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HEARINGS

BEFORE A

SUBCOMMITTEE OF THE

COMMITTEE ON APPROPRIATIONS

HOUSE OF REPRESENTATIVES

ONE HUNDRED SEVENTH CONGRESS

SECOND SESSION

SUBCOMMITTEE ON THE DEPARTMENT OF TRANSPORTATION AND RELATED AGENCIES APPROPRIATIONS

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RICHARD E. EFFORD, STEPHANIE K. GUPTA, CHERYLE R. TUCKER, and LEIGHA M. SHAW, *Subcommittee Staff*

PART 5

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80-360 WASHINGTON : 2002

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DEPARTMENT OF TRANSPORTATION AND RELATED AGENCIES APPROPRIATIONS FOR 2003

WEDNESDAY, FEBRUARY 27, 2002.

DEPARTMENT OF TRANSPORTATION

WITNESSES

GEORGE WARRINGTON, PRESIDENT & CHIEF EXECUTIVE OFFICER, AMTRAK

ALLAN RUTTER, ADMINISTRATOR OF THE FEDERAL RAILROAD ADMINISTRATION

KENNETH MEAD, INSPECTOR GENERAL FOR THE DEPARTMENT OF TRANSPORTATION

GILBERT E. CARMICHAEL, CHAIRMAN, AMTRAK REFORM COUNCIL

Mr. ROGERS. The committee will come to order. Good afternoon to all of you. Thank you witnesses for being here today.

In 1971 Amtrak's enacting legislation stated that the railroad would be the country's only intercity passenger railroad and it would be profitable. Ever since then the President of Amtrak has repeatedly told the Congress that Amtrak only needed a few more years of federal assistance before it would be profit making.

Most recently in 1997 Amtrak, as we all know, was given five years or until December of this year to become operationally self sufficient. Like past attempts, Amtrak has failed to achieve that goal and now some 31 years after Amtrak's inception the Congress is still subsidizing a private railroad with hundreds of millions of dollars. Whether the subsidy remains in the future and at what level may be decided this year when Congress reauthorizes Amtrak, if that takes place.

Amtrak is in dire financial shape. Within the last year Amtrak has had to mortgage Pennsylvania Station to obtain sufficient funds to remain operational for the last three months of fiscal 2001. And in early February, Amtrak announced $285 million in operating cuts, capital deferrals and maintenance actions so that it would have enough money to get through this fiscal year.

These actions may not be enough because Amtrak has not been able to control expenses even during periods of record revenue growth.

There are two very different budget requests in front of this Subcommittee for Amtrak. The Administration has asked for an appropriation of $521 million and has said that this amount is a placeholder until Congress decides how Amtrak should be structured in the future.

In comparison, Amtrak has asked for more than double that amount, $1.2 billion for fiscal 2003. And on February 1, Amtrak announced that if the railroad did not receive this entire appropriation it would stop all long distance service, 18 trains in all, on October 1 of this year.

Amtrak also noted that this request does not allow for any new growth in service. It just takes care of current needs. It is startling that those needs could more than double in just a year.

Amtrak has failed to meet its legal mandate to achieve operational self-sufficiency. They blame conflicting policy mandates and inadequate capital investment. And while some of that may be true, Amtrak cannot ignore the fact that they have tried to grow an unprofitable system without adequately controlling expenses, and they have failed to identify or request more than the bare necessities of funding to support long term capital investments.

Now after over-extending itself and failing to control costs, Amtrak says it can no longer run as a commercial enterprise, moreover a profitable one if it is expected to provide intercity passenger transportation and develop new high speed rail corridors without a stable funding source. That term, "stable funding source", we think we know what that means. It is a euphemism for a direct tap into the U.S. Treasury.

It is clear that significant decisions must be made about this railroad and how it will operate in the future.

The Inspector General and the Amtrak Reform Council have been monitoring Amtrak's financial health and the corporation's ability to reach self-sufficiency. Both have reported negatively on these prospects in the past few months.

In addition the Amtrak Reform Council issued a report on February 7 recommending ways to restructure national passenger rail travel in the U.S.

The Federal Railroad Administration represents the Secretary of Transportation on Amtrak's Board and will be intimately involved in the issues of how Amtrak should be restructured. According to their grant request, the Administration believes that "Amtrak cannot continue indefinitely under current circumstances and that the Administration is eager to work with the Congress to develop solutions that result in a cost effective, financially stable system that can help meet the public's travel needs." While the budget request does not provide any recommendations on how we do this, and perhaps inadequately funds the future system, I am hopeful that the Administration will step up to the plate and shortly submit a long term restructuring and financial plan for financial rail.

But it seems no one wants to tackle this subject. The Authorizing Committees of the Congress has expressed no interest; the Administration expresses no interest; and so it very well may depend upon this Subcommittee. So be it.

Today before the Subcommittee we have four witnesses who are well versed in Amtrak's financial condition. Each has a very different opinion about the railroad's needs and what type of service should be provided in the future.

We are pleased to welcome Mr. George Warrington, the President and Chief Executive Officer of Amtrak; Mr. Allan Rutter, Administrator of the Federal Railroad Administration; Mr. Kenneth Mead,

Inspector General for the Department; and Mr. Gil Carmichael, Chairman of the Amtrak Reform Council. We welcome each one of you here and thank you for your time and the testimony you are about to give. We will have you testify in the same order as I introduced you if that is agreeable, and we will enter your written statements in the record. We would appreciate hearing from you an oral summary of your written testimony.

But before I go to President Warrington let me yield to my friend Mr. Sabo.

Mr. SABO. Thank you Mr. Chairman, and welcome to all the witnesses.

As I have indicated at other hearings, in the 24 years of service on the committee this is the year that an Administration budget leaves me the most bewildered ever. In other years we have had marginal problems, at least in comparison to this year. We have major problems with funding for a new security agency, we have major funding and policy decisions as it relates to highway funding, and we have major issues relating to the future of Amtrak which involve billions of dollars that are not reflected in the Administration's budget.

Somewhere, somehow, we are going to have to come to some conclusion about the sources of money, by the time we mark up bills this spring. I am not sure where it is going to come from.

I listened to recommendations. Mr. Warrington, we know what you think is needed for next year. I guess I read the Administration's request as simply a placeholder. Mr. Rutter, I do not know what you really mean. I find analysis and facts but no conclusions. To the Reform Commission, I do not know how reshuffling boxes solves the problem in putting a budget together for 2003.

So we have a real dilemma. I think from everyone we have to know realistically what happens if we simply fund at the budget request, what happens to Amtrak service in this country. And what options are by increments, and what we can and cannot do.

I might say that we have this fiction that other modes of transportation pay for themselves, but that clearly is not the case. We have put an incredible amount of general revenue into FAA operations over the years. I understand the request this year is something like $4 billion of general revenue for the operations of FAA. In other years it has been more modest, but there has been a significant amount of money other than user fees that helps pay for FAA operations in this country.

And while it may be true at the federal level that only gas tax receipts go primarily for paying for roads, on a nationwide basis, particularly at the local level, property taxes fund an incredible amount of the infrastructure and the operations for maintaining the road system in this country. So we clearly have lots of public subsidies that go into other modes of transportation.

On the other hand, Mr. Warrington, the question we have is if we are providing subsidies, how do we make judgment that they are effectively being used?

I look forward to the wisdom of the four of you to give us some guidance on what we should do and I welcome you here.

STATEMENT OF GEORGE WARRINGTON, PRESIDENT AND CEO OF AMTRAK

Mr. ROGERS. President Warrington, you are invited to testify.

Mr. WARRINGTON. Thank you very much, Mr. Chairman. Thank you for the opportunity to appear here before the committee this morning. As you have said, we have some very critical policy issues before us today. I will be completely straight and honest and transparent as possible about the dilemma we have ourselves in. Ultimately there are a whole host of serious public policy questions that do have to be addressed by the Congress and the Administration and we will help to inform that discussion as we move forward.

Meanwhile my focus and our focus is on managing the business this year, to get through this year, and to manage the business through next year as Congress decides and debates that much bigger question about what the role of rail service in this country is and what the appropriate funding level should be.

As you said, Mr. Chairman, over the last couple of years we have worked hard to manage the business within the context of conflicting policy mandates. We have been expected to run a national public service network not unlike essential air service and at the same time drive toward commercial self-sufficiency. We tried to move down both of those paths at the same time while also coping with both historical and relatively recent undercapitalization of what really is the most capital intensive business certainly in this country and in the Western world, the railroad business.

Many of our key indicators have in fact moved in the right direction. Since the start of 1997 ridership has grown by 19 percent and overall revenues close to 40 percent. We have had to, we have been forced to diversify our revenues by forming partnerships with the private sector, with states and commuter agencies, in order to generate income to help underwrite the costs of and expenses associated with what always has been and always will be an unprofitable network of long distance trains.

I will tell you we have also worked very hard on the cost side around those costs that we could get our arms around and control, and there are a whole host of uncontrollables out there as well. I would add that a substantial portion of the growth that we have seen has been attributable to depreciation which is a non-cash expense, and a portion of it has been attributable to interest expense. The interest expense flows in part from the undercapitalization which forces us to finance in private markets.

As a matter of fact virtually every piece of equipment that Amtrak owns has been privately financed over the years in private markets and that has resulted in non-defeased debt service of about $3 billion.

The combination of all of those cost management and cost cutting initiatives which I testified before you last year were well underway, and they are systemic and they take time to execute thoughtfully and rationally, and particularly in a business where you have to be safety sensitive.

I will tell you that the first quarter of this year compared to the first quarter of last year, our actual expenses, when you subtract

depreciation, have been reduced, first quarter of last year versus first quarter of this year.

Despite our best efforts on all of these fronts and some tangible signs of progress here, as you say, Mr. Chairman, this entire system has reached a critical crossroads. On top of the long term constraints and conflicts that we have been confronted with and that we are already dealing with, we have had to face over the past years several very serious short term challenges that really are beyond our own control.

First of all, the weakened economy has had about $120 million impact on us over the past 12 to 15 months. Clearly September 11th has had some impact, a bit of positive impact, actually, on the Northeast Corridor, but across the system September 11th plus the recession have cost us dearly and we have had to substantially beef up our security costs around the entire network as a consequence of 9/11.

The Amtrak Reform Council (ARC) finding itself technically has had a consequence. As a result of triggering the formal liquidation process under the law, the consequence of the formal action has technically been to create uncertainty in private markets. This has the regrettable result of limiting our access to capital or private markets which causes some of the financing which we had been counting on to evaporate. As a result we have had to invest Amtrak cash in what would otherwise have been financed transactions. That has had an impact over the past year as well.

Once again we have done everything we can through self help internally to try to confront these latest challenges. Last year as the recession began to take its toll we intensified our core management efforts and we executed last year $258 million of expense reductions. More recently, in response to rising security costs, the impact of the ARC finding, we announced another $285 million in spending cuts and capital investment deferrals. That adds up to a combined total of $543 million in cuts or deferrals over two fiscal years. Frankly, Mr. Chairman, as we run the entire system and continue to run that entire system within the context of what I believe are conflicting mandates, we are running out of tools in the tool box to be able to hold this together.

Going forward, as you said, the minimum federal funding that is needed to manage this network through fiscal year 2003 without service eliminations, route reductions or adding to our capital backlog is about $1.2 billion. An appropriation at this level would cover basically $160 million of Excess Railroad Retirement payments, those are taxes; $840 million is the minimum need around basic capital investment, a substantial portion of which includes debt service as well as mandatory investments that are required either under safety regulations or under other environmental type requirements and which we have an obligation to move forward with; and basic infrastructure or renewal. You know we have a substantial backlog on the system. Third, $200 million to cover the net operating losses of unprofitable long distance trains.

I will tell you that these are not the total losses from running these trains. It is what is left after internal cross-subsidies from both profitable services, particularly on the Northeast Corridor,

and other lines of business that we engage in to generate revenue streams to help underwrite an inherently unprofitable system.

As you examine the request, Mr. Chairman, it does not include several things such as capital backlog, accumulating for over 30 years and which has been well documented at about $5.8 billion. The request also does not include the development of high speed corridors or any portion of those 11 federally designated corridors in 38 states around the country; and, finally, it does not include incremental security costs which separately have been requested through the security legislation which we submitted to Congress last fall.

Each of these unmet needs—the capital backlog, high speed corridors and security—really are central to whatever future outcome the Congress and the Administration define here and they do really need to be addressed in connection with the upcoming reauthorization. They will have a clear impact on the system's future appropriation needs.

It is also important to understand that the $1.2 billion request is not significantly higher than the total amount of federal appropriations from a cash point of view that we received this fiscal year. This fiscal year is total federal funding for Amtrak was $939 million from a cash point of view, and cash matters to us a lot because we did not have any working capital at all.

United Airlines lost $2 billion last quarter and they can handle that easily because they are sitting on cash reserves. Amtrak has never had cash to be able to deal with uncontrollables or uncertainty. So this is, from our point of view, cash is king here.

This year we have available through the federal government $939 million from a cash point of view. That is 60 percent of last year's appropriation, the fiscal 2001 appropriation, $313 million; 100 percent of our 2002 appropriation of $521 million; $100 million for life safety upgrades in the New York City tunnels; and $5 million provided for additional security after September 11th.

While this level of funding might have been adequate for Amtrak's minimum needs before unforeseen circumstances such as the economic slowdown, September 11th, and private market consequences, these recent events have had significant financial impacts and this is why we have had to defer capital investment, cut operating expenses and covering some of our needs through private financing.

Another way of restating this issue is to recognize that if we are level funded in 2003 at $521 million the entire appropriation would be consumed by Excess Railroad Retirement payments and mandatory capital investments before a single dollar is invested in other capital needs, in long distance trains which are unprofitable, or in any kind of modernization of the system.

Mr. Chairman and members of the committee, those are the highlights of the FY 2003 request. I would just like to leave you with two additional points.

First, by any standard inter-city passenger rail in this country has been underfunded for decades. The General Accounting Office, the DOT Inspector General and all international comparisons converge I believe around that point.

We have worked very hard to maintain and improve the current system despite underfunding by increasing revenues from every conceivable source and working hard to control discretionary spending. But as I have explained we simply cannot continue to manage that current system unless we receive the $1.2 billion in 2003.

A lesser appropriation would require a series of business plan actions that depending upon that shortfall could include one of a number of steps such as continuing to defer important capital investments or some combination of capital deferral and service elimination.

Since the 2003 funding level is uncertain, simply as a contingency, on or about March 29 we will regrettably provide the states notice of possible service discontinuance later this year simply to maintain flexibility as we construct our budget through this summer for fiscal year 2003.

First, I hope we will not have to continue capital deferral actions or service elimination actions later this year, but we simply need the flexibility in the face of uncertain funding levels and uncertainty around both the appropriation process and the reauthorization process.

Second, there is a critical need, as we discussed earlier, for the Congress and the Administration to look beyond the 2003 appropriation cycle and fix the underlying policy model for passenger rail which clearly is broken. Neither Amtrak nor any other entity can operate unprofitable public service trains and be expected to generate a profit. I think it is a myth. Some have called it the big lie that circulated around Amtrak and this issue for 30 years. Undercapitalization in its own way drives up operating expenses because you are not able to secure the kind of efficiency in the day-to-day operation that capital investment would allow you to secure.

Thus we urge the Congress and the Administration working with governors, mayors and all interested parties to make Amtrak's reauthorization an urgent priority. During the debate we clearly need to find the answers to three fundamental questions.

First, what kind of inter-city passenger rail system does America really want and really need? Second, how much capital and operating support is required to support such a system? And third, what will be the sustainable sources of government public funding to meet these needs?

Until these questions are answered any policy that relies primarily on short term business actions or structural reorganization which does not provide adequate or reliable funding sources will only perpetuate the current problem.

Mr. Chairman, with the actions we have taken this year internally and the level of funding requested in next year's budget we will be able to maintain the current level of service and give Congress the time to adequately deal with the fundamental issues that need to be addressed here.

However it is important to reiterate that we are in fact, as you have said, running out of time here. As Congress moves forward with the reauthorization debate I want to assure you that we are prepared to inform that discussion and provide the expertise we have developed over 30 years of operating America's rail system.

We have given a significant amount of thought to these very important questions. There is no doubt we can build a system of rail passenger service which our nation can in fact be proud of and that can help address a national transportation crisis.

I know it will not be easy. I know the financial resources are extremely constrained. But we are prepared, to help inform that debate and help shape that outcome. I understand, Mr. Chairman, this is a very difficult task.

Thank you.

[The information follows:]

STATEMENT

Of

GEORGE D. WARRINGTON
PRESIDENT AND CHIEF EXECUTIVE OFFICER
AMTRAK

Before the

HOUSE APPROPRIATIONS
SUBCOMMITTEE ON TRANSPORTATION

Wednesday, February 27, 2002

TESTIMONY OF GEORGE D. WARRINGTON
PRESIDENT AND CHIEF EXECUTIVE OFFICER, AMTRAK
Before the
HOUSE APPROPRIATIONS SUBCOMMITTEE ON TRANSPORTATION
Wednesday, February 27, 2002

Mr. Chairman, thank you for the opportunity to appear before the Subcommittee this morning. With your permission, I will submit for the record a copy of our Business Plan and Legislative Grant Request, which was sent to Congress on February 15. In my statement this morning, I will summarize the major points of that document and how they relate to our FY03 needs.

Over the last few years, we have worked hard to manage the business within the context of conflicting policy mandates. We have been expected to run a national public service network, *and* drive toward commercial self-sufficiency, while *also* coping with inadequate levels of federal capital investment. And many of our key indicators have moved in the right direction. Since the start of 1997, we have boosted ridership by 19 percent and overall revenues by 38 percent. We have diversified our sources of revenue and forged more partnerships with the states, commuter agencies and the private sector.

We have also worked very hard on the cost side. Over the last four years, a substantial portion of cost growth has been attributable to depreciation -- which is a non-cash expense -- and interest, which is the result of inadequate federal capital investment. Excluding depreciation, our costs have actually *fallen* over the past year.

However, despite our best efforts and these tangible signs of progress, the national passenger rail system has reached a critical crossroads. On top of the long-term constraints that we were already dealing with, we have had to face several short-term challenges beyond our control: the weakened economy; September 11; and the Amtrak Reform Council's finding.

Once again, we have done everything we can through self-help to confront these latest challenges. Last year as the recession began to take its toll, we intensified our cost management effort, executing $258 million in expense reductions. More recently, in response to rising security costs and the impact of the ARC finding, we announced another $285 million in spending cuts and capital investment deferrals. That's a combined total of $543 million in spending cuts or capital deferrals over two fiscal years. So as you can see, Mr. Chairman, we're running out of tools.

Going forward, the minimum federal funding that is needed to manage the passenger rail network in FY03 – without route reduction, or adding to our capital backlog or debt -- is $1.2 billion. An appropriation at this level would cover the following needs:

- **First,** $160 million is needed to cover the cost of excess railroad retirement payments – the amount of Amtrak payroll taxes that are contributed to the industry retirement fund in excess of that paid out to Amtrak retirees. This item is essentially a "pass through" responsibility that Amtrak has inherited, and which is funded through the annual appropriations process.

- **Second,** $840 million is the minimum capital need for the current network, and that includes:
  - Mandatory investments, such as environmental, life safety, ADA and debt service;
  - Basic infrastructure investments to maintain current schedules and levels of safety across the entire network; and
  - Fleet overhauls and upgrades of facilities and technology to ensure efficient, reliable operations.

- **And third,** $200 million is needed to cover the net operating losses of unprofitable long-distance trains. Please note that *these are not the total losses from running these trains* -- this is what's left after internal cross-subsidies from profitable routes and other lines of business.

As you examine our request, it is important to note that it does *not* cover three items that are critical to the future of passenger rail in America:

- First, it does not cover any of the **capital backlog** that has developed over 30 years of under-investment. The current estimate of the capital backlog is about $5.8 billion – of which $3.8 billion is for the Northeast Corridor infrastructure and thus affects the capacity and reliability of commuter and freight services, as well as Amtrak. One reason this is so high is because Amtrak, over the last 31 years, on average, has received less than $325 million a year. The DOT Inspector General has reported that Amtrak needs at least $1 billion a year for capital investment. In short, our grant request would help prevent the capital backlog from growing any larger in 2003, but it *would not reduce* the backlog.

- Second, our request does not include any money for **development of higher-speed, higher-capacity corridors** – which are sought by 38 states and mayors and business leaders across America as an essential component of our future transportation system. Preliminary estimates of the cost to develop the 11 federally designated high-speed corridors are in the range of $50 billion over 20 years.

- Third, our FY03 request does not include funding for **additional security measures.** Mr. Chairman, as you know, following the tragic events of September 11, we were asked to propose a package of safety and security investments. That package, including infrastructure hardening, equipment security, and tunnel safety improvements, totals about $1.5 billion – of which

$105 million was funded by the DOD appropriations act in December. Pending legislation to address these issues includes S. 1550, the Rail Security Act of 2001. In order to achieve a higher level of safety and security in the passenger rail system, I encourage you and your colleagues to act as soon as possible on this or similar legislation, and provide an adequate appropriation to back it up.

Each of these unmet needs – the capital backlog, high-speed corridors and security -- are central to the future of transportation in America. These needs should be addressed in Amtrak's upcoming reauthorization, and they will have an impact on the system's future appropriation needs.

It's also important to understand that **a $1.2 billion request is not significantly higher than the total amount of federal appropriations in the current fiscal year.** In FY02, total federal funding for Amtrak was $939 million, not just $521 million as some have reported. The total figure included:

- 60 percent of our FY01 appropriation, which was deferred until the first day of FY02 for budget scoring purposes ($313 million);
- 100 percent of our FY02 appropriations ($521 million);
- $100 million provided for life-safety upgrades of the New York City tunnels; and
- $5 million provided for additional security after September 11.

While this level of funding might have been adequate for Amtrak's minimum needs before unforeseen circumstances such as the economic slow-down, September 11, and the November ARC finding, these recent events have had significant financial impacts, and this is why we have had to defer capital investment, cut operating expenses and cover some of our needs through private financing.

Another way of restating this issue is to recognize that if we are level-funded in FY03 at $521 million, the entire appropriation would be consumed by

excess RRTA and mandatory capital investments – before even a single dollar is invested in other capital needs, or in long-distance trains, or in modernization.

Mr. Chairman and members of the subcommittee, those are the highlights of our FY03 request. I'd like to leave you with two additional, vital points.

First, by any standard, intercity passenger rail in this country has been under-funded for decades. The GAO, the DOT Inspector General, international comparisons all agree on this point. We have worked hard to maintain and improve the current system, despite under-funding, by increasing revenues from various sources and controlling discretionary spending. But as I have explained, we simply cannot continue to manage the current system unless we receive $1.2 billion in FY03. A lesser appropriation will require a series of business plan actions that, depending on the shortfall, could include one or a combination of steps such as deferring capital investment and eliminating services. Since our FY03 funding level is uncertain, as a contingency, on March 29 we will regrettably provide the legally required 180-day cancellation notice of possible service discontinuance to maintain flexibility as we construct our budget for FY03. I hope we will not have to take capital deferral or service elimination actions later this year, but I have to have this flexibility in the face of uncertain funding levels.

Second, there is a critical need for Congress and the Administration to look beyond the FY03 appropriations cycle and fix the underlying policy model for passenger rail, which is clearly broken. Neither Amtrak nor any other entity can operate unprofitable public service trains *and* be expected to generate a commercial profit – particularly in the context of significant undercapitalization. Yet that is exactly what we are required to do today.

Thus, we urge the Congress and the Administration -- working with governors, mayors and all interested parties – to make Amtrak's reauthorization

an urgent priority this year. During that debate, we need to find the answers to three fundamental questions:

- **First, what kind of intercity passenger rail system does America need and want?**

- **Second, how much capital and operating support is required to support such a system?**

- **And third, what will be the sustainable sources of government funding to meet these needs?**

Until these questions are answered, any policy that relies primarily on short-term business actions or structural reorganization and which does not provide adequate or reliable funding sources will only perpetuate the current problem.

Mr. Chairman, with the actions we have taken this year internally and the level of funding requested in next year's budget, we will be able to maintain the current level of services and give Congress time to adequately deal with the fundamental issues that need to be addressed. However, it is important to reiterate that we are running out of time.

As Congress moves forward with the reauthorization debate, I want to assure you that we are prepared to inform that discussion and provide the expertise which we have developed over the past 30 years of operating America's passenger rail system. I want to assure you that we have given a significant amount of thought to these questions. There is no doubt that we can build a national system of rail passenger service which our nation can be proud of and one that will help address our national transportation crisis. I know this

won't be easy. I know it will take time, but all of us at Amtrak are ready to roll up our sleeves and get the job done.

That concludes my presentation; I'll be happy to answer questions.

George D. Warrington
President and Chief Executive Officer
National Railroad Passenger Corporation (Amtrak)

Amtrak President and Chief Executive Officer George D. Warrington is leading a transformation at Amtrak, the nation's intercity passenger rail service.

Appointed in December 1998, Warrington has led the company to record growth through improved quality of service and focus upon building and diversifying Amtrak's lines of business.

During his tenure, he has introduced a number of highly successful customer-focused efforts including an unconditional Satisfaction Guarantee for all Amtrak guests and an exciting new customer loyalty program – Guest Rewards. Additionally, he has significantly increased the company's revenue through passenger growth, expansion of mail and express services, commuter operations and other commercial enterprises.

Signaling the transformation underway at Amtrak, Warrington launched a new corporate brand identity in 2000 that captures the excitement and the enjoyment of the passenger rail experience.

Warrington's visionary leadership and dedication to modernizing the country's passenger rail system was punctuated in December 2000 with the introduction of *Acela Express*, the nation's first high-speed train service.

Serving Washington, New York, Boston and intermediate stops, *Acela Express* delivers high-quality service and superior amenities at speeds of up to 150 mph. Already, *Acela Express* and improvements in the northeast have reduced travel times between New York and Washington to as little as two and a half hours and New York to Boston in as little as three and a half hours.

Since serving as acting President and CEO in December 1997, Amtrak's ridership has grown 12 percent and ticket revenue has increased 23 percent. The growth trend is continuing in 2001, with ridership and ticket revenue running 9 and 14 percent ahead, respectively, of last year's all-time records of 22.5 million passengers and $1.1 billion.

While charting a course for business success, Warrington is leading the company's effort to eliminate federal operating assistance by 2003. This subsidy has been reduced from $318 million just two years ago, to a current year projection of only $59 million. Additionally, securing a long-term federal commitment for capital investments in intercity passenger rail, as provided to all forms of transportation, remains a continued focus for Warrington and Amtrak.

Warrington joined Amtrak in 1994 as President of its Northeast Corridor business unit. Prior to Amtrak, Warrington served as the Executive Director and President of the Delaware River Port Authority and Port Authority Transit Corporation from July 1992 to January 1994. He was the Deputy Commissioner of the New Jersey Department of Transportation from November 1990 to July 1992.

From November 1988 to November 1990, Warrington served as Vice President and General Manager of New Jersey Transit Rail Operations. He was Deputy Executive Director and Chief of Staff of New Jersey Transit Corporate Operations from 1980 to 1988. From 1975 to 1980, he served as Special Assistant to the Commissioner and as Assistant to the Director of Commuter Services at the New Jersey Department of Transportation.

Warrington currently serves on the boards of directors of the American Association of Railroads, Philadelphia Belt Line Railroad, University of Denver Intermodal Transportation Institute, Mineta International Institute for Surface Transportation Policy Studies, and the Great American Station Foundation. He is also on the advisory board of the Voorhees Transportation Center of the Bloustein School of Planning and Public Policy at Rutgers University.

Warrington was born September 19, 1952. He received a Bachelor of Arts degree from Syracuse University in 1974, where he graduated cum laude. He received a Masters of Public Administration from the Maxwell Graduate School of Citizenship and Public Affairs at Syracuse University in 1975.

Amtrak operates a 22,000-mile intercity passenger rail system, serving more than 500 communities and employing more than 25,000 people in 45 states.

Mr. ROGERS. Thank you.

FRA OPENING REMARKS

Administrator Rutter.

Mr. RUTTER. Thanks. Thanks for the opportunity of appearing before you this afternoon.

I think it is a fairly unique thing that all four of the people you have before you are agreeing on one basic point and that is that the current system we have is unsustainable and needs to be fixed. That has not been the case in the 30 years we have been talking about Amtrak.

We may have different ideas on how we got here and different ideas on where to go next, but there is unanimity on the fact that the problem is significant and has reached a crisis situation.

Before we respond to questions about written testimony I want to make three additional points. First, as the Chairman and Congressman Sabo have talked about, it is an incredibly complicated issue. The complications are the result of 30 years of accumulated decisionmaking and that complication will not be easily resolved or quickly resolved. For that reason the DOT and the Administration continue to work out the best way for us to work with Congress on identifying possible solutions to our current situation.

I want to assure you that we are neck deep in trying to get to the bottom of examining all of the possible permutations and possible solutions, some of which have included transferring the Northeast Corridor to federal ownership or to ownership by the states or a compact of states; changes to the governance of passenger rail by new boards, new responsibilities for current entities or new federal entities; changes in how trains are operated; changes in who owns them; changes in who operates those trains.

The breadth and variety of solutions that have already been suggested, there are at least two or three different restructuring bills in Congress right now as well as two to three bills that deal strictly with capital funding.

As complex and broad the variety of solutions that have already been suggested, that kind of pales compared to the possibilities for funding and restructuring that we are studying right now.

The fact that our testimony was as detailed as it was I hope should indicate the depth of our commitment to deal with the issues, although I certainly understand your frustration about the language in the budget the President proposed.

Second, this unlike wine, is a problem that is not going to get better with age. Waiting for real change is only going to worsen the underlying fundamentals which make it harder to fix later. Those problems of high cost will not go away on their own, and increasing expenses associated with debt service for capital needs will continue to get worse.

Third and finally I would point out that this is an exceptionally difficult time for the people who work on the railroad, for Amtrak. A torrent of unrelenting negative publicity and press over the last six or seven months makes it difficult for them to do their jobs, to show up for work every day. My own experience prior to joining Governor Bush's staff involved working in high speed rail in Texas which was a wildly unsuccessful possibility. I understand what it

is like to tell people what you do and have them react with a mixture of sympathy and tongue tiedness, not knowing what to say.

The fact that the folks are showing up to work and offering quality service to customers on the line speaks to their dedication and it is really for them that we are committed to trying to find some solutions to making it work.

Thanks for inviting me again, and we will look forward to responding to questions as they come. Thank you.

[The prepared statement of Mr. Rutter follows:]

Statement of the
Honorable Allan Rutter
Federal Railroad Administrator
Before
The Subcommittee on Transportation and Related Agencies
Committee on Appropriations
U.S. House of Representatives
February 27, 2002

Mr. Chairman and members of the Subcommittee: I am honored to be representing President Bush and Secretary of Transportation Mineta as the Administration and the Congress begin our discussions which will hopefully lead to a consensus on a new national policy on intercity passenger rail and the Federal role in support of that form of transportation.

Secretary Mineta has advocated the need for this policy since he first joined the Amtrak Reform Board of Directors last summer. He and I hope that we can determine what this Nation's transportation system needs from intercity passenger rail, how decisions will be made on where and how service is provided, how extensive a system can be afforded, and how it will be paid for.

Today, I want to help lay a foundation for the development of that policy by sharing the facts about rail passenger service as it is currently constituted. By doing so, I hope I can help the committee as it considers possible solutions by describing the nature of the problems to be solved. In this testimony, I will:

- Describe the current financial challenges facing the National Railroad Passenger Corporation, or Amtrak;
- Offer an analysis of the current rail passenger system;
- Detail its efforts to ameliorate its fiscal condition; and
- Offer some general principles for going forward.

One other note about nomenclature: intercity rail passenger service is the only mode of transportation that is synonymous with a corporate brand. We must be able to differentiate between the public policy issues associated with the form of transportation – intercity rail passenger service – and the financial and other challenges faced by the corporate provider of that service – Amtrak. I will try to distinguish between issues facing rail passenger service (general) and those facing Amtrak (particular).

There Is a Role for Intercity Passenger Rail Service

Amtrak service between Washington, D.C. and New York City has shown that this mode of transportation can be an irreplaceable part of a regional transportation system. Sustained double-digit growth in ridership on Amtrak's Pacific Northwest route has shown that there are other

corridors where there may be potential for passenger rail. And, as demonstrated in the aftermath of September 11th, a strong argument can be made for flexibility and redundancy in this Nation's passenger transportation system that could be provided by intercity passenger rail.

Intercity rail passenger service provides more than mobility to the Nation's transportation system. Large portions of the Northeast Corridor main line between Washington and Boston host some of the most intensively used commuter rail operations in the U.S. If intercity rail passenger services were ended in the Northeast Corridor or on the West Coast, highways and airports would suffer additional congestion in the short term at a time when drivers and travelers already face significant frustration and delays. These indirect roles in aspects of the national transportation system must also be considered as we work to formulate the new policy on intercity passenger rail.

At the same time, we must confront the realities of Amtrak's deteriorating financial condition, the challenging fundamental economics of passenger rail and the practical limits to Federal financial resources dedicated to transportation and the many worthwhile demands currently being placed upon those resources.

Amtrak Faces Financial Challenges

In fiscal year 2002, the Federal Government will provide Amtrak almost $840 million in cash to support its operations and essential capital needs, not counting $100 million that was specifically earmarked to improving the safety and security of the aging rail tunnels owned by Amtrak that provide access to New York City. Despite these funds and an additional $133 million in financial support expected from Amtrak's State partners, the Corporation has been forced to undertake a number of actions, including some that are short-sighted but necessary to continue operations through the fiscal year.

One of the actions recently announced by Amtrak is a deferral of $175 million in capital projects involving equipment refurbishment and capacity and reliability improvements. In addition, the operating budget will be reduced by $110 million through a 4 percent staff reduction, reduced advertising, delayed modernization of information technology systems, and reduced training. Together these actions will reduce the quality of Amtrak service in 2002 and succeeding years. Amtrak's management is to be commended for taking these steps on its own to conserve its cash resources, rather than asking for supplemental funding from Congress.

The adequacy of these actions to close the budget gap is dependent upon assumptions about the depth and duration of the economic downturn's impact on business and discretionary travel as well as the bottom line impact of specific actions to be implemented. Given the uncertainty in the economy and other external factors that might affect Amtrak's business plan, policy-makers in the Administration and in Congress should be prepared for the possibility of a greater cash shortfall that might require additional and more stringent measures to successfully manage the Corporation's cash resources.

Amtrak's fiscal challenges will continue into FY 2003. As the Committee is aware, Amtrak recently announced its plans to provide the statutorily-required notification to the States that,

absent a higher level of appropriations for FY 2003 (which Amtrak projects to be $1.2 billion), service on most long-distance trains will be terminated on October 1 of this year. But even these actions would not be sufficient to achieve the vision of Amtrak established by the Amtrak Reform and Accountability Act of 1997, which is of a Corporation that can provide high-quality cost-effective passenger rail service without depending upon a Federal operating subsidy. As I will discuss later, Amtrak can improve its financial performance by cutting trains and routes, but cannot break even by means of cutbacks alone.

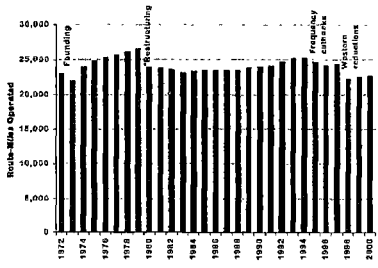
Amtrak's financial challenges will extend into the foreseeable future unless we – the Administration and the Congress – can agree on how to make intercity rail passenger service work better and within the level of fiscal support that we can afford. To provide a starting point for those discussions, I wish to provide some of the Federal Railroad Administration's (FRA) observations on the state of intercity rail passenger service today.

Intercity Rail Passenger Service Has Changed Little in the Last 30 Years

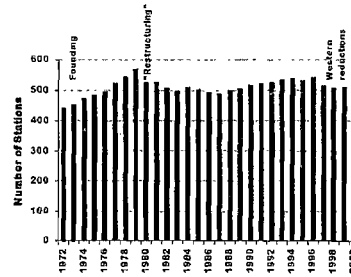
Amtrak's Network Limits Its Competitiveness

Since Amtrak's first full year of operations, the system route-mileage operated has remained in the 22,000 – 25,000 mile bracket. Even the route restructuring of the late 1970s and the elimination of two Western connections in the late 1990s made little difference in the overall scope of service. The service adjustments in the mid-1990s focused on reducing frequencies rather than shrinking the system map. Likewise, the number of stations served has hovered at about 500 for the last 30 years.

Amtrak's network size, in route miles: Essentially unchanged since 1972



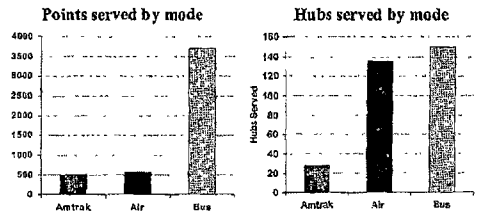
Service coverage, in stations served: Also basically unchanged



Source: Amtrak annual reports.

Currently, Amtrak serves the same number of stations as the airlines serve airports. There is a qualitative difference, however: many of Amtrak's stations serve communities too small for scheduled air service, and some important metropolitan areas (i.e. Nashville, Tennessee, Columbus, Ohio, and Phoenix, Arizona) lack Amtrak service entirely. Greyhound's bus system, with its many stops, can schedule service to many more points than either rail or air. More

important, however, is the nature of the service offered at these stations: only 25 to 30 of Amtrak's stations would be regarded as realistic transfer points between intersecting routes, while 136 airports are classified as hubs and Greyhound claims 150 major terminals.



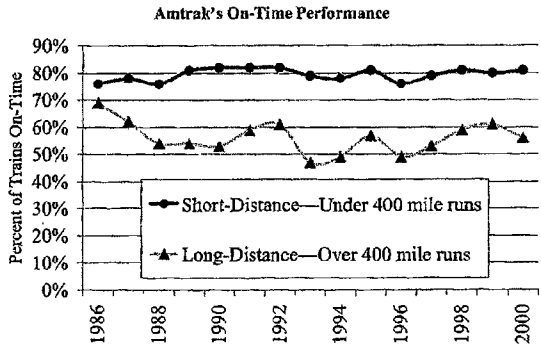
Sources: Amtrak Annual Report, 2000; Amtrak National Timetable, route map; National Transportation Statistics 1999, table 1-2, Number of civil certificated airports; Bureau of Transportation Statistics, "Airport Activity Statistics of Certificated Air Carriers"; www.greyhound.com/company/factsheet.shtml, "3700 destinations", www.greyhound.com/company/factsheet.shtml; "150 company-operated terminals"

Today's passenger rail system – unlike the much more extensive system of Amtrak's predecessor railroads – is largely linear, connecting most stations to other stations on the same route. While transfers among lines are possible, transfer points are few in number, and low frequencies in most of the country undermine the practicality of changing trains. By contrast, scheduled air service in its entirety is a true network. With the highway system as ubiquitous as it is, Greyhound can maintain a network pattern as well, and the automobile can reach every corner of the 48 coterminous States.

A linear system like Amtrak's faces severe limitations on the number of city pair travel markets it can effectively serve. This fundamental constraint – totally apart from the frequency, quality, and price of the service – has significant consequences in terms of total market share. If a prospective traveler "can't get there from here" by a particular mode, that mode simply can't compete for his or her business.

Amtrak's Schedule Reliability On Much of Its System Is Poor

Amtrak's on-time performance for trains with runs under 400 miles has remained in the 80 to 90 percent bracket since the mid-1980s (with an on-time measurement tolerance of between 10 and 20 minutes). By contrast, long-distance trains (over 400 miles) – which currently generate the majority of system-wide passenger-miles – have suffered a marked decline in punctuality, from almost 70 percent in the mid-80s to about 55 percent today (with a measurement tolerance of 20 to 30 minutes). These averages mix the superior performances of selected routes (the New York–New Orleans *Crescent* had an 80 percent on-time record in FY 01) with the unreliability of others (New York–Florida *Silver Palm*, 36%; Chicago–Texas *Texas Eagle*, 25%; Washington–Chicago *Capitol Limited*, 44%). These figures do not indicate the seriousness of the lateness, which can be of many hours' duration per train.



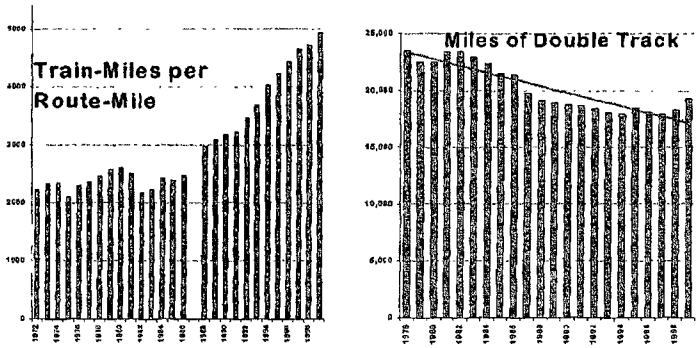
Source: Amtrak Annual Reports, 2000 and prior years

Although the airlines, too, have suffered declines in punctuality, at least before September 11th (the industry was 73 percent on time in 2000, down from 82 percent in 1997), Amtrak's combination of slowing schedules[a] and lateness on some long-distance routes has exacerbated passenger rail's inherent travel time disadvantages compared to airlines and even automobile travel.

Increasing Freight Traffic Hurts Amtrak's Performance

The reasons for Amtrak's declining on-time performance are many and complex. One obvious cause is the increasing traffic density of America's freight railroads. As shown in the following chart: train-miles per route-mile have risen by 150 percent since the 70s, while double-track route mileage operated is down by almost 20%. This is a strong indication that the intensity of use of rail infrastructure assets is at an all-time high, which is of great importance to the private sector owners of the infrastructure. But the congestion that has resulted from this increased intensity of use has affected the timeliness of both passenger and freight services. This is only one factor, but clearly an important one. Of the 40,000 hours of delay to Amtrak trains reported in FY01 through June, one-third accumulated due to interference from other trains – mainly freight, but also Amtrak and commuter runs. Other major causes of delay include "slow orders," maintenance work, equipment trouble, and trains held for passenger connections.

[a] For example, the fastest scheduled timing between New York and Chicago by rail in the mid-1950s was 15.5 hours; at Amtrak's founding, it was 17 hours; today, it is 19.6 hours, representing a 25 percent lengthening of scheduled trip times in 50 years.

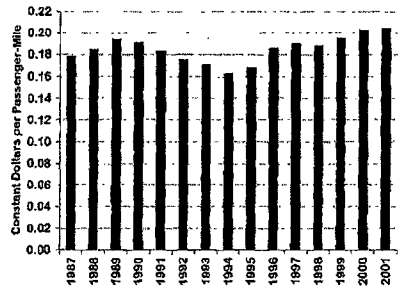


Source: Association of American Railroads, Yearbook of Railroad Facts; Analysis of Class I Railroads.

Nationwide, Amtrak Cannot Compete With Other Modes on Price

On average, today's Amtrak fares are about ten percent higher than they were in 1987 on a constant dollar basis. More to the point, since 1994, Amtrak has raised its system average fares dramatically – by about 25 percent. These Amtrak fare increases merit comparison with trends in other modes.

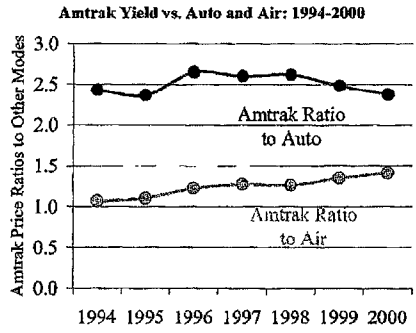
Amtrak Yield, or Revenue, per Passenger Mile: 1987-2001



Source: Passenger Transportation Revenue (in constant dollars deflated by CPI) and Passenger-Miles from Amtrak Annual Reports

FRA analysis shows that as of the end of 2000, Amtrak's per-mile fares remained almost two-and-a-half times as high as the perceived costs of driving. The rail fare increases had, in that regard, partially negated the effects of the gas price hikes in recent years. With constant dollar airfare yields declining and Amtrak fares increasing, Amtrak's average fares were approaching fifty percent higher than those of air. These fare comparisons were system averages and will

vary among markets and among service types. Still, nationwide, there was an obvious dissonance between the relatively high – and growing – fares and the declining timeliness of the service provided by Amtrak.



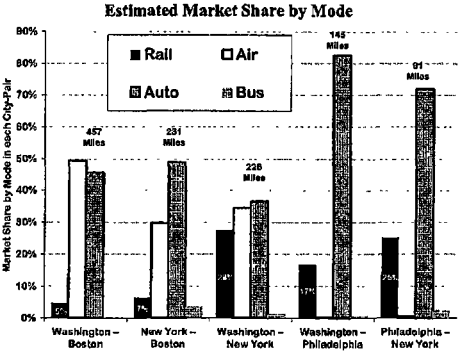
Sources: Amtrak Annual Reports; American Automobile Association, Your Driving Costs; FAA, Statistical Handbook of Aviation; Bureau of Transportation Statistics, National Transportation Statistics; Air Transport Association, website www.air-transport.org.

Amtrak's Competitive Posture Varies by Market

Although Amtrak's product is not available nationwide at high quality, intercity passenger trains can attract significant market shares where they provide a competitive quantity and quality of service – even at relatively high fares. The prime example, of course, is the Northeast Corridor (NEC), where FRA has estimated that Amtrak holds a seven percent share of intercity traffic by all modes in all city pairs and a substantially higher percentage of the combined air/rail trips.

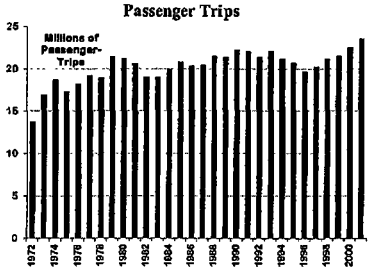
In specific markets, like New York to Philadelphia and New York to Washington, rail can reach market shares of 25 percent and more of all trips and in excess of 50 percent of the combined air/rail trips where rail travel times and service can compete with those of other modes.[b] Under present circumstances – for instance, with reduced service at Reagan National Airport – those market shares can be expected to increase markedly.

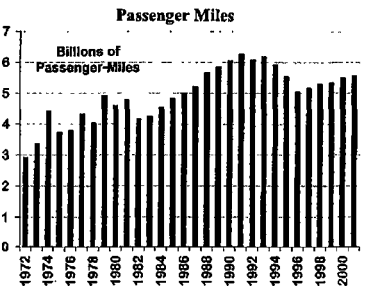
[b] Market shares are based on 1993 estimates prepared for FRA's commercial feasibility study of high-speed ground transportation, the most recent study of its kind.



Source: Volpe National Transportation Systems Center, supporting data for the Commercial Feasibility Study based on 1993 estimated traffic levels for the various modes. No more recent study of this kind has been done.

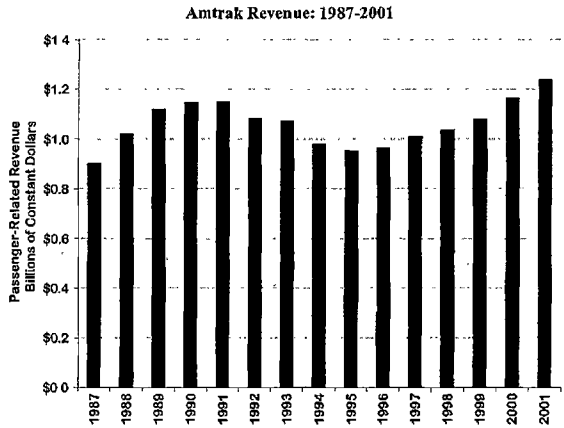
In viewing ridership trends, some emphasize the number of passengers carried. From that viewpoint, the traffic has grown in the past four years to the highest level in corporate history: 23.5 million passenger trips. All the traffic losses of the early 1990s would seem to have been reversed. However, by treating all trips the same, regardless of distance, this measure distorts the transportation economics of the service. Another measure of traffic volume, passenger-miles, shows why. From a disastrous first full year in 1972, with three billion passenger miles, Amtrak had rebuilt its volume to a peak of over six billion passenger-miles by 1991. However, by 1996, fully one-fifth of the peak volume had been lost, due to a marked reduction in service (15 percent fewer train-miles in 1996 than in 1993) and a worsening fare differential in comparison with other modes. There has been growth since the low point in 1996, but not enough to offset the long-term decline. The Corporation today generates about 800 million fewer passenger-miles than it did at its 1991 peak and this decline occurred during a significant expansion in total passenger mobility in the U.S.





Source: Amtrak Annual Reports.

Since 1997, the slight rebound in traffic and the continuing fare increases has led to the highest passenger-related revenue levels in Amtrak's history. On a constant-dollar basis, however, passenger revenues are only eight percent above those of 1991—not a significant percentage in light of the company's increased costs. These restored revenue levels have come from a much smaller traffic base than in the early 1990s.

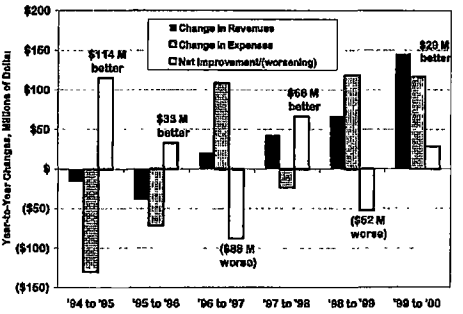


Source: Amtrak Annual Reports and detailed financial statements. Constant 2000 dollars based on GDP deflator.

Amtrak Has Been Unable To Improve its Fiscal Health

Although it has tried, Amtrak has made very little progress in improving the economics of its core[c] passenger and allied businesses since the mid-1990s. Indeed, from 1994 through 2000, the net constant-dollar reduction in the annual operating deficit for the "core" amounted to about $100 million; this is to be compared with an annual deficit in the range of $600 to $700 million during that period.

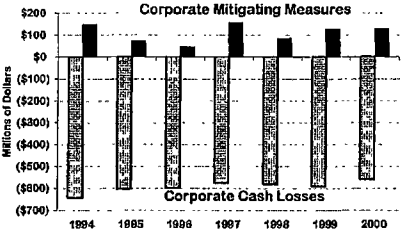
[c] This "annual operating deficit for the core" excludes all State subsidies and other Federal and State payments. All monetary amounts are constant 2000 dollars.



Source. Amtrak detailed financial statements.

Diversification of the Revenue Base Has Not Eliminated Amtrak's Deficits

Amtrak's diversification of its revenue base has not had any appreciable impact on the corporate cash loss since 1995 (as calculated by the DOT Inspector General). In the chart below (which presents Year 2000 constant dollars), "Corporate Mitigating Measures" are the difference between the annual operating deficit for the "core" and the Corporate Cash Loss as calculated by the Inspector General and include such items as commuter profits, profits from reimbursable businesses, and commercial development activities.



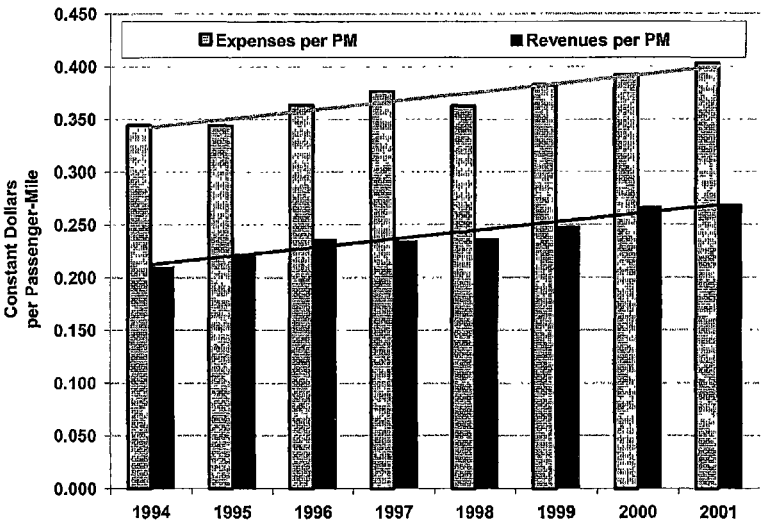
Source: Amtrak Annual Reports, Amtrak detailed financial statements; reports of the Office of Inspector General.

The foregoing facts lead to a simple but key conclusion: Amtrak's corporate performance relies on the marketability and cost-effectiveness of its primary business: passenger transportation. That Amtrak's marketability is weak – at least under normal circumstances – is evident from the previous discussion of its service quality.

Operating Efficiency Declines as Expenses Outpace Revenues

On a constant dollar basis, the cost to generate each passenger-mile on Amtrak has grown by about 17 percent since 1994 – or about 2½% per year – thus counterbalancing any benefit from increased revenues, as the chart clearly indicates.[d] Indeed, the trend lines for the expense and revenue increases are parallel rather than converging. Had expense increases been held to inflation from 1994 to the present, the system-wide deficit per passenger-mile would be only 7½ cents, almost half the 13½ cents that Amtrak presently generates; and the cash losses would likewise be about half of what they are today. Thus, despite commitments made when the last round of labor negotiations was concluded, Amtrak's productivity has declined in real terms since the mid-1990s.

Expenses and Revenues per Passenger Mile: 1994-2001



Source. Amtrak detailed financial statements, adjusted to constant 2000 dollars by GDP deflator.

Several factors, some of which are addressed above, correlate with this trend, including:

- Average trip lengths have decreased from 288 miles in 1991 to 235 miles in 2001 – a drop of one-fifth. This means that fixed per-trip costs, like reservations and ticketing, are spread over fewer miles. The result: higher unit costs.

[d] In the referenced chart, "revenues" are total core revenues less State subsidies and other governmental payments; and expenses are total core expenses, less depreciation but with interest expense included.

- In 2001, train-miles reached their highest level in corporate history, almost 36 million. Since 1996, train-miles have risen more than twice as fast as passenger-miles: 21% vs. 9%. This reflects the restoration of daily service on some routes, like the Texas Eagle, that had previously run only 3 or 4 days a week, and increased frequencies on the West Coast and the Northeast Corridor.

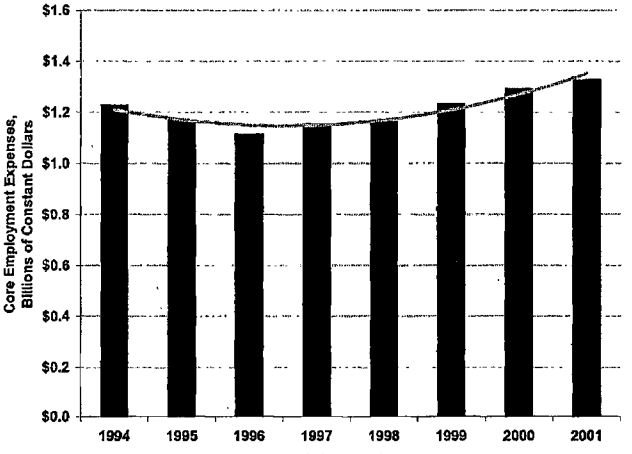
- With more train-miles and less traffic volume than in the past, Amtrak's average trainload of passengers has declined – by almost one-fifth, from 188 in 1989 to 155 today. In part, this reflects the growing importance of short-distance trains, which carry fewer people than overnight or transcontinental runs.

- Finally, since the mid-80s, Amtrak's system-wide load factor has also decreased—from over 50% to about 45%. This shows that the Corporation is having difficulty matching capacity with demand.

Employment Costs Continue to Grow

The most important factor in Amtrak's operating costs is wages, fringes and employee benefits. Employment costs account for almost three-fifths of Amtrak's expenses. This proportion has remained constant since the mid-1990s, an indicator that no substantive productivity gains have occurred during that time. In 2001, Amtrak's core employment expense amounted to over $1.3 billion, exclusive of the embedded employment cost in capital projects.

On a constant-dollar basis, core employment expenses are growing . . .

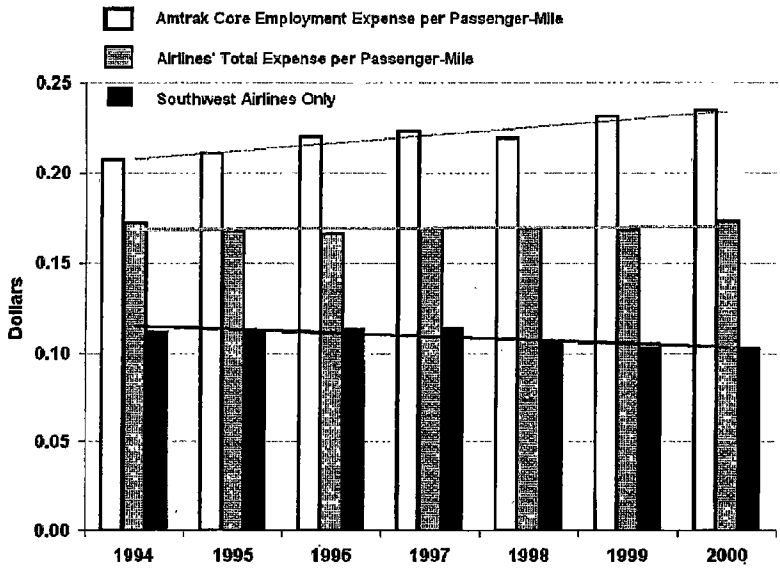


Source: Amtrak detailed financial statements.

Although annual core employment expenses are growing in the aggregate, they have remained fairly constant on a train-mile basis, at about $36-$37 per train-mile. This constancy also demonstrates that no major productivity advances, such as service redesigns or outsourcings of business functions, have occurred in recent years. Increasing train-miles at these constant rates have led to higher total costs.

Since each train has been carrying fewer passengers, core employment expenses have steadily increased on a passenger-mile basis since the mid-1990s, eroding any advantages Amtrak has obtained from higher fares and making it ever more difficult for Amtrak to compete with declining prices for air travel, at least before September 11. The trend for Amtrak does not compare favorably with the total operating expenses of U.S. airlines, and particularly with those of the most efficient carrier, Southwest Airlines. The airline industry has been able to keep its unit cost increases even with inflation, and Southwest has controlled its costs still further. These are publicly available numbers from the Air Transport Association, the Bureau of Transportation Statistics, and the FAA.

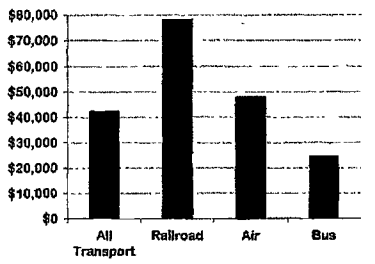
Comparison of Amtrak and Airline Unit Operating Expenses
(2000 Constant Dollars)



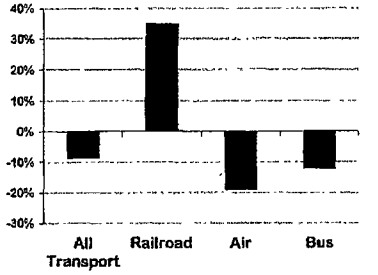
Sources: Amtrak detailed financial statements; Bureau of Transportation Statistics, particularly their "yellow" and "green" books; Air Transport Association; Federal Aviation Administration, "Statistical Handbook of Aviation."

Amtrak's unit employment costs exceed the total unit expense of other transportation providers for several reasons, including compensation levels, as well as the rate of growth in compensation, which has outpaced inflation. These intermodal comparisons are based on Eno Foundation data.

Average Yearly Compensation by Mode, 1999



Percent Real Change in Rail Compensation, 1980-99



Source: Eno Foundation historical statistics; the right-hand chart adjusts the numbers for inflation using the GDP deflator.

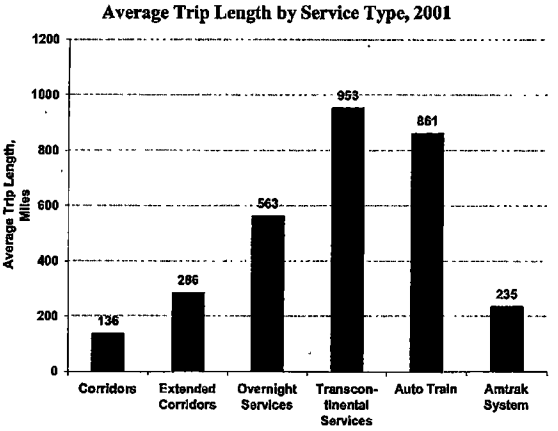
Amtrak has entire employment categories that airlines and bus companies do not deal with: maintenance-of-way employees and dispatchers, for example. While some of these costs are embedded in the funding mechanisms that support these other modes, air traffic controllers work for the FAA and highway maintainers work for State highway departments.

Finally, the Federal Government has had a longer-term involvement in railway labor and management issues, with the result that many provisions are especially applicable to the rail industry – for instance, Railroad Retirement and the Federal Employers' Liability Act – and may result in higher costs for all railroads.

The foregoing discussion is not intended as a comment upon Amtrak's workers, many of whom are as dedicated to their company and its mission as any worker in the country. Nor is it commentary as to the adequacy of the compensation of individual workers or to the quality of their work. It is an observation, however, that if public policy is to dictate that operating expenses must be brought into line with operating revenues, then employment costs as a percentage of revenue must be addressed.

Amtrak's Financial Performance Varies Significantly Among The Different Services it Provides

Amtrak provides five basic types of intercity passenger rail service. These are Corridor, Extended Corridor, Overnight, Transcontinental, and Special Services (i.e., Auto-Train). As shown below, these service types have average trip lengths that are clearly differentiated.



Source. Amtrak route profitability system.

A listing of the various routes, categorized by service type, appears on the following page.

In addition to the average trip length, these services have other differentiating characteristics

- **Corridor** services are characterized by relatively frequent schedules with modest amenities, on routes in the 100–500 mile range. Depending on average speeds and service quality, these trains can serve both business- and personal-travel markets.

- **Extended Corridors** are daytime services on routes over 500 miles in length. These services, also with modest amenities, are few in number, have single daily frequencies, and often have very early departures and very late arrivals at major terminals, making their marketability highly dependent on on-time performance. Extended corridor services cater primarily to personal travel needs because of their relatively lengthy time requirements during daylight hours.

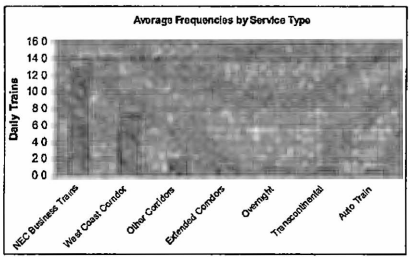
- **Overnight** trains take one night and portions of the adjoining days and are concentrated in two major, traditional traffic lanes: between Northeast Corridor points and Chicago (four daily round trips); and between Northeast Corridor points and Florida (three daily round trips). Other traffic lanes with single daily services include: Northeast Corridor-Atlanta-New Orleans; Chicago-New Orleans; and Chicago-Texas; as well as overnight runs along the Northeast Corridor and the West Coast. These services generally provide sleeping and full dining cars in response to passenger needs and expectations, and as an extension of past practices. Their primary market is evidently for personal travel; the size of any potential business market is unknown because of Amtrak's chronic on-time performance difficulties and schedules that have deteriorated, in many cases markedly, since the mid-1950s.

FRA Categorization of Intercity Passenger Train Routes, 2001

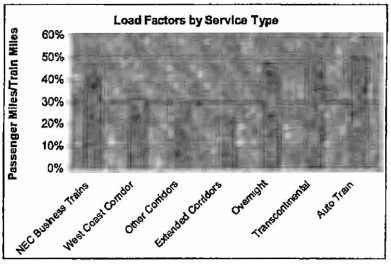
Corridor Services	Northeast Corridor Services		Metroliner and Acela Express
			Northeast Direct
		Clockers and Keystones (Harrisburg-Phila.-NYC)	New York-Philadelphia (Clocker)
			Keystones (Harrisburg-Philadelphia-New York)
	Empire Corridor Services		NYC-Albany-Buffalo (Empire Service)
			NYC-Albany-Vermont (Ethan Allan)
			NYC-Albany-Montreal (Adirondack)
			NYC-Buffalo-Toronto (Maple Leaf)
	Chicago Hub Network Services		Chicago-Milwaukee (Hiawathas)
			Chicago- Quincy
		Chicago-St Louis-Kansas City	Chicago-St. Louis
			St Louis- Kansas City
			Chicago- Carbondale
			Chicago-Indianapolis- Louisville
			Chicago-Detroit
			Chicago-Grand Rapids (Pere Marquette)
	West Coast Corridor Services		Pacific Northwest (Cascades)
			San Jose- Sacramento (Capitols)
			Bay Area- Bakersfield (San Joaquins)
			CA Coast- L.A.- San Diego (Pacific Surfliners)
	Other Corridors		Raleigh-Charlotte, NC (Piedmont)
			Fort Worth- OK City (Heartland Flyer)
Extended Corridor Services *[Daylight service routes over 500 miles and extending beyond a single corridor]*			Vermonter
			Pennsylvanian
			Carolinian
			International
Overnight Services	NEC Overnight Service		Twilight Shoreliner (Boston-Washington-Hampton Roads)
	Trunk Line Overnight Services (East Coast and Chicago)		Lake Shore Ltd (Via New York State)
			Three Rivers (Via Pennsylvania)
			Capitol Ltd. (Via Potomac Valley)
			Cardinal (Via West Virginia)
	Florida Overnight Services (NEC and Florida)		Silver Star (via Columbia SC)
			Silver Meteor (via Charleston SC)
			Silver Palm (via Charleston SC)
	Other North-South Overnight (East-Midwest and South)		Crescent (NEC-Atlanta-New Orleans)
			City of New Orleans (Chicago- New Orleans)
			Texas Eagle (Chicago-San Antonio)
	West Coast Overnight		Coast Starlight (Seattle-Bay Area-L.A.)
Transcontinental Services			Empire Builder (Chicago-Seattle/Portland)
			California Zephyr (Chicago-Denver-Oakland)
			Southwest Chief (Chicago-New Mexico-L.A.)
			Sunset Ltd (Florida-Texas-L.A.)
Special Services			Auto Train (NEC and Florida)

- **Transcontinental** trains require a trip of two or more nights and are comprised of trains providing service between Chicago (and in one case Florida) and the West Coast. As a result of the travel time involved, their prime market under normal circumstances is for personal, non-time-sensitive travel.

- **Special services** presently consist of Amtrak's Auto Train, which links the Northeast Corridor market (served at Lorton, Virginia, south of Washington, D.C) with the prime tourist attractions of Florida (accessed at Sanford, north of Orlando). It is geared toward extended personal trips or seasonal migrations, and allows customers to take their cars with them.



Source. Amtrak timetables



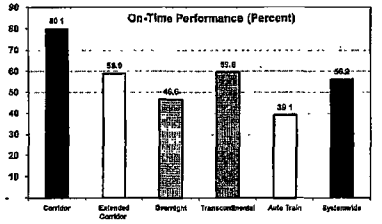
Source: Amtrak route profitability system

Since the 1990s, the corridors have received the bulk of public attention and investment in passenger rail. However, the other service types still account for the majority of Amtrak's transportation production (measured in passenger-miles) and a very sizable share of revenues. Only in terms of annual passenger-trips do the corridors assume a preponderant role; because of repetitive travel over shorter distances, this statistic does not indicate the number of individuals making use of the various Amtrak services yearly.

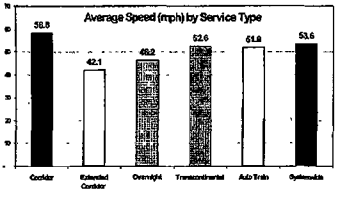
Amtrak's corridor routes offer higher-quality service to passengers, as measured by frequency, average speed, and on-time performance. However, service quality on overnight and transcontinental trains has deteriorated, and in some cases fares have been raised, contributing to a marked decline in ridership in the mid-1990s.

The long-distance trains average only one round-trip daily, speeds well below 55 miles per hour, on-time performance at or below 60 percent and delays sometimes measured in hours. As a result, these trains are at a significant competitive disadvantage versus other modes (in ordinary circumstances), particularly for business and time-sensitive personal travel. Amtrak's high fixed

cost base, low load factors, poor on-time performance, and challenging revenue management conditions adversely affect the financial performance of overnight and transcontinental trains.

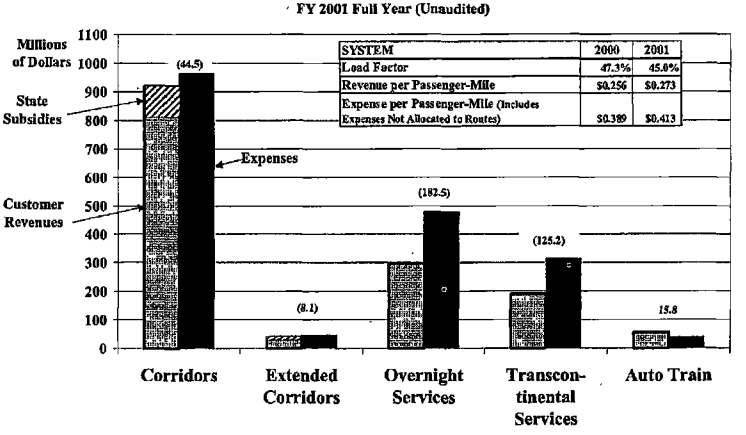


Source: Amtrak on-time data provided to FRA



Source: Estimated from Amtrak timetables

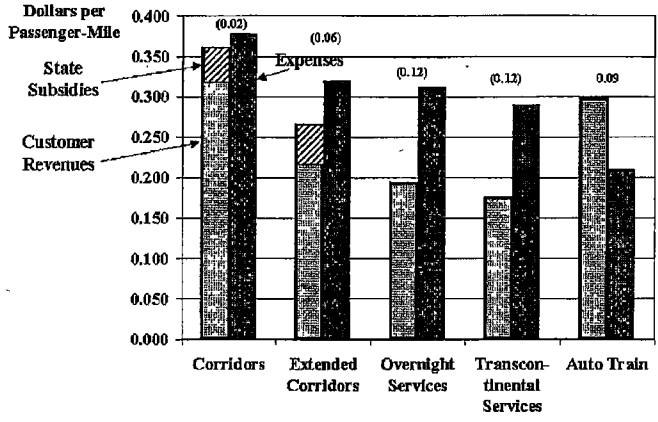
FRA has analyzed of all segments of Amtrak's network, and has estimated avoidable costs. *These are costs that would be saved if a particular route, or group of routes, were eliminated.* The data represent actual performance in fiscal year 2001 (full year–unaudited). Payments to Amtrak from State governments (which are negotiated each year) are shown separately from ticket revenue.



# of Routes	22	4	13	4	1
Passenger-Trips, mil.	18.8	0.5	2.7	1.1	0.2
Train-Miles, mil.	18.2	1.4	9.5	6.2	0.6
Passenger-Miles, mil.	2550.9	144.9	1532.4	1081.5	184.2

The chart above illustrates that a simplistic solution such as eliminating routes cannot restore the Corporation's financial viability. The long-distance service cuts proposed by Amtrak may ultimately save Amtrak on the order of $200 million (depending on the application of labor protective conditions in its contracts) and cuts of all overnight and transcontinental service may save as much as $300 million per year. However, absent major structural changes to the revenue/expense relationship, Amtrak will still not achieve fiscal health. The leading causes of Amtrak's weakened financial condition are crosscutting cost drivers – those costs that impact every train on every route. Cutting certain under-performing routes does not address this structural weakness. The pervasiveness of these crosscutting cost drivers, which affect all service categories—even the corridors, despite higher revenue yields and State subsidies—becomes apparent in the following chart:

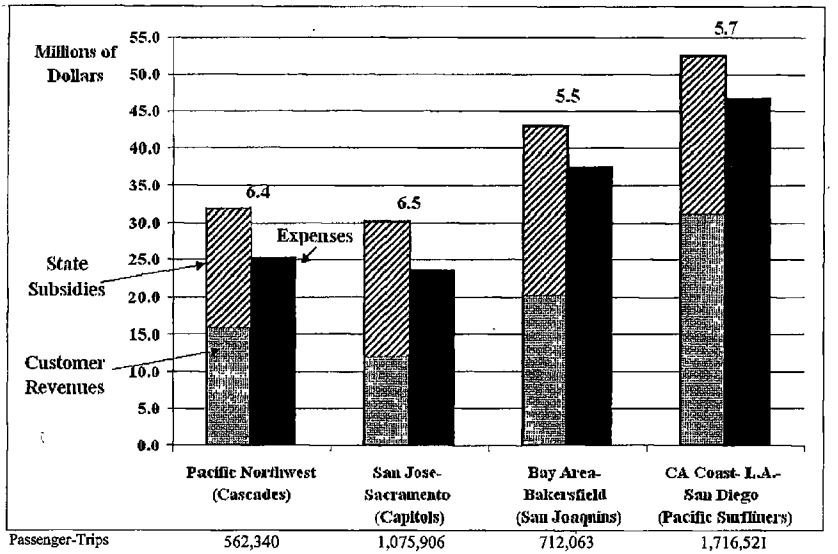
Per Passenger-Mile Revenues and Expenses by Service Category



States Are Playing An Increasingly Important Role in Supporting Intercity Rail Passenger Service

Amtrak forecasts State payments in FY 2002 of $133 million, an amount equivalent to nearly 10% of its passenger-related revenues. Validating the importance of State payments to Amtrak today is the chart below, which reflects steadily, increasing demand for intercity passenger rail on the West Coast. The routes depicted here run in California, Oregon, and Washington State. Including State payments, revenues on each of these routes exceed avoidable expenses.[e]

[e] Data for Fiscal Year 2001. The expenses shown are those which the FRA staff regards as "avoidable" on an individual route basis, and do not include an allocation of costs common to more than one route, or corporate overheads. These estimates are completely independent of, and not comparable with, the terms of any State contracts with Amtrak for reimbursement.

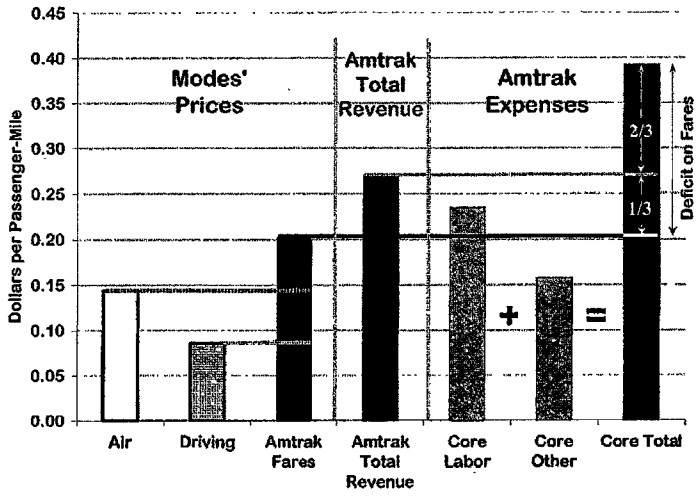


	Pacific Northwest (Cascades)	San Jose-Sacramento (Capitols)	Bay Area-Bakersfield (San Joaquins)	CA Coast- L.A.-San Diego (Pacific Surfliners)
Passenger-Trips	562,340	1,075,906	712,063	1,716,521
Load Factor	0.42	0.30	0.33	0.26
Customer Revenues plus State Subsidies per Passenger-Mile	$0.38	$0.42	$0.39	$0.33
Avoidable Expenses per Passenger-Mile	$0.30	$0.33	$0.34	$0.29

Amtrak's Competitive Posture Shapes Its Fundamental Economics

Given the measurable characteristics of Amtrak's product, one could conclude that airfares – now a third below those of Amtrak – or perceived driving costs – now less than half Amtrak's fares – would constitute the ceiling for Amtrak's fares. Although rail travel attracts business that cannot be totally explained on quantitative grounds, it is difficult to see how Amtrak can significantly raise its overall prices without eroding its traffic base, diminishing its utility to the Nation as a transportation provider, and even reducing its total revenues.

Thus Amtrak is in a vise: It cannot raise its fares across the board because of competitive pressures from other modes, made worse by Amtrak's service quality levels. And historically, it has not only been unable to lower its unit costs, but in recent years has actually seen them rise well above inflation. Therefore, Amtrak's economic stance in relation to other modes is overshadowed by its cost structure.



The discussion above relates to Amtrak's core revenues, i.e. revenues from carrying passengers and mail and express. Amtrak does have other revenue sources, such as facility rentals and commuter management fees. Yet, when these other sources enter into the equation, they propel Amtrak only one-third of the way toward a break-even operation.

Thus the basic economics of Amtrak point to the passenger deficit with its underlying, disproportionate unit costs as the prime target for improvement. Amtrak's basic economic problems are compounded by the debt load the corporation bears. At the end of 2001, Amtrak had long-term debt and lease obligations on the order of $3½ billion; the company's debt service (principal and interest) is expected to amount to some $¼ billion in 2002.

With three decades of ballooning expenses, a revenue base that can never expand fast enough to keep up with them, substandard service in most parts of the country that constrains the fare structure, and a traffic level that has actually declined since the early 90s, we must regard the current service provision system as unproductive and unsustainable. Quite simply, it needs to be changed.

Now Is the Time for a Cogent National Policy for Intercity Passenger Rail

For the last 30 years, Administrations and Congresses have addressed intercity rail passenger service by minor adjustments to authorizing statutes and the infusion of funds only sufficient to

keep Amtrak and its current route structure barely solvent. The discussion above provides strong support that we take a different path this year.

Last year and again a few weeks ago, Amtrak's President, George Warrington talked of two conflicting visions of Amtrak – as a provider of a public service at the direction of the Federal Government and as a commercially viable corporation. Mr. Warrington said that these visions are in such fundamental conflict that Amtrak cannot perform either of them well. He has called on the Administration and the Congress to provide clear direction as to what the national interest is in passenger rail service and adequate resources to cover those aspects of the national interest that are not commercially viable.

The Department of Transportation agrees that now is the time to develop a new, clear national policy for intercity passenger rail. The crisis in intercity passenger rail has been decades in the making and will not lend itself to simple solutions. At the present time, the Department is listening to the many stakeholders in intercity rail passenger service to identify their concerns, their needs, and their basic principles so that we can develop the outline of a new national intercity rail passenger policy that can have the broadest possible base of support. Secretary Mineta and I look forward to working with the Congress and others with an interest in passenger service in this difficult but important task.

STATEMENT OF KENNETH M. MEAD, INSPECTOR GENERAL U.S. DEPARTMENT OF TRANSPORTATION

Mr. ROGERS. Mr. Mead.

Mr. MEAD. Thank you, Mr. Chairman.

It ought to be clear at this point that Amtrak will not meet its operating self-sufficiency deadline by this December. Last year at about this time you will recall that we expressed some real reservations about whether it was possible for them to meet it, but I did withhold judgment at that time. It is now a mathematical certainty, save doing things of a serious nature like mortgaging the Northeast Corridor.

And you may recall, you say you heard this before in your years on the subcommittee, Amtrak's perils and financial woes. So what is different this time?

What is different this time is that there are few options. Amtrak has mortgaged most everything there is to mortgage and sold and leased back most of its assets, so there is not much left. There are some station properties and there is also the Northeast Corridor, but beyond that Amtrak does not have any sort of options.

As for the budget, it will not be able to operate on a subsidy of $500 to $600 million. It is that simple. Amtrak cannot do it. I have the numbers in front of me and we will explain them later during the Q&A period.

I would like to walk through some slides. I think you all have some slides in your packets there that have a bluish cover. They basically highlight some financial and operating performance issues that I would like to point out.

Slide one is entitled System Wide Passenger Revenue and Ridership. For those who have the testimony but not the individual slides, they are set forth in the testimony as well.

There is an irony on slide one, that the revenues and ridership for Amtrak have shown marked growth. Since the self-sufficiency mandate was established in fiscal year 1998, system-wide ridership, which is represented by the blue line on that chart, grew over 11 percent. System-wide passenger revenue which is represented by the red line, grew 26 percent. The revenue growth trend that began in 1995 has brought Amtrak the highest passenger revenue levels in its history.

Another note on revenue that is fairly interesting, Amtrak is increasingly relying on revenue from sources other than passengers. So that today, nearly 43 percent of the revenues that Amtrak takes in do not come from passengers. They come from sources other than the fare box.

If you turn to slide two, this is where the picture becomes somewhat dispiriting. Amtrak's revenue growth was more than matched by the growth in expenses. In fact, since the self-sufficiency mandate was established, for every dollar in new revenues Amtrak's cash expenses increased by about $1.05. An area worth noting: interest on borrowing which was $24 million in 1994 is now approaching $185 million and it is expected to go to $225 million in 2005.

If you go to slide three, slide three represents the growth in operating and cash losses. Amtrak's operating loss in 2001 which is rep-

resented by the dark blue line was a little over $1 billion. That is about $129 million higher than its 2000 loss and is in fact the largest loss in Amtrak's history.

The dark blue line needs to be put in context, though, because that also is rising because of the acquisition of capital equipment and infrastructure improvements from the infusion of capital funding that Amtrak received several years ago. But the cash loss, which is the basis for measuring self-sufficiency, that is the line that should have disappeared. That is the light blue one with the number $585 million on it. That is now $24 million worse than Amtrak's cash loss in 1998 which was the first year on this five year glide path.

If you turn to slide four, this tells the story of Amtrak's debt. Between September 2000 and 2001, Amtrak's long term debt and capital lease obligations grew by 30 percent or a total of over $800 million.

Since 1997 Amtrak's total debt has grown 155 percent from $1.7 billion to over $4 billion. What that translates into, when you combine interest payments and principle payments, it is now approaching $300 million in debt payments. You bump that up against the current subsidy level of $521 million and I think you can see the picture as well as I can.

If you turn to slide five, slide five is where we have attempted to measure in a fairly crude way what is happening in the Northeast Corridor as a result, at least in part, of inadequate capital investment. And what you see there is an increase in delays.

Amtrak has about a $5 billion backlog of repair needs in the corridor and the total minutes of delay for Amtrak trains in the Northeast Corridor has gone up nearly 75 percent between 1998 and 2001. That is somewhat scary when you stop and think about what we are trying to do in the Northeast Corridor. We are trying to go faster. If that blue bar chart gets much higher you are going to see reduction in the speed that the trains can go.

The last slide deals with the budget. The Administration has a placeholder budget that is $521 million as the Chairman pointed out. That is less than half of what Amtrak has separately requested. What Amtrak is requesting, I think they would characterize it fairly is a limp-along, tight budget just to get them through '03.

You will see that of the $1.2 billion, $160 million will be for excess railroad retirement payments, $200 million for net operating subsidies, and $840 million for capital investment. That may be a bit more than they need to just get through 2003. If the goal is just to get them to the end of 2003, I think they probably can get by with somewhat less than that. But if the idea is to position the railroad for the future, you are going to need probably more than that.

A few closing points. I think the focus on the operating subsidy has been a distraction and that the real issue is the capital issue. In fact, the annual operating subsidy that is required to continue operating the most unprofitable trains in the Amtrak system is less than one-third of the money that is needed for capital in the Northeast Corridor to keep the trains running there. And that is where the most profitable trains are.

I have heard suggestions that one of the solutions may be cost sharing with the states, where the states will be expected to provide a greater level of contribution. A couple of issues there.

If I were one of those states, I would want to know what I was going to get for my money and how much it was going to cost. Amtrak is going to have to provide you with more detailed analysis than is currently available if you want to achieve that.

The second issue is how are you going to divvy it up among states. Take the Northeast Corridor as an example, most of the money that is needed is in the Northeast Corridor. The Northeast Corridor states will likely say that they are an economic engine, and they are. And the corridor, if it were to shut down in the Northeast, would cause real problems with the airports and the roadways. It really would.

So there is going to be an issue about how much should the Northeast Corridor states contribute in relationship to other states in the country.

Finally, I know there are a number of proposals on the table to reorganize Amtrak, to split it up into three pieces, to create three separate Amtraks called something else, and create an agency that would handle infrastructure. I am telling you, do not be fooled into thinking that that is going to solve the problem. If we are not going to come to grips with the capital situation at Amtrak, we are fooling ourselves if we think we are going to continue with the status quo or that we are going to expand passenger rail in this country.

Thank you, Mr. Chairman.

Mr. ROGERS. Thank you, Mr. Mead.

[The prepared statement and slides of Mr. Mead follow:]

Before the Subcommittee on Transportation and Related Agencies
House Appropriations Committee

United States House of Representatives

For Release on Delivery
expected at
1:00 p.m. EST
Wednesday
February 27, 2002
Report Number: CC-2002-112

Amtrak's Performance, Budget, and Passenger Rail Service Issues

Statement of
The Honorable Kenneth M. Mead
Inspector General
U.S. Department of Transportation

Mr. Chairman and Members of the Subcommittee:

We appreciate the opportunity to testify on Amtrak's performance, budget and passenger rail service issues. Since December 1997, Amtrak has operated under a Federal mandate to eliminate its need for Federal operating assistance by December 2, 2002. Amtrak has not succeeded in implementing enduring financial improvements of the magnitude necessary to attain and sustain self-sufficiency in and beyond 2003. *Despite marked growth in Amtrak's passenger revenues and ridership – 26.1 percent and 11.4 percent, respectively – expense growth has more than kept pace, so that for every $1 Amtrak realized in additional revenue, cash expenses increased by $1.05.*

Amtrak's operating loss in 2001 of $1.1 billion was $129 million higher than the 2000 loss and the largest in Amtrak's history. Amtrak's cash losses, which are the basis for measuring Amtrak's progress towards self-sufficiency, were $585 million in 2001. This was $24 million worse than Amtrak's cash loss in 1998, the first year of Amtrak's self-sufficiency mandate.

Amtrak's failure to eliminate its need for operating assistance has detracted attention from the more critical issue, which is how much capital investment will be needed to sustain a system of intercity passenger rail. The long-distance trains, which account for most of Amtrak's cash losses, actually constitute a relatively small subset of Amtrak's capital needs. *The annual net operating subsidy required to continue operating Amtrak's <u>most unprofitable</u> long-distance trains is about 30 percent of the annual capital subsidy required to continue operating Amtrak's <u>most profitable</u> trains in the Northeast Corridor.* The Northeast Corridor alone accounted for about 55 percent of Amtrak's total ridership in Fiscal Year 2001 and contributed about $89 million in cash profits to the rest of the system, but to ensure safe and reliable operations, most of Amtrak's capital investment dollars will need to be invested there.

Any system of passenger rail – profitable or not – will require substantial and continuing capital funding. Even if Amtrak (or a successor) were to succeed in becoming operationally self-sufficient, it would still require substantial external assistance to address its capital needs. The Northeast Corridor has a backlog of capital investment needs to bring it to a state of good repair that Amtrak has recently estimated to cost about $5 billion. To address this backlog and make the kinds of annual reinvestment necessary to sustain safe and reliable operations, Amtrak estimates that it will need between $1 billion and $1.5 billion annually.

As Congress continues with its reauthorization proceedings, three core issues will need to be addressed:

- The level of funding necessary to address the capital and operating needs of various options for an intercity passenger rail system,
- The most equitable and appropriate source and vehicle for funding these needs, and
- The importance of each component of the system from a national, regional, and state perspective and implications of such for cost-sharing decisions.

Detailed Operating and Capital Cost Estimates Must Be Developed For Each Passenger Rail Option Considered.

Congress and the Administration need to determine whether the public interest lies in a linked national passenger rail system, in regional systems of time-competitive routes, in some variation of the two, or in no passenger rail service at all. Once the desired system is determined, a detailed cost analysis, including the funding that will be needed to support operations and adequate capital investment will need to be developed.

On February 15, Amtrak submitted its own grant request to the President, seeking $1.2 billion for operating and capital needs in Fiscal Year 2003.[1] The request included $840 million for capital investment needs that Amtrak describes as, "essential for keeping a national rail service network intact," during that year. This "limp-along" budget is substantially greater than the Administration's placeholder budget request for 2003 of $521 million.

Amtrak projects that over the next 25 years, it will need to invest about $30 billion in capital projects just to sustain the system as currently structured. Approximately one-half will be needed in the Northeast Corridor, including $5 billion to address the backlog of state-of-good-repair needs. The magnitude of need makes it clear that neither the Administration's request nor Amtrak's request would allow Amtrak to begin to meaningfully address these needs in 2003. However, it is not clear at this point how passenger rail will be structured beyond that date, which could affect the required level and location of investment. Congress needs to understand how and where Amtrak intends to use its 2003 capital dollars before it can determine the appropriate amount of funding. *Amtrak needs to develop specific and detailed information on the exact projects requiring*

[1] The Office of Management and Budget traditionally requests funds on behalf of Amtrak which it includes in the Department of Transportation budget request. A request was submitted by the Department on February 4, 2002 for Fiscal Year 2003 funds, which included $521 million for Amtrak's 2003 operations. Amtrak subsequently transmitted its own request to the President on February 15, 2002, requesting $1.2 billion

immediate and long-term attention including where they are located, how much they will cost, and their impact on safety, reliability, or other service priorities.

In order to determine the capital and operating subsidies necessary to support any future intercity passenger rail service, it will be necessary to develop fully allocated cost estimates for each option considered, for example, the current system, the current system minus long-distance trains, the Northeast Corridor only, or existing corridors plus new corridors.

Amtrak's figures are likely to be the best data currently available to establish a cost baseline. From these data, the short- and long-term capital and operating funding needs associated with any potential option for passenger rail could be determined. *This information will be essential to the Congress and other stakeholders if any discussion of route or service restructuring is to be considered. Amtrak should be encouraged to develop these data as quickly as possible.*

Funding For Continued Rail Service Should Be Shared Among Stakeholders.

Amtrak has historically received Federal capital and operating subsidies, which it invests systemwide as needed to support operations across a national network. In some cases, states and freight railroads have partnered with Amtrak on a project-by-project basis to fund capital improvements. Some states have also agreed to subsidize the operations of services that Amtrak could not otherwise operate due to the losses associated with these services.

The "formula" for partnering, however, is inconsistent, and some entities have contributed substantially to the growth and operation of passenger rail while others have benefited from service without contributing anything. Work should be done to better identify and allocate the costs of capital and operating investment according to the benefits realized by stakeholders. An important precursor to allocating costs will be determining how each service fulfills our national, regional, and state goals for mobility and other transportation priorities.

Importance of Rail Service to a Region Will Likely Play An Integral Role in Determining Cost-Sharing Ratios.

Once the costs of subsidizing passenger service are identified – both operating and capital – it will be important to weigh the subsidies needed – both capital and operating – in light of national, regional, and state priorities. A number of variables should be considered in these evaluations including the importance of the rail system to regional mobility, essential transportation for small communities, national security, the need for transportation alternatives,

relationship to other national priorities including environmental issues, political considerations, and historical or nostalgic importance.

For example, an argument has been made that the rail infrastructure in the Northeast Corridor is a national asset and is essential to national mobility. The Northeast Corridor serves cities with four of the seven most congested airports in the United States, and has for several years carried more passengers between Washington and New York (62 percent of the total) than all airlines combined. Including intermediate stops on the New York to Washington route, Amtrak carries nearly three times as many passengers as the airlines. While the capital subsidies associated with maintaining the Northeast Corridor service may be higher than in other parts of the country, the contribution to regional mobility and the implications on congestion for other modes of transportation without it, may justify the significant capital investment.

Regions and states may decide that even if a service or corridor does not fulfill a national need, it serves a critical regional or state priority. For example, California has decided to subsidize both rail service operations and capital improvement projects to expand rail service within California consistent with the state's sensitivity to environmental issues and concerns about regional mobility.

Assessing and identifying the importance and need of service in a particular region or community will play an integral role in determining who should bear responsibility for financially supporting that service or how those costs should be shared among stakeholders. It is possible that cost-sharing equations would differ in areas where limited demand makes service less of a necessity even though the relative subsidies to continue that service might be far less than what would be required in other, more rail-dependent, communities.

Eliminating Amtrak Does Not Address Primary Issue of Capital Funding.

Proposals have been made concerning the possibility of establishing separate entitities – either public or private – to address the operational needs and infrastructure needs of intercity passenger rail. While elements of these proposals may have merit, the primary issue of funding needs to be resolved first. Amtrak currently estimates that it would need about $1.0 billion to $1.5 billion in capital each year just to sustain the current system and another $0.5 billion each year to begin to develop new high-speed corridors. These needs would not just go away by handing the system or parts of it over to another entity. What it will cost to continue and begin to expand passenger rail in the United States is not dependent upon whether Amtrak is the operator or not. *The debate over whether a private company or government entity should be established solely for the purpose of*

administering the rail infrastructure investment program is irrelevant if there is no assurance that adequate capital funding has been secured to invest in the system.

In fact, privatization is not likely to be an option unless adequate funding is secured. If the Northeast Corridor were to be franchised "as is," with its $15 billion in long-term capital investment needs, few investors would find it a good bargain. For the Northeast Corridor to become marketable, the capital needs must first be addressed, which leads us back to the funding question already on the table: "How much will it cost, who pays, and how?"

The recent experience in Great Britain with rail service underscores concerns about commercializing and separating infrastructure and operating functions. Allowing a business to operate "like a business" may mean relinquishing control over how certain expenses are cut or which capital investments are made. *An infrastructure company that is focused on its bottom line may make decisions that are in its best interest financially, but which may affect the safety or efficiency of rail service operations.*

With Amtrak's authorization expiring at the end of 2002, many questions face the Congress about the future of intercity passenger rail in the United States. The question of what kind of system is best for the country is inextricably intertwined with the question of how much the country is willing to pay for such a system. The answers to both questions are most appropriately left to the Administration, the citizens of the United States, and their elected representatives.

We expect that our contribution to the debate will be in helping to frame the questions in such a way as to make the task easier as Congress moves forward to develop answers. As part of our legislative mandate to perform annual assessments of Amtrak's financial condition and needs, we will also provide whatever information we can concerning possible options and the likely costs, risks, or both associated with the various options put on the table.

The following discussion summarizes Amtrak's performance achievements and shortfalls since it received its self-sufficiency mandate in 1997, as well as general performance trends experienced over the past decade. We also offer some observations on Amtrak's Fiscal Year 2003 grant request.

Amtrak's Performance Achievements and Shortfalls

In the following section, we highlight some of Amtrak's achievements and shortfalls in financial and operating performance since its self-sufficiency mandate in December 1997 as well as longer-term trends in performance. For the most part, the record shows that Amtrak has fallen far short of its financial and operating performance goals and, as a result, its financial health has significantly deteriorated.

- **Implementation of High-Speed Rail Service in the Northeast Corridor**

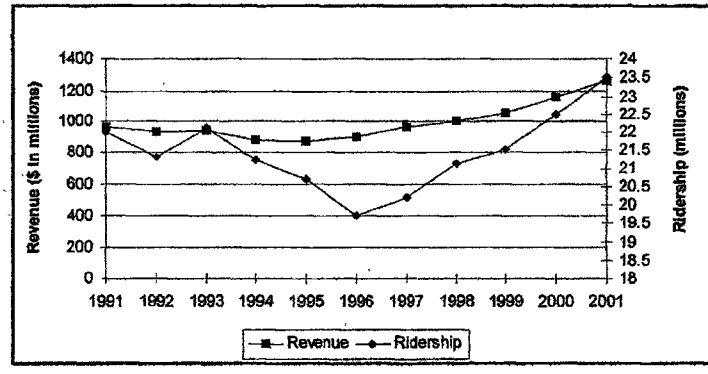
First and foremost, Amtrak implemented high-speed rail service in the Northeast Corridor. Acela Regional service was initiated on a limited basis in January 2000 and Acela Express revenue service started in December 2000. These accomplishments were not without their downside, however. The electrification of the right-of-way between New Haven, Connecticut, and Boston, Massachusetts, was completed about 1 year behind schedule and more than $300 million over budget. Similarly, Acela Express revenue service was introduced about 1 year behind schedule with substantial budget overruns. The 20th and final Acela Express trainset is now projected to be in service by the summer of 2002, about 2 years behind schedule.

- **Passenger Revenue and Ridership Growth**

In 2001, systemwide passenger revenue[2] and ridership improved from 2000, continuing the upward swing of the past few years. Passenger revenues increased by 8.2 percent and ridership by 4.3 percent. The Northeast Corridor experienced the most significant increase where passenger revenues grew a strong 13.5 percent and ridership increased by 4.6 percent.

Systemwide ridership grew 19.3 percent between 1996 and 2001, rising from 19.7 million to 23.5 million. Additionally, systemwide passenger revenue grew 44 percent between 1995 and 2001. The revenue growth trend that began in 1995 has brought Amtrak to the highest passenger revenue levels in its history. Figure 1 illustrates systemwide passenger revenue and ridership growth from 1991 through 2001.

Figure 1. Passenger Revenue and Ridership Growth Since 1991



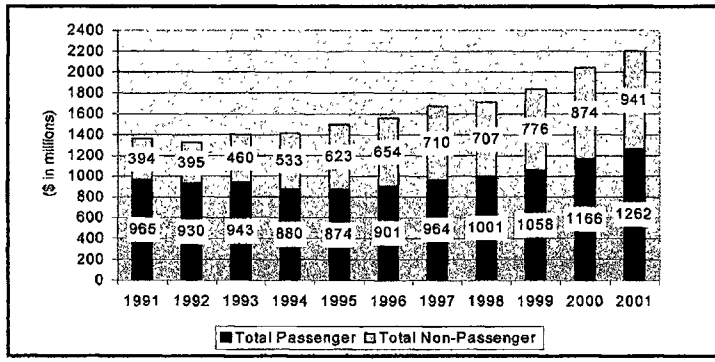
[2] Financial data for Fiscal Year 2001 were compiled from Amtrak's unaudited internal financial statements.

While growth has fallen short of Amtrak's projections for both revenue and ridership, in the current economic climate and in the wake of the terrorist attacks, Amtrak's relative performance has been more positive than its competitors. Domestic air passenger enplanements for the major carriers were down approximately 21 percent for the most recent quarter ended December 31, 2001, compared to the same quarter last year and air carrier passenger revenues were down almost 33 percent. Amtrak's ridership and revenue numbers, however, remained strong. Compared to the same quarter last year, Amtrak's systemwide ridership was only down about 1 percent and passenger revenues were *up* by 13 percent. It is particularly noteworthy that passenger revenue in the Northeast Corridor grew by 21 percent over the same quarter a year ago.

- **Non-passenger Revenue Growth**

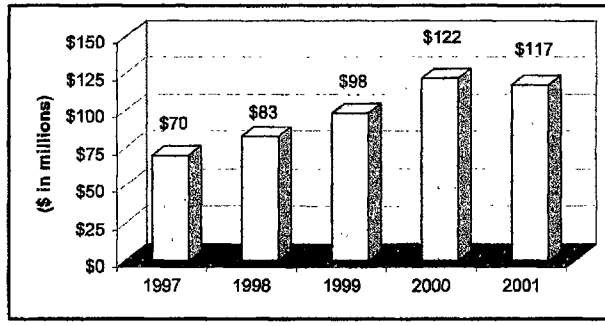
Non-passenger revenue has accounted for an increasing share of Amtrak's total revenues between 1991 and 2001. In contrast to passenger revenues, which grew 31 percent, the overall increase in non-passenger revenue has been 139 percent, rising from $394 million in 1991 to $941 million in 2001. Non-passenger revenue includes revenue from operating commuter services, mail and express, reimbursable work, state support for train services, commercial development, and other miscellaneous sources. Non-passenger activities now account for 43 percent of Amtrak's total revenues. Figure 2 illustrates growth in non-passenger revenues between 1991 and 2001.

Figure 2. Composition of Amtrak Revenues, 1991 Through 2001



Amtrak's fastest growing source of non-passenger revenues was projected to come from its expanded Mail and Express business line. To its credit, Amtrak's Mail and Express revenues increased 67 percent, from $70 million in 1997 to $117 million in 2001. Figure 3 illustrates actual revenues generated from Amtrak's Mail and Express business line for the 5-year period 1997 through 2001.

Figure 3. Actual Mail and Express Revenues, 1997 Through 2001

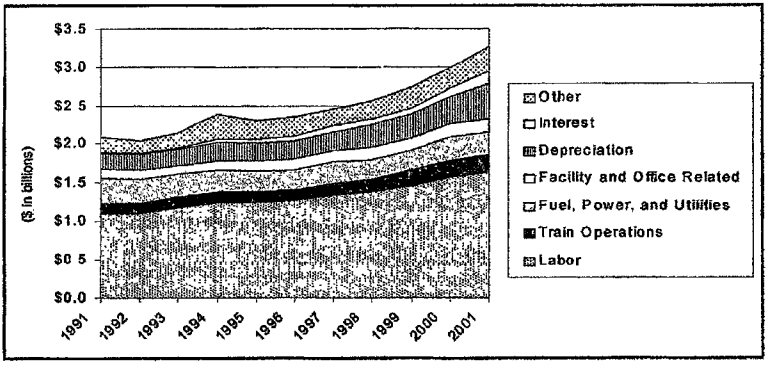


However, this performance fell far short of Amtrak's projections. Amtrak's 2001 Strategic Business Plan projected revenues of $181 million for 2001, growing exponentially to over $400 million by 2003. Subsequent issuing its business plan, Amtrak recognized that its forecasts were not realistic and substantially reduced the estimated contributions from the Mail and Express business.

- **Expense Growth Has More Than Kept Pace**

Since receiving its mandate in December 1997, for every $1 Amtrak realized in additional revenue, cash expenses increased by $1.05. Between 2000 and 2001, Amtrak's expenses, including depreciation, grew 9.8 percent, or a total of $294 million. Viewing expense growth in the longer term, since 1991, total operating expenses have grown about $1.2 billion, from $2.1 billion to $3.3 billion, representing an overall increase of 57 percent. In the same time period, total revenues grew by about $850 million. Figure 4 illustrates growth in various categories of expenses between 1991 and 2001.

Figure 4. Growth in Amtrak's Expenses, 1991 Through 2001

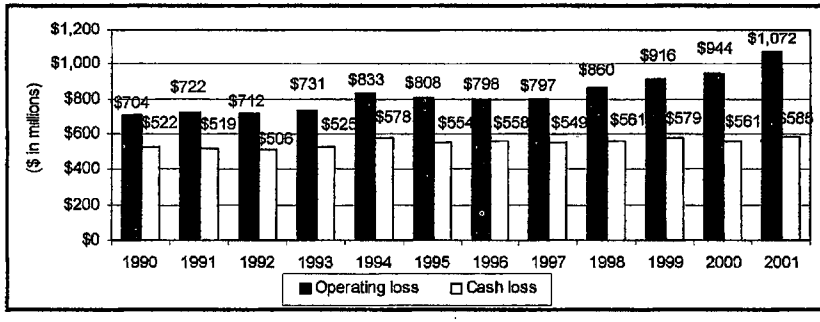


Our assessments of Amtrak's prior Strategic Business Plans identified large gaps in Amtrak's ability to stay on its glidepath. Simply put, Amtrak needed to curtail expense growth by over $700 million and the railroad did not have concrete plans to achieve the reductions. In FY 2001, Amtrak began to focus on cost management initiatives but these actions were clearly inadequate.

- **Operating and Cash Losses Continued to Grow**

Continued expense growth coupled with lower-than-projected revenue growth has resulted in operating losses that have continued to increase since Amtrak's mandate was established in 1997. Amtrak's operating loss in 2001 of $1.1 billion was $129 million higher than the 2000 loss and the largest in Amtrak's history. Amtrak's 2001 cash loss, which is the basis for measuring operating self-sufficiency, was $585 million, $24 million higher than its cash loss in 2000. Figure 5 illustrates growth in Amtrak's operating and cash losses since 1990.

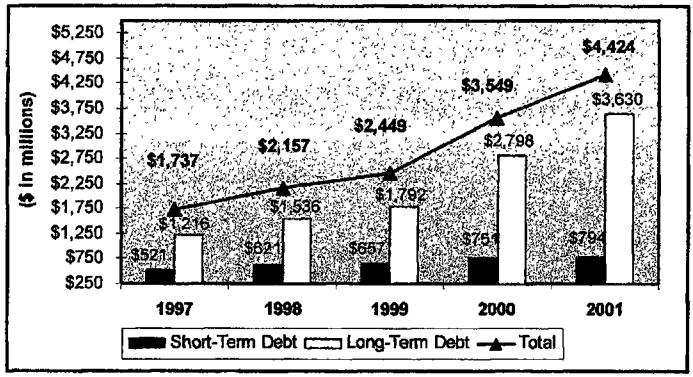
Figure 5. Growth in Operating and Cash Losses, 1990 Through 2001



- **Amtrak's Overall Financial Health Has Deteriorated**

Between September 2000 and September 2001, Amtrak's long-term debt and capital lease obligations grew by 30 percent, or a total of $832 million. Since 1997, Amtrak's total debt has grown about $2.7 billion, from $1.7 billion to $4.4 billion, representing an overall increase of 155 percent.[3] Figure 6 illustrates the growth in Amtrak's short-term liabilities as well as long-term debt and capital lease obligations since 1997.

Figure 6. Growth in Amtrak's Short- and Long-Term Debt, 1997 Through 2001

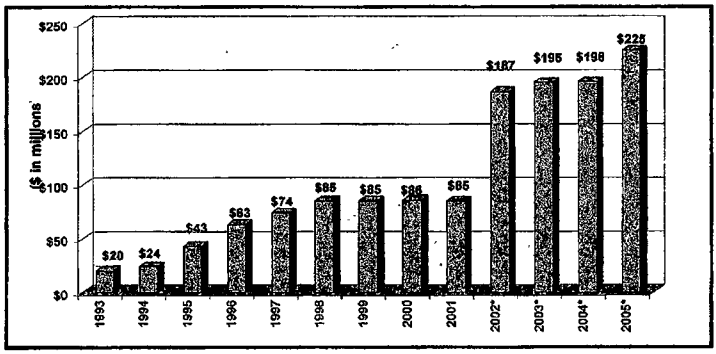


As a result of its growing debt burden, Amtrak has experienced a significant increase in interest expenses.[4] The expenses primarily relate to externally financed purchases of new equipment, including the Acela trainsets and high-horsepower locomotives in the Northeast Corridor. Interest expense is expected to

[3] In 2000, Amtrak entered into several sale-leaseback transactions involving passenger train equipment. Amtrak set aside proceeds from the transactions that, combined with projected interest earnings on the proceeds, are expected to satisfy the associated future capital lease obligations of over $900 million.
[4] Discussion of interest is on a cash interest basis, rather than accrual.

grow substantially, reaching $225 million by 2005. Figure 7 illustrates past growth in interest expense since 1993 and projected growth through 2005.

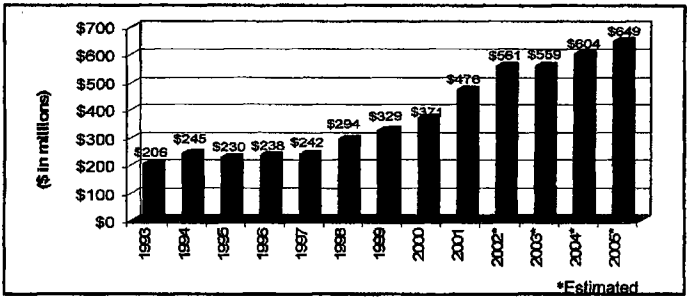
Figure 7. Growth in Interest Expense, 1993 Through 2005*



*Estimated

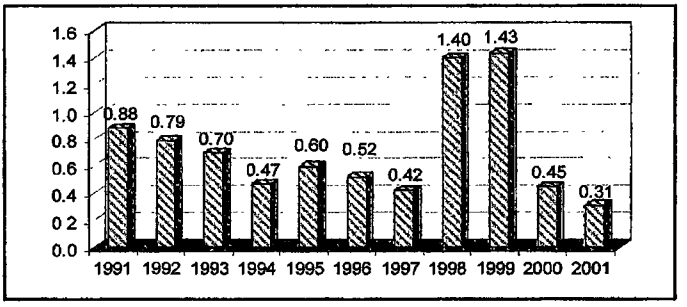
In addition, depreciation expenses will increase dramatically over the next 4 years as the new capital investments financed by Taxpayer Relief Act funds, Federal appropriations, and private borrowing add to the total value of Amtrak's capital assets. Depreciation expense is expected to reach nearly $650 million by 2005, almost double the expense in 2000. Although depreciation is a non-cash expense, it is important to note that this reflects the cost of assets used up in generating the railroad's revenues. In essence, this is the annual amount of capital required just to replace or restore train equipment, stations, tracks, and other facilities. Figure 8 shows actual depreciation levels from 1993 through 2001 and projected levels for 2002 through 2005.

Figure 8. Growth in Depreciation Expense, 1993 Through 2005*



During 2001, Amtrak's liquidity continued to deteriorate. As a result, Amtrak sought to compensate for cash shortfalls through a variety of means, including mortgaging portions of one of its most valuable assets, Penn Station-New York, for approximately $300 million. Despite this cash infusion, Amtrak's working capital ratio went from 0.45 in 2000 to 0.31 in 2001, its lowest level in over a decade. The working capital ratio, which is calculated by dividing the value of current assets by current liabilities, is a measure of an entity's ability to meet short-term liabilities. The decrease in working capital means that Amtrak may have to increase its short-term borrowing or slash current expenses to enable it to meet its current obligations. Figure 9 shows the changes in Amtrak's working capital ratio since 1991.

Figure 9. Changes in Working Capital Ratio, 1991 Through 2001



- **Amtrak Has Not Met Its Operating Performance Goals**

While Amtrak's ridership grew from 22.5 million in 2000 to 23.5 million in 2001, it fell short of Amtrak's 2001 ridership goal of 24.7 million. The shortfall was primarily attributed to delays in the Acela Express trainset deliveries, a slowing economy, and poor on-time performance. Other key performance measures for Amtrak are on-time performance and the Customer Satisfaction Index (Index). Amtrak reported systemwide on-time performance in 2001 of 75 percent, which was significantly below performance levels in 1999 and 2000, and far short of 2001 goals. Amtrak cited scheduled and unscheduled track work, freight rail traffic interference, mechanical failures, and weather as the largest contributors to the poor performance. As illustrated in Table 1, all three business units fell short of 2001 on-time performance goals.

Table 1. On Time Performance (percentage)

Business Unit	1999 Actual	2000 Actual	2001 Actual	2001 Goal	+/(-) 2000	+/(-) Goal
Systemwide	78	78	75	85	(3)	(10)
Intercity	67	68	62	75	(6)	(13)
Northeast Corridor	88	87	83	92	(4)	(9)
West	75	75	75	79	0	(4)

Amtrak's Customer Satisfaction Index, which indicates the level of customer satisfaction with Amtrak's overall service delivery, remained the same in 2001 as the score in 2000, 82 (out of 100). However, as Table 2 indicates, all three business units fell short of their goals for 2001.

Table 2. Customer Satisfaction Index Results (Scale: 1 – 100)

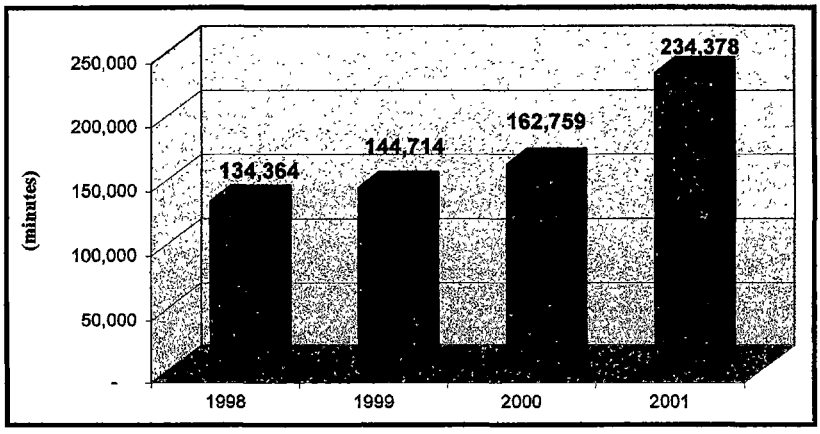
Business Unit	1999 Actual	2000 Actual	2001 Actual	2001 Goal	+/(-) 2000	+/(-) Goal
Systemwide	83	82	82	86	0	(4)
Intercity	78	79	79	83	0	(4)
Northeast Corridor	85	82	81	86	(1)	(5)
West	86	84	87	89	3	(2)

- **Infrastructure Has Deteriorated Due To Underinvestment**

While Amtrak's capital funding since 1998 has been substantial, it has not been sufficient to invest in both high rate-of-return projects *and* reinvest sufficiently in existing infrastructure. The projects that support self-sufficiency, while not frivolous, have come at the expense of other, less visible reinvestment and

operational reliability projects. The most notable of these needs is an estimated $5.0 billion backlog of "state of good repair" needs in the Northeast Corridor. Amtrak has not been able to invest sufficiently in operational reliability or other kinds of projects that would begin to address these needs. The results of this deferred spending are becoming apparent. Total minutes of delay for Amtrak trains in the Northeast Corridor rose nearly 75 percent between 1998 and 2001.[5] Figure 10 compares minutes of delay in the Northeast Corridor from 1998 to 2001.

Figure 10. Comparison of NEC Minutes of Delay, 1998 Through 2001

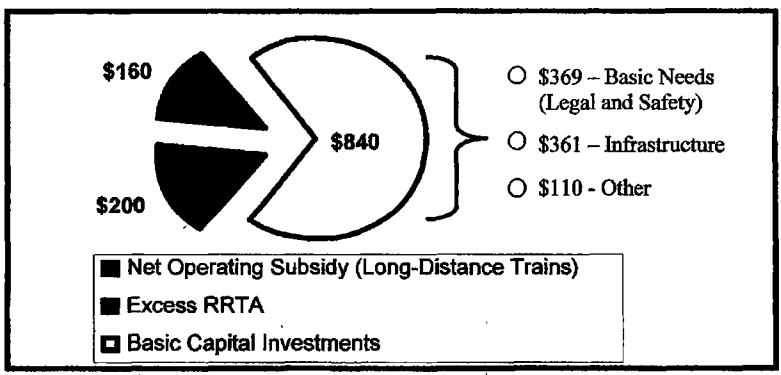


[5] Total includes delays caused by equipment, infrastructure, train operations, and outside interference (weather, police, and trespassers). The total includes delays incurred by Amtrak operating along its own right-of-way as well as trains operating over territory in which Amtrak neither owns nor is responsible for maintaining the infrastructure.

Amtrak's FY 2003 Grant Request Exceeds The Administration's Budget Submission By Nearly $700 Million

The Department of Transportation's FY 2003 budget submission to the President requested funding in the amount of $521 million for Amtrak. On February 15, 2002, Amtrak submitted its own grant request to the President, requesting $1.2 billion, which it stated would be, "essential for keeping a national rail service network intact" in 2003. Included in this $1.2 billion is $160 million for payments to the railroad retirement fund in excess of the amount paid to Amtrak retirees, commonly referred to as "excess RRTA," $200 million to cover net losses generated by 18 long-distance trains, and $840 million to pursue a "minimum" capital program. Figure 11 illustrates Amtrak's FY 2003 grant request.

Figure 11. Amtrak's $1.2 Billion Grant Request



We have not had an opportunity to review the detailed support, but Amtrak's request for $200 million to subsidize the operation of 18 long-distance trains as well as $160 million for excess RRTA appears reasonable. However, the $840 million Amtrak is requesting for "minimum" capital investment needs close scrutiny. Table 3 outlines the general categories of capital projects Amtrak is proposing to fund with its FY 2003 capital grant request.

Table 3. Amtrak's $840 Million Capital Grant Request ($ in millions)

Environmental	$29
Americans With Disabilities Act	19
Minimum Fleet Overhauls/Preventive Maintenance	190
Life Safety	26
Debt	105
Federal Infrastructure/Operational Reliability	286
Non-Federal Infrastructure/Operational Reliability	75
Fleet Repair and Additional Limited Overhaul	59
Facilities	12
Technology	40
Total Capital	**$840**

Amtrak's grant request for capital alone is significantly higher than the funds requested by the Administration for Amtrak's total needs in 2003. We note that the Administration recognized that the $521 million essentially serves as a funding placeholder until a new paradigm for intercity passenger rail service is identified.

However, Amtrak's mandatory requirements including payment on debt service, excess RRTA, and net losses on the 18 long-distance trains identified by Amtrak amount to about $500 million before the first dollar is spent on real capital projects.

Amtrak forecasts that over the next 25 years, it will need to invest about $30 billion in capital projects just to sustain the system as currently structured. Approximately one-half will be needed in the Northeast Corridor, including about $5 billion to address the backlog of state-of-good-repair needs. The magnitude of need makes it clear that neither the Administration's request nor Amtrak's request would allow Amtrak to begin to meaningfully address these needs in 2003. However, it is not clear at this point how passenger rail will be structured beyond that date, which could affect the required level and location of investment. Congress needs to understand how and where Amtrak intends to use its 2003 capital dollars before it can determine the appropriate amount of funding.

In our view, the most significant area where more information is needed is in the category of investment related to "infrastructure/operational reliability." Amtrak's budget request includes $286 million for Federally-owned infrastructure and $75 million for agreements with partner railroads for improvements on non-Federally-owned infrastructure. In our prior assessments, we have maintained

that Amtrak's annual minimum capital need for Federally-owned infrastructure was about $135 million, $151 million less than Amtrak's grant request.

It may be that Amtrak needs more than our annual estimate for FY 2003, but its budget request only includes a laundry list of projects that could be undertaken, which Amtrak indicates is "subject to condition assessments." To enable Congress and the Administration to make informed decisions, Amtrak should provide specific and detailed information on exactly what projects need to be done in FY 2003, where they are, how much each is estimated to cost, how the projects will improve service, and what would be the implications if the projects were not done in FY 2003.

The same type of information is needed for the $75 million Amtrak requested for operational reliability on non-Federally-owned infrastructure. While we fully endorse Amtrak partnerships that leverage funding from other sources and improve service, Amtrak has not shown in detail how the $75 million will be spent and the implications if it did fund its share of these agreements in FY 2003.

The lack of clarity and specificity in its budget request may be symptomatic of Amtrak's unwillingness or inability to provide detailed financial information for effective decision making. Despite recommendations by the Amtrak Reform Council to break out financial results from train operations and owned

infrastructure, and our repeated requests for detailed financial information on its mail and express business, Amtrak resisted implementing a financial reporting system that provided the information.

The absence of this important data makes it difficult to arrive at good business decisions and to pinpoint responsibility and accountability for achieving measured results. As an example, even though Amtrak was leaning heavily on generating substantial bottom-line contributions from its mail and express business to achieve self-sufficiency, Amtrak was not closely tracking the costs associated with this business line and could not account for how much, if any, it was netting from this activity. Even as it entered the 5th year of its 5-year glidepath, Amtrak was still trying to refine how to assign costs to its mail and express activity.

Mr. Chairman, this concludes our statement. I would be pleased to answer any questions.

Accompanying Slides

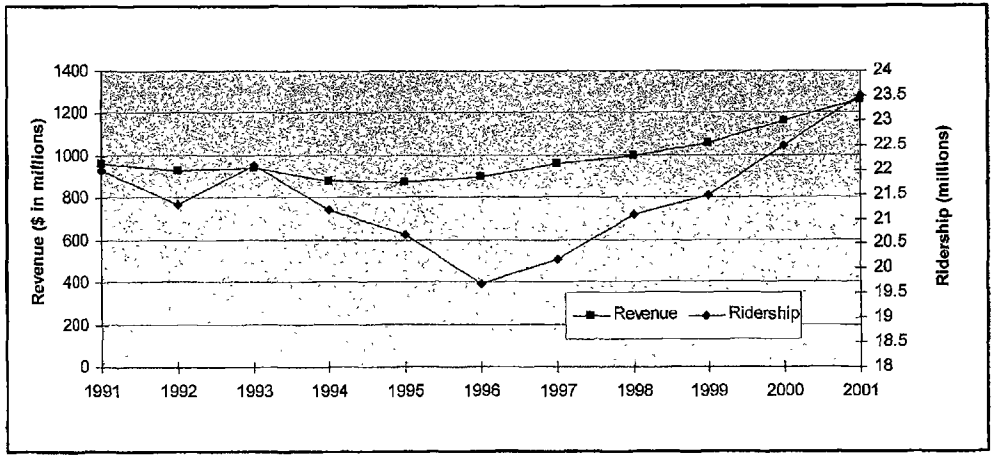
Amtrak's Performance, Budget, And Passenger Rail Service Issues

Office of Inspector General
U.S. Department of Transportation
Addendum to Testimony
Before the Subcommittee on Transportation and Related Agencies
House Appropriations Committee

February 27, 2002

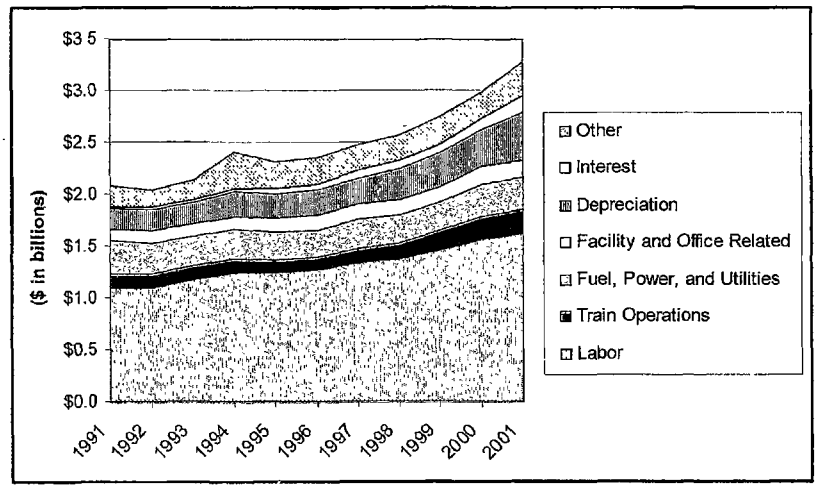
Slide 1

Systemwide Passenger Revenue and Ridership Growth, 1991 Through 2001



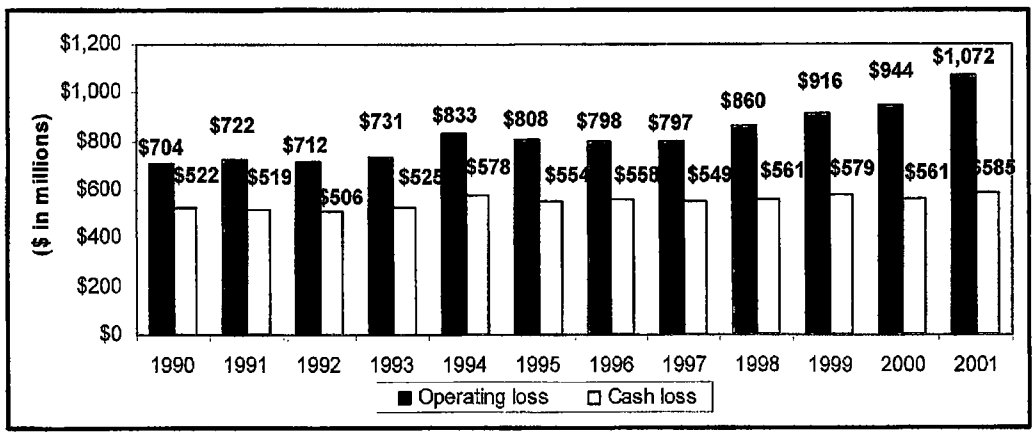
Slide 2

Growth in Amtrak's Expenses, 1991 Through 2001



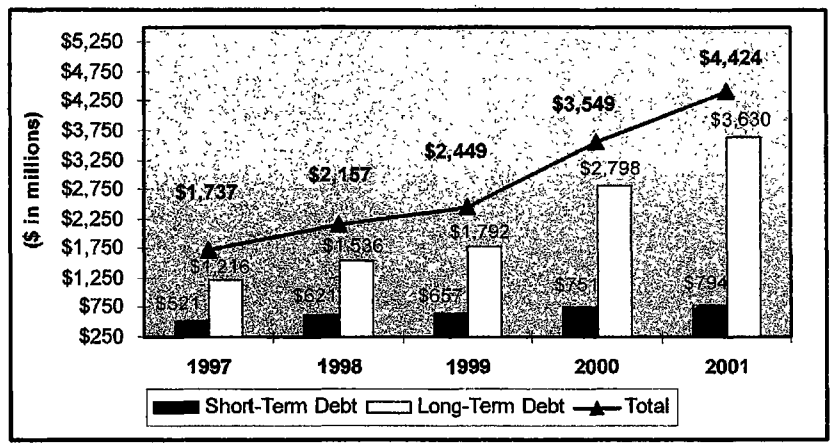
Slide 3

Growth in Operating and Cash Losses, 1990 Through 2001



Slide 4

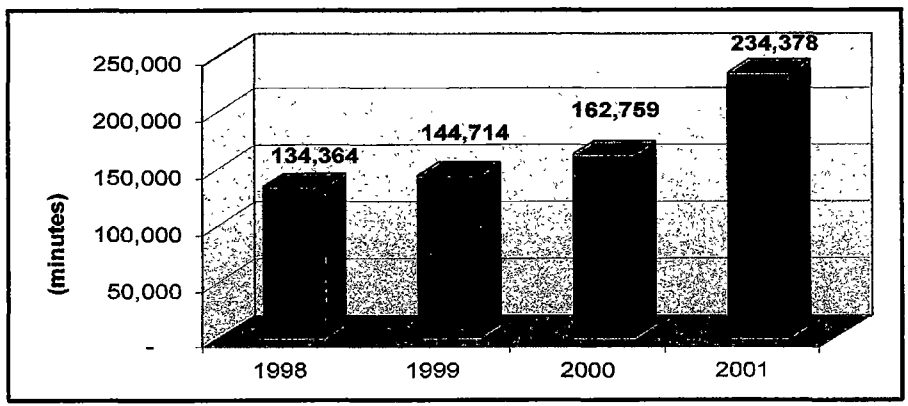
Growth in Amtrak's Short- And Long-Term Debt, 1997 Through 2001*



*In 2000, Amtrak entered into several sale-leaseback transactions involving passenger train equipment. Amtrak set aside proceeds from the transactions that, combined with projected interest earnings on the proceeds, are expected to satisfy the associated future capital lease obligations of over $900 million.

Slide 5

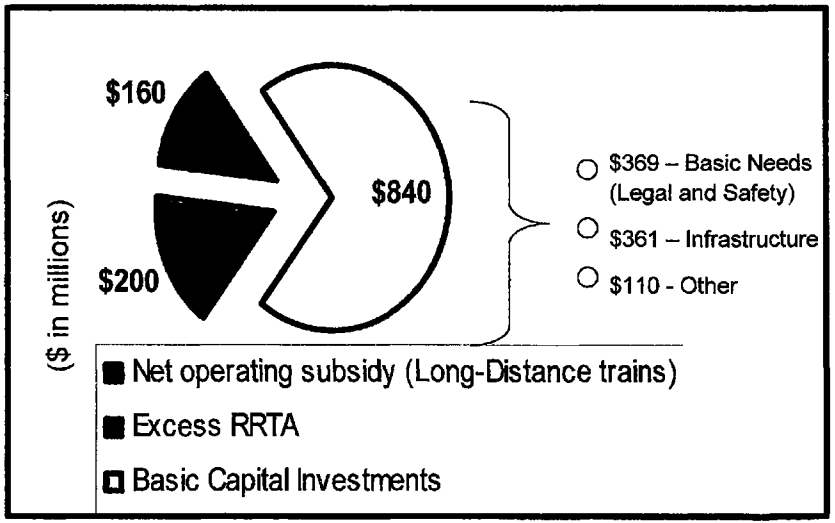
Total Minutes of Delay
Northeast Corridor, 1998 Through 2001*



*Total includes delays caused by equipment, infrastructure, train operations, and outside interference (weather, police, and trespassers). The total includes delays incurred by Amtrak operating along its own right-of-way as well as trains operating over territory in which Amtrak neither owns nor is responsible for maintaining the infrastructure.

Slide 6

Amtrak's $1.2 Billion Grant Request



Slide 7

Breakdown of Amtrak's $840 Million Capital Investment ($ in millions)

Environmental	$29
Americans With Disabilities Act	19
Minimum Fleet Overhauls/Preventive Maintenance	190
Life Safety	26
Debt	105
Federal Infrastructure /Operational Reliability	286
Non-Federal Infrastructure /Operational Reliability	75
Fleet Repair and Additional Limited Overhaul	59
Facilities	12
Technology	40
Total Capital	**$840**

ARC OPENING REMARKS

Mr. CARMICHAEL. This is kind of an interesting position to be in after these three conversations.

Thank you Mr. Chairman and members of the subcommittee. I am Gil Carmichael. I am Chairman of the Amtrak Reform Council, the council you created made up of citizens. And those citizens have worked very hard for the last three years with a very small staff—a good staff of professional people.

We have a message, and we are bringing you the message, and it is kind of fun to see how people react to the message. There was quite an attempt to kill us before we ever got here, but we made it.

So I am here to present the council's view on near to mid term budget issues that affect the funding of inter-city rail passenger service.

Also with me today, Mr. Chairman, are three other members of the Reform Council, Nancy Connery, I think sitting behind me, and Jim Coston, and Charlie Moneypenny. And Tom Till, the Executive Director, who has been managing this staff for the last three and a half years.

I will present the council's views, Mr. Chairman, in context with the council's action plan for restructuring and rationalizing the national inter-city rail passenger system.

When Congress passed the 1997 Amtrak Reform and Accountability Act, they created the trigger that President Warrington was talking about a while ago, and they created this council and charged us to monitor Amtrak's progress towards operational self-sufficiency.

We submitted our recommendations to Congress for reform. We are sure that other reasonable reforms will be proposed. The most important thing is that the council believes that reform is no longer an option, and I think we have heard that from the three previous speakers. Reform is an imperative. An imperative for an effective, modern passenger rail program.

We have held hearings all around this country and there is a strong support for a national rail passenger system, almost a passionate support for it.

But there is also an imperative for how better to fund our rail passenger program.

Over its lifetime the increase in Amtrak's ridership has barely kept pace with the growth rate of the U.S. population. Contrary to popular belief in the period between September 11, 2001 and the end of last year Amtrak carried fewer passengers than it did in the comparable period in 2000. Amtrak is burdened with debt, as you have heard, and debt service, and its assets are in poor condition and, I am afraid, getting worse.

The continuing deterioration of Amtrak's performance since the council was established led the council to its finding that Amtrak could not achieve self-sufficiency by December 2, 2002 as required by the Reform Act.

Sadly, Amtrak is no closer to self-sufficiency today than it was in 1997, despite the appropriations to Amtrak of more than $5.5

billion during the past five years including $2.2 billion in capital funding under the Taxpayer Relief Act.

Its announcement on February 1, 2002 that it needed $1.2 billion for 2003 or it will shut down 18 long distance streams, is business as usual for Amtrak. Lower revenues, higher costs, greater losses than it promised.

Amtrak as it is organized, as it exists today, has proven that it cannot concentrate on its core mission of running trains. It has too much to do and does little of it well. As it is chartered and organized today, no agency has effective oversight of Amtrak's business plans, its funding requests, or its financial operation and performance. No program can be successful without good oversight.

The action plan that the ARC council sent to the Congress on February 7 thus recommends a fundamental restructuring of the way we organize, fund and operate the national rail passenger service program. If we are to have a modern rail passenger program that works, we have to separately organize and fund the passenger train operations from the 20,000 miles of nationwide rail infrastructure that supports them. That includes the 400 miles or so that Amtrak owns in the Northeast Corridor.

The Council proposes that the two new companies [train operations and Northeast Corridor infrastructure] be administered by a small federal agency. We call it the National Rail Passenger Corp., NRPC. The Council recommends that the NRPC be modeled after the USRA, United States Railway Association, created by Congress in 1972 to restructure Penn Central and six other bankrupt northeast and midwest railroads. USRA planned Conrail.

U.S.R.A. enforced strict accountability on Conrail, shielded Conrail from political interference, and by working closely with Conrail management, contributed to Conrail's success.

The Council believes the national rail passenger program needs and would benefit from a similar oversight organization.

In this framework a new national train operating company could concentrate strictly on the business of running trains, carrying passengers, mail and express. With the resources to do so under contract and with no unfunded mandates and without political pressure on its management decisions.

To ensure that there are adequate incentives for efficiency the Council proposes a national passenger train operating company, for the train operators, and recommends introducing the possibility of competition into the provision of passenger train services after a transition period.

In many countries around the world reforms in the provisions of both passenger and freight rail service have involved competitive bidding for contracts to provide public service at lower cost and with better service.

Our recommendation also deals directly and strongly with the parts of the Northeast Corridor and other infrastructure that Amtrak owns. Today's Amtrak is a minority user of the Northeast Corridor. They run about 150 of the corridor's 1200 trains every day but Amtrak finances and management cannot bear the burden of maintaining and improving what is largely a commuter facility.

The main evidence of the infrastructure's physical deterioration, as was mentioned by Ken Mead a while ago, is increasing minutes

of train delay under Amtrak's stewardship, from 134,000 minutes in 1998 to 234,000 minutes in 2001, or more than 160 days of train delays.

The Northeast Corridor, a high speed corridor, is literally slowing down. This is reported in the January 2002 report that Ken referred to a minute ago.

The council's final major recommendation is that the Congress enact measures to provide stable and adequate sources of funding—separate sources for train operation and separate sources for infrastructure for a new national rail passenger program.

There are those who say that putting more money into the existing Amtrak is all we need to do. The council strongly rejects that notion. What we have today is an institution that through more than 30 years of existence has never had the full confidence of Congress or the Executive branch regarding Amtrak's ability to spend money properly and to produce a modern rail system, regardless of which party controls either of those branches. Effective structural reform will go far to correct the lack of confidence.

Even then the reality of government funding today poses important challenges to effective funding of passenger and freight rail infrastructure needs. As you know, guaranteed spending programs have been very beneficial for highways, transit, and aviation, but the rail mode of transportation is having a tough time raising funds or having funds appropriated. Today guaranteed spending programs predetermine the appropriation of 75 percent of all the federal transportation funds. As a result there is no room in the transportation appropriation bills to fund major facilities such as the Northeast Corridor infrastructure, which needs a minimum of $1 billion a year.

Clearly the Northeast Corridor infrastructure needs to be shifted to a federal agency or authority that has better access to federal, state, and local guaranteed funding than Amtrak has.

More important for the infrastructure needs of the improved passenger rail program are several bond bills that have been introduced. One is the High Speed Investment Act cosponsored by Senators Daschle and Lott. A bill sponsored by House Transportation and Infrastructure Committee Chairman Don Young, RIDE–21, provides $36 billion in tax-exempt bonding authority and $35 billion in loan guarantees for railroad investments.

Under appropriate safeguards the council also recommends that the states have flexibility to use highway and aviation funds for investment to improve intermodal connectivity of the passenger network or to fund rail investments that would relieve highway or aviation congestion in the short haul corridors.

The federal fuel tax revenue shortfall for 2003, approximately $8.6 billion, is not only bad for highway infrastructure, but it will also have a devastating impact on the flexible provisions of TEA21.

Pending House and Senate bills would restore $4.4 billion above the Administration's request for highways. If the funding is restored, the likelihood that the flexibility provisions will be exercised is greater because the highway program would be funded to the levels projected in TEA–21.

When such a program is enacted, and I say when, not if, these funds will be the engine for an effective federal/state rail infra-

structure program in cooperation with the freight railroads to support and improve intermodal freight and passenger rail service, both of those—intermodal freight, the container freight, and passenger rails—need higher speeds.

The systematic and continuing improvement of railroad rights of way and tracks that this program would support is an essential element of the sound national rail passenger and freight program that America needs across the country as well as in the Northeast Corridor.

The issue of funding for operating facilities and other needs for Amtrak's long haul trains, as well as the capital requirements of corridor trains and operating assistance during the transition period, is more difficult. The council's action plan recommends that the government provide funding on the basis of a formula that will promote its efficient use, not simply fund cash shortfalls resulting from inefficient, deficit-ridden operations.

Funding under such a program structure might be provided through appropriations or through some dedicated source of funds. Some have suggested a new penny might be added to the federal motor fuel tax that could go for rail uses if it was matched by a new state penny.

Under the program structure that the council recommends, in which train operations would be provided under contract, much of the funding for the passenger equipment investment needs of the operating company should or could come from the private capital markets.

Let me go back and address the Northeast Corridor infrastructure. Separating the Northeast Corridor infrastructure both organizationally and financially from Amtrak's nationwide train operation is another way of narrowing the gap between the subsidy needs of Amtrak's national train operations and the uncommitted funds available in the budget. There is little or no chance that Amtrak will be able to get the capital it needs to maintain and improve the Northeast Corridor out of appropriated funds. It has not been able to do so.

Why not? One major reason is Amtrak has demonstrated that it has to use whatever cash is available to offset operating losses of its trains. To fund operations Amtrak raised $300 million for operating expenses last year by mortgaging 16 years of future income from two concourses in Penn Station in New York. It regularly charges portions of its large management overhead costs to capital projects and it has deferred maintenance on the Northeast Corridor infrastructure below levels needed for minimum operational reliability. And despite the $3.8 billion backlog of critical fire and life safety and other urgent capital projects on the Northeast Corridor, Amtrak did not request the full amount of appropriations authorized by Congress under the Amtrak Reform Act.

Amtrak as it is presently structured cannot be an effective public steward for this vital toll road known as the Northeast Corridor.

The council's action plan describes a variety of funding sources that, while not all directly available to Amtrak, are all accessible to the Northeast Corridor state governments (and the other states with emerging corridors) to assist in providing the investments to

support their large Northeast Corridor commuter operations as well as Amtrak's high speed operations.

Indeed there is no single source that could provide all the necessary capital for the Northeast Corridor. Thus the Congress should look at a variety of sources which may include the bond bills that are pending before Congress, RIDE–21 and high speed, HSRIA. They will help. And I think the bond bills may be the key way to fund the Northeast Corridor and the emerging corridors.

A federal appropriation, perhaps through a reauthorized Northeast Corridor improvement program account, would help the new Northeast Corridor authority fund some of the life safety projects that must be addressed.

And just a quick sideline here. I come from the deep south and I recognize that the Northeast Corridor is an extremely vital corridor and artery for the economy of this part of the country.

My own research in working with our staff is the Northeast Corridor needs to raise and spend $20 billion in the next seven to 15 years, as quickly as it can, to get the Northeast Corridor up to the standards it ought to meet. If they do that, it has an awful lot more speed and capacity ability.

And congressmen, I go back to this. The Northeast Corridor is vital and it is also a model for the rest of the country. Other areas, like the Midwest group, need their corridor and want their corridor. So as we do the Northeast Corridor, if we spin it off into a separate organization it should be a model for how to develop the rest of the corridors around the country.

The Congress might also consider providing part of the funding needed to establish a trust fund to pay off bonds for these vital Northeast Corridor life safety improvements. You need bond money to build and develop the corridor. You need emergency money to take care of the life safety problems that are there.

Loans and guarantees under TIFIA or RRIF may be employed in various ways. One way would be to work with the regional transmission organizations, the RTOs, in partnership with a restructured national rail passenger corporation and the states, to undertake one of the major infrastructure projects south of New York, the replacement of the electric traction system. Amtrak has already considered entering in such an arrangement with the Northeast RTO.

As mentioned above, and I am almost finished, Mr. Chairman, expanding the flexibility provisions and current transportation trust funds to include the Northeast Corridor project that would reduce highway and air traffic congestion. Civil works projects under the Army Corps of Engineers are often undertaken with federal transportation funds. And, under an expanded role of the Northeast Corridor states through special purpose mechanisms for ownership and control, assets such as the Penn Station complex, whose needs have been neglected for decades, might be effectively handled under some kind of appropriate regional umbrella.

Federal and state tax incentives—such as tax incentives—might be developed to encourage the private sector to make investments in the corridor, an approach the Association of American Railroads has suggested for broader rail infrastructure financing purposes.

Mr. Chairman, the council believes its recommendations are strong and sound after three years of hard work and really studying this problem. The chronic difficulties that Amtrak experiences year in and year out are not due principally to lack of funding. They spring primarily from an organization that desperately needs to be redesigned. Effective reform will beget funding. Funding does not beget reform.

For these reasons the council strongly recommends that the Congress first adopt broadly needed institutional reform before providing major new funding for the passenger rail service.

I will be pleased to answer any questions.

Thank you, sir.

[The information follows:]

★ ★ ★ AMTRAK REFORM COUNCIL ★ ★ ★

THE COUNCIL

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EXECUTIVE DIRECTOR

nas A. Till

**BEFORE THE COMMITTEE ON APPROPRIATIONS,
SUBCOMMITTEE ON TRANSPORTATION AND RELATED AGENCIES
U.S. HOUSE OF REPRESENTATIVES**

For Release on Delivery
1:00 p.m. EST
Wednesday,
February 27, 2002

Testimony of The AMTRAK REFORM COUNCIL

Concerning THE IMPACT OF THE COUNCIL'S PROPOSALS FOR RESTRUCTURING THE NATIONAL INTERCITY RAIL PASSENGER SYSTEM ON FUNDING RAIL PASSENGER SERVICE

Summary Statement of
Gilbert E. Carmichael
Chairman
Amtrak Reform Council

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The ARC is an independent federal commission established under the Amtrak Reform and Accountability Act of 1997 (P. L. 105-134)

Testimony of
Gilbert E. Carmichael
Chairman
Amtrak Reform Council

Before the
Committee on Appropriations,
Subcommittee on Transportation and Related Agencies
US House of Representatives
February 27, 2002

Good afternoon, Mr. Chairman, and members of the Subcommittee.

I am Gil Carmichael, Chairman of the Amtrak Reform Council. Thank you for the invitation to present the Council's views on near- to mid-term budget issues that affect the funding of intercity rail passenger service. Also here today, Mr. Chairman, are three other members of the Amtrak Reform Council – Nancy Connery, James Coston, and Charles Moneypenny.

I will present the Council's views, Mr. Chairman, in the context of the Council's *Action Plan for the Restructuring and Rationalization of the National Intercity Rail Passenger System*, which was submitted to the Congress on February 7, 2002. With your permission, Mr. Chairman, I will summarize my statement and submit the full statement for the record.

The Council has submitted its recommendations to the Congress for reform. We are sure that other reasonable reforms will be proposed. The most important thing is that the Council believes that reform is no longer an option, Mr. Chairman. Reform is an imperative – an imperative for an effective modern rail passenger program, and an imperative for effective funding of our rail passenger program.

Over its lifetime, the increase in Amtrak's ridership has barely kept pace with the growth rate of the US population. Contrary to popular belief, in the period between September 11, 2001, and the end of last year, Amtrak carried fewer passengers than it did in the comparable period of 2000. Amtrak is burdened with debt and debt service, and its assets are in poor condition.

The continuing deterioration of Amtrak's performance since the Council was established, led the Council to its finding that Amtrak would not achieve operational self-sufficiency by December 2, 2002, as required by the Amtrak Reform and Accountability Act of 1997.

Indeed, Amtrak is no closer to self-sufficiency today than it was in 1997, despite the appropriation to Amtrak of more than $5 billion during the past five years, including $2.2 billion in capital funding under the Taxpayer Relief Act. Its announcement on February 1, 2002, that it needs $1.2 billion for FY 2003, or it will shut down 18 long-haul trains, is business as usual for Amtrak – lower revenues; higher costs; and greater losses than it promised.

Sadly, **Amtrak has proven that it cannot concentrate on its core mission of running trains.** It has too much to do, and does little of it well. As it is chartered and organized today, **no agency has effective oversight of Amtrak's business plans, its funding requests, or its financial and operational performance. No program can be successful without good oversight.**

The Action Plan the Council sent to Congress on February 7, 2002, thus recommends a **fundamental restructuring of the way we organize, fund, and operate the national rail passenger service program. If we are to have a modern rail passenger program that works, we have to separately organize and fund the passenger trains from the 20,000 miles of nationwide rail infrastructure that supports them.**

The Council proposes that the two new companies be administered by a small federal agency, the National Railroad Passenger Corporation (NRPC). The Council recommends that the NRPC be modeled after the United States Railway Association (USRA), created by Congress in 1973 to restructure Penn Central and 6 other bankrupt northeast and midwest railroads – USRA planned Conrail. USRA enforced strict accountability on Conrail, shielded Conrail from political interference, and, by working closely with Conrail management, contributed to Conrail's success. The Council believes the National Passenger Rail Program needs, and would benefit from, a similar oversight organization.

In this framework, **a new national train operating company could concentrate strictly on running trains,** with the resources to do so, under contract, with no unfunded mandates, and without political pressure on its management decisions.

To ensure that there are adequate incentives for efficiency, the Council's proposal for a National Passenger Train Operating Company also recommends **introducing the possibility of competition into the provision of passenger train services.** In many countries around the world, reforms in the provision of both passenger and freight rail service have involved competitive bidding for contracts to provide public services.

Our recommendations also deal directly and strongly with **the parts of the Northeast Corridor and other infrastructure that Amtrak owns.** Today's Amtrak is a minority user of the Northeast Corridor – running only about 150 of the Corridor's 1200 trains – and its finances and management cannot bear the burden of maintaining and improving what is largely a commuter facility. The main evidence of the infrastructure's physical deterioration is the increase in minutes of train delay under Amtrak's stewardship – from 134,000 minutes in 1998 to 234,000 minutes in 2001, *or more than 160 days of train delays.* The NEC is literally slowing down! This is reported in the January 2002 report of the DOT Inspector General.

The Council's final major recommendation is that the Congress enact measures to **provide stable and adequate sources of funding – separate sources for train operations and for infrastructure – for a restructured National Rail Passenger Program.** There are those who say that putting more money into the existing Amtrak is all we need to do. The Council strongly rejects that notion. What we have today is an institution that, through more than 30 years of existence, has never had the full confidence of the Congress or the Executive regarding Amtrak's

ability to spend money properly, regardless of which party controlled either of those branches. Effective structural reforms will correct that lack of confidence.

Even then, the reality of government funding today poses important challenges to effective funding of passenger and freight rail infrastructure needs. As you know, guaranteed spending programs have been very beneficial for highways, transit and aviation, but the rail mode of transportation is having a tougher time getting funds appropriated. Today, guaranteed spending programs predetermine the appropriation of 75 percent of all federal transportation funds. As a result, there is no room in the transportation appropriations bill to fund major facilities such as the Northeast Corridor infrastructure, which needs about $1 billion per year. Clearly, the NEC infrastructure needs to be shifted to a federal agency or authority that has better access to federal, state, and local guaranteed funding than Amtrak has.

Most important for the infrastructure needs of an improved passenger rail program are several bond bills that have been introduced. One is the High Speed Rail Investment Act, co-sponsored by Senators Daschle and Lott. A bill sponsored by House Transportation and Infrastructure Committee Chairman Don Young, **RIDE-21, provides $36 billion in tax-exempt bonding authority** (and $35 billion in loan guarantees) for railroad investments.

Under appropriate safeguards, the Council also recommends that states have flexibility to use highway and aviation funds for investments to improve the intermodal connectivity of the passenger network or to fund rail investments that would relieve highway or aviation congestion in short-haul corridors!

The federal fuel tax revenue shortfall for FY 2003 of approximately $8.6 billion is not only bad for highway infrastructure; it will have a devastating impact on the flexible provisions of TEA 21.

Pending House and Senate bills would restore $4.4 billion above the Administration's request for highways. If the funding is restored, the likelihood that the flexibility provisions will be exercised is greater because the highway program would be funded to the level projected in TEA 21.

When such a program is enacted – I say "when," not "if" – these funds will be the engine for an effective federal-state rail infrastructure program, in cooperation with the freight railroads, to support improved intermodal freight and passenger rail service. The systematic and continuing improvement of railroad rights-of-way and tracks that this program will support is an essential element of the sound national rail passenger (and freight) program that America needs, across the country as well as in the Northeast Corridor.

The issue of funding for operating subsidies and other needs for Amtrak's long-haul trains, as well as for the capital requirements of corridor trains, and operating assistance during a transition period, is more difficult. **The Council's Action Plan recommends that the government provide funding on the basis of a formula that will promote its efficient use,** not simply fund cash shortfalls resulting from inefficient, deficit-ridden operations. Funding under such a structure might be provided through appropriations or through some dedicated source of funding

(some have suggested that a new penny might be added to the federal motor fuel tax that could go to rail uses if matched by a new state penny). **Under the program structure that the Council recommends, in which train operations would be provided under contracts, much of the funding for the passenger equipment investment needs of the operating company should or could come from private capital markets.**

Let me go back and address the Northeast Corridor infrastructure. **Separating the Northeast Corridor infrastructure – both organizationally and financially – from Amtrak's nationwide train operations is another way of narrowing the gap between the subsidy needs of Amtrak's national train operations and the uncommitted funds available in the budget.** There is little or no chance that Amtrak will be able to get the capital it needs to maintain and improve the NEC out of appropriated funds. It has not been able to do so. Why not?

One major reason is that Amtrak has demonstrated that it has to use whatever cash is available to offset the operating losses of its trains. To fund operations, Amtrak raised $300 million for operating expenses last year by mortgaging 16 years of future income from two concourses in Penn Station New York, it regularly charges portions of its large management overhead costs to capital projects, and it has deferred maintenance on the NEC infrastructure below levels needed for minimum operational reliability. And, despite the $3.8 billion backlog of critical fire and life safety and other urgent capital projects on the Northeast Corridor, Amtrak did not request the full amount of appropriations authorized by the Congress under the Amtrak Reform Act.

Amtrak – as it is presently structured – cannot be an effective public steward for this vital toll road known as the Northeast Corridor.

The Council's Action Plan describes a variety of funding sources that, while not all directly available to Amtrak, are accessible to NEC state governments (and the other states with emerging corridors) to assist in providing the investments to support their large NEC commuter operations, as well as Amtrak's high-speed operations.

Indeed, there is no single source that could provide all the necessary capital for the NEC. Thus, the Congress should look at a variety of sources, which may include:

- Bond bills that are pending before Congress (RIDE-21 and HSRIA) would help, and may be the key way to fund all of the corridors;
- A federal appropriation, perhaps through a reauthorized Northeast Corridor Improvement Program account, to help this new Northeast Corridor Authority fund some of the life/safety projects that must be addressed;
- And, the Congress might also consider providing part of the funding needed to establish a trust fund to pay off bonds for these vital NEC life/safety improvements;
- Loans or guarantees under TIFIA and/or RRIF may be employed in various ways. One way would be to work with Regional Transmission Organizations (RTOs), in partnership with a restructured National Railroad Passenger Corporation and the states, to undertake

one of the major infrastructure projects south of New York – the replacement of the electric traction system. Amtrak is already considering entering into such an arrangement with a northeast RTO.

- As mentioned above, expanding the flexibility provisions in current transportation trust funds to include the NEC projects that would reduce highway and air traffic congestion.

- Civil works projects under the Army Corps of Engineers are often undertaken with federal transportation funds. There is some precedent for the Corps to undertake bridge projects that are over navigable waters, and the NEC has several bridges in serious condition.

- Expand the role of the NEC states through special purpose mechanisms for ownership and control. Assets, such as the Penn Station Complex, whose needs have been neglected for decades, might be effectively handled under some kind of appropriate regional umbrella.

- Federal and/or state tax incentives, such as tax incentives, might be developed to encourage the private sector to make investments in the corridor, an approach that the Association of American Railroads has suggested for broader rail infrastructure financing purposes.

Mr. Chairman, the Council believes its recommendations are strong and sound. The chronic difficulties that Amtrak experiences – year in and year out – are not due principally to lack of funding. They spring primarily from an organization that desperately needs to be redesigned. Effective reform will beget funding. Funding alone will not beget reform.

For these reasons, the Council strongly recommends "that the Congress first adopt badly needed institutional reforms" before providing major new funding for passenger rail service.

I will be pleased to answer any questions. On behalf of the Council, I thank you, Mr. Chairman, for the opportunity to address the Subcommittee.

IS AMTRAK SOLELY TO BLAME FOR ITS FINANCIAL TROUBLES

Mr. ROGERS. Thank you for your testimony.

President Warrington, earlier this month you attributed Amtrak's recent financial troubles to, and I quote here, "conflicting policy mandates, inadequate federal capital funding, economic recession, additional security costs, and the actions of the Amtrak Reform Council."

I do not see anywhere in there where Amtrak shares in any of that blame. Is there a place for Amtrak to share some of the blame?

Mr. WARRINGTON. Yes, I think so. Mr. Chairman, I think we have been focused on staying on that federal glide path. It has been a one-dimensional focus as I have frequently testified to you and other members of Congress.

By focusing virtually all of our attention on adherence to that glide-path because we needed to under the law—we have certainly created, and I have created an expectation that we would do everything possible to achieve that objective. Therefore, we have worked very hard on both the cost and the management side to get there. And as a number of uncontrollable events occurred that we did not have much or any discretion around it became clear to me, about a year ago, that this was going to be difficult if not impossible to do. From that point forward the uncontrollables continued to mount and it became even clearer that this would be very difficult to do.

I think we have worked hard to try to use every tool that we have on both the cost and expense side as well as the revenue side. As Ken testified, we have scratched and clawed to find revenue from every conceivable source to help make this work.

As I have said, I think underpinning all of this is a fundamental structural flaw around the economic model here. I think it has always been there. If anything, what we have done is enabled the perception that the model could work in order to get to the goal. I think it has become increasingly clear that the model just does not work. Even if we could have achieved self-sufficiency, all things would have had to work near perfectly and with the events that have occurred over the past year or so it just made it impossible to do.

As soon as that became clear to me, Mr. Chairman, I was very clear that this was becoming an increasingly difficult task.

[The information follows:]

As I indicated in my testimony before the Subcommittee, we have worked very hard to manage the business within the context of conflicting policy mandates. We have been expected to run a national public service network, and drive toward commercial operational self-sufficiency, while also coping with inadequate levels of federal capital investment. And many of our key indicators have moved in the right direction. Since the start of 1997, we have boosted ridership by 19 percent and overall revenues by 38 percent. We have diversified our sources of revenue and forged more partnerships with the states, commuter agencies and the private sector.

We have also worked very hard on the cost side. Over the last four years, a substantial portion of cost growth has been attributable to depreciation—which is a non-cash expense—and interest, which is the result of inadequate federal capital investment. Excluding depreciation, our costs have actually fallen over the past year.

IS ACHIEVING OPERATING SELF-SUFFICIENCY STILL POSSIBLE

Mr. ROGERS. So you now agree with the rest of us that Amtrak is not going to make it.

Mr. WARRINGTON. Self-sufficiency technically could be achievable, but it would be extraordinarily destructive and I would not recommend it. Clearly, as I have pointed out, it is not sustainable, I have not built the budget for next year to achieve that.

Mr. ROGERS. This time last year you told us that Amtrak was on a glide path towards self-sufficiency and all was rosy and then a few days later, frankly, in May of last year you mortgaged Penn Station to cover about three months of operating expenses.

Did you not know last year when you told us you were on the right path to self-sufficiency that you were in such dire straits that you would have to mortgage Penn Station to pay for three months of operating costs?

Mr. WARRINGTON. The measuring stick, Mr. Chairman, has always been the glide path and the amount of appropriated funds that we use to support operations. During the course of last year and the prior year our original business plans for those years assumed a whole host of financing transactions including the Penn Station transaction.

As a matter of fact, the Penn Station transaction was in our business plan about a year earlier. Frankly, if we had moved forward with it at that time it would have been to create some working capital to deal with uncertainty and not use it to cover operating needs.

What occurred over the course of last year, which I testified to, was the combination of factors principally the delay in the delivery of the high speed train sets making what I would have preferred to be a source for working capital become a critical requirement for cash through the balance of the year.

Mr. ROGERS. Mr. Warrington, don't you agree that Amtrak has been particularly disingenuous about its financial condition over the past 5 years, particularly regarding achieving operational self-sufficiency when it was clear to outside observers, such as the Inspector General and GAO, that your company was making no significant progress in this area?

[The information follows:]

By following the operational self-sufficiency measure as set within the Reform Act, Amtrak was set to only use $40 million of its FY02 $521 million federal grant to support its daily operations with the expectation that it could reduce that number to zero in FY03, thereby meeting the self-sufficiency mandate. However, since I last testified before your committee, Amtrak has had to face several new challenges that were beyond its control: the weakened economy; September 11; the continued delay in Acela Express; and the Amtrak Reform Council's finding.

CAUSES OF AMTRAK COST GROWTH

Mr. ROGERS. The Inspector General in his slide two that he presented to us showed the growth in Amtrak's expenses for the last ten years. In essence, he has reported that for every dollar of revenue that you have generated, you have incurred a dollar and a nickel in expenses. Can you tell us why it took you until February 1st of this year to finally announce some significant cuts to try to gain control of the escalating cost side of the business?

Mr. WARRINGTON. Because it became clear to me toward the end of calendar year 2001 that events were conspiring to make it dif-

ficult and my responsibility was to get us through the year. It was a combination of the recession and its impact on revenues, September 11th, and the financial consequences of the trigger being pulled by the Reform Council that we had an immediate cash impact through the balance of the year and put at risk private financing that had been assumed.

So my focus and our focus turned immediately to managing for cash and managing the business through the balance of the year, Mr. Chairman.

On the broader subject of expense growth, Ken is right. One of the difficulties here is that a substantial portion of the expense growth that we experience is uncontrollable. And I will tell you that on those that are controllable and those that we can manage I think we have done a very good job of managing and managing the costs down.

IS CUTTING ROUTES AN OPTION TO CUT COSTS

Mr. ROGERS. The Amtrak Reform and Accountability Act of 1997 gave you the ability to add and cut routes, but you have consistently said that you would grow to self-sufficiency, emphasizing the importance of the interconnectivity of routes. In looking at the Reform Council's report of February 7, 2002, on page 98 in Appendix 5, at the profit/loss statement for individual routes and the amount of loss per rider cost, and I notice for example, I am just picking one of these out. The Sunset Limited, Route 33 which runs LA to Orlando. The loss per rider is $347.45, i.e. the subsidy that we are paying you to haul a passenger that distance is $347.45.

On the other side of the equation, you are making $19.33 for a passenger on the Metroliner Acela route, route number one. Then there are differing subsidies, a few profits here and there, not many. But mostly losses per rider, some of them quite significant. And yet those routes are still being run. We gave you the power to cut away some routes to try to save some money and yet we have seen none, to my knowledge.

Mr. WARRINGTON. Let me give you a couple of answers, Mr. Chairman. You are right. Our clear strategy has been to take that network and try to find opportunities to incrementally add revenue to the existing network. In some cases we have been successful, although not as successful as we wanted to be frankly, and there are a number of constraints that limited our ability to do that, one of them is capital. Some of the costs associated with some of those incremental services that would have grown revenue became capital cost prohibitive.

As I testified to you last year, Mr. Chairman, we are charged with running a national system. Frankly, the political constituency around this is just a fact of life. I told you that I will be completely straight with you. The facts are that Amtrak is and has always been a creature of the political process. Congress has made very clear that there is an expectation that we would run a national system, even one that is actually a skeleton of what it once was before Amtrak was formed. It is very clear to me that this skeleton of a system number one, is important to maintaining a political support across this nation for America's passenger railroad system. That is just a fact, and that is the way this process works.

Number two, I and we made a judgment that that skeleton of a system really does constitute a basic essential network of services not unlike essential air service which the government directly subsidizes through contracts.

My objective was before eliminating that national system I had a responsibility, a management responsibility, to use every tool in the tool box to enable us to continue to run that system by increasing revenues and reducing costs to hold it together.

What I testified about last year before this subcommittee, Mr. Chairman, was that I would not hold out that network as a Washington monument cut in order to extract money from this Congress. Instead I believed, I had a responsibility which I have worked very hard at for three, three and a half years here, to use every other tool at my disposal including generating financing and income from other sources, from other commercial revenue streams, and managing down costs where I could control them, and eliminating service only as a matter of last resort.

The difficulty we have right now is that we are out of tools in that tool box.

I will tell from my experience that for that model to have worked over the last several years does in fact require, and I have testified to this fact, internal cross subsidies. In other words, it is around self help also to underwrite the cost of money-losing trains with profitable trains or profitable lines of business. Next year the actual cross-subsidies within the company that flow from both the Northeast Corridor operation on a cash basis, particularly since Acela has been introduced, and from other profitable businesses, in particular seven large commuter contracts we operate around this country, and real estate development revenue streams and the like combine to contribute $265 million which literally is directed to cover a portion of losses on that long distance train network.

What I am saying is that after we subtract passenger revenue and after we subtract internally generated revenue that moves over to help underwrite the long distance train network because they do not cover their costs. It is the reason the freight railroads got out of this business in 1970. Bottom line, we generate internally $265 million to help underwrite and cross-subsidize those trains. After we cross-subsidize internally at a rate of about $265 million, the net loss next year is about $200 million for that network of trains.

Mr. ROGERS. Which network?

Mr. WARRINGTON. The unprofitable long distance train network. That is the net operating loss.

But I will tell you, Mr. Chairman, that is after we internally, largely from the Northeast Corridor and other businesses, apply about $265 million of positive contribution to the long distance network.

Mr. MEAD. Mr. Chairman?

Mr. ROGERS. So the total is about $475 million.

Mr. WARRINGTON. The total loss. The total loss is much more than the $200 million. In fact the total loss, Mr. Chairman, on that network of trains, if you give me a minute here.

[Pause]

Mr. WARRINGTON. The total loss on the long distance train network of those 18 trains on a fully allocated basis which includes

the allocation of all overhead costs that support that network like reservation centers and the like and our shops, the total cost of that network, all in, is about $1.036, okay?

When you subtract from that passenger revenue of about $396 million, other revenue relating to those trains of $118 million, you basically get a net loss of $521 million.

Mr. ROGERS. And that is for all of the long distance——

Mr. WARRINGTON. Yes. Yes.

Mr. ROGERS [continuing]. That lose money.

Mr. WARRINGTON. Yes, $521 million. Then, what we do internally is generate from the Northeast Corridor and other profitable businesses positive contributions. That, by the way, is after the Northeast Corridor, for example, covers all of its corporately allocated overhead and those other profitable businesses. We apply internally $265 million against that $521 million loss.

In addition, we apply $35 million of excess railroad retirement, which is the government's contribution, for a net subsidy need of $200 million.

Mr. ROGERS. I want to get to other members. I do not want to hog the time here.

[The information follows:]

Mr. Rogers. Mr. Warrington, how much better a financial position might Amtrak be in today if these cuts had been made in the first year of the mandate rather than the last?

[The information follows:]

The recent cuts implemented by Amtrak make good business sense, as short-term measures, based on the current economic decline, particularly in travel markets. Delays in deliveries of high-speed equipment and additional costs for security following September 11th also contributed to the need for severe cost cuts.

Amtrak has made business decisions that it felt were appropriate given the conditions at the time. As such, retroactively applying business actions out of context in a different economic environment would not make sense.

Mr. Rogers. Mr. Warrington, how have you meaningfully used the freedoms of the Amtrak Reform Act to reduce costs?

[The information follows:]

One key area that has provided opportunity for cost reduction was the changing of to, previously mandated, labor provisions pertaining to labor protcetcion and prohibitions on contracting out . Amtrak was able to reduce its labor protection costs through renegotiations of the old C2 provisions, which were mandated by federal law. The Amtrak Reform Act also eliminated the federal mandate prohibiting the contracting out of services and the company has been able to reduced additional costs through the subsequent outsourcing of its commissary operations. Amtrak also now has the ability to negotiate directly with the states, which has led to a greater interest in expanding state supported train service, which has led to stronger revenues. On the other hand, though the Amtrak Reform Act eliminated the requirement to operate over every designated route within the national system, it increased the legal notification from 90 to 180 days in advance of any planned route eliminations or service reductions below 3 days a week. This provision in some ways has made it more difficult and costly for Amtrak to make service reductions or changes.

Cost Savings Measures

Mr. Rogers. Mr. Warrington, earlier this month, Amtrak undertook $285 million in operating cuts and capital deferrals in order to have enough money to make it through the end of this year. If Amtrak did not take these actions, when would Amtrak have run out of cash this year?

[The information follows:]

Before the operating cuts and capital deferrals were implemented, Amtrak planned to meet any residual cash needs with short term bank borrowings. It was projected that short term borrowings might be required beginning in June 2002.

Mr. Rogers. Mr. Warrington, it sometimes takes a while for operating cuts to have the planned impact. What happens if these actions are not enough? How will Amtrak cover the unanticipated short fall this year?

[The information follows:]

In fact, many of the actions such as the management reductions and employee furloughs have immediate cash savings. With these actions Amtrak anticipates generating sufficient cash by the fiscal year end. In any case, Amtrak could meet unexpected cash needs through short-term bank borrowings.

Mr. Rogers. Mr. Warrington, how can Amtrak continue to cut back on investments needed to improve service reliability, and project that performance will improve this year?

[The information follows:]

We believe that some operating performance will be sacrificed this year following the projected $285 million in operating and capital spending reductions recently initiated. Through process improvements in the areas where the cuts are occurring, however, we are making every effort to insure that performance will not deteriorate. If the requested level of funding is provided in FY03, we should be able to restore spending that would improveme reliability of equipment and infrastructure.

Mr. Rogers. Mr. Warrington, Amtrak claims that on-time performance is possibly the greatest driver behind customer satisfaction and subsequently retention, how can you afford *not* to make the kinds of investments necessary to improve service reliability in 2002?

[The information follows:]

On-time performance is a critical driver of customer satisfaction and it is a key indicator of whether or not a passenger will use Amtrak service again. Though Amtrak does dispatch its trains in the northeast corridor where it owns a majority of the tracks, the vast majority of Amtrak trains operate over tracks owned by freight railroads and Amtrak does not dispatch its trains over freight owned tracks.

Mr. Mead, you had something you wanted to interject?

Mr. MEAD. Yes. Just two quick points.

I want to go back to your original question. I think your original question had to do with the period preceding the announcement that Penn Station was going to be mortgaged and the closure of routes and things of that nature.

You will recall in the closing days of the Clinton administration, there was a bill up here called the bond bill and if you walked around and asked members of Congress what that bond bill provided, many of them would have told you that they were going to get high-speed rail in their backyard, that the bill was going to provide that.

That is not a fair characterization of what was really going to happen and I think part of the problem here is the raising of expectations of people as to what is possible.

Just looking back, and I think Mr. Warrington's point is right, too, that politically one of the things that holds the network together is everybody getting rail service and when you see the glimmer of a high speed train coming through your state, that kind of reinforces that and that was one of the phenomena that I saw playing out with the bond bill.

The second point is on the money. Most of the money that Amtrak is asking for, and that its capital requirements are for, is right here in the Northeast Corridor. It is not those long distance trains because we do not own that track. The rolling stock, yes, but not the track.

ESSENTIAL AIR SERVICE AS POSSIBLE RAIL SERVICE MODEL

Mr. ROGERS. Before I yield to Mr. Sabo, let me ask you, Mr. Warrington, you earlier—I think twice, even—made reference to the essential air service subsidy as a model for one that you were thinking of. You compared Amtrak to the essential air service, in fact, several times.

However, with essential air service, we impose a cap on the per passenger subsidy that we give them. If it exceeds a certain amount, we do not subsidize. Is that a good model?

Mr. WARRINGTON. I think that is the type of model that needs to be worked with here. I thoroughly understand that any subsidy needs to come with an appropriate measurement, as Mr. Sabo has said. I agree with that completely. I think the difficulty here is, frankly, when the act in 1997 was put in place what we all grabbed for was a concept called operational self-sufficiency and I think it is an inappropriate set of measurements around the business that we are dealing with here.

I thoroughly agree with you, Mr. Chairman, that the concept of subsidies here for what could be determined, I believe, are essential services is appropriate, measurement is appropriate and necessary and could be the basis for determining what are or are not essential services within a reasonable price tag.

I think a concept like that could also be constructed in a way so that there is a very clear set of both operating and financial measurements tied to it. I think there could be caps on it. I think there could be efficiency expectations clearly articulated and those services could be performed by Amtrak on a contract basis, not unlike

the way we are the contract operator of seven large commuter rail systems across this country where we compete for contracts. They include a clear set of expectations about performance, both on the operating side and on the financial side.

Mr. ROGERS. I was not here in 1971 when this act passed, but I do not know how anyone in their right mind could have figured that we could segregate the passenger service off of the freight service, lose that cross subsidy, not own the track and still make a go of it. The freight railroads were unable to make it hauling passengers and subsidizing passenger operations with freight revenues and they owned the track, the same equipment, the same stations and so forth. The freight railroads did quite well, thank you very much. They got rid of a loser and expected you to pick it up and make it go. We deluded ourselves, the Congress, and used that phrase, operational self-sufficiency, to sell ourselves and more importantly our constituents that, yes, this is only a short time we are going to subsidize this thing, it will make money in due course of time.

Here we are 31 years later and we have finally come to the conclusion, which you have agreed with, that it does not work, cannot work.

Mr. WARRINGTON. Mr. Chairman, I think we have all deluded ourselves into that. I think Amtrak has been a part of that as well over the years and it is the nature of the political process.

I will tell you that we have done extensive work around the economics of not only our operation, but comparable operations in the world and we would be happy to share that with you. There are lots of experiences around the world that could be appropriate models, but fundamental to all of this, I think, is a recognition that within reasonable economic boundaries, there is a public responsibility associated with passenger train service in all instances around capital investment for capacity, speed and reliability and, in some instances where the services are deemed to be essential services connecting communities in less densely populated areas they will clearly require a subsidy.

I think your point, though, is right on about subsidies being tied to very clear sets of economics and performance measures around efficiency.

Mr. ROGERS. You do not disagree much with the Chairman of ARC, then, do you?

Mr. WARRINGTON. I do not know whether I want to say that.

Mr. ROGERS. Oh, come on. Can we be friends here?

Mr. WARRINGTON. We are friends.

Mr. ROGERS. You wanted to say something?

Mr. CARMICHAEL. Yes, sir, Mr. Chairman. I will try to add a dimension to this discussion.

When we first started looking at Amtrak and the type of entity it was, our first report showed that it was a conglomerate of everything, it was a federal agency, it was a real estate company, it was a manufacturing company, and in there somewhere was an operating railroad passenger company.

And we first off went to Amtrak and asked them, you have 24,000 employees, you have two major assets, one is your trains running across the countries and the other is your real estate

called the Northeast Corridor, with tracks and signal systems and everything on it: of the 24,000 employees that you have, how many does it take to run the trains and how many does it take to run the infrastructure company in the northeast? Give us those figures, how many dollars does this operating company generate, how many people does it employ and what does it need?

We asked the same thing about the Northeast Corridor because the previous blue ribbon committee had come up with the same proposal to separate the Northeast Corridor from the operating company.

We do not know to this day. After February 7th, when we submitted our report, we did get some information on this thing, but we have not been able to assimilate it. Congress needs to know what it takes to run this national rail passenger system that we have out here, how many employees, and how much budget.

And they ought to be submitting to Congress every year a budget for running the national passenger system and how much in revenues and subsidies it needs, because I do not believe those darn figures that were given to us a while ago, the ones that you read and the ones that they have.

Now, until we know that, it is going to be hard for Congress to decide what to do, so the only way we can do that is separate it (the nationwide train operations from the NEC infrastructure).

Now the federal role: Amtrak plays a rail policy role. It is a federal agency, too. It does not need to be that. It oversees itself. All we have done is simply say, create this small federal agency for oversight, tell us what this train operating company costs to run and how many people you need, and spin off that Northeast Corridor—AT&T has done this. It is nothing new. Restructure and divide it so that we can see what it is.

Until you know what they need for these trains and how many employees and how much money it needs and generates, it is going to be very difficult to make it work.

Mr. ROGERS. You raise a very essential point. We have been unable to get the same kind of information and yet we are expected to dole out this year $521 million, or Mr. Warrington's request, $1.2 billion. I do not know of any other entity that Congress doles out that kind of money to without having strict accountability.

Now, those tax dollars are being spent and yet we do not have that in this case. I am new as chair in this Subcommittee, I am just getting my teeth into this problem, but I cannot bring myself to the point of continuing to do that and feel that I am responsible to the people that sent me here or the taxpayers of the whole country.

So we are going to have to shake things up big time on the accountability to the Congress if we are going to dole out huge tax dollars. I do not know how else to say it. I want to be nice and courteous, but we are going to be damn frugal.

Mr. CARMICHAEL. I think the Northeast Corridor as a toll road is strong enough and has enough revenue generating itself, it is generating enough revenue that it could probably sell bonds and fix itself up. It has that magnitude of business on it. And Amtrak's trains could pay a fee for using the tracks. So I think you are going to find when you get down there that the Northeast Corridor, if it

was set up as a separate authority, is not the problem. The problem is how much does it cost to run and build a modern, new, national rail passenger system.

Mr. ROGERS. In other parts of the country.

Mr. CARMICHAEL. All across this country. I am from the south. I want to be involved in this thing.

Mr. ROGERS. Okay. Well, to make it work over distances, to effectively compete with airlines or interstate highways, you are going to have to build tracks that can go fast, right? And if you are like what we saw in France, you are going to have to own the track so that you do not have freights on there as well, otherwise, you cannot go very fast, can you?

And, to have tracks that are capable of going high speed, you cannot use existing tracks, frankly, because of the grade crossings, freight trains, bad trackage and everything else——

Mr. CARMICHAEL. You can use existing right of ways that connect our major cities and you can double track them and signal them and grade separate them and you can move high speed freight trains and high speed intercity passenger trains. That is what this Young bill is about.

Mr. ROGERS. And with that kind of an investment, you are talking zillions of dollars of investment, are you not?

Mr. CARMICHAEL. That is right. You are talking about an interstate program for railroad passenger service, too. Another mode of high speed transportation service.

Mr. ROGERS. And I am told that will cost $30 to $50 billion dollars.

Mr. CARMICHAEL. A hundred billion. And we will have something very good, too, within 15 to 20 years.

Mr. ROGERS. You are the last of the big time spenders.

Mr. CARMICHAEL. Yes, sir.

Mr. ROGERS. And you can make this thing work financially?

Mr. CARMICHAEL. I am old highway lobbyist. I came out of the highway lobby a long time ago. I think the bonds are a step in the right direction.

Mr. ROGERS. Can you make this thing pay for itself if you do that?

Mr. CARMICHAEL. What you are saying is will the freight railroad boys help pay for those bonds? Yes, sir. And I think the passenger train service properly set up can help pay a good share on the bonds, too.

Mr. ROGERS. You think the freight railroads are going to want to spend that kind of money?

Mr. CARMICHAEL. Yes, sir. They cannot go in the marketplace any more now. They are very interested in this tax-exempt bond program. They tried to get the state of Mississippi to pass a $100 million GO bond issue down there so they could build track and take some kinks out of the bad tracks down there and the state came real close to doing it and they pledged their revenue to do it.

HIGH-SPEED PASSENGER SERVICE

Mr. ROGERS. Can you run a fast train with passengers over a track with grade crossings every few miles?

Mr. CARMICHAEL. FRA will let you—with proper signaling, they will let you run up to 125 miles an hour.

Mr. ROGERS. Tell us.

Mr. RUTTER. Well, that depends on what you define as high-speed.

Mr. ROGERS. One hundred eighty-five miles an hour.

Mr. RUTTER. No. No grade crossings.

Mr. CARMICHAEL. That is very high-speed. That is France's speed. That is very high-speed.

Mr. ROGERS. That is an average of French speed where you can compete with airplanes. If you cannot compete with airplanes, you are out of business. Right or wrong?

Mr. CARMICHAEL. Well, what is happening to my small city is the airplanes are disappearing, the commuter planes are going away. And so we are fighting for high speed trains going into airports.

Mr. ROGERS. How fast can you go with grade crossings every whip stitch?

Mr. RUTTER. There are different standards for grade crossing protection between 79 and 110, 110 to 125, and anything over 125 there should be no grade crossings.

Mr. ROGERS. I have exceeded my time, Mr. Sabo, I apologize to you.

AMTRAK'S ALLOCATION OF COSTS

Mr. SABO. There are great expectations about what those bonds would do, and somehow they also have to be repaid.

Do you have the same problems sorting out the allocation of costs between the Northeast Corridor and the long distance trains?

Mr. MEAD. Yes. Over the years, people have suggested that these long distance trains that are unprofitable, let's just get rid of them: the idea being they are not profitable, and if you are supposed to operate like a business, get profitable.

What I was trying to point out was, when you add up the shortfall between the revenues that we are getting for the long distance trains and the deficit there and you compare that to how much money you are being asked to put into the Northeast Corridor; the trains outside the Northeast Corridor are like chump change.

That is sort of a different way of looking at it, but when somebody is coming to the table and saying they need $1.2 billion, you want to know, well, what exactly is that for? And when you take it apart you will find that a very, very substantial percentage of that will go into the spine. And one of the big reasons for that is because outside the Northeast Corridor we do not own anything except the trains that are rolling.

So does that answer your question?

Mr. SABO. Well, I am not sure where I am going with it. Let us assume that Amtrak closed all long distance trains on October 1st. How much money would they need next year?

Mr. MEAD. Oh, I see where you are headed. Let us take the administration's budget, $521 million and the long distance service that Amtrak says, as of October 1st if they do not get the $1.2 billion, they will have to stop. Okay. Well, that frees up in theory about $300 million and that money would presumably go to capital, except that under the labor laws, it would end up going to pay sev-

erance payments to employees. I think in the first year, it would be about $250 to $300 million.

So if you cut off the trains, you save $300 million, which presumably you would want to go to capital, but you have to come up with another $300 million from somewhere to pay the employees. That is how it would effectively work.

If you take the administration's proposal and you apply it to the current system, you first have about $160 million that would go to excess railroad retirement payments, another $200 million would go to the long distance trains, the subsidy. The reason I was using a number of $360 million for the subsidy is because the Northeast Corridor cross-subsidizes the long distance trains. Debt payments, and that is principal only, that would be $105 million. Mandatory environmental and Americans with Disabilities Act capital investments, matters that are legal obligations, would be another $48 million, for a total of $513 million. That leaves by my math $8 million from the administration's request for capital for the entire Amtrak system. It is not possible to do it. The railroad just cannot operate under those circumstances.

AMTRAK'S LABOR COSTS VERSUS INDUSTRY AVERAGE

Mr. SABO. In Mr. Rutter's testimony he indicates that the labor costs are high in Amtrak. How does compensation in Amtrak compare with other freight railroads. Are levels of pay comparable?

And a second question, I notice in testimony that indications are the capacity system wide is down from 50 percent to 45 percent. Is that accurate? I assume by capacity we mean percentage of the passenger seats that are occupied.

Mr. WARRINGTON. I would have to check that number, Mr. Sabo. Could you ask the first question again?

Mr. SABO. My question is relative costs of Amtrak labor. The railroad administrator indicates that it is comparably significantly higher than other modes of transportation.

Mr. WARRINGTON. Right.

Mr. SABO. It has been increasing. What your levels of pay are in comparison to freight rail?

Mr. WARRINGTON. On average, they are actually below the industry as a whole and I would say they are below by probably somewhere in the neighborhood of 10 to 15 percent—20 percent, my staff is telling me. About 20 percent less.

MEASURING AMTRAK'S LOAD FACTOR

Mr. SABO. What about the capacity question?

Mr. RUTTER. By that you mean load factor?

Mr. SABO. Yes. Yes.

Mr. RUTTER. How many of those seats are being——

Mr. SABO. Yes.

Mr. RUTTER. That is the information that we have, that system wide, load factors are around 45 to 50 percent.

Mr. WARRINGTON. Let me address that for a moment because the railroad business is not like the airline business, where you are going from end point to end point and your origin and your destination encapsulate the entire trip. For Amtrak, when we measure seats and available or filled seats, they are for the entire trip with

multiple stops and we consist our trains for the expected peak load segment generally, within reason.

For example, our Acela high speed train service is scheduled to a regular density of traffic, hourly departures. Now, we designed the number of seats on those train sets to be able to handle the peak periods, which are 6:00 in the morning, 6:30, 7:00, 8:00, 9:00, in both directions. We also run those trains on a regular frequency, on an hourly basis.

Now, we know that the share of those seats are going to be filled during the peak periods and we know that they are not going to be completely filled during the off peak periods, but you need to run those trains to provide a sufficient density of service and flexibility for people who want to leave early or travel—you know, it is about choice and alternatives. We have to offer a sufficient density in order to make the overall service attractive.

When you average in the number of seats that are available during the off peak that are not going to be filled like they are on the peaks, it brings your overall average seat utilization down. But in this business, the nature of it is to run those seats much more frequently than you know every one of them will be used. Do you follow?

Mr. SABO. Mr. Chairman, I have several questions about how capital budgets are——

Well, he went to vote.

Ms. KILPATRICK. Thank you, Mr. Ranking Member, soon to be Chairman.

Thank you very much, it has been very instructive. I have been on the subcommittee—I think this is my fourth year now, and I knew four years ago that Amtrak was not going to be self-sufficient in December 2002 for many of the reasons that we talked about then and this morning, nothing on you personally.

Mr. Mead——

Welcome, Mr. Rutter, let me say that to you first.

Mr. RUTTER. Thank you.

2003 AMTRAK FUNDING REQUEST

Ms. KILPATRICK. Is it coincidental that the loss of $521 million happens to equal the place setter $521 million you gave us in our budget or is there some correlation there?

Mr. RUTTER. No, ma'am. The 521 is what was there last year and it really is literally a place holder while we are trying to identify this system and solutions of making this a going forward, long term way of providing these services.

Ms. KILPATRICK. And is the administration going to present to our subcommittee some plan or proposal, either the commission's report or some variance of it of your own, that we might respond to as we put this budget together?

Mr. RUTTER. I have heard loud and clear, both today and in previous hearings, that this committee expects us to have some ideas on what to do next. And that is what we are working on. Yes, ma'am.

Ms. KILPATRICK. Okay. We look forward to that and welcome to our subcommittee.

Mr. Mead, my favorite person on this subcommittee, you have been here longer than I have. You knew they were not going to be self-sufficient. We have heard all this and the commission has made some mention in three recommendations. We always knew the Northeast Corridor was the corridor that Amtrak really had any hopes of saving as they went into real estate and managing other lines and other things to produce the $200 plus million dollars of revenue.

It is scary to me because Amtrak is an economic engine to many families and employees and the like. The Northeast Corridor by far is the most outstanding across the country. We would like to see more in the northeast, I heard the gentleman say he would like to see something in the south. Where do we go from here?

And, by the way, the chairman and the ranking member have me holding you, they do not want you to leave, I am going to vote, they just went to vote, they will be right back, and they asked me to ask you to stay.

Mr. Mead? I mean, yours is to do the critiques and you have done that. It seems like the next step, and we need to get into that soon, what do we really do now with Amtrak? I mean, I heard the chairman say they are not about to get a billion two unless he knows where it is going. You know, I do not know.

Mr. MEAD. Let me say that my response is the response of the Inspector General, not the administration. I am not the ARC and certainly not Amtrak. I think where we go from here is that—I am not sure I would even appropriate the $521 million that the administration has asked for if we do not deal with the capital situation, the capital requirements of the railroad, at least for the one or two years that it might require until we ultimately decide what to do with intercity rail because things are so serious in the Northeast Corridor.

I think we need to come up with a source of capital. Now, what does that mean?

Do we have a Bond Bill where really the states come up with 20 percent and the taxpayers come up with the rest by giving a tax credit as interest on the bonds and you are cut out of the picture as an appropriator?

Or do we tap the general fund where you are very much in play?

Do you authorize the states to have the discretion to use their Highway Trust Fund dollars?

You have heard the suggestion of a penny of the fuel taxes. I think there is a substantial amount of opposition to the penny idea.

Ms. KILPATRICK. And the Highway Trust Fund idea, too. Most states, like my own, of this $9 billion that has been reduced by the slow economy, there is no money in the Highway Trust Fund to fund railroads. We want roads. We want transit systems and we want other things. Railroads added onto that—and the penny that Mr. Chairman mentioned——

Yes, Mr. Carmichael, I am sorry?

Mr. CARMICHAEL. It is a new penny.

Ms. KILPATRICK. A new penny?

Mr. CARMICHAEL. Yes. It has nothing to do with any of the trust fund pennies.

Ms. KILPATRICK. It is also a tax increase.

Mr. MEAD. It raises taxes. Right. But actually, the Highway Trust Fund right now can be used under the special provisions for the use for commuter rail and is used by a number of states.

If you decide that you want to try high-speed rail outside the Northeast Corridor, that you do not want to just keep it here, you think that we should foray off into some other areas, I would limit it to one or two other corridors in the country. I would stop leading people to believe that there is going to be a high-speed train in every state because it is not going to happen.

Ms. KILPATRICK. Okay. Please excuse me. And, again, the chairman and ranking member are on their way back, they have asked that you stay. Thank you for coming.

Mr. MEAD. So we should stay?

Ms. KILPATRICK. Yes, please stay.

[Recess.]

Fiscal Year 2003 Requests for Amtrak

Mr. Rogers. Mr. Warrington, Amtrak and the Amtrak Board have not been entirely forthcoming on Amtrak's financial position and funding needs in recent years. Given that, why should we believe Amtrak now when it says $1.2 billion is "essential" to remain viable in 2003?

[The information follows:]

Amtrak has been forthcoming regarding its financial position and funding needs in recent years. For FY03 Amtrak will require: $160 million to cover the cost of excess railroad retirement payments - the amount of Amtrak payroll taxes that are contributed to the industry retirement fund in excess of that paid out to Amtrak retirees; $840 million to maintain the minimum of capital funding for the current network that includes mandatory investments (environmental impact studies, life safety, ADA and debt service), basic infrastructure investments to maintain current schedules and levels of safety across the entire network and fleet overhauls and upgrades of facilities and technology to ensure efficient, reliable operations; and $200 million will be needed to cover the net operating losses of unprofitable long-distance trains.

SUFFICIENCY OF 2003 AMTRAK GRANT REQUEST

Mr. ROGERS. Mr. Warrington, over the years, we have not been able to really rely on the word of Amtrak about what your real needs have been. You know, sometimes you say $521 million, sometimes $1.2 billion, to remain essentially on track in 2003.

If we provided the $1.2 billion that you say is essential to remain viable in 2003, would you not be back hat in hand six months later asking for more, as has been the case in the past?

Mr. WARRINGTON. No. I would not be back. We have very carefully gone through the construction of those numbers, Mr. Chairman, and I know that you want accountability and you want to understand exactly where every one of those dollars would go and I can assure you that $1.2 billion is the right number and that will enable us to manage this business safely and the entire operation through next fiscal year.

Mr. ROGERS. But that just operates it as it is.

Mr. WARRINGTON. Yes, Mr. Chairman.

Mr. ROGERS. No changes?

Mr. WARRINGTON. Well, yes, it does include changes with respect to expenses and revenues. Implicit in that number are a set of actions that we have well under way.

Mr. ROGERS. Which is what?

Mr. WARRINGTON. Around expense reduction, around revenue generation. There are a whole host of assumptions that go with that number and, in the end, that is the number that does work.

Mr. ROGERS. But would the taxpayers still be paying $377 to haul a person from Orlando to L.A.?

Mr. WARRINGTON. Yes, Mr. Chairman. We would continue to run that existing system.

Mr. Rogers. Mr. Warrington, Amtrak's grant request of $1.2 billion is more than double what Congress has provided the railroad in the past few years. Mr. Warrington, why should we double your funding this year when you have failed to reach operational self-sufficiency as mandated by law?

[The information follows:]

Amtrak, in part, has failed to reach operational self-sufficiency because congress has failed to adequately fund Amtrak. Though Congress in 1997 authorized $5.1 billion in capital for Amtrak from FY98-02, it has only appropriated approximately half that amount. Without the sufficient capital funding, Amtrak has been forced to defer capital investment which has driven up its operating costs. Further, the $1.2 billion request represents the approximate amount of funding that Congress has authorized in the past for Amtrak, but has failed to fully appropriate.

Mr. Rogers. Mr. Warrington, will $1.2 billion just allow you to continue operating the current inefficient system until Congress decides how to restructure the national passenger rail program or will this amount allow Amtrak to grow the system, for example in other high-speed rail corridors?

[The information follows:]

It is important to note that the $1.2 billion request represents the minimum need to safely operate the current system in FY03, and does not include two capital categories critical to the future of passenger rail in America:

Capital Backlog. For over 30 years, the U.S. has failed to invest at levels sufficient to maintain the national passenger rail system, much less to optimize that system. Federal capital funds available for passenger rail since Amtrak's inception have totaled just over $10 billion, or less than $325 million per year. A portion of this investment was for the Northeast Corridor Improvement Program to upgrade the Boston-New York corridor, including electrification from New Haven to Boston; the balance has been just enough to ensure a safe system and provide minimal equipment overhaul and infrastructure investment - significantly below the levels needed to modernize equipment and prevent continued deterioration of the infrastructure.[1] Thus a significant backlog of capital needs has developed, and that backlog has grown each year the system is under-funded. The current estimate of the cost to address the capital backlog is about $5.8 billion - of which $3.8 billion is for

[1] About $3.9 was dedicated to the Northeast Corridor Improvement Program (NECIP) and Northeast High-Speed Rail Improvement Program (NHRIP) program, $3.8 billion from general capital appropriations, $2.2 billion in Taxpayer Relief Act (TRA) funds, and $0.2 billion in other categories, for a total of $10.1 billion in federal capital funds since 1971

infrastructure on the federally-owned Northeast Corridor and thus affects commuter and freight as well as intercity passenger service. [2]

Corridor Development. The future of passenger rail in the U.S. is dependent on developing higher-speed rail corridors that can both compete with, and complement, the aviation and highway systems. In congested air corridors between cities of up to 350 miles apart, for example, development of higher-speed rail using existing infrastructure could free up airport capacity for longer-distance air travel. Formal high-speed rail initiatives involving over 30 states are underway to transform what is finally recognized as a precious resource into an economic engine for regional growth. In some cases, these efforts build off existing Amtrak service; in other cases, they represent new initiatives that include both commuter operations and intercity high-speed rail connections. In the Northeast Corridor, adding new capacity for all users, along with speed enhancements, would reduce trip times further while meeting the growing demand for intercity and commuter travel. Preliminary estimates of the cost to develop all 11 federally designated high-speed corridors total about $50 billion.[3]

[2] The 1995 *State of Good Repair Report* estimated a backlog of about $3.2 billion for infrastructure in the Northeast Corridor. The updated 2001 estimate of the cost to address the capital backlog is approximately $3.8 billion for infrastructure (accounting for six more years of under-investment), plus $1.1 billion for fleet, and $900 million for stations and facilities.

[3] Based on synthesis of available corridor development analyses; detailed estimates are not available for all segments. Corridors vary significantly in their potential to attract riders and alleviate congestion on other modes and policy-makers may, therefore, choose to fund only selected corridors (resulting in a lower capital cost).

Mr. ROGERS. Your request of $1.2 billion is, as you say, "essential for keeping a national rail service network intact during the next fiscal year." Included in that figure is $286 million for operational reliability investments.

The last three years, even while the Inspector General has been criticizing, Amtrak has been spending less than $100 million a year. How is it now that Amtrak's bare minimum needs for one year are greater than what you invested for the past three years combined?

Mr. WARRINGTON. We have been spending over the past couple of years on average $100 to $120 million on the Northeast Corridor around basics and what I am suggesting is that the consequence of that is, as Ken has pointed out, a substantial increase in minutes of delay. The number that is in this program enables us to not continue to lose ground there.

Mr. ROGERS. Mr. Mead, Amtrak says the $1.2 billion is essential to keeping the rail service network intact. Have you had a chance to look at their current request for 2003 and can you give us your thoughts about whether or not that amount is essential for those purposes?

Mr. MEAD. I can tell you that of the three elements of the grant request, one of them is for excess railroad retirement payments. I give them a passing grade on that. I think those numbers are sound. That is about $160 million.

There is $200 million for subsidy for trains outside the Northeast Corridor. I think that is sound—well, if anything, that is a low ball number. It may be a little bit higher, but it is a plausible number.

That leaves $840 million. Of the $840 million, about $370 would go to things that they have to do by law and that leaves about $400 million, $400 odd million, and I would like to know more about what that exactly would be used for.

I know the Amtrak situation is somewhat analogous to a house where the plumbing is bad, where the roof is leaking, and one of my staff said just about everything is going wrong with your house all at once, but I still would like to know exactly what this money was going to go for and where.

Also, what you pointed out, We have been reporting in our statutory report for several years now that Amtrak is not putting its capital in some of the areas where it really needs to, and what their minimum needs are all of a sudden has increased. I guess their theory is, well, the backlog has caught up with us.

Well, I want to know exactly what that money is needed for.

DETAIL OF AMTRAK'S CAPITOL REQUEST FOR FY'03

Mr. ROGERS. I know somebody that knows.

Mr. Warrington.

Mr. WARRINGTON. I can tell you that we have this program in excruciating detail and I will provide it to both Ken and yourself, Mr. Chairman.

When you get beyond the $370 million that are for mandatory requirements, we have about $140 million of basic subsistence, safety and operating reliability on the Northeast Corridor, the Keystone Corridor, the Empire Corridor through New York, Springfield and

our Michigan and Indiana lines. And this is pretty basic stuff and where we continue to lose ground on reliability.

We also have about $75 million relating to agreements on non-federally owned or non-Northeast Corridor infrastructure, and that includes investments on the Metro North Commute Railroad between New York and New Haven where our own trains now run at about 90 miles an hour because of serious infrastructure-related constraints and restrictions. And we have a longstanding arrangement around investing in that railroad, which we do not own, which affects our high speed service but would shave minutes off our trip times.

We also have as part of that program partnerships with states and commuter agencies all around this country and on the West Coast, in Los Angeles, in the state of Washington, California, and we have arrangements with freight railroads such as the Burlington Northern Santa Fe. All of these arrangements are around funding partnerships, existing agreements relating to either improving reliability or improving capacity of our own railroad service on their assets.

We can provide, Mr. Chairman, to you and Ken details of those agreements along with where the investments would go and what the benefits are.

Mr. ROGERS. Would you do that for us?

Mr. WARRINGTON. Absolutely.

[The information follows:]

Project	FY03 Request	Financial Liability if not funded	Comments/Impacts/Legal	Previous years expenditures				
				FY98	FY99	FY00	FY01	FY02 Thru 3/26
NEC Projects								
NEW HAVEN to NEW ROCHELLE								
New Haven Interlocking	1 500	1 500	Existing agreement with CDOT (5/86), interlocking scheduled for completion in FY02. Amtrak is committed by agreement to pay a share ($63m) of total project costs ($92m). The $1.5m is the remaining balance of Amtrak's commitment. Non payment would put us in default with CDOT.	20 895	15.476	18 041	3 368	0.338
Stamford Station	1 340	1.340	Existing agreement with CDOT (2/95), Station scheduled to be completed February 2003. Amtrak is committed by agreement to pay a share ($32m) of total project costs ($100m). The $1 34 is the remaining balance of Amtrak's commitment. Non payment would put us in default with CDOT.	5.677	8.413	5 479	0 000	0.000
CDOT Line Improvements	8 350	8.350	Existing agreement with CDOT (3/99), 3rd crossover, CP240, to be completed FY03. Deferral would affect operational reliability and increase cost to complete. Termination or deferral of the project would make us liable for costs incurred. The $8.35m is expected liability at 9/30/02.	0.000	0.152	11.935	1.090	0.240
Shell-at-Grade	15 000	3 650	Working under letter of direction to Metro North, pending modification to existing construction agreement. Deferral would cause unrealized trip time improvements of approx. 2 minutes. Termination or deferral of the project would make us liable for costs incurred. The $3 65m is expected liability at 9/30/02. Additional revenue loss per year related to trip time is estimated to be $2.58m per minute lost.	0 002	0.200	3 662	1.166	2 277
Acela Express - MOU	12.000	5.500	Existing agreement with CDOT/MNR (10/00) Deferral would cause unrealized trip time improvements of approx. 4 minutes. Termination or deferral of the project would make us liable for costs incurred. The $5 5m is expected liability at 9/30/02. Additional revenue loss per year related to trip time is estimated to be $2.58m per minute lost.	0 000	0 000	0.000	0.000	0 000
Subtotal	38.190	20.340						

Project	FY03 Request	Financial Liability if not funded	Comments/Impacts/Legal	Previous years expenditures				
New York State Turboliner Project	18.000	23 250	Existing agreement with the State of New York for Equipment and Infrastructure upgrades. Payments to the State of New York will be in default, stations and maintenance facilities will not be completed, operational reliability will suffer, and trip times will not be realized. If the project were terminated at 9/30/02 we would be liable for 4 trainsets in process and completed infrastructure work Other termination costs are undeterminable and will be millions.	2.327	1.119	0 651	0 097	0 000
Total NEC projects	**56.190**	**43.590**						
West Projects								
Seattle Maintenance Facility	3.351	3.351	Existing project under construction $3.351 million is the balance remaining of Amtrak's 30 3 million authorized for this project. Contractual obligation with Sound Transit Commuter Rail to provide 10 years (2000 - 2010) of maintenance of equipment services in addition to a capital investment by Sound Transit of $12 7 million. Contractual obligation to Washington State DOT for maintenance facility improvements in return for a $6 3 million capital investment in the facility. Loss of funding would result in contract defaults, unrealized operating efficiencies and Phase 1A construction would not be completed	3.212	9.671	3.169	7.860	10.618
Seattle King Street Station	1.918	1.918	Existing project. $1 918 million is the balance remaining of Amtrak's $9.7 million authorized for this project. The State of Washington Legislature has approved special legislation that allows for bonding authority for renovation Exterior track and platform work is completed. Remaining funds are being used to attract and retain local, state and federal matching dollars.	0 370	3.149	6.058	3 903	0.044

Project	FY03 Request	Financial Liability if not funded	Comments/Impacts/Legal	Previous years expenditures				
Oakland Maintenance Facility	11.938	11.938	Existing project. 11.938 million is the balance remaining of Amtrak's $22 2 million authorized for this project Amtrak's capital funds are contractually obligated to match $32 million of State of California capital funding for construction of maintenance facility. Amtrak's contractual obligation in the sale and purchase agreement with the Union Pacific for property acquisition requires Amtrak to vacate existing yard as new facility is completed. If not funded, Amtrak potentially could lose the maintenance contract on 88 State owned cars and 17 state owned locomotives	(0.104)	1.075	9 080	0.140	0 497
Pacific Northwest Infrastructure	3.567	3.567	Existing project. $3.567 million is the balance remaining of Amtrak's $22 million authorized for this project. Contractual obligation with Burlington Northern Santa Fe Railroad to build four sidings between Seattle and Bellingham WA in order to operate Seattle-Bellingham Service. The train is already in operation based upon commitment to build the sidings. If sidings are not built, train will cease to operate. In addition, WSDOT pays 100% of the operating loss on this train.	4.535	7.049	0.568	(0.424)	4 597
Tukwila, WA Station Platform	0.400	0.400	Existing project. Contractual obligation to Sound Transit to assist in construction of a new station at Tukwila Amtrak has paid 1/2 of it's commitment and trains are stopping on a provisional basis This stop is of strategic importance due to it being adjacent to Seattle - Tacoma International Airport If second payment is not made, Amtrak will not be able to stop at the station..	0.000	0.000	0 000	0.000	0.000
Everett, WA Station	0.010	0.010	Existing project. $ .010 million is the balance of $1 million authorized. The City of Everett has just completed a brand new $44 million intermodal transportation center. All work except track and platform is completed Amtrak has a contractual obligation to pay $400,000 upon completion of track and platform and to begin serving the station. If we are unable to make the payment, we will be forced to serve the old station two miles away with no intermodal connections at all.	0.000	0.000	0.600	0.000	0 000

Project	FY03 Request	Financial Liability if not funded	Comments/Impacts/Legal	Previous years expenditures				
Eugene, OR Station Renovation	0.750	0.750	Existing project $.750 million is balance of $1 million authorized for this project. Contractual obligation to participate in Station renovation. If we do not participate, we will be able to serve the station when renovation is complete, but rents will be at fair market value. In addition, Amtrak funding has been used to attract and retain local, state and federal matching funds. These funds will be in serious jeopardy.	0.000	0.000	0.000	0.250	0.000
Albany, OR Station Renovation	0.210	0.210	Existing project. Contractual obligation to participate in Station renovation. If we do not participate, we will be able to serve the station when renovation is complete, but rents will be at fair market value. In addition, Amtrak funding has been used to attract and retain local, state and federal matching funds. These funds will be in serious jeopardy	0.000	0.000	0.000	0.000	0.000
Sacramento Station Rehab	0.156	0.156	Existing project. In 1998, Amtrak committed $5 million to this project. As the project has slowed down, we have reduced our contribution to $500,000. The remaining $156,000 will show a good faith effort by Amtrak to assist the State Capital of California.	0.000	0.000	0.000	0.000	0.000
San Joaquin Corridor Infrastructure	0.600	0.600	Existing project. $.600 million is the balance remaining of $1.5 million authorized. The remaining funds in the project are contractually obligated to the City of Fresno to make changes to the station tracks when the City completes a $15 million renovation of the Fresno train station. If the investment is not made, the station will be renovated and Amtrak won't have access to the station.	0.000	0.000	0.000	0.893	0.000
Metrolink Ticket Vending Machines	0.920	0.920	Existing project. Agreement between Amtrak, Metrolink, and State of California DOT to integrate tickets, schedules and fares in the Southern California region. This project is $14 million in total with $920,000 from Amtrak. If we do not participate, then we will not be able to take advantage of a much larger ticket distribution network in the region. In addition, we will not be able to enter in revenue enhancing joint ticketing partnerships with Metrolink. Amtrak funding has been used to attract state and local funding. Without the Amtrak funding, the matching funds will not be available	0.000	0.000	0.020	0.000	0.000

Project	FY03 Request	Financial Liability if not funded	Comments/Impacts/Legal	Previous years expenditures				
Las Vegas Service	2.250	2 250	Existing project. $2.250 million is the balance remaining of 15.6 authorized for this project. Contractual Obligation to Union Pacific Railroad to pay $14 million for double track construction between Cima and Kelso If this construction is not completed, the Los Angles to Las Vegas train will not operate.	0.153	0.386	1.256	1 504	0.142
California High Speed Rail			Existing project. Funds are the balance of $25 million authorized for this project. As part of the 2000 State Transpiration Improvement Program, the State of California and Amtrak developed program in which $25 million of Amtrak funding would allow $63 million in State funding to be spread further and construct more projects. Our obligation is contained in the public record in the formal Resolution of the California Transportation Commission approving the matching program. As a result of these projects Amtrak will realize increased capacity, improved operational reliability and reduced trip times. The following is a list of projects required for FY03.		0.027	4.266	2.748	0.179
LA to Fullerton Triple Track	3.000	3 000	Existing agreement with Caltrans. Amtrak's $3m is a contribution to a $12m project. Construction is underway and expected to be completed by FY03. If funding is not provided Amtrak payments will be in default to Caltrans					
Doubletrack Flores to O'Neill	1.250	1.250	Existing agreement with Caltrans Amtrak's $1 25m is a contribution to a $5m project. Construction is underway and expected to be completed by FY03. If funding is not provided Amtrak payments will be in default to Caltrans					
San Diego Maintenance Facility	1 000	1.000	Existing agreement with Caltrans. Amtrak's $1m is a contribution to a $11m project. Construction expected to start in FY03 and be completed in FY03. If funding is not provided Amtrak payments will be in default to Caltrans					
Oakland Station Improvements	0.600	0.600	Existing agreement with Caltrans. Amtrak's $600k is a contribution to a $1m project. Construction expected to start in FY03 and be completed in FY03. If funding is not provided Amtrak payments will be in default to Caltrans.					

Project	FY03 Request	Financial Liability if not funded	Comments/Impacts/Legal	Previous years expenditures				
Sidings, Santa Barbara/Carpenteria	0.625	0.625	Existing agreement with Caltrans Amtrak's $625k is a contribution to a $2.5m project Construction expected to start in FY03 and be completed in FY03 If funding is not provided Amtrak payments will be in default to Caltrans					
Centralized Traffic Control - Orcutt to San Luis Obispo	0.500	0.500	Existing agreement with Caltrans. Amtrak's $500k is a contribution to a $2m project. Construction expected to start in FY03 and be completed in FY03. If funding is not provided Amtrak payments will be in default to Caltrans.					
Electronic Message Boards - San Diegan Corridor	0.263	0.263	Existing agreement with Caltrans Amtrak's $263k is a contribution to a $3 2m project. Construction expected to start in FY03 and be completed in FY03. If funding is not provided Amtrak payments will be in default to Caltrans.					
Gaviota Siding Upgrades	0.210	0.210	Existing agreement with Caltrans. Amtrak's $210k is a contribution to a $1.8m project. Construction is underway and Amtrak has funded $240k in FY02. If funding is not provided Amtrak payments will be in default to Caltrans.					
Total California High Speed Rail	**7.448**	**7.448**						
Total West	**33.518**	**33.518**						
Total Projects	**89.708**	**77.108**						

Project	FY03 Request	Financial Liability If Not Funded	Comments/Impacts/Legal	Previous years expenditures				
				FY98	FY99	FY00	FY01	FY02 Thru 3/26
Other Projects								
ACSES Equipment & Wayside Washington-Boston	10 800	10.800	ACSES will not be implemented on the entire NEC This cost assumes an additional $2.6M in FY02 is allocated. Costs are mainly Equipment driven under a contract with the Alstom Corp.	3.342	9 242	15 595	8.615	5.308
Electrification Environmental Impact Statement Record of Decision Tasks. $13.3m			Tasks are required by the FRA ROD of the EIS Deferral could potenbally result in a speed reduction by FRA due to					
Guilford Sidings	9.000	9 000	ROD default. Probable litigation from affected parties to	0.008	0.669	0 953	0.000	0.000
Switch Heaters	4 300	4.300	require Amtrak to complete project.	0.001	0 440	0,196	0.285	0.000
ROW Fencing	1.500	0 000	Additional fencing locations previously identified between Amtrak and Local communities as per the ROD. Additional locations were suggested but not required by the ROD	0 421	1.363	1.479	0.081	0.000
CSX Trackwork Mitigation	0.600	0.600	Agreement with CSX, FRA, and MBTA to construct new yard track as a result of removing a freight track to construct Rte 128 Hi-Level Platform	0.000	0.000	0.000	0.000	0.000
RT128 Local Roads	0.625	0 625	$625k letter agreement by GOW 4/00 MBTA withholding fund from other Amtrak Receivables.	0 000	0 000	0.000	0 000	0.000
Keystone Corridor Improvement Project (KCIP)	12.000	3 650	Represents Infrastructure($4M) and Equipment($8M) Amtrak would be in default of the pending KCIP agreement with Penn DOT and be required to pay 1/2 of incurred costs There is also an additional $12m committed to materials which would have to be absorbed in to inventory or termination charges paid.	0.000	0.000	4.486	(0.509)	0.000
Shell-at-Grade- MNR Manor Interlocking-Amtrak	6 300	0.000	Working under letter of direction to Metro North for Shell at-grade, pending amendment to construction agreement. Manor Interlocking must be progressed or it will impact start of Shell at-grade/CP216 in FY04 Deferral would cause unrealized trip time improvements of approx. 2 minutes and increased cost to complete. Additional revenue loss per year related to trip time is estimated to be $2 58m per minute lost.	0 000	0.000	1.175	0.437	0.005

New London Pedestrian Overpass	3.000	0.000	Proposed overhead pedestrian bridge will connect the parking garage and the ferry terminal as well as access to Amtrak's platform's Funding is provided by Amtrak and and FHWA grant of $1 6M. Deferral may impact the FHWA grant An additional $2m will be required in FY04.	0.000	0 000	0 207	0 208	0.017
Kingston Pedestrian Overpass	2 900	0.000	Deferral will impact the construction start for the new Kingston Station overhead pedestrian bridge until at least FY04. Amtrak guests must continue to be bussed across the highway to access the northside platform creating additional operating expense (approx. $60k)	0 000	0.000	0 000	0 000	0 029
Total Other Projects	51 025	28 975						

2003 AMTRAK GRANT REQUEST

Mr. ROGERS. Now, Mr. Rutter, if the Congress adopts your current request of $521 million, how long could Amtrak survive on that and in what form?

Mr. RUTTER. Not long and not well.

Mr. ROGERS. So are you saying let us let it die?

Mr. RUTTER. No, sir.

Mr. ROGERS. What are you saying?

Mr. RUTTER. We are saying that if anything the calendar about budget submission got in the way of us being able to get to the bottom of all the issues associated with what to do next. When we say it is a placeholder, that is what it is.

We are committed to working with this committee, Chairman Murray's committee and Chairman Young's and Chairman Holling's committee to try to determine what needs to happen next in the large scheme of things before we talk about what is a good investment in the short term.

ADMINISTRATION PROPOSAL ON AMTRAK/RAIL SERVICE

Mr. ROGERS. But do you not think you have an obligation to put forward a proposal? I mean, you are the executive branch, you are the experts, we are part-time soldiers up here. None of us are experts on railroad. You have spent a career doing that.

Do you not think the administration ought to come forward with a proposal for how they think Amtrak and rail passenger service in the country ought to be done?

Mr. RUTTER. That is what we are working on and what I can do, Mr. Chairman, is convey that expectation which you have already explained to the secretary and deputy secretary back to them and to the folks we are working with in the administration as a whole to say that is what your expectation is, that is what you want out of us.

Mr. ROGERS. We have already passed that word pretty strongly to the Deputy Secretary when he testified. We said we want an answer. We told the Secretary we need an answer. I mean, this is a significant national question that needs to be resolved. It is a huge part of the transportation problem of the country and I would think the Department of Transportation would be constructive and come forward with a recommendation for the Congress to chew around on. Do you not think so?

Mr. RUTTER. Yes, sir. And given——

Mr. ROGERS. When can we have it, then?

Mr. RUTTER. Given the fact that this is the result of 30 years of choices, we are going to do our best to come up with something in the short term, in part because of the needs of appropriators and in part because of the reduced amount of legislative days that face this particular Congress. We are well aware of those time deadlines.

Mr. SABO. Mr. Chairman, if I might?

Is there any proposal in process right now at OMB or at the White House?

Mr. RUTTER. We are working together with the entire executive staff at the White House and within the department to identify the

possible alternatives which are not only a restructuring of what to do about delivering services in a different way but how to pay for it, where the money is going to come from and how much we are going to need.

As you have said, both of you, that is the toughest problem and that is what we are struggling the hardest with how to come up with those dollars.

Mr. ROGERS. Well, you know that unless you get it up here in the next two months, it is DOA. I mean, this train is going to leave the station and unless that gets up here quickly so that we can digest it and process it, it will be useless.

Mr. RUTTER. Yes, sir.

Mr. ROGERS. Two months?

Mr. RUTTER. I hear that your expectation is that you want something in two months.

Mr. ROGERS. And what do you say about that?

Mr. RUTTER. I say that I desperately want to meet your deadline.

Mr. ROGERS. I am trying to find something to be optimistic about and this all reminds me—you know, we are digging around in the muck of a horse stall, and President Reagan once said, being the optimist that he is, he was sure there was a pony in there somewhere.

Mr. CARMICHAEL. It is in the Amtrak Reform Council report. The pony is in there. The pony is there.

Mr. ROGERS. It very well may be.

Mr. SABO. An expensive pony.

Mr. ROGERS. That is right. An expensive pony. And it very well may be.

FISCAL YEAR 2003 REQUEST FOR AMTRAK

Mr. Rogers. Mr. Carmichael, your testimony states that Amtrak needs $470 million (net) to continue running their long-distance trains in 2003. How is this figure derived and why is it more than double Amtrak's estimate of $200 million?

[The information follows:]

Amtrak's historical loss from running its long distance trains was $470 million. Page 25 of Amtrak's FY02-03 Business Plan and FY03 Legislative & Grant Request dated February 15, 2002, states in footnote 32, "The projected operating loss from the 18 routes is about $360 million (after cost reductions) – of which $160 million is covered by internally-generated cross-subsidies and the remaining $200 million represents a net funding need; the capital requirements of the 19 long-distance routes is $100 million per year (see Figure 10); the total long-term savings from eliminating these routes is therefore about $460 million annually." The Council's $470 million estimate was based on Amtrak's FY2001 Route Profitability System reports on the affected routes and the Council's assessment that Amtrak is not likely to achieve all of the cost reductions that it describes in its latest Business Plan.

Mr. Rogers. Mr. Warrington, the Administration is requesting $521 million for Amtrak, which is about $700 million less that you say is your ''bare bones'' need for this year. If the Committee were to adopt the Administration's request, what level of service could Amtrak provide? For example, would Amtrak be able to continue service along the Northeast Corridor and all of your commuter operations?

[The information follows:]

Amtrak would be unable to operate any services based on an appropriations level of $521 million. Mandatory obligations such as debt payments, excess RRTA and capital for ADA & environmental requirements, life safety and FRA mandated fleet maintenance would more than overwhelm the administration's appropriation amount, even if Amtrak were operating only the Northeast Corridor. Therefore, it would not leave any available funds for capital programs necessary for the reliable operations of the network, such as progressive overhauls or infrastructure safety.

Mr. Rogers. Mr. Warrington, your budget request states that Amtrak needs $200 million to continue operating the long distance trains in 2003. If this amount were added to the Administration's budget, would that be sufficient to permit both Northeast corridor and long distance service?

[The information follows:]

No. Keeping the current system intact while only funding $721 million would force Amtrak to eliminate vitally important capital expenditures in the areas of infrastructure, safety and reliability of our system. The combined mandatory capital expenditures of $370 million, operating expenditures of $200 million and excess RRTA payments of $160 million - a total of $730 million, would be greater than the suggested appropriation level.

Mr. Rogers. Mr. Warrington, last year in front of this Subcommittee, I asked you why Amtrak was backing away from your $955 million grant request and was supporting the Administration's $521 million request. You stated that if Amtrak received all of this funding at the beginning of the fiscal year, this would be sufficient, and the railroad would be able to meet operational self-sufficiency. At the end of the year, Amtrak actually received $626 million for capital grants, life safety repairs, and security costs. Why was this amount insufficient?

[The information follows:]

In a perfect world, $521 million made entirely available in FY02 would have been enough to run the system - based on our business plan. However, there were a number of unforeseeable circumstances that significantly increased the cost of running the national system - including but not limited to the national economic crisis, the incidents of September 11, and costs associated with the November 9 ARC finding. As of February 1 the net impact of these three events alone was $188.5 million and are broken out as follows:

Recession -- $120 million in FY01-02
9/11 Costs -- $16.5 million
ARC Finding -- $52 million

Furthermore, the statement that Amtrak received $626 million last year is incorrect. The Office of Management and Budget has yet to release the $105 million appropriated for tunnel life safety and security.

Mr. Rogers. In retrospect, shouldn't you have asked for the $955 million at the 100 percent outlay level? Wasn't that number a more accurate reflection of your true needs in 2002, excluding security costs?

[The information follows:]

If you refer to Amtrak's FY02 Legislative and Grant Request, you will see that Amtrak requested the fully authorized funding level of $955 million. However, looking back on last year's budget request, Amtrak could have been more clear. At the time, Amtrak assumed the Committee, should they have chosen the fully authorized amount, would have traunched the funding under the standard 40/60 outlay level. In other words, under this scenario, Amtrak would have received $696 million (60 percent of $521 million plus 40 percent of $955 million), which is less than the $833 million total it received for the year ($521 million at the 100 percent outlay level plus 60 percent of $521 million). We believed that given what we knew about the coming fiscal year, we could have managed with the fully authorized amount or $521 million at 100 percent. In retrospect, we should have been more clear in our budget request.

Mr. CARMICHAEL. Mr. Chairman, the railroad mode is only operating at about 25 percent of its capacity.

Mr. ROGERS. The what?

Mr. CARMICHAEL. The railroad mode, this big huge railroad right of way system across this country. And it is the only mode right now that is not carrying a decent number of passengers. The highway mode is as congested as ever, the airline mode was and is still pretty full. And this railroad mode sitting out here of 130,000 miles of track across this country going to our center cities, and the freight railroads are asking for some help in developing the corridors, they want to participate in increased speed.

And we are sitting here with a debate that I think is as healthy as the dickens I was part of the previous Bush administration, and we need a new railroad policy. You are asking for it, and the Reform Council's report is pointing toward a new policy on this thing. And I think there is a very nice national rail passenger system in there that will work with a very good intermodal freight system.

I just encourage you in this next two months to really study what we have recommended in here.

Mr. ROGERS. We will do that. But I want you to talk to Administrator Rutter and convince him.

Mr. CARMICHAEL. I have been trying.

Mr. ROGERS. Of your scheme or some scheme. You know, we are not experts in this business. We are trying to figure out how to make some things happen in order to have a viable rail passenger program in the country. And yet we cannot continue to pour money down a sink hole without hope of something coming from it. And we are at that point with Amtrak and President Warrington, who has worked hard and his staff is devoted, but so was the staff on the Titanic.

Mr. CARMICHAEL. And that is why he has to restructure himself. The Amtrak board needs to restructure itself.

THE APPROPRIATE ROLE FOR RAIL POLICY DEVELOPMENT

Mr. WARRINGTON. Mr. Chairman, could I say a couple of things, please?

Mr. ROGERS. Yes, sir. You are entitled to.

Mr. WARRINGTON. Amtrak is the vestige and a skeleton of what was once an operation that the freight railroad industry in this country did not want. It was a huge burden to the industry. Amtrak, from day one, was handed obsolete assets. It was never effectively capitalized. And, as you know better than I, we have struggled about that and I am not going to go through all of that history here today. We have struggled with trying to meet the self-sufficiency deadline and in a political context also meet as many political expectations as we could about the reach of this system, because that is just the way this works.

And, you know, we have as a practical matter never been in the power structure in this town around resource allocation. Amtrak has been an outsider. Amtrak has quite clearly been a target all of that time and the difficulty here is that Amtrak has never been at the center of the power structure around resource allocation or policy in this town. All this time we have in the United States Department of Transportation a set of mechanisms and institutional

apparatus for designing what the appropriate development responsibilities are for the transportation highway system in this country and the aviation system in this country.

At the DOT there is a power structure, there is a resource availability associated with it and there is no misunderstanding about the role of the federal government and it has clearly accepted that role for the development of this nation's aviation and this nation's highway system.

In the absence of having within this government a clear set of policy responsibilities for developing the railroad asset and the railroad capabilities of this nation, Amtrak has carried the ambitions of every American around the development of rail service in this country because there has been a policy void for 30 years.

A couple of messages. Number one, we cannot carry that burden on our back any more. I cannot carry that burden on my back any more. I have to manage this business through this year and I have to manage the business through next year, so I would urge that the Congress and the Administration come to grips with the fundamental issue here.

There is a fundamental issue about whether this government wants to, can afford to and will accept responsibility for the development of an intercity rail system in this nation that is comparable to the level of policy involvement and investment that exists in virtually every developed country certainly in the western world.

We spend more money in this nation annually on salt for snow removal and cleaning up road kill than we do on intercity passenger rail service. The investments that are made in the intercity passenger rail system in this country pale compared to the level of investment and the satisfaction and the competitiveness that flows from intercity rail services all around this world.

Hopefully you can see your way clear, to secure the right level of effort to continue to be able to sustain this over the next year, but these are difficult public policy questions. Frankly, I am not optimistic that in the next several months or in the next six months or eight months these fundamental issues will be addressed in the political process, so I would urge you to, if at all possible, consider our request.

I very much want to furnish you and Ken and everyone else with all of the detail supporting that. This is not about making threats. I do not want to do that, I do not intend to do that. We would be very careful with the decisions we make as we go forward here in connection with the level of appropriation effort.

I have to manage the basic business over the short haul, the short haul being the next six months and the next 12 months beyond that, that is the focus. The bigger set of policy questions, though, really need to be addressed and we cannot continue to carry everyone's ambitions on our back. There has to be a policy responsibility in this town for deciding what those ambitions are and figuring out how to execute them. I personally believe that has to be a federal responsibility. Amtrak cannot do that.

Mr. ROGERS. Well, you are exactly right. You are exactly right. We need to have this discussion, the nation needs to decide if it wants to subsidize passenger rail service. I personally do not think we are going to make money at it, except on a few places, but on

intercity traffic, I do not see the profit in it, so we have to decide whether or not we want to subsidize it or not.

At this point in time, it is not a hugely relevant matter because you only haul one half of one percent of all travelers, and that is not a significant number of people. Nor, I think, could it ever be, contrary to what the chairman has said. We will talk about that.

Routes

Mr. Rogers. Mr. Warrington, in 1998, GAO reported that only one Amtrak route was profitable. In 2002, not much has changed: only two routes are profitable. Mr. Warrington, why hasn't Amtrak cut its long-distance trains before now if they were expendable and unprofitable?

[The information follows:]

A number of routes that Amtrak operates cover their direct operating costs. However, there is no train route that in the classic commercial sense covers all of its costs, including capital. The long distance trains are not expendable because they provide an important transportation service to the communities served. Our goal in the coming years should be to determine what it is we want out of our national system and align the resources to support the system.

Mr. Rogers. Mr. Warrington, how will cutting Amtrak's long-distance trains on October 1, 2002 affect its other routes?

[The information follows:]

Cutting Amtrak's long distance-trains will affect ridership, Mail and Express, the public's perception of Amtrak and management's focus, to name but a few. Ridership will be affected by the loss of interconnecting passengers, Mail and Express revenues will be dramatically reduced due to the loss of capacity and interconnectivity, public perception of the long-term viability of Amtrak will be negatively affected, further eroding ridership in the short-term, and management's focus will be diverted from managing the day-to-day business activities and will instead be concentrated on the numerous issues associated with shutting down the long-distance routes - layoffs, labor protection payments, asset disposals/storage, and a number of other activities which would need to be done.

Mr. Rogers. Mr. Warrington, your grant request states that if Amtrak ceased service on 18 long distance routes, the net loss associated with these routes would be about $200 million. How did you come up with this figure?

[The information follows:]

The projected operating loss from the 18 routes is about $360 million (after cost reductions) - of which $160 million is covered by internally-generated cross-subsidies and the remaining $200 million represents a net funding need.

Mr. Rogers. Mr. Warrington, what would happen to the equipment currently used on these services?

[The information follows:]

The equipment would be placed into revenue-ready storage while we continue to make debt service payments on it.

Mr. Rogers. Mr. Warrington, Amtrak has encountered many difficulties in negotiating access to the national network of the freight railroads. If you carry through with your threat to terminate 18 long distance trains, how difficult will it be to restore service should funding for these routes become available at some later time?

[The information follows:]

The answer depends heavily on the length of time that the 18 long distance trains are out of service. For example, significant capital could be required to restore the lines to passenger rail service levels and increased funding would be necessary to offset the reduced revenues due to the time needed to rebuild passenger demand or market share. Additionally, as mentioned, restarting passenger friendly schedules on the networks of the freight railroads could be difficult and would have to be approached on a case-by-case basis. Since there is virtually no historical precedent to draw on, in this case, one O'Henryesque outcome could be that it will cost significantly more to restart the service than it would be to continue it.

Mr. Rogers. Mr. Warrington, what efforts you have made to obtain State or regional subsidies to continue these trains if Federal funding is not forthcoming in 2003?

[The information follows:]

Amtrak has not contacted state or local governments to request funding to continue these long distance services in 2003 because all of Amtrak's long distance trains serve multiple states which view their Amtrak service as part of the interstate transportation system which they believe falls under the responsibility of the federal government.

Use of Capital Funds for Operating Expenses

Mr. Rogers. Mr. Warrington, many states are experiencing record shortfalls this year, yet your business plan assumes a substantial increase in state support for Amtrak (from $5 million in 2002 to $16.8 million in 2003). Is this feasible?

[The information follows:]

Amtrak received $122 million in train operating support from states in FY01. Amtrak anticipates an increase in state operating support over FY01 of $5 million in FY02 and $16.8 million in FY03, increases of approximately 4% and 14%, respectively. Some states under financial stress, such as California, which has added new passenger rail service, plan to increase their operating support for new and existing Amtrak services in FY03. Some states, such as Missouri, may hold or decrease their operating support in FY03. Levels of financial support from states are the result of individual negotiations between Amtrak and each state, and the outcome will depend on the value each state places on passenger rail relative to its competing budgetary demands since there is no federal or dedicated funding source available to States for rail passenger service.

Mr. Rogers. Mr. Warrington, if this does not occur, does Amtrak plan on reducing Corridor trains as well as long distance trains in 2003?

[The information follows:]

If state support were substantially or completely withdrawn from a train, Amtrak would have little choice but to curtail or terminate that service.

Mr. Sabo.

METHOD FOR ALLOCATION OF COSTS TO LONG DISTANCE TRAINS

Mr. SABO. Thank you. Just a couple of questions.

When you allocate the costs of the long distance trains, how are you allocating general overhead for Amtrak? Is that part of that?

Mr. WARRINGTON. Yes. There is a formula for allocating overhead cost to the Northeast Corridor and to—and it varies depending upon what the service is that is being provided. But there is a very clear set of formulas for allocating overheads.

Mr. SABO. If those trains stopped, would the overhead drop correspondingly?

Mr. WARRINGTON. No, that is the difficulty here because they are formula allocated overheads. The chairman asked me before: Why do you run a train like a *Sunset Limited* that loses the money it loses.

And one of the difficulties with eliminating that train or any particular train, if that is something we wanted to do, is that the direct revenues associated with that train would be lost as well. When you eliminate an individual train or one or two or three trains, unless you are able to claw out all of the overhead costs associated with it much of which has to stay in place because it supports the rest of the operations the savings are limited. The difficulty with eliminating a train here or a train there is that you tend to not be able to claw out all of that overhead.

In fact, Amtrak tried to do that in the mid 1990s, you may recall, when it had about a 20 percent reduction in intercity train service in connection with a budget issue then. What we learned then was that it is very difficult to claw out all of that overhead.

The allocation includes all of those costs, some of which is fixed costs and will never get it all out.

Mr. SABO. They do not disappear.

Mr. WARRINGTON. Yes.

Mr. RUTTER. The other thing, Congressman, if I might, it is not just about whether you are going to get rid of a route or a series of routes, it is what are you going to do about the fundamental cost structure of the entire operation.

Taking one line out does not address those underlying issues and I think that is what we were trying to get at in our testimony and on a short-term basis it does not really save you money because you are going to have to pay separation costs to those people anyway.

INTERESTS COSTS AS PART OF THE CAPITAL BUDGET

Mr. SABO. How are capital costs handled? I notice in 1990 there was hardly any interest cost and that is something that has been creeping up. I understand everything is mortgaged, in effect.

The money that came from the tax code changes, my assumption was that money would have gone directly to buying capital equipment.

Mr. WARRINGTON. Mostly in infrastructure. A lot of it was invested in the high speed program in the northeast and in overhauls of equipment all across this country.

You know, we have thousands of pieces of equipment. When I first came to Amtrak, actually, that equipment was on what was called a progressive maintenance cycle where if something broke it was brought in and when you had it in the shop for a couple of days you would try to attack everything around it.

We moved to a much more formal overhaul program on a four-year cycle which was programmed and that is a fairly substantial part of our capital program.

Part of it is about safety and mandatory required work on equipment and some of it is around overhaul of systems, like air conditioning systems and toilet systems and the like. That money was primarily invested in those kinds of projects.

Mr. SABO. Rolling stock.

Mr. WARRINGTON. Mostly rolling stock overhauls, as well as infrastructure.

Mr. SABO. But then have those pieces of equipment been sold and leased back?

Mr. WARRINGTON. In some cases. In some cases, using our equipment we have derived benefits, such as safe harbor and leveraged leasing, which is a common practice in the transit and transportation business. For example, as in the transit business, we are able to sell those tax benefits and secure income from them. We have done some of that.

Mr. MEAD. When Congress passed that law, Mr. Sabo, the one you are referring to, it was about a $2 billion infusion of capital. Congress thought—I think the community generally thought—that was a one-time deal, that was a one-time infusion of $2 billion, that things would get better.

Well, what happened was that $2 billion got consumed pretty fast by investment needs. They ran out of new capital, in effect, and so they had to sell the things they had bought and lease them back. So then they took the proceeds from the sale and they plowed it into other capital in the railroad. But now, all these things, as you point out, have started adding up and you have to start paying it back. And that is why the interest tab is so substantial and why it is spiraling up. That is how we have gone from $1.7 billion in debt to over $4 billion.

Mr. CARMICHAEL. And we found that over $500 million of that TRA money went into operating expenses.

PROCESS FOR ALLOCATIONS INTEREST COSTS

Mr. SABO. How is the cost of that interest allocated?

Mr. WARRINGTON. Going back to Ken's point, most of the TRA money was not devoted to acquiring equipment. Most of it went into assets, hard assets and infrastructure and a substantial piece of it went into the Northeast Corridor high speed and electrification program.

The company has always been short of Capital and so generally has always financed its equipment. For example, the 20 high speed train sets, the Acela train sets, were entirely privately financed, $800 million. Our entire Viewliner fleet, which we use for example between New York and the south and Florida, completely and privately financed. Our acquisitions of Superliner, double-deck cars for

our long distance train network have entirely been over the years privately financed.

That is where much of the interest cost flows from and why it has been escalating. The only tool we have had to acquire equipment has been financing and we have taken capital and primarily invested it in very aged infrastructure.

Mr. SABO. Of your future capital needs, what is the relative ratio between rolling stock versus——

Mr. WARRINGTON. I would say a substantial piece of it is infrastructure, once again, and a piece——

Mr. SABO. Non-rolling stock?

Mr. WARRINGTON. Non-rolling stock. And the equipment piece of it is not about acquisition of equipment, it is about overhauls of equipment.

Mr. CARMICHAEL. Mr. Sabo, what you are hearing is the same problem that we had. We do not know how much is infrastructure investment or cost and we do not know how much is a train operating company cost. So that is why we kept insisting you are going to have to separate this Northeast Corridor out with a separate budget and a separate board, or something like that, so that we know what it needs and wants and has to have. And we cannot evaluate these 18 trains or anything else like that until we know what the train operating company wants. Because, as you hear it, it is all mixed together and, as a result, Congress and our reform council never could separate it and define it.

And so the only thing we could come up with is, for God's sake, when you re-authorize Amtrak, set it up as two separate divisions and make them submit two separate budget requests so we know what that real cost is.

AMTRAK ACCESS COSTS FOR NON-OWNED LINES

Mr. SABO. Let me ask this question. On the rail lines which you do not operate, I assume you are planning on paying the freight lines a certain amount of rent or lease?

Mr. WARRINGTON. Yes, we pay access fees. We are entitled under the law to operate over these lines and we pay for access.

Mr. SABO. There in effect the capital costs are being reflected in your lease payment, which I assume is counted as operating cost.

Mr. WARRINGTON. Well, there is very little capital cost included in those payments. Those lease payments are primarily—or those access fees we pay the freight railroads primarily flow from—and it is a complicated formula which is then negotiated, but it is primarily the incremental costs associated with operating or maintaining our train on their track and the incremental costs associated with handling that train at perhaps higher speeds or higher class of railroad than is necessary for a freight operation.

Mr. SABO. But then in effect, whatever capital costs are associated with that line is reflected in the operating costs for the long distance lines.

Mr. WARRINGTON. Yes.

Mr. SABO. While in the Northeast Corridor it is considered separately.

Mr. WARRINGTON. Yes. On the Northeast Corridor, the flip side is in play, where Amtrak——

Mr. SABO. Some of these numbers are not comparable.

Mr. WARRINGTON. Yes. And on the Northeast Corridor, we as the owner and the base user incur the base costs and the commuters that operate on there which we manage in trust for them, basically, pay the incremental costs, just as we pay the incremental costs on the freight railroads. And this goes back to the original Interstate Commerce Commission Ex Parte 417 cost allocation methodology for owners and then operators over railroads.

ACCESS COST AND INCENTIVE PAYMENTS

Mr. RUTTER. And one of the points, Congressman, is that access cost does not really pay for capital. Right now, Amtrak is paying a little over $100 million in access fees and incentive payments to the freights. That does not even begin to explain or go to the underlying capital costs of keeping up those freight lines, any more than the access fees that commuters pay for the use of the Northeast Corridor go to help offset the underlying costs of providing that Northeast Corridor capital base.

Mr. SABO. I understand, but they are to a certain degree reflected and considered operating in one case and in the case of the Northeast Corridor, not.

Mr. RUTTER. Yes, sir.

Mr. SABO. And when we see the subsidy by train, to a certain degree, we are comparing apples and oranges.

Mr. CARMICHAEL. Under our reform council recommendations, Amtrak does not even own a train station in the system. The cities own the train stations, just like they do airports. Amtrak is constantly having to put money into city stations around the country and they are having to invest money with the freight railroads on certain pieces of track or something else like that.

What we were trying to do in our report is we were trying to put Amtrak on the same level playing field, with an airline (an airline). It does not own the infrastructure, it does not have to maintain the airports. All it has to do is lease planes and pay for ticket agent space or something else like that. Our report puts Amtrak in a very competitive position with the airlines so that when we look at this national operating company, we know exactly what the trains cost, how many people it takes to run it and what it needs, and it can submit a budget every year for the national system and Congress can vote lines up or down, or whatever they want to do.

Mr. SABO. But the airlines pay significantly in fees for the capital of an airport and they have significant property that they own individually for maintenance facilities.

Mr. CARMICHAEL. That is right. And Amtrak can own maintenance facilities. That is fine. But to put it on a competitive level field, it needs to get out of all this infrastructure stuff and it needs to concentrate on its core business of carrying passengers, mail and express. So our report says that and, hopefully, as Congress is creating a new operating company in the next few months and funding it we will get a budget picture every year of what the national train system costs to run and what individual trains cost to run.

The infrastructure issue: all these 11 high speed corridors are developing around the country and the states want to play and the freight people are willing to play. Norfolk Southern, Mr. David

Goode down there has offered if he can get $900 million worth of money, he would double-track his line down through Virginia for high speed intermodal freight trains and passenger trains.

So you have the infrastructure, the real estate thing out there must be a separate business and submit a separate budget.

Mr. ROGERS. How many grade crossings are there in Virginia?

Mr. CARMICHAEL. Probably one for every mile of track. And the cities are beginning to work on this—my little city, for example, traded some grade crossings for the old train station and we rebuilt it.

VIRGINIA TRACK SPEEDS

Mr. ROGERS. Mr. Rutter says that you can only go how fast on that kind of a track?

Mr. CARMICHAEL. Seventy-nine.

Mr. RUTTER. Yes, up to 79 and then between 79 and 110, it depends on the kinds of grade crossing signals.

Mr. ROGERS. Well, let us assume you can go 110 miles an hour. How many people are you going to get on that train and spend—what, ten hours to go what you can fly in an hour, hour and a half?

Mr. CARMICHAEL. The average train trip is not ten hours, it is very much like the commuter trips between cities, particularly between here and the northeast and over in the midwest. This is an unused mode of transportation out there that is primarily carrying freight right now and it has a huge capacity to do better than that.

PER PASSENGER COSTS ON AMTRAK ROUTES

Mr. ROGERS. Now, Mr. Warrington, I am trying to simplify this, correct me if I am wrong. Corridor trains travel typically less than 300 miles, as opposed to long distance trains that travel overnight. Corridor trains have a per passenger operating loss of $9.98 and your long distance trains, the overnight trains, are responsible for by far the largest share of your losses. In 2001, I am told the per passenger loss on those trains, those long distance trains, was $138.71. Is that correct?

Mr. WARRINGTON. Off the top of my head, I do not know, but it sounds right.

Mr. ROGERS. And so if you dropped all of the overnight trains, the long distance trains, you would still be in the red, right?

Mr. WARRINGTON. Well, let me answer it in two ways. First of all, if we eliminated long distance trains, there are clearly short-term costs around devolving that system that are costly around transition and the like. I think it is not the right economic thing to do, clearly, over the short haul.

Now, on the issue of corridor services, the Northeast Corridor and the other corridor trains, a substantial portion of which are state-supported. The corridor is clearly a positive contributor. The state-supported trains are very close to being a positive contributor and, in fact, in the next round of discussions over the next 12 months with those states we will be negotiating upward some of those contributions in order to cover all of the direct costs. As a matter of fact, those contributions have increased, have virtually doubled over the past four or five years.

The other point that I would like to make, Mr. Chairman, around this question of long distance trains, corridor services and the like, is the importance of defining a long-term policy here. As I said, the long distance train network is uneconomic and will always be uneconomic and will require subsidies. The corridor trains we run out there are close to being positive contributors and with more work, focus and some moderately additional speed can be positive contributors. We know the Northeast Corridor is a positive contributor.

I think the real challenge here is to evolve this system. Many say that the system that is out there today is a 1971 designed system and to a certain extent it is. And I think the real issue here is the extent to which we want to define what the ultimate system is over the next 20 years, a federal responsibility I would argue and evolve that system into a system which looks much more like a series of higher speed corridors, with whatever connections we believe are appropriate between those corridors.

I will tell you that in all of the work that we have done what is very clear is that the economics of trips, trip times between two and three hours, are very powerful and if you couple that with frequency and a comfortable trip, you have a winner that can be a positive contributor and that experience has existed all around the world.

If you look at the Northeast Corridor, despite the under investment in the Northeast Corridor, which has been well documented, since the Acela service has been introduced, we at Amtrak are now capturing between New York and Washington 53 percent of the end point market share.

That means that every rail or air trip Washington and New York, not including any of the intermediate points, Amtrak now captures 53 percent of those trips with U.S. Air and Delta splitting the remaining 47 percent.

AIR/RAIL MARKETSHARE SPLITS ON NEC

Mr. ROGERS. And have you analyzed why you are so successful on that route compared to airlines?

Mr. WARRINGTON. It is because downtown to downtown is very attractive and, in the end, it is time. I will tell you all of our research tells us it is a positive experience. Our employees do a terrific job and the design of the service package is very attractive.

And my point, Mr. Chairman, is the bigger set of policy questions here start with what is the national system that we want to see over the next 15 or 20 years? Right now, we happen to be discussing today's system for the next six, 12 and 18 months. There is a real bigger question here, though, which is what do we want that system to evolve to?

AMTRAK'S VISION OF A NATIONAL SYSTEM

Mr. ROGERS. Well, what do you want it to evolve to? What is your solution to solving the Amtrak problem?

Mr. WARRINGTON. The federal government taking responsibility for defining what is in the national interest around the development——

Mr. ROGERS. Mr. Rutter is going to solve that problem.

Mr. WARRINGTON. Defining what is in the national interest. And that is in effect designing the system like in 1955 the interstate highway system was designated and designed.

You know, over the past number of years we have 11 corridors federally designated but no money to go with them. When the interstate highway program was designated in the 1950s, there was money that went with the designation of the interstate highway program.

And my point is that the system needs to be defined as a matter of national transportation policy. It can only be done as a federal responsibility so it links well with both the planning and the policy and the investments that go to adjoining modes and intermodalism needs to be more than a cliche. The system needs to work better together. And there are lots of efficiencies that could be better secured now around the rail system and rail service than could be secured around alternative investments in other modes.

My point is that we need to define what that system is, but not over the next one, two or three years, but over the next 20 or 25 or 30 years and evolve today's system to that kind of a route map across this country, with a very clear set of market expectations.

Mr. ROGERS. What draws the map? Who decides what routes we are going to do?

Mr. WARRINGTON. I think that is something that has to be done, the leadership around it has to be in the federal government, with Congress, with us, and all other interested parties.

How was the interstate highway system designed and developed? It was a product of a political process and I think the same political process and focus needs to be—for the first time in 30 years, really, needs to be applied here. I cannot unilaterally do that and, you know, it would be irresponsible for me and Amtrak living outside the power structure, outside the transportation policy structure in this country, to be making those kinds of judgments about what this nation should have as a competitive intercity rail system. It is an inappropriate role for Amtrak and even though we have carried that burden for 30 years.

Mr. ROGERS. See, I think the routes have already been decided. I mean, you look at your ridership on the various routes that you have, I do not know how many riders there are.

For example, on the Sunset Limited, the one that costs $377 for us to pay to haul one passenger, you are only hauling 5 percent of the end point traffic between those two cities, 95 percent are not using it. They have voted to do something else. They are either flying or they are driving or whatever.

And we can go down the list. You are getting 45 percent of the Chicago-Washington traffic, end point traffic is on Amtrak. That is not too bad. But from Boston to Newport News, only 2 percent of the end point travelers are going Amtrak. And so on.

Are we not seeing here where people prefer to travel by train? Is this not the route map that we should be looking at? You already have trains traveling those routes and people are saying no thanks.

Mr. CARMICHAEL. One of the problems with it, it does not have any frequency. That is one of the difficult things. On Portland to

Seattle to Vancouver, when they increased the frequency, the ridership went up dramatically in those city pairs.

Mr. ROGERS. It is awfully easy to do surveys. I mean, airports do surveys all the time. Towns do surveys all the time. Ridership for making application for a commuter line on air service. Have we done any passenger surveys about where people would like and need to have routes, even if you increase the frequency, perhaps even the time? Have we done any of that?

Mr. WARRINGTON. Yes. We have done extensive economic modeling, as well as research around what the potential is of different services and what is very clear, Mr. Chairman, is that the future has to be around and has to directly relate to the development of higher speed, dedicated corridors connecting critical city pairs in this country. And I think the issue here is the transition issue.

How do you transition from today's system to that kind of a system? Over what period of time? And what are we prepared to pay for as a government to keep today's system in place in order to enable that system to evolve to the right kind of system over time that could be more attractive from a market share point of view?

How do we create more Northeast Corridor scenarios here in other locations around this country?

And I think it is really a transition issue, a transition of today's network into a system that looks and feels much like that, that is then well connected with linked assumptions about what is an appropriate air market and what is an appropriate rail market.

Mr. ROGERS. Maybe we ought to go back and look at Congress' bill on base closings because the biggest problem we all face in all of this is shutting down a line. We all know that, it is unspoken. It is like closing a military base. When you say we do not need this base any more, and we have dozens of those that DOD is trying to shut down now, when we say we need to close a base, all of the local civic efforts erupt and require the congressmen and the senators to oppose it and consequently we do not do that. We have the same problem here when we attempt to shut down a route that is hopelessly unfunded, unsupported. We get opposition from all of those folks that civic pride requires they defend. Have we hit a nail here on the head?

Mr. CARMICHAEL. Yes. In fact, what he just described was the train operating company and what you just described is an oversight small government agency that can do what you are talking about. So the whole argument today seems to keep coming back to creating an operating company and having some sort of oversight that will make them be responsible and produce a national passenger system that connects the right cities.

Mr. ROGERS. But when that small government agency that we fund that you are talking about decides to close down the Florida-L.A. route, they are going to descend upon us just like they do now, will they not?

Mr. CARMICHAEL. No, sir. No, sir. When the operating company decides to close a route, it is the small government agency's job to sit and defend it and approve it.

Mr. ROGERS. Yes, but who pays the salary of the government agency?

Mr. CARMICHAEL. That is a tough situation.

Mr. ROGERS. Hello?

Mr. WARRINGTON. Mr. Chairman, if I might?

You know, I cannot get away from the fact that there is a United States Department of Transportation in this town that is charged with setting national transportation policy. This is a national transportation policy question. In the end, unless there is a set of policy decisions that are linked to where the investment goes in this transportation arena, around highways, aviation, ports and all the other modes to create a separate, new government type agency that is also outside the power structure, the policy structure and the United States Department of Transportation, all we will have done is simply shift the political baggage and the political process from Amtrak to another entity that is outside of the government process.

I think in the end the United States Government and the Department of Transportation is the only entity in this government that can effectively, professionally, directly and meaningfully deal with these difficult policy questions and can be in the power structure around resource allocation in this town.

Mr. CARMICHAEL. I do not disagree with him. Just put it in DOT, the small government agency, but it cannot be under the FRA. As the FRA administrator, I realized when I was on the board of Amtrak that I was in conflict of interest. I am a safety officer for the government, I should not be on the Amtrak board, looking back on that. First, I pushed real hard that the FRA take the responsibility for this oversight, but then I realized the FRA is a safety agency and there is a conflict. This oversight committee needs to be in an advocate position and it needs to be in an independent oversight position.

So you can put it in the Surface Transportation Board or something, you can put it in DOT, I do not disagree with him. I wish DOT was more of a policy developer, but it is very hard for the government to get into picking winners and they do not like to do that, so policy out of DOT is going to be hard to get.

SERVICE PAYMENTS

Mr. RUTTER. But it is not just picking winners, it is paying for it. We could ratchet down to just a few routes around the country and we are still facing how to pay for those types of services and that is the thing that is the frustrating part, but it is also the thing that keeps us from coming up with this is how we want to get to where we want to go.

Mr. Rogers. Mr. Warrington, since 1999, Congress has fully funded your capital grant request each and every year, yet you repeatedly state that ''Amtrak is coping with inadequate levels of capital investments''. If you needed more money for capital, why didn't you ask for it?

[The information follows:]

It is important to remember that in 1997 Amtrak was authorized to receive $2.2 billion from the Taxpayer relief Act and, as a consequence, the Appropriations Committees rescinded $199 million in general capital funds appropriated for Amtrak for FY1998 sending a clear signal that the Congress was not prepared to fund Amtrak at its authorized amount. For FY1999 Amtrak asked Congress to restore the $199 million in capital funding as well as for an additional $521 million, which was a total of $820 million -- $238 million less than the authorized amount. At the time, Amtrak believed that it had a stronger interest in seeking a consensus with the Administration on Amtrak appropriations than seeking the full $1.058 billion as authorized. For FY2000, Amtrak requested $571 million in an effort to demonstrate Amtrak's commitment to reducing its dependence on federal support and, for fiscal year's 2001 and 2002, Amtrak did request the fully authorized amount. You may recall that the Administration requested $989 million in their budget, of which $521 million was to be funded with discretionary funds and the remaining $468 million through RABA funds. In the end Congress chose to only fund the $521 million.

Mr. Rogers. Mr. Warrington, beginning in 1999, Congress permitted Amtrak to use some of its capital dollars for operating expenses, such as for maintenance of way and equipment. For the first two years, Amtrak used more than 50 percent of the capital grant for these operating activities. Weren't you the one short changing your capital investments?

[The information follows:]

When the Administration approached Amtrak with the proposal to provide only capital funding, Amtrak clearly indicated that operating support would continue to be needed and that Amtrak would need to apply the FTA capital definition for maintenance of way and maintenance of equipment for the proposed funding approach to work. The FY1999 Business Plan clearly laid out the operating needs of the company over the next four years, which was consistent with the needs expressed for operating support in the prior plan. The amounts used to support operating expenses in those two years were the amounts indicated in the Business Plan. In addition, in testimony, both oral and written, and in response to congressional questions, Amtrak always clearly indicated that it would need a stable, substantial source of capital in order to continue future operations.

Mr. Rogers. Mr. Warrington, permitting capital grants to be used for operating expenses was intended to occur only until Amtrak achieved operational self-sufficiency in December 2002. We now know that this will not occur. Should Congress continue to permit you to use your capital funds for traditional operating activities (maintenance of way and equipment, and progressive overhauls)?

[The information follows:]

Amtrak has made the effort to achieve operational self-sufficiency under the guidelines set by the Amtrak Reform and Accountability Act without it's full authorization. Though Congress in 1997 authorized $5.1 billion in capital for Amtrak, it has only appropriated approximately half that amount. Without the sufficient capital funding, Amtrak has been forced to defer capital investment that has driven up its operating costs. Preventing Amtrak from using future capital funding for progressive overhauls, maintenance of way and equipment will further erode Amtrak's investment in its operations thereby undermining the quality of service it can provide to its customers through reliability, on-time performance and equipment quality. Further, Amtrak's current definition of capital funding is consistent with that of the Transit Agencies, which include progressive overhauls as capital expenditures.

Mr. Rogers. Mr. Warrington, if we deny this flexibility, does this have any impact on your grant request for fiscal year 2003?

[The information follows:]

The Grant Request identifies the specific breakdown of $1.2 billion. $200 million is required to cover the net loss of long distance trains, $160 million is for excess RRTA and $840 million is for capital. As has been true since FY 1995, progressive overhauls would continue to be funded with capital dollars. A prior Senate hearing reaffirmed that progressive overhauls were not considered to be an expense that would be included in a test of Amtrak's operating self-sufficiency.

Revenues to Fund Amtrak's Capital Requirements

Mr. Rogers. Mr. Warrington, Amtrak always states that it is "under subsidized" compared to other modes of transportation, however, these other modes as self-taxing. If Congress were to provide you with a dedicated tax-based source of revenue, like highways and aviation, would you be willing to include this in your ticket prices—as is the case in those other modes?

[The information follows:]

We would certainly be open to discussing user fee scenarios as long as policy makers understand that while other modes have multiple users and contributors, Amtrak is essentially an industry of one. So while we are open to considering any and all proposals to generate more reliable funding sources, Amtrak strongly feels it is a significant component of the US transportation system– and as such deserves the same consideration for our capital needs as the other modes.

Mr. Rogers. Mr. Warrington, what level of tax would you need to charge your riders to cover your annual costs assuming continuation of the current system?

[The information follows:]

Using the ridership and passenger revenues of FY 2001, the results can be represented as a dollar tax or as a percentage tax. Given the number of passenger trips of 23.5 million, the "dollar tax" would be approximately $15 per passenger based on an operating need of $360 million or $51 per passenger based on a total need of $1.2 billion. These tax amounts would be in addition to Amtrak's average ticket price of $51. Stated as a percentage, the "tax" would be either 30% to cover operating needs or 100% to cover total support needs. It would likely be higher since the price increase would shed some ridership and state supported services would be put at risk since states set most ticket prices.

USER FEES FOR RAIL TRAVEL

Mr. ROGERS. But there are a lot of models out there. When you get in your car to travel across the interstate system, you are paying huge gasoline taxes, which goes to build and maintain that highway. When you fly on an airplane, you are paying a pretty good sized aviation tax, in part to help pay the costs of airports and now security and so on. The users are paying the fee, it is a user fee. Should there not be a user fee for riding on a railroad?

Mr. RUTTER. That is maybe a big part of the ultimate solution, both in terms of——

Mr. ROGERS. What do you charge——

Mr. RUTTER. Whether you do it by taxes or whether you do it by fares, but that is not going to get you all the way there.

Mr. ROGERS. I understand that. But you owe us a report.

Mr. RUTTER. Yes, I do.

Mr. ROGERS. And it just so happens that the same Subcommittee that is funding Amtrak funds your agency. As luck would have it. And they are both due about the same time.

Mr. RUTTER. Yes, sir.

Mr. ROGERS. So we expect DOT to have a plan before us before we mark up this appropriations bill.

Mr. RUTTER. I can do the math.

Mr. ROGERS. Pardon me?

Mr. RUTTER. I can do the math. I know what you are talking about.

Mr. ROGERS. You are getting close. We want a plan. We want the administration's plan. We have to have the experts through the DOT, the nation's transportation policy maker, to make policy. That is what they are paid for. We are paid to appropriate and oversee. You are paid to propose plans on national transportation policy. We are waiting with the money, we want your plan.

Mr. RUTTER. Yes, sir.

Mr. ROGERS. Anybody have anything else?

Marty, do you want to——

Mr. SABO. No.

QUESTIONS FOR THE RECORD FROM CHAIRMAN ROGERS TO FEDERAL RAILROAD ADMINISTRATION

TICKET TAX

Mr. Rogers. Mr. Rutter, would you favor a ticket tax on Amtrak passengers, like the aviation ticket tax, that then could be used as a sustainable source of funding for this system?

[The information follows:]

This is one of many options that are under consideration within the Administration; however, to date no decision has been made whether to support such a tax. Sustainable funding for intercity passenger rail will need to come from multiple sources: Federal, state, and private, including contributions from intercity rail passengers.

Mr. Rogers. Currently, Amtrak and all the Freight Railroads pay 4.3 cents per gallon in gasoline tax, which equates to about $175 million per year. Mr. Warrington and Mr. Rutter, I would like you both to answer the following question: Would you support using this revenue for capital improvements off of the Northeast Corridor, on tracks that Amtrak shares with the freights, and what would this level of funding permit?

[The information follows:]

Amtrak generally agrees with the freight railroads' position that this tax is unfair given the fact the proceeds go to the highway trust fund rather than rail development. Obviously using this funding for rail infrastructure would provide some investment benefits for freight and passenger rail service, particularly on jointly used lines, by increasing capacity and improving and/or eliminating grade crossings. Nonetheless, $175 million, which is the approximate industry-wide level of contribution the 4.3 cent tax generates, represents only a fraction of the capital needs of the railroad industry and could not address the significant capital challenges faced by the industry. As a point of information, Amtrak also pays the 4.3 cent fuel tax, providing a user fee to the trust fund, from which Amtrak derives no benefit.

USE OF GASOLINE TAX

Mr. Rogers. Currently, Amtrak and all the freight railroads pay 4.3 cents per gallon in gasoline tax, which equates to about $175 million per year. Mr. Warrington and Mr. Rutter, I would like you both to answer the following question: Would you support using this revenue for capital improvements off the Northeast Corridor, on tracks that Amtrak shares with the freights, and what would this level of funding permit?

[The information follows:]

Mr. Rutter. All railroads currently pay a 4.3 cents per gallon fuel tax for deficit reduction into the general fund of the Treasury. Major freight railroads paid an estimated $160 million in fuel taxes in 2000, the most recent year for which figures are available. Smaller freight railroads are estimated to have paid an additional $9 million. The tax will expire on September 30, 2005, unless reauthorized.

Historically, the Administration has not supported using the gas tax for Amtrak capital expenditures. However, the entire national rail passenger program is currently being reviewed, and all options are being considered.

REVENUES TO FUND AMTRAK'S CAPITAL REQUIREMENTS

Mr. Rogers. Mr. Carmichael, your proposal for restructuring intercity passenger rail requires establishing a trust fund to provide for rail infrastructure projects. Your proposal does not identify the source of these funds, or how the fund will be replenished. Are you proposing a new tax or some other mechanism for ensuring that the trust fund balance is adequate?

[The information follows:]

The Council's position on funding – in which it called for stable and adequate sources of funding to support a restructured national rail passenger program – was consistent with the establishment of a trust fund, but the Council did not specifically recommend a trust fund for infrastructure. The Council recognizes the limitation of the appropriations process to fully fund all of the needs that Amtrak is currently responsible for due to the existence of guaranteed spending programs in transportation. The Council has examined closely the various legislative initiatives that have been put forward to fund rail infrastructure. These proposals encompass appropriated funds, tax-exempt and tax credit bonds, as well as loans and loan guarantees. The Council believes that these proposals contain the ingredients for a workable program for funding the rail infrastructure improvements needed to support improved rail passenger service. AASHTO's proposal, announced on May 9, 2002, to establish a new Transportation Finance Corporation that would issue tax-credit bonds for transportation infrastructure financing, is also consistent with the Council's concept for rail passenger capital financing.

On the specific issue of the massive capital needs of the Northeast Corridor rail infrastructure, the Council laid out in its February 2002 Action Plan a quite detailed list of funding options. These options were from a preliminary report on NEC funding options that BGL Rail Associates provided to the Council under contract. The final BGL recommendations, received by the Council in April 2002, identified three major advantages in securing capital funding that would accrue to the NEC infrastructure if it is separated from Amtrak's train operations as the Council proposes. First, it could apply to the maintenance and improvement of the NEC infrastructure more than $480 million in annual captive funding that the NEC generates. This amount comprises about $200 million in annual non-train-operating income, about $90 million in track use fees from commuter and freight railroads, an estimated $160 million in track use fees that Amtrak's trains would have to pay, and capital contributions from commuter railroads of about $30 million. Second, it would, through the states on its board, have some access to the transportation trust funds, which control 75 percent of all transportation funds. Third, it could access other sources of funding for infrastructure that Amtrak cannot access. I have attached a copy of the BGL Final report to this testimony.

Amtrak Reform Council Report

Mr. Rogers. Mr. Warrington, the Amtrak Reform Council's report recommends the dissolution of Amtrak as we currently know it over a two to five year period. Do you support the proposals contained in this report? Are they feasible?

[The information follows:]

As with all the other previous commissions, councils, and panels studying Amtrak, the Amtrak Reform Council Report sidesteps the underlying policy and funding issues that must be determined. First, a federal commitment to define, develop and invest in the passenger rail system must be made. Fundamentally, only then can the nation determine the system's scope and nature, level of necessary funding, and source of funding. No council or commission can make these decisions - the ARC hasn't - and until these issues are resolved, the nation's passenger rail system will continue to be torn by conflicting policy mandates and inadequate capital, whether operated by Amtrak or anyone else.

AMTRAK REFORM COUNCIL REPORT

Mr. Rogers. Mr. Carmichael, you propose creating a *small* federal agency to administer federal funds for intercity passenger service, administer the development of high-speed rail corridors, oversee the business plans of the train operating and infrastructure companies, and design and administer the competitive bidding process. Many *large* federal agencies can hardly accomplish this number of tasks, yet you suggest that this new agency be populated with a workforce of only 50. Is this really feasible?

[The information follows:]

The small federal agency will indeed administer federal funds for intercity passenger service, administer the development of high-speed rail corridors, oversee the business plans of the train operating and infrastructure companies, and design and administer the competitive bidding process. Its recommended size is small on purpose because it is not intended to do the corridor planning and development work itself. The small federal agency will administer funds and approve and monitor the planning and development work done by state agencies and other entities applying for federal financial support. Keeping the organization small will help it to focus on its key objectives of rail passenger funding and development. The rail division of the State of California's Department of Transportation has a staff of approximately 53 that plans future rail corridors, that monitors and funds Amtrak corridor services subsidized by the State of California, and oversees the maintenance and overhaul of equipment funded and generally owned by the State of California. In fact, approximately half of the 53 California rail positions are directly involved with on-site monitoring and inspection of equipment maintenance and overhaul. These are functions that states or interstate compacts would do for intercity rail passenger service, rather than the proposed small federal agency. Though the agency might fund such maintenance and overhaul work, it would not send its employees to monitor shops or track work on a regular basis.

Just as California today runs its extensive program with an office staff of 53, other corridors, as they develop, will also staff up to provide the same kind of state or regional oversight for the Northeast Corridor, the Pacific Northwest, the Midwest, and so on. The agency the Council proposes is small so that it will be efficient, will not be encumbered by layers of unnecessary management, and will structure a program that will fairly allocate the workload for program administration and reporting between itself and the states, regions, and other entities with which it deals. Its arms length dealings with the train operating company that succeeds today's Amtrak, and with the Northeast Corridor infrastructure company, would ensure that complete, correct, and timely information would be provided as part of the planning process essential to approval of funding requests. This information would form the basis for the budget requests that the agency would take to the Congress for annual appropriations.

AMTRAK REFORM COUNCIL REPORT

Mr. Rogers. The ARC proposes creating a small Federal agency to administer federal funds for intercity passenger service, administer the development of high-speed rail corridors, oversee the business plans of the train operating and infrastructure companies, and design and administer the competitive bidding process. Mr. Rutter, while the ARC believes Amtrak should do this, FRA could easily handle these activities. Should this be FRA's responsibility?

[The information follows:]

The Administration has not yet taken a position on the future model for providing intercity passenger rail service or the role of the Federal Government in support of that service. As a consequence, I am not prepared to comment on the relative merits of the ARC's proposal. I would note however, that FRA either currently performs or has previously performed many of the functions outlined in your question.

Mr. Rogers. Mr. Carmichael, Amtrak and the Inspector General have stated that your report "rearranges the boxes by sidestepping the issues that should be dealt with first—namely the size and nature of the system, and the level of funding necessary to support it". Tell me, what level of funding do you believe would be required to support your proposal for the first two to five years until franchising begins?

[The information follows:]

We start from the premise that maintaining the status quo at Amtrak is unworkable for a number of reasons, not the least of which is that it will require over $1 billion per year in federal subsidies, the bulk of which is for infrastructure in the NEC. The plain fact is that this committee will be very hard pressed to provide that kind of funding. Separating the infrastructure from Amtrak is a critical first step so that Amtrak will not have the burden of providing all of the infrastructure needs, with their very high costs, when it is and will always be a minority user of the NEC.

This is just one of the reasons that the Council believes that the current rail passenger program and the system of national services are unworkable. All the reasons stem from the flawed institutional design of the single box into which this country tossed the dregs of the private rail passenger system some 31 years ago. Most recently, that single opaque "box" has brought us five years of failure since the enactment of the Amtrak Reform and Accountability Act of 1997. Since 1997, Amtrak has more than tripled its corporate debt. It has announced three strategies to achieve "operational self-sufficiency" that have all failed to achieve their financial performance goals (one, the Market Based Network Analysis, failed completely, and the other two, Mail & Express and Acela Express, have failed by significant margins). And Amtrak has made continuing claims that the company was "on the glide-path to self-sufficiency." All the while, Amtrak was deferring vital maintenance on its equipment and the Northeast Corridor infrastructure, and engaging in long-term borrowing to keep from running out of cash. At the same time, Amtrak was leaving on the table a total of more than $2 billion in funding authorized under the Reform Act by not even asking for it. Against this backdrop, for critics to characterize the Council's proposal as "rearranging the boxes" is akin to describing proposals for a flat tax as recommending "a minor change in the Internal Revenue Code." As one informed commentator said, "It is clear that the Council's report has more critics than it has readers."

In relation to funding needs, the Council's proposals would provide for the first time an institutional structure that would tell the Congress and the American taxpayer what it actually costs to operate Amtrak's national system of intercity rail passenger services and the Northeast Corridor rail infrastructure. Under current practice, these numbers are simply not made clear by Amtrak's strategic plans or financial reports. The Amtrak Reform Council has requested these numbers on numerous occasions, and Amtrak has yet to provide them in any complete and coherent fashion. It is important to note that the new program structure the Council recommends would be less difficult to finance as well.

How can the Congress provide "stable and adequate funding" if there is no way to verify what amount is actually required? Verification is required precisely because Amtrak has provided different numbers for every occasion. Until its FY 2002 request (when Amtrak asked for the full authorization but settled for $521 million scored at 100 percent), Amtrak had been asking for between $500 and $600 million per year. Most recently, Amtrak indicated that it needs $1.2 billion for FY 2003, but informed sources have disclosed that the real requirement is for $1.5 billion, which Amtrak thought was "politically" too much to request. If the "real" number is $1.5 billion, then why does the National Defense and Interstate Rail Act (S. 1991) call for $2.6 billion per year, split evenly between Amtrak's train operations and the Northeast Corridor infrastructure? It is doubtful that these numbers were developed without Amtrak's complete cooperation.

In contrast, despite a statutory requirement for Amtrak to provide information requested by the Council, and, despite repeated requests, Amtrak persisted in its historical practice of not providing capital and operating fund requirements to governmental entities with Amtrak oversight responsibilities, of which the Council was but one. In this environment, it is not surprising that the Council did not (and could not) address specific Amtrak funding recommendations, including annual dollar amounts, in its restructuring plan.

Personally, on the basis of the estimates we have seen, I would estimate that, under the Council's proposals, an annual funding level of $1.2 billion would be adequate to reorganize and stabilize Amtrak for the first year or two. This amount does not include any monies provided to implement transportation security measures. Under the Council's proposals, this period would see the introduction of accountability through effective program administration and oversight, the restructuring of Amtrak's operations into a train operating company and the NEC infrastructure company, and the implementation of new accounting, management information, and planning systems. The new structure would realize significant economies from the elimination of grossly overstaffed non-agreement employee ranks, and from the improved management of Amtrak's capital assets and its agreement labor force. Economies would also come from the sale of infrastructure outside the Northeast, and some infrastructure such as stations in the Northeast, to states, transportation authorities, and cities. These measures would lessen the requirements for appropriated funds. Assuming enactment and implementation of an effective program for financing infrastructure, such as that proposed in Chairman Don Young's bill (H.R. 2950), demands on appropriated funds could be further reduced. The introduction of the franchising of train operations downstream would provide additional economies. Any funds freed up in the short term because of the implementation of efficiencies should be applied to high-priority capital investments for operational reliability and for the fire and life safety needs of the Penn Station complex in New York City.

The NRPC would administer the restructuring program and oversee implementation of these measures.

Mr. Rogers. Mr. Carmichael, Amtrak's labor costs account for over 50 percent of its total costs. Yet the Council recommends that new train operators must honor Amtrak's existing labor contracts. How will new train operators achieve increased efficiencies if the Council saddles them with Amtrak's largest expense?

[The information follows:]

As the DOT IG has testified before this committee, the "largest expense" Amtrak must deal with is the cost of meeting the capital infrastructure needs of the NEC. Organizing the NEC infrastructure into a government corporation with the majority of directors representing the NEC states, and completely separate from Amtrak's train operations, would help to shift the burden of funding the NEC infrastructure to funding sources that are not dependent on the appropriations process. These sources are much more accessible to the states than to Amtrak. These sources include tax exempt bonds, public/private partnerships, guaranteed loans, and the flexible provisions of guaranteed spending programs. This restructuring would be a more effective way to attack Amtrak's "total costs" than focusing on labor issues per se.

With respect to Amtrak's agreement employees, the Amtrak Reform Council believes that Amtrak's workers and their labor contracts are not the root of the problems with Amtrak labor costs. The high labor costs of Amtrak relative to Amtrak's revenues are the result of a management problem and an institutional structure that fosters political pressures on management that discourage innovation and more efficient operating and maintenance practices within currently existing labor contracts. One of the most efficient transportation companies in the United States today is United Parcel Service, a company that is highly unionized, and pays its workers higher wages than most other transportation companies. UPS's management knows what it wants and works with its unions and workers to generate customer revenues as efficiently as possible, understanding that wages can be higher when revenues increase. As long as Amtrak's management believes that its best source of additional cash is the Congress rather than the riding public, Amtrak is likely to continue operating in a very inefficient manner, regardless of its labor contracts. Despite provisions in the Amtrak Reform and Accountability Act of 1997 that provided the opportunity for labor productivity improvements and related reforms, there have been no significant changes in Amtrak's labor contracts since enactment of the Act. This lack of progress makes it more difficult for Amtrak to improve its financial and operating performance, which would be good for both rail labor and the taxpayer.

The structural changes that the Council proposes will not only help with NEC financing, they will also introduce badly needed accountability and commercial urgency into our passenger rail program.

Mr. Rogers. How will requiring potential train operators to honor Amtrak's existing labor contracts impact their decision to compete for operations, Mr. Carmichael?

[The information follows:]

A number of potential train operators informally have indicated to the Council's staff members that they see no way that they could take over operation of Amtrak trains without hiring most current Amtrak operating personnel. They envision negotiating changes in the labor contracts over time as they determine changes that would be beneficial to their operations and profitability, but they do not anticipate any problems from giving existing workers a hiring preference. Any added costs of initially operating under current Amtrak labor contracts would clearly be reflected in the bids for service.

Mr. Rogers. Mr. Carmichael, if intercity passenger rail were to be restructured into separate operating and infrastructure companies as proposed by your report, who should be responsible for assuming (or paying) the over $3 billion in debt Amtrak has accumulated for equipment and facilities?

[The information follows:]

Most of the existing Amtrak debt is associated with the equipment and would most logically be transferred to the companies owning or leasing and operating the equipment. The debt associated with fixed assets such as 30th Station in Philadelphia and the Richmond Converter would remain obligations of the infrastructure company or local transportation agencies taking over responsibility for the facilities.

Mr. Rogers. How would assuming this debt affect the financial viability of the operating and infrastructure companies, Mr. Carmichael?

[The information follows:]

The assumption of this debt, largely by the train operating companies, would make it more expensive to support the financial viability of the operating companies and, to a lesser extent, the infrastructure company.

This fact, in the light of Amtrak's accumulation of so much secured indebtedness over the past five years, raises issue of sound financial management, particularly when the approximately $2 billion of authorized funding that Amtrak did not request is considered. Because so much of the indebtedness revolved around sale-leaseback of Amtrak's own assets, many of which were purchased and overhauled, and rebuilt with federal capital, policies should be in place to ensure that the taxpayer does not end up paying twice or more for the same assets.

ASSUMPTION OF DEBT

Mr. Rogers. Mr. Rutter, how would assuming this debt affect the financial viability of the operating and infrastructure companies?

[The information follows:]

Amtrak's debt service is approximately $250 million of combined interest and principal, an amount roughly equal to half of this year's appropriation. Relieving any entity, be it operating, infrastructure, or combined, of this level of mandatory annual financial obligations would have a significant positive impact on that entity's financial viability.

Mr. Rogers. Mr. Warrington, given Amtrak's current fleet profile, how much additional debt is required to allow Amtrak, or another operator, to obtain the equipment needed to provide ''world class'' service?

[The information follows:]

There is no doubt that Amtrak's fleet is stretched with many pieces of equipment in significant need of overhaul. We estimate that we have $900 million of backlog needs for our fleet. If we could invest that funding and keep our fleet in regular cycles of maintenance, we would be able to operate a higher level of service. If we could procure more equipment, we could replace singular level diners and add new singular level sleepers. We would also look at opportunities to advance a new design on existing superliner equipment to begin phasing out the older bi-level cars in our fleet. Given Amtrak's size and scale of its operation, it is unlikely that any single entity could replicate Amtrak's current system without sizable federal support.

Mr. Rogers. Mr. Carmichael, the ARC business model focuses on profitability. Routes that are not profitable will basically be eliminated unless congress specifically subsidizes that route. If a route needs to run several round trips per day to be profitable, will the route be shut down if the freight railroads that own the right-of-way do not allow passenger train services to run the profitable number or daily trips because passenger trains interfere with the freight business?

[The information follows:]

Mr. Chairman, I disagree with your assessment. The ARC business model focuses on efficiency, economy, equity, and accountability; it does not focus on profitability, per se. (Nor does it carry forward from the Reform Act the concept of "operational self-sufficiency.") As to the specific example that you raise, the Council has noted that the role of the freight rail industry in this nation is vital. It carries 40 percent of the intercity ton-miles at a very low overall cost. It is carrying more and more containerized intermodal traffic into the major metropolitan areas where improved rail passenger service is needed most. To diminish the operational and financial capability of the freight railroads to carry out their vital freight business by adding more passenger trains to a track system that is at capacity would be wrong.

That is why an effective rail infrastructure program is essential to the expansion of rail passenger services. It is also why the Council believes that planning for the improvement of the regional high-speed rail passenger corridors needs to be done at the state or regional level. The states know where they want to upgrade rail passenger service. They have proven that they can work effectively with the freight railroads. And their service planning must encompass the infrastructure improvements needed to ensure that adequate capacity is available to support the framework of the planned service improvements. This is essential so that it will be feasible for the state or regional compact – not the federal government – to fund any subsidies for operations, should subsidies be necessary.

Mr. Rogers. Mr. Carmichael, will the freight railroads be compensated for the use of the track? If so, how would the compensation be paid and by whom? Federal, state, or local governments, or the train operator franchisee?

[The information follows:]

The Council does not propose any change in the basic structure of the compensation paid by intercity passenger carriers for the use of the tracks of freight railroads. The track use payment could be made by the train operating company (which would operate under contract to the NRPC or to a state or compact of states), whether that operator was the national passenger carrier or a franchised operator. A less desirable alternative would be to have the franchising agency make the track use payment directly to the freight carrier or to the Northeast Corridor Infrastructure Company.

Mr. Rogers. Mr. Carmichael, if the track used by the franchisee needs to be upgraded to accommodate the increased number of trips, would that amount be funded by the new infrastructure company?

[The information follows:]

Under the structure that the Council has proposed for the Northeast Corridor Infrastructure Company (NECIC), the answer is no. Funding for infrastructure would be administered by the NRPC, working with the NECIC for NEC facilities, and with the states or compacts of states for the emerging corridors. In this respect, the NECIC would be the prototype for a new type of interstate compact, which would take the form of a federal corporation with each of the NEC states represented on its board.

Reauthorization

Mr. Rogers. Mr. Warrington, you must have thought long and hard about the future of intercity passenger rail. If Congress chooses to restructure Amtrak, how should it be done?

[The information follows:]

As I said in my testimony, I think that the future of intercity passenger rail should be defined as a matter of national transportation policy and designed in a similar manner to the interstate highway system and it must be defined to fit our nation's needs, not over the next two to three years, but over the next twenty to thirty years. Further, intercity passenger rail can only succeed if it is a federal responsibility that links well with the planning, policy and investments of the adjoining modes and is focused around the development of higher speed, dedicated corridors connecting critical city pairs in this country.

Mr. Rogers. Mr. Warrington, is intercity passenger rail necessary? If so, who do you believe should be responsible for deciding what routes to operate and who pays for them?

[The information follows:]

To transition to a fully modernized national system of high speed corridors, the federal government will need to take a leadership role because it can develop interstate passenger rail corridors in the manner it developed the national highway system.

REAUTHORIZATION

Mr. Rogers. Mr. Rutter, in 1997, Congress enacted a 5-year plan for Amtrak with the end result being operational self-sufficiency. Amtrak and the Administration agreed to meet this goal, and beginning in 1999, tied their grant requests to the "glide path" called for in the legislation. Each year, Amtrak told us that they would meet this goal, even though the Inspector General and GAO were pessimistic. We now know that they have failed. Mr. Rutter, in your opinion, what Federal Initiatives should be adopted to solve Amtrak's problems?

[The information follows:]

The Department is working with our colleagues within the Administration to explore options to address Amtrak's problems. In the near future, we will provide you with the Administration's views on initiatives to address Amtrak's problems and the future of intercity passenger rail service.

FRA TASKFORCE

Mr. Rogers. Mr. Rutter, it is my understanding that FRA has a taskforce working on Amtrak reauthorization issues. What are your key findings and when can we expect to see them?

[The information follows:]

The key findings of FRA's internal working group on Amtrak were summarized in my written statement to this Subcommittee on February 27. In brief, FRA has concluded that the current model for providing intercity passenger rail service in the U.S. is not working and cannot survive over the long-term in its present configuration with the level of financial resources likely to be available for passenger rail service. Amtrak is challenged by a comparatively high cost structure that limits its ability to compete on price; a rail infrastructure that limits its ability to compete on trip times; and a large capital backlog for both equipment and infrastructure that limits its ability to compete in the area of service quality. FRA's review, as well as those of the Department's Inspector General, the General Accounting Office, the Amtrak Reform Council and even Amtrak's own internal studies, point to the need for a fundamental restructuring of this form of transportation.

NEED FOR INTERCITY PASSENGER RAIL SYSTEM

Mr. Rogers. Mr. Rutter, in your opinion, does America need an intercity passenger rail system? If so, how much capital and operating support would this type of system require?

[The information follows:]

Intercity passenger rail service can be an important part of the Nation's transportation system, particularly in some corridors. However, questions as to the coverage and characteristics of that service, who operates it, and how it is funded must be based upon a new vision of how to provide this service differently than what exists today. There are different visions that have been proposed by Congress and others. For our part, the Department and our colleagues within the Bush Administration have been grappling with these issues and will present to the Congress the principles that the Administration believes should serve as the foundation for discussions on a future national policy for intercity rail passenger service.

Mr. Rogers. Mr. Mead, your report on Amtrak's 2001 Financial Status states that it is questionable whether a linked national network of passenger rail in the United States could ever break even financially. How is it that a national rail network is not feasible in the United States but has proven to be very successful in Europe and Japan?

[The Information Follows:]

National rail networks have been "successful" in other countries in terms of attracting passengers but that does not mean that they are financially self-sufficient. All of them require either capital or operating subsidies, or both, from their respective governments. Some individual railways have achieved operating self-sufficiency, but only after a long-term, massive infusion of capital funding from their governments. For example, three of Japan's six private railways do not require operating subsidies, but these railways also benefit from 1,200 route-miles of high-speed rail in a country that is much smaller than the U.S. The Japanese government constructed these high-speed rail lines with substantial government funds over a period of more than 30 years.

Another issue is that national rail networks in Europe and Japan cover areas of denser settlement, with a considerably greater propensity for patronage on public transportation than we have in the U.S. They also tend to cover smaller geographic areas with linear population settlements, which are more conducive to rail travel. Moreover, these countries have greater costs associated with private vehicle ownership and operation, such as taxes, tolls, and higher fuel prices. Even so, their governments must continue to supply capital funds for rail.

Mr. Rogers. Mr. Mead, what would it take for National Intercity Passenger Rail in the United States to be successful as it has in those countries?

[The Information Follows:]

In order to make national intercity passenger rail successful in the U.S., we will have to invest substantial capital funds in our railway infrastructure. High-speed passenger corridors could attract rail passengers away from airplanes and cars in markets up to 300 miles with time and price competitive service, but the capital costs of doing so are in the tens of billions of dollars. With substantial investment over a long period of time

and improvements in mass transit and intermodal connections, several high-speed rail corridors in the U.S. could potentially become operationally self-sufficient. Successful high-speed corridors like the Northeast Corridor have the potential to generate sufficient operating profits to cross-subsidize the losses from a modest network of longer distance trains that link the corridors.

Mr. Rogers. Mr. Mead, in your opinion, does America need an intercity passenger rail system? If so, how much capital and operating support would this type of system require?

[The Information Follows:]

In certain parts of the country, intercity passenger service forms and important part of the Nation's transportation system. For example, the Northeast Corridor has experienced significant growth over the past few years. Most recently, from 2000 to 2001, passenger revenues grew a strong 13.5 percent and ridership increased 4.6 percent to about 13.5 million passengers. Amtrak West's ridership grew 13.4 percent over the same time period. If intercity rail services ended in these areas, highways and airports would suffer additional congestion at a time when travelers already experience frustration and delays and regional economies may be affected.

Any operator of a national system will require substantial operating and capital dollars for the near and intermediate term. For the current system, annual capital investment of between $900 million and $1.0 billion would be required to maintain and improve the rail infrastructure, modernize the fleet, and eliminate the backlog of capital needs in the Northeast Corridor, recently estimated at about $5 billion. Regarding operating subsidies, in the near term the amount needed to support the existing national system is about $400 million including excess railroad retirement (RRTA) payments.

REAUTHORIZATION

Mr. Rogers. Mr. Carmichael, your report states "there should be a bright fu
r passenger rail service in America". Where do you see passenger rail working b
e United States?

he information follows:]

es, Mr. Chairman, the Council's Action Plan does say that. But it also says that
Amtrak, as it is structured, managed, and operated under existing law, cannot achi
at promise." That's why the Congress needs to give serious consideration to the
ouncil's recommendations if passenger rail is to have that bright future.

s for where, modern rail passenger service can work best in the United States in h
nsity rail corridors of up to 300 miles. It is in these markets where Amtrak's traffi
own over the past few years. In contrast, ridership has been declining on Amtrak
ng-distance, overnight train services, which carry on average only about 11,500 c
mtrak's 64,000 total daily passengers. Thus, the short- to medium-haul intercity
rridors with high levels of daily passenger travel are most likely to see the bulk o
w, faster, high-frequency rail passenger service that is needed to improve our nat
nsportation system.

ttachment: BGL Rail Associates, *A Recommended Approach to Funding the Estimated Capital Investment Needs of the Northeast Corridor Rail Infrastructure*, Report (Chevy Chase, MD; April 2002).

BGL Rail Associates

A Recommended Approach to Funding the Estimated Capital Investment Needs of the Northeast Corridor Rail Infrastructure

Prepared For The Amtrak Reform Council

By BGL Rail Associates
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April 2002

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PART I

ALTERNATIVE FUNDING SOURCES FOR ESSENTIAL INFRASTRUCTURE IMPROVEMENTS TO THE NORTHEAST INTERCITY RAIL CORRIDOR

BACKGROUND

The Northeast Corridor (NEC or Corridor) passenger railroad system is the most heavily traveled segment of the nation's intercity rail passenger system. In addition to Amtrak's high speed premium trains (Acela Express), Metroliners and lower cost Acela regional and Northeast direct intercity trains, nine rail commuter agencies use various segments of the NEC and its station facilities to serve heavily populated cities and regions in the Northeast and Mid Atlantic states. More than 350 intercity and 1240 commuter train movements occur daily on various segments of the NEC. Several hundred thousand passengers, intercity and commuter, travel the NEC rail system daily. In addition, less frequent freight service, provided by CSX, Norfolk Southern and the Providence & Worcester, serves auto plants, coal burning utilities and other major freight shippers on certain segments of the NEC.

Amtrak owns, maintains and operates much of the Northeast Corridor. The NEC is approximately 460 miles long with an infrastructure of from two to six tracks at differing locations. More than half of Amtrak's national ridership is on the corridor along with approximately 100 million commuters annually. The 226-mile link between New York and Washington is perhaps the most heavily used railroad, in terms of train movements, in the United States. In this segment, Amtrak operates its high-speed Acela Express service that competes for track schedule time with more than 100 other Amtrak trains, almost 200 New Jersey Transit trains, more than 150 Southeastern Pennsylvania Transit Authority (SEPTA) trains, over 40 Maryland (MARC) rail commuter trains. It also must accommodate Virginia Railway Express (VRE) trains for off peak storage needs and track time moving south out of Washington Union Station.

Amtrak acquired its ownership of major segments of the Northeast Corridor in 1976, during creation of Conrail as part of the restructuring of the northeast freight rail system following the financial collapse of Penn Central and six other northeast and mid-west rail corporations. In addition, Amtrak assumed ownership of the 103-mile segment between Philadelphia and Harrisburg; the 62 miles of track between New Haven, CT and Springfield, MA; and about 12 miles of track near Albany, NY.

The states of New York and Connecticut jointly own a 57-mile track segment between New Rochelle, New York, and New Haven, Connecticut. The Commonwealth of Massachusetts owns a segment of the NEC from the Rhode Island state line to Boston. Amtrak has sole or a shared ownership interest in major passenger and yard facilities including Ivy St. Yard and Union Station in Washington; 30th St. Station in Philadelphia,

the North and East River tunnels; Penn Station and Sunnyside Yard in New York and other maintenance of way and locomotive and passenger car servicing facilities.

The NEC has a long history as the most traveled and most capital-intensive rail passenger line in the nation. The Pennsylvania Railroad began running electrified trains between Washington and New York in 1935. Unlike the European rail systems, which were rebuilt after World War II, many of the components of the NEC's electrification system date to the original installation. The electrification power system and catenary design have not been upgraded to fully support, without costly breakdowns, the higher speed, multiple users and high density train movements required for today's operation and for future growth.

NORTHEAST CORRIDOR FUNDING PROGRAMS

In the 1980's, through the congressional appropriations process, Federal funding was earmarked for the Northeast Corridor Improvement Project, which resulted in a major and wise step toward creating a high-density, high-speed intercity rail corridor. Installation of continuous welded rail, concrete ties, enhanced drainage, stabilized roadbed, improved track switching turnouts and high speed interlockings, rehabilitated bridges, rehabilitated tunnels, and elimination of most highway/railway grade crossings supported the introduction of 125 mph service speeds on much of the corridor between Washington and New York.

In 1991, Congress provided funding to electrify 157 miles of the NEC between New Haven and Boston under the Northeast High-Speed Rail Improvement Project. The completed project provides an electrified, high-speed rail line between Washington and Boston. It also eliminated the need for a change of locomotives from electric to diesel, or vice versa, at New Haven. The Northeast Corridor Improvement Project was financed through mortgage notes issued by the federal government, due in the year 2975.

The above-the-rail cost of providing rail passenger service on the Corridor is the most cost effective in the Amtrak system. However, the ownership responsibility of maintaining and improving the infrastructure of the Northeast Corridor causes a strain on Amtrak's resources, consumes an enormous amount of management resources, has negative impact on Amtrak's bottom line, and has led to a substantial deterioration in the physical condition of the NEC over the past four years.

Prior to the mid 1990's, most federal transportation dollars were allocated to the various modes of transportation through the appropriations process. At that time it made sense that Amtrak's infrastructure needs could, at times, successfully compete for funding with other transportation modes through the Congressional appropriations process. In fact, a significant amount of federal support was appropriated for capital investment in the Northeast Corridor through the Northeast Corridor Improvement Project (NECIP) and the Northeast High-Speed Rail Improvement Project (NEHRIP).

NEC FUNDING LIMITATIONS

The advent of federal guaranteed spending programs (i.e., TEA 21 and AIR 21), created new additional spending categories or "firewalls", under the Budget Enforcement Act, which effectively prohibited the Appropriations Committees from reducing those spending levels in the annual appropriations process. These new programs essentially created mandatory spending programs within the discretionary caps. As a result, the majority of budgetary resources for transportation appropriations are "guaranteed" by federal legislation and protected by legislated points of order. The effect of these guarantees are now impacting non-covered transportation programs like infrastructure funding for the Northeast Corridor, which is forced to compete within the appropriations process for leftover funding.

According to the committee's report (H. Rept. 107-108), accompanying the transportation appropriation for fiscal year 2002 (H.R. 2299), the committee expressed concern that "bills such as TEA 21 and AIR 21 skew transportation priorities inappropriately while leaving safety-related operations in the FAA, Coast Guard and FRA to scramble for the remaining crumbs." If the current situation continues, obtaining appropriated funds through this process for all the essential infrastructure needs in the Northeast Corridor will be almost impossible.

The level of funding for full development of the NEC has been known for some time. In its first report to the Amtrak Reform Council, BGL Rail Associates reviewed all the current studies and analyses of critical funding requirements for both fire and life safety purposes and essential infrastructure improvements. After reviewing various materials and discussions with knowledgeable officials at Amtrak and other sources, we concluded that the cost of infrastructure improvement for the NEC would be in the order of $20 billion, or an average of $800 million per year for the next 25 years, although the fire and life safety requirements need to be addressed in the next few years.

As we have noted, current federal funding limitations provide no mechanism for allocating sufficient, specific federal resources for the Northeast Corridor. Funds appropriated for Amtrak are not earmarked for the NEC. Amtrak's appropriations in recent fiscal years have been in the range of $520 million per year, approximately half of what is authorized for appropriations. That amount is provided to support the operations of the national system and all its capital and operating needs. Under that funding level, capital funding for investments in the NEC is virtually non-existent.

For fiscal year 2002, Amtrak received a $521 million Federal appropriation. For cash purposes, Amtrak received 60 percent of its 2001 appropriation, 40 percent of the 2002 appropriation and $240 million realized from the sale-leaseback of its ownership interest in New York's Penn Station concourse. Amtrak had to cover a cash loss of $585 million which included $183 million of excess Railroad Retirement System costs, leaving limited funds to cover debt requirements, equipment overhaul, and other capital costs. No funds were available for new capital programs, environmental mitigation, and other legally required spending.

As the owner of the NEC, Amtrak would likely require an additional appropriation of $300 million more than what was appropriated for 2002, plus an additional $800 million to cover the full annual cost of the major rehabilitation program necessary to the future viability of NEC operations.

In our view, the "firewalls" created in the Budget Enforcement Act will prevent the Federal appropriations process from being a realistic source of funding for all aspects of an upgraded Northeast Corridor improvement program. Those concerned about the vitality of the Northeast Corridor as a critical, national transportation asset must begin to develop alternative sources of funding. Federal, state and private sector users have to work together to avoid serious deterioration of the corridor's infrastructure and service capability. Operational safety will also become a growing concern if the downward spiral of investment continues. Doing nothing will guarantee a decline in service and, later, a much larger program cost if intercity, commuter and freight operations are to grow and safely attain a higher level of service throughout the NEC.

If the appropriations process is unable to provide the resources for the Northeast Corridor infrastructure needs, safety and operational reliability needs will require other federal options to be pursued. This could include tax incentives, economic stimulus funds, homeland security funds, transportation trust accounts or other more radical alternatives like directing the Army Corps of Engineers to undertake major bridge projects on the Corridor.

Whatever funds may be provided to improve the Northeast Corridor infrastructure it is critical that safeguards be included to assure that these funds are dedicated to the capital projects in the corridor. In the past (according to the DOT/IG January, 2002 report, p. 53), when Amtrak had a large base of capital funds,(for example the $2.2 billion of TRA funds), they allocated indirect and overhead costs which were initially recorded to the company's operating expenses and then "transferred" to capital projects through the application of an overhead rate to capital project-related labor and material expenses. As a money losing operating company and one that is also responsible for infrastructure investments, there will be temptation to shift some of the operating expenses to capital projects, thereby losing the full impact of the capital dollars available for infrastructure improvements.

INFRASTRUCTURE NEEDS

In January 2000, Amtrak published a report identifying the short and long-term infrastructure improvements needed along the South End (Washington-New York) of the NEC. The short-term covered years 2001 to 2005. The long-term needs covered years 2006 to 2025. The following is a summary of that report.

- Life Safety/Mandatory: Includes projects principally focused on raising the South End of the corridor up to modern standards of design and meeting building code

requirements with particular emphasis on completing life safety improvements to rail tunnels at Baltimore and New York.

- Operational Reliability: Includes projects that deal in large measure with clearing the backlog of deferred maintenance and capital improvements. Deferred maintenance and limited capital investments have caused the increase in slow orders and reduced service reliability of the operations of all users. Essential improvements in this category include track and bridge structures, signals, and electric traction. According to Amtrak, failure to address these basic needs, "will result in a steady deterioration of the infrastructure, reduced on-time performance, lower operating speeds, deteriorating customer service and a severe transportation mobility problem for the Northeast."

- High-Speed Rail: Achieving maximum operating speeds of 150 mph with improved track configurations and platform realignments, upgraded interlockings and high-speed crossovers, modern traction power systems, and new, modern catenary are the focus of this category. In addition, completion of the Advanced Civil Speed Enforcement System signal system for high-speed operations, which is required by FRA, plus a variety of other elements necessary to 150 mph operations are included.

- Shared Benefits: This category includes the major infrastructure improvements of importance to all users of the corridor. They include the renewal of the electric traction power system, replacement or rehabilitation of key bridges and tunnels critical to operations on the corridor, completion of the Penn Station construction project in New York and the infrastructure improvements designed to achieve faster trip time goals.

- Commuter/Freight Capacity. This category includes capital investments identified by commuter and freight users of the corridor designed to allow efficient and reliable operation on the NEC.

The Amtrak report estimated the short and long-term costs as follows:

($Millions)

Category	**Short Term**	**Long Term**
Life Safety/Mandatory[1]	311.7	342.4
Operational Reliability	1,243.2	3,574.8
High Speed Rail	457.9	286.0
Shared Benefits	971.8	4,137.1
Commuter/Freight Capacity	205.6	521.6
TOTAL	$3,190.2	$8,861.9

Total South End Infrastructure Needs To 2025 is $12.1 billion in 2000 dollars.

[1] In December 2000, the DOT/IG issued a report updating the cost estimates for the fire/life safety improvements. The revised estimate was set at $898 million over nine years.

Amtrak is in the process of completing a similar analysis of the North End of the Northeast Corridor. Details of these estimates are not yet available, but rough estimates have been developed. Operational reliability will require rebuilding aging structures such as the bridges over the Thames and Niantic Rivers, which are approaching the end of their useful lives. Improvements to expand capacity, safety and reliability will be necessary on the NEC between New Rochelle, NY, and New Haven, CT, where Metro-North Commuter Railroad also operates. This section of the NEC is owned by the States of New York and Connecticut and operated by MNCRR, an agency of the Metropolitan Transportation Authority. Metro North and Amtrak have an agreement that will allow additional slots for Acela trains in exchange for Amtrak making capital improvements that will accommodate those trains.

Based on the review of various materials and discussions with knowledgeable officials at Amtrak and elsewhere, it is estimated that even with the completion of electrification east of New Haven and other major infrastructure improvements on the North End in recent years, a substantial continuing investment in the infrastructure there will be required. The South End Report estimated that simply to maintain operational reliability (including deferred maintenance recovery) on segments of the NEC other than the South End itself would cost $1.75 billion over the period. The Penn Station complex, which is not clearly defined in either the North End or South End reports, has infrastructure costs that are in the range of $4.3 billion over the next 20 years. The New Haven-Springfield line, assuming no growth, has a cost estimate of $150 million. The Keystone Line (Philadelphia-Harrisburg) is estimated at $500 million[2] and the Empire Corridor (New York-Albany) is estimated at $350 million. Corridor-wide, there are estimates for non-line related infrastructure investments that are in the range of $1 billion over the next 20 years. In all, the total estimated costs for the entire Northeast Corridor could be in the range of $20 billion over the next 25 years.

Most of the cost estimates for the Northeast Corridor are from Amtrak studies and reports. The identified needs could be higher or lower depending on who performs the analysis. Many users of the corridor have suggested that an outside, independent analysis either confirming or modifying the Amtrak estimates would provide the Federal government with a higher level of confidence over what needs to be invested. Such an analysis could be done with a grant from the Department of Transportation to a qualified and experienced engineering firm. There are some that would argue that the traffic levels on the corridor would prevent an aggressive construction schedule and would limit the amount that could be spent to roughly $300 million per year, if service is to be maintained without significant disruption. The historically erratic and inconsistent feast or famine availability of capital for the corridor has made planning a long range and cost efficient program of infrastructure improvements nearly impossible.

[2] Pennsylvania's Department of Transportation and Amtrak are close to finalizing an agreement under which each will fund half of an initial capital improvement project to increase speeds to 110 mph at and estimated cost of $150 million.

If federal and state policy makers could agree on one policy that would improve the prospects of a cost effective, public investment in the NEC infrastructure, it would be to establish a consistent, baseline funding arrangement that could be relied on over the long term. A reliable, predictable funding source would support a viable NEC infrastructure improvement program. Lacking such a funding arrangement, it will be impossible for whatever entity is responsible for the NEC infrastructure improvements to enter into arrangements with the users of the corridor for cost sharing of capital investment. Despite Amtrak's efforts to successfully negotiate joint-capital funding agreements with NEC states and/or commuter authorities, Amtrak's financial problems and funding shortfall have forced it to delay a number of joint capital funding projects. A list of the projects impacted is identified in the recent DOT/IG report (page 52, table 25).

COMMUTER RAILROAD OPERATIONS ON THE NORTHEAST CORRIDOR

The multiplicity of users, frequency of service, variation in train speeds, track and station limitations and peak hour congestion points, combine to make the NEC an extremely complex operation. Achieving a workable balance in the frequency of intercity and commuter train movements, while accommodating freight services in critical areas of the corridor, demands close coordination among all the users. As the owner and intercity operator of much of the corridor, Amtrak bears most of the coordination burden.

A week day, Saturday and Sunday listing of all single-move intercity and commuter train movements on the NEC was provided by Amtrak's office of planning and scheduling. The listing is shown in APPENDIX A, along with several graphs that identify congestion points and the multiple users of the corridor. The train movement lists do not add to a total since most train movements serve multiple stations.

Not unexpectedly, the varying demands of each service segment often create a "my-train-your-train" competition when schedules change, new services are added, or disruptions in track availability are caused by infrastructure improvements and heavy maintenance programs.

Interviews were held with Amtrak, commuter agencies and freight users. The agencies interviewed are listed in APPENDIX B. Commuter and freight users generally agreed that the Corridor is operated as efficiently as possible, given capacity and physical constraints. Some complained about the frustrations of dealing with Amtrak's bureaucracy. However, all users expressed the need for increased capacity to permit smoother operations and growth. In order to better accommodate current services as well as promote growth, they emphasized the need for major infrastructure improvements. Among these are fire and life safety improvements to the New York and Baltimore tunnels; higher track speeds; modern electric traction systems with a change to European style, constant tension catenary; elimination of certain curves, construction of island platforms at BWI and Metro Park stations; and additional track and connections to support more freight use without interfering with high-speed, high-frequency passenger movements.

Since many states and commuter authorities have easier access to capital funding than operating funds, Amtrak has attempted to reach agreements with users of the NEC for more capital in lieu of higher access fees. In the current fiscal year Amtrak will receive approximately $90 million in access fees and $32.4 million in capital contributions from all users of the NEC for a total contribution of $122.4 million. Those amounts are expected to grow to increase to $95.8 million and $42.4 million in FY 2003. Access fees and contributions to capital by each user-agency are shown in APPENDIX C. Not all users of the corridor have agreed to capital contributions, and in some cases, there may be agreements in place that have not yet been implemented. At this point, Amtrak has received capital contributions from MARC, New Jersey Transit, VRE and DelDOT. The current users of the Northeast Corridor are as follows:

- Virginia Railway Express - VRE
- Maryland Area Railroad Commuter - MARC.
- Southeastern Pennsylvania Transit Authority—SEPTA
- New Jersey Transit – NJT
- Long Island Rail Road
- Metro North Commuter Railroad
- ConnDOT
- Metropolitan Boston Transportation Authority—MBTA
- Freight Railroads on the Northeast Corridor (Norfolk Southern, CSX and Providence & Worcester) operating in the states of Rhode Island, Massachusetts, New Jersey, Pennsylvania, Delaware, Maryland and the District of Columbia.

POSSIBLE FUNDING OPTIONS FOR NEC INFRASTRUCTURE

Many world political leaders in Asia and Europe have concluded that demographic, environmental and economic pressures make the development of modern rail networks vital to their countries' future and have committed to make the appropriate capital investments. In the United States, some policy makers conjure up images of the railroad industry as the smoke-belching locomotive and the creaky wooden passenger car. However, today's railroad technology makes these images as outdated as those of the biplane and the Model-T.

The Northeast Corridor is one of the most heavily traveled corridors in the U.S., and is the only true high-speed passenger corridor currently operating in the United States. Although the federal government made significant investments in the Northeast Corridor during the 1970's and 80's, Amtrak's appropriations during the past decade failed to

achieve the level of capital investment necessary to keep the NEC in a state of good repair. The recent report from the Department of Transportation Inspector General (1-24-02) states that there is "an estimated $3 billion backlog of 'state of good repair' needs in the Northeast Corridor," which is the source of major and growing delays of Amtrak and commuter trains in the Northeast Corridor. According to the report, the minutes of delay for Amtrak trains "rose nearly 75 percent between 1998 and 2001."

Given the volume of commuter traffic on the Northeast Corridor, any policy change that results in the Northeast Corridor being controlled and operated by an entity other than Amtrak, would naturally look to the commuter authorities or the states to assume responsibility for much of the infrastructure costs that will be required for the corridor. However, most (if not all) commuter authorities would argue that the funding made available to them through the federal government and state governments is insufficient to cover their current needs. Despite the fact that transit will receive $6.7 billion in federal funding for FY 2002 (a 7.8 percent increase over prior year funding), there are many transit projects that will be left unfunded. Nevertheless, the constraints on federal appropriations may force capital funding needs of the NEC to come from guaranteed accounts like the Mass Transit Account of the Highway Trust Fund. .

In interviews with commuter authorities, none would support using the Mass Transit Account as a source for funding Northeast Corridor Infrastructure, unless the account was supplemented with additional funds for that purpose. It is highly unlikely that the federal government would entertain shifting any funds from the Highway Trust Fund into the Mass Transit Account to address this need. In fact, the President's Budget for FY 2003 includes an obligation limitation of $22.6 billion for the Federal-aid Highway Program in FY 2003, $9.2 billion lower than FY 2002. This change would have dramatic consequences for the program and could spike job losses due to delays in highway construction projects, delaying the recovery of the economy.

In addition, these changes could significantly affect future highway funding by reducing the funding baseline for highways that will be used by Congress as the starting point for the next reauthorization of TEA 21. There is no question that states will be concerned about these revenue shortfalls and will no doubt seek solutions to address these shortfalls. One such action could be to ask House and Senate appropriators to offset any negative Revenue Aligned Budget Authority (RABA) shortfall by increasing the obligation limitation in FY 2003 to levels consistent with past TEA 21 program levels, possibly by drawing down from Highway Trust Fund balances. More recently, there has been support voiced in Congress for restoring approximately $ 4 billion of the RABA-caused shortfall. This is within the authority of the appropriators. The Highway Trust Fund has a sufficient balance to support increases notwithstanding reduced revenue estimates. This decline in available funding is important because it demonstrates how difficult it would be to try to address the NEC infrastructure needs within the Mass Transit Account of the Highway Trust Fund.

Some have suggested that another way to deal with these projected shortfalls would be for the federal government to consider increasing the federal fuel tax to accommodate the

program reductions that states can anticipate. Fuel prices have been so erratic in the past few years that most people would not have difficulty adjusting to a one to five cent increase. Although it is unlikely that the current Administration would support any increase in fuel taxes as a solution, some in Congress may be forced to take drastic steps to avoid the negative impact on the economy that a significant reduction in highway projects would have—including increasing fuel taxes or shifting those fuel tax revenues that go toward the General Fund to the Mass Transit Account. For example, currently 2.3 cents of the fuel tax on gasohol goes toward the General Fund. Shifting these resources could provide a small but dedicated source of funding for rail infrastructure.

The disposition of the Northeast Corridor must take into consideration the needs of all the users. In some cases, Northeast Corridor states may be interested in assuming the responsibility of ownership for parts of the corridor that are critical for their commuter operations. For example, some Northeast Corridor states have expressed an interest in assuming responsibility and, perhaps, ownership of some portions of the corridor. Pennsylvania may have access to more resources and a stronger interest in upgrading the Harrisburg line (Keystone Corridor) than does Amtrak. New York and/or New Jersey may have an interest in taking over the Penn Station Complex, including Sunnyside Yards. Because Amtrak has been unable to obtain the necessary capital to address the significant capital needs of the Penn Station complex (estimated to be in excess of $4 billion over the next 20 years), the future disposition of the corridor may need to take into consideration the interests of states like New York and/or New Jersey in assuming the responsibility for that station complex. Clearly, states are in a more favorable position to access the type of funding for the necessary infrastructure requirements than is Amtrak. New York already is responsible for that portion of the corridor (57 miles owned jointly with Connecticut) that is heavily used by Metro North. That section of the corridor has not deteriorated. New York and Connecticut have been far more successful in providing for the necessary capital requirements for the sections they own than those sections not owned by the state.

Assuming there will be no single federal or state funding source to address the capital needs of the Northeast Corridor, other creative means could be taken to address the infrastructure needs. For example, one of the larger capital costs that must be addressed on the South End of the corridor is the replacement of the electric traction system, estimated to be approximately $800 million dollars. With the federal government seeking to adopt an energy policy that would create Regional Transmission Organizations (RTO's), it is conceivable that a northeast RTO may be interested in entering into a partnership to either take ownership or develop a long term lease arrangement of the electric traction infrastructure in the corridor in exchange for construction of a new electric traction system as well as new transmission lines to meet the needs of electric customers in the northeast. Such a partnership may be able to take advantage of recently enacted rail infrastructure programs like TIFIA. Amtrak is in the process of seeking "economically beneficial opportunities" for replacement of the electric traction system through the formation of a partnering arrangement. Although no such arrangement has yet been accomplished, this remains a viable alternative funding option for one of the major capital requirements on the corridor.

FUNDING OUTLOOK

The U.S. economic slump that began in mid-2000, which was exacerbated by the events of September 11, has left the federal government and most state governments facing budget deficits and difficult decisions about which programs get funded and which will not. While the federal government has more room to maneuver than many of the states that have constitutional requirements to balance their budgets, recent public statements appear to indicate that the federal budget for fiscal year 2003 will be geared to add funding for defense and homeland security, leaving many existing federal programs or proposed programs on an austere budget or with no funding at all.

Given this difficult economic environment, finding resources to fund the multiple infrastructure needs of the Northeast Corridor will be difficult. On top of the general economic woes, the U.S. Treasury now estimates that state governments may lose $8.2 billion in federal transportation funds next year because of declining fuel tax collections. This bleak financial picture will only add to the challenges of the long ignored Northeast Corridor needs. Hopefully, as most economists predict, this economic downturn is just a temporary condition and government deficits will be eliminated in the short term. For the time being, the best strategy to address these needs will be to look toward a variety of funding options including federal, state and private sources. For the purpose of this report, it is assumed that some public entity other than Amtrak will be responsible for infrastructure improvements.

Federal Sources

Federal appropriations could be used to help address the fire and life/safety needs of the NEC. Despite the constraints of the appropriations process, the federal government has a responsibility to assume some role in addressing life/safety issues on an interstate transportation infrastructure like the NEC, particularly since it has been the de facto owner for 25 years. Even if the federal government is only able to provide $100 million per year and commit to a multiple number of years, it will provide some assurance for rail planners that the funds will be there to design and implement these projects. The most recent DOT/IG report suggests that Congress should "earmark" funds designed to address safety and security-related needs. With the administration's budget expected to place a great deal of weight on the need to fund projects that are critical to homeland security, it may be prudent for DOT and/or Amtrak to expand the infrastructure list of corridor projects addressed in S. 1550 to include additional NEC projects that may fall into that category. Given the urgent needs of the Northeast Corridor infrastructure, there may be ways for the appropriations committees in Congress to breach the so-called "firewalls" to address these needs. As was demonstrated during the closing days of the last Congress, when there is an urgent need to address infrastructure (like the New York tunnels) that may be related to security, the federal government has the ability to provide funding even when it may result in deficit spending.

Transportation Infrastructure Finance Assistance and Innovation Act (TIFIA) was authorized in TEA 21 and was designed to provide secured loans, lines of credit and loan guarantees to public and private sponsors of major surface transportation projects. Part of the strategy to address these capital projects should be to encourage partners that have an interest in the safety and reliability of the NEC. These partners could include states, commuter authorities, freight railroads, Regional Transmission Organizations, "design and build" partnerships with engineering firms, real estate developers, airlines, airport authorities and Amtrak.

The Railroad Rehabilitation and Improvement Financing Program (RRIF) is another partner-based funding source. The freight railroad industry is expected to support provisions in T&I Committee Chairman Don Young's RIDE-21 legislation that would increase the amount of low-interest loans and loan guarantees available from $3.5 billion to $35 billion for this program. The bill would also eliminate "overly restrictive regulatory requirements" that have constrained implementation of the program. Such a change could provide the NEC with another possible funding option for critical joint use projects, particularly for those projects that could enhance the capacity for additional freight traffic.

Federal Legislation

The Administration and Congress could enact new legislation that would provide capital for NEC infrastructure.

1. Bond Measures that would finance major construction projects in the corridor. During the first session of the 107th Congress, a variety of bills that would provide bonding authority to meet infrastructure needs were proposed. It is not likely that Congress will settle on any one piece of legislation until it is clear what the fate of Amtrak will be. Whatever the outcome, it is clear that any bonding measure should be designed to help meet the needs of the NEC.

2. Economic Stimulus proposals are likely to surface again. Such legislation could include tax cuts that promote growth in the economy and job creation. The private sector may be more inclined to undertake certain rail projects that have a common public good in the Northeast Corridor if the tax code had incentives for them to do so. The freight rail industry is expected to submit a legislative request that would support the enactment of legislation that would provide tax incentives, such as rail investment tax credits, or tax-exempt financing for certain qualified rail projects. Private sector railroads are also expected to seek funding for rail infrastructure through the issuance of tax-exempt indebtedness. Freight users of the corridor may be willing to undertake capital projects that would expand capacity of the NEC for freight users, if such a provision were enacted into law.

3. Expanding the flexibility of current transportation trust funds to include NEC projects that are designed to reduce congestion on other modes. One of the hallmarks of TEA 21 included the flexibility provisions that allowed states to

"flex" funds allocated to their states for transportation projects that were their highest priority. Both the Surface Transportation Program (STP) and the Congestion Mitigation and Air Quality Improvement program (CMAQ) have flexibility provisions. However, federal law does not clearly stipulate whether railroad projects would be eligible for the flexible funds. The next round of TEA 21 should make clear that, at a minimum, the NEC would be eligible for such flexibility. In addition, these funds could be supplemented by shifting the current portion of gasohol taxes that are contributed to the General Fund to an account that would be authorized to flex funds for rail projects.

4. Since the September 11, terrorist attacks public fear and concern about air travel has increased. In addition, increased security requirements have led to significant delays, making short distance air travel less desirable. The location of airports that are adjacent to the Northeast Corridor open up the possibility that the Airport and Airway Trust Fund could be as flexed along the lines of the policy established in TEA 21 and in a way that would help airports reduce the amount of slots consumed by short distance flights when a high speed rail corridor can provide a competitive alternative. The funds in the Airport and Airway Trust Fund are used to meet obligations for airport improvements but are limited to the confines of the airport grounds. An expanded use of these funds in a way that would allow construction of a rail connection to a high-speed rail line could be beneficial to the traveling public, the airports and the Northeast Corridor. Current constraints on funding for the NEC have prevented the advancement of center Island platforms at BWI, a major congestion point on the NEC. The BWI rail station has become an integral part of the airport operation and better coordination on funding projects could substantially improve the operation of both the airport and the rail operation.

5. Federal transportation funds are often used for civil works projects that are under the Army Corps of Engineers. There is some precedent for the Corps to undertake bridge projects that are over navigable waters to meet the necessities of rail or highway traffic. There are three bridges in the state of Maryland that fall into this category on the NEC that traverse the Susquehanna, Bush and Gunpowder rivers.

State Participation

- Expand the NEC states' role through a broader based ownership-control institutional mechanism. Today, the NEC states invest state and federal transit funds in corridor segments providing specific value to communities and citizens for essential commuter services. A larger and more significant role for NEC states could lead to a more coordinated funding program and improved coordination of operations and schedules among all users.

Freight Users

- Freight users of the NEC envision growth in the important Northeast-Mid-Atlantic market, particularly in higher-speed intermodal operations. Current freight use of NEC facilities is constrained by track speed limitations and access periods. State and Federal policy could encourage freight users to invest in additional facilities to improve their services, enhance capacity and further minimize conflicts with intercity and commuter services could justify and attract private sector investment. The State of Delaware has recently resolved a congestion point on the NEC by reaching an agreement with Norfolk Southern to share the cost of a capital project that met both the needs of the state and the railroad.

PART II

RECENT DEVELOPMENTS AND CONCLUSIONS

THE GROWING CRISIS AT AMTRAK

Against the backdrop of the Amtrak Reform Council Findings and Action Plan, Amtrak, the nation's intercity rail passenger operator and owner of the Northeast Corridor infrastructure, by any measure is in an extreme state of financial crisis. The corporation is burdened with $4 billion in debt, with interest expense expected to more than double in 2002, a significant backlog of capital needs and is enduring a continuing annual cash loss of nearly $600 million. With the recently announced departure of its CEO, Amtrak is like a rudderless ship in turbulent waters. Its future is dependent upon the federal appropriations process in which the trend for discretionary spending programs, like Amtrak, has been on the decline.

While Amtrak has achieved some growth in ridership and revenues, every dollar in new revenue is offset by $1.05 in additional costs, according to the U.S. DOT Inspector General's analysis. Amtrak announced that it plans to shut down the entire long-distance network unless Congress approves $1.2 billion in federal grants for FY 2003. If funding is limited, Amtrak may discontinue as many trains as necessary at the beginning of FY 2003 (October 1, 2002). The Administration has proposed a subsidy of $521 million for the next fiscal year as a "placeholder" until a more definitive policy decision is made as to the future of intercity rail passenger service. By all accounts, the $521 million level of funding would be insufficient to continue the system as it exists today.

CONGRESSIONAL RESPONSE

1. Hearings: A series of congressional hearings were held in the House and the Senate following the finding of the Amtrak Reform Council that Amtrak, as currently structured, cannot become self sufficient and will require continued Federal operating subsidies. In testimony before Congress, the Department of Transportation Inspector General concurred that "Amtrak has not succeeded in implementing enduring financial improvements of the magnitude necessary to attain and sustain self-sufficiency in and beyond 2003". In fact, no Congressional witness that appeared before any committee was able to present any evidence that the Amtrak structure, as it exists today, can be "self-sufficient". The ARC's Action Plan for Congress to deal with the crisis included, notably, a recommendation to separate the Northeast Corridor from Amtrak ownership as a means to focus and facilitate public and private capital investment in the Corridor. The ARC also recommended that Congress consider competitive franchises as a means of preserving intercity rail passenger service on the most traveled routes of Amtrak's national system at the lowest possible cost.

The Administration has not yet made known its public policy position on how to resolve the current Amtrak crisis but expects to outline for Congress a set of principles rather

than specific legislation. In testimony before Congress, witnesses for the Department of Transportation indicated that they first needed to understand some basic questions including:

- What kind of system is needed – Regional or National?
- What will the system cost?
- How will the costs of the system be met?
- How can a new or revitalized system be more efficient?
- Should the current institutional structure be changed to resolve issues like track access and safety?
- What is politically feasible/possible within the current budget environment?

Although there appears to be a general consensus among those in Congress charged with Amtrak oversight responsibility that additional resources may be necessary, no such unanimity exists on what the delivery system would be or on how Amtrak should be structured. There are some in Congress who say that without a national system, there will be no Amtrak. Others indicate that it only makes sense to operate a series of regional corridors. Still others say that the operating losses of the national system are not the problem; they say that any system of passenger rail will require substantial and continuing capital funding. While few argue that the cost of preserving and enhancing rail passenger service has been and will continue to be costly, there is no agreement on where the resources will come from or if Amtrak should be the recipient. With Amtrak' s authority to obtain appropriations set to expire at the end of this fiscal year, a number of bills pending in Congress propose various ways to address the Amtrak crisis.

2. Reauthorization Legislation:

a. S. 1958, The Rail Passenger Service Improvement Act, introduced by Senator John McCain –

1. Creates an Office of Rail Passenger Development and Franchising within FRA with the power to access freight railroads;
2. Requires Amtrak to create at least three subsidiaries—Operations, Maintenance and Reservations;
3. Requires Amtrak to redeem outstanding common stock;
4. Requires Amtrak to cover "avoidable costs" on each route it operates;
5. Requires the transfer of the Northeast Corridor to the Secretary;
6. Creates an Amtrak Control Board;
7. Expands flexibility of Highway Trust Funds;
8. Authorization includes:
    - $510 million for general security
    - $898 million for tunnels
    - $400 million in FY 2003 for operations, declining to $100 million in FY 2006
    - $400 million per year for capital grants for four years
    - $500 million per year for Northeast Corridor improvements for four years

This bill includes many of the recommendations made by the Amtrak Reform Council.

b. S. 1991, The National Defense Rail Act, introduced by Senator Hollings –
   - Title I authorizes $360 million for Amtrak security assistance;
   - Title II requires the development of a national high-speed ground transportation policy and would authorize $1.55 billion for planning, research and implementation;
   - Title III defines a national rail passenger transportation system and includes an authorization of $4.1 billion per year for rail passenger service;
   - Title III also would establish a new Board of Directors;
   - Title IV authorizes $35 billion in loans or loan guarantee coverage for infrastructure improvements and security enhancements.

Both of these bills depend heavily on obtaining funds through the appropriations process. Some Members of Congress who serve on the Appropriations Committee have expressed concern that those resources may not be there. For example, in considering Amtrak's request for $1.2 billion in FY 2003 appropriations to keep the current system running, Senator Patty Murray, Chairman of the Senate Transportation Appropriations Subcommittee, stated at a recent hearing, "As a member of the Budget Committee and Chairman of this Subcommittee, I don't see where that kind of money is going to come from."

The House of Representatives has yet to introduce an Amtrak Reauthorization bill but has under consideration several bills like HR 2950, The Rail Infrastructure Development and Expansion Act for the 21st Century ("RIDE 21"). This legislation would provide $36 billion in tax-exempt bonds for high-speed rail development, $35 billion in loans and loan guarantees for freight and commuter rail improvements. Also pending in the House is HR 3166, Rebuild America: Financing Infrastructure Renewal and Security for Transportation Act of 2001, which provides for tax credits for Amtrak bonds. While neither of these bills attempts to restructure Amtrak, they do provide resources for railroad infrastructure and may be part of the answer for addressing the backlog of capital needs for the Northeast Corridor.

Even if Congress is able to enact an authorization bill, it will be subject to the spending levels in the Budget Resolution that is still working its way through Congress. At this point, the House and Senate appear to be very far apart on a number of budget priorities, including Function 400, Transportation. It is the Budget Resolution that establishes an allocation for the Appropriations Committee, which then subdivides the amount among its subcommittees. Given current economic conditions and the fact that the federal government is once again facing a budget deficit, it is unlikely that the transportation function of the federal budget will be able to expand enough to accommodate the $1.2 billion that Amtrak is seeking.

Given the complexity of closing the gap between the various proposals to reauthorize/restructure Amtrak and the uncertainty in the budget process, it is very possible that Congress will not be able to reach a consensus on an Amtrak re-authorization bill this year. Without an authorization bill and the prospect of a deepening

financial crisis at Amtrak, the House and Senate appropriations committees are likely to be responsible for determining the short-term fate of Amtrak.

3. Appropriations Process: The fundamental problem with any program dependent on federal appropriations is that the federal budget process is evolving into one in which "mandatory spending" is consuming larger and larger portions of the budget. The reality is that the Transportation Appropriations Subcommittees have been hamstrung by federal legislation that provides guaranteed spending for certain transportation programs. The allocation of about 75 percent of federal transportation resources is now predetermined by the provisions of AIR 21 and TEA 21. Consequently, non-covered transportation programs (like Amtrak) are forced to compete with funding for Coast Guard, FAA safety, FRA, and a variety of other programs within the transportation appropriations process for whatever is left over.

Fiscal Year 2003 transportation funding will be particularly difficult for the Transportation Appropriations Subcommittees because the Administration's budget request proposes a 9 percent reduction in transportation spending, due in large part to the automatic adjustments in highway spending based on anticipated receipts from Federal highway user taxes. As reflected in recent proposals, Congress will almost certainly restore a significant portion of the highway shortfall and meet most of the Coast Guard and Aviation security needs, thus squeezing transportation funding further, and making it even more difficult for programs that fall into the non-guaranteed spending category.

At this stage, it does not appear that there will be resources to provide Amtrak with its request for $1.2 billion. And, unless there is a significant upsurge in the economy and a return to budget surpluses, subsequent fiscal years will be equally difficult for intercity rail funding given the "firewalls" that protect highway, transit and aviation spending. Asking the Appropriations Committees to provide more funding for Amtrak in this environment is risky because it places too large a burden on committees that simply will not have the resources to meet these needs no matter how urgent they may be. Proponents of rail passenger service will need to be much more creative about finding alternative funding sources outside the federal appropriations process.

PART III

CONCLUSIONS AND RECOMMENDATIONS

NORTHEAST CORRIDOR INFRASTRUCTURE VS. AMTRAK'S NATIONAL SYSTEM OF INTERCITY RAIL PASSENGER SERVICES

Recent Congressional hearings and reports from outside watchdog groups have attempted to shine a bright light on the true costs of operating Amtrak's national system. One conclusion is that the cost of owning the Northeast Corridor comes at a very high price. A continuing concern among some in Congress is that rail passenger service in the Northeast Corridor receives favored treatment and funding while other routes of Amtrak's national rail network suffer from an inequitable funding formula and therefore have higher risks of being discontinued or substantially reduced in frequency. Recently, Senator Patty Murray (D-WA) expressed her concern by saying,

> "Amtrak owns the Northeast Corridor. The vast majority of federal capital dollars that the railroad has received has gone into the Northeast Corridor. Even so, this corridor is in desperate need of between $3 billion and $5 billion just to maintain the current level of service. Over the next decade, it may require as much as $20 billion."

The DOT Inspector General also told the House Appropriations Committee that the operating subsidies for non-NEC routes and services is "chump change" compared to the capital needs of the Northeast Corridor. As long as Amtrak owns the Northeast Corridor it will be responsible for the lion's share of the infrastructure costs associated with the corridor. And, as mentioned earlier, getting those resources out of the appropriations process may be impossible.

If funding the infrastructure maintenance and capital costs of the NEC is one of the biggest obstacles to solving the problem of funding rail passenger service, it makes some sense to separate these costs from Amtrak's train operations. The removal of the infrastructure costs from Amtrak's books would have an immediate and positive impact on its operating budget. The real problem is how to pay for the infrastructure costs of the Northeast Corridor. Amtrak would perform much better if it were only an operating company and not also burdened with the responsibility to get whatever funds it can out of appropriations to address the needs of the Northeast Corridor infrastructure.

CURRENT OPERATIONS AND FUNDING OF THE NORTHEAST CORRIDOR INFRASTRUCTURE

The policy decision on how to fund the NEC, which is a national transportation asset, must consider the fundamental questions of: 1) who owns the Corridor, 2) who benefits from the Corridor, and 3) how it can be placed in the hands of an entity that would enhance its ability to access sufficient capital, including private sector participation?

Amtrak, through the appropriations process, has not and will not generate a sufficient level of funding. Ironically, those sections of the NEC that are not owned by Amtrak receive far more funding for essential infrastructure needs than those that are owned by Amtrak. In fact, over the past four years, the DOT/IG reports that Amtrak has spent only about $325 million on track maintenance out of the $540 million minimum required for operational reliability, a shortfall of about $215 million. Commuter agency owners of NEC properties are able to access alternative funds and are more consistent about implementing the necessary infrastructure maintenance and capital improvement expenditures. Connecticut, for example, has a ten-year capital expenditure program, funded at $100 million per year, for the 46 miles of the NEC that it owns.

While Amtrak has worked with commuter agencies in the Northeast Corridor to share some of the capital costs where there is a joint benefit, the DOT/IG has told Congress that the terms of these partnerships are "inconsistent, and some entities have contributed substantially to the growth and operation of passenger rail while others have benefited from service without contributing anything." The Inspector General suggested that a better job must be done in identifying and allocating "the costs of capital and operating investment according to the benefits realized by stakeholders."

On page 9 of Part I of this report, we discussed the commuter operations on the Northeast Corridor and the various agreements each have with Amtrak for their operations on the Corridor. Amtrak received a total contribution of $122.4 million in access fees and capital contributions for fiscal year 2001. BGL Rail met with selected commuter and freight users of the corridor to discuss their arrangements with Amtrak. While agreements with Amtrak vary, generally the commuter users of the corridor pay an access fee that is tied to "incremental costs" and the freight users of the corridor pay a "fully allocated cost" access fee. The capital contributions are negotiated with individual users and are, in principle, based on how the benefits accrue to the individual users.

The recent history of funding Northeast Corridor infrastructure clearly demonstrates that Amtrak has not been able to obtain the resources it needs from the federal appropriations process. Further, it is unlikely that the budget environment will improve sufficiently in the out years for federal transportation appropriations to meet the almost $1 billion of annual funding that will be required for the next two decades. One fact is clear – as long as Amtrak owns the NEC, it will be responsible for the infrastructure improvements. Clear historical experience tells us that this approach does not and will not work.

RECOMMENDED APPROACH TO NEC FUNDING

An effective and new approach must be found to effectively fund the capital needs of the Corridor. The approach we recommend is to separate the Corridor infrastructure from Amtrak: 1) so that the funds that NEC operations generate can be plowed back into the infrastructure; 2) so that through the states there is the possibility of accessing funds from the guaranteed spending programs of the Highway Trust Fund; and 3) so that a systematic program can be developed to exploit a variety of other sources of incremental funding to satisfy the substantial and ongoing maintenance and investment needs of the Corridor.

1. Separating Operations from Infrastructure

Amtrak has always lost money on its passenger operations. It should not have to shoulder the burden of being responsible for generating capital funds and managing the NEC infrastructure. Equally important, whatever funds are generated for NEC capital improvements should, indeed, be used for that purpose. The DOT IG suggested in its January 2002 report that when Amtrak has an infusion of capital dollars, it uses capital to offset operating losses and makes poor business decisions. Thus, owning the Northeast Corridor and experiencing operating losses leads the company to make decisions that are not in the long-term best interest of the Corridor and its users, like the decision to mortgage Penn Station for 16 years to help meet a three-month shortfall in cash. The current Amtrak structure is not the most efficient or effective way to maintain the vital infrastructure resource of the Northeast Corridor.

2. Using The Flexible Provisions of The Highway Trust Fund

The current short fall in federal fuel tax revenue of approximately $8 billion dollars is not only bad for highway infrastructure, it could also have a devastating impact on the flexible provisions of TEA 21. Programs like the Surface Transportation Program (STP) and the Congestion Mitigation & Air Quality (CMAQ), which are the primary vehicles used to flex funds for other modes, will not stand a chance to fund other infrastructure modes (such as rail passenger) unless Congress agrees to make up for the shortfall of the fuel tax revenues. If Congress addresses the highway funding shortfall issue, the flexible provisions of the Highway Trust Fund are more likely to be used for alternative modes, enhancing the chance that some elements of the infrastructure needs of the NEC may be funded through these programs.

3. Exploiting Sources of Incremental Funding of NEC Infrastructure Needs

The capital needs of the Northeast Corridor are substantial and cannot be met in any single year or from any single source. Continuing to depend on the appropriations process, which has very little flexibility to find additional resources, will only lead to continuing deterioration of the Corridor. There is also no incentive to spend funds efficiently under the current Amtrak structure with ineffective oversight by post-audit congressional hearings, and GAO and DOT/IG analyses.

Even if more funds were authorized for the NEC, the chances of more funds being appropriated are not good. Our analysis of capital needs and the likely sources of funding indicates that only through a coordinated program of new ownership with broad participation of users can the NEC users expect to achieve the operating level the NEC requires and that the region's transportation needs justify. A change in ownership is essential because Amtrak has demonstrated that it cannot obtain the level of funding necessary out of federal appropriations. Participation of all owners and users in the identification of logical funding sources can result in a concerted effort to achieve a multi-year capital improvement program using multiple sources of funding. We offer the

following as examples of some of the sources that could be considered to support the multi-year NEC improvement program.

- Establish a separate NEC infrastructure organization by transferring the Corridor to the Secretary or to a separate authority made up of states, US DOT, freight railroads that use the corridor, and the intercity passenger train operating company that uses the corridor. Establishing such an entity would open up additional opportunities for federal, state and local funding.

- Bond authority in legislation currently pending before Congress appears to have bi-partisan support and is a logical source for addressing some of the critical Northeast Corridor infrastructure projects. Some changes may be necessary to pending legislation to allow individual corridor states to issue bonds for NEC infrastructure work that is not related exclusively to high-speed rail. This is true of guaranteed loan programs such as those currently pending in H.R. 2950 and S. 1991, which would be effective if states used their discretion to exercise those programs.

- Tax incentives for public interest rail projects like those being proposed by the Association of American Railroads could generate private sector investments in the NEC and take some pressure off the appropriations process to find all the funding required.

- Creative partnerships with private sector entities such as "design and build" agreements with engineering construction firms and Regional Transmission Organizations could be a means to build much needed electric transmission lines in the Northeast. Such partnerships could implement the $800 million catenary replacement program on the south end of the corridor. One legislative proposal in the Energy bill pending before Congress would authorize $130 million for the development of a more energy efficient locomotive. A similar policy approach could be used as an incentive to encourage the development of electric traction technology for all the electric trains that operate in the NEC. Existing railroad guaranteed loan programs could be used to finance such projects on a user payback basis. There are numerous consumers of electric power on the corridor that, over time, would provide a sufficient stream of revenues to pay off the capital investment.

- Turning over portions of the corridor that are used primarily by commuter authorities (like the Penn Station Complex) to local commuter authorities would shift many of the associated maintenance costs and capital expenditure requirements that are now dependent on federal appropriations to other sources.

- Reauthorize the Northeast Corridor Improvement Project (NECIP) to provide federal funding for life safety/security concerns on the corridor.

- Expand the flexibility provisions in TEA 21 and similar flexible provisions in the Aviation Trust Fund where NEC improvements would relieve capacity and congestion restraints of major highways and airports. The NEC serves cities with

four of the seven most congested airports in the U.S., and parallels Interstate 95 for large sections. Today, the NEC's operations help reduce regional congestion on highways and airports and justify flexibility in how these programs assure the availability and value of an alternative mode of transportation.

ADDITIONAL RECOMMENDATIONS

Not taking a creative and aggressive approach to resolve the capital needs of the Northeast Corridor would be a serious and costly mistake in national transportation policy. From our analysis of NEC program and cost data, and interviews with the major users of the NEC infrastructure, we are convinced that the first essential step toward preservation and enhancement of the NEC is to place the ownership in the hands of an entity other than Amtrak. A Federal corporation, a combination of state entities or a combination of Federal and state agencies, would give the Northeast Corridor better access to alternative funding resources and a broader understanding by all government policy makers of the transportation value of the NEC to the nation and the region it serves. At the same time, Amtrak's national system's operations would benefit from not having the NEC capital requirements coupled with the network's operating needs, when seeking operating assistance from Congress and the states. We recommend the following actions:

- Transfer the NEC infrastructure to the Department of Transportation;
- Authorize the Secretary of Transportation to contract for an outside engineering analysis of the NEC's infrastructure needs and the associated costs and develop a five-year maintenance and capital investment program;
- Authorize the Secretary to identify portions of the corridor (if any) that should be turned over to local authorities;
- Require the Secretary to report back to Congress in one year on funding options to be considered for NEC infrastructure improvements.

APPENDIX A

TYPICAL PASSENGER TRAIN TRAFFIC
WEEKDAYS* (SEPT. 29,2001 TIMETABLE)

LINE SEGMENT	AMTRAK	COMMUTER	PSSGR TOTAL
BOSTON - BACK BAY	36	173	209
BOSTON-DORCHESTER BR.	0	49	49
BACK BAY - FORREST HILLS	32	132	164
FORREST HILLS - READVILLE	32	72	104
READVILLE - CANTON JCT	32	72	104
CANTON JCT - ATTLEBORO	32	34	66
ATTLEBORO - PROVIDENCE	32	26	58
PROVIDENCE-NEW LONDON	32	0	32
NEW LONDON - OLD SAYBROOK	32	12	44
OLD SAYBROOK - MILL RIVER	32	28	60
MILL RIVER-NEW HAVEN	46	28	74
SPRINGFIELD - NEW HAVEN	12	0	12
NEW HAVEN - CP261	40	76	116
CP261 - CP257	40	89	129
CP257 - CP241	40	111	151
CP241 - STAMFORD	40	176	216
STAMFORD - CP216	40	242	282
CP 216 - HAROLD	40	0	40
HAROLD(SSY01) - NEW YORK	129	521	650
EMPIRE CONNECTION	28	0	28
NYP - SWIFT	107	226	333
SWIFT-NEWARK	107	207	314
NEWARK - HUNTER	107	254	361
HUNTER - UNION	107	190	297
UNION - COUNTY	107	99	206
COUNTY - TRENTON	107	84	191
TRENTON(XMO) - SHORE	107	62	169
SHORE - ZOO	107	165	272
ZOO - 30TH ST(LL)	114	29	143
30TH ST(LL) - PHIL	85	1	86
PHIL COMPLEX	85	137	222
PHIL - MARCUS HOOK	85	61	146
MARCUS HOOK - WILM.	85	37	122
WILMINGTON - PERRYVILLE	85	20	105
PERRYVILLE - BALTIMORE	85	14	99
BALTIMORE - WASHINGTON	85	44	129
WASH. - ALEXANDRIA	20	30	50
ALEX. - MANASSAS	4	18	22
ALEX. - FREDERICKSBURG	18	12	30
FRED. - RICHMOND	18	0	18
RICHMOND - NEWPORT NEWS	4	0	4
30TH ST - ZOO	22	261	283
ZOO - OVERBROOK	22	123	145
OVERBROOK - BRYN MAWR	22	101	123
BRYN MAWR - FRAZER	22	86	108
FRAZER - DOWN./THORNDALE	22	48	70
DOWN./THORNDALE - LANCASTER	22	2	24
LANCASTER - HARRISBURG	22	0	22
*NOTE: WEDNESDAY USED FOR COUNTS			

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N.ROCHELLE

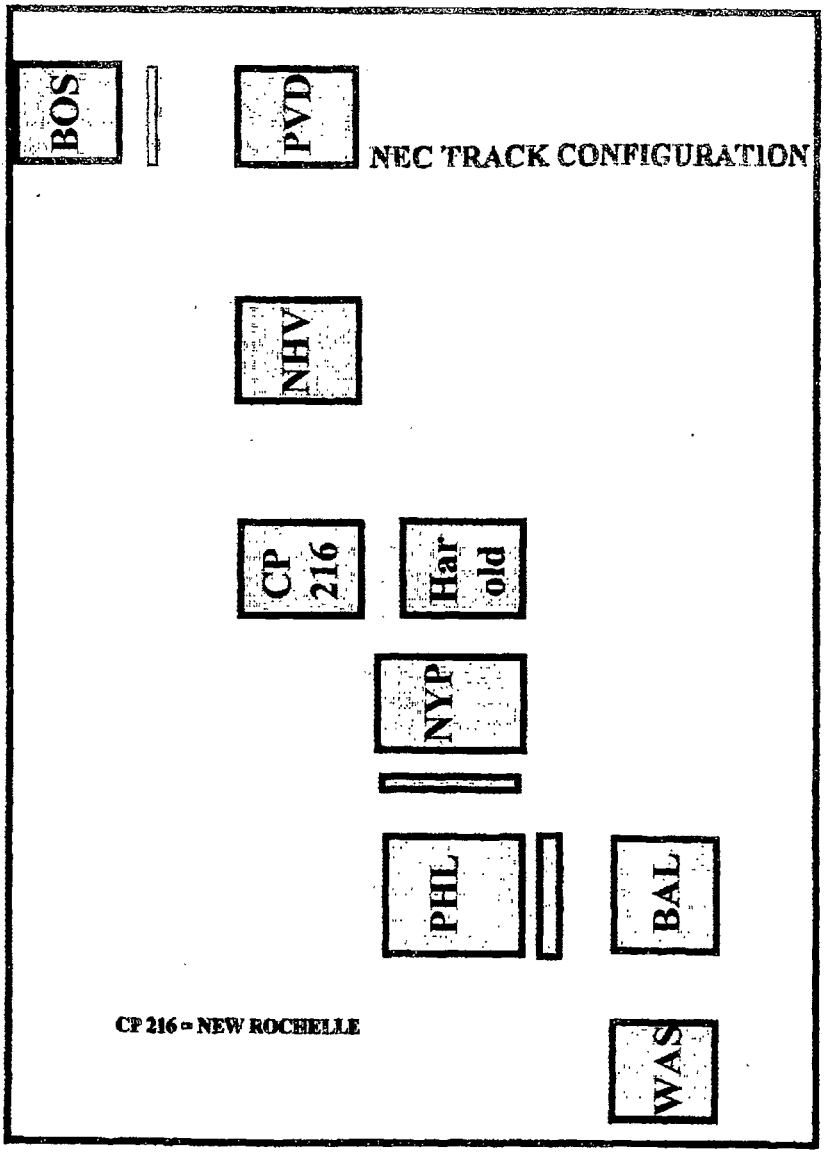
TYPICAL PASSENGER TRAIN TRAFFIC
SATURDAYS (SEPT. 29,2001 TIMETABLE)

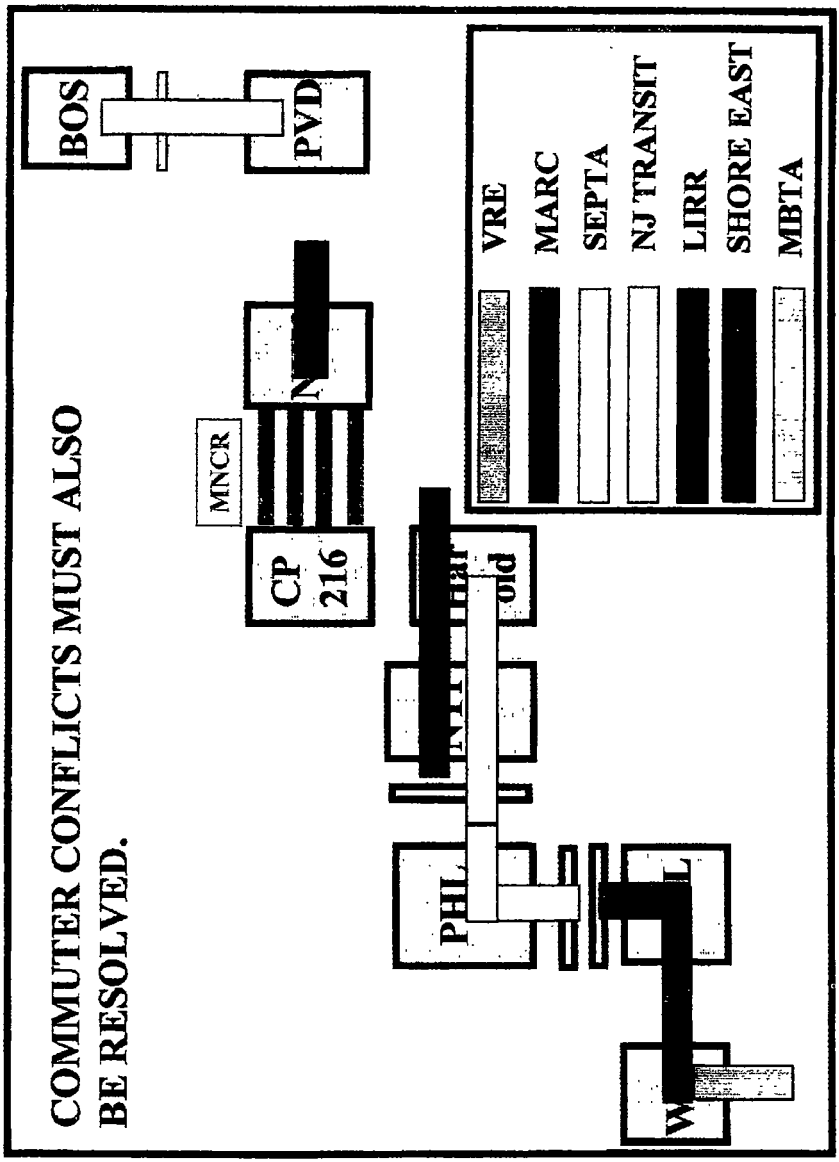
LINE SEGMENT	AMTRAK	COMMUTER	PSSGR TOTAL	
BOSTON - BACK BAY	28	74	102	
BOSTON-DORCHESTER BR.	0	0	0	
BACK BAY - FORREST HILLS	24	55	79	
FORREST HILLS - READVILLE	24	18	42	
READVILLE - CANTON JCT	24	18	42	
CANTON JCT - ATTLEBORO	24	18	42	
ATTLEBORO - PROVIDENCE	24	18	42	
PROVIDENCE-NEW LONDON	24	0	24	
NEW LONDON - OLD SAYBROOK	24	0	24	
OLD SAYBROOK - MILL RIVER	24	0	24	
MILL RIVER-NEW HAVEN	36			
SPRINGFIELD - NEW HAVEN	12	0	12	
NEW HAVEN - CP261	32	0		
CP261 - CP257	32	N/A		
CP257 - CP241	32	N/A		
CP241 - STAMFORD	32	N/A		
STAMFORD - CP216	32	N/A		
CP 216 - HAROLD	32	0	32	
HAROLD(SSYD) - NEW YORK	96	na		
EMPIRE CONNECTION	24	0	24	
NYP - SWIFT	70	127	197	226
SWIFT-NEWARK	70	105	175	207
NEWARK - HUNTER	70	131	201	254
HUNTER - UNION	70	95	165	190
UNION - COUNTY	70	51	121	
COUNTY - TRENTON	70	51	121	
TRENTON - SHORE	70	36	106	
SHORE - ZOO	70	98	168	165
ZOO - 30TH ST(LI)	74	28	102	29
30TH ST(LI) - PHIL	62	0	62	
PHIL COMPLEX	62	111	173	
PHIL - MARCUS HOOK	62	35	97	61
MARCUS HOOK - WILM.	62	12	74	
WILMINGTON - PERRYVILLE	62	0	62	
PERRYVILLE - BALTIMORE	62	0	62	
BALTIMORE - WASHINGTON	62	0	62	
WASH. - ALEXANDRIA	17	0	17	
ALEX. - MANASSAS	2	0	2	
ALEX. - FREDERICKSBURG	17	0	17	
FRED. - RICHMOND	17	0	17	
RICHMOND - NEWPORT NEWS	4	0	4	
30TH ST - ZOO	12	123	135	
ZOO - OVERBROOK	12	53	65	
OVERBROOK - BRYN MAWR	12	53	65	
BRYN MAWR - FRAZER	12	53	65	
FRAZER - DOWNINGTOWN	12	25	37	
DOW./THORNDALE - LANCASTER	12	0	12	
LANCASTER - HARRISBURG	12	0	12	

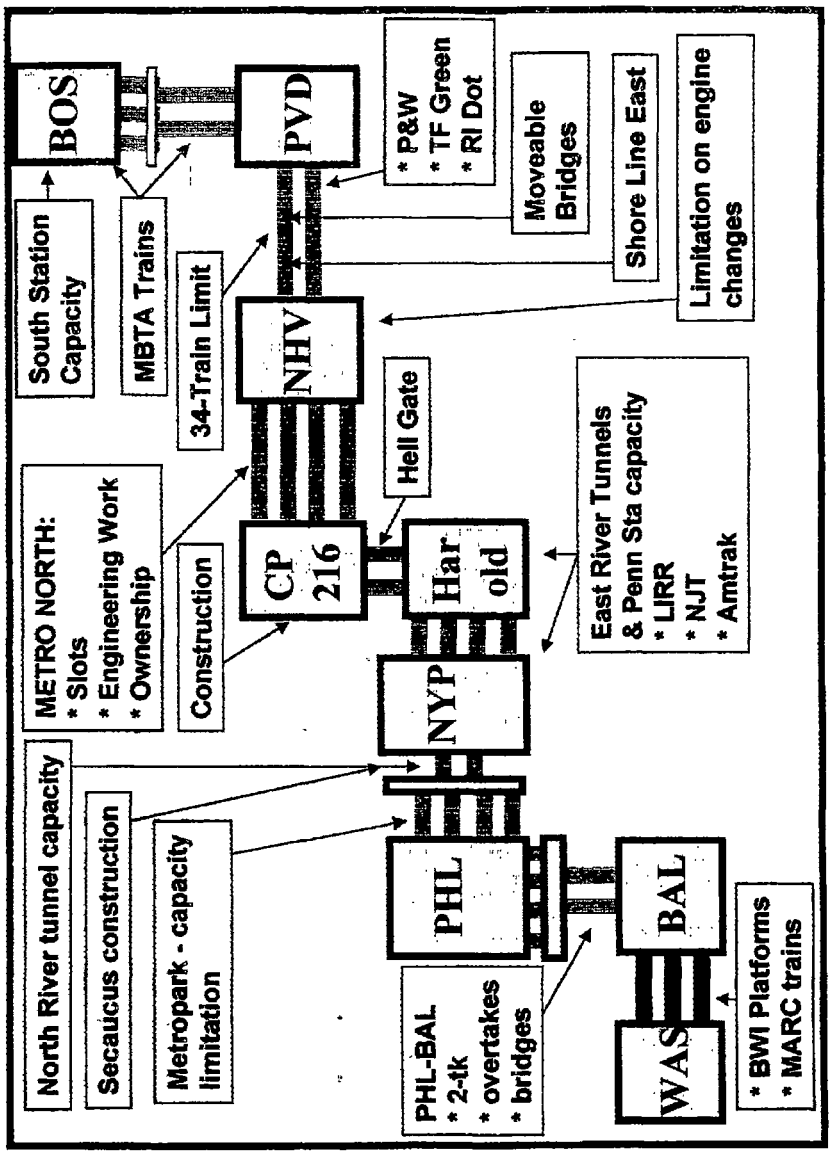
Prepared by Schedule Systems 10/11/01

LINE SEGMENT	AMTRAK	COMMUTER	PSSGR TOTAL	
	TYPICAL PASSENGER TRAIN TRAFFIC SUNDAYS (SEPT. 29,2001 TIMETABLE)			
BOSTON - BACK BAY	29	43	72	
BOSTON-DORCHESTER BR.	0	0	0	
BACK BAY - FORREST HILLS	25	27	52	
FORREST HILLS - READVILLE	25	14	39	
READVILLE - CANTON JCT	25	14	39	
CANTON JCT - ATTLEBORO	25	14	39	
ATTLEBORO - PROVIDENCE	25	14	39	
PROVIDENCE-NEW LONDON	25	0	25	
NEW LONDON - OLD SAYBROOK	25	0	25	
OLD SAYBROOK - MILL RIVER	25	0	25	
MILL RIVER-NEW HAVEN	37			
SPRINGFIELD - NEW HAVEN	12	0	12	
NEW HAVEN - CP261	33	N/A		
CP261 - CP257	33	N/A		
CP257 - CP241	33	N/A		
CP241 - STAMFORD	33	N/A		
STAMFORD - CP216	33	N/A		
CP 216 - HAROLD	33	0	33	
HAROLD(SSYD) - NEW YORK	102	N/A		
EMPIRE CONNECTION	25	0	25	
NYP - SWIFT	77	127	204	226
SWIFT-NEWARK	77	102	179	207
NEWARK - HUNTER	77	131	208	254
HUNTER - UNION	77	93	170	190
UNION - COUNTY	77	49	126	
COUNTY - TRENTON	77	49	126	
TRENTON - SHORE	77	36	113	
SHORE - ZOO	77	98	175	165
ZOO - 30TH ST[LL]	81	28	109	29
30TH ST[LL] - PHIL	67	0	67	
PHIL COMPLEX	67	104	171	
PHIL - MARCUS HOOK	67	28	95	61
MARCUS HOOK - WILM.	67	0	67	
WILMINGTON - PERRYVILLE	67	0	67	
PERRYVILLE - BALTIMORE	67	0	67	
BALTIMORE - WASHINGTON	67	0	67	
WASH. - ALEXANDRIA	19	0	19	
ALEX. - MANASSAS	4	0	4	
ALEX. - FREDERICKSBURG	17	0	17	
FRED. - RICHMOND	17	0	17	
RICHMOND - NEWPORT NEWS	4	0	4	
30TH ST - ZOO	12	105	117	
ZOO - OVERBROOK	12	35	47	
OVERBROOK - BRYN MAWR	12	35	47	
BRYN MAWR - FRAZER	12	35	47	
FRAZER - DOWNINGTOWN	12	1	13	
DOW./THORNDALE - LANCASTER	12	0	12	
LANCASTER - HARRISBURG	12	0	12	

Prepared by Schedule Systems 10/11/01


BOS
PVD
NEC TRACK CONFIGURATION
NHV
CP 216
Har old
NYP
PHL
BAL
WAS
CP 216 = NEW ROCHELLE


COMMUTER CONFLICTS MUST ALSO
BE RESOLVED.
BOS
PVD
MNCR
CP
216
PHL
VRE
MARC
SEPTA
NJ TRANSIT
LIRR
SHORE EAST
MBTA


BOS
South Station Capacity
MBTA Trains
PVD
* P&W
* TF Green
* RI Dot
Moveable Bridges
Shore Line East
Limitation on engine changes
34-Train Limit
NHV
METRO NORTH:
* Slots
* Engineering Work
* Ownership
Construction
CP 216
Hell Gate
Har old
East River Tunnels & Penn Sta capacity
* LIRR
* NJT
* Amtrak
North River tunnel capacity
Secaucus construction
Metropark - capacity limitation
NYP
PHL
BAL
WAS
PHL-BAL
* 2-tk
* overtakes
* bridges
* BWI Platforms
* MARC trains

APPENDIX B

1. January 4, APTA, briefing on BGL assignment and general views of APTA on NEC intercity and commuter matters.

2. January 4, CONEG, NEC states' concerns regarding funding for NEC infrastructure improvements.

3. January 14, Maryland DOT, MARC use and financial contributions to NEC.

4. January 18, MetroNorth Commuter Railroad, funding of NEC portion owned by MNCR

5. January 23, New Jersey Transit, financial contributions NJT has made to those portions of the corridor used by NJT.

6. January 24, Amtrak, Office of Planning & Scheduling, complex issues regarding scheduling of multiple users and congestion points on NEC corridor.

7. January 25, Norfolk Southern, NS' operating agreement and contributions to Amtrak for use of NEC.

8. January 28, PennDot, Pennsylvania's contributions to infrastructure on Harrisburg Line.

9. January 28, MARC, Amtrak-MARC's contract to pay for operating commuter service and use of NEC facilities.

APPENDIX C

		FY 2003 (millions)	
Agency	**Access**	**Capital Contribution**	**Total**
ConnDOT	.8	--	0.8
LIRR	6.6	--	6.6
MARC	8.1	5.0	13.1
MBTA	10.2	--	10.2
NJT	30.0	35.0[1]	65.0
SEPTA	21.8	--	21.8
VRE	.9	1.6	2.5
DelDOT	2.5	.8	3.3
Freight	14.9	--	14.9
Total	$95.8	$42.4	$138.2
(FY 2002	**$90.0**	**$32.4**	**$122.4)**

[1] The capital contribution for NJT in FY2002 was $25 million.

Mr. Rogers. Mr. Mead, since deregulation in the airline industry, competition between private air carriers has resulted in a greater range of choices for consumers and lower average airfares, at least for leisure travelers. Do you think introducing competition into passenger rail could exert the same competitive forces encouraging service to improve and reduce costs of rail travel?

[The Information Follows:]

It is true that deregulation in the airline industry has resulted in a greater range of choices for consumers and lower average airfares for leisure travelers. However, having multiple providers of rail service over the same route as we do in air service is neither realistic, nor likely to be economically efficient given the low demand and high fixed cost for relatively slow intercity trains.

Establishing periodic competition to be the sole service provider may yield benefits in service offerings and fares. The answer will depend on the concurrent capital subsidy provided. Without sufficient capital, no operator of either long-distance trains or corridor services is likely to provide appealing or efficient passenger services.

Mr. MEAD. I have one question. Administrator Rutter is going to get to you the administration's plan in a couple of months, within a couple of months, by the time you mark up and he desperately wants to do that, he said. I also heard you say that you wanted Amtrak's numbers for this $1.2 billion scrubbed and Mr. Warrington has committed to getting us those numbers so we can get on with the process of scrubbing that. It is going to be particularly important if the plan that comes forward contemplates cost sharing between the states and the federal government. Meanwhile, you have to mark up this legislation and report out a bill before you know what the authorization is going to look like. Your forecasts right now, this request, is not based on a concept of an 80/20 or 70/30 match.

Mr. ROGERS. Well, let me just say this. We are not going to do as we have done before. That day is over. Amtrak is going to change. We are not going to pour money in that hole any more and if you want a national rail system, you had better get busy. And I suggest you talk to these folks who have put a lot of time into this restructuring and, of course, to Mr. Warrington, who has vast experience and, of course, Ken Mead is going to keep an eye on you, too. And I expect we are going to be back here at this same table pretty soon and we are going to see how far you have come. Because I have an idea there will not be a re-authorization bill this year.

And so this may be, as I have said at the outset, the only train leaving the station. And if it is going to be the only train leaving the station, I am going to scrub the load before it goes. So this is not your last appearance, your last chance to testify here.

Mr. RUTTER. I certainly hope it is not my last.

Mr. ROGERS. And so we are going to send you back to the shops now and we want some work done.

Mr. RUTTER. Yes, sir.

Mr. ROGERS. And we will have you back up here and see how far you have come. I do not have a date in mind at this point in time, but it cannot come any later than late April. So I am going to say by the last week of April you all better be prepared because we are going to give you a chance to save the world.

Anything else before we close down here?

Mr. CARMICHAEL. We would just thank you, Mr. Chairman, for letting us—the ten members of this council—present their citizens' report. They did some good work.

Mr. ROGERS. Well, they did and I want to thank you and the members of the reform council for the work that you put into this and the dedication and devotion. I know it is a chore and we appreciate it very much in the public interest and we hope that you have precipitated some sort of action here.

Thank you very much.

AMTRAK
QUESTIONS FOR THE RECORD FROM CHAIRMAN ROGERS
HOUSE SUBCOMMITTEE ON TRANSPORTATION APPROPRIATIONS
FEBRUARY 27, 2002

Grant Request

Mr. Rogers. In announcing your 2003 grant request, Amtrak states that some of the reasons it was experiencing recent financial troubles was due to inadequate capital funding and conflicting policy mandates. The amount of projected capital funding and what you describe as conflicting policy mandates have been in existence and known to all since the Reform Act was passed in 1997. Your position *now* is that these conditions were insurmountable from the start. Why wasn't that your position in 1997 when we, Congress, could have done something about it?

[The information follows:]

First, it is important to remember that Amtrak's current Board of Directors and its President and CEO were not confirmed and assembled until 1999, two years after passage of the 1997 Amtrak Reform and Accountability Act and were therefore not in a position to voice their perspective during the crafting of the legislation. The Amtrak Board and its President and CEO, George Warrington, later undertook the challenge to achieve operational self-sufficiency by developing a strategic business plan that would maximize all of Amtrak's assets leading to additional revenue and long term cost savings because it was mandated by the new law. We did everything we could to comply with the mandate.

Mr. Rogers. If these are truly insurmountable, why have you been providing guarantees to Congress as recently as last year that Amtrak would meet its self-sufficiency mandate?

[The information follows:]

By following the operational self-sufficiency measure as set within the Reform Act, Amtrak was set to use only $40 million of its FY02 $521 million federal grant to support its daily operations with the expectation that it could reduce that number to zero in FY03, thereby meeting the self-sufficiency mandate. However, since Amtrak's President and CEO testified in June of last year, Amtrak has had to face several new challenges that were beyond its control: the weakened economy; unanticipated security costs in the wake of September 11; the continued delay of Acela Express; and the Amtrak Reform Council's finding.

First, while Amtrak has been fortunate to see growth on some segments amid the broader industry recession, its overall ridership has not grown as strongly as projected due to the decline in leisure travel. By the end of this fiscal year, the recession will have reduced total revenues by about $120 million.

Second, the costs of added security and safety measures since September 11 is expected to be about $16.5 million in FY '02. Congress has provided $5 million toward these costs, but there is still a much larger program of infrastructure hardening, equipment security, and tunnel safety

improvements that we are recommending for the safety and security of everyone touched by Amtrak service.

Third, the introduction of Acela Express - one of the cornerstones of Amtrak's long-term success - was postponed for more than a year by delays in delivery of the equipment from the manufacturer. The service was finally launched in December 2000, and first-year results have been promising. But the introductory delay and the subsequent delivery schedule delays have had a substantial impact on financial performance, costing Amtrak approximately $300 million over three fiscal years.

And finally, the November 2001 finding by the Amtrak Reform Council had a direct cash impact of $52 million since November.

Mr. Rogers. For fiscal year 2003, Amtrak is requesting $1,200,000,000. How much of this will be spent on operating expenses? Do you believe bill language is necessary to clarify this point? If so, please provide bill language for the record.

[The information follows:]

Because substantial amounts of the $1.2 billion sought in FY 2003 grant funds would be used for purposes other than capital acquisitions or maintenance of equipment and infrastructure, funds should be appropriated both for capital and operating outlays. The language would be as follows:

''To enable the Secretary of Transportation to make grants to the National Railroad Passenger Corporation, as authorized by 49 U.S.C. 24104, $1,200,000,000, to remain available until expended, of which $360,000,000 shall be available for operating losses, and $840,000,000 shall be for capital improvements.''

Mr. Rogers. Of the $1,200,000,0000, how much do you plan on spending on capital expenditures, such as maintenance of way and maintenance of equipment?

[The information follows:]

The majority of the $1.2 billion is for capital needs - for a total of $840 million in capital. These capital needs are detailed further in answers to questions below.

Mr. Rogers. Amtrak's grant request states that it will require about $840,000,000 for legal requirements, safety and reliability. Please detail for the Committee exactly what these requirements are, by cost activity.

[The information follows:]

Amtrak FY03 Equipment Maintenance Requirements

Regulatory Legal Compliance - Federal regulations require that all railroads perform specified inspections, component overhauls and repairs. These requirements are prescribed mostly on the basis of elapsed time in service. Some were

initiated many years ago and all are intended to insure safe operations.

Cost of Air Brake System & Truck Overhauls - Federal regulations require that air brake systems be disassembled and rebuilt on a regular basis. This must occur every three years for locomotives and every four years for cars. All working components (e.g., valves, cylinders, etc.) must be removed from the car or locomotive, cleaned and brought within proper tolerances, all wearable parts (e.g., gaskets, springs, etc.) replaced, and the reassembled and lubricated units bench tested prior to being reapplied to equipment. This process requires significant teardown of the related equipment.

Accordingly, Amtrak takes the opportunity provided to do a complete truck overhaul on any equipment receiving its air brake work. (Trucks are the wheel, axle and suspension systems upon which equipment rides.) At the time of this work, a typical long distance car would have traveled one million miles, a corridor car approximately 800,000 miles and a locomotive more than half a million miles. Locomotives are much heavier than cars and their trucks are subject to greater stresses due to the work of pulling trains.

In a truck overhaul, Amtrak completes the disassembly initiated by the air brake work and replaces or restores all components. This includes wheels, axles, frames, disk and tread brake hardware not otherwise included in regulatory requirements, plus all sensors, pins and wiring. It is Amtrak's experience over 30 years that regular truck overhauls are essential to a safe and comfortable ride.

During FY03, the following equipment will come due for brake and truck programs:

11 Locomotives	$6 Million
323 Passenger Cars	$24 Million
260 Mail & Express Cars	$9 Million
Total Program Cost	$39 Million

Cost of New Federal Requirements - Effective on January 1, 2002, new and expanded regulations went into effect for the nation's railroads. These are known as CFR 49 Part 229 for locomotives and Part 238 for cars. They require a complete exterior and interior inspection every calendar day, and test and repair of the locomotive or car and everything that attaches to it. The scope of the exterior includes, for example, all running gear and safety appliances. The interior work encompasses, for example, doors, seats, and emergency lighting and tools. Amtrak has adopted the 180-day maintenance requirement for cars. Up to now, Amtrak has conducted comprehensive car inspections every 120 days as part of its preventive maintenance program. The scope of both Amtrak's former 120-day program and the Federal 180-day program are essentially the same. While the frequency of the program is reduced, it is now a legal obligation and removes any flexibility on the part of any railroad to defer related work to control costs. It remains to be seen whether the 180-day schedule will be sufficient or if more frequent unprogrammed ''bad order'' repairs will also be required to keep equipment in good repair. The frequency of work for locomotives is unchanged but the scope of components inspected is increased.

The following table depicts the number of federally required inspections that will be due in FY03:

Number of Inspections and Cost Under the Code of Federal Regulations 238 and 229	
447 Locomotive	$18 Million
2666 Passenger Car	$38 Million
2714 Mail & Express	$ 9 Million
Total Program Cost	$65 Million

In addition, certain less comprehensive daily inspections, pre-departure inspections and enroute inspections are also specified in Federal Regulations.

Mandated Costs - In order to keep its new fleet of General Electric diesel locomotives in top condition, Amtrak entered into a multi-year agreement with the manufacturer to oversee maintenance, provide material and spare parts, and guarantee the reliability of the fleet. This kind of agreement is becoming much more common among all railroads as they seek to transfer the risk of unreliability to the makers of this increasingly high tech equipment. The contract requires that Amtrak perform regular overhauls on the specified locomotives at 1.1 million miles or five years, whichever comes first. The cost for the 50 units that will be due in FY03 is $31 million.

Overhaul & Wreck Repair Costs -

When a locomotive or car is due for any of the legally prescribed maintenance described above, Amtrak evaluates it based upon its overall condition and the last date that it received a

availability of funds, equipment that is due for and requires a general overhaul is taken into a backshop for all work. The cost of any regulatory work is included in the financial estimates shown above. The table below depicts the costs associated with comprehensive overhauls and upgrades.

Equipment Overhaul Program Costs

12 AEM-7 Locomotive Remanufactures	$48 Million
75 Amfleet/Horizon Interior Upgrades	$18 Million
Component Life Cycle Replacements	$10 Million
110 Superliner Upgrades	$ 9 Million
18 Viewliner Overhauls	$ 4 Million
10 Heritage Dining Car Overhauls	$ 4 Million
Diesel Switcher Fleet Upgrade	$ 2 Million
Wreck Repair Program	$19 Million
Total Program Cost	$114 Million

The AEM-7 locomotive remanufacturing program will continue Amtrak's efforts to improve the reliability of its electric locomotive fleet. These units now average 20 years old and employ an obsolescent direct current propulsion technology that needs to be replaced. Rebuilding the AEM-7's is less costly than purchasing additional new HHP-8 units. The remanufactured AEM-7's will employ new alternating current propulsion technology.

Amtrak's Amfleet I and II cars provide most coach, café and lounge service east of Chicago. Due to a lack of funds, overhaul and upgrade programs for this equipment were cancelled for food service cars in FY99 and for coaches in FY01. In particular, the mid-life renewal that was initiated for the 26-year-old Amfleet I cars had

to be stopped despite the fact that much of the required material was already on hand. Subject to available funding, Amtrak's proposed program for 48 Amfleet I cars used mostly on the Northeast Corridor would include:

- Overhauling two air conditioning units per car
- Replacing air conditioning control panels
- Replacing temperature control panels
- Renewing gaskets to eliminate leaks
- Replacing end door relay panels
- Replacing end door motors
- Converting food service units to environmentally friendly R-134A refrigeration
- Installing new lavatories and bathroom modules
- Replacing seat cushions
- Applying a new exterior decal package

The proposed program for 27 Amfleet II cars used on the national system would include:

- Overhauling two air conditioning units per car
- Replacing air conditioning control panels
- Replacing temperature control panels
- Rebuilding toilets
- Replacing seat cushions
- Replacing end door motors
- Designing and installing a replacement prototype café refrigeration system
- Installing fully isolated smoking lounges
- Upgrading interiors with new window and ceiling panels

Cars from Amtrak's short distance Horizon fleet would receive similar work. Many Horizon cars were recently transferred from the West Coast to the Upper Midwest as new California, Surfliner and Talgo cars were delivered and put into

service in the west. The transfer highlighted a design deficiency in that the cars are insufficiently protected from freeze damage. This was not evident in the milder west coast environment. That deficiency will be corrected. In addition, Amtrak will:

- Overhaul the air conditioning units
- Replace the air conditioning control panels
- Replace the temperature control panels
- Replace gaskets to stop leaks
- Rebuild the toilets
- Replace the seat cushions
- Improve the reliability of the 480-volt on board power distribution system

The component life cycle replacement program for rolling stock takes advantage of the opportunity of any scheduled maintenance activity to replace components based upon their known life expectancy. If it is known, for example, that a particular type of compressor can be expected to fail after 500,000 hours of operation, and we know that the particular unit on which it is installed will not be due for maintenance until after that point, we would like to replace the compressor while the equipment is shopped anyway to avoid unscheduled repairs. This is less costly and less disruptive to operations than unprogrammed failure-based replacement.

Amtrak's Superliner fleet is used on overnight trains of the national system, primarily in the west. There has been no comprehensive overhaul program for these cars since 1997. The entire fleet is past due for its four-year overhauls.

Amtrak would focus most of the effort on 72 20-year-old Superliner I cars that have never received an interior restoration or seat replacement. They have each seen approximately four million miles of service. Their deteriorated interiors require additional cleaning efforts but those efforts do not achieve results commensurate with the effort or cost because of the underlying condition of the cars. The proposed program for these cars includes:

- Overhaul of air conditioning units
- Replacement of seat cushions, all carpets and window privacy drapes
- Replacement of aging and soiled carpeted wall cover with contemporary plastic laminate that is already paid for and in Amtrak's Beech Grove warehouse
- Replacement of end door motors

The less comprehensive program for 27 newer Superliner II cars would include:

- Overhaul of air conditioning units
- Replacement of seat cushions and carpets

The overhaul program for the 18 Viewliner cars would be similar to the Superliner II cars since they are of approximately the same age. In addition, however, Amtrak needs to perform a complete replacement of all the numerous Ogontz valves that protect this equipment from freezing when power failures occur.

The Heritage diner overhaul program would complete ongoing upgrades to a car fleet originally constructed in the early 1950's and last rebuilt by Amtrak more than 20 years ago. This program

would replace all kitchen components with new or reconditioned equipment and standardize kitchens across all cars. Improvements need to be completed to the kitchen water, electrical, and venting systems. Dining areas must be dissembled so that repairs can be completed to flooring, seating, heating, air-conditioning, ventilation, and lighting systems. All seating, tables, wall and floor coverings need to be replaced in a style and color similar to the pending Superliner I upgrade program. Major mechanical systems need to be overhauled. The existing Freon 12-refrigeration system should be replaced with an environmentally friendly refrigerant system that would also reduce costs.

The diesel switching locomotive fleet could be upgraded at minimal cost by trading some of Amtrak's retired equipment for better switching locomotives. Some cash is needed nonetheless to make this stored equipment suitable for movement to the other party's location. We know that rail equipment remanufacturers would find numerous components in these retired locomotives useful for their rebuild programs.

Also included in the above line item are funds to re-spring and dampen Amtrak's F-40 cab control cars. The equipment is utilized to provide less costly operation of train service by using this non-powered cab control unit on one end of the train and the locomotive at the other. When the train arrives at its destination it no longer requires repositioning the locomotive from one end to the other. The engineer simply moves from the lead engine's cab to the trailing cab and utilizes it to control the now trailing locomotive eliminating the cost to turn the train. The

equipment has been created from former F40 locomotive bodies with the engines removed. To compensate for the weight change we must re-spring and dampen the equipment to meet the guidelines for safe operations and the comfort of our engineers.

Wreck repairs - Amtrak has numerous cars and locomotives stored as a result of wrecks and fires. This equipment could otherwise be earning revenue or substituting for life-expired equipment (e.g., Heritage coaches or E60 locomotives) that could be retired. It would not be possible due to shop capacity constraints to repair all stored equipment. For the national system, Amtrak proposes that 18 Superliner cars and six Amfleet II / Horizon be repaired along with six diesel locomotives. It is also proposed to repair eight Amfleet cars and one fire-damaged AEM-7 electric locomotive for the Northeast Corridor. Five express cars are also planned for repair

Facilities - Amtrak requires improvements at its equipment maintenance facilities to reduce the cost of wheel repairs, improve the effectiveness of inspections and other repairs, and promote overall efficiency. Wheel truing machines eliminate the labor-intensive process of many wheel repairs. At locations where Amtrak has no wheel truing machines, defective wheel and axle assemblies must always be removed from the car or locomotive and carried to a lathe for correction. A wheel-truing machine corrects many defects without the need to remove the wheel. Also, new federal inspection requirements could be more effectively carried out if lighting and pits could be constructed at more locations. These facilities make it possible to conduct inspections

faster and more accurately than is possible when a mechanic must look under the equipment from the side with a flashlight.

Facilities

Install wheel truing machines one at Beech Grove, IN and Bear, DE	$ 4 million
Install pits & lighting at various locations for better inspection and repairs	$ 5 million
Provide industrial engineer studies to determine efficiency improvements, better workflow and tooling	$ 3 million
Total Facilities Program	$12 million

Amtrak FY03 Infrastructure Maintenance and Renewal

Amtrak's owned infrastructure is concentrated in the Northeast but includes certain properties in the Midwest and elsewhere. It has historically been undercapitalized and suffered from decades of deferred maintenance dating to freight railroad ownership of passenger service prior to 1971. This has resulted in abnormally high maintenance costs, a reduced life span of plant components, lower service reliability and slower speeds. From the customer's perspective, this has caused less confidence in service reliability, longer trip times and lower levels of ride comfort than would have been possible otherwise. The financial impact on Amtrak has been a substantially lower level of revenue than would be achieved with state-of-the-art infrastructure.

Amtrak's infrastructure capital program maintains the safety and reliability of current operations. This section addresses only the infrastructure that Amtrak owns. Outside the Northeast, the

majority of Amtrak service operates over the track of freight railroads that are responsible for its condition.

Track Program - This program insures that all tracks are kept in suitable condition for the types and speeds of service required by Amtrak's customers. Important elements of track condition include: a stable sub-grade with good drainage, a clean bed of crushed rock ballast to support the track and maintain proper alignment, physically sound concrete or wood crossties, and (preferably) continuous rail. Demanding track geometry tolerances (e.g., alignment and cross-level) must be continually maintained due to the speeds that passenger trains need to operate. Amtrak owns over 1,500 miles of track with over 2 million concrete and almost 3 million wood ties. There are also thousands of switches, numerous interlockings (controlled locations with both switches and signals where trains change tracks and cross each others paths) and numerous grade crossings. FY03 requirements to insure safety and reliability include:

Track program

118,000 mainline concrete crossties	$ 34.3 million
Replace worn rail and eliminate joints	$ 30.0 million
Branch line and terminal wood ties	$ 11.0 million
Replacement of rail fasteners	$ 2.0 million
44 Miles - Ballast cleaning and renewal	$ 13.0 million
400 Miles - Track geometry improvement	$ 6.9 million
10 Interlocking improvements	$ 20.4 million
Total track program	$117.6 million

Signal Program - Railroad signals are vital to maintaining safe train separation, paths and distances as well as providing highway grade crossing protection. Signal devices and switches are mostly electrically operated and are responsive both to the instructions of train dispatchers and the presence of the trains themselves. Amtrak's signals program insures the safe and reliable operation of nearly 3000 individual signal devices over its 1500 miles of owned track, plus remote controlled and manually operated interlockings, switch machines, and its three centralized computer-based traffic control centers.

Signal Program

Interlocking renewal, replacement and reconfiguration	$14.0 million
Signal device and track circuit upgrade	$ 6.0 million
Total Signal Program	$20.0 million

Electric Traction System - Amtrak owns and operates the most extensive and complex electric traction system in the North American rail industry. It includes over 1000 miles of track and consists of poles, catenary wire (to deliver power to each train), transmission lines to distribute power throughout the system, 13 electric power phase and voltage converters and other substations. Most Amtrak and many commuter trains throughout the Northeast are powered by this system that is emission-free at point of use. Amtrak recently extended its electrification system from New Haven, CT to Boston, MA. This eliminated a time consuming electric / diesel locomotive change at New Haven and made it possible for trains to travel at much higher speeds than diesel propulsion allows. On the south end of the Northeast Corridor, however, all trains still use an electric traction system that was installed in the 1930's. It requires continual and expensive maintenance due to its advanced age and the condition of its components. This system also provides power to Amtrak's adjacent signaling systems.

Electric Traction Program

Substation battery, circuit breaker and other component renewal	$ 5.3 million
Rehabilitation of transmission lines	$ 1.3 million
Rehabilitation of catenary components	$ 4.6 million
Replacement of signal power hardware	$ 0.8 million
Total Electric Traction Program	$12.0 million

Structures Program - In addition to its 1500 miles of track, Amtrak owns and is responsible for the upkeep of over 27 track miles of tunnels, almost 1,200 bridge structures, 1,150 culverts, 11 moveable bridges, stations, yards, and mechanical and engineering facilities. The majority of these bridges, tunnels and other structures are approximately 100 years old. They require continual maintenance to insure safe and reliable operation of trains.

Structures Program

Drawbridge replacement designs and component renewals at 12 locations	$29.2 million
30 Fixed bridge ballast deck conversions and component renewals at 30 locations	$15.2 million
Tunnel component renewals and replacement designs	$ 5.0 million
Replace deteriorated culverts	$ 0.7 million
Replace existing fences and barriers	$ 0.8 million
Replace deteriorated ties on 12 bridges	$ 4.0 million
Replace components at 3 maintenance of way bases	$ 1.0 million
Replace windows and subsystems at passenger stations	$ 1.4 million
Renew electrical systems at 3 train control towers	$ 2.8 million
Total Structures Program	$60.1 million

Communications Program - Continuous and dependable communication between trains, dispatchers, maintenance crews, police and others is vital to the safe and reliable operation of trains. To achieve this capability, Amtrak must provide for the operation of radio base stations, antenna systems, fiber optic cable with its drop / insert locations, underground communication duct lines, three million feet of copper cable, telephone systems, and signal code lines. Much of the related infrastructure is old and antiquated, requiring continual renewal to attain reliability. Major program work planned for FY03 is shown in the following table.

Communications Program

Renew copper cable in Baltimore Tunnels	$0.8 million
Renew fiber cable on the Hell Gate line in New York	$2.3 million
Total Communications Program	$3.1 million

Systems Program - The system program addresses the computerized control system, equipment, and capitalized maintenance.

Systems Program

Centralized Electrification and Traffic Control Upgrades	$ 1.8 million
Production track and electric traction maintenance equipment and vehicles	$20.0 million
Renewal of work train rolling stock	$ 1.8 million
Upgrade technological systems, project and construction management, and capitalized maintenance programs	$38.9 million
Total Systems Program	$62.5 million

West and Midwest Program - Amtrak owns approximately 100 miles of right-of-way in Michigan and Indiana. In addition it owns a major station and terminal complex in Chicago, plus smaller facilities in other major cities across the country. This program addresses the needs of the limited infrastructure that Amtrak owns outside the Northeast.

West and Midwest Program

Upgrades and renewals on Amtrak West	$ 3.0 million
Upgrades and renewals in the Midwest	$ 8.0 million
Total West and Midwest Program	$11.0 million

Environmental compliance -- In order to comply with environmental regulations, especially the federal Clean Water Act, the Resource Conservation Recovery Act (RCRA), and Court or EPA ordered clean-ups under the Comprehensive Environmental Response, Compensation and Liability Act (Superfund), Amtrak must invest annually in pollution control systems, site clean-ups and remediation efforts. In FY03, these investments include: continued PCB remediation at Paoli Yard, PA and Wilmington Shops, DE; oil collection systems at Ivy City, DC, Los Angeles, Goletta, and Oceanside, CA and Seattle, WA; oil spill clean-up at Sunnyside Yard, NY, Wilmington Shops, DE, Hialeah, FL and Sanford, FL; hazardous waste facility upgrades at Beach Grove, IN and Wilmington, DE; and pollution control system replacements and upgrades at Beech Grove, IN, Philadelphia 30th Street and New Orleans, LA.

Americans with Disabilities Act (ADA) station compliance. Under the ADA, 42 U.S.C. § 12162(e)(2)(A)(ii)(I), Amtrak is required to make all existing stations for which it is a responsible entity under the implementing regulations accessible to persons with disabilities by no later than July 26, 2010. In order to begin evaluation of each affected station and prioritization of stations for renovation, and to ensure that stations currently undergoing renovation or alteration are done so in compliance with the ADA, Amtrak must make this minimal investment and evaluate what further investments are needed in the future.

Life safety in the New York tunnels. As has been well documented, critical fire and life safety improvements are needed in the East River and

Hudson River tunnels, including ventilation improvements, structural rehabilitation, communications, and security and emergency response investments. The total required for this program is $898 million, of which Congress has provided $100 million in the Department of Defense Appropriations Act of 2001 (P.L. 07-117). Amtrak's FY03 capital request of $26 million represents a minimal additional contribution for FY03 to ensure continuing progress towards completion of the program.

Principal on debt service - $105 million. In the absence of sufficient capital to meet the system's ongoing needs, Amtrak has been compelled over the years to finance a substantial portion of its fleet acquisition program as well as some infrastructure improvements. The principal portion (considered a capital expense) of the resulting debt burden for capital equipment only in FY03 is $105 million, including about $55 million on the long-distance fleet (e.g., Superliner cars), $31 million on the off-NEC corridor fleet (e.g., Horizon cars), and $19 million on the Northeast Corridor (e.g., Acela Express equipment).

Mr. Rogers. One of your cost requirements is the federally mandated 180-day inspection and maintenance of all fleet. The grant request estimates that this will require $190,000,000 in fiscal year 2003. According to the Inspector General, Amtrak had been doing this work every 120 days until recently, when it began to conduct 180-day inspection and maintenance activities as a cost savings measure. How much would these activities require in fiscal year 2003 if you were to go back to a 120-day schedule?

[The information follows:]

An increase of $12.5M, for a total of $38M would be required to reinvest in the 120-day preventative maintenance program. This would increase the labor hours providing maintenance to our car fleet by approximately 200 additional hours per car, annually, for a total of 600 hours of maintenance.

Mr. Rogers. How much of the $1,200,000,000 that Amtrak requested would have been spent on repaying debt?

[The information follows:]

Of the appropriate funds received in FY03, Amtrak would spend approximately $113 million to repay principal and $195 million in interest expense.

Mr. Rogers. Your grant request states that Congress has been paying the excess railroad retirement costs for Amtrak; however, since 1999, Congress has only provided Amtrak with a capital appropriation. Have you diverting funds from the capital grant to pay these costs?

[The information follows:]

In 1999 when Congress changed Amtrak's appropriation to be strictly capital, they also consciously broadened the definition of the use of these funds. The definition was expanded to be similar to that allowed for Transit, which

includes the use of capital for preventive maintenance. Amtrak has, according to its plan and as allowed by the definition, drawn funds for preventive maintenance. This draw* has been in an amount which covers the need for Amtrak to pay excess railroad retirement costs. There has been no diversion of funds.

* This draw has been in an amount which covers the need for Amtrak to pay excess railroad retirement costs.

Mr. Rogers. If Amtrak has been using its own revenues to pay excess railroad retirement costs since 1999, why should Congress begin paying them now?

[The information follows:]

Amtrak has not been using its own revenues to pay excess railroad retirement costs since 1999. It has been drawing funds supported by preventive maintenance costs in a level large enough to cover the shortfall caused by excess railroad retirement costs. Amtrak has clearly stated in its Plan that excess railroad retirement costs are one of the drivers behind its need to draw funds supported by preventive maintenance.

Mr. Rogers. On February 1, 2002, Amtrak announced that if it did not receive $1,200,000,000 in fiscal year 2003, it would cancel all of its long distance routes on October 1, 2002 and may need to consider further cuts depending on the final appropriations level. Please detail for the Committee which long distance routes will be terminated, their start

and endpoints, the number of passengers, and the yearly cost to run the train (total and per passenger).

[The information follows:]

On April 4, 2002 Amtrak sent letters to 46 governors (see hard copy attachment) indicating Amtrak may be forced to eliminate some of its current services if it does not receive an appropriation of 1.2 billion in FY03. The list of long distance routes as referenced in the February, 1 2002 announcement are as follows:

	Route	Start/End Point	FY2001 Passengers	FY2001 Cost excluding Depreciation ($millions)	Cost excluding Depreciation per Passenger
Route 06	Twilight Shoreliner	Boston/Newport News, VA	242,116	$16 6	$68.76
Route 16	Silver Star	New York/Miami	266,246	30.0	112.86
Route 17	Three Rivers	New York/Chicago	134,202	32 8	244.69
Route 18	Cardinal	Chicago/Washington, DC	67,560	12 6	186.91
Route 19	Silver Meteor	New York/Miami	252,269	21 2	84.12
Route 25	Empire Builder	Chicago/Seattle	397,985	45 4	114 14
Route 26	Capitol Limited	Chicago/Washington, DC	153,513	24 2	157 33
Route 27	California Zephyr	Chicago/Emeryville (OAK/SF)	361,229	52 0	143 93
Route 28	Southwest Chief	Chicago/Los Angeles	265,168	62 8	236.76
Route 30	City of New Orleans	Chicago/New Orleans	187,273	23.7	126 81
Route 32	Texas Eagle	Chicago/Los Angeles	148,578	38.4	258 25
Route 33	Sunset Limited	Orlando/Los Angeles	110,262	38 3	347.45
Route 34	Coast Starlight	Seattle/Los Angeles	493,683	45 9	92 98
Route 45	Lake Shore Limited	Chicago/New York	293,405	41 9	142 65
Route 48	Silver Palm	New York/Miami	218,543	28.7	131 31
Route 52	Crescent	New York/New Orleans	264,676	35.0	132 37
Route 54	Kentucky Cardinal	Chicago/Jeffersonville, IN	29,201	6.2	211 65
Route 57	Pennsylvanian	Philadelphia/Chicago	89,855	26 3	292 34
Total Long Distance Trains			**3,975,764**	**$582**	**$146.41**

Sample Governor Letter

April 5, 2002

Dear Governor :

On behalf of the Amtrak Board and in the spirit of 49 U.S.C. §24706 which promotes early notice, I am writing to you with an update on Amtrak's situation and the efforts now underway to ensure continued service on Amtrak's entire system, including the service that currently runs through your state.

As you may know, Amtrak is pursuing a federal appropriation of $1.2 billion in FY 2003 to maintain today's system in the coming year. While we are very early in the legislative process, we are encouraged by the support we have received from members of Congress and from state and local officials throughout the country. In the last few weeks, several pieces of legislation to reauthorize Amtrak have been introduced, including a comprehensive reauthorization and rail development bill sponsored by Senate Commerce Committee Chairman Ernest Hollings (D-SC). This legislation has nearly 30 Senate cosponsors. In addition, the Senate Budget Committee included Amtrak's request in its FY 2003 Budget Resolution which will be considered before the full Senate in April. These are all important steps in the process and reflect support for Amtrak and a national rail passenger system.

That said, the uncertainties associated with the legislative process mean that Amtrak must prepare for the possibility that it will not receive an appropriation sufficient to keep all current services in place. As a corporation, we cannot rely on an uncertain outcome. While Amtrak could not be more committed to a national passenger rail system, if funding falls below Amtrak's budget, it is likely that certain trains will be discontinued. Of course some trains require more direct subsidy than others. Eighteen of these already have been identified as being at high risk and, depending on the level of appropriation, other routes, services or programs are also at risk. I would like to make it very clear that no final decisions about Amtrak services in FY 2003 have been made at this time. Amtrak intends to make decisions after the federal appropriations process has been concluded this fall.

I want to assure you that we are working very hard to secure the funding that is needed to maintain our current services. I also want you to know that we will provide as much notice as possible of route cancellations, should these be required at the conclusion of that process. As you may know, in circumstances like this where train service rests on the availability of federal appropriations, the law does not require Amtrak to provide the customary 180-day cancellation notice, and indeed it would not be feasible to provide notice as to specific routes until Congress takes action.

However, in the spirit of the law, we felt it was important on February 1 and again today to explain Amtrak's financial circumstances and the choices we may face, and to assure you that Amtrak will work closely with you in the important months ahead.

If you have any questions about this or Amtrak's services in general, please contact Joe McHugh, Amtrak's Acting Corporate Vice President – Government Affairs at 202-906-3918.

Sincerely,

George D. Warrington
President and Chief Executive Officer

cc: Secretary, [name of state] Department of Transportation

Mr. Rogers. What other options are under consideration?

[The information follows:]

As previously stated in testimony, Amtrak has taken a number of steps to manage its cash throughout the balance of this year and Amtrak simply cannot continue to manage the current system unless it receives $1.2 billion in FY03. A lesser appropriation will force a series of business plan actions that, depending on the shortfall, could include one or a combination of steps such as deferring capital investment and eliminating services. Amtrak hopes it will not have to take capital deferral or service elimination actions later this year, but must retain this flexibility in the face of uncertain funding levels.

Mr. Rogers. Your budget states that ''while there would clearly be significant cost savings from service reduction in the long-term--approximately $460,000,000 annually--those savings would be partially offset by labor protection obligations of about $250,000,000-$300,000,000 in the first year''. Please detail for the Committee how you derive the cost savings and labor protection obligation figures.

[The information follows:]

The labor protection estimates are not precise. Global assumptions about hypothetical actions, the secondary effects of initial job cuts and employee ability to secure other work opportunities drive

the extent and incidence of labor protection payments. The analysis estimated the percentage of people who could receive labor protection payments by labor category in a broad elimination of long distance routes.

- First, estimate the effect of eliminating these routes by individual ''cost center'' (a.k.a. Responsibility Center). The total corporate financial cost saving was determined by adding the change in costs for each cost center. Based on FY01 corporate-wide actual expenses, the cost savings was estimated to be 28.5% of Amtrak's total expenses.

- Second, estimate the number of employees made redundant by elimination of these routes.

For Engineers, Conductors, On Board Service and Turnaround Servicing crews, the ''man-years'' assigned to these functions were extracted from Amtrak's Financial Information System by route. Because cost centers (other than corporate) are geographically specific, this method captures only those employees on route segments that are no longer served by Amtrak and, hence, captures only those employees that ''trigger'' labor protection payments.

Labor categories that are not geographically specific or will not change in proportion to the service change - mechanical, operating and support staff, for example - were reduced by the corporate-wide dollar reduction in cost center totals (28.5%). Most likely,

these labor categories would not see a proportional reduction in work force. As a result, they were assigned percentages based on a high level review of these labor categories.

- Third, estimate by function, the percentage of employees that are union. In most cases, this percentage is 100%.

- Fourth, compile a matrix for employee length of service across the Amtrak system and apply the guaranteed protection against that level by labor category.

- Fifth, adjust for timing of the estimated first year labor protection payout.

Potential employee relocation and ''displacement'' costs (wage difference before/after the transaction) are *not* figured in.

Mr. Rogers. What would be the labor protection obligation if all long distance routes were stopped in the outyears? Please detail by year.

[The information follows:]

The table below presents a summary of the estimated potential labor protection payments for five years under the contingency that Amtrak's eighteen long-distance passenger routes were discontinued.

	Annual Labor Protection Payment
	$ Millions
Year 1	$ 269
Year 2	269
Year 3	129
Year 4	98
Year 5	31
5-year Total	$ 795

Mr. Rogers. The fiscal year 2002/2003 business plan that accompanied your fiscal year 2003 grant request, you indicate that Amtrak intends to close on financial transactions in fiscal year 2002 that will yield Amtrak up front cash benefits but will not require interest or principal payments. Could you describe the nature of these transactions and estimate how much money you will receive.

[The information follows:]

From April to September 2002, the up front cash benefits that Amtrak would receive from closing on financial transactions but would not require interest or principal payments would be approximately $180 million. Amtrak plans on entering into several highly structured financing transactions, some of these would be in the nature of a ''defeased leveraged lease''.

Mr. Rogers. Of the $1,200,000,000 request, $361,000,000 is for infrastructure investments. Please detail for the Committee each project contained in this amount, how much each will require in 2003 and in each subsequent year until completion, where the project is located, whether there will be any cost sharing, and what impact these projects will have on safety, reliability, and/or other service priorities.

[The information follows:]

This category includes investment needs on Federally-owned infrastructure, and partnerships with other railroads. Below are details of each of these two elements.

§ Federally-owned infrastructure. The federal government, through Amtrak, owns nearly 650 miles of right-of-way including much of the Northeast Corridor (NEC) and portions of the Keystone, Empire, Springfield and Michigan and Indiana lines. While this represents a small fraction of the nation's rail infrastructure, it is among the most complex, high-density rail in the country, serving intercity, commuter and freight operations. Much of the network is rated Class 6 for 126 to 150 mph operations, requiring much higher levels of ongoing capital investment and maintenance than track dedicated to slower moving operations. Moreover, since much of the infrastructure is mixed use - with commuter operations accounting for most of the train movements - Amtrak must maintain significantly more track than would be required for intercity service

alone, along with a complex web of rail crossovers and interlockings that allow trains to enter at numerous points and readily move from one track to another to ensure safe, reliable operations at a variety of speeds. Specifically, this minimum infrastructure investment would be used for life cycle replacement of major components critical for the safety and reliability of intercity, commuter and freight operations on federally-owned infrastructure. Projects to be undertaken, subject to condition assessments, include:

- Track. 80,000 tie replacements; 5 interlocking replacements; 15 miles of rail replacement; 40 miles of drainage, undercutting and subgrade formation improvements; and 400 miles of surfacing.
- Structures. 1,500 bridge tie replacements; 25,000 linear feet of right-of-way fencing; 2,600 linear feet of bridge structural improvements; and 10 culvert replacements.
- Electric Traction. 125 miles of catenary and transmission wire replacement, including auxilary, trolling wire and components; 10 catenary pole replacements; and rehab and replacement of signal power and substations.
- Communications and Signals. ACSES Phase 1 transponders - 40 miles in Delaware and Maryland; ACSES Phase 2 Data Radio, Boston to Washington; North Philadelphia interlocking reconfiguration; 175 switch heater replacements; 600 relay rehabs; and 100,000 feet of signal connectivity cable replacement.

§ Partnerships on non-federally-owned infrastructure. In order to operate at agreed-upon service levels, Amtrak must fulfill its commitments on several agreements with partner railroads, including some that have recently been deferred. These commitments include: Memorandum of Understanding with Connecticut DOT/MTA to ensure Acela slots on Metro North territory through track and catenary improvements, as well as interlocking and drainage improvements in South Norwalk and shell-at-grade interlocking configuration; New York State agreement for infrastructure improvements and Turboliner equipment on the Empire corridor; western state corridor agreements for maintenance facility projects, station improvement projects, and right of way projects to increase capacity and improve reliability.

Mr. Rogers. Of the $1,200,000,000 request, $110,000,000 is for ''other'' investments. Please detail for the Committee each project contained in this amount, how much each will require in 2003 and in each subsequent year until completion, where the project is located, whether there will be any cost sharing, and what impact these projects will have on safety, reliability, and/or other service priorities.

[The information follows:]

This category includes investment needs for fleet overhauls and repairs, facilities, and information technology.

§ Fleet overhauls and repairs. In addition to the mandatory fleet maintenance requirements, Amtrak must perfom a basic level of maintenance to its fleet to ensure that repairs are made for normal wear-and-tear on non-safety-critical fleet components. A minimal program is necessary to rebuild, replace or overhaul key passenger car components such as toilet systems, air conditioning units, carpet, upholstery, and key operating systems such as doors openers and wheel slip systems. While this funding level does not allow Amtrak to conduct a comprehensive overhaul program to bring the fleet up to desired levels of quality, it would allow critical needs to be addressed on 150 low-level coaches and 25 low-level diners and sleepers, as well as 150 bi-level Superliner coaches, sleepers and diners.

§ Facilities. To ensure a safe and efficient work environment is provided to perform fleet maintenance, a bare minimum level of improvements is needed on existing facilities. Safety and reliability improvements are needed at Amtrak's three heavy maintenance facilities and six key multiuse terminals. These facilities vary in age and condition, and include facilities built in the early 20th century. In addition to improving the efficiency of the existing facilities by replacing worn-out or obsolete maintenance systems, this program would allow new tooling, such as split-rail systems and overhead cranes, to be installed to match the performance of the facilities to the maintenance requirements of the equipment fleet currently being operated.

§ Information technology. Technology is the cornerstone of safety, reliability and efficiency in a modern services based company. Minimum technology investment needs for FY03 are in three areas: (i) Continued modernization of the reservations system, web site, and call center technology - investments that are critical to efficiently processing sales and providing reliable information to a growing number customers. (ii) Following September 11, Amtrak identified a series of technology investments that can work in concert with homeland security to identify and deal with potential threats - investments that include biometric recognition, on-line integration with law enforcement agencies, and an improved capability to identify intermodal cargo as well as the companies and people involved in delivering the cargo for transport. (iii) Old legacy systems that are essential to the operational and financial management of trains, especially in the NEC, need to be upgraded and/or replaced to ensure on-going safety and revenue generation.

Administration's request

Mr. Rogers. The Administration is seeking $521,000,000 for Amtrak in fiscal year 2003, with a 100 percent outlay rate. Please compare this level of funding to your requested level and discuss the ramifications of adopting the Administration's proposed level. As part of this answer, please detail programs that would not be funded in fiscal year 2003 at the lower level.

[The information follows:]

A funding level of $521,000,000 for Amtrak would likely be insufficient to operate any intercity passenger rail service in FY03. The entire $521 million would be consumed by excess RRTA, debt principal and mandatory safety expenses, before a single dollar were invested in basic capital needs such as tunnel life safety, system reliability, equipment overhauls, environmental compliance & technology, let alone operating costs for long distance service. Moreover, since elimination of routes would result in significant G-2 labor protection payments, $521 million is insufficient even to eliminate service. In sum, a federal funding level in FY03 of $521 million would not cover capital, operating or liquidation of services, and is therefore not a viable appropriation level.

Mr. Rogers. If the Corporation received $521,000,0000, how much do you plan on spending on capital expenditures, such as maintenance of way and maintenance of equipment in fiscal year 2003?

[The information follows:]

Funding allocated for mandatory safety expenses (as described above), would include approximately $104 million for federally mandated fleet safety programs (e.g., the capital portion of 180-day equipment inspection and maintenance); there would be no funding available for maintenance of way after excess RRTA, debt principal and this mandatory safety spending. As described above,

however, under an appropriation of $521 million, there is no viable scenario for intercity passenger operations.

Amtrak Reform Council's report

Mr. Rogers. What, if any, merit do you see in the Amtrak Reform Council's recommendations for restructuring and rationalization of the national intercity passenger rail system and the proposed business model?

[The information follows:]

The Amtrak Reform Council's report only reasserts what has been recognized for a long time: the increasing need for passenger rail service requires a substantial capital investment, greater efficiency and, where it exists, ongoing operating support for the public service of long-distance service.

But the report sidesteps the underlying policy and funding issues that must be determined. First, a federal commitment to define, develop and invest in the passenger rail system must be made. Fundamentally, only then can the nation determine the system's scope and nature, level of necessary funding, and source of funding. No council or commission can make these decisions - the ARC hasn't - and until these issues are resolved, the nation's passenger rail system will continue to be torn by conflicting policy mandates and inadequate capital, whether operated by Amtrak or anyone else.

It is also important to recognize that our nation is faced with an intercity passenger rail policy

problem, not an Amtrak performance problem. Under current management over the last five years, Amtrak's total revenues have grown by 38% and nationwide ridership has risen by 19%, while federal operating support has been cut by more than 80%.

The DOT Inspector General said it best in the *Wall Street Journal* on January 28: "For what it has been charged to do, it is amazing that Amtrak has gotten this far." But the limits to this success are set by a flawed policy that must be fixed. The ARC Report fails to address this flawed policy.

Mr. Rogers. Your 2002/2003 business plan states that Amtrak is now required to pay for approximately $52,000,000 of increased costs due to the Amtrak Reform Council's findings. What does the $52,000,00 relate to and how has the ARC findings caused these costs to be incurred?

[The information follows:]

Amtrak has an agreement with NPC for processing credit card sales and was in the process of arranging financing with several institutions for equipment acquisitions. Because of the ARC findings that has created uncertainty about Amtrak's creditworthiness, these institutions either no longer expressed an interest in doing business with Amtrak or are requiring Amtrak to establish a cash reserve account to continue processing transactions for which they carry a liability. As a result, Amtrak had to pay out-of-pocket for equipment acquisitions and set up cash collateral for credit card processing. The increased out-of-pocket expenses amount to $52

million and consist of $7.0 million for the remaining 55 refrigerated boxcars that Amtrak is contracted to buy from Ebenezer, the manufacturer, $30 million that Amtrak has spent on the remanufacturing of the AEM-7 locomotives, and $15 million that it is required to establish a cash reserve account to process the credit card ticket sales.

Mail & Express

Mr. Rogers. Last year's strategic business plan projected that Amtrak's mail and express business would generate revenues of over $400,000,000 by fiscal year 2003. In 2001, revenues were $117,000,000, which was about $5,000,000 less than 2000. Why is Amtrak falling so short of its goals and what are you doing to improve performance?

[The information follows:]

Last year's strategic business plan that projected revenues of $400,000,000 by fiscal year 2003 was based on the company's Network Growth Strategy (NGS). NGS contemplated adding 15 new route and service actions, the majority involving the expansion of service. To date, 9 out of the 15 planned route actions have been cancelled. The previous Mail & Express management expected the growth in routes as well as substantially longer trains on these routes would increase revenues by the magnitude projected.

The $5 million decline in total revenues in FY01 was mainly the result of $12 million in exceptional mail revenue that was realized in FY00

and not continued in FY01. This extra coast-to-coast mail business in FY00 was given to Amtrak on a temporary basis by the U.S. Postal Service (USPS) due to problems that they were experiencing as a result of the takeover of Conrail by CSX and Norfolk Southern. Eventually, this business was awarded to over the road carriers due to their ability to meet USPS cut-off times associated with this business and low pricing. The express side of the business showed a $5 million increase in FY01 vs. FY00. This was a result of both volume and price increases in boxcar express as well as better utilization of the fleet. The roadrailer express business also showed increases mainly as a result of new transcontinental business (Los Angeles to Harrisburg and Philadelphia to Los Angeles). Additionally, improved utilization of the fleet and price increases also helped the roadrailer express business.

Mr. Rogers. Please provide a table showing actual gross and net revenues from the express service for 2002 and 2001, and projected for fiscal years 2002-2005.

[The information follows:]

($ Millions):

	2000	2001	2002	2003	2004	2005
Gross Rev	$25.9	$31.1	$43.0	$50.0	$55.0	$60.0
Net Rev	$25.3	$30.5	$42.1	$49.0	$54.9	$58.8

Mr. Rogers. How have the actual revenues for express compared to your previous business plan projections.

[The information follows:]

Currently projected FY02 Express revenues of $48.0 million is approximately $11 million below original projections for fiscal year 2002 due to:

- $6 million as a result of late car deliveries
- $3 million as a result of a shortfall in refrigerated business partner projections
- $2 million as a result of weakening demand

However, given these issues it is important to note that the express revenues year-to-date February 2002 are on par with last year's revenues.

Mr. Rogers. Have these figures changed since last year based on new contracts that Amtrak has signed? If so, please provide the Committee with details on the contracts Amtrak has signed to increase its express revenues.

[The information follows:]

Although Amtrak primarily sells it services through rate quotes and not contracts, efforts continued in FY02 to solicit more remunerative long-haul traffic moving from Los Angeles, Oakland and Seattle on the west coast to Albany, Philadelphia and Harrisburg on the east coast. This mix change has begun to enhance revenue as anticipated.

Mr. Rogers. How many cargo cars has Amtrak procured to provide express mail and cargo service?

[The information follows:]

Within the last fiscal year Amtrak has completed (September, 2001) the procurement of 100 new dry boxcars (bringing the total boxcar fleet to 350 units) and will complete (May 2002) the procurement of 110 refrigerated boxcars. In addition, Amtrak has maintained its existing fleet of 134 Material Handling Cars (MHC's) and 665 Roadrailers.

Mr. Rogers. How much revenue does Amtrak believe it can earn from express mail and cargo? Please discuss the implications on revenues for both the short-term (this fiscal year) and long term.

[The information follows:]

Fiscal year 2002 Mail and Express revenues are forecasted to be $139 million. Longer-term the Mail and Express revenues are forecasted to be approximately $160 million by fiscal year 2005.

Mr. Rogers. What route currently earns the most from mail and express? Please discuss the earnings history of this route for the past three years.

[The information follows:]

The route/train that currently earns the most for Mail & Express is the Southwest Chief that runs between Chicago and Los Angeles. The average gross revenue for this train for the past three years has been $25.9 million. From a net earnings standpoint, the average earnings for the past three years were $3.3 million.

Mr. Rogers. In comparison, which routes have the greatest earning potential for express mail and cargo services? If these routes are different from the current high earners, please explain why and what Amtrak is doing to develop this service potential.

[The information follows:]

Both the Empire Builder and California Zephyr have the same earning potential as the Southwest Chief. Currently the California Zephyr is limited to 19 cars leaving Oakland. We are negotiating with Union Pacific to develop an operating plan, which will allow Amtrak to run a 30-car train. Available capacity on the Empire Builder is limited by terminal constraints in King Street Station. We are working with the BNSF to develop an operating and capital plan, which will address this limitation.

Mr. Rogers. Last year, Amtrak was projecting a significant growth in mail revenues, particularly for fiscal years 2001 and 2002. Please highlight for the Committee the actual growth in mail revenue for 2000 and 2001 as well as the projected growth for 2002 through 2005 and explain any deviations from the information provided in last year's hearing record.

[The information follows:]

Gross Rev.	2000	2001	2002	2003	2004	2005
	$96.1M	$86.2M	$92M	$98M	$105M	$112M

As discussed in question 21, FY00 figures were anomalous due to the one-time handling of $12.0 million in diverted freight railroad business

Mr. Rogers. Amtrak has lost a number of mail contracts recently. Please explain to the Committee why this occurred and what impact it has had on your revenues.

[The information follows:]

Poor on time performance by freight railroads in handling Amtrak trains over their routes is the principal reason Amtrak has lost a number of mail contracts. We estimate the value of these lost contracts at $5-6 Million.

Mr. Rogers. In February 29, 2000, Amtrak released its market-based network analysis. Because of this analysis, Amtrak planned to expand 11 new route segments, increase frequencies on three current routes, increase ridership by 430,000, and increase passenger miles by 350 million. At the time of the release, Amtrak estimated that most of these frequency changes would occur in the summer and fall of 2000 because most required agreements with the freight railroads, capital improvements to rail lines, new equipment, and some rerouting of lines. Please detail for the Committee what is the status of your plans to expand the 11 new route segments and to increase frequencies on the 3 current routes. Each route should be addressed individually.

[The information follows:]

Status of Network Growth Strategy Route and Service Actions, as of March 2002

Name	Status	Reason for cancellation, postponement, or hold
Kentucky Cardinal (extension to Louisville)	Implemented in December, 1999 (Implemented in December, 2001)	Not applicable.
Skyline (Manhattan Limited)	Cancelled	Freight railroad and capital funding issues.
Twilight Limited	Cancelled	Freight railroad and capital funding issues.
Lake Cities	Cancelled	Freight railroad and capital funding issues. Insufficient M&E traffic to warrant service.
International (re-route)	Cancelled	State provided funding to continue current routing.
Chicago-Des Moines	Cancelled	Freight railroad and capital funding issues.
Hiawatha (extension) to Fond du Lac	Cancelled	Cancellation of Skyline.
Chicago-Janesville, Wisconsin (Lake Country Limited)	Implemented in 2000, cancelled in 2001	Insufficient passenger and express market and cancellation of Skyline.
Silver Service extension to Boston	In planning	Contingent upon FEC split implementation Negotiations in process.
Silver Service restructuring in Florida (including service on Florida East Coast Railway)	Project planning underway. Start date contingent upon track work that, itself, is contingent upon funding. April 2003.	Estimated Amtrak capital requirements for crew training and miscellaneous station costs of $1.5 M is frozen as of Feb. 1. FEC and FDOT need to sign agreement before $23.5 M can be dispersed for phase-one track improvements. Dispersal date of July 1, 2002 at earliest. Communities required to provide 20% of the funds for rehabilitating stations.
Crescent Star	In planning	Freight railroad negotiations in process. RIFF loan application in abeyance.
Texas Eagle (restore daily service)	Implemented in 2000. FY01 ridership and revenue were 33.8% and 27.0% higher than FY99 respectively.	Not applicable.
Luxury transcontinental	Cancelled	Lack of capital funding, poor market conditions, no corporate sponsorships.
Sunset Limited (reroute in Texas)	Cancelled	Freight railroad resistance.
Aztec Eagle	Cancelled	Freight railroad and capital funding resistance.

Mr. Rogers. The MBNA-identified initiatives were projected to generate $65,000,000 in financial benefits by 2003? Is Amtrak on course to achieve these benefits? If not, have you achieved *any* financial benefits?

[The information follows:]

As the table for question #31 indicates, most of the NGS initiatives have been canceled or delayed. As a result, Amtrak is not on course to achieve the projected financial benefits of $65 million. While Amtrak has successfully implemented daily service on the Texas Eagle and the extension of the former Hoosier State (now the Kentucky Cardinal) into Louisville, the financial benefit of those routes were, by and large, predicated on the timely implementation of the other NGS service expansions. As a result, the financial benefit of the MBNA-identified initiatives that have been implemented is minimal.

Operating and Cash Loss

Mr. Rogers. What was Amtrak's operating loss and cash loss at the end of 2001?

[The information follows:]

Amtrak's unaudited net loss for FY2001 is $1,049 million. Amtrak's unaudited cash loss, or Budget Result, (defined as net loss adding back non-cash items such as Depreciation, Capital for

Maintenance and Capital contribution to Operating) for FY2001 is $281.7 million.

Mr. Rogers. What are you projecting for fiscal year 2002 based on two quarters worth of revenues?

[The information follows:]

Amtrak's business plan calls for revenues of $2.357 billion from all lines of business. Actual results for the first five months of the year (through February 2002) were $945 million, which is $85 million higher than last year but $15 million lower than plan. At this time, Amtrak is projecting that total revenues will come in approximately on plan.

Mr. Rogers. In the past, Amtrak has been able to mitigate passenger revenue shortfalls in revenue through reimbursable work and one-time sales of real estate, but these opportunities are limited. Please identify for the Committee how much the Corporation has relied on reimbursable work and one-time sales of real estate over the past three years. Is this a growing, shrinking, or constant number?

[The information follows:]

Amtrak's three non-core business lines; Commuter, Reimbursable and Commercial are integral to the long-term success of Amtrak. The results for these three business lines for the last three years are as follows:

($ millions)	FY 99	FY 00	FY 01
Commuter	$42.4	$43.6	$42.8
Reimbursable	$ 2.1	$ 3.4	$ 6.5
Commercial[1]	$63.5	$47.1	$55.1
Total	$108.0	$94.1	$104.5

Amtrak's Commuter business remains constant, Reimbursable has been growing and Commercial (real estate and communication right of way sales) is dependant upon individual transactions and can fluctuate from year to year.

Mr. Rogers. What amount of revenue does the Corporation plan to collect from reimbursable maintenance work performed for freight and commuter operations in 2002 and 2003? How does that compare to your actual 2001 reimbursables?

[The information follows:]

Amtrak's business plan calls for Reimbursable revenue of $139 million in FY02 and $147 million in FY03. Amtrak had Reimbursable revenue in FY01 of $100 million.

Mr. Rogers. What amount of revenue does the Corporation plan to collect from one-time sales of real estate in 2002 and 2003? How does this compare to your actual 2001 real estate sales?

[The information follows:]

[1] The Commercial Business Line includes both Real Estate transactions as well as the sale of communication rights of way.

In FY01 - Amtrak sold two major pieces of property - Churchman's Crossing in Delaware for $692,000 and a parcel of land in Worcester, Massachusetts for $541,000.

In FY02 - Amtrak has sold the Maintenance of Way base in New London, Connecticut for $1.8 million and anticipates a sale of a parcel of land at Lake and Randolph Streets in Chicago, Ill for $5.6Million. Both of these transactions have been in negotiation for more than a year.

At the present time, we have no planned sales of real estate in FY03.

Mr. Rogers. Does Amtrak plan to undertake any significant refinancing and new mortgage measures, like you did with Pennsylvania Station last year? If so, what is planned for the remainder of 2002 and for 2003 and how much revenue will you earn from these activities?

[The information follows:]

Amtrak currently has no plans to undertake any refinancings and new mortgage measures in 2003, like it did with Pennsylvania Station last year, to raise cash for operations.

Mr. Rogers. Please provide the Committee with a monthly cash flow table for fiscal years 2000 and 2001 and compare it to what is expected in 2002.

[The information follows:]

We would be happy to brief the Chairman of the company's cash flow for any of the fiscal years including the current fiscal year. However, this information is of a highly proprietary nature and we respectfully ask that it not be contained in a public document such as this hearing record. Therefore we would be happy to provide this to the Chairman or other members of the committee at your convenience.

Capital Needs

Mr. Rogers. A memo written by an Amtrak staff dated April 21, 1998 indicates that Amtrak was clearly aware in 1998 that its available capital funding would fall short of needs between 1999 and 2000. Please explain why you chose to go forward with projects, in some cases entering into contractual agreements with states and other entities, knowing full well that you would not be able to make good on your commitments?

[The information follows:]

Amtrak is obligated to run a business and explore and pursue any and all opportunities that will generate additional revenues and increase market share. Amtrak chose to go forward with projects with the States because there were already significant plans underway and the States were prepared to provide the lion's share of the financial resources for the projects. By developing the corridors in partnerships with the States, the metropolitan areas will be better connected with more frequent and faster service, thereby increasing ridership and revenues for the corporation.

Mr. Rogers. Also, knowing in 1998 that this shortfall was looming, why is it that 2002 was the first year Amtrak vocalized its need for its full authorization?

[The information follows:]

2002 was not the first year that Amtrak vocalized its need for its full authorization. Amtrak first requested in 2000 its need for its full authorization of $989 million for FY01 and, as indicated in the answer to question 1, Amtrak's current Board of Directors and its President and CEO were not assembled and confirmed until 1999.

Mr. Rogers. Please describe the condition of Amtrak's assets today and compare this with their condition 5 years ago.

[The information follows:]

Amtrak's principle assets consist of rolling stock and infrastructure. Each type of asset is discussed separately below.

ROLLING STOCK

Amtrak's rolling stock includes its locomotives, high-speed train sets, passenger cars, and mail, baggage and express equipment. The condition of each part of the fleet is described below.

Locomotives

- ROAD DIESELS: These units power virtually all Amtrak trains on the national system, except for those operated with electric locomotives on the Northeast Corridor. In 1997, this fleet was comprised mostly of life-expired F40 locomotives with an average age of 21 years. Over the past five years, through various private financing initiatives, Amtrak has been able to substantially modernize its road diesel fleet. In 2002, the diesel fleet is comprised of 200 P42-8, 41 P40-8, 18 P32-8, and 21 F59PHI units for a total of 280 units with an average age of 4.3 years. With the exception of the 21 F59PHI General Motors units, all are under a maintenance and reliability contract with General Electric requiring regular overhauls.

- DUAL MODE: There are presently 18 active P32AC-DM locomotives serving routes operating into New York Penn Station from upstate New York. Dual mode locomotives can operate either as diesels or electrics. They are required to operate as electrics in the Penn Station tunnel complex in New York City. Their average age is 5.5 years. These units are also included in the maintenance contract with General Electric that keeps them in good condition. Like the diesel locomotives, they were also acquired with private financing and replaced Amtrak's FL-9 locomotives originally built in the 1950's as well as some Turboliner trains.

- AEM-7: These 51 electrics are the workhorses of the Northeast Corridor locomotive fleet.

Their average age is 20 years. Over the last three years, 22 have been remanufactured with a new state-of-the-art alternating current propulsion system. An additional eight (for a total of 30 units) are presently undergoing remanufacture and are scheduled for completion in FY02. The remaining 21 units retain their original direct current propulsion system that is obsolescent and increasingly unreliable, resulting in unnecessarily high maintenance costs and train delays. New state-of-the-art alternating current propulsion systems replace unreliable direct current traction motors. A typical passenger locomotive has four traction motors, one to drive each axle. Among the units converted to alternating current systems, Amtrak has not experienced a single traction motor failure in 2½ years compared to over 400 failures in the remaining direct current fleet. This has given Amtrak a $4 million saving in traction motor overhauls, cut the cost of traction motor maintenance and reduced the number of locomotives out of service for traction motor repairs. Provided that capital funds are available, Amtrak intends to continue the remanufacturing program. Up to now the program has been privately financed but additional funding for more units is no longer available following the unfavorable report of the Amtrak Reform Council.

- HHP-8: There are 15 of these new electric locomotives active on the Northeast Corridor. They were acquired with private financing because more electric locomotives were needed following the extension of electric operations from New Haven to Boston. Their average age

is one year. Amtrak is working through a number of reliability issues typical for a new type of equipment using new technology not previously included in our fleet.

- E60MA: There are 10 of these electric locomotives active in the Northeast Corridor. Their average age is 26 years. No overhaul or upgrade has been scheduled since 1997 in anticipation of retirement. This equipment is beyond its useful life. Retirement however requires that capital funds be available to complete the AEM-7 remanufacture program and to install additional braking equipment on the HHP-8 locomotives to make them compatible with Amtrak's mail and express operations.

- SWITCHERS: There are 67 switching locomotives systemwide used to assemble trains, move cars to and from maintenance work, and to support right-of-way work train operations. Their average age is 44 years. Since this fleet includes nine different locomotive types dating to as far back as 1947, it is extremely difficult to maintain. The only significant improvement to this fleet in the last five years has been the addition of three rebuilt locomotives obtained from CSX Transportation. In order to meet daily operating requirements, this aging switcher fleet must be supplemented from Amtrak's P32-8 road diesel fleet. These road locomotives are larger and consume more fuel than typical of a switching locomotive. The majority of the switcher fleet is beyond its useful life and in need of replacement.

High-speed train sets

Amtrak is in the process of acquiring 20 high-speed train sets for use on Acela Express trains between Boston and Washington. Each set consists of two power cars, a first-class car, a bistro car and four coaches. At present, Amtrak has accepted 17 of the 20 trains. These trains have been used to introduce new premium service between New York and Boston and to replace Metroliner service between New York and Washington. The Metroliner trains replaced used Amfleet I equipment (see discussion below) that has been cascaded to other services, notably the new route between Boston and Portland, Maine.

Passenger Equipment

Amtrak operates a variety of passenger equipment, including single-level cars used primarily east of the Mississippi River (due to clearance restrictions) and bi-level Superliner cars used on most western routes. Including all passenger equipment types, the average age of the fleet has increased from 17.1 to 20.6 years since 1997. This change reflects the addition of 40 new Surfliner cars in California (average age 1.5 years) and the retirement of some 50-year old Heritage equipment, together with the overall aging of the remainder of the fleet. Due to the cancellation of several overhaul programs, the condition of the fleet has deteriorated over the last five years.

- SUPERLINER I & II: Amtrak operates 430 of these bi-level cars. They are the backbone of the national system long-distance fleet and include coaches, diners, lounges, sleepers and

crew cars. There has been no comprehensive overhaul program for this fleet since 1997. Most significantly, the Superliner I cars (average age of 22 years) have never received an interior restoration or seat replacement resulting in escalating maintenance and cleaning costs without commensurate visible results. Amtrak previously acquired much of the material needed to overhaul and refit these cars but the program had to be cancelled due to insufficient funds to complete the work.

- AMFLEET I & II: Amtrak operates 599 of these single-level cars. The Amfleet I cars average 26 years old and include the coaches and food service cars used primarily in the NEC Acela Regional service. The Amfleet II cars average 20 years old and include the coaches and lounges used on most eastern long-distance trains. The regular overhaul and upgrade program for food service cars was cancelled in FY99 and the program for coaches in FY01 due to lack of funds. Consequently, Amtrak has had to rely almost entirely on less comprehensive preventive maintenance programs and spot repairs to keep the fleet in acceptable condition. Similarly the ''Capstone'' program to give these cars a major mid-life restoration was also cancelled for lack of funds even though much of the required material was already on hand.

- HORIZON: This fleet consists of 101 single level cars used primarily on Midwest short-distance routes. Their average age is 13 years. This equipment has never undergone a comprehensive overhaul or upgrade program.

Since 1997, when much of this fleet was reassigned from California to the upper Midwest, a number of serious design deficiencies have severely impacted the availability and reliability of these cars in winter weather. Freezing of plumbing plagues this fleet and cannot be corrected without a comprehensive overhaul and upgrade program. Like all other cars, interior fixtures require periodic restoration that has not occurred due to a chronic lack of funds.

- HERITAGE: This equipment includes 70 cars used on eastern long-distance trains. The average age of this fleet is 50 years. All cars were acquired from the freight railroads when they quit passenger operations in 1971. Amtrak has progressively eliminated most of them but certain types (diners, dormitories and some coaches) have persisted due to lack of funds to replace them. Since 1997, nine dining cars have been stripped, redesigned, overhauled and refitted. In addition, 10 dining cars were given less comprehensive overhauls in-kind. Nine dining cars remain which have yet to get any recent work. The remainder of the Heritage fleet is beyond its useful life and should be replaced with modern equipment that is maintainable, reliable and that meets contemporary transportation standards.

- VIEWLINER: Amtrak operates a fleet of 48 single-level sleeping cars in the east. Their average age is 6 years. Thirty-two cars from this fleet have received their first overhaul. The overhaul program had to be cancelled in FY02 due to funding constraints. The remaining 16 cars have not been overhauled

since they were delivered despite the fact that they have each accumulated more than one million miles in service.

Mail, Baggage and Express Equipment

- BAGGAGE CARS: Amtrak's fleet of baggage cars includes 117 cars with an average age of 48 years that were acquired from the freight railroads following their exit from intercity passenger operations in 1971. Due to age, design, wear and advanced corrosion, a replacement baggage car fleet is needed. Due to funding constraints, only basic maintenance of this equipment has been conducted since 1997. This has resulted in a fleet that is increasingly unreliable and adversely impacts both baggage service and mail operations.

- MATERIAL HANDLING CARS: Amtrak's fleet of material handling cars includes 135 cars with an average age of 14 years. These cars are used predominantly for mail shipments by the United States Postal Service. The cars are in good condition in spite of having an average of 2.5 million miles each.

- EXPRESS CARS: Amtrak's fleet of express boxcars includes 50 cars 50 feet in length with an average age of 25 years and 300 cars 60 feet in length with an average age of 3 years. These cars are used to haul dry goods for a variety of express customers. They are in generally good condition since they were recently built/rebuilt before acquisition by Amtrak. The trucks (wheel/axle/frame assemblies) however require continuous maintenance due to the fact that they were

originally constructed for use in freight trains whereas passenger service is more demanding.

- REFRIGERATED EXPRESS CARS: Amtrak's recently acquired fleet of refrigerated express boxcars includes 90 cars with an average original age of 32 years. It should be noted that the total fleet will increase to 111 cars by June 2002 as the remainder of the fleet is delivered. All these cars have been refurbished within the last year and are currently in good condition. The cars are used to haul perishable commodities.

- ROADRAILER TRAILERS: A RoadRailer is a highway trailer that can be fitted with rail bogies for movement in a train without the need to place it on a flatcar. The trailers are used to haul dry goods. They are attractive to mail and express shippers that do not have easy access to railcar loading sites. The RoadRailers can be loaded at a shippers dock and proceed directly to the consignee without the need to transload to and from an express boxcar. Amtrak's fleet of RoadRailer trailers includes 659 48-foot and 53-foot trailers with an average age of three years. The equipment is in fair condition and requires continuous maintenance due to the rigorous demands of the service.

- REFRIGERATED ROADRAILER TRAILERS: Amtrak's fleet of refrigerated RoadRailers includes eight trailers with an average age of 2 years. They are similar to other RoadRailers described above but are equipped to haul perishable commodities.

- COUPLERMATES AND BOGIES: Amtrak's fleet of couplermates and bogies includes 544 units with an average age of 3 years. This equipment is used when the RoadRailer trailers are on rails in passenger trains as opposed to when they are on the highway and pulled by a truck tractor. The equipment is in good condition but requires frequent maintenance due to the rigorous nature of the service in which it is employed.

INFRASTRUCTURE

In connection with the formation of Conrail in 1976, Amtrak was given ownership of extensive ex-Penn Central Railroad infrastructure throughout the Northeast that was primarily used in support of passenger service. In addition, Amtrak assumed ownership of 100 miles of ex-Penn Central track in Michigan and Indiana on its Chicago-Detroit route. Amtrak has also acquired a variety of passenger terminal properties to permit direct operation and investment in the maintenance of rolling stock at the ends of its various routes.

Due to the long and debilitating bankruptcy of Penn Central, the vast majority of these properties were received in extremely dilapidated condition. As a result of the federally supported Northeast Corridor Improvement Project (NECIP) in the late 1970's, most of the track structure was significantly improved. There were also a few bridge replacements and countless repairs-in-kind. Following 1985 that same infrastructure was deprived of the funding necessary to maintain it at the level then achieved. In the late 1990's,

federal financing enabled Amtrak to complete the electrification from New Haven, CT to Boston, MA, a project that had been discussed since the 1920's. With other federal capital, Amtrak has also performed many incremental upgrades, notably the conversion of many fixed bridges to ballasted deck designs that are necessary for high-speed passenger trains.

Sufficient capital funding has never been available, however, to bring these properties to the level of high-speed infrastructure that widely exists throughout Western Europe and Japan. For example, although Amtrak owns the right-of-way needed to replace its tunnels south of Baltimore, its new 150-MPH Acela Express trains must operate through the old tunnels at 30 miles per hour because they were completed in 1879 on an alignment and with interior clearances and conditions that will not permit higher speeds. Most of Amtrak's major bridges were completed early in the last century. Amtrak's right-of-way in Michigan and Indiana is plagued with countless highway grade crossings that frustrate any serious attempt to run truly high-speed trains.

Amtrak's infrastructure assets are aged, and some are well beyond their useful lives. An evaluation done five years ago found that:

- 50 percent of bridges were over 90 years old
- 40 percent of wood ties were over 25 years old
- 63 percent of structures were older than 75 years and 31 percent were past 90 years
- The average age of culverts was over 80 years
- The average age of catenary wire was over 60 years
- The average age of substations was over 60 years

- The average age of electric frequency converters was over 60 years

In addition almost three million wood ties were being used in track, rather than the more reliable and durable concrete ties. Overdue switch tie replacements totaled 34,000, and ballast cleaning and treatment was 500 track miles behind cyclical requirements. Signal cables and air machines for the signal system were beyond their useful lives. Over 500 high-voltage electric traction power circuit breakers were beyond economic repair. Most maintenance of way equipment was over 14 years old, versus an average life expectancy of seven years.

Federally enforced standards for track mandate specific engineering criteria for every level of train speed. Much of Amtrak's owned infrastructure is above Track Class 6 versus Class 4 for a typical mainline freight or commuter railroad. The track geometry variance allowed for these high-speed tracks is 1/4 inch or less, versus 3/4 inch for typical commuter and freight. Amtrak must maintain approximately twice the quantity of crushed rock ballast under and around the crossties compared to freight and commuter. It is required to use a more sophisticated cab signal system compared to the ordinary wayside signals for others. Federally required inspections are also more rigorous and frequent. A freight or commuter railroad track inspector can cover 100 miles per day and still comply with federal standards whereas an Amtrak inspector can only cover five miles.

A study done in the mid-90s determined that the cost to bring the Northeast Corridor

infrastructure to a ''State of Good Repair'' condition, where assets were in good, reliable condition and could be kept in good condition by planned, cyclical maintenance, was $3.2 billion (since inflated to $3.8 billion). The cost of sustaining this capital replacement equilibrium was determined to be $233 million per year, and another $70 million annually was required to contribute towards the reduction of the backlog of deferred work. Amtrak's infrastructure capital funding has averaged $107 million over the past five years, for a shortfall of $196 million annually.

While significant improvements were achieved 20 years ago, some of the components have a 20-year life. For example, the switches at interlockings that permit trains to change tracks have movable parts that are subject to deterioration in use. While these switches were replaced, they are now at the end of their life expectancy. We anticipate the need to reduce speeds through these switches if they are not replaced soon in order to maintain safe operations.

In the face of constrained infrastmcture funding Amtrak has been forced to adopt a ''program'' of unscheduled spot repairs to failed components or to those on the verge of failure. These components are identified by individual inspection or by being the cause of an actual service failure rather than by performing a planned renewal program driven by asset age, condition, new technology and other business criteria. The present practice brought about by chronic shortages of capital leads to a spiraling cycle of higher operating expenses, higher asset replacement costs and reduced asset life. There

is a point at which the cost of even limited failure replacement exceeds available funding, and the only option is to reduce the class of track based upon Federal Regulations and slow down the trains. These steps would be necessary to insure safe operations because of the associated risk of derailments.

Mr. Rogers. Your fiscal year 2003 grant request notes that there is $5.8 billion needed for backlogged capital projects. The Amtrak Reform Council report says it is $20 billion. Please explain the difference and identify for the Committee what your $5.8 billion consists of.

[The information follows:]

Amtrak cannot comment on the Amtrak Reform Council's report of $20 billion in capital backlog.

Amtrak's $5.8 billion starts with the 1995 *State of Good Repair Report['s]* estimated backlog of about $3.2 billion for infrastructure in the federally owned Northeast Corridor. The updated 2001 estimate of the cost to address the capital backlog is approximately $3.8 billion for infrastructure (accounting for six more years of under-investment), plus $1.1 billion for fleet, and $900 million for stations and facilities.

The cost to address the accumulated backlog from deferred infrastructure and fleet investment (1971-2001) - estimated to stand at $5.8 billion; could be completed over a 5-10 year period.

Mr. Rogers. Similarly, your 2003 grant request states that there is about $50 billion needed for high-speed rail corridor development. The Amtrak Reform Council report says it is $70 billion. Please explain the difference and identify for the Committee what your $50 billion consists of.

[The information follows:]

Amtrak cannot comment on the Amtrak Reform Council's report of $70 billion in high-speed rail corridor development.

Amtrak's $50 billion consists of formal high-speed rail initiatives involving over 30 states, which are underway to transform what is finally recognized as a precious resource into an economic engine for regional growth. In some cases, these efforts build off existing Amtrak service; in other cases, they represent new initiatives that include both commuter operations and intercity high-speed rail connections. In the Northeast Corridor, adding new capacity for all users, along with speed enhancements, would reduce trip times further while meeting the growing demand for intercity and commuter travel. Preliminary estimates of the cost to develop all 11 federally designated high-speed corridors total about $50 billion.

This estimate is based on synthesis of available corridor development analyses; detailed estimates are not available for all segments. Corridors vary significantly in their potential to attract riders and alleviate congestion on other modes and policy-makers may, therefore, choose to fund only

selected corridors (resulting in a lower capital cost).

Mr. Rogers. Beginning in 1999, Congress permitted Amtrak to expend its capital dollars on traditional capital projects and for maintenance of equipment. Please detail for the Committee what Amtrak's total capital needs were in fiscal years 1999-2002, how much of the appropriated dollars went for traditional capital projects, and how much of these dollars were used for maintenance of equipment, way, and progressive overhauls.

[The information follows:]

Amtrak's capital needs have been greater that its programs in FY1999 through FY2001.

Appropriated dollars used for maintenance of equipment and maintenance of way is equal to the value of excess RRTA plus operations:

($ in millions)	FY 99	FY 00	FY 01	FY 02
Funding for Excess RRTA	166	178	183	174
Funding for Operations	318	184	59	56
Dollars Used for Maint of Way/Equip	484	362	242	230

Note: Both TRA and appropriated dollars have been used in this period for maintenance of equipment (TRA for temporary borrowings and appropriated dollars as the permanent source of funding). Appropriated dollars have been used for maintenance of way, beginning in FY2000, with the further expansion of the capital definition. This expanded definition was consistent with Transit in their ability to use capital dollars for all preventive maintenance.

Appropriated dollars and/or TRA funds used for progressive overhauls equals: FY1999-$92 million; FY2000-$88 million; FY2001-$65 million; and FY2002-$54 million. Progressive overhauls have historically been considered capital expenditures.

The total appropriation dollars received for FY1999 through FY2002 were $2,246.4 billion.

Mr. Rogers. What is planned in 2003? Please discuss at both Amtrak's and the Administration's request levels.

[The information follows:]

Amtrak's request of $840 million in capital funding is described previously in question #5. Amtrak cannot respond for the Administration.

Mr. Rogers. Please provide a table that identifies how each strategic business unit and headquarters plans to spend on traditional capital projects, maintenance of equipment, maintenance of way, and progressive overhauls in 2002 and 2003. As part of this table, identify each project.

[The information follows:]

($ millions) FY2002	Intercity	Northeast Corridor	Amtrak West	Mail & Express	Total
Capital for Maintenance - Maint of Equipment & Way	68	135	27		230
Progressive Overhauls	23	25	5	1	54

The FY2002 Capital Program by Strategic Business Unit and headquarters follows:

Summary

FY2002 Capital Investments by SBU or Corporate Service Center and by Funding Source

Funding Source ($ millions)

Sponsor	Federal Grant	Reprogrammed	Federal Capital	State/ Local	Financing	Total	
Intercity	$0 0	$4 3	$56 4	$0.0	$2 3	$63 0	9%
Northeast Corridor	100 0	0.0	162 0	30 8	0.0	292.8	42%
West	0.0	5 5	41 5	0.0	0 0	46 9	7%
Amtrak Technology - C/SC	0.0	0.0	11 3	0.0	1.9	13.2	2%
Corporate HSR - C/SC	0 0	0 0	4.8	2.4	0 0	7 2	1%
EVP - C/SC	0 0	7 2	3.8	0 0	9 5	20 5	3%
Finance - C/SC (Excluding Technology)	0 0	0 0	1 8	0 0	0 0	1.8	0%
Inspector General - C/SC	0 0	0 0	0 0	0 0	0 0	0.0	0%
Mail and Express	0.0	8.0	11.9	0 0	21.2	41 1	6%
Procurement - C/SC	0.0	0.0	4 0	0 0	0.0	4 0	1%
Service Operations - C/SC	0 0	40 2	160 7	0 0	0 0	201 0	29%
Revised Total	$100.0	$65.2	$458.1	$33 2	$34.9	$691 5	100%
	14%	9%	66%	5%	5%	100%	

Mr. Rogers. It was Congress' intention that Amtrak would only use capital dollars for maintenance of equipment and way until such time as the railroad reached operational self-sufficiency, or until December 2002. Does Amtrak plan to spend any of its 2003 and out-year capital appropriations on maintenance of equipment and way? If so, how much and under what authority?

[The information follows:]

Amtrak will require $360 million in operating subsidies for FY2003. Of this amount, $160 million represents the amount of Railroad Retirement Tax that is paid by Amtrak to support non-Amtrak retirees. The remainder will be used to support the operation of its long distance network. This amount represents that portion of the over $500 million in net costs associated with running this network that is not cross-subsidized by other services that provide a profit.

Mr. Rogers. Amtrak obviously will not achieve the self-sufficiency mandate. Why should Congress continue to allow the railroad to use capital dollars for operating activities, such as progressive overhauls, maintenance of way and equipment?

[The information follows:]

Amtrak has made the effort to achieve Operational self-sufficiency under the guidelines set by the Amtrak Reform and Accountability Act without it's full

authorization. Though Congress in 1997 authorized $5.1 billion in capital for Amtrak, it has only appropriated approximately half that amount. Without the sufficient capital funding, Amtrak has been forced to defer capital investment which has driven up its operating costs. Preventing Amtrak from using future capital funding for progressive overhauls, maintenance of way and equipment will further erode Amtrak's investment in its operations thereby undermining the quality of service it can provide to its customers through reliability, on-time performance and equipment quality. Further, Amtrak's current definition of capital funding is consistent with that of the Transit Agencies, which allows funding of preventative maintenance with capital.

Mr. Rogers. Please provide the Committee with a chart that shows Amtrak's current services capital needs by debt service, fleet, infrastructure, stations/facilities, information technology, program management, and financed items for fiscal years 2000 and 2001, and what is projected for fiscal years 2002 through 2005. Also, as part of this chart, please include a separate column that shows how much non-federal funding was received for these capital needs.

[The information follows:]

Capital Sources and Uses by Category: FY00, FY01 & FY02

(in millions of dollars)

Capital Category	FY00			FY01		
	TRA & Fed Gen Cap	Non-Federal	*Total*	TRA & Fed Gen Cap	Non-Federal	*Total*
Debt Service	49	0	49	64	0	64
Fleet	197	510	707	148	209	357
Infrastructure	356	282	638	188	85	274
Stations/Facilities	83	30	112	20	89	109
Technology/Prog Mgt	53	36	89	55	21	76
Total	738	858	1,595	476	405	881
Financing		(518)			(337)	
Subtotal (excl. financing)		340			68	

Capital Category	FY02		
	TRA & Fed Gen Cap	Non-Federal	*Total*
Debt Service	70	0	70
Fleet	239	0	239
Infrastructure	282	45	327
Stations/Facilities	18	21	39
Technology/Prog Mgt	32	17	49
Total	641	83	724
Financing		(35)	
Subtotal (excl. financing)		48	

Mr. Rogers. Please highlight what is needed for capital investment, by subcategory (i.e. high-speed rail, equipment, life safety, mandatory investments, debt reduction, local and state partnerships, and new business development) in fiscal year 2001 and planned for in 2002 and 2003.

[The information follows:]

The FY2002 and FY2003 Capital Plan include the following funding for projects by category:

($ millions)	FY2001 Funding	FY2002 Funding	FY2003 Funding
Corridor Development	55	39	75
New Business Development	268	19	0
High Speed Rail	31	0	0
Mandatory	121	91	134
Life Safety	21	100	26
Operational Reliability	181	207	325
Overhauls/Refleeting	188	239	249
Yards/Shops/Stations	16	13	31
Total	881	708	840

How much of Amtrak's general capital expenses are for mandatory expenditures (i.e. debt service, ADA)? Please specify by category.

[The information follows:]

Amtrak's FY2002 capital plan totals $91 million from general capital for mandatory projects as follows:

Mandatory

Hialeah Maint. Yard Environmental Proj.	1.021
ACSES I & II	3.500
Sunnyside Catenary	0.270
Paoli Superfund	2.000
Lancaster Bridge	0.180
Environmental Database	0.700
Supplemental Environmental Projects	0.830
Debt Service – Intercity	37.525
Sanford Maint. Yard Environmental Proj.	0.567
Chicago Maintenance Yard	0.195
NOL Maint. Yard Environmental Proj.	0.375
Jacksonville Station	0.530

Debt Service - Northeast Corridor	15.313
Lightman Drum (PRP)	0.000
Debt Service – West	8.463
Talgo Trainsets - FRA-Strength Tests	0.150
Locomotive Fuel Sys. Environmental Prog.	1.704
Portland Storm Water Pollution Prevention Req.	0.098
Environmental Improvements to LA S&I Facility	1.430
Debt Service - Mail & Express	7.299
Fueling Facility for Refrigerated Cars	0.158
Debt Service – Corporate	1.800
Pollution Prev. - Beech Grove Maint. Fac.	0.268
Environmental PCB Remediation	0.893
Asbestos/Lead Paint Removals	0.275
Kreiger Finger Hazardous Waste	0.100
Pollution Control Equipment Upgrade	1.000
Storage Tank Removals	0.350
Sunnyside Yard Oil/PCB Remediation	1.175
Wilmington Fueling Area	0.800
PCB Clean-Ups	0.700
	89.669

Mr. Rogers. Please provide a table that highlights what Amtrak's capital needs are over the next five years.

[The information follows:]

Current Service Capital Needs: FY03-07

(average annual in $ millions)

FY03-07 Average Annual Capital Needs (1) ($ millions)	Backlog (2)	Ongoing (3)	Total
Debt Principal	-	140	140
Fleet	140	200	340
Infrastructure/Life Safety	420	575	995
Stations/Facilities	60	80	140
Technology	-	65	65
Total, Average Annual	**620**	**1,060**	**1,680**

Notes

(1) Current service capital needs; excludes growth (e g., high speed corridor development) and security needs

(2) Proposed average annual investment to address accumulated backlog estimated at $5.8 billion

(3) Ongoing annual capital investments needed to operate current services

Mr. Rogers. Amtrak's business plan shows a table that highlights, for fiscal year 2002, Amtrak's capital program by investment category. In this table, Amtrak states that it will require $39,000,000 for corridor development and $19,000,000 for new business opportunities. What does this consist of?

[The information follows:]

Corridor development projects are focused on the design, construction and implementation of high-speed rail corridors, often in support of state and local government needs. This category has been significantly scaled back compared to prior years as a result of limited capital funds. Funded projects generally are those for which a financial obligation existed at the start of the fiscal year, and include:

- Improvements to the New York-New Haven section of the Northeast Corridor to support the Acela Express service; and

- Minimal investments in California, Michigan, Wisconsin, Southeast and Midwest corridor development.

New Business Development includes investments to expand the Mail and Express Business and to pursue commercial improvements such as the development of 30th Street Station. Of the $19 million indicated in this category, $15 million is reliant upon sufficient financing and will only be implemented when such financing is available.

Mr. Rogers. For comparison purposes, please provide the Committee with a detailed table showing how much money Amtrak has invested in corridor development over the past three years (1999-2002).

[The information follows:]

($ millions)

Corridor Development			
1999	2000	2001	2002
32	58	17	37

Mr. Rogers. Why is Amtrak investing in corridor development and new businesses when it has had to undertake dramatic actions, such as mortgaging Pennsylvania Station and deferring capital investments, just to keep the core system running?

[The information follows:]

While Amtrak recognizes it is faced with a number of challenges to maintain the national system, it nonetheless is obligated to run a business and explore and pursue any and all opportunities that will generate additional revenues and increase market share. Further, Amtrak and the States already have significant plans underway to develop the corridors with more frequent and faster service that will connect metropolitan areas, building ridership and increasing revenues for the corporation. The States are providing the lion's share of the financial resources in developing these corridors.

Mr. Rogers. Why does Amtrak believe that it needs biometric recognition systems? How would they be used?

[The information follows:]

Amtrak's projected use of these technological identification systems would initially be tied to employee recognition and identification. While Amtrak's Security Investment Plan (See following question) calls for upgrading the present employee identification system in a more traditional manner (tamper proof identification cards, security control over the process, better database system), utilization of biometric identification systems would further increase security matters among employees. Part of Amtrak's reason for promoting such usage is related to the Department of Transportation's Direct Action Groups' work on various transportation security issues. It is our understanding that use of a biometric identification card for all transportation industry employees is being advocated by, at

least, one of the Direct Action Groups. In addition, a recent article in *The New York Times* (March 27, 2002) stated that security experts believe that biometric identification checks will become commonplace within the next five years for anyone passing through an airport.

The Amtrak Office of System Security and Safety, which includes Amtrak's Police Department, is presently conducting research on numerous technological improvements that could improve rail security. This research includes the examination of biometric systems in various applications involving passenger screening.

Within the aforementioned Security Investment Plan, there are two systems that relate to passenger identification information and could be considered as predecessors to use of biometric recognition systems. The Passenger Information Retrieval System would collect various data about passengers and match that information to certain terrorist and/or criminal suspects for action by law enforcement agencies. Watchlist information and research on travel patterns of individuals involved in criminal investigations could be quickly obtained. In another proposed technological upgrade, Amtrak's Quik-Trak, self-service machines would be improved by installing photo-imaging capabilities in order to retain photographs of ticket purchasers. Again, this information could be used for comparisons to FBI Watchlist investigations, credit card fraud investigations and other law enforcement and security purposes.

Mr. Rogers. Please detail for the Committee what you believe your current security needs are, following the incidents on September 11th. As part of this answer, please include a cost estimate for each investment and time frame that you could procure this system. Also, please identify that, if any of these investments, would improve your long distance or corridor services (operating times, new equipment, etc.)

[The information follows:]

Attached, as Exhibit A is a listing, description and cost for Amtrak's currently projected security needs.

Exhibit A

Security Investment Plan

Infrastructure Protection

- Passenger Information Retrieval System
- Incident Tracking – Police Crime Analysis
- QuikTrak Upgrade
- System Infrastructure Security
  - Tunnels
  - Bridges
  - Interlockings
  - Towers
  - ET Facilities
  - Equipment Facilities
  - Yards / Terminals
  - Mail & Express Terminals
  - Stations
  - Vehicle Barriers
  - Command 1 & 2
- Railroad Incident Command System
- Train Locator & Tracking (GPS)
- Notification System
- Mail & Express (Shipment tender software)
- Mail & Package Tracking – RF Scanning
- Employee ID Badge System
- Bomb Resistant Trash Containers

Equipment Security

- Satellite Communications on Trains
- Hazmat Detectors
- Rapid Response Team (Mobile Command Units only)
- Radio Repeater Upgrade
- High-Rail Vehicle Rescue (DMV – self propelled)
- Head End Surveillance Recorder
- Package Express
- Enroute Train Service
- Remote Capability to turn off Engine
- Bomb Detectors

Operating Costs

- Expansion of Aviation Unit
- Leased Vehicles & Patrol Bikes
- Police Officers (150)

Security Officers (250)
Civilian Staff / Corporate Security
Terrorism / Crimes Analysis Intelligence Team
Canine Units (20) for patrol / bomb detection
Applicant Investigation
Rapid Response Team (Detectives)
Engineering / Maintenance / Inspection

Security Investment Plan

	(000's)		
Infrastructure Protection	Corridor	Off Corridor	Total
Passenger Information Retrieval System	2,900	2,900	5,800
Incident Tracking - Police Crime Analysis	3,100	3,100	6,200
Quicktrak Upgrade	2,150	2,150	4,300
System Infrastructure Security (see attached)	189,062	186,818	375,880
RR Incident Command System	5,000	11,750	16,750
Train Locator & Tracking (GPS for trains)	2,500	2,500	5,000
Notification System	59	60	119
Mail & Express – shipment tender software development	405	840	1,245
Mail & Package Tracking - RF Scanning	606	605	1,211
Employee ID Badge System	269	269	538
Bomb Resistant Trash Containers	37	38	75
	206,088	211,030	417,118
Equipment Security			
Satellite Communications on Trains	877	878	1,755
Hazmat Detectors	231	420	651
Rapid Response Team - Mobile Command Units (2)	-	3,000	3,000
Radio Repeater Upgrade	2,160	2,160	4,320
High-Rail Vehicle Rescue (DMV - self propelled)	2,000	2,000	4,000
Head End Surveillance Recorder	4,859	5,375	10,234
Package Express	700	700	1,400
Enroute Train Service	653	652	1,305
Remote Capability to turn off engine	-	6,712	6,712
Bomb Detectors	2,000	2,000	4,000
	13,480	23,897	37,377
Operating Costs			
System Infrastructure Security	17,534	13,227	30,761
Expansion of Aviation Unit (helicopter lease & 12 Detectives)	997	1,993	2,990
Leased Vehicles (SUV's) and patrol bikes	569	526	1,095
Police Officers (150) – train riders/patrol	5,969	4,442	10,411
Security Officers (250) – patrol yards, bridges, tunnels, RSO's	6,640	4,652	11,292
Civilian Staff/Corporate Security	446	223	669
Terrorism/Crimes Analysis Intelligence Team	177	177	354
Canine Units (20) for patrol/bomb detection	548	1,280	1,828
Applicant Investigation	490	490	980
Rapid Response Team (6) (labor/equip/uniforms)	-	457	457
	33,370	27,467	60,837
Total Security	**252,938**	**262,394**	**515,332**

Infrastructure Protection

Passenger Information Retrieval System - $5,800,000

Background

- Prior to 9/11/01, Amtrak captured passenger information solely for the purpose of customer service. On 9/11, we began to receive numerous requests from the FBI for information about names being added to their watch list and their criminal investigation. Initially, the process was manual but now, it has been automated. However, the data is not available quickly and cannot be analyzed as a group.

- Changes were also made to our reservation and ticketing system to require picture ID's and the recording of the passenger name and other identifying information at the time of purchase and reservation, regardless of how and where the ticket is purchased.

Problem Absent Emergency Spending

- Amtrak may not be able to react as quickly or adequately to protect passengers and trains from persons who match the FBI watch list. Should terrorist activity and associated investigations grow, the current temporary solution may cause the reservation system to fail.

- The TPF system Amtrak and 90% of other travel companies' use for reservations and ticketing, are not designed to handle this kind of processing load for an extended period of time. Nor can it handle an extensive watch list (or other government requested check lists) comparison and real time analysis that may be required in the future.

Proposed Solution

- Through use of information technology, a system would be assembled which will capture security information and notify law enforcement agencies, such as the Amtrak Police Department and the FBI, automatically in a form immediately useable to capture or track the individuals on the list. The system would also allow watch lists to be based on other forms of information, such as telephone numbers and addresses. This system would also keep an on-line history of all passengers that would allow law enforcement agencies to research patterns of travel involved in a criminal investigation.

- This would be accomplished in 12 – 24 months.

Benefits

- This technology can aid investigative efforts to quickly track passenger lists to identify subjects of criminal and/or terrorists investigations.

- Application of system can be explored to determine if suitable for CAPPS (Computer Assisted Passenger Profile Systems) and/or programs that would reduce vulnerability to terrorist travel or drug trafficking.

Incident Tracking System - $6,200,000

Background

- Amtrak's Police Department and National Consolidated Operations Center (CNOC) handle information related to criminal and operational issues manually. This means that all information concerning ongoing criminal or operation incidents is not readily available to all necessary persons unless communicated via fax or telephone. There is no facility for easily trending data across incidents. Effective information transmission and analysis is delayed. During critical events, such as a terrorist incident or derailment, receipt of timely information is critical for an appropriate crisis and consequence management response.

Problem Absent Emergency Spending

- Amtrak will continue to encounter difficulties during crisis situations where quick, reliable information dictates effective responses from police and operational personnel. Failure to examine trend and incident mapping capabilities afforded by this technology will hamper efforts to improve ongoing security efforts as well as operational issues.

Proposed Solution

- An incident management system would computerize and capture all data related to incidents affecting Amtrak. With the ability to do trend analysis and to link common elements, more effective management can be created. This would apply to the Police Department where criminal incident analysis could be streamlined and more useful deployment of assets achieved as well as to the Operations Center to better train management issues in areas, such as on-time performance.

- This would be accomplished within 12 – 24 months.

Benefits

- Increase overall rail security for Amtrak by establishing up-to-date tracking systems.

- Aid ability of new units covered by this legislation such as the Crimes Analysis/Intelligence Gathering section and the Corporate Security Unit.

QuikTrak Upgrade - $4,300,000

Background

- Currently, ticketing kiosks handle approximately 18% of all tickets issued. The system cannot perform identification checks as it only accepts credit cards for payment and ticket issuance. Although Amtrak has instituted procedures to improve security through a passenger identification requirement for ticket purchases, this ticket purchasing alternative does not allow such checks and, therefore, a segment of the passenger identification is not effectively covered.

Problem Absent Emergency Spending

- Amtrak may need to initiate more comprehensive security measures to cover this gap. Such measures could increase delays in train operations.

- Criminals are aware of this system and have used it in credit card theft crimes. This could easily be an area where terrorists or watch list subjects could use this gap to travel.

Proposed Solution

- This upgrade would have updated units that could capture an image of the ticket purchaser's face. The photo would be kept on file for face comparison to FBI watch lists and for use in criminal investigations, such as credit card fraud. A feature of this system would be to possibly include the photo being printed on the ticket so that on board personnel will be able to verify that the person traveling matches the purchaser and that the purchaser's identification matches the same information.

- This would be accomplished in 12 - 24 months.

Benefits

- This upgrade would enhance overall passenger security efforts and reduce vulnerability to terrorists using the National Rail Passenger System for transportation or as a target.

  - Photo-taking features would also be a deterrent effect on such activities.

  - This technology should also improve criminal investigating in the credit card fraud area.

System Infrastructure Security – Tunnels -- $39,714,415

Background

- At the present time, fencing, usually cyclone, physical geography and barriers such as walls and grade levels protects tunnel entrances. The security aspect is geared primarily to stopping traditional trespassers. Police officers conduct random patrol of the ROW and respond to reports of trespassers and suspicious people called in by employees. Engineering employees while working in these areas would provide some deterrence by their presence to some forms of criminal activity.

Problem Absent Emergency Spending

- Amtrak has 15 tunnels (13 on-corridor, 2 off-corridor). Present conditions require sight observations and rely upon reports of employees and citizens to respond to trespassers and criminal activity. These latter categories create delays in response time. Without emergency spending, the same security system would be in place. Thus, there is no significant deterrence to motivated acts of terrorism or sabotage and this type of structure is vulnerable.

- An act of terrorism or sabotage in a tunnel and/or on a train could cause catastrophic loss of life and serious disruption of business.

Proposed Solution

- The proposal would add significant security enhancements. It would increase deterrence and reduce vulnerability. Two closed circuit television cameras would be placed at the top of each tunnel entrance or in the most effective locations. This technology would provide visual security and deterrence by alarms being activated through motion and/or thermal detection. This would capture information on film which would

viewed be directly to a central monitoring station for immediate response by Amtrak police, security and/or local police. Two high security lights would be established at each tunnel entrance providing a ¼ mile illumination.

- High security fencing would be installed for a ½ mile on each side of a tunnel entrance to increase deterrence and restrict accessibility by trespassers. Vehicle barriers would be strategically placed at locations to prevent such access.

- This would be implemented within 12 – 18 months.

Benefits

- High security fencing has been successfully used in a specific one-mile area in Baltimore to deter and practically eliminate chronic vandalism problems.
- Technological and physical barriers create deterrence from criminal activity and reduce the vulnerability to a terrorist or saboteur's act.

Bridges – $30,797,991

Background

- Like tunnels, bridges are protected by cyclone fencing, physical geography and limited access areas. In some locations, Amtrak personnel operate certain bridges (draw bridge) and a non-security employee is present. Again, police conduct random patrols and respond to calls for service, usually trespassers. Engineering employees working in bridge areas would also provide a non-police presence to deter some forms of criminal activity.

Problem Absent Emergency Spending

- Amtrak has 21 bridges (16 on-corridor, 5 off-corridor) and relies upon sight observations by police and reports by employees and citizens to deter criminal activity around bridges. Without emergency funding, the security scheme would remain unchanged. No significant deterrence to a dedicated terrorist act would be in place.

- An act of terrorism or sabotage at a bridge could cause catastrophic loss of life and serious disruption of business.

Proposed Solution

- The proposed plan would place a total of six closed circuit television cameras at a bridge (two at each entrance and two underneath looking toward the support structures or in the most effective location). These would be motion and/or thermal activated and would provide visual security and deterrence. The activations would be forwarded to a central monitoring station for response by Amtrak police, security and/or local police. Two high security lights would also be installed at each bridge and would provide illumination in and around the bridge area. One mile of high security fencing would be placed on each side of a bridge in both directions. Vehicle barriers would be placed at key locations to prevent unauthorized access to this structure by vehicle. This combination of security assets would increase deterrence, provide real time alerts and reduce the vulnerability of bridges to an act of terrorism or sabotage.

- This would be accomplished within 12 – 18 months.

Benefits

- Technological and physical security enhancements will reduce vulnerability and provide added deterrence from potential terrorist acts or criminal acts.

Interlockings - $176,568,407

Background

- Interlockings are strategic railroad pieces of roadbed and track switches that enable railroad trains to switch tracks and can control railroad traffic.

- The basic security at an interlocking would have fencing to some degree. In many cases, they are unprotected. Many are lighted. Some portions of an interlocking such as a Central Instrument House (CIH) are alarmed. Presently, the Police would conduct random patrols of the ROW and inspect the interlocking roadbed and switches at the location. Engineering personnel would also inspect these areas during the course of their regular duties. Response to trespassers and criminal activity would be performed by sight observations or information from civilians and employees. Without the emergency improvements, these locations remain susceptible to an act of terrorism or sabotage.

Problem Absent Emergency Spending

- Amtrak has 114 interlockings, (57 on-corridor, 57 off-corridor) and an act of terrorism or sabotage would cause moderately serious loss of life and impact on business.

Proposed Solution

- The proposed plan would upgrade all interlockings and provide a significant reduction in vulnerability. Six closed circuit television cameras would be installed on all sides of the track area surrounding the interlocking with activation accomplished by motion and/or thermal detection and alarms. This would allow visual information to be relayed to a central monitoring station for immediate response by Amtrak police, security and/or local police. This will increase deterrence. 1 1/2 miles of cyclone fencing would be installed on each side of the interlocking location. There would be upgrades to lighting at these places. Where appropriate, vehicle barriers would be installed to prevent vehicle access to these areas.

- This would be completed within 12 – 18 months.

Benefits

- Security upgrades at interlockings will provide significant measures of physical and technological support to "target harden" these locations, reducing the chance for terrorist attack or criminal activity, such as sabotage. These provide the ability to deter illegal activity and provide the opportunity for a more timely response.

Tower $419,660

Background

- A tower is a structure that contains a series of mechanically controlled switches that control interlockings and movement of trains. It can be manned. Patrol security is described above. The security issues are the same as above also. The tower has lighting.

Problem Absent Emergency Spending

- Without the emergency improvements, the status quo would be maintained and the existing tower would remain vulnerable to a dedicated act of terrorism or sabotage.

- Amtrak has one tower needing protection and it is On-corridor. Like the above structure, an act of terrorism or sabotage would cause moderately serious loss of life and business disruption.

Proposed Solution

- To decrease vulnerability at this tower, two closed circuit television surveillance cameras would be installed on either side of the tower with the requisite motion and/or thermal detection activators. A ¼ mile of cyclone fence would be installed around the tower to increase deterrence as well as upgrades in lighting. Vehicle barriers would be installed where appropriate.

Benefits

- Improved security at this location would minimize traditional criminal access and would reduce vulnerability to a terrorist act by providing real time surveillance and the ability to rapidly respond.

Electric Traction Facilities - $29,450,587

Background

- Electric Traction facilities are electrical substations located at various points along the ROW that help to boost power to the train's electrical power. Some of these stations have security in the form of lighting and fencing (aged). Like bridges, tunnels and interlockings, there can be employees working at or near these locations. Otherwise, police patrols are random and response to criminal activity is based upon sight observation and reports from employees or civilians.

Problem Absent Emergency Spending

- Without the emergency improvements, the status quo would be maintained and this facility would remain vulnerable to a terrorist or saboteur's act.

- Amtrak has 66 Electric Traction facilities throughout the Corridor and an act of terrorism or sabotage would cause moderate loss of life, but could cause very serious business disruption.

Proposed Solution

- The proposed plan would reduce vulnerability by installing 2 closed circuit television cameras for real time surveillance, based upon motion and/or thermal detection and alarms. Existing lights would be upgraded and a ¼ mile of high security fencing would be installed around these facilities to fortify deterrence levels at these critical sights. Where appropriate, vehicle barriers would be installed.

- This would be accomplished in 12 – 18 months.

Benefits

- The security enhancements provided to these structures would increase the deterrent effect and provide reliable information to responding patrol units. The combination of these improvements also reduces Amtrak's vulnerability to criminal or terrorist acts.

Equipment Facilities - $17,029,680

Background

- Equipment facilities are repair facilities that provide service to trains and other necessary railroad property. Some facilities currently have Amtrak security and/or police officers assigned to these locations (Example: Bear, DE Sunnyside yard, NY – security officers, Beech Grove, IN – police officers) as well as fencing and lighting. Some may also have alarms (panic, emergency). To a large degree, these locations have wide open areas that need to be secured. Officers on sight respond to incidents, off-site Amtrak Police and/or local police must respond and non-police employees could provide some measure of deterrence.

Problem Absent Emergency Spending

- The deployment of personnel would remain the same without the emergency improvements and there is not sufficient security and deterrence for a terrorist or saboteur's act.

- Amtrak has identified 15 equipment facilities for improvement, On-corridor 5, Off-corridor 10. An act of terrorism or sabotage would cause moderately serious loss of life and business disruption.

Proposed Solution

- The proposed plan would enhance security at these locations by improving existing resources where there are security assets and reduce vulnerability and improve deterrence at other locations. Ten closed circuit television cameras would be deployed at entrances, along the perimeter at the facility at key locations and at critical buildings inside the facility. Four high security lights would be installed with ¼ mile illumination at needed locations to increase deterrence and surveillance capabilities. Specialized police vehicle barriers will be deployed strategically.

- In 1997, an employee killed 1 employee and wounded another at Wilmington Shops, the employee was killed by responding local police.

- This would be accomplished within 12 – 18 months.

Benefits

- Existing assets would receive necessary upgrades to these facilities and would reduce physical vulnerability and provide additional protection to aid in employee security and safety.

Yards / Terminals – $29,280,197

Background

- Yards and terminals are places where railroad trainsets are stored for periods of time for later service. They can be beginning and ending points for a train route destination and can store mail and express equipment, such as roadrailers, where loading of shipping products occurs. More regular police patrols can occur where these facilities are close to passenger stations. These places are generally fenced with lighting to a moderate level and some locations may have alarmed trailers or similar worksites. People working at these sites may provide some measure of deterrence.

Problem Absent Emergency Spending

- The current security coverage would remain without any emergency improvements and there would be no significant added deterrence to a terrorist attack or act of sabotage.

- Amtrak has identified 12 yards and terminals for security improvements, on-corridor 5, off-corridor 7, and would sustain moderately serious loss of life and business disruption in the event of a terrorist attack or act of sabotage.

Proposed Solution

- The plan would provide 6 closed circuit television cameras for increased surveillance to deter criminal activity by providing real-time security alerts to personnel at the site or to responding Amtrak police, security and /or local law enforcement. Target vulnerability would also be reduced by installation of high security lighting at strategic locations (entrances, rear, perimeter) and a light tower (centrally located). 1 1/2 miles of cyclone fencing would also be added to upgrade existing fence and cover unprotected areas. Appropriate vehicle barriers would be placed to prevent unauthorized access.

- Would be accomplished within 12 – 18 months.

Benefits

- Security of yards and terminals would be improved and would increase deterrent levels. Physical property and personnel asset vulnerability would be reduced.

Mail & Express Facilities - $3,778,927

Background

- Mail and Express facilities are locations where shipments of cargo transported by Amtrak are received and delivered to trains or loaded onto trucks. Presently, these facilities have little or no security. In some areas, there may be some lighting. Amtrak police would conduct random patrols in conjunction with their regular duties where these facilities are near stations. In many areas, there would be a reliance on response by local police to criminal activity.

- Some Mail and Express facilities are not run by Amtrak.

Problem Absent Emergency Spending

- Without the emergency improvements, security would not be improved in any measurable way. The vulnerability of these places would remain fairly wide open.

- Amtrak has identified 14 Mail and Express facilities to receive emergency improvements, on-corridor 3, off-corridor 11. A terrorist or saboteur's act would not cause serious loss of life at these facilities, but may have some economic disruption.

Proposed Solution

- The proposed plan would place 2 closed circuit television cameras for video surveillance with real time response to be provided from a central monitoring station. These would be placed at the entrance and loading areas. 4 security lights with a ¼ mile illumination would be installed at the entrance, loading dock areas and at other strategic locations. ¼ mile of cyclone fencing would be installed at the perimeter to enhance deterrence and further reduce vulnerability. As with all other locations, vehicle barriers would be placed where needed.

- At 10 other Mail and Express facilities, bomb-trained canine teams and security personnel would be deployed. See Operations Costs segment for projected assignments.

- This would be accomplished within 12 – 18 months.

Benefits

- Security would be in place for the first time at 24 of 42 mail and express facilities. At these locations, vulnerabilities would be reduced.

Stations - $27,233,024

Background

- Stations are the core passenger terminals where passengers come and board trains. In many locations, there are numerous retail and business establishments connected to the station. Amtrak Police are assigned to major and some mid-size stations and patrol the areas around the clock. Various criminal acts have been committed at such stations ranging from minor offenses to serious felonies. There are 137 stations with some form of audible and/or silent alarms that alert the Amtrak Police Department of a need for police response. There are panic, emergency, fire and medical alerts in places such as ticket offices, station floors and employee-only areas. Few have closed circuit television cameras with basic recording capability. It is important to know that these same officers will also perform ROW patrols.

Problem Absent Emergency Spending

- Staffing and patrol level would remain stationary without any emergency improvements. As a result, there would be no improvement in deterrence or decrease in vulnerability.

- Amtrak has identified 23 stations for emergency improvements, on-corridor 8, off-corridor 15, and these facilities would sustain catastrophic loss of life and significant business disruption in the event of an act of terrorism or sabotage.

Proposed Solution

- The proposed plan would provide up to 8 closed circuit television cameras with video surveillance capabilities and real time monitoring at a central location. Criminal activity could be identified and police response immediately directed to the scene. Bomb detection equipment would be available and located at baggage rooms. These devices can trace explosive particles and provide an alert. X-ray machines could also be employed. Bomb resistant trash containers would also be utilized to make stations less vulnerable to use of explosive devices. Up to 12 security lights would be installed around the station perimeter and parking lots, stairways or other pertinent locations. Up to ¼ mile of high security fencing would be used to secure track areas around stations or in conjunction with attached yards and terminals. All of these initiatives would reduce threat vulnerability and increase deterrence.

- This would be accomplished within 12 – 24 months.

Benefits

- Stations would receive technological and physical improvements that would reduce vulnerability to criminal and/or terrorist acts and will provide additional security to passengers and employees.

Vehicle Barriers - $11,111,843

Background

- Vehicle barriers have been used by law enforcement agencies throughout the country to create physical barriers and to deter vehicle traffic away from certain areas.

- The Amtrak Police Department has used these devices in limited applications. After 9/11, they were used effectively to keep vehicles away from stations, parking garages and other areas susceptible to terrorist acts.

Problem Absent Emergency Spending

- For a comprehensive infrastructure and station security program, vehicle barriers are a physical security staple. Amtrak cannot afford the required amount of barriers to "target harden" specific locations from vehicle access. Thus, the status quo would be maintained with limited use of these devices.

Proposed Solution

- Major utilization of vehicle barriers throughout the Amtrak system at key locations to deter vehicle access. 910 miles (380 feet per mile, $25.00 per foot) would be used. Use of these vehicle barriers would add physical deterrence capabilities and would reduce unauthorized vehicle access.

- These concrete barriers would also reduce vulnerability to terrorist acts where a car or truck would be used in conjunction with large amounts of explosives or for carrying equipment to sabotage railroad equipment.

- These would be deployed in 12 – 18 months.

Benefits

- Increase prevention and deterrence through these physical assets.

- Support infrastructure protection plan, off-corridor maintenance, equipment and mail and express facilities.

Centralized Electrification Traffic Control (CETC) - $212,486

Background

- Amtrak has three CETC locations on the Northeast Corridor. These operation centers monitor train movement and coordinate electrical power related to train movement. These CETC's are located in Philadelphia, New York and Boston. They are secured to some degree.

Problem Absent Emergency Spending

- The amount of security at these installations should be upgraded. While there is some security elements associated with these operations, they could be vulnerable to terrorist acts, even through a cyber attack on their systems.

Proposed Solution

- Security upgrades would be made to these operations. Access control systems would be installed and/or upgraded. Additional monitoring and alarm systems would be added. Technological protections to system would also be made.

- This would be accomplished in 12 – 18 months.

Benefits

- Greater protection for CETC's which control and monitor train traffic.

- Reduction in vulnerability and more protection against a cyber attack.

Command 1 and Command 2 - $10,282,793

Background

- The Amtrak Police Department does monitor intrusion alarms to some degree. In addition, there are a limited number of surveillance cameras used for station or platform monitoring.

Problem Absent Emergency Spending

- The limited technological capabilities fail to address present day security needs after the tragic events of 9-11-01. Amtrak security could only maintain status quo patrol coverage without any substantive increase in monitoring, response and prevention capabilities without a centralized approach to system security.

- In addition, the proposed spending for station and infrastructure protection would be diffused and not as coordinated as it would be with these "central monitoring" facilities.

Proposed Solution

- The building of central monitoring type technology centers would provide extensive electronic security coverage. All CCTV cameras feed intrusion

alarms and other relevant monitoring devices would be linked to these centers.

- One would be on-corridor and one would be off-corridor.
- Security personnel would be assigned to these locations and would be trained to operate the technologies. They would work under the Chief of Corporate Security.
- The costs associated under this caption are for the actual building and construction of the command centers.
- This would be accomplished in 18 - 24 months.

Benefits

- Centralized functions create better interoperability with other departments and outside agencies.
- Major increase in deterrence capability from criminal and terrorist acts.
- Real time ability to observe incidents and to coordinate appropriate security responses.

Railroad Incident Command System - $16,750,000

Background

- The primary operations center for Amtrak is the Consolidated National Operations Center (CNOC) in Wilmington, DE. All railroad incidents are managed and coordinated from this location. It is located in close proximity to the Wilmington Station. It would be a logical target for terrorist attack, including a cyber attack because of the disruption that would be caused.
- Amtrak has a GPS Flymap for the NEC.

Problem Absent Emergency Spending

- There is no redundancy. Without a second operations command center, Amtrak could lose the capability of managing critical incidents and situations to a successful conclusion.

Proposed Solution

- Construction of a second commander center. This would be used for daily operations support and as a disaster recovery site for CNOC.
- Amtrak would expand the GPS fly map to all Amtrak routes.
- This would be accomplished in 18-24 months.

Benefits

- Establish redundancy and eliminate gaps in crisis and/or consequence management through interrupted communications.
- Complete pictorial assessment of Amtrak system, in which location specific areas could be examined and used for emergency response and security analysis.

Train Locator & Tracking (GPS) - $5,000,000

Background

- Amtrak utilizes older GPS systems that have not been dependable and are mounted on most of our off-corridor locomotives. We also have a central computer system that records the location of each of the trains, when the transmission is made. Only 7% of required messages are being transmitted. CNOC and emergency response units need up to date locations of trains in emergency situations.

Problem Absent Emergency Spending

- Without the requested funding, the current unreliable format of tracking will continue. Amtrak's level of response to crisis situations will not improve significantly with the status quo train tracking technology.

Proposed Solution

- A new state of the art GPS system would be installed on every locomotive. These systems would provide GPS coordinates to our systems every minute, whenever a train is moving. The systems will be integrated with Amtrak's central computer systems and CNOC to insure that the exact locations of trains will be made.

- This would be accomplished in 12-18 months.

Benefits

- A major impact of this new system would be in the emergency response area. Pinpointing the exact spot of an incident will enable a more complete coordination of efforts in emergency situations.

- This capability will also allow more effective response to criminal incidents by both Amtrak and local law enforcement agencies.

- Better response systems will help to reduce train vulnerability because timely law enforcement response to service calls will increase apprehension and investigation efforts.

Notification System - $119,092

Background

- In major incidents, whether they are criminal or operational, personnel are utilized to make manual notifications via telephones and beepers. An inordinate amount of time is spent on these communications to simply notify personnel of an incident. Time management is not properly utilized.

Problem Absent Emergency Spending

- Present notification system would remain in effect.

Proposed Solution

- Installation of an automated notification system that is preprogrammed to manage the initial and ongoing notification of emergency personnel.

Benefits

- Effective time management at the initial critical juncture of notification at the start of an emergency situation
- Enhanced coordination and response will lead to more effective crisis and/or consequence management

Mail & Express – Shipment Tender Software - $1,245,000

Background

- Mail and express is a growing portion of Amtrak's business. Currently, there is no positive advance identification of shipments and contents. Many shipments are received prior to notification by the shipper. Thus, unidentified materials on trains with passengers can be shipped.

Problem Absent Emergency Spending

- Without the suggested improvement, Amtrak may still have materials that are not traceable to the actual shipper. While there have been security improvements made to mail and express business, they would not fully address this issue.

Proposed Solution

- Development of a software package that will enable shippers to send us timely information about shipments and to positively identify each shipment prior to transport.
- This will be accomplished in 12 - 24 months.
- Improved identification system for shipper and mail and express.
- When combined with corporate security program for shippers, vendors, etc. More effective identification and control of materials will be achieved.
- Creates another layer of prevention and will help reduce vulnerability to explosives/Chem./Bio devices being shipped on Amtrak.

Mail & Package Tracking - $1,211,000

Background

- Amtrak has a fully developed and deployed track and trace system for US mail. Because of a lack of funding, this system has not been expanded for express shipments.

Problem Absent Emergency Funding

- Amtrak is unable to fully track shipments enroute. The status of express shipments carried on our trains will continue to be incomplete and leaves Amtrak vulnerable to contraband or dangerous items being loaded onto our passenger trains.

Proposed Solution

- Completion and full deployment of the track and trace system used for US mail It will enable Amtrak to know the status of each shipment, the shipper, and location of the car.
- It can enhance the express side business.
- This would be adopted in 12-15 months

Benefits

- Improved on board train security for mail and express shipments through more appropriate coordination.

- Enhanced security efforts to deter acts of violence or shipment of contraband.

Employee Identification Systems – Systemwide $538,000

Background

- The Amtrak Police Department has recommended a total revamping of the existing employee identification system as a result of the 9-11-01 attacks.

- Presently, employee identification cards are issued to all new employees and replaced upon request. The control and distribution of this function is with the Human Resources Department. There is little security oversight. At some facilities access card readers have been installed to control points of entry to Amtrak offices (examples: Philadelphia, Washington 10 G Street)

Program Absent Emergency Spending

- Since 9-11-01, all employees are required to wear their photo identification card in a visible manner when on Amtrak property. However, this type of process can be easily compromised and there is no adequate method of verifying identification immediately through police or security. This increases vulnerability and cannot be accomplished without emergency improvements.

Proposed Solution

- The proposed plan would harden internal controls of employee identification. The function would be shifted to the Police and Corporate Security Departments. High-quality identification cards would be issued and controlled through a centralized database. The new cards would have larger pictures of employees and imbedded in the card will be a holographic overlay. This will make the card tamper-proof and will prevent duplication. Visitor and contractor access can be controlled through temporary, dated identification badges that can be easily recognized when it expires (ex: red X appears on badge).

- Remote access to the centralized database will be available for positive security identification at off-site locations.

- Depending upon an employee's craft, methods to attach the identification card safely on the employee can be done through breakaway lanyards or arm pouch holders.

- This would be accomplished within 12 – 18 months.

Benefits

- Amtrak would increase internal security measures and reduce vulnerability of persons imitating an employee in order conduct criminal activities. This system would also increase deterrence and help to ensure employee safety.

Bomb Resistant Trash Containers – $75,000

Background

- These are specialized receptacles that are designed to mitigate the outward explosion that accompanies a bomb's detonation.

- Amtrak has deployed these receptacles for years in stations like New York, Philadelphia, Baltimore and Washington.

Problem Absent Spending

- Current use of these receptacles would be maintained. Expansion could not be afforded.

Proposed Solution

- Provide above funding to expand use of these devices. Majority of receptacles would be deployed off-corridor.

- These will be deployed in 12 – 18 months.

Benefits

- Increase deterrent to repel blast effects in areas where large crowds of people are likely.

- Terrorists recognize these devices and it helps create impression that the facility has been "target hardened."

Equipment Security

Satellite Communications on Trains - $1,755,000

Background

- Amtrak maintains communications with trains through radio and telephone technologies. In the aftermath of critical incidents, these systems can fail or not support emergency response efforts. For example, the "City of New Orleans" derailment and crash with a truck carrying rebar in Bourbonnais, IL on March 15, 1999 had a communications problem in that the use of cellular phones completely jammed the network and made on-site communications difficult at best. For the most part, phone calls could not get in or out of the scene.

Problem Absent Emergency Spending

- In critical incident situations, the failure to maintain a redundant or back up communication system will continue to exist. This can impede consequence management and emergency response efforts.

Proposed Solution

- Amtrak trains would be equipped with satellite telecommunications. The use of these systems would be for emergency situations, particularly in the event that normal communications are broken.

- These would be deployed in 12 – 18 months.

Benefits

- A reliable redundant communications system would be available on all trains.

- Back-up systems would support regular communication network and cut down on response time for the notification and coordination of first responders and emergency personnel.

- At large critical incident sites, satellite communications would provide a superior alternative to overburdened cellular networks.

Hazmat Detectors - $651,000

Background

- Amtrak has not had any significant instances related to chemical/biological agents on trains or in stations. Since 9-11-01, the Amtrak Police Department has responded to 587 suspicious package and 122 biological hazard calls for service.

- Originally, these devices were undervalued significantly.

Problem Absent Emergency Spending

- Amtrak has a need to address chem./bio hazards as part of an overall security and emergency response plans. Without the stated resources, these basic upgrades could not be obtained.

Proposed Solution

- As part of an overall security and emergency response plan, deployment of these devices would be made equally throughout the Amtrak service system.

- Since these devices are portable, a great degree of flexibility in providing chem./bio trace detection will be obtained. These devices would be used in stations, and on trains and may be used to support mail, baggage and express facilities.

- 130 chem/bio hazmat detection devices would be purchased at approximately $5,000.00 per unit.

Benefits

- Increase in prevention and detection of chem./bio attacks.

- Devices should reduce vulnerability.

- Effective deployment as part of overall security and emerging response plan will reduce threats and decrease likelihood of a catastrophic chem./bio incident.

Rapid Response Teams – $3,456,912

Background

- The Amtrak Police Department has one mobile command center. It is equipped to respond to crisis situations and / or to prepare for on-site consequence management. This unit contains satellite, cellular and radio frequency communications. There are several on-board computers, two light towers (over 200,000 lumens) and a telescoping camera that can capture images and transmit them off-site. It also houses two ATVs for rough terrain use. It has a conference room and flat TV monitor with recording capabilities. It is manned by three officers.

- It is also used for large scale events and can be used as an incident command center. For example, this mobile command center has been deployed at the Winter Olympics, Y2K in New York, and at events where crowds or demonstrations are anticipated.

Problem Absent Emergency Spending

- This mobile command center is housed in the Philadelphia area. Thus, it is of limited utility in emergency situations, outside of the on corridor areas.

Proposed Solution

- The Amtrak Police Department is requesting that 2 mobile command centers be authorized for use off corridor. The availability of such units would increase the ability to respond to critical incidents in these areas as well as be incident command centers for events where operational plans and deployment can be made in advance.

- This would be accomplished in 18-24 months.

Benefits

- Improved critical incident response in Midwest and West

- Additional on-site incident command capabilities and coordination with other law enforcement as well as internal operations departments

Radio Repeater Upgrade - $4,320,000

Background

- The Amtrak Police Department has a nationwide National Communications Center. It handles calls from sworn officers across the country. Some of the areas where Amtrak Police must patrol are in remote locations where unreliable cellular communications exist. In addition, there are communication "dead spots" and limited communication ability at certain bay stations where the reliable range is only 20 miles. The current system is in need of upgrades, however, cost factors have limited the ability of the Amtrak Police Department to install these improvements.

Problem Absent Spending

- There will be a continuation of existing communication problems. This will only be exacerbated if the personnel funding levels are approved as more radio traffic will be placed on the existing radio network.

Proposed Solution

- The recommended solution is to install 10 new communications stations that will house satellite receivers and radio repeaters. This will enable radio communications to Amtrak Police personnel in remote areas to be accomplished. In addition, radio communication "dead spots" will be significantly reduced by the installation of 125 new satellite receivers and new radio repeaters at the existing bay stations.

- This would be accomplished in 12-24 months.

Benefits

- Increase radio communications throughout the country, such as in Florida, Texas, North Carolina, New Mexico and Oregon

- Improve existing radio services to enhance radio communications, including constant police radio connectivity while riding on board trains, which should benefit employee, passenger and officer life safety matters

High Rail Rescue Vehicle (DMV – self propelled) - $4,000,000

Background

- The Amtrak Police Department possesses one mobile command center. This motor vehicle is not equipped to proceed on rail tracks and must utilize highways to proceed to emergency locations. It has been deployed to support patrol operations and has been useful in multiple interagency operations during large scale events, such as the Winter Olympics, Y2K and IMF conferences.

Problem Absent Emergency Spending

- Emergency response and other effective applications to daily railroad operations will not be enhanced without these multi-purpose response vehicles.

Proposed Solution

- The High Rail Response vehicles would provide a variety of specific, dedicated services. The four vehicles would be deployed equally on-corridor and off-corridor.

- A proposed use would be for daily "first run" coverage over track areas to ensure that there are no problems for traffic that day. A second use would be to support specific trains where there are dignitaries on board or where threats have been made against a particular train.

- Another component would be for emergency response. These self-propelled cars would be outfitted with emergency and medical equipment needed to operate in a critical incident environment. Like the mobile command centers, they could also serve as incident command centers at the scene. They would be equipped with digital and satellite communications and could operate in a hazmat situation(chemical/biological/radiological terrorist incident). Vehicles would be stored with respirators, triage and decontamination devices. They would also be powered by diesel and electric and would have their own air filtration system.

- This would be accomplished in 18-24 months.

Benefits

- Added emergency response capabilities.

- Unique "on track" first run patrols.

- Dedicated train patrol capability.

Head End Surveillance Recorder - $10,234,00

Background

- Amtrak locomotives rely primarily on the ability of the engineer to react to emergency situations. This is a physical response that does not have significant implications because of the fact that it may take a train a mile to come to a complete stop. For the most part, there is no ability to avoid potential deadly accidents or acts of terrorism and sabotage. Amtrak suffered one such incident in 1995 at Hyder, Arizona, where an employee was killed by a deliberate act of sabotage.

Problem Absent Emergency Spending

- The status quo would be maintained and reliance would remain on the reaction times of engineers. There would be no advance warning of impeding danger.

Proposed Solution

- Amtrak has recommended that all locomotives be equipped with head end surveillance technology. Monitors would be placed in each locomotive that would allow the engineer to examine the upcoming track areas, grade crossings and switching stations to ensure that there are no potential problems ahead. This technology could be instrumental in reducing grade crossing accidents, derailments and possible acts of terrorism and sabotage.

- This would be accomplished in 18-24 months.

Benefits

- Provides engineers with more response time to act where potential critical incidents may be developing.

- Tool that possesses dual purpose of being a deterrence to criminal or terrorist acts as well as a device to address grade crossing accidents.

- Captures video evidence of what transpires at the scene of critical incidents.

Package Express (Chemical Sniffers/Explosives) - $1,400,000

Background

- Amtrak did not utilize any type of chemical sniffers for explosive devices prior to 9/11/01. Since that date, Amtrak has entered into a pilot project with the FAA where portable explosive trace devices were utilized in the rail environment.

Problem Absent Emergency Spending

- Amtrak does not possess the financial capability to upgrade security and to create meaningful deterrents to potential explosive devices.

Proposed Solution

- Amtrak would acquire 14 fully equipped explosive detection devices for deployment at major stations with mail and express components both on-corridor and off-corridor. They would be deployed equally.

- By augmenting station and package express security with these devices, more effective security can be obtained and a reduction in vulnerability for explosive threats would be achieved.

Benefits

- Increase technological support to basic patrol and security functions.

- Package express and baggage screening capability.

- New models can also trace for narcotics detection.

Enroute Train Service - $1,305,000

Background

- Mail and Express is a growing portion of Amtrak's business. Currently, there is no enroute train service security. Because passenger train service would be a more attractive target for a terrorist act, use of mail and express to load explosive/bio devices, or tamper with these shipments exists as a potential risk.

Problem Absent Emergency Spending

- Without the suggested improvement, Amtrak would not be able to establish some basic enroute train security mechanisms nor have a useable shipment tracking system.

Proposed Solution

- Purchase and install electronic door seals for Mail and Express cars to alert security if doors are opened improperly. These security seals would have dual purposes as it addresses vulnerability of the current Mail and Express cars against terrorist acts as well as providing preventive security against theft and vandalism.

- Software would be installed to verify terminal load plan against the manifests, improve reporting of "set-outs" (removed cars – why removed and where), electronic tracking of items, verification of original order and would collect piece count shipping container types and weights.

- This would be accomplished within 12 – 18 months.

Benefits

- Improved security for Mail and Express shipping with enroute service technology.

- Increase deterrence capability through security upgrades against terrorist acts and train larceny.

- As part of an overall, comprehensive rail security plan, this improvement would be a useful countermeasure in reducing threats against passenger rail service.

Remote Capability to Turn Off Engine - $6,712.000

Background

- Off-corridor, Amtrak trains are run by diesel engines. There is the potential that individuals could commandeer a locomotive engine to cause catastrophic loss at a major station or area where large amounts of people are gathered.

- Unlike the NEC electrification system, Amtrak does not possess the same ability to control movement by shutting down the electrical power.

Problem Absent Spending

- Vulnerability will exist that diesel locomotives could be used in a planned terrorist act against passenger rail.

- While Amtrak is taking steps to secure locomotives better, this consequence management technology would not be utilized.

Proposed Solution

- Implementation of technology in diesel locomotives to shut down the engine if necessary. Similar to a GPS, the technology does exist which can connect a computer unit to the engine via a satellite to read the engine's status. It would tie into the cab signaling system when deactivation would be required.

- This would be deployed off-corridor within 12 – 24 months.

Benefits

- Turn-off capabilities could eliminate any threat of locomotives being used for terrorist acts.

- Could serve a safety purpose where an engineer is hurt or becomes unconscious during travel.

Bomb Detectors - $4,000,000

Background

- Outside of canine explosive detection teams, the Amtrak Police Department did not possess the assets to use explosive detection equipment in any forum. It has joined recently with the FAA for a pilot project aimed at using these devices in a rail environment.

- Original cost estimates for a bona fide explosive detection device were understated significantly.

Problem Absent Emergency Spending

- In the wake of 9-11-01, significant security upgrades should be mandatory for all modes of transportation. Because of Amtrak's requirement to operate a national rail system, security improvements are vital. Without such funding and authority to use explosive detection devices, Amtrak will remain vulnerable to terrorist acts.

Proposed Solution

- As a part of a comprehensive security plan, portable explosive detection devices would be utilized throughout the system. They would be deployed equally, on-corridor and off-corridor.

- The advantage of these devices is that they are hand held and, thus, can travel to different stations and on trains.

- These devices are approximately $33,300.00. The requested appropriation would purchase 120 devices.

Benefits

- Establishes portable explosive detection capabilities which can reduce vulnerability to explosive terrorist acts.

- Increases deterrence and increase prevention in combination with chemical sniffer devices and canine explosive detection teams.

Operating

Aviation Unit Expansion - $2,989,704

Background

- Presently, the Amtrak Police Department charters a helicopter. It generally flies missions in and around the NEC, but has been deployed in the San Jose, CA area. In the time frame after 9/11/01, numerous missions were flown to protect high speed trains and to support train movements.

Problem Absent Emergency Spending

- The capability of air support is limited. Dedicated patrol missions will be confined and full use of aerial police services would remain the same.

Proposed Solution

- Expand the Aviation Unit to provide dedicated service in the Mid-West, South, and West. This would provide the same flexibility for dedicated missions to support intercity rail travel by operating missions over foreign railroad tracks,

increased deterrence and prevention activities would occur and would benefit the host railroad as well as Amtrak.

- New charters would be obtained in 12-18 months.
- At least 2 of 3 units would be deployed off-corridor.

Benefits

- Another emergency response capability
- Aerial train and track protection that could alert personnel of potential problems while enroute train service is occurring.

Leased Vehicles (SUV's) and Patrol Bikes - $1,095,000

Background

- The Amtrak Police Department currently has a fleet of 95 leased vehicles for its sworn and security force. These vehicles are deployed to support patrol efforts throughout the Amtrak service areas, both on corridor and off-corridor.

Problem Absent Emergency Spending

- If the personnel security portion of existing legislation is passed, there will be the need for additional vehicles to support this security expansion program. Without funding for vehicle leasing, the ability of these new forces to be sufficiently deployed and to patrol on a substantive basis will be reduced.
- This could lead to continuing coverage gaps that could be eliminated.

Proposed Solution

- The vehicle lease program would provide an additional 150 patrol vehicles for use by sworn and security personnel. These would be used effectively to increase coverage capabilities both on corridor and off corridor. They would be deployed equally.

Benefits

- Vehicle patrols increase vigilance and the ability to respond to incidents. Here, leased vehicles would support ROW patrol, Mail and Express facility patrols as well as maintenance and equipment facilities and stations.

- Visible marked units add a significant deterrent effect and can help create an awareness of police and security presence.

- The additions to the existing fleet will help support the overall basic patrol mission of the Amtrak Police Department.

- Would aid in increasing deterrence to potential criminal acts or acts of terrorism and/or sabotage.

Police & Security Officer Deployment - $23,531,280

Background

- The Amtrak Police Department currently has 325 police officers and 15 security officers to patrol and protect the Corporation's passengers, employees and property. A nationally accredited law enforcement agency since 1992, the primary focus has been to protect areas where the greatest number of people are located, namely stations, platforms and areas abutting these facilities. In addition, ROW patrols on-corridor provide random protection for key structures like bridges, tunnels and interlockings. In 2000, the Police Department handled approximately 143,000 service calls.

Problem Absent Emergency Spending

- The Amtrak Police Department has been fully implemented and deployed since the attacks of 9-11-01. Even with this mobilization, significant problems in coverage exist, and will continue to exist. For example, engineering personnel are watching key structures like tunnels and bridges. Requests have gone out via a NCIC message and a US Conference of Mayors letter for local law enforcement to assist Amtrak in providing coverage of Amtrak facilities within their jurisdiction. Amtrak has had officer-riding trains, but their coverage has not been extensive, given existing security demands.

- Without increased personnel, gaps in coverage will remain in all areas, including stations, trains and ROW patrols. This increases the risk of terrorist acts as sufficient assets to deter such activities are already deployed and leaves Amtrak more vulnerable to such occurrences.

Proposed Solution

- Immediate process to begin hiring 150 patrol officers, 250 security officers and 20 canine officers. Deployment of additional police officers and canine officers would be 92 on-corridor and 78 off-corridor.

- 250 security officers would be deployed as follows: 130 on-corridor and 120 off-corridor.

- All additional sworn police officers would patrol trains as a regular part of their daily duties. Depending upon their assignment, an officer could ride train segments, get off at a particular area or station, perform patrols at this location and then have another train segment patrol. Off-corridor, it is anticipated that coverage of some long haul trains will occur.

- Proposal includes hiring of 20 additional bomb trained canine teams, where 14 will be assigned off-corridor, ten of which will cover mail and express facilities.

- Security officers would be assigned to cover ten mail and express facilities, primarily off-corridor as well as tunnels, bridges and yards, primarily on-corridor. In addition, security officers would monitor the technology command centers (see Command 1 and 2).

- Implementation would take about 12 – 18 months (8 - 12 months recruitment and hiring and 6 months training).

Benefits

- Visual police presence is one of the hallmarks of effective crime deterrence practice. The increased uniform presence on trains, stations, mail and express facilities and the ROW will provide significant upgrades of patrol capabilities and have a direct impact on Amtrak's vulnerability as a crime and/or terrorist target. Combined with the infrastructure improvements, Amtrak will have taken emergency measures to add patrols and install assets that can have an impact on the Corporation's short-term safety and security.

Corporate Security Unit - $668,796

Background

- The Amtrak Police Department provides sworn patrol services as well as deploys security officers in yards. Their primary mission is to protect the lives of employees, passengers and the public as well as protect property. Dedication to these efforts requires maximum amount of resources. Amtrak police had one manager whose duties included security assessments and the vulnerability assessment of its physical locations.

Problem Absent Emergency Spending

- The ability to conduct such assessments system wide for Amtrak is inadequate. Without emergency improvements, Amtrak does not have the resources to create a bona fide Corporate Security Unit. A lack of coordinated management of security functions, beginning with capital projects, would leave Amtrak vulnerable to criminal acts of terrorism and sabotage.

Proposed Solution

- Under the proposed plan, a specialized unit would be established of 6 management level positions. A review of all capital projects would be undertaken to assure that security considerations are included in the development of the project. Where necessary and appropriate, CPTED (Crime Prevention Through Environmental Design) would be utilized. This would include planning where lights, fencing, surveillance technology would be analyzed and recommended.

- Responsibility for the employee identification function would rest in this Unit and would control the entire process.

- All security policy, planning and procedures would be published out of this office in conjunction with the Police Department. All security inspections, audits and reviews would be handled by this function.

- This would be accomplished within 12 months.

Benefits

- This type of unit would increase deterrence and make Amtrak less vulnerable to criminal acts and terrorist acts.

Intelligence – Terrorism & Crimes Analysis - $353,636

Background

- Amtrak presently has one full time employee dedicated partially to intelligence gathering. He is a sworn management level official. Another police officer is assigned to work with the New York Joint Terrorism Task Force and, thus, supplements the work of the above manager. While these personnel do have regular contact with appropriate government officials, the intelligence aspect is inadequate for the need of rail transportation in the current environment.

Problem Absent Emergency Spending

- The problem is acute because intelligence gathering and analysis is, arguably, the most critical aspect of preventing terrorism and sabotage. Use of reliable information can dictate how your assets can be deployed to prevent criminal and/or terrorist acts.

- Without the emergency improvements, the Amtrak Police Department cannot afford to take away basic uniform patrol services to start-up this type of specialized unit.

Proposed Solution

- Under the proposed plan, 4 police officers would be employed to provide intelligence gathering and analysis as well as conduct crime-mapping type assessments throughout the entire system, on-corridor and off-corridor. Each would be dedicated to specific regions of the country and work with their law enforcement counterparts on developing timely intelligence to prevent terrorist acts and criminal patterns and would reduce Amtrak's vulnerability to such activities.

- These personnel could also be used to screen manifests and examine purchasing habits of certain passengers for possible interdiction by officers in the field.

- This would be accomplished within 12 months.

Benefits

- This would allow the current manager to focus primarily on relationships and liaisons with governmental officials and intelligence experts in order to acquire information in a more comprehensive and effective manner, which would reduce Amtrak's vulnerability to attack. All assigned personnel would be performing crime prevention and deterrence activities.

- Freight Railroad Police Chiefs identified reliable intelligence gathering as their number one priority in preventing terrorist acts.

Applicant Background Investigations - $980,454

Background

- Presently, the Amtrak Police Department has investigators assigned to perform full background investigations on sworn police officers and a more limited background investigation on security officers. There is also coordination between state agencies that also may request information on applicants. These are performed on a regular basis as applicants apply and are scheduled to complete the employment process steps. It is not designed to handle a large influx of new hires.

Problem Absent Emergency Spending

- If the funding request is adopted and 198 sworn officers and 250 security officers need to be recruited and hired, the existing process will be totally inadequate to handle this increased volume.

Proposed Solution

- The proposed funding would allow Amtrak to dedicate existing personnel to work primarily on the hiring phase. Investigators would be assigned specifically to handle this load. In addition, outside contracted personnel would also be brought in to handle the recruitment, selection and management of hiring over 400 new security personnel.

- This process would take between 8-20 months to accomplish. Recruitment and selection procedures for this volume would take 8-14 months, training would take another 6 months.

Benefits

- An effective coordinated procedure for hiring will enable Amtrak to select good, qualified candidates for these important security positions.

- This "ramp up" is a one time cost factor.

You have also asked if any of these investments would improve rail service in non-security areas, such as operating times, for both long distance trains and corridor services. It is believed that ancillary benefits could be derived from implementation of the stated security needs for Amtrak.

The below list, includes, but is not limited to, specific areas where potential dual purpose (security and train performance improvements) could be achieved:

- System Infrastructure Security: Many of the security improvements in this section involve installation of fencing, vehicle barriers, CCTV, and intrusion alarms. All of these items would enhance rail passenger corridors, particularly in the NEC. The ancillary effect would be on train delays and on-time performance as the potential for trespasser strike, debris strike and other similar delays could be decreased through use of these physical and technological deterrents.

- Train Locator and Tracking, Satellite Communications on Phones

  Technological communication improvements on board trains, especially long distance trains, would provide more meaningful opportunities to coordinate, evaluate and resolve critical

incidents. Consequence management of a train accident, mechanical breakdown or similar matters causing delays would be improved through these enhanced communications. With the ability to determine the precise location of an incident, necessary response time would be reduced. Redundant communications, such as satellite communication, would ensure a viable mode of communications should regular channels become unavailable or overburdened.

Personnel Increase - Additional Police Officers

One of the elements of Amtrak's Security Plan is the addition of 150 police officers. Most of these officers would be assigned to the train riding or Train Marshall Program. Since 9/11/01, Amtrak has received very positive feedback from passengers and employees with regard to sworn uniform personnel riding trains on patrol.

These officers would support on-board train personnel and provide a resource for on-board train incidents. Medical emergencies and disturbances on trains (disorderly conduct, theft, etc. could be effectively handled by the officer on the train.) His/her role with local emergency services or law enforcement personnel would reduce delays occasioned by on-board train incidents.

Mr. Rogers. In Airports nationwide, the FAA has used trace explosive detection to screen airline passengers and carry-on baggage for explosive residue. In the aftermath of September 11, is Amtrak considering deploying any type of screening technology to protect passengers from explosive that might be carried on board its trains?

[The information follows:]

Amtrak is considering deploying screening technology in a variety of areas to protect passengers. The manner in which this is done, however, requires further study, additional funding and regulations to implement any effective programs. In the previous question, Amtrak provided the basic security needs it anticipates. Contained within that answer are requests for 130 portable Hazmat detection (Chem/Bio), 14 Chemical Sniffers and 120 explosive trace detection devices. In addition, Amtrak has asked for 20 canine teams to perform explosive detection services.

Specifically, the Amtrak Office of System Security and Safety is planning to use some form of screening technology in conjunction with the following identified programs:

On Board Train Security
Station Security
Mail & Express Security
Checked and Carry-On Baggage Security
Explosive Detection Program
Chem/Bio Detection Program
Emergency Response Program

Passenger Identification & Security Programs

Currently, a pilot program using portable trace explosive detection equipment is underway at Amtrak. This program consists of a partnership with the FAA who have graciously provided both technical support and the equipment. This program has been in operation for approximately three months.

However, despite all of these efforts and considerations it is extremely important to remember that the passenger rail system, unlike the aviation system, is relatively intermodal and open in nature. Even in countries that have dealt with terrorist threats more than the United States (ex. England, France, and Japan) open, intermodal passenger rail systems are the norm. For example:

- New York's Penn Station handles about 30,000 Amtrak passengers per day, but an additional 250,000 passengers pass through on New York City subways, the Long Island Railroad and New Jersey Transit

- At many major stations, passengers can walk relatively freely between commuter platforms and Amtrak platforms.

- The majority of tracks over which we operate are owned by private freight railroads, and many are shared with commuter railroads.

- Amtrak stations in many small towns are unstaffed.

- We have no control over waterway traffic that may be used to attack railroad bridges.

- To date, Amtrak has never had the same kind of strict federal regulations governing access to trains and facilities that you see for aircraft and airports.

Notwithstanding, the difficulties associated with the intermodal openness of passenger rail, Amtrak recognizes the need to create an enhanced and effective explosive detection program for passenger safety.

Mr. Rogers. Further, is Amtrak aware of technology that combines explosive and narcotics detection to serve the dual function of apprehending drug dealers and couriers on high trafficking routes as well as protects passengers from potential threats from explosives?

[The information follows:]

Since September 11, Amtrak's Office of Security and Safety has conducted extensive research on various forms of technology in attempts to identify products and equipment that would help protect the national rail passenger system against terrorism.

However, your question raises a different issue of combining similar strategic missions countering drug traffic and terrorism dually through the use of technology. For decades, Amtrak has engaged in law enforcement efforts to interdict drugs on passenger trains. Our police department working on tasks forces along with federal, state and local police agencies have been quite successful in stemming the flow of drugs on our system.

With regard to drug/explosive detection instruments, Amtrak has recently learned about a few commercial products that perform this dual function. We have received materials from one manufacturer, Ion Track Instruments that has two types of devices:

Itemiser[3] is a desktop contraband detection and identification system. The literature states that it can identify many explosive substances (including ammonium nitrate, C4, Semtex, etc.) and narcotics (including cocaine, heroine, and methamphetamine.

Vaportracer[2] is a portable instrument that can identify 8 explosive substances and numerous narcotic substances (including cocaine, heroine, PCP).

In a related area, there are also computer systems that could assist in the identification of individuals that could associate with drug and/or terrorist activities. In Amtrak's request, the passenger identification retrieval system would be one type of application that could serve the dual function requested by this committee.

In the aftermath of 9/11, Amtrak's Police and IT departments worked on creating a system where passenger reservations could be matched against the FBI's Watch list. The aforementioned passenger identification system would be an upgrade of that basic program which cannot fully support the requirements of such as crosscheck system. In the narcotics trafficking area, linkage to computerized systems like NADDIS would help identify rail passengers with drug

trafficking history and/or as wanted by law enforcement agencies. See answer to Question 58 (Passenger Information Retrieval System)

Furthermore, similar applications to rail passenger service would be utilized from adapting the airline industries use of Computer Assisted Passenger Profile Systems (CAPPS).

Finally, while Amtrak is increasing canine patrols significantly with explosive detection teams, there is always the development of additional canine teams for narcotics detection.

The use of canine patrol in explosive and narcotics efforts is still an instrumental part of any law enforcement effort in these specific areas.

High Speed Rail Delays

Mr. Rogers. How many high-speed trainsets are in service on the Northeast Corridor now?

[The information follows:]

As of March 12, 2002 Amtrak had accepted from the Bombardier/ALSTOM Consortium and placed into service 17 trainsets on the Northeast Corridor.

Mr. Rogers. Two years ago, Acela was supposed to be fully operational by 2001. In reality, only two of the twenty trains were running at the beginning of 2001 and not all trainsets will be operational until May 2002.

Please detail for the Committee why these delays are occurring and what Amtrak has done to mitigate this impact?

[The information follows:]

The reasons for the delays are detailed in Amtrak's response to the previous question. Amtrak has made significant concessions to the Consortium in an attempt to mitigate the Consortium's delays, for example:

- Amtrak has allowed the Consortium to ship trainsets from its Barre VT plant that were missing many key parts and/or that were outfitted with parts that are not to the latest configuration. Amtrak has also allowed the Consortium to install the missing and defective parts at the Commissioning site in Philadelphia. These accommodations were made in an attempt to help the Consortium alleviate congestion on its production line;

- Amtrak has provided the Consortium with access to its facilities so the Consortium and its vendors could perform modifications to the equipment to bring the trainsets up to the proper configuration; and,

- Amtrak has waived the requirements for many of the qualification tests that were to have been performed at the Pueblo test site, allowing the Consortium to complete its testing requirements on the NEC.

Mr. Rogers. Is May 2002 still the target date for having the full complement of 20 trainsets in revenue service? If not, please explain the delay.

[The information follows:]

Amtrak expects that 19 of the 20 trainset will be accepted by May 2002. The 20th trainset will be accepted by the 4th quarter of 2002. The reasons for the delay include:

- The Consortium lost control of its inventory, creating a significant parts shortage for the trainset and locomotive manufacturing programs;

- The testing and qualification programs identified numerous deficiencies in the operation of the trainset and various components, requiring numerous modifications to the equipment; and,

- Because of poor trainset performance during the test phase and other technical problems with the equipment, the NEC's testing program finished 19 months later than originally planned.

Mr. Rogers. According to the original Acela contract, daily damages can be assessed to the vendor if the trainsets were not delivered on time, with all 20 being delivered by August 2000. Please identify the damage charges agreed to in the contract and identify what penalties have been assessed to the manufacturer, to date? What does the manufacturer believe it is liable for?

[The information follows:]

The "Acela" Contract provides for per diem liquidated damages of up to $13,500 per trainset per day of delay, subject to an overall cap of 7.5% of total contract value.

At this time Amtrak has withheld payments of approximately $48 million with respect to delay liquidated damages. This represents the current contract and may be subject to modest upward revision to the extent change orders increase the total contract value.

As to the manufacturer's position, it has submitted no claims for excusable delay under the Contract, which is the proper means by which it might contest Amtrak's withholding.

Bombardier, one member of the contracting Consortium, has initiated litigation against Amtrak to recover damages allegedly incurred on account of Amtrak causing delay and disruption. The litigation, at least at this time, does not directly specify a claim for excusable delay. Alstom, Bombardier's co-venturer in the Consortium, has not joined in the litigation. Amtrak has filed a motion to dismiss the litigation, and this motion is pending before the D.C. Federal District Court.

Mr. Rogers. What penalties is Amtrak projecting that it will collect over the life of the delay? How will the Corporation collect these damages?

[The information follows:]

As noted above, Amtrak is already withholding the contract ceiling amount of $48 million in delay damages. (Amtrak does not consider this to be a penalty, but rather an amount less that its full actual damages.) Future change orders could increase this by less than $1 million.

At this time Amtrak is "collecting" these damages by withholding payment to the Contractor.

Mr. Rogers. Have you collected any damages to date? If so, how much?

[The information follows:]

Please see responses to the previous two questions.

Other High-Speed Rail Corridors

Mr. Rogers. Please describe Amtrak's role in high-speed rail corridor development off of the Northeast Corridor? How has this role evolved?

[The information follows:]

Amtrak is extensively involved in working with our state and freight rail partners to plan and implement new high-speed rail service. Our work has focused primarily on routes designated as High-Speed Rail Corridors by the US Department of Transportation. This includes:

- Northeast HSR System, including the Washington-Boston high-speed Northeast Corridor, the Keystone Corridor from Philadelphia to Harrisburg; the Empire Corridor from New York City to Albany and Buffalo; and the New England HSR Corridor from Boston to Maine and Boston to Montreal.

- Southeast & Gulf Coast HSR Corridors, running from Washington, D.C., to Richmond, Charlotte, Atlanta and New Orleans and from Washington to Jacksonville, Tampa and Miami.

- Midwest Regional Rail Initiative, consisting of a 3,000-mile, nine-state " hub and spoke" system connecting Chicago with the major cities of the Midwest, including Mimeapolis, Madison, St. Louis, Kansas City, Omaha, Indianapolis, Cincinnati, Cleveland and Detroit.

- California HSR System, consisting of the Pacific Surfliner, San Joaquin, Capitols and Coastal corridors.

- Cascades HSR Corridor, with service from Eugene, and Portland, Oregon, to Seattle and Vancouver, British Columbia.

Over the past five years, Amtrak's role in planning future service on these corridors has increased significantly for a number of reasons:

- First, nearly all states are limited to planning and funding activities solely within their own boundaries. Because Amtrak operates a national passenger rail system, we are able to provide the cross-border regional

coordination that is critical to the success of new high-speed rail systems.

- Second, Amtrak's expertise at passenger trains operations planning is unparalleled and we have the tools and experience to develop the systemic efficiencies that can maximize ridership and help to control costs.

- Third, because Amtrak is working with many states in various high-speed rail corridors, we can consolidate train equipment procurements to achieve significant price and design efficiencies. Amtrak has 30 years experience in the design, procurement and testing of new trains, including development of the new Acela Express trainsets.

- Fourth, Amtrak has developed a relationship with many of the freight railroads that allows for a productive discussion on the availability of rail line capacity. We have defined an acceptable process, which builds off 30 years of partnering with the freight railroads, for quantifying the improvements required to facilitate growth of both passenger and freight rail service existing rail freight lines and right-of-ways.

- Finally, Amtrak is the only national passenger train operator and we have the ability and expertise to operate new high-speed rail systems. This includes numerous services and activities -- train operations and on-board train activities; station services and reservations; and right-of-way and equipment maintenance. Moreover, Amtrak has unique relationships with the private freight

railroads that own most of the trackage over which new high-speed rail systems will operate, based on 30-years of working together and various statutory rights.

Amtrak's work includes extensive operations planning - development of potential train schedules, identification of capacity constraints and improvements to address them - equipment design and procurement, and management of specific projects, including development of the new ITCS signal system in Michigan and design and construction of maintenance facilities in California and Washington State.

Attached is a document that more fully describes progress in planning and implementing new high speed rail corridors across the country.

The attachment follows:

AMERICA'S HIGH-SPEED RAIL PROGRAM
Spring 2002

With introduction of Amtrak's Washington-to-Boston Acela Express service, America is finally seeing first-hand the immense benefits that high-speed rail can provide for travelers, communities and entire regions of the country. Ridership on Acela Express is growing faster than ever projected and, particularly since the transportation challenges created by the September 11 terrorist attacks, America's high-speed rail system is the preferred mode of travel in the Northeast.

Amtrak's vision for high-speed rail does not end in the Northeast. Indeed, Amtrak is working with states, commuter rail partners and private freight railroads across the nation to develop new high-speed rail corridors that will provide an efficient, reliable and safe alternative for accessing and connecting the business and population centers of this country. In most cases, work is focused on upgrading existing rail lines to permit faster and more frequent passenger rail service, while ensuring that freight rail service can continue to grow. The states are largely driving this effort – they have consistently concluded that improved passenger rail service often is the only viable and affordable alternative to the highway and airport congestion that is choking economic growth.

The success of these high-speed rail corridor programs will depend on the availability of federal funding to support the state planning and construction work. Today, while large dedicated federal funding sources support construction and maintenance of the national highway, air and transit systems, there is no similar funding to support Amtrak or state efforts to implement high-speed rail service. The lack of a federal funding partner has severely limited the number and scope of new high-speed rail systems.

Amtrak plays an important role in working with states and freight railroads to plan and implement high-speed rail service:

- First, nearly all states are limited to planning and funding activities solely within their own boundaries. Because Amtrak operates a national passenger rail system, we are able to provide the cross-border regional coordination that is critical to the success of new high-speed rail systems.

- Second, Amtrak's expertise at passenger trains operations planning is unparalleled and we have the tools and experience to develop the systemic efficiencies that can maximize ridership and help to control costs.

- Third, because Amtrak is working with many states in various high-speed rail corridors, we can consolidate train equipment procurements to achieve significant price and design efficiencies. Amtrak has 30 years experience in the design, procurement and testing of new trains, including development of the new Acela Express trainsets.

- Amtrak has developed a relationship with many of the freight railroads that allows for a productive discussion on the availability of rail line capacity. We have defined an acceptable process, which builds off 30 years of partnering with the freight railroads, for

quantifying the improvements required to facilitate growth of both passenger and freight rail service existing rail freight lines and right-of-ways.

- Lastly, Amtrak is the only national passenger train operator and we have the ability and expertise to operate new high-speed rail systems. This includes numerous services and activities -- train operations and on-board train activities; station services and reservations; and right-of-way and equipment maintenance. Moreover, Amtrak has unique relationships with the private freight railroads that own most of the trackage over which new high-speed rail systems will operate, based on 30-years of working together and various statutory rights.

As efforts progress in Washington to secure a dedicated source of federal funding for high-speed rail, Amtrak and its state and freight partners continue the planning work necessary to quickly implement new service. Moreover, as described below, some important construction – funded by the states and Amtrak – is progressing now to reduce trip time and expand the capacity of corridor rail lines. These efforts demonstrate the state interest in and focus on high-speed rail as a means to enhance regional transportation and economic growth.

High-speed rail planning has generally focused on five broad-based regional markets:

- Northeast HSR System, including the Washington-Boston high-speed Northeast Corridor, the Keystone Corridor from Philadelphia to Harrisburg; the Empire Corridor from New York City to Albany and Buffalo; and the New England HSR Corridor from Boston to Maine and Boston to Montreal.

- Southeast & Gulf Coast HSR Corridors, running from Washington, D.C., to Richmond, Charlotte, Atlanta and New Orleans and from Washington to Jacksonville, Tampa and Miami.

- Midwest Regional Rail Initiative, consisting of a 3,000-mile, nine-state "hub and spoke" system connecting Chicago with the major cities of the Midwest, including Minneapolis, Madison, St. Louis, Kansas City, Omaha, Indianapolis, Cincinnati, Cleveland and Detroit.

- California HSR System, consisting of the Pacific Surfliner, San Joaquin, Capitols and Coastal corridors.

- Cascades HSR Corridor, with service from Eugene, and Portland, Oregon, to Seattle and Vancouver, British Columbia.

The vision for these programs and updates on their progress is detailed below.

NORTHEAST HIGH-SPEED RAIL SYSTEM

1. Northeast Corridor

The 457-mile Northeast Corridor rail line connecting Washington, Philadelphia, New York and Boston is the busiest passenger line in the country. Indeed, some 200 million travelers use Amtrak and seven commuter rail systems over a portion of the Northeast Corridor every year. Amtrak owns and operates most of the trackage. Between 1978 and 1999, the federal government invested some $3.7 billion in preserving and upgrading the line, which was inherited from the bankrupt Penn Central Railroad in 1976. In 1992, Amtrak initiated its Acela high-speed rail program, which focused on extending the Washington-New Haven electrification system east to Boston and rebuilding the railroad infrastructure to support train speeds up to 150 mph. The work included new stations and bridges, new signal and safety systems, and new tracks and rails. In addition, Amtrak developed and procured America's first high-speed trainsets, designed to provide unparalleled comfort for premium fare passengers on the corridor.

In December 2000, Amtrak inaugurated its first *Acela Express* service between Washington and Boston; the last of 20 Acela Express high-speed trainsets will be delivered to Amtrak during fall 2002. Today, trains operate between Washington and New York in as little as 2' 35" and between New York and Boston in as little as 3'25". Work is underway to further reduce trip times, particularly north of New York where a goal of 3' 10" is expected within three years.

Amtrak's Northeast Corridor is unique amongst the world's high-speed rail systems. In Europe, most high-speed lines are dedicated solely to high-speed passenger trains. Slower passenger service and all freight operations are relegated to other rail lines. On the Northeast Corridor, Amtrak's Acela Express trainsets operate at speeds between 110 and 150 mph for much of the route. However, hundreds of 80 mph commuter trains and 30 mph freights trains also operate on the right-of-way. Amtrak's ability to upgrade the corridor to accommodate freight, commuter and high-speed trains enabled it to avoid the enormous costs and environmental issues associated with construction of new right-of-way. Interesting, several European high-speed rail operators are studying this less-expensive option for expanding Europe's high-speed rail network.

Amtrak's Acela service is projected to increase ridership some 30 percent to over 14 million Northeast Corridor riders. Ridership already is growing faster than projected and Amtrak's share of the air/rail market has grown to over 50 percent between New York and Washington and to over 30 percent between New York and Boston.

Importantly, by the end of 2003, Acela revenues are projected to exceed costs by some $180 million, enabling the Northeast Corridor to generate an operating profit. This achievement – a rail system that can cover its operating costs – is virtually unique in the international world of high-speed rail and reflects huge potential for high-speed rail in the American market place.

2. Empire Corridor

New York State has championed preservation and upgrade of the New York City-Albany-Buffalo rail line for two decades and line is a major freight and passenger corridor serving the entire Northeast. Amtrak currently provides 12 daily round-trip trains between New York City and Albany and four round trip trains to Buffalo. Amtrak uses turboliner equipment on this route, which can operate at speeds up to 125 mph. However, current speeds are limited to 90 mph, with up to 110 mph over a short segment of track south of Albany. The trackage is owned by New York MTA between New York City and Poughkeepsie and by CSX to Buffalo.

Recent Developments: In 1998, Amtrak and New York State entered into a $185 million agreement to upgrade the New York-Albany rail line, as well as the Amtrak Renssalaer maintenance facility, where the turboliner equipment is maintained. Work is currently underway to double track a key bottleneck between Albany and Schenectady and to upgrade a major Hudson River bridge crossing at Albany.

A total of seven turboliner trainsets are to be upgraded with new turbines and passenger amenities, with work being performed by Super Steel in its Schenectady facility. Work on two trains has been completed and the trains have successfully been tested on the Empire corridor line at speeds up to 125 mph. The remaining trainsets will be completed over the next two years.

3. Keystone HSR Corridor

In 1991, the FRA designated the 104-mile Amtrak-owned Harrisburg-Philadelphia line as the Keystone HSR Corridor. This portion of the rail line is electrified and currently provides both Amtrak and SEPTA commuter rail service. Upgrade of the line to reduce trip time is projected to reduce congestion in the Philadelphia region and provide a significant ridership boost for *Acela* high-speed rail service on the Northeast Corridor main line. The upgrades also will benefit SEPTA commuter trains that operate on Amtrak's right-of-way. The route is currently limited to 90-mph operations and requires major track and electric traction upgrades to permit faster speeds and reduced travel times. In October 2000, the FRA extended the Keystone Corridor designation to Pittsburgh.

Recent Developments: In November, 1999, Amtrak and Pennsylvania announced a joint $150 million infrastructure and equipment upgrade program that will reduce current 2-hour trip times to just 90 minutes over the next five years, upgrade stations and improve reliability. The program includes upgrade of the existing electrification system and the upgrade of electric locomotives and Amtrak Amfleet equipment operating on the line. Plans also are underway to construct a new intermodal station at Harrisburg International Airport – providing Amtrak service to the airport for the first time -- and to improve existing stations in Lancaster, Harrisburg and Elizabethtown.

4. New England HSR Corridor

This new HSR corridor, designated by the DOT in 2001, extends along two routes: Boston-Portland ME and Boston-Manchester-Burlington-Montreal. In January 2002, the four states and Province of Quebec initiated a planning study for the corridor. An initial ridership and route alignment analysis currently is underway and should be completed by the end of the year. More detailed planning will commence in 2003. A series of public hearings also has been completed

along the proposed routes. The program will consist of upgrading existing trackage to speeds up to 110 mph and to replace some sections of track that have been abandoned and removed. The Boston-Montreal travel market is large and growing. In January 2002, Amtrak and the Maine inaugurated *Downeaster* service between Boston and Portland. Ridership already exceeds projections and planning is underway to extend the service to Brunswick.

ATLANTIC COAST HSR CORRIDORS

1. Southeast HSR Corridor

In 1998, the FRA designated the corridor from Washington, D.C., through Richmond, Raleigh, Charlotte, Atlanta to Macon, and between Washington and Jacksonville, as the Southeast HSR Corridor. Amtrak currently operates long-distance passenger service from Washington to Atlanta and to Florida, linking the Southeast HSR Corridor to the Northeast Corridor. Over the past five years, North Carolina and Virginia have taken the lead in developing a detailed vision for significantly reducing trip times and increasing service in this growing and highly congested region. Amtrak has worked closely with the states to providing operations planning and analysis, engineering reviews, and system-wide coordination. The plan includes a $2 billion investment between Charlotte and that would reduce travel time to just two hours between Charlotte and Raleigh, 1' 45" service between Raleigh and Richmond, and 1' 30" between Richmond and Washington. An additional $2 billion investment would be required to reduce trip times between Charlotte and Atlanta to 3' 30" and to develop the Atlanta-Macon-Jacksonville route. Georgia has announced ambitious commuter and intercity rail plans and is actively pursuing new Macon-Atlanta commuter rail service and construction of a new Multi-modal Passenger Terminal in Atlanta.

Population, traffic and air pollution is growing in this region at rates far in excess of the rest of nation and both public and private leaders have focused on regional HSR as essential to maintaining the vitality and mobility of the Southeast. The Chambers of Commerce in the four states are proactively advocating for initiation of HSR service in the Southeast and enactment of the HSRIA as a means of funding the work.

Recent Developments: There has been significant progress in advancing the Southeast HSR Corridor:

- Virginia Construction Activities: Virginia is implementing a $67 million construction program to enhance capacity and improve speeds between Richmond and Washington. This work is part of a $470 million program agreed to by Virginia, Amtrak, CSX, the FRA and Virginia Railway Express (the local commuter authority) that will eventually permit speeds up to 110 mph and significantly increase the capacity of the corridor to handle the growing number of commuter, freight and intercity passenger trains.

    - Work has been completed on a $10 million project to significantly improve train speeds and capacity at a key interlocking in Alexandria, Virginia. Design of a new $20 million double track bridge at Quantico is now underway, with construction to begin next year. Virginia and CSX are negotiating six additional projects valued at

$28 million that would provide near-term improvements for Amtrak and VRE commuter service.

- Richmond Main Street Station: On October 17, 2000, Virginia Governor James Gilmore and Richmond Mayor Tom Kaine inaugurated a $60 million program to restore passenger rail service to the former downtown Richmond Main Street Station over the next two years. The station's downtown location will significantly enhance the high-speed rail market on the Southeast HSR Corridor and is a cornerstone of the high-speed rail program. Environmental mitigation work is completed and rehabilitation work is now underway, with station completion projected for 2003.

- North Carolina Design Work: North Carolina and Norfolk Southern have agreed to a $45 million track and signal improvement program between Raleigh and Charlotte that will save some 30 minutes in train trip time compared to the current schedule. The first phase of the program will cost $24million and will be completed in 2004. In addition, North Carolina is separately funding $2.2 million for the installation of new ties, surfacing and rail grinding. This work is largely completed and will improve speeds, ride quality and reliability.

- Southeast HSR Environmental Impact Statement: North Carolina is taking the lead in progressing the Programmatic Environmental Impact Statement for the Charlotte-Raleigh-Richmond-Washington high-speed rail program Some 25 public meetings already have been held in the two states to solicit comments on the program. The Draft EIS is expected in 2002.

- Equipment: Amtrak, North Carolina and Virginia are working to develop a short- and long-term equipment strategy for trains operating on the Southeast HSR Corridor and north of Washington, with the goal of initiating an equipment procurement in the near future for new corridor trains operating between Charlotte, Washington and the Northeast Corridor.

    - Georgia Rail: Georgia initiated three important studies in preparation for new high-speed and commuter rail service across the state. A critical analysis is progressing to identify the improvements required to substantially increase the number of passenger and freight trains that can access Atlanta. A second study has been completed by Amtrak to quantify the costs and benefits of HSR service between Atlanta, Macon, Jessup and Jacksonville line. Lastly, a third effort is underway to develop a major new multi-modal transportation center in downtown Atlanta to accommodate new commuter and high-speed rail service and other modes serving Atlanta.

2. Florida

In the short 15 months since voters in Florida approved a constitutional amendment mandating construction of a statewide high-speed rail (HSR) system, the state has taken several critical steps towards meeting this requirement. It has created a nine-member High-Speed Rail Authority, which issued a new study on the cost and benefits of HSR between St. Petersburg-Tampa and Orlando, concluding that the system would cost approximately $1.3 -1.9 billion to construct and, once fully implemented, system revenues could exceed system costs. The Authority also has issued an "Invitation To Pre-Qualify" to vendors and consortia interested in designing, building, operating, maintaining and financing (DBOMF) the system. This is the first step towards

procurement of a team to build and operate the system. The mandated environmental impact review also has been initiated.

The Authority's new study focused primarily on construction of a new high-speed rail line between Tampa and Orlando along the median of Interstate-4, with service eventually extending to Miami in the south and possible north to Jacksonville. Ridership between St. Petersburg and Orlando would exceed 4 million riders by the year 2020, with significant additional ridership when the system is extended to Miami. With 60 million annual trips forecast between Central and South Florida by the year 2010, and domestic and international travelers operating some 25,000 rental cars each day, high-speed rail service would be expected to help the state manage the enormous projected growth in tourism and travel in the coming years.

In parallel with this work, Amtrak and Florida DOT continue to work on a statewide HSR Vision Plan for upgrading existing rail lines within Florida. In May 2000, Florida DOT released a Phase 1 Intercity Passenger Rail Service Vision Plan, prepared by Amtrak. The plan calls for the upgrade of existing routes in Florida over the next 20 years to substantially reduce trip times and build capacity along major transportation corridors in the state for both high-speed rail passenger and freight service. Phase 2 of the study – further refining work on the Miami-Orlando corridor and defining a southwest corridor -- Tampa-Naples -- service – will be completed in June 2002. Phase 1 also recommended the re-routing of two of Amtrak's New York-Florida trains between Jacksonville and Miami along the coastal Florida East Coast Railway route. In December 2001, Governor Jeb Bush agreed to provide the state's share of funding required to initiate this new service. Planning is now underway, with service to begin in 2003.

3. Gulf Coast HSR Corridor

In 1998, the FRA designated the Houston-New Orleans-Mobile-Pensacola and the New Orleans-Birmingham routes as the Gulf Coast High Speed Rail Corridor. With future extensions to Tallahassee and Jacksonville, Florida, and to Atlanta, Georgia, this corridor would connect the south with the remainder of the Atlantic Coast HSR Corridor.

Designation of the route as the Gulf Coast HSR Corridor follows nearly 20 years of work by Louisiana, Mississippi and Alabama, which created the Southern Rapid Rail Transit Commission (SRRTC) in 1982 to explore options for improving rail passenger service along the Gulf Coast. The Commission recently completed a high-speed rail corridor development plan, which identifies the scope, cost and benefits of proposed rail upgrades between New Orleans and Atlanta.

Recent Developments: In 2001, the SRRTC completed a detailed analysis of the New Orleans-Meridian-Atlanta route, identifying trip times and improvements required to improve speeds and reduce congestion on the line. A more detailed second phase analysis of this line is underway, from which preliminary engineering of the improvements can begin. This analysis should be completed by the end of June. The Commission also plans to study the upgrade of the CSX line between New Orleans and Mobile, which last saw passenger service during the 1984 Expo. Mississippi DOT is separately assessing the environmental consequences of a new rail alignment parallel to I-10 that would permit faster service and avoid some 100 at-grade crossings on the existing CSX line.

MIDWEST REGIONAL RAIL INITIATIVE

The Midwest Regional Rail Initiate (MWRRI) is a nine-state program to establish an 11-corridor, 3,000 mile "hub and spoke" route system between Chicago and Milwaukee-Madison-Minneapolis; Omaha; St. Louis; Kansas City; Carbondale; Cincinnati; Cleveland; and Detroit. The system would use a common equipment pool, with speeds up to 110 mph. Major track, capacity and signal system upgrades, along with significant capacity improvements, would be required to achieve desired trip times and levels of service. The nine states, together with Amtrak, meet bi-monthly to manage the work of consultants and address planning and institutional issues.

Recent Developments: There have been significant developments on this program:

- Equipment: On August 25, 2000, Amtrak, Illinois and Wisconsin issued a Request for proposals to six pre-qualified vendors for 13 new 110 mph, tilting high-speed corridor trains and associated maintenance facilities. Discussions are underway with two vendors to resolve issues and to refine the proposals. Amtrak expects to conclude discussions with the vendors during the spring of 2002 and be positioned to select a contractor. Illinois and Wisconsin intend to share the cost for the new trains with Amtrak. However, the lack of federal funding and failure to win passage of the HSRIA has forced delay in concluding the procurement.

The trains would initially operate in the St. Louis-Chicago, Madison-Chicago and Detroit-Chicago corridors. With full implementation of the MWRRI, a fleet of some 66 trains, seating 300 passengers each, will operate between major cities in the Midwest. Amtrak will manage the procurement of the new trains. The trains will be the first high-speed, non-electric trains developed for America's new high-speed rail corridors and have been designed to optimize trip times in high-speed corridors around the country.

- Planning: In February 2000, the final Report for the MWRRI was released. The Report concludes that completion of the system would generate some 9 million riders and that construction of the system would require a 10-year investment of some $4.1 billion in infrastructure upgrades and new equipment. Work continues on coordination with freight railroads, pre-engineering activities, and organizational issues.

- Madison-Milwaukee: Wisconsin and Amtrak are undertaking engineering and environmental approval work to implement new high-speed rail service to Madison from Chicago and Milwaukee. The work will be completed in 2002. In October 2000, Wisconsin announced its intention to purchase the Milwaukee Amtrak Depot from the city in order to upgrade the station in preparation for new MWRRI high-speed service and in February 2002 the city hired a developer to begin commercial development of the facility. In addition, a $100,000 preliminary engineering and environmental assessment study has been initiated for an anticipated $5 million passenger rail station at the General Mitchell International Airport in Milwaukee.

- St. Louis-Chicago Corridor: In 1999, Illinois voters approved $70 million for high-speed rail infrastructure and at-grade crossing improvements between St. Louis and Chicago. The rehabilitation work, to be completed in the fall of 2002, is being performed by Union Pacific crews and will bring the track up to Class 6 standards allowing speeds of

up to 110 mph. Illinois has also continued to sponsor the $60 million North American Joint Positive Train Control Project along with the Association of American Railroads (AAR) and the Federal Railroad Administration (FRA). This project is focused on developing and demonstrating a nationally applicable positive train control system for speeds of up to 110 mph in the Chicago-St. Louis Corridor. With the acquisition of new high-speed trainsets, the St. Louis corridor program will reduce trip time between St. Louis and Chicago from 5' 40" to just 4' 40" by 2005 and to just 3' 50"upon completion of the full program.

- Michigan Signal System: Michigan, working with Amtrak and the FRA, has developed a state-of-the-art Incremental Train Control system that will permit passenger train operations on the existing right-of-way at speeds up to 110 mph, which is essential to achieve marketable trip times through the MWRRI corridors. The first phase of the system – permitting speeds up to 90 mph on some 45 miles of track – was successfully implemented in January 2002. Work is now underway to extend the system to 65 miles and to seek approval for speeds in excess of 90mph operations later this year.

- Indiana has completed a series of seven high-speed rail public outreach meetings to define the state's interest and participation in the MWRRI. The meetings were well attended and public comment was almost entirely positive. Indiana continues to work closely with Amtrak, Illinois, Michigan, and freight railroads on the "South of the Lake Corridor Study". The purpose of this study is to identify the best way to route passenger trains through Southern Chicago and Northwest Indiana – one of the most highly congested areas in the nation. Indiana has also sought and received federal high-speed rail corridor designation of the Indianapolis-Louisville corridor as a part of the Chicago Hub Network.

- Minnesota DOT is pursuing a $10 million capital budget request for preliminary engineering and environmental documentation for the Minnesota portion of the Twin Cities to Chicago Corridor. This work would build off Wisconsin's Chicago-Milwaukee-Madison program.

CALIFORNIA HIGH SPEED RAIL CORRIDORS

California has been the leader in developing and funding high-speed rail along its heavily populated and economically vibrant corridors. Since 1990, the state and Amtrak have jointly funded $1.6 billion in developing and expanding intercity rail throughout the state, resulting in additional roundtrips, increased ridership and reduced trip times. With the state's population expected to grow an additional 40 percent (15 million) over the next 20 years, the state continues to look to rail to provide mobility between its urban centers.

California currently provides operating and capital financial support for Amtrak service across the state along the Pacific Surfliner, San Joaquin and Capitol corridors. The three state-supported services are in the top five most heavily traveled Amtrak services in the country. Ridership is booming. California has the second highest ridership of any other state in the nation, second only to New York and hosts the fastest growing service in the country.

In March 2001, Amtrak, the state of California, commuter and freight partners, elected officials and advocates unveiled the California Passenger Rail System 20-Year Improvement Plan that details $10.1 billion of investment statewide that would result in faster, more frequent and convenient passenger rail service to all of the state's major population centers. This initiative, managed by Amtrak, provides the blueprint for implementation of high-speed rail on existing tracks in California, including cost, ridership and trip time impacts from specific upgrades. As part of the planning process, task forces were established consisting of elected officials, representatives of local advisory groups, freight and commuter railroads, Caltrans and the Federal Railroad Administration provided input and direction to the study to ensure that the plan reflects the long-term growth desired by the state and local communities and planned by all rail users The summary report and the longer technical plan can be obtained for a small fee through Amtrak West Public Affairs (510-238-4360).

Over the past three years, Governor Gray Davis proposed and the California Legislature approved some $400 million for upgrading the state's intercity passenger rail lines. This funding will enable the state to initiate implementation of many of the improvements identified in the 20-year plan.

Recent Developments: Work has begun on various projects included in the 20-year plan:

- Oakland Maintenance Facility: Amtrak is designing a new $65 million maintenance facility in Oakland, where equipment used on the Capitol and San Joaquin corridors would be maintained and repaired. California is jointly funding the facility. Construction is expected to begin by the summer.

- Pacific Surfliner Corridor Upgrades: Several projects to increase capacity on this heavily-used line are under way. A third main line track is under design between Whittier and Fullerton. Conversion of a siding at San Onofre, near Camp Pendleton, to a second main line track also is now underway. A similar project is under design at Flores. These additional tracks will permit speeds up to 90 mph and ease rail congestion, permitting greater service reliability and additional frequencies.

- LA Union Station Through Tracks: Amtrak is managing a California-funded project to provide through-tracks at Los Angeles Union Station. The new tracks will reduce travel time between San Diego and Los Angeles, greatly enhance the ability to operate service north to Santa Barbara, and provide the capacity to permit increases in train service.

- San Joaquin Corridor Upgrades: Several infrastructure improvement projects that would reduce congestion, improve trip times and increase corridor capacity are fully funded and under contract. The construction of a seven mile second main track from Bowles to Calwa (five miles south of Fresno, CA) and a 23 mile second main track from Escalon to Stockton are under design.

CASCADES HIGH SPEED RAIL CORRIDOR PROGRAM

Washington State, Oregon, Amtrak, freight railroads, the federal government, local communities and businesses have committed over $450 million in the Pacific Northwest Passenger Rail since

the inception of the service in 1993. This partnership is a national leader in developing and supporting new rail service.

To address growing congestion at regional airports and along the I-5 economic and population corridor, work has been underway for over seven years on the 466-mile Eugene-Portland-Seattle-Vancouver line to reduce trip time and add new passenger service. This program represents a partnership among Washington State, Oregon, Amtrak, the Burlington Northern Santa Fe (BNSF) Railroad and the Union Pacific Railroad to improve service and enhance at-grade crossing safety along the line. The total program cost over the next
20 years is projected at $2.1 billion.

Washington Governor Gary Locke has proposed a $200 million capital plan for the FY 01-03 biennium that would result in additional capacity for new frequencies and reduced trip times as well as additional equipment. This plan assumes funds from the bond proceeds from the anticipated passage of the High Speed Rail Investment Act.

Oregon finalized a twenty-year plan that demonstrates a need for three additional round trips between Eugene and Portland within the next five years, with expected ridership increase of 300 percent.

CONCLUSION

Over the past five years, Amtrak and its state partners have made enormous progress in planning a national high-speed rail network. The tragic events of September 11 have vividly demonstrated the critical importance of transportation in this country and availability of reliable travel alternatives. The significant increase in ridership on the Northeast Corridor and, in particular, on the Acela Express, illustrates the economic, transportation and environmental benefits that high-speed rail can provide regions all across the United States.

Without a federal funding partner, the ability of states and Amtrak to implement this high-speed rail network is severely limited. Enactment of legislation to provide federal funding support is essential and timely. Much of the vision presented above could be implemented over the next ten years if such funding becomes available. The price tag is very modest compared to the alternative of additional highways and airports; the cost of not moving forward will be even more severe in terms of congestion and constraints on the national economy.

High-speed rail will be a win-win for transportation, for cities attempting to attract investment to their downtown business areas, and most importantly, for travelers seeking an alternative to the gridlock that makes automobile and airplane travel so frustrating and unproductive.

Amtrak is excited to be at the center of these important projects. Clearly, high-speed rail can play a critical role in the nation's transportation system and Amtrak looks forward to leading this effort.

Mr. Rogers. Please detail for the Committee what investments Amtrak has made in regional high speed rail projects, such as the Midwest Rail Express, in 2000 and 2001 as well as what investments are planned for in 2002 and 2003.

[The information follows:]

For FY1999-2001, the corridor development amounts (see question 55) included in the capital budget were for regional high speed rail development projects. In FY2002, this category also includes funding for some remaining high speed rail requirements for the Northeast Corridor. The amounts attributable to only regional high speed rail corridor development are as follows:

Regional High Speed Rail Development				
1999	2000	2001	2002	2003
32	58	17	8	0

Mr. Rogers. What high-speed rail commitments, if any, has Amtrak had to defer because of your precarious financial situation? Please detail each commitment and when you believe Amtrak may be able to fulfill the commitment.

[The information follows:]

Amtrak's lack of capital - coupled with the lack of a federal funding program for state HSR initiatives - has forced Amtrak and the states to defer numerous HSR investments. With specific regard to Amtrak, these include:

- Northeast Corridor HSR Program - Amtrak has been forced to defer several critical projects that will severely impact trip time and reliability on the Northeast Corridor:

  1. Metro North improvements - Amtrak has deferred some $11.64 million in agreed-upon contributions to Metro North for installation of the new Shell interlocking, which will reduce trip time by 2.5 minutes, and other upgrades between New Rochelle and New Haven.

  2. EIS Requirements - Amtrak has deferred construction of the Guilford sidings and installation of switch heaters, which are required as mitigation under the Record of Decision for the Final Environmental Impact Statement on electrification of the New Haven-Boston segment of the Northeast Corridor.

  3. Thames and Niantic River Bridges - Amtrak committed to Connecticut DEP and the US Coast Guard to replace the 90-year old, unreliable movable bridges across the Thames and Niantic Rivers by the year 2004. Design of a new bridge at Thames has been completed and all permits are in hand; permitting for the Niantic River bridge replacement also is progressing. Amtrak has no funding to initiate construction of these

projects, each estimated to cost $50 million. Failure to replace the bridges not only undermine the reliability of Amtrak's Acela service, but poses potentially serious issues for the US Navy - submarine traffic to and from the Navy's submarine base in Groton must pass through the bridge - and is a constant irritant with area boaters.

- Midwest Regional Rail Initiative Train Procurement - Amtrak, Illinois, Wisconsin and Michigan had planned on placing an order for 13 new high-speed tilting trainsets and three new maintenance facilities in 2001. The trains would be used for the first phase of the Midwest Regional Rail Initiative -- new service between Chicago and St. Louis, Madison and Detroit/Pontiac. Neither Amtrak nor the states have been able to secure funding to procure all 13 trains.

- Madison-Milwaukee HSR Plan - Amtrak and Wisconsin are sharing the cost for the environmental and preliminary engineering of the new Madison-Milwaukee rail line. Amtrak owes the state $60,000, which has been deferred due to lack of budget.

- North Carolina - In 1988, Amtrak committed to partnering with North Carolina to share the cost for new high-speed trains operating north of Charlotte. Amtrak's share was established at $75 million. This commitment has been deferred indefinitely.

- Virginia - In 1990, Amtrak committed to partnering with Virginia to share in the costs for acquiring new trains to operate north of Richmond. A specific funding share was not stated. This commitment has been deferred indefinitely.

- Gulf Coast HSR Corridors - In 1988, Amtrak agreed to provide up to $1 million to assist in planning and construction work associated with the Gulf Coast HSR Corridors. Of this amount, $350,000 has been spent; although the Gulf Coast states are not yet ready to spend the remainder, Amtrak has been forced to indefinitely defer this providing the remaining $650,000.

California - In 1999, Amtrak agreed to provide $25 million to support capital work on California's three high-speed rail corridors. Of this amount, $7.7 has been spent, but Amtrak has had to defer the remainder. The original spend plan called for a three-year expenditure plan (2000,2001, 2002). We have had to modify the expenditure plan to take into account Amtrak's financial issues. It now appears that a 5-year spend plan (2000, 2001, 2002, 2003, 2004) will be required. This has the potential to jeopardize California's funding share, which faces legislative timelines.

Life Safety Needs in Pennsylvania Station

Mr. Rogers. In December 2000, the Inspector General reported the costs to repair the fire and life safety needs in Pennsylvania Station and the adjoining 6 tunnels was $898,000,000. The IG believed that this work could be completed by 2008. Last year, Congress provided $100,000,000 to begin these repairs. Please detail for the Committee how these funds will be spent.

[The information follows:]

The IG reported that the total estimated cost of the Penn Station New York Fire & Life Safety Program (FY 2002-FY 2010) was $898,000,000 and that, if a continuing stream of dedicated funding could be found, the program could be completed by 2010, not by 2008. There was further acknowledgement by the IG that under the dedicated funding scenario, the highest priority projects could be completed by 2005-2006.

It is also important to point out that the Fire & Life Safety Program is not a repair program as reflected by the question's wording. It is a major capital investment program to construct critical life safety functional enhancements such as ventilation, communications, standpipe and lighting systems, as well as, structures to provide ventilation shafts and emergency access/egress capability that does not exist currently. It is much more than a program intended to repair existing systems.
The $100,000,000 in funds provided by Congress in FY 2002 have not been utilized for any work to

date since discussions are still ongoing with FRA staff to satisfy Grant Agreement requirements. It is anticipated, however, that the funds will be made available retroactively to the beginning of FY 2002 once discussions are concluded, the Grant Agreement is executed and OMB releases the money.

This will provide the necessary funding for the anticipated $29,427,000 in Amtrak expenditures estimated for the Fire & Life Safety Program in FY 2002.

The $100,000,000 in special funds will be expended over FY's 2002-2005 to permit major project elements to progress to construction, assure key milestone deliverables and in some instances to complete currently ongoing projects.

The categories of projects and enhancements that will progress as a result of these Grant funds are: tunnel ventilation; access/egress; standpipe installation; tunnel portal access improvements; and supervisory control & data acquisition systems

Mr. Rogers. Have they been released by FRA yet? If not, what is the hold up?

[The information follows:]

As of April 9, no funds have been released. FRA is still negotiating with OMB the finer details of the plan, including OMB review of the proposed engineering plans. Once OMB is satisfied with the work plan, it is expected to release the money.

Mr. Rogers. In the past, Long Island Rail Road and New Jersey Transit have also contributed money for fire and life safety needs in the tunnels. Did LIRR or NJT match the Congressional investment? If not, has Amtrak secured any funding from LIRR and NJT for tunnel work in 2002?

[The information follows:]

The total estimated Fire & Life Safety expenditure for FY 2002 is $47,385,000, which is made up of Amtrak's Grant funds of $29,427,000 and LIRR's contribution of $17,958,000. Funding is received from NJ TRANSIT through its Joint Benefits Program with Amtrak and is distributed to Amtrak's General Capital Improvements Program, which in turn allows Amtrak to allocate funds to the Fire and Life Safety Program.

Mr. Rogers. For fiscal year 2003, Amtrak is planning to spend $26,000,000 for life safety in the New York tunnels. Specifically what work will be accomplished at this level?

[The information follows:]

Amtrak now plans and is discussing with the FRA a program allocation that will result in the total estimated expenditure in FY 2003 of $71,488,000. This will consist of Amtrak's Grant funds of $35,459,000 and an estimated LIRR contribution of $36,029,000. It is anticipated that the categories of projects spelled out in response to question #70 will be progressed further with this level of expenditure in FY 2003.

Mr. Rogers. Will Long Island Railroad and New Jersey Transit match this?

[The information follows:]

See the anticipated FY 2003 funding share reflected in response to the previous question.

Mr. Rogers. To date, how much of the $898,000,000 requirement has been done? What remains to be done? As part of this answer, please include a timetable for the work and assume current funding levels ($100,000,000 in 2002, $26,000,000 in 2003, as well as any outside contributions already agreed to).

[The information follows:]

The $100,000,000 in Grant funds and $26 million in Amtrak capital funds will trigger an estimated $ 125,000,000 in LIRR contributions. This combined expenditure amount of $251,000,000 results in a funding need of $647,000,000 to complete the $898,000,000 program. This remaining amount of funding will be expended in Fiscal Years 2003 through 2010.

Labor Contracts

Mr. Rogers. Within the past year, Amtrak has been renegotiating its contracts with various labor unions. Please detail for the Committee the results of these negotiations, whether or not C-2 protection were discussed and modified, and what impact they may have on your costs.

[The information follows:]

Amtrak is currently engaged in negotiations with all of its labor unions covering the year 2000 onward. As covered in the answer to Question 77, the major freight railroads are also open with the exception of one bargaining unit.

Negotiations are likely to continue into the foreseeable future because of the open freight negotiations (which are often settled first), Amtrak's present financial situation, and the nature of issues being discussed in negotiations, such as productivity and health insurance coverage.

The Amtrak Reform and Accountability Act (ARAA) eliminated any statutory or collectively bargained job protection provisions (commonly referred to as C-2) and required Amtrak and its unions to negotiate replacement terms and conditions. Since Amtrak and the unions were unable to reach negotiated agreement on a replacement to C-2, the parties agreed to submit this issue to an arbitration panel. The arbitration panel issued an initial decision, addressing many of the open issues. The award provides for substitute

protection, which, among other things, exempts from coverage new service for two years of operation and overall provides for lesser time lengths of benefits and payments compared to the former C-2. The arbitration panel left open for further consideration the question of whether federal, state, local and private services and contracts are covered by these new protections. Additional information and material have been provided to the Board and a final decision on these issues is expected in the near future.

Mr. Rogers. On average, how much did union wages increase? How does this compare to other railroads and transit providers?

[The information follows:]

The current Amtrak agreements, like the open national freight agreements, provide for a biannual Cost of Living Allowance (COLA) based on the Consumer Price Index (CPI). This is not part of the base wage, which has not increased in two years. Amtrak's employees were paid approximately $5 million dollars as a result of the COLA In FY 2001. The COLA currently pays a cumulative total of $0.48 per hour. The last two adjustments have been $0.11 and $0.10 per hour respectively. Generally speaking, the sum of the biannual COLA is worth slightly more than 1% to the average Amtrak employee and less to many of the skilled employees. Wage increases that might result from the current round of bargaining would likely be offset by this COLA payment.

On the major freight railroads, negotiations are open for the same period as on Amtrak with all

unions except for the Brotherhood of Maintenance of Way Employes (BMWE). The table below summarizes wage ''patterns'' on Amtrak, the major freights and several commuter rail agencies:

	2001		2002	
	January 1, 2001	July 1, 2001	January 1, 2002	July 1, 2002
Amtrak & Major Freights[2]	$0.12 COLA (in addition to a prior $0.15 COLA)	$0.11 COLA	$0.10 COLA	TBD COLA
Freight BMWE	3.5% GWI ($0.63)[3]	$0.48 COLA less $0.17 offset ($.31)[4]		TBD COLA[5]
LIRR	3% GWI		3% GWI	
Metro North	3% GWI		3% GWI	
NJT		3% GWI		3.5% GWI
SEPTA	3% GWI[6]		3%[5]	
METRA		3% GWI		3% GWI

[1] COLA (as determined by CPI) continues every six months until modified in the current round of negotiations.
[i] January 1, 2001. $0.63 is an approximation of the value to an average Amtrak/BMWE employee.
[i] This offset is based on the yearly increases in the freight railroads' payment rates for various health and welfare insurances. The agreement contains a "me too" provision that could affect the continuation of the offset in the event other unions reach alternative agreements to contain payment rate increases.
[1] The Freight BMWE COLA will be twice the sum of the 2002 Amtrak COLA, less an offset for health and welfare plan increases.
[1] Date varies by union.

Revenues

Mr. Rogers. Your 2003 business plan states that Amtrak will ''maximize net revenue in the Northeast Corridor by optimizing passenger car allocations and individual trains to reflect demand changes''. What specifically does this mean?

[The information follows:]

The customer services department that operates the trains and the revenue management department are going to work more closely to better match the equipment to the demand changes that occur closer to the departure of the trains, even as close as 24 hours before departure. It is difficult to precisely predict demand on unreserved trains. However, as we designate more of the heavily traveled trains as reserved, it will be possible to better predict the demand, and match equipment, accordingly. The benefits are best derived from the Acela Regional services. Currently, there are about 39 Acela Regional trains operating in the northeast. The trains have four to six coach cars, one business car and a food car. As part of this initiative, revenue management will review the number of reservations for each Acela Regional departure 72 to 24 hours from departure and then add or drop coach or business cars from the train. Moving the equipment around will allow Amtrak to accommodate as much of the demand as possible.

Mr. Rogers. Similarly, your business plan proposes to ''reduce trip time on Acela Express to improve value proposition vis-à-vis air shuttle by selective schedule changes and working with the Federal Railroad Administration to refine equipment under-balance requirements" . What does this mean? Please give specific examples of what you are considering that will allow your revenue to grow by $3,800,000 in 2003.

[The information follows:]

On January 30, 2002 the FRA approved Amtrak's submission of a plan to operate at higher speeds through curves north of New Haven. To operate under the new authority Amtrak must comply with new reporting requirements in the FRA's authorization, modify the trainsets' truck assembly to provide a higher maximum degree of tilt through curves and modify ACSES (Advanced Civil Speed Enforcement System) wayside transponders, which convey speed restriction information to the trainsets. A decrease of approximately 7 minutes in travel time between New York and Boston will be achieved when these criteria are met. When complete (end of 2002), speeds through certain portions of the north end will be increased. The annualized ticket revenue value of the travel time improvement is estimated to be about 10 million dollars ($1.5 million per minute).

Mr. Rogers. Similarly, Amtrak plans to increase revenues from $23,100,000 in 2002 to $38,800,000 in 2003 by increase mail and express revenues due to business expansion, focusing on increasing backhaul sales, perishables business and the periodicals network for the US Postal Service. Please break out these revenues by category for both years.

[The information follows:]

	FY02	FY03
Backhaul	$11M	$18M
Perishables	$ 3M	$ 6M
Periodicals	$ 1M	$ 3M
Business Expansion	$ 8M	$11M

Mr. Rogers. How much of these increases are contingent upon agreements with the freights or businesses not already signed?

[The information follows:]

None of the projected increases in the Mail & Express business are contingent upon agreements with the freight railroads. The projected increases are a result of increased business with existing customers and new business from prospects we are actively soliciting.

Mr. Rogers. It is my understanding that the US Postal Service reduced its use of Amtrak. How can you grow revenues via transporting periodicals if they have reduced their contracts with Amtrak?

[The information follows:]

The US Postal service has not reduced its use of Amtrak. For FY02 YTD February, revenue from the USPS is up $5.6 million vs. the previous year. There has been some business that Amtrak received as a result of 9/11 that would have gone to the airlines which has since been moved back. There are also some individual routes in which the business has been moved due to service issues. The initial handling of periodicals is now being shifted away from the postal service to the individual publishers. This ''drop ship'' market is one in which Amtrak has begun a program in order to retain and increase its business with the drop shippers.

Mr. Rogers. Amtrak plans to receive about $30,000,000 for commercial revenue growth through real estate transactions. Please detail for the Committee what these transactions are and when this will occur in 2002?

[The information follows;]

For FY02 to date Amtrak has completed two real estate transactions totaling $38 million. Amtrak sold the leases for its air rights property through two transactions at the following locations: 222 South Riverside Drive in Chicago,

Illinois for $16.5 million and 10 and 120 South Riverside Drive in Chicago, Illinois for $21.5 million. Further, Amtrak expects to complete a land sale transaction before the end of the fiscal year for $6 million at the property located at Lake and Randolph Streets in Chicago, Illinois. Amtrak has also completed smaller transactions in FY02 such as the sale of its maintenance base to the city of New London, Connecticut for $1.8 million as well as five other land sale transactions with values below $300,000.

Mr. Rogers. Amtrak also plans to increase revenues from $5,000,000 in 2002 to $16,800,000 in 2003 by ''renegotiating state subsidies to increase service payments to cover direct and incremental costs, with an overhead fee and adopt a uniform standard for measuring costs of state supported train service''. Please breakout for the Committee the estimated increases in revenues from each of these two activities and explain, with examples, what a uniform standard to measure costs on state supported routes is and why Amtrak currently does not have it.

[The information follows:]

The increase of $11.8 million from state-supported trains represents improved contribution toward covering system costs, above direct and incremental costs. Contribution can be improved by increasing passenger revenue, increasing state support, or decreasing direct and incremental train operating costs.

A ''uniform standard'' means applying one protocol when determining which costs to charge against the operation of a train when calculating its contribution, and how to compute those costs.

Amtrak's Strategic Business Units are responsible for negotiating state support, and each of the three SBUs has, over time, developed its own protocol. For example, Amtrak allocates the cost of providing Reservation and Information services across all trains. One of Amtrak's SBUs has used 100% of these train-specific costs when determining a cost basis for negotiating with states in its territory; another SBU has used around 10%, and the third SBU around 25%.

Amtrak does now have a standard protocol for calculating the Direct and Incremental costs for evaluating state-supported trains. In the Reservation and Information costs example, the new standard protocol applies 50% of the train-specific Reservation and Information costs. This protocol calls for passenger revenue plus state support on each state-supported train to cover 105% of that train's direct and incremental costs. That is, an amount equal to 5% of the train's direct and incremental costs would be an ''overhead fee'' left over to contribute toward covering system costs.

Amtrak SBUs now use this information as a target to assist them in reducing costs, increasing revenue, and/or increasing support when negotiating for train operations with each state.

Mr. Rogers. You are proposing a tripling in revenues from the states. In the past, some states have not been willing or able to increase their payments for Amtrak services. This may be more prevalent now that most states are experiencing large budgetary shortfalls. What will Amtrak do if states refuse?

[The information follows:]

Amtrak and its state partners are pursuing three options to improve the economics of state-supported trains. Those are: (1) increase state support through negotiations; (2) increase passenger revenue through marketing, advertising, or fare actions; and (3) reduce operating expenses through Cost Management Initiatives. Increases in passenger revenue and/or reductions in operating costs can reduce the need for increases in state support. As a last recourse, Amtrak will consider terminating operation of underperforming state-supported trains.

Mr. Rogers. The Inspector General has testified that Amtrak's formula for partnering with states is inconsistent. Some entities have contributed significantly to the growth and operation of passenger rail while others have benefits from service without contributing anything. The IG recommends that, ''work should be done to better identify and allocate costs of capital and operating investment according to the benefits realized by the stakeholders''. Do you plan on adopting this recommendation?

[The information follows:]

Amtrak has acted on this recommendation by creating a common financial measurement tool to evaluate the operating contribution of each state-supported train, and is using this information as a basis for state operating support contract renewal negotiations. A source of disparity among train services in different states is the legislation creating Amtrak, which specified a core network of trains to be run. Amtrak operates these trains without the benefit of state support.

Amtrak has in some cases partnered with states to provide operational and capital financial support for additional train frequencies on the core network, such as the *Pacific Surfliners* in California and the *Keystones* in Pennsylvania. In other cases, such as the Empire corridor in New York, Amtrak has partnered with the state to increase capital support (on a 50-50 basis) for core trains. In other locations without core trains, Amtrak has contracted for operating and/or capital support from interested states (e.g., Maine and Nevada). The form and amount of support for trains will always depend on the transportation investment policies of and the financial resources available to Amtrak's state partners as well as the specifics of each state's transportation situation in terms of the existing and future travel market and the service options available to the states.

If national transportation policy is defined in a manner that requires the core/commercial network to achieve certain financial performance standards, then services that do not meet those standards would be the subject of state support as

a mechanism for retention. It would then be up to the state and/or other stakeholders to determine the benefits of alternative, incremental service levels above the core/commercial network.

As noted in prior policy speeches and announcements, Amtrak needs policy guidance on the service and/or financial criteria that should be used to define this core/commercial network.

Mr. Rogers. Please identify for the Committee each contribution states or localities make to the growth and operation of passenger rail. Who does not?

[The information follows:]

Operating and capital support from states expected to be received by Amtrak in FY2002:

Millions of Dollars		
State	Operating Support	Capital Support
California	$ 65.1	$ 107.1
Delaware	$ -	$ 0.8
Illinois	$ 9.3	$ 0.5
Illinois/Wisconsin	$ 5.1	$ -
Maine	$ 1.8	$ -
Maryland	$ -	$ 5.0
Michigan	$ 5.9	$ 1.6
Missouri	$ 6.2	$ -
New Jersey	$ -	$ 28.8
New York	$ 2.0	$ -
North Carolina	$ 4.8	$ -
Oklahoma	$ 4.4	$ -
Oregon/Washington	$ 16.1	$ 19.0 -
Pennsylvania	$ 3.3	$ 0.4
Vermont	$ 2.0	$ -
Virginia	$ -	$ 2.1
Virginia/North Carolina	$ -	$ 1.4

Wisconsin	$ -	$ 8.0
Total	$ 125.9	$ 48.6

States served by Amtrak from which Amtrak expects to receive no operating or capital support in FY2002:

Alabama
Arizona
Arkansas
Colorado
Connecticut
District of Columbia
Florida
Georgia
Idaho
Indiana
Iowa
Kansas
Kentucky
Louisiana
Massachusetts
Minnesota
Mississippi
Montana
Nebraska
Nevada
New Hampshire
New Mexico
North Dakota
Ohio
Rhode Island
South Carolina
Tennessee
Texas
Utah
West Virginia

Mr. Rogers. If you assumed that all states should subsidize rail service, if they want to continue it, what do you believe would be equitable for those that currently do not share in these costs?

[The information follows:]

The level of state/partner support should be determined by the state in consultation/negotiation with Amtrak. The first issue that needs resolution is the definition of the core/commercial network. States are generally comfortable with investing in incremental improvements to the core/commercial network and service levels. The issue of equity arises initially from concerns that certain portions of the network are in the core/commercial network due to past practices that are not commercially defensible in economic terms. Thus the first requirement to reach ''equity'' among funding partners is to have a specific commercial or other policy standard that can be used to specifically define or, in law, specify the core/commercial network.

State support for incremental services can then be equitably determined on the basis of consistently applied analytical techniques to analyze alternatives. These techniques include standard cost estimation techniques that appropriately incorporate Amtrak's costs for service operation—techniques that already exist at Amtrak. It would also include appropriate risk sharing regarding the estimation of incremental ridership and revenue results in order to determine the incremental net revenue (or loss) that would need

to be covered by the states. Also included in the analysis is the development of capital costs for equipment, storage, maintenance facilities, stations, etc. required to support the incremental service as well as a recapitalization cost to retain the assets in a state of good repair into the future. Our approach with states has been to work cooperatively with them in the estimation of financial requirements for achieving their desired incremental service objectives.

The rationale that the states use for adding incremental service generally have included one or more of the following objectives: congestion relief, more cost effective delivery of capacity than other alternatives, air quality, energy efficiency, land use policy (''smart growth'') and economic development. Each case is unique and it is Amtrak's belief that the key to the equitable funding of incremental service by the states is the availability of discretionary funding that will allow the states to make balanced transportation investment choices that reflect the economics and aspirations of the state.

Mr. Rogers. Do you support a cost-sharing equation that differs in areas with limited demand, where service is less frequent, compared to areas with frequent service or other rail-dependent needs, for example to address air quality or congestion issues?

[The information follows:]

Please note the response in the previous question.

The first requirement is to clearly define either the network and level of service to be used as the core network or provide the performance criteria and associated funding to define and support the core/commercial network.

The rationale for service beyond this core network is to be determined and funded by states in accordance to the specifics of their needs and requirements. Certainly service to rural or less frequently served areas could be and would be expected as an investment justification for some states. Air quality and congestion are also frequently the basis for state transportation investments in rail service--both intercity and commuter. But each state needs to make its determination as to the benefit associated with an incremental improvement to the core network whether it is an added frequency for a long distance train or the development of higer speed corridor service. State do need the added resources and flexibility to make the balanced transportation investment decisions that are right for them.

Mr. Rogers. Your business plan states that Amtrak will add additional frequencies in the Capitols and San Joaquin services. Please detail for the Committee what these service increases entail and who will pay the costs.

[The information follows:]

An additional frequency started on the San Joaquins route on March 18th. The additional frequency is being paid for by the State of California. The Capitol Corridor expansion has

been deferred until FY 2003 due to track capacity work not being completed. Extensions of the Capitols included Oakland to San Jose and Sacramento to Roseville.

Mr. Rogers. What new business partnerships has Amtrak entered into since January 2000? Please provide the Committee with more details on each of these partnerships and identify the revenues or cost-savings for each venture.

[The information follows:]

Amtrak has been seeking out partnerships to build ridership, revenues, and brand equity. Among the key initiatives since 2000, one of the most important has been the launch of the loyalty program, Amtrak Guest Rewards. By building a high-quality customer database and delivering a new tool for customer relationships management, Amtrak Guest Rewards has positioned Amtrak to improve customer service, increase customer retention, and partner with new companies.

In addition, Amtrak has built other important partnerships with companies to continue to build financial and operational successes. Most notable among these was our recently launched ''code share'' partnership with Continental Airlines, but other recent successes also include work with American Express, Icelandair, and Yahoo!

Amtrak Guest Rewards

On November 29, 2000, Amtrak launched its loyalty program, Amtrak Guest Rewards. That program is designed to encourage repeat business, improve our

competitive position vis-à-vis the airlines, particularly on the northeast corridor, encourage higher spending per trip, and thereby generate incremental revenues to Amtrak. The program now includes a number of partners to support this objective with whom Amtrak exchanges points and sells travel benefits, including hotels (Hilton, Sheraton/Westin, Marriott), airlines (United, Continental, and Midwest Express), rental cars (with Hertz, initially, but now expanding to others), and retail (Amtrak Guest Rewards offers a variety of retail exchange options).

In 2001, Amtrak Guest Rewards also launched an Amtrak Guest Rewards co-branded credit card together with MBNA.

Results

Our initial projections for the Amtrak Guest Rewards program, based on an initial net expense of $3 million and conservative trip stimulation and spending assumptions, resulted in incremental net income to Amtrak growing from $1 million in the second year of program operations to $4 million by year 5 of the program.

Since that time, Amtrak has found its success with regard to each of the program operational metrics exceeds expectations. For example, spending and trip stimulation from the program's availability has been proven to be higher than was projected,[7] and the costs to support program benefits were lower than projected.[8]

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[7] Recently completed market research has shown the trip stimulation and incremental spending behavior of Amtrak guests has averaged 7.5% compared to the 6%-6.8% that was estimated at the time of program launch.

[8] Analysis of first-year redemptions in the program shows that redemption cost has averaged 13% lower that projected.

Among other sources of partner revenue is the program's co-branded credit card with MBNA. Initial program participation was projected to rise to 16,000 accounts by the end of year one of operations. Amtrak and MBNA are currently on track to meet or exceed that objective.[9] As part of this program, MasterCard is also now working with Amtrak to promote card use, and has given Amtrak more than $800,000 for joint marketing programs.

Other Partnerships

As mentioned earlier, additional partnerships into which Amtrak has entered since 2000 include:

Continental Airlines
American Express
Icelandair
Yahoo!
Continental Airlines

One of Amtrak's most important partnership announcements over the last 3 years is that with Continental Airlines. The Amtrak-Continental partnership has grown to include three important elements:

Passenger re-protection/re-accommodation from Continental Airlines to Amtrak. Shared access to Amtrak's premium service club in New York (ClubAcela), completed in October 1, 2001, and ''Code share'' agreement, which became operational March 9, 2002.

[9] As of February 2002, or roughly half of the way through the fiscal year, MBNA has secured 10,300 accounts, or some 65% of target.

Begun in Fiscal Year 2000, Amtrak has re-accommodated Continental Airlines' customers that have had flight interruptions at Newark International Airport due to weather, mechanical or some other reason. That program has since expanded to include 3 airports (National, BWI, and Newark) and is used by Continental system-wide to ensure passengers arrive at their destinations. This program is estimated to generate approximately $250,000 in passenger revenues to Amtrak annually, and should grow this year with the added convenience of the new Newark Airport rail terminal.

The shared access agreement with Continental Airlines allows Continental's ''President's Club'' members access to Amtrak's New York Penn ClubAcela facility in exchange for an investment by Continental Airlines of roughly $400,000 to refurbish the facility, completed October 1, 2001.

Capitalizing on the new Newark International Airport (EWR) rail terminal (and the monorail system), customers will be able to connect to Amtrak's *Acela Regional* or *Keystone* service from Philadelphia, Wilmington, Stamford or New Haven to over 100 destinations on Continental Airlines at EWR.

By placing Continental Airlines' designator code (CO*) and flight numbers on Amtrak's *Acela Regional* and *Keystone* trains, travel agents and Continental will be able to book through itineraries on Continental and Amtrak with a single reservation. Reservations are made by Continental Airlines or one of its agents. *Amtrak cannot book code share connections.*

Travelers on Amtrak/Continental code share segments may earn either Amtrak Guest Rewards points or Continental OnePass miles when they travel - including earning Guest Rewards points for connecting Continental Airlines services.

As an additional partnership benefit, Amtrak customers can now opt to earn either Amtrak Guest Rewards points or Continental OnePass miles on *Metroliner* or *Acela Express* service between Washington (WAS) and New York (NYP), or NYP and Boston (BOS/RTE/BBY). Amtrak call center agents and station agents can enter a OnePass number for these qualifying rail segments, as can travel agents when selling these segments.

Amtrak has intentionally set conservative revenue objectives for the code share portion of the relationship that include incremental passenger projections of roughly 3,000 passengers annually, resulting in incremental revenue benefits of some $100,000 annually. Continental Airlines, on the other hand, projects ultimately reaching as many as 500 passengers *daily*, which equates to tens of millions of dollars in incremental revenue to Amtrak. While Amtrak is prepared to support Continental's outlook, it has intentionally set conservative revenue and ridership objectives because of the untested nature of air-rail code share in the United States.

American Express

Shortly following the re-launch of Amtrak's northeast corridor ''Club'' facilities as *ClubAcela* in late 2001, Amtrak also entered into an agreement with American Express. Amtrak's American Express agreement provides American Express

Platinum cardholders with a same-day Amtrak ticket access to any one of our four northeast corridor ClubAcela facilities (Washington, Philadelphia, New York, and Boston).

In exchange for this access, American Express entered into a two-year agreement with Amtrak compensating Amtrak roughly $14 for each guest, for an estimated revenue to Amtrak of $169,000.

Icelandair

Amtrak's partnership with Continental Airlines was built on the earlier operational success of our relationship with Icelandair. Begun in mid-2001, the Icelandair code share partnership was the first operational test with an airline of the feasibility of air-rail code sharing. Amtrak and Icelandair now sell through services to and from Europe connecting Philadelphia (30th Street Station) and Washington, DC (Union Station) with BWI airport.

Like the Continental Airlines partnership, incremental revenues were set conservatively. Since Icelandair only operates one 757 flight daily from BWI (service that was cut back following September 11, 2001), projected incremental revenues were to grow to approximately $100,000 annually by 2003. Events of September 11 slowed international traffic, and Icelandair responded by cutting service from daily service to 3 day-a-week service. Nonetheless, traffic is now recovering and Amtrak appears to be likely to meet these objectives.

Yahoo!

In early 2002, Amtrak entered into a barter agreement with Yahoo! In exchange for allowing Yahoo! to (a) ''wrap'' Amtrak café cars and (b) install wireless personal digital assistants for web surfing on services in the northeast (Acela Regional), midwest (Hiawathas), and west (Capitols), and (c) place advertising at select rail stations, Amtrak was given up to approximately $1,000,000 in online advertising to promote its services and web site, Amtrak.com, contingent on the delivery of all of the elements noted above.

Mr. Rogers. What percent of total revenues are derived from commuter services? How does that compare to five years ago when commuter services revenues comprised about 13 percent of all revenues?

[The information follows:]

Commuter services revenues contributed approximately 13.5% of total revenue for FY2001 compared to 15.1% in FY1996. However, FY2001 commuter services revenues have grown 23% compared to FY1996, while total revenue has grown 38% during the same time period. So while commuter services revenues as a percentage of total revenue has decreased, it is due to the large increase in growth of total revenue during that time.

Mr. Rogers. Please update the in last year's hearing record that shows non-core business revenues from 1996 onwards.

[The information follows:]

Non-Core Revenue 1996 Actual - 2002 Budget

$ In Millions

	1996 Actual	1997 Actual*		1998 Actual		1999 Actual*		2000 Actual		2001 Actual		2002 Budget	
	$	$	% Change	$	% Change	$	% Change	$	% Change	$	% Change	$	% Chang
Commuter	234 4	241 6	3 1%	259 9	7 6%	260 8	0 3%	274 0	5 1%	289 2	5 5%	284 0	-1 8
Commercial	34 0	114 7	237 4%	63 1	-45 0%	78 4	24 3%	62 0	-21 0%	83.5	34 8%	107 0	28 1
Reimbursable	107 5	91 1	-15 3%	91 2	0 1%	94 3	3 4%	126 1	33 8%	100 0	-20 7%	140 0	40 0

* 1997 and 1999 Commercial revenues include one-time real estate sales.

Mr. Rogers. Please detail the revenues from Amtrak's mail, commuter operations, commuter fees, and real estate.

[The information follows:]

Our current budget for FY 2002 projects the areas requested will be as follows:

FY02 Budgeted Revenue for Selected Areas
($ Millions)

	FY02
Mail	$ 87.7
Commuter Operations	284.0
Commuter Fees	78.8
Real Estate Revenue	87.6
Total	$538.1

Mr. Rogers. What impact did these revenues have on Amtrak's operations in fiscal year 2001?

[The information follows:]

These revenues in fiscal year 2001 were $494.4 and were broken down as follows:

($ Millions)

Mail	$ 86.2
Commuter Operations	289.2
Commuter Fees	78.2
Real Estate Revenue	40.8
Total	$494.4

The impact of these revenue sources were positive relative to Amtrak's bottom-line since each of these businesses contributed operating profits to the corporation.

Mr. Rogers. How does this compare to fiscal year 2000?

[The information follows:]

The following is the breakout of revenues for fiscal year 2000:

($ Millions)

Mail	$ 96.1
Commuter Operations	274.0
Commuter Fees	76.1
Real Estate Revenue	36.4
Total	$482.6

Mr. Rogers. Please provide a breakdown of the fiscal year 1999, 2000, 2001, and estimated 2002 commuter service revenues by route location, similar to the information in last year's hearing record.

[The information follows:]

($ Millions)	FY99	FY00	FY01	FY02 Budget
Northern Virginia	$9.9	$11.7	$13.4	$13.2
Maryland DOT	18.4	19.8	21.7	22.0
Connecticut DOT	5.7	5.3	7.9	6.1
MBTA	163.9	168.2	169.7	178.9
Southern California	15.7	17.5	17.1	18.1
Peninsula Commuter	39.7	44.2	48.8	35.4
San Diego Commuter	7.3	7.4	6.6	6.6
Sound Transit Commuter	0.0	0.0	3.9	3.4
Total	$260.6	$274.0	$289.1	$283.7

Mr. Rogers. Please update the table of actual versus budgeted revenues in last year's hearing record.

[The information follows:]

ACTUAL VS BUDGETED REVENUE
($MILLIONS)

	FY98		FY99		FY00		FY01	
	Actual	Budget	Actual	Budget	Actual	Budget	Actual	Budget
Passenger Related	$1,000 2	$1,006.6	$1,058.3	$1,088 9	$1,165.6	$1,185.5	$1,261.6	$1,366 2
State Support	82 6	79 3	99.9	96.0	111.5	112 2	123.1	119.7
Commuter Operations	259.9	266 6	260.6	255.0	274.0	257 6	289 2	275.3
Commuter Fees	74.1	72.2	73.4	74.5	76.1	74.6	78 2	75.7
Mail/Baggage/Express	83.3	110.5	98 4	108.5	122.6	176 6	118 0	180.6
Real Estate	35.2	46.7	52.0	34.1	36.9	33.7	40 8	48.9
Freight Operating	18 3	23 1	18.7	24 7	19 4	19 2	15.2	20.0
Other	148.6	148.9	158.4	164 6	192 6	243 9	197.5	244.1
Direct Operating Revenue	1,702.2	1,753 9	1,819.6	1,846.2	1,998.7	2,103 2	2,123.6	2,330.5
Federal/State Payments	542.1	542.1	191.3	191 3	112.1	100 9	20.7	20.7
TOTAL	$2,244.3	$2,296.0	$2,010.9	$2,037 5	$2,110.8	$2,204.1	$2,144 3	$2,351 2
Int from Operations	$4 4	$3.3	$6.4	$3 9	$13 1	$20 8	$13.6	$6 6
Int from Defeased Leases	$0.0	$0.0	$0 0	$0.0	$28 1	$0 0	$66 0	$65.4
Int on Federal Payments	$34.6	$34.6	$23 1	$18.0	$12.0	$12.0	$2 8	$2.8
Total Interest Revenue	$39.0	$37.9	$29 5	$21 9	$53.2	$32.8	$82 4	$74.8

State Contributions

Mr. Rogers. The Amtrak Reform Council suggests that Amtrak should be more aggressive in pursuing sate contributions for capital for the Northeast Corridor. Why haven't you been more aggressive?

[The information follows:]

Amtrak has been aggressive in pursuing added capital contributions from the states along the NEC. For example, Amtrak recently concluded an agreement with NJTRANSIT that provided for a joint capital program over five years totaling $350 million or an average of $35 million per year from NJTRANSIT to be matched with a like amount from Amtrak for recapitalization/operational reliability investments in New Jersey.

States have provided capital support to Amtrak generally as part of a negotiation associated with access and operating rights to use the Northeast Corridor. Amtrak's ability to seek funding from the states for capital are also related to each states expectations regarding improved levels of service--either in terms of reduced travel times, added frequencies and/or improved on time performance. Of course, the state's funding sources are limited as there is no dedicated funding source for rail as there is for highway, transit and air. Increasingly, the northeastern states are turning to funding available from the Federal Transit Administration to support their investment objectives.

Mr. Rogers. Please provide the Committee with a table for the past five years that shows how much states have contribute, if any, for projects along the Northeast Corridor.

[The information follows:]

Actual amounts spent for FY1998-2001 and the planned amount for FY2002 are detailed in the chart below.

State/Locality	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002
Delaware	$628,603	$648,718	$698,272	$730,853	$4,352,011
District of Columbia	0	0	0	1,792,814	207,186
Maryland	3,000,000	2,000,000	5,000,000	4,000,000	10,000,000
New Jersey	28,362,446	28,383,114	28,425,742	28,658,258	28,751,264
New York	0	0	0	0	6,400,000
Virginia	995,880	1,941,615	3,108,516	2,404,749	1,545,121
Total by Fiscal Yr.	**$32,986,929**	**$32,973,447**	**$37,232,530**	**$37,586,674**	**$51,255,582**

Mr. Rogers. Given Amtrak's experience in dealing with Northeast Corridor states, under which circumstances do you think these or other states would substantially increase their participation?

[The information follows:]

In general, the states would be more forthcoming if they had funding available and the flexibility to use that funding for the ''best'' solution to transportation investment decision making as appropriate to their circumstance. They generally understand that an underfunded NEC will result in slower trip times and poor on time performance that will, in turn, have a deleterious impact on customer service and constituent support.

The recently completed South End Transportation Plan was produced with support from each of the commuter railroads. That program defined a $12 billion, 20-year plan to recapitalize the Corridor and restore its state of good repair necessary for continuing network performance but also incorporated significant investments (approximately half, or $6 billion) for increasing commuter rail capacity. The program that was developed consisted of projects in each state but the investments must be made across the network and a multi-state program is paramount. With scarce funding, Amtrak has made investment decisions at locations and facilities in the NEC that are most critical to maintaining a safe, reliable railroad. The states and Amtrak need a reliable funding source in order to perform a more orderly program of projects that will lead to longer-term reliability and added capacity for service enhancements.

The states continue to look to the federal government to fund the basic infrastructure requirements in a manner similar to highway and transit capital investments. And they are concerned that network level investments and/or funding should be made available at the federal level. They expect Amtrak to deliver these funds as a funding channel for federal support.

States have less difficulty investing in incremental capacity or improved service levels (frequency, travel time and/or reliability) that support their commuter rail or corridor intercity rail objectives, and have more difficulty in funding the basic system infrastructure recapitalization, which is crucial for basic service. The investment decision on

recapitalization is always difficult regardless of mode. But it is more difficult with rail as the solution, for all other modes have substantial federal revenue collection and distribution to states for state level investments. Absent this direct funding support mechanism, the state's expectations are that the federal government should and will invest in the Amtrak network as a surrogate. Given this expectation and the desire to have cross modal equity in the federal role in infrastructure support, the states have little incentive to take proactive steps in funding rail recapitalization and operational reliability. Again their fundamental problem is generally not the will but the means to invest.

Commuter railroads have enjoyed ''avoidable cost access'' to the Northeast Corridor. If this standard were adjusted to a fully allocated cost basis, there would be more financial pressure on the states to decrease direct infrastructure funding. In the current environment (most cases) the potential for a federally mandated higher cost share has helped in negotiations with the states in developing capital cost sharing relationships.

Mr. Rogers. Please provide the Committee with a table that shows each state's contribution for passenger rail service for 1998-2002 and identify what these dollars were spent on (i.e. operating subsidy, specific capital improvements).

[The information follows:]

State Operating Support
($ millions)

States	FY 98	FY 99	FY 00	FY 01	FY 02 *
California	47	59	62	63	65
Illinois	8	9	9	10	10
Maine	-	-	-	-	2
Michigan	2	2	3	6	6
Missouri	4	5	6	6	6
New York	1	-	1	3	2
North Carolina	6	7	6	6	5
Oklahoma	-	2	4	5	4
Oregon	2	1	2	5	5
Pennsylvania	2	3	3	3	3
Vermont	1	1	2	2	2
Washington	5	8	11	11	11
Wisconsin	4	3	4	4	4
State Operating Subsidy	83	100	112	122	126

* FY02 estimated based on state support contracts.

State Capital Support
($ millions)

	FY98	FY99	FY00	FY01	FY02
Total Capital Commitment from States	$107.6	$302.9	$218.5	$47.7	$48.6

The following capital improvement projects are state funded with the dollar values representing funding commitments:

1998 Projects

- HLI Chicago $0.443 million
- NJT Joint Benefits Projects $25.0 million
- VRE Joint Benefit Projects - Washington $1.0 million
- NJT Reimbursable Projects $3.0 million
- MARC Joint Benefits Projects $3.0 million
- DelDot Joint Benefits Projects - Station $0.719 million
- Oakland Maintenance Facility $30.0 million
- Pacific Northwest Infrastructure Program $6.6 million
- King Street Station Intermodal Project $16.25 million
- Salem, OR Multimodal Facility $3.7 million
- Los Angeles Service and Inspection Facility $5.0 million
- Centralia, WA Platform $3.73 million
- King Street Coach Yard Maintenance Facility $9.145 million

1999 Projects

- DelDot Joint Benefit Projects $0.719 million
- MARC Joint Benefit Projects $3.0 million
- New York State Agreement $18.0 million
- Michigan Crossties & Resurfacing $3.042 million
- Southeast Corridor Equipment $5.5 million
- West Detroit, MI & Porter, IN $0.5 million
- Battle Creek, MI Station Track $0.5 million
- Chicago Lake Street Interlocking $10.0 million
- Harrisburg Line Improvements $1.0 million
- Wilmington Station $1.90 million
- Union Station, Washington. DC $3.2 million
- Pacific Northwest Infrastructure Program $5.4 million

- King Street Coach Yard Maintenance Facility $12.255 million
- King Street Station Intermodal Project $16.25 million
- DET-CHI Corridor High Speed Program $0.247 million
- High Speed Rail - North $ 8.0 million
- Operational Reliability - New $28.0 million
- Commercial Development, and Lanvale Park $13.5 million
- Amtrak & Metrolink TVM's $1.939 million
- Marysville Bypass $5.295 million
- San Joaquin Corridor Infrastructure $29.6 million
- Lomas Santa Fe Double Track $15.883 million
- Sacramento, CA Station Renovation $36.58 million
- Salinas Station Improvement $2.979 million
- San Diego Station Improvement $0.4 million
- Albany, OR Multimodal Station $11.0 million
- Eugene, OR Multimodal Station $3.6 million
- Everett, WA Intermodal Project $40.43 million
- Tukwila, WA Station $24.2 million

2000 Projects

- DelDot Joint Benefit Projects $0.719 million
- MARC Joint Benefit Projects $2.0 million
- New York State Agreement $19.625 million
- Michigan Crossties & Resurfacing $1.1 million
- Southeast Corridor Equipment $17.125 million
- NJT Reimbursable Projects $4.023 million
- Spartanburg, SC Station Improvements $0.565 million
- Union Station, Washington. DC $2.5 million
- PA Corridor Partnerships $30.0 million
- Operational Reliability - New $25.0 million

- NEC Support Facilities Improvements $1.0 million
- Intercity Leveraged Station Project $0.049 million
- Calif High Speed Rail Corridor Development $72.072 million
- Maine Svc F-40 Locomotive Cab/Baggage $1.160 million
- San Joaquin Corridor Infrastructure Improvements $36.62 million
- Sacramento, CA Station Renovation $4.9 million

2001 Projects
- Washington, DC Lower Level $2 million
- Washington Station - Lower Level $0.725
- NJT Reimbursable Projects $3.8 million
- MARC Joint Benefit Projects $7.0 million
- DelDot Joint Benefit Projects $0.719 million
- Operational Reliability $25 million
- Amtrak Intercity Infrastructure $6.521 million
- Wilmington Station $1.900 million

2002 Projects
- Michigan High-Speed Positive Train Separation - $1.0 million
- Southeast Corridor - $1.4 million
- MARC Joint Benefit - $5.0 million
- Del DOT Joint Benefit - $0.75 million
- NJTransit Joint Benefit - $25.0 million
- Mitchell Intl Airport Intermodal Design - $8.0 million
- NJTransit Reimbursable - $3.8 million
- Washington, DC, Lower Level Station Platform - $2.1 million
- Niles, MI, Station Platform - $0.5 million

- Erie, PA, Station Improvements - $0.4 million
- Centralia, IL, Station Platform - $0.3 million
- La Plata, MO, Station Platform - $0.2 million

Mr. Rogers. Have states been increasing their contributions to Amtrak for rail service? If so, please explain why.

[The information follows:]

	FY96	FY97	FY98	FY99	FY00	FY01
Total Operating Subsidies from States	$64.19	$70.09	$82.61	$99.87	$111.52	$121.58
Total Capital Commitment from States	$114.63	$129.74	$107.59	$302.92	$218.46	$47.67

Amtrak has made great progress in increasing the contribution received from state and local governments. Over the last six years, operating contributions have increased from $64 million to $122 million. However, our ability to solicit state capital contributions is impaired by our own lack of funding to contribute. During FY2001, the capital contributed by states came to just under $50 million, compared to contributions of $220 million in FY2000. This is due to Amtrak's inability to match state capital funding.

We believe the increased operating support comes from a growing recognition among states of the vital role played by passenger rail in a balanced transportation network.

Mr. Rogers. What do you anticipate for state contributions in fiscal year 2003?

[The information follows:]

Amtrak business plan calls for increased operating state support by over $11 million in FY2003. While Amtrak would expect to continue with at least the current capital funding levels, many states are working through their budgeting process and Amtrak will not likely know definitively about the level of support until sometime during the summer.

Available Cash

Mr. Rogers. How much available cash did Amtrak have at the end of fiscal year 2001? If this figure is a deficit, please explain how Amtrak covered these costs. How did this compare to your plan?

[The information follows:]

Amtrak ended FY 01 with $19 million in available cash. The plan projection of available cash at Fiscal Year End 2001 was $10 million.

Mr. Rogers. How much cash do you project will be available at the end of fiscal year 2002? How does this compare to your plan? If it is less, please explain why.

[The information follows:]

The current projection of available cash at Fiscal Year End 2002 is $10 million. This is equal to the plan projection.

Expenses

Mr. Rogers. Your 2003 business plan proposes a number of actions to reduce costs. One includes decreasing the ratio of mechanical supervisors to craftsmen, reduce the number of general foremen to benchmarked targets, and reduce mechanical management positions. Please detail for the Committee how many people currently fill each of these positions (mechanical supervisors, general foremen, and mechanical management) and what your targets are for 2003.

[The information follows:]

As of March 15, 2002, Amtrak employs 568 mechanical supervisors, 83 general foremen, and 128 other mechanical managers (including staff support professionals) for a total of 779 mechanical managers and supervisors. Our 2003 target is to reduce the total number of mechanical managers and supervisors to approximately 700 positions. At this time, it is impossible to give precise targets for each of the three categories of mechanical supervision, particularly since we plan to consolidate the mechanical supervisor and general foreman positions.

Mr. Rogers. Does this action require a change in your labor agreements? If so, has this been done yet?

[The information follows:]

Our 2003 plan to reduce mechanical supervision includes the consolidation of general foremen and mechanical supervisor positions. The planned consolidation requires negotiation of a new position within our existing agreement with the American Railway and Airway Supervisors Association

Mr. Rogers. Similarly, your business plan states that Amtrak will centralize operations management and reduce management labor costs by eliminating positions. Does this action require a change in your current labor agreements? If so, has this been done yet?

[The information follows:]

We are in the process of reducing the number of management positions. The management positions being eliminated are not subject to any labor agreement so no change in them is required.

Mr. Rogers. Your business plan states that Amtrak will increase agent productivity in the call centers. How do you propose to do this?

[The information follows:]

Agent productivity will be improved by increasing the amount of time that agents spend answering calls and are on the phone. Our goal is for the agents to be on the phone 100 percent. However, we recognize that this goal is unattainable, if for no other reason than the fact that several minutes are necessary for an agent to walk between the time clock and their workstation. Even so, we are increasing our on-phone goal to 97.2%.

To achieve the goal and accrue the savings, we are decreasing approved off-phone time by 50%. Off-phone time includes non-essential training, team meetings, coaching, safety sessions and recognition and promotional events. Essential training, safety sessions and team meetings will continue to take place. To reach the new goal, call center team leaders will put a renewed emphasis on productivity by using positive reinforcement and the disciplinary process, only when necessary. The new goal will also be included in the performance evaluations of the call center team leaders, managers and directors.

Mr. Rogers. In the past, when Amtrak has proposed increased productivity measures as a cost savings technique, how well has this worked? Please provide specific examples.

[The information follows:]

As a result of the changes obtained in various labor agreements during the last round of settlements, Amtrak was able to implement productivity measures that produced cost savings

of nearly $86 million through FY2001. Some specific examples include:

- Outsourcing Amtrak's commissary operations has saved over $16 million through FY2001,

- Increasing the threshold from 4 to 6 hours for manning locomotives with 2 Engineers has saved almost $19 million through FY2001,

- Reducing the number of Assistant Conductors on Long Haul Trains from 2 to 1 has saved approximately $12.5 million through FY2001,

Relocating intact bridge rehabilitation crews at the end of major projects has saved over $3 million through FY2001.

Mr. Rogers. As a cost savings measure, Amtrak is proposing renegotiating contracts for connecting bus service. Please detail for the Committee how many contracts Amtrak currently has in place for connecting bus service, the cost of each contract, per year, and why you believe that these contracts are not cost effective.

[The information follows:]

In assessing cost savings opportunities within Amtrak's Thruway bus network, a cost management team examined those services that required minimum fees regardless of the number of riders. Thirteen carriers were identified operating such services at an annual cost of approximately $4.66 million. A table showing the individual routes and annual costs is attached.

In a number of cases, the minimum fee charged by the Thruway carriers far exceeded the train revenues received from the connecting passengers. As an example, a Thruway connection between the Hot Springs, AR airport and the Amtrak station in Malvern, AR averaged less than one passenger per day. Because of the minimum fee plus waiting time penalties incurred under this contract, Amtrak paid on average over $200 per passenger for the 21-mile trip. Amtrak was able to terminate this contract and secure this connection on an ''as-needed'' basis, thus saving about $80,000 per year with no disruption in services offered to its Texas Eagle customers.

Other Thruway services were only marginally profitable, at best. Through a combination of actions consisting of train rerouting, schedule changes and re-bidding of contracts, Amtrak will save an estimated $1.4 million annually with minimal impact on its customers.

Mr. Rogers. Do you plan to eliminate or decrease connecting bus service in 2003? If so, why and where?

[The information follows:]

The Amtrak Thruway service cost management initiative team did not recommend any specific service changes beyond fiscal year 2002. The CMI team did recommend that Amtrak continue to monitor the marginal contribution of its minimum fee services and make adjustments as the economics dictate.

Mr. Rogers. Similarly, Amtrak states that it will reduce the hours of operations at the 73 lowest volume stations across the system, which will save the railroad about $9,300,000 in 2003. Please detail for the Committee where these stations are, the current hours they are in operation, what you propose the new hours will be, and why you believe that this change is necessary?

[The information follows:]

Amtrak has already changed the hours at many stations to reduce labor costs in an effort to conserve cash and thereby insure that it will be able to operate all its trains through the end of fiscal year 2002 while meeting all financial commitments. Most of the changes in station hours were effective on March 1, 2002.

The specific stations affected are listed below with their former and current hours. Wherever Amtrak has been able to achieve cost reduction without a reduction in hours, the stations are not included.

MICHIGAN CORRIDOR

STATION	FORMER HOURS	CURRENT HOURS
HAMMOND-WHITING, IN	6AM-1030PM Daily	1PM-930PM SM--TFS CLOSED --TW---
NILES, MI	730AM-9PM	8AM-11PM Daily
KALAMAZOO, MI	730AM-9PM Daily	8AM-11PM Daily
BATTLE CREEK, MI	8AM-6PM Daily	8AM-11PM Daily
JACKSON, MI	8AM-9PM Daily	830AM-5PM Daily

ANN ARBOR, MI	7AM-1130PM Daily	730AM-1230AM Daily
DEARBORN, MI	6AM-1230AM Daily	7AM-1230AM Daily
DETROIT, MI	6AM-1230AM Daily	7AM-1215AM Daily

TEXAS EAGLE ROUTE

STATION	FORMER HOURS	CURRENT HOURS
LITTLE ROCK, AR	Continuous	11PM-745AM SMT---S 11PM-815AM ---WTF-
TEXARKANA, AR	7AM-11PM Daily	3PM-1145PM -MTWTF- CLOSED S-----S
MARSHALL, TX	7AM-12N, 5PM-11PM Daily	4PM-1145PM -MTWTF- CLOSED S-----S
LONGVIEW, TX DALLAS, TX	8AM-10PM Daily 9AM-7PM Daily	945AM-730PM Daily 1230PM-845PM Daily
FORT WORTH, TX	10AM-8PM Daily	1230PM-845PM Daily
TEMPLE, TX	10AM-8PM Daily	11AM-745PM -MTWTF- CLOSED S-----S
AUSTIN, TX	8AM-1030PM Daily	9AM-1215AM -MTWTF- CLOSED S-----S
SAN ANTONIO, TX	930PM-430PM Daily	11PM-830AM Daily

SUNSET LIMITED ROUTE

STATION	FORMER HOURS	CURRENT HOURS
TALLHASSEE, FL	7PM-12AM, 1030AM-6PM Daily	12PM-245PM -MTWTF- CLOSED S-----S
PENSACOLA, FL	1201AM-1PM -MTWTFS Closed S------	12AM-730PM -MTWTF- CLOSED S-----S
MOBILE, AL	1201AM-1001AM 530AAM-330PM various Closed F-S-S	1AM-830AM -MTWTF- CLOSED S-----S
HOUSTON, TX	7AM-9PM Daily	9AM-545PM S------

		9AM-1145PM -MT--F- 3PM-1145PM ---WT-S
SAN ANTONIO, TX	10PM-2PM Daily	1115PM-830AM Daily
EL PASO, TX	930AAM-630PM Closed Sunday	1PM-915PM --TWTFS CLOSED SM-----
TUCSON, AZ	615AM-130PM Daily 415PM-1130PM --TWTFS	8AM-445PM SM----- 4PM-1245AM --TW-- 8AM-1245AM ---- TFS
MARICOPA, AZ	615AM-345PM, -M--TF-S 415PM-145AM, -T------ 1015AM-745PM, W	11PM-730AM --TWTFS CLOSED SM-----

SOUTHWEST CHIEF ROUTE

STATION	FORMER HOURS	CURRENT HOURS
FORT MADISON, IA	9AM-1PM, 630PM-830PM	9AM-1PM, 630PM- 830PM -MTWTF- CLOSED S-----S
	Daily	
TOPEKA, KS	12AM-8AM Daily	12AM-8AM -MTWTF- CLOSED S-----S
NEWTON, KS	12AM-8AM Daily	12AM-8AM -MTWTF- CLOSED S-----S
GARDEN CITY, KS	Closed M-T	6AM-9AM, 10PM-1AM -MTWTF-
	6AM-9AM,10PM-1AM S-----S	CLOSED
LA JUNTA, CO	8AM-12PM/7PM-10PM Daily	8AM-11AM, 7PM-9PM -MTWTF-
		CLOSED S-----S
RATON, NM	930AM-630PM Daily	930AM-630PM - MTWTF-
		CLOSED S----- S
LAMY, NM	9AM-7PM Daily	12PM-8PM -MTWTF- CLOSED S-----S

SAN BERNARDINO, CA MTWTF-	5AM-1030PM Daily	230PM-1030PM -
-S		CLOSED S----

CALIFORNIA ZEPHYR ROUTE

STATION	FORMER HOURS	CURRENT HOURS
MT. PLEASANT, IA WTFS	1045AM-745PM Daily	1045AM-745PM S--
--		CLOSED -MT--
OTTUMWA, IA FS	930AM-315PM;	1215PM-915PM SMT--
WT--	445PM-815PM Daily	CLOSED ---
OMAHA, NE	1030PM-730AM Daily; 7AM-4PM M-F	11PM-8AM Daily
LINCOLN, NE WTFS	1130PM-730AM Daily; 730AM-4PM M-T-W	1130PM-730AM S-- CLOSED -MT--
--		
HASTINGS, NE FS	1130PM-730AM Daily;	1130AM-730AM SMT--
WT--	730AM-4PM M-T-W	CLOSED ---
WINTER PARK, CO	10AM-6PM Daily	10AM-6PM S--WTFS CLOSED -MT----
GRAND JUNCTION, CO	9AM-7PM Daily	930AM-6PM S--WTFS CLOSED -MT----
SALT LAKE CITY, UT	10PM-7AM Daily; 6AM-2PM M-F	10PM-7AM Daily

EMPIRE BUILDER ROUTE

STATION	FORMER HOURS	CURRENT HOURS
COLUMBUS, WI	1030AM-630PM Daily	1030AM-630PM -
MTWTF-		CLOSED S----
-S		
LACROSSE, WI	830AM-11AM; 6PM-830PM Daily	830AM-1130AM,6PM-
830PM		-MTWTF-
		CLOSED S-----S
WINONA, MN	830AM-11AM; 6PM-9PM Daily	830AM-11AM, 6PM-
9PM		-
MTWTF-		CLOSED S-----
	S	
FARGO, ND	12AM-7AM Daily	12AM-8AM -MTWTF-
		CLOSED S-----S
GRAND FORKS, ND	12AM-7AM Daily	12AM-8AM -MTWTF-
		CLOSED S-----S
RUGBY, ND	6AM-3PM --TWTFS	6AM-3PM -MTWTF-
	Closed SM-----	CLOSED S-----S
MINOT, ND	7AM-1230PM; 3PM-11PM	7PM-4PM -MTWTF-
		CLOSED S-----S
WILLISTON, ND	1010AM-710PM Daily	1010AM-710PM -
MTWTF-		CLOSED S----
-S		
HAVRE, MT	10AM-5PM Daily	10AM-530PM Daily
SHELBY, MT	9AM-6PM Daily	930AM-630PM Daily
EAST GLACIER PARK, MT	830AM-1130AM Daily	830AM-1130AM,
330PM-730PM		-MTWTF-
	330PM-730PM	CLOSED S-----S
PASCO, WA	815PM-11PM	8PM-6AM --TWTF-
	4AM-6AM Daily	CLOSED SM----S

SILVER SERVICE (NEW YORK-FLORIDA)

STATION	FORMER HOURS	CURRENT HOURS
COLUMBIA, SC	10AM-6PM Daily	9PM-5AM Daily
OCALA, FL	1130PM-7AM Daily 8AM-345PM T-W-H --	1130PM-730AM SM--TFS CLOSED --TW-
LAKELAND, FL	630AM-10PM Daily	630AM-2PM Daily
SEBRING, FL	930AM-630PM Daily	930AM-630PM SM--TFS CLOSED --TW---
PINELLAS PARK/ ST. PETERSBURG (BUS STOP ONLY)	8AM-5PM Daily	8AM-5PM SM--TFS CLOSED --TW---
TAMPA, FL	530AM-10PM Daily	545PM-1045PM Daily

CITY OF NEW ORLEANS ROUTE

STATION	FORMER HOURS	CURRENT HOURS
CHAMPAIGN, IL	5AM-1130PM Daily	4PM-1AM Daily
HAMMOND, LA	10AM-530PM Daily	10AM-530PM SM--TFS CLOSED -TW---

CRESCENT ROUTE

STATION	FORMER HOURS	CURRENT HOURS
GREENVILLE, SC	945PM-645AM Daily	945PM-645AM SM--TFS CLOSED --TW---
MERIDIAN, MS	10AM-7PM Daily	10AM-7PM SM--TFS

CLOSED --
TW---

THREE RIVERS/CAPITOL/LAKE SHORE LIMITED ROUTE

STATION	FORMER HOURS	CURRENT HOURS
ALTOONA, PA	8AM-910PM Daily	1030AM-830PM Daily
PITTSBURGH, PA Daily	430AM-1230AM Daily	12AM-11PM
CLEVELAND, OH	Continuous 12PM-730PM	12AM-7AM, Daily
HAMMOND-WHITING, IN SM--TFS	6AM-1030PM Daily	1PM-930PM
TW---		CLOSED --

COAST STARLIGHT ROUTE

STATION	FORMER HOURS	CURRENT HOURS
SALINAS, CA SM--TFS	10AM-7PM Daily	11AM-8PM
TW---		CLOSED --

VERMONTER ROUTE

STATION	FORMER HOURS	CURRENT HOURS
ST ALBANS, VT	6AM-10AM SM-WTFS 8AM-945PM SM-WTFS CLOSED --T----	6AM-10AM MTWTF 8PM-945PM -MTWTF- CLOSED S---S
ESSEX JCT, VT	730AM-12PM Daily 8PM-9PM Daily	730AM-12PM -MTWTF- 8PM-9PM -MTWTF- CLOSED S-----S
WHITE RIVER JCT, VT MTWTF-	7AM-12PM Daily	7AM-12PM -

MTWTF-
5PM-7PM Daily 5PM-7PM -
MTWTF-
CLOSED S--
---S

Mr. Rogers. Do you plan on eliminating station stops outright, assuming that long distance trains continue past October 1, 2002?

[The information follows:]

There are no plans to eliminate station stops. There was consideration in regard to eliminating station staffing at the poorest performing stations, in order to provide better service at the larger stations, however, that decision has been put on hold.

Mr. Rogers. Amtrak also identifies that it will assume responsibility for the Cardinal train and engine crews as a cost savings measure. Who has the responsibility now? How will this action save the railroad money?

[The information follows:]

The CSX train and engine crews operate train 50/51, The Cardinal, from Cincinnati, Ohio to Washington, D.C. This is the last segment of Amtrak service that is operated by a host railroad. Due to seniority districts and labor constraints on this route, CSX has as many as five crew changes (5 engineer changes and 3 train crew changes) between Cincinnati and Washington. In addition, train crews are staffed with one conductor and two assistant conductors. In

December 1998, Amtrak established an Indianapolis crew base when service was expanded to Jeffersonville, Indiana. With a full crew base established, it has become more reasonable and cost effective for Amtrak to staff this service. The estimated cost of the CSX crew is $2.4 million annually versus Amtrak's estimated cost of $1.2 million. Therefore, a savings of $1.2 million is expected. The current status of the project is that it has been implemented and savings are expected to be evident in the near future.

Mr. Rogers. Your business plan states that ''Amtrak has focused on developing profitable business lines since FY96 as a way to cross subsidize the core train operation business and limit the amount of federal funds required for operations''. Please provide the Committee with a table, for each year beginning in 1996 that shows profits from business lines as compared to core operations and federal subsidies.

[The information follows:]

Profits from Non-Core Business Lines

($ Millions)	FY96	FY97	FY98	FY99	FY00	FY01
Commuter	$15.8	$37.5	$36.9	$42.4	$43.6	$42.8
Reimbursable	9.1	5.2	9.0	2.1	3.4	6.5
Commercial	24.4	104.2	47.3	63.5	47.1	55.2
Total Non-Core Profits	$49.3	$146.9	$93.2	$108.0	$94.1	$104.5
Core Budget Result	($164.3)	($254.6)	($192.2)	($99.9)	($203.6)	($386.2)
Federal Subsidies[1]	405.0	406.5	363.3	495.7	363.8	243.1
Total Core and Federal	$240.7	$151.9	$171.1	$395.8	$160.2	($143.1)

[1] Defined as Federal Operating Support

Mr. Rogers. Please update the breakdown of on-board service expenses in last year's hearing record to include 1996 through 2001.

[The information follows:]

Product Line Direct Costs
(Dollars in Millions)

	1996	1997	1998	1999	2000	2001
Train & Enginemen Labor	152.8	160.3	176.4	171.7	174.3	182.1
On-board Services Labor	99.6	106.0	106.8	115.8	125.1	129.1
Other Costs	82.6	97.7	78.6	76.9	107.7	129.5
Product Line Direct Costs	335.0	364.0	361.7	364.4	407.1	440.7

Source: Amtrak's Route Profitability System

Mr. Rogers. Please update the marketing and reservation expenses breakdown in last year's hearing record by providing data for fiscal years 1996-2001.

[The information follows:]

Marketing/Sales Support
(Dollars in Millions)

	1996	1997	1998	1999	2000	2001
Information & Reservations	81.9	83.4	77.9	87.3	95.2	98.9
Marketing & Advertising	55.7	38.5	37.0	44.3	53.9	54.9
Commissions	36.8	44.9	44.6	34.6	37.0	37.6
Sales	35.7	25.5	27.9	18.6	23.9	25.0
Marketing/Sales Support	210.1	192.3	187.4	184.9	210.0	216.4

Source: Amtrak's Route Profitability System

Mr. Rogers. Please update the breakdown of insurance and interest expenses in last year's hearing record by providing data on fiscal years 1996-2003.

[The information follows:]

($ Millions)	FY96	FY97	FY98	FY99	FY00	FY01	FY02 Budget	FY03 Plan
Real Estate Taxes	1.4	1.5	1.5	0.5	0.5	0.6	0.6	0.6
Interest Expense*	60.2	75.8	87.6	82.9	107.5	162.1	230.7	53.9
Fuel Tax	2.7	3.0	3.6	3.0	3.1	3.2	3.2	2.4
FRA User Fees	1.8	(1.8)	-	-	-	-	-	-
Purchased Insurance	11.2	7.6	8.7	7.2	7.4	9.6	12.3	12.1
Claims Insurance	64.8	68.5	69.3	73.4	77.0	83.2	84.0	84.0
Total	142.1	154.7	170.6	167.1	195.5	258.9	330.2	53.0

*Part of the increase in interest expense starting in FY00 is the result of non-cash defeased lease transactions. In FY00 these transactions comprised over $11 million. In FY01 and FY02 this number is $55 million growing to $59 million in FY03.

Mr. Rogers. Please provide data on depreciation costs for fiscal years 1998-2001 and planned for 2002 and 2003.

[The information follows:]

($ millions)	
Fiscal Year 1998	293.8
Fiscal Year 1999	328.8
Fiscal Year 2000	370.6
Fiscal Year 2001	475.6
Fiscal Year 2002 Budget	516.2
Fiscal Year 2003 Plan	532.6

Stock

Mr. Rogers. Amtrak has about 9.4 million shares of outstanding common stock that it is required to redeem at fair market value before October 1, 2002. Your grant request indicates that Amtrak has made legitimate offers to stockholders but has not been successful to date. What do you think is the fair value of the outstanding stock?

[The information follows:]

Amtrak has carefully reviewed the fair market value of Amtrak's common stock both with outside counsel and with counsel for the Federal Railroad Administration. We believe that the outstanding common stock has little or no value. Briefly put, there is only an extremely remote chance of Amtrak generating earnings and profits to pay dividends on the common stock, and liquidation of Amtrak would likely yield little or no cash to Amtrak stockholders generally. Nevertheless, in the

interest of trying to reach agreement with the common stockholders on the redemption of their stock, Amtrak did offer to purchase it for $0.03 per share in late 2000. That offer was rejected as grossly inadequate.

Mr. Rogers. How far apart are you and your stockholders?

[The information follows:]

As referenced in the previous question, Amtrak did offer to purchase the stock for $0.03 per share in late 2000 and that offer was rejected as grossly inadequate.

Mr. Rogers. What changes in law are necessary to fix the situation and why?

[The information follows:]

Because of the apparent impasse over the valuation of the common stock, Congress should, by legislation, authorize the common stock to be acquired through the exercise of eminent domain authority, either by Amtrak or by the Federal Government, with compensation to be prescribed by a Federal Court.

Theft Issues

Mr. Rogers. In the past five years, Amtrak has operated trains at speeds of 150 miles per hour, instituted internet-based ticket sales, and built a complex electrification system on the

Northeast Corridor. Why is it that in a company capable of making such technological strides forward, its café car employees are still making change for food sales out of a cigar box?

[The information follows:]

Amtrak has been developing a Point of Sale system that not only provides a sales terminal on board our trains, but also automatically ties into our food and beverage commissary/inventory system. This provides for a system that monitors the complete cycle of purchasing, maintaining warehouse inventories, menu design, transferring food and materials to trains, tracking sales on each train, and the transfer of stocks remaining back into inventory that is reusable.

The system, less the point of sale device, has been in place and functioning for the last two years. The point of sale system has been in a test status since last fall on the Surfliner trains in Southern California. These tests have been successful and further systems will soon be put into service on all California state supported trains. A schedule for implementation on further trains is in suspense until an operating budget is finalized.

Mr. Rogers. Doesn't such a system make Amtrak vulnerable to theft? Is theft a problem?

[The information follows:]

Anytime point of sale systems are not employed in a retail environment problems could occur. Amtrak

management has established a priority to conduct and track the results of mini audits of onboard service personal periodically throughout the year, but has a sincere desire to fully implement the point of sale system as operating funds become available.

Mr. Rogers. When is this system going to change?

[The information follows:]

We are working with the state of California to equip all state-supported trains in a cost sharing arrangement. Phased implementation in the NEC and Chicago Hub service is planned through the remainder of fiscal year 2002. When sufficient operating funds are available for full implementation the project will continue throughout the system.

Expenditures

Mr. Rogers. Please update the chart showing expenditures per passenger mile fiscal years 1998 through 2001, and projected for 2002 and 2003.

[The information follows:]

The expense per passenger mile listed below utilizes total expense for core railroad operations, excluding depreciation and interest.

	Core Expense Excluding Depreciation & Interest ($ millions)	Total Miles (millions)	Cost per Passenger Mile	Core[1] Revenue pe Passenge Mile
FY1998 Actual	1,873	5,304	$0.35	$0.24
FY1999 Actual	1,915	5,330	$0.36	$0.26
FY2000 Actual	2,050	5,498	$0.37	$0.28
FY2001 Actual	2,206	5,559	$0.40	$0.30
FY2002 Budget	2,186	5,735	$0.38	$0.32
FY2003 Plan	2,306	5,973	$0.39	$0.32

[1] Core Revenue excludes Interest and Federal & State capital payments

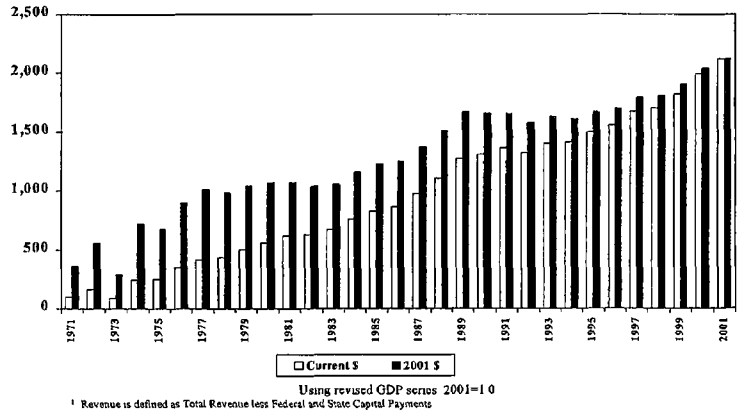
Financial History

Mr. Rogers. Please update the bar charts and supporting data regarding Amtrak's financial performance history as shown in last year's hearing record.

[The information follows:]

AMTRAK REVENUE[1]

($MILLIONS)

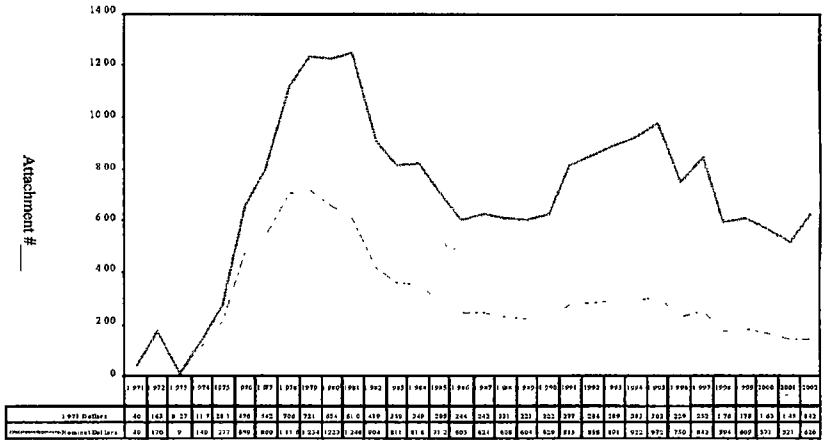


[1] Revenue is defined as Total Revenue less Federal and State Capital Payments

Mr. Rogers. Please update the federal funding history graph shown in last year's hearing record.

[The information follows]

Amtrak Total Federal Grant
FY1971-FY2002



Total Grant includes Operating & capital grants including NECIP, NHRIP, Farley and FY2001 DOD Appropriations Does not include Taxpayer Relief Act
Using revised GDP series 1971 = 1.0

Contracts with Freight Railroads

Mr. Rogers. The railroads receive payment of incentives if Amtrak achieves an 80-percent on-time performance while using their lines. How much did Amtrak pay out in fiscal years 1996 through 2001 (please specify by year)?

[The information follows:]

Amtrak's payments to all host railroads with incentive contracts were as follows:

FY 1996	$16.1 million
FY 1997	$21.2 million
FY 1998	$19.0 million
FY 1999	$23.6 million
FY 2000	$26.1 million
FY 2001	$19.7 million

Source: Amtrak.

Mr. Rogers. What does Amtrak project it will pay freight railroads for incremental, avoidable costs and incentives in fiscal years 2002 and 2003?

[The information follows:]

Using the first half of FY 2002 as a basis, the freight railroad payments are projected at:

	Millions	
	FY 2002	FY 2003
Incremental/Avoidable costs	$76.4	$79.0
Incentives	$29.0	$30.0
Total	$105.4	$109.0

Mr. Rogers. What percentage of delay in on-time performance does Amtrak cause? What percentage is caused by other railroads? How has this percentage changed over the past five years?

[The information follows:]

	FY97	FY98	FY99	FY00*	FY01*
Delays due to Amtrak	21%	18%	17%	22%	28%
Delays due to Other Railroads	50%	52%	55%	74%	59%
Delays due to Other Factors	29%	30%	28%	4%	13%

*Data collection method was changed in FY2000. FY2000 includes delays for all trains. Prior years only included data for late trains.

If "delays due to other factors" are excluded then the distribution of Amtrak vs. other railroad delays is as follows:

	FY97	FY98	FY99	FY00*	FY01*
Delays due to Amtrak	29%	25%	23%	23%	32%
Delays due to Other Railroads	71%	75%	77%	77%	68%

*Data collection method was changed in FY2000. FY2000 includes delays for all trains. Prior years only included data for late trains.

Ridership

Mr. Rogers. What was Amtrak's ridership at the end of fiscal year 2001? How does that compare to the prior year? Please provide ridership information for intercity passengers and commuter passengers separately.

[The information follows:]

Amtrak's FY2001 intercity ridership totaled 23.5 million passengers. This was 1.0 million riders or 4.4 percent higher than the FY00 ridership of 22.5 million. This does not include riders on commuter contract operations.

Amtrak's FY 2001 commuter ridership was 63.4 million passengers. This was 1.9 million riders or 3.1 percent higher than the FY 2000 ridership of 61.6 million.

Mr. Rogers. What is the relationship of ridership to route miles at the end of fiscal year 2001 as compared to the prior year?

[The information follows:]

The following relationship is calculated with end of year route miles. The end-of-year route mile total in FY00 was approximately 22,850 and the end-of-year route miles for FY01 decreased slightly to approximately 22,675.

The ridership-to-route mile ratio for FY 00-01 are as follows:

FY 2000	985
FY 2001	1,036

Mr. Rogers. What was Amtrak's ridership for the first two quarters of fiscal year 2002? How does that compare to the same period in fiscal year 2001? Please provide ridership information for intercity passengers and commuter passengers separately.

[The information follows:]

Ridership for the first two quarters is not available until late April. Below is the year over year comparison for intercity passengers for the first quarter of FY02, as well as the first five months of FY02:

	FY 2001	FY 2002	Change
First Quarter	5.96 million	5.91 million	-0.84%
First 5 months	9.31 million	9.44 million	1.40%

The numbers presented below are actual results for commuter passengers for the first quarter and estimated results for the five months through February 2002:

	FY 2001	FY 2002	Change
First Quarter	15.20 million	15.84 million	4.21%
First 5 months	25.16 million	25.70 million	2.15%

Mr. Rogers. What is the relationship of ridership to route miles for the first two quarters of fiscal year 2002 as compared to the prior year?

[The information follows:]

	Oct-Dec FY 2001	Oct-Dec FY 2002	Change
Ridership	5.96 million	5.91 million	-0.8%
Route Miles	22,850	22,675	-0.8%
Ridership-to-Route Mile Ratio	260.8	260.6	-0.1%

Oct-Feb	Oct-Feb FY 2001	Oct-Feb FY 2002	Change
Ridership	9.31 million	9.44 million	1.4%
Route Miles	22,850	22,675	-0.8%
Ridership-to-Route Mile Ratio	407.4	416.3	2.2%

Mr. Rogers. Please update the ridership and revenue data shown in last year's hearing record.

[The information follows:]

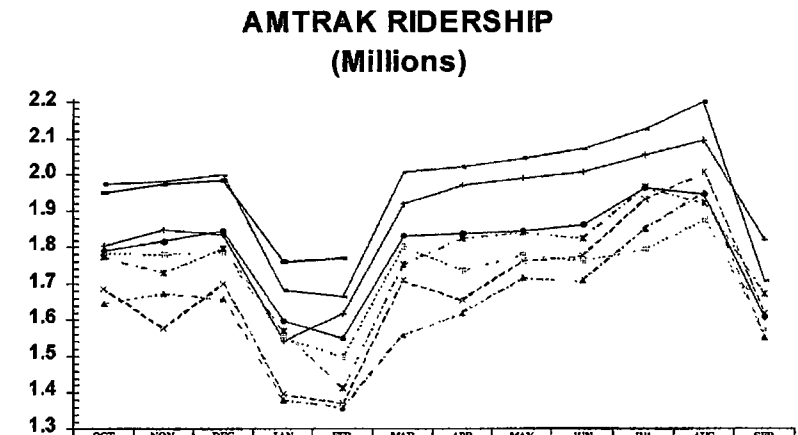
Period	Passenger Miles (Millions)	Ridership (Millions)	Revenue ($ Millions)	Percent Change from Prior Year: Passenger Miles	Ridership	Revenue
CY 71 May-December	1,779	10.6	$100 9			
CY 72	2,978	16.6	162.6	67.4%	56.6%	61 1%
FY 74	4,290	18 4	240.1	44.1%	10.8%	47.7%
FY 75	3,946	17.3	246.5	-8 0%	-6.0%	2.7%
FY 76	4,055	17 8	283.0	2.8%	2.9%	14.8%
FY 77	4,333	19.2	415.4	6 9%	7.9%	46.8%
FY 78	4,029	18.9	433 3	-7.0%	-1 6%	4.3%
FY 79	4,915	21.4	496 3	22.0%	13.2%	14.5%
FY 80	4,582	21.2	558 8	-6.8%	-0.9%	12.6%
FY 81	4,762	20.6	612.2	3.9%	-2.8%	9.6%
FY 82	4,172	19.0	630.7	-12.4%	-7 8%	3.0%
FY 83	4,246	19.0	664.4	1 8%	0.0%	5.3%
FY 84	4,552	19.9	758.8	7 2%	4 7%	14.2%
FY 85	4,825	20.8	825.8	6.0%	4.5%	8.8%
FY 86	5,014	20.3	861.4	3.9%	-2.4%	4.3%
FY 87	5,221	20.4	973.5	4.1%	0 5%	13.0%
FY 88	5,678	21 5	1,106.7	8 8%	5 4%	13.7%
FY 89	5,859	21.3	1,269.1	3.2%	-0 9%	14.7%
FY 90	6,057	22.2	1,308.4	3.4%	4 2%	3.1%
FY 91	6,273	22.0	1,347 1	3.6%	-0.9%	3.0%
FY 92	6,091	21 4	1,320.1	-2.9%	-2.7%	-2.0%
FY 93	6,199	22 1	1,399.7	1.8%	3.3%	6.0%
FY 94	5,921	21.2	1,409.4	-4.5%	-4.1%	0.7%
FY 95	5,545	20.7	1,489.9	-6.4%	-2.4%	5.7%
FY 96	5,050	19.7	1,549.1	-8.9%	-4.8%	4.0%
FY 97	5,166	20.2	1,669.1	2.3%	2.5%	7.7%
FY 98	5,304	21.1	1,702.2	2.7%	4.5%	2.0%
FY 99	5,330	21.5	1,819.6	0.5%	1.9%	6.9%
FY 00	5,498	22.5	1,998.7	3.2%	4.7%	9.8%
FY 01	5,559	23 5	2,123.5	1.1%	4.4%	6.2%
FY 2002 Projected	5,735	24.6	2,357.0	3.2%	4.7%	11.0%

Note:

1. **The table does not include riders on commuter trains that Amtrak operates for State/Commuter Agencies.**
2. **Excludes Federal and State Capital Payments from FY1998 through FY2002.**
3. **FY1991 forward reflects restated revenue to comply with new reporting format which excludes interest income.**

Mr. Rogers. Please update the ridership trend graph in last year's hearing record by providing data for fiscal years 1995 through 2001, and 2002 to date.

[The information follows:]



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
FY95	1.783	1.780	1.788	1.551	1.499	1.803	1.738	1.778	1.764	1.794	1.877	1.572
FY96	1.647	1.673	1.657	1.382	1.361	1.559	1.619	1.715	1.709	1.853	1.952	1.551
FY97	1.687	1.576	1.700	1.397	1.372	1.708	1.655	1.763	1.776	1.934	2.008	1.616
FY98	1.774	1.732	1.797	1.570	1.413	1.755	1.825	1.843	1.826	1.968	1.922	1.670
FY99	1.791	1.817	1.847	1.599	1.549	1.832	1.840	1.846	1.865	1.966	1.949	1.607
FY00	1.804	1.850	1.836	1.542	1.617	1.920	1.971	1.992	2.010	2.054	2.097	1.824
FY01	1.977	1.981	2.008	1.683	1.663	2.008	2.024	2.047	2.073	2.127	2.203	1.708
FY02	1.951	1.974	1.985	1.760	1.771							

Please provide a breakdown of fiscal year 2001 Amtrak ridership by state, similar to the list shown in last year's hearing record.

[The information follows:]

State	Boardings	Alightings	Total
Alabama	25,725	25,996	51,721
Arkansas	10,933	11,400	22,333
Arizona	40,466	42,640	83,106
California	3,995,983	3,987,118	7,983,101
Colorado	115,834	114,671	230,505
Connecticut	497,317	514,393	1,011,710
District of Columbia	1,763,308	1,755,115	3,518,423
Delaware	357,236	362,517	719,753
Florida	465,633	468,436	934,069
Georgia	74,733	74,914	149,647
Iowa	27,610	27,793	55,403
Idaho	2,608	2,776	5,384
Illinois	1,409,378	1,399,590	2,808,968
Indiana	56,772	60,545	117,317
Kansas	15,523	15,001	30,524
Kentucky	4,191	3,878	8,069
Louisiana	93,606	95,048	188,654
Massachusetts	778,570	756,833	1,535,403
Maryland	857,300	848,170	1,705,470
Michigan	267,229	266,204	533,433
Minnesota	68,510	67,231	135,741
Missouri	241,489	243,640	485,129
Mississippi	44,461	45,385	89,846
Montana	61,065	61,138	122,203
North Carolina	253,718	252,721	506,439
North Dakota	41,162	41,109	82,271
Nebraska	19,015	19,601	38,616
New Hampshire	909	1,005	1,914
New Jersey	1,931,602	1,932,301	3,863,903
New Mexico	45,722	45,778	91,500
Nevada	49,883	57,757	107,640
New York	5,185,326	5,171,114	10,356,440
Ohio	88,214	90,060	178,274
Oklahoma	31,231	28,374	59,605
Oregon	345,287	348,140	693,427
Pennsylvania	2,378,271	2,387,639	4,765,910
Rhode Island	218,713	226,835	445,548
South Carolina	86,834	86,273	173,107
Tennessee	27,952	27,249	55,201
Texas	127,910	129,789	257,699
Utah	15,467	16,411	31,878
Virginia	452,253	453,266	905,519
Vermont	41,854	43,996	85,850
Washington	516,264	512,564	1,028,828
Wisconsin	247,743	250,956	498,699
West Virginia	32,438	34,003	66,441
Wyoming	92	92	184
United States Total	23,413,340	23,407,465	46,820,805

Mr. Rogers. Please provide a table highlighting Amtrak's market share of air-rail intercity travel markets from 1985 onwards.

[The information follows:]

When reviewing this chart, keep in mind that this data compares Amtrak, a single operating company, against an entire industry. If Amtrak were an airline, it would, in terms of ridership, be the ninth largest domestic carrier.

Air / Rail Shares*

	---- Passengers ----	
Fiscal Year	Airlines	Amtrak
1985	92.5%	7.5%
1986	92.6%	7.4%
1987	91.9%	8.1%
1988	92.7%	7.3%
1989	92.8%	7.2%
1990	92.7%	7.3%
1991	93.2%	6.8%
1992	93.4%	6.6%
1993	93.6%	6.4%
1994	94.2%	5.8%
1995	94.5%	5.5%
1996	94.9%	5.1%
1997	94.9%	5.1%
1998	94.0%	6.0%
1999	94.8%	5.2%
2000	94.7%	5.3%
2001	94.4%	5.6%

** Defined as share of travelers using plane or Amtrak.*

Note: Domestic air passenger data obtained from Database Products O&D Plus Air Carrier Database; Rail data taken from train earnings reports.

Air/Rail Shares for Key Northeast Markets, FY94 - FY01

	New York - Washington		Washington - Boston		New York - Boston		New York - Albany	
FYR	Air	Amtrak	Air	Amtrak	Air	Amtrak	Air	Amtrak
FY94	63%	37%	91%	9%	82%	18%	38%	62%
FY95	62%	38%	90%	10%	82%	18%	28%	72%
FY96	61%	39%	92%	8%	80%	20%	27%	73%
FY97	63%	37%	93%	7%	82%	18%	27%	73%
FY98	62%	38%	95%	5%	82%	18%	20%	80%
FY99	63%	37%	95%	5%	81%	19%	17%	83%
FY00	63%	37%	95%	5%	82%	18%	13%	87%
FY01	55%	45%	92%	8%	73%	27%	11%	89%

	Boston - Philadelphia		New York - Philadelphia		Washington - Philadelphia		New York - Providence	
FYR	Air	Amtrak	Air	Amtrak	Air	Amtrak	Air	Amtrak
FY94	83%	17%	9%	91%	21%	79%	n/a	n/a
FY95	91%	9%	12%	88%	20%	80%	n/a	n/a
FY96	92%	8%	7%	93%	19%	81%	61%	39%
FY97	91%	9%	9%	91%	20%	80%	63%	37%
FY98	93%	7%	9%	91%	22%	78%	60%	40%
FY99	93%	7%	5%	95%	22%	78%	60%	40%
FY00	90%	10%	5%	95%	21%	79%	60%	40%
FY01	84%	16%	4%	96%	17%	83%	47%	53%

Routes

Mr. Rogers. Press has reported that Amtrak may reduce or eliminate routes in Missouri in 2002 because of an absence of the state's 403(b) payment. Please discuss this issue and whether or not this may have any impact on long distance trains traveling through the state.

[The information follows:]

The Missouri legislature continues to debate funding for Amtrak's two state-supported trains in

Missouri, the *Mules* and the *Ann Rutledge*. If the state decides no longer to fund these two trains, Amtrak will be forced to terminate the service. The outcome of funding for these two state-supported trains will not affect other long distance Amtrak trains operating through Missouri, the *Southwest Chief* and the *Texas Eagle* (which together serve four stations in Missouri including Kansas City and St. Louis) or the two additional daily St. Louis to Chicago round trips.

Mr. Rogers. Do you expect to make any major changes to the national route system this year, pre-October 1?

[The information follows:]

Amtrak provided notice to the State of Missouri on February 1 that it intends to discontinue daily service for the *Missouri Mule* and *Ann Rutledge* routes on or about August 1, 2002 depending on the outcome of the State's decision to continue support for these services. These routes have historically been supported by the State of Missouri and the State provided no funding in its budget request for its FY2003 fiscal year beginning July 1, 2002. Should the State of Missouri provide sufficient funding, Amtrak will reinstate the service.

Mr. Rogers. Are any of your routes Congressionally mandates by law? If so, please identify which ones and under what statute?

[The information follows:]

In 1997 Congress repealed the specific requirement to operate the ''basic system'', and substituted therefore the current, more general requirement to operate a ''national system''. See 49 U.S.C. 24701. Specific Amtrak routes are therefore not mandated by provisions of the Rail Passenger Service Act, as amended to date.
49 U.S.C. 24101 *et seq.*

However, in December 1981, outside of the Rail Passenger Service Act, Congress required Amtrak to re-instate a route between Washington, D.C., and Chicago, via Cincinnati (the ''Cardinal''), that Amtrak had already discontinued. This mandate was enacted as a proviso to the DOT Appropriations Act for Fiscal Year 1982. Pub. L. No. 97-102, 95 Stat. 1442,1451.

Near the end of Fiscal Year 1982, questions arose as to whether the referenced proviso was intended to require operation of the *Cardinal* permanently or only through the end of fiscal year 1982. In a lively exchange of legal memoranda, Amtrak took the position that the proviso was permanent legislation, and the USDOT and the General Accounting Office took the position that operation of the route was not required on a permanent basis, though the GAO's position indicated the provision was open to interpretation. The *Cardinal* has continued to date. Although there were respectable arguments to be made on both sides of the question in 1982, it would be impossible to decide which view would prevail today without a thorough review of the relevant case law changes over the past twenty years.

Mr. Rogers. Please provide the most recent route-by-route performance statistics for all the short and long distance routes, similar to that in last year's hearing record.

[The information follows:]

Description	Amtrak Generated Revenue	State Revenue	FY01 Total Revenue	FY01 Expense	FY01 Profit / (Loss)	Amtrak Generated Revenue	State Revenue	FY00 Total Revenue	FY00 Expense
NEC Spine									
Acela Express/Metroliner	$271.2	$0.0	$271 2	$220.5	$50.7	$222.7	$0.0	$222.7	$158.5
Acela Regional/NE Direct	$312 3	$0.0	$312.3	$350.5	($38.1)	$281.8	$0 0	$281.8	$335.4
Special Trains (NEC)	$1.4	$0.0	$1 4	$1.5	($0.1)	$1.4	$0.0	$1.4	$1.5
Total NEC Spine Trains			$585 0	$572.5	$12.4			$505.8	$495.3
Corridor Trains									
Maple Leaf	$10 4	$0.0	$10.4	$13.1	($2.7)	$10.3	$0.0	$10.3	$13.5
Ethan Allen Express	$2 0	$0.2	$2 2	$3.8	($1 5)	$2.1	$0.0	$2.1	$4.0
Vermonter	$4 3	$1 5	$5.8	$6.2	($0 4)	$4.7	$1.6	$6.3	$6.8
Clocker Service	$17.8	$0.0	$17.8	$22.0	($4.2)	$15 5	$0.0	$15.5	$22.2
Keystone Service	$1.7	$2.8	$4.5	$8.0	($3.5)	$1.7	$2.9	$4 6	$8.0
Empire Service	$42 2	$0.0	$42.2	$64.5	($22.4)	$41.0	$0.0	$41.0	$66.3
Chicago-St.Louis	$7.8	$3.8	$11.5	$22.6	($11 1)	$8.4	$3.0	$11.4	$21.2
Hiawathas	$7.6	$5 1	$12.6	$21.8	($9.1)	$7.6	$5.0	$12.6	$20.4
Chicago-Pontiac	$9 7	$0.0	$9.7	$24.2	($14.5)	$10.0	$0.0	$10.0	$23.7
Illini	$3.5	$2.4	$6.0	$8.1	($2.1)	$3.4	$2.7	$6.1	$7.3
Illinois Zephyr	$2.7	$2.8	$5 5	$7.4	($1.9)	$2.7	$2.5	$5.2	$6.8
Heartland Flyer	$1 2	$4.6	$5.8	$5.2	$0.6	$1.4	$3.9	$5.3	$4.6
Lake Country Limited	$0 1	$0.0	$0.1	$1.4	($1.3)	$0.1	$0.0	$0.1	$1.3
Pacific Surfliner	$31.0	$21.5	$52 5	$70.5	($18 0)	$27.7	$20.3	$48.0	$66.5
Cascades	$15.5	$16.3	$31.8	$36.2	($4.4)	$13.5	$13 0	$26.4	$31.5
Capitols	$11.7	$18.4	$30.2	$33.2	($3 1)	$9.1	$16.7	$25.8	$29.5
San Joaquins	$19.8	$23.2	$43.0	$49.3	($6.3)	$18.6	$24.7	$43.3	$46.2
Adirondack	$4.4	$2.7	$7.1	$7.6	($0.5)	$4.6	$1.0	$5.6	$8.1
International	$3.4	$3.7	$7.1	$9.1	($2.0)	$3.4	$1.6	$5 0	$8.1
Keystone Service	$22 9	$0.0	$22.9	$29.3	($6.4)	$21.0	$0.0	$21 0	$27.7
Kansas City-St.Louis	$4.5	$6.1	$10.5	$12.0	($1.4)	$4.6	$6.2	$10.8	$12.4
Auto Train	$54.6	$0.0	$54.6	$62.7	($8.1)	$56.1	$0.0	$56.1	$61.8
Pere Marquette	$1.9	$2 2	$4.1	$5.8	($1.7)	$1.9	$1.0	$2.8	$4.7
Carolinian	$13.5	$2.7	$16.2	$18.9	($2.7)	$13 4	$2.7	$16 1	$16 8
Piedmont	$0.7	$3.2	$4.0	$4 7	($0.7)	$0.7	$3.0	$3.8	$4.5
Special Trains (West)	$1.4	$0.0	$1.4	$1.1	$0.3	$1.9	$0.0	$1.9	$1 1
Special Trains (Intercity)	$3.9	$0.0	$3.9	$2.8	$1.1	$3.9	$0.0	$3.9	$2.5
Total Corridor Trains			$423.2	$551.3	($128.2)			$400 9	$527 5
Long Distance									
Twilight Shoreliner	$16 3	$0.0	$16.3	$27.7	($11.4)	$16.5	$0 0	$16.5	$31.1
Silver Star	$30.7	$0.0	$30.7	$51.3	($20.6)	$29.2	$0.0	$29.2	$48.3
Three Rivers	$26.5	$0.0	$26 5	$49.0	($22 5)	$25.8	$0 0	$25.8	$45.7
Cardinal	$4 4	$0 0	$4 4	$13.1	($8.6)	$4.6	$0.0	$4.6	$14.5
Silver Meteor	$28.5	$0.0	$28.5	$43.1	($14.5)	$27.7	$0 0	$27.7	$40.6
Empire Builder	$53.3	$0.0	$53.3	$84.4	($31.1)	$57.4	$0.0	$57.4	$91.5
Capitol Limited	$21 4	$0 0	$21.4	$38.0	($16.5)	$19.1	$0.0	$19.1	$36.2
California Zephyr	$51 7	$0 0	$51.7	$87.3	($35.6)	$51.4	$0.0	$51.4	$88.9
Southwest Chief	$65.9	$0.0	$65.9	$108.9	($43.0)	$65.9	$0.0	$65.9	$101.4
City of New Orleans	$15.3	$0 0	$15.3	$31.6	($16.3)	$15.3	$0.0	$15.3	$38.0
Texas Eagle	$22.4	$0.0	$22.4	$48.6	($26.3)	$20.7	$0.0	$20 7	$45.3
Sunset Limited	$17 7	$0.0	$17.7	$44 0	($26.2)	$18.7	$0.0	$18.7	$45.9
Coast Starlight	$41 2	$0.0	$41.2	$72 8	($31 6)	$41.2	$0.0	$41.2	$70 8

Staffing

Mr. Rogers. How much does Amtrak plan to spend on corporate staff in fiscal year 2002 as compared to fiscal year 2001? As part of this answer, please include total number of personnel.

[The information follows:]

The size, role, and function of headquarters staff, as in the past, continues to undergo change. During FY2001, Amtrak undertook a major corporate reorganization, resulting in a centralization of certain responsibilities into corporate staff. The following table shows the FY2001 actual and FY2002 budget for Corporate and Service Center staff direct labor costs including benefits.

Corporate and Service Center Direct Labor Costs

	FY2001	FY2002 Plan
Salaries, Wages and Benefits	$268,346,799	$280,361,010

Mr. Rogers. What is anticipated for fiscal year 2003 (amount and personnel)?

[The information follows:]

Amtrak will not complete the detailed budget including breakdown by organization or staffing plans for FY03 until late in FY02, and therefore do not have this information at present. However, we expect to be consistent with the levels in FY02

unless we do not receive the full $1.2 billion appropriation request. In that event, certain staff associated with support of discontinued service would no longer be required.

Mr. Rogers. Please provide similar breakdowns for the amount Amtrak plans to spend on staff in each of its three strategic business units in fiscal year 2002 as compared to fiscal year 2001. Please provide a breakdown that includes the number of personnel.

[The information follows:]

The size, role, and function of business unit staff, as in the past, continue to undergo change. During FY2001, Amtrak undertook a major corporate reorganization, resulting in a centralization of certain responsibilities from business units into corporate staff. The following table shows the FY2001 actual and FY2002 budget for business unit staff direct labor costs including benefits.

Business Unit Direct Labor Costs

	FY2001	FY2002 Plan
Salaries, Wages and Benefits	$1,328,299,875	$1,347,778,674

Mr. Rogers. What is anticipated for fiscal year 2003 (amount and personnel)?

[The information follows:]

Amtrak will not complete the detailed budget including a breakdown by organization or staffing plans for FY03 until late in FY02, and therefore do not have this information at present. However, we expect to be consistent with the levels in FY02 unless we do not receive the full $1.2 billion appropriation request. In that event, certain staff associated with support of discontinued service would no longer be required.

Equipment

Mr. Rogers. Please provide a listing of the new locomotives and passenger cars Amtrak has received within the past two years and expects to receive in fiscal year 2003.

[The information follows:]

Locomotives

General Electric P-42 Locomotives, Quantity 85

Delivery Date	Quantity
October 2000	3
November 2000	4
December 2000	6
January 2001	3
February 2001	6
March 2001	8
April 2001	9
May 2001	9
June 2001	8
July 2001	4

August 2001	4
September 2001	5
October 2001	8
November 2002	8

High Speed Locomotives

Locomotive:	Conditionally Accepted:
No. 656	October 2000
No. 658	December 2000
No. 663	December 2000
No. 661	January 2001
No. 657	February 2001
No. 664	April 2001

Locomotive:	Conditionally Accepted:
No. 660	April 2001
No. 662	May 2001
No. 653	July 2001
No. 650	August 2001
No. 651	September 2001
No. 652	October 2001

Surfliner Trainsets

Alstom Bi-Level Equipment

Trainset	Delivery Date
No. 5	November 2000
No. 6	December 2000
No. 7	February 2001
No. 8	March 2001

Acela Trainsets and Locomotives

Trainset	Conditionally Accepted
No. 1	February 2002
No. 2	Due 2002
No. 3	Due 2002
No. 4	Due 2002
No. 5	October 2000
No. 6	December 2000
No. 7	February 2001
No. 8	January 2001
No. 9	March 2001
No. 10	April 2001
No. 11	April 2001
No. 12	May 2001
No. 13	June 2001
No. 14	June 2001
No. 15	August 2001

Trainset	Conditionally Accepted
No. 16	August 2001
No. 17	September 2001
No. 18	October 2001
No. 19	November 2001
No. 20	November 2001

Mr. Rogers. Please provide a listing of Locomotives and passenger cars Amtrak has retired over the past two years and expects to retire during fiscal year 2002.

[The information follows:]

The following equipment has been retired:

Car No.	Type
2461	Sleeper
2435	Sleeper
2440	Sleeper
3122	Lounge
1615	Baggage Dormitory
1616	Baggage Dormitory
1617	Baggage Dormitory
1627	Baggage Dormitory
2055	Sleeper
2088	Sleeper
2090	Sleeper
2093	Sleeper
2431	Sleeper
2432	Sleeper
2434	Sleeper
2436	Sleeper
2437	Sleeper
2447	Sleeper
2456	Sleeper

Car No.	Type
2458	Sleeper
2459	Sleeper
2460	Sleeper
2880	Sleeper
2886	Sleeper
2932	Sleeper
3100	Lounge
3101	Lounge
3103	Lounge
3107	Lounge
3120	Lounge
3123	Lounge

4005	Coach
4644	Coach
8603	Table Car
8700	Buffet Grill Car
9648	Cab Car
9822	Cab Car
39900	Dormitory Coach
39901	Dormitory Coach
39902	Dormitory Coach
39903	Dormitory Coach
39904	Dormitory Coach
39905	Dormitory Coach
39906	Dormitory Coach
39907	Dormitory Coach
39909	Dormitory Coach
39911	Dormitory Coach
39913	Dormitory Coach
39914	Dormitory Coach
39915	Dormitory Coach
39916	Dormitory Coach
39917	Dormitory Coach
39918	Dormitory Coach
39919	Dormitory Coach
39920	Dormitory Coach
39921	Dormitory Coach
39923	Dormitory Coach

Car No.	Type
39926	Dormitory Coach
39927	Dormitory Coach
39928	Dormitory Coach
39929	Dormitory Coach
39930	Dormitory Coach
39931	Dormitory Coach
39932	Dormitory Coach
39933	Dormitory Coach
39934	Dormitory Coach

39935	Dormitory Coach
39936	Dormitory Coach
39938	Dormitory Coach
39942	Coach
39945	Coach
39947	Coach
39948	Coach
39949	Coach
39950	Coach
39954	Coach
39956	Coach
39959	Coach
39960	Coach
39961	Coach
39962	Coach
39963	Coach
39964	Coach
39971	Lounge
39980	Diner
39981	Diner
39982	Diner
39983	Diner
39984	Diner
39985	Diner
7007	Coach
7621	Coach
7622	Coach
7624	Coach
7628	Coach

Car No.	Type
4005	Coach
4644	Coach
0030	Dome Car
9302	Dome Car

There are no equipment retirements scheduled for the balance of FY2002.

Mr. Rogers. Please provide a table showing the current planned delivery schedule for the Northeast corridor trainsets and locomotives.

[The information follows:]

Trainset	Scheduled Acceptance
Trainsets (18)	Accepted
Trainset (1)	May 24, 2002
Trainset (1)	4th Qtr. 2002

All 15 HHP locomotives were delivered by October 2001.

Please note that this schedule is based on Consortium projections as to its ability to complete required work. Similar Consortium projections in the past have sometimes proven unreliable.

Mr. Rogers. Please provide a table that shows estimated equipment deliveries (non-Acela) for equipment currently on order, broken down by fiscal year--by month--and by type of equipment.

[The information follows:]

Other than the three remaining high-speed trains sets, Amtrak expects delivery of only 21 refrigerated express cars. These are due to

arrive by June 2002. All other equipment on order has been delivered.

Mr. Rogers. Please update the data on your passenger cars and locomotive fleets from last year's hearing record.

[The information follows:]

AMTRAK EQUIPMENT INVENTORY

Effective 3/15/02

LOCOMOTIVES	Total Ownership	Active	Stored
ROAD DIESEL AND DUAL MODE LOCOMOTIVES			
F40PH *	133	8	104
F59PHI	21	21	0
P32-8	18	18	0
P32AC-DM	18	18	0
P-40	43	41	2
P-42	207	200	7
FL-9	6	0	6
TOTAL DIESEL AND DUAL MODE LOCOMOTIVES	**425**	**306**	**119**
* Includes units leased to other railroads			
ELECTRIC LOCOMOTIVES			

E60MA (HEP)	11	10	1
E60CP	2	0	2
HHP-8	15	15	0
AEM-7	52	51	1
TOTAL ELECTRIC LOCOMOTIVES	**80**	**76**	**4**
TOTAL DIESEL SWITCHERS	**78**	**67**	**11**
TOTAL LOCOMOTIVES	**583**	**449**	**134**
CAB CONTROL CARS			
Metroliner Cab Cars	27	8	19
F40 Cab Cars	20	20	0
TOTAL CAB CARS	**47**	**28**	**19**

TURBOLINERS			
Turboliner Power Cars	18	2	16
Turboliner Coach and Food Service	19	2	17
Turboliner Food Service	9	1	8
TOTAL TURBOLINERS	**46**	**5**	**41**
PASSENGER CARS	**Total Ownership**	**Active**	**Stored**
AMFLEET I			
Coach (Including Michigan Coach)	361	346	15
Food Service	128	109	19
TOTAL AMFLEET I	**489**	**455**	**34**

AMFLEET II			
Coach	122	120	2
Food Service	25	24	1
TOTAL AMFLEET II	**147**	**144**	**3**
SUPERLINER I			
Coach/Baggage	15	14	1
Coach Smoking	36	33	3
Coach	86	77	9
Snack Coach	11	10	1
Lounge	30	28	2
Diner	34	29	5
Sleeper	67	58	9
TOTAL SUPERLINER I	**279**	**249**	**30**
SUPERLINER II			
Coach	38	37	1
Lounge	25	22	3
Diner	30	27	3
Sleeper	49	49	0
Deluxe Sleeper	6	6	0
Transition Sleeper	47	40	7
TOTAL SUPERLINER II	**195**	**181**	**14**
VIEWLINER			
Diner(Prototype)	1	0	1
Sleeper	50	48	2
Sleeper(Prototype)	2	1	1
TOTAL VIEWLINERS	**53**	**49**	**4**
HORIZON			
Coach	85	84	1
Food Service	18	17	1
TOTAL HORIZON	**103**	**101**	**2**
HERITAGE FLEET			
Coach	12	0	12

Clocker Coach	26	12	14
Diners/Diner Grills	28	23	5
10-6 Sleepers/11BR Sleeper/Slumbercoach	23	0	23
Crew Dorm Sleeper	25	24	1
Bag Dorm	4	0	4
Lounge	7	0	7
Dome Lounge	1	1	0
Automat	1	0	1
Buffet/Buffet Kitchen/Table	3	0	3
SF Hi-Level Coach	19	5	14
SF Hi-Level Diner	6	0	6
SF Hi-Level Transition Dorm/Coach	32	0	32
SF Hi-Level Lounge	6	5	1
Capitoliners (Former Metroliner Cars)	11	0	11
TOTAL HERITAGE FLEET	**204**	**70**	**134**
SURFLINERS			
Cab Car	9	9	0
Coach	15	15	0
Custom Class	8	8	0
Café	8	8	0
TOTAL SURFLINERS	**40**	**40**	**0**
TALGO			
Coach	19	19	0
Bistro	3	3	0
Diner	2	2	0
Baggage	2	2	0
Power Cars	2	2	0

TOTAL TALGO	**28**	**28**	**0**

TOTAL PASSENGER CARS	**1550**	**1333**	**282**
HIGH SPEED TRAINSET	**17**	**17**	**0**
NON-PASSENGER CARS	**Total Ownership**	**Active**	**Stored**
MAIL/BAGGAGE			
Baggage/Mail (1000-1200-1700-1800)	140	117	23
Material Handling (1400 - 1500)	141	135	6
TOTAL MAIL/BAGGAGE	**280**	**252**	**28**
EXPRESS CARS			
Express Cars	350	345	5
Refrigerated Express Cars	89	89	0
TOTAL EXPRESS	**439**	**434**	**5**
ROADRAILERS			
Mail & Express Trailers (Mail 48', Express 53')	659	659	0
Bogies/Couplermates	544	544	0
Refrigerated Trailers	8	8	0
TOTAL ROADRAILER	**1211**	**1211**	**0**
AUTO TRAIN AUTO CARRIERS	**64**	**64**	**0**

TOTAL NON-PASSENGER CARS	**1994**	**1961**	**33**

Mr. Rogers. Please update the chart showing passenger and locomotive fleet average age from last year's hearing record.

[The information follows:]

PASSENGER CARS	Total Active	Avg. Age
AMFLEET I (Includes Michigan Coaches)	455	26
AMFLEET II	144	20
HERITAGE (Includes High-Levels)	70	50
HORIZON	101	12.5
SUPERLINER I	249	22
SUPERLINER II	181	7
VIEWLINER	48	6
VIEWLINER (Prototype)	1	14
SURFLINER	40	1.5
TALGO	28	3
TURBOLINER	5	26
HIGH SPEED RAIL EQUIPMENT	136	1
MAIL/BAGGAGE/EXPRESS AND AUTO CARRIERS		
BAGGAGE (Includes 1700 series Mail car)	117	48
MATERIAL HANDLING (MHC)	135	14
EXPRESS CAR (50 & 60 ft.)	345	3
EXPRESS CAR (Refrigerated)	89	32 *
ROADRAILER TRAILERS (48 & 53 ft)	660	3
ROADRAILER REFRIGERATED TRAILERS (53ft)	8	2
ROADRAILER BOGIES AND COUPLERMATES	544	3
AUTO CARRIERS	64	41
LOCOMOTIVES		
P42-8 DIESEL	200	3
P40-8 DIESEL	41	8.5
P32AC-DM DUAL MODE	18	5.5
P32-8 DIESEL	18	10
F59PHI DIESEL	21	3.5
F40 DIESEL	8	36
DIESEL SWITCHERS (Includes GP40H Units)	67	44
AEM-7 ELECTRIC	51	20
E-60MA ELECTRIC	10	26
HHP-8 ELECTRIC	15	1
Metroliner Cab Control Car	8	35
F40 Cab Control Car	20	26
* Original date built used for age calculation		

Mr. Rogers. How much equipment does Amtrak have stored for accident repairs?

[The information follows:]

There are currently 91 repairable wrecked cars out of service, including 42 Superliners, 33 single level cars, and 16 mail, baggage and express cars. If repaired, the great majority of these cars would be used on the national system. There are also seven wreck and fire damages locomotives out of service, six of which would be used for use outside the Northeast Corridor.

Mr. Rogers. Of the stored equipment, how much will be remanufactured?

[The information follows:]

Amtrak has numerous cars and locomotives stored as a result of wrecks and fires. This equipment could otherwise be earning revenue or substituting for life-expired equipment (e.g., Heritage coaches or E60 locomotives) that could be retired. Subject to the amount of Amtrak's appropriation, we therefore intend to return it to service. It would not be possible due to shop capacity constraints to repair all stored equipment in one year but significant progress can be made. For the national system, Amtrak proposes that 18 Superliner cars be repaired along with six Amfleet II and Horizon cars and six diesel locomotives. It is also proposed to repair eight Amfleet cars and one fire-damaged AEM-7 electric locomotive for the Northeast Corridor. In addition, we would repair five damaged express cars.

Amtrak ordinarily reviews its accident repair programs twice annually and adjusts as needed in the event other critical equipment is damaged or

that passenger demand becomes more important for one type of car over another. Typically, an annual program of approximately $10 million would be adequate but the accumulation of damaged equipment due to funding shortages over several years has resulted in an abnormally large backlog.

Maintenance

Mr. Rogers. Please provide the Committee with the data on maintenance-to-equipment ratio similar to that shown in last year's hearing record.

[The information follows:]

Maintenance of Equipment per Unit Mile (includes Turnaround Servicing Costs)(in dollars)

	FY97	FY98	FY99	FY00	FY01
Intercity	0.76	0.70	0.68	1.11	1.06
NEC	1.85	1.72	1.76	2.36	2.41
Amtrak West	1.00	1.07	0.92	1.29	1.21
Total Amtrak	1.03	0.96	0.93	1.38	1.37

Locomotive Maintenance per Locomotive Unit Mile (in dollars)

	FY97	FY98	FY99	FY00	FY01
Intercity	1.11	0.98	0.84	0.76	0.85
NEC	3.85	2.98	3.55	2.76	2.59
Amtrak West	1.30	1.67	1.14	0.90	0.84
Total Amtrak	1.77	1.51	1.47	1.22	1.26

Car Maintenance per Car Mile (includes Turnaround Servicing Costs)
(in dollars)

	FY97	FY98	FY99	FY00	FY01
Intercity	0.71	0.66	0.65	1.16	1.10
NEC	1.50	1.49	1.43	2.29	2.38
Amtrak West	0.94	0.95	0.88	1.36	1.28
Total Amtrak	0.90	0.86	0.84	1.40	1.38

Mr. Rogers. Please update the state-by-state table on planned maintenance of way expenses in last year's hearing record, by providing data for fiscal years 2000 and 2001, and planned for 2002 and 2003.

[The information follows:]

State	Communications & Signals	Buildings & Bridges	Electric Traction	Track Department	Total M of W
Connecticut	2,064,596	2,409,268	1,748,147	5,810,345	12,032,356
Delaware	850,118	592,443	974,204	2,280,009	4,696,773
District of Columbia	242,879	-	162,370	514,841	920,090
Maryland	3,643,392	1,382,348	2,760,260	8,752,292	16,538,292
Massachusetts	4,614,950	2,330,272	967,920	10,517,460	18,430,603
New Jersey	15,302,168	4,858,007	3,572,094	10,076,168	33,808,437
New York	2,914,714	5,568,944	3,409,741	2,721,301	14,614,699
Pennsylvania	9,229,901	8,531,129	6,170,000	16,989,743	40,920,773
Rhode Island	850,118	513,447	2,955,314	514,841	4,833,719
Total:	**39,712,837**	**26,185,858**	**22,720,050**	**58,176,998**	**146,795,743**
From Funds Usage:	39,712,837	26,185,858	22,720,050	58,176,998	146,795,743

Mr. Rogers. Please provide a detailed summary of Amtrak's plans for upgrade and modernization for each of its maintenance facilities, cost estimates by fiscal year (2000-2003), and scheduled date for completion.

[The information follows:]

Maintenance Facility Upgrades and Modernization Plans (Amtrak Federal funds only) for 1999-2001. The 2002 budget is in process.

Funded Maintenance Facility Upgrades and Modernization Plans (Amtrak Federal funds only) for 2000-2002. The 2003 budget is in process.

Facility	FY00	FY01	FY02	Scheduled Completion Date
Sunnyside Yard - Oil/PCB Remediation	1.8			Sep-04
Paoli Superfund Project	2.2			Dec-03
NEC Support Facilities Improvements	2.7			Sep-01
New Haven Diesel Locomotive Maintenance Facility		1.0		Sep-01
Maintenance of Way Facility - Midway		0.8		Sep-01
Chicago Yard Roof Replacement	0.05			Dec-99
King Street Coach Yard Maintenance		8.0		Sep-01
Oakland Maintenance Facility			1.0	Sep-02
Environmental Imp.-LAX Svc. & Inspection Facility			1.4	Sep-02
Pollution Prevention - Beech Grove Maint. Facility			0.3	Aug-02

Mr. Rogers. Please provide data on station renovation costs for fiscal years 1998 through 2003.

[The information follows:]

FISCAL YEAR 1998 STATION RENOVATIONS

Station	Funding		Total
	Amtrak	Other	
New AutoTrain Facil., Sanford	250,000		250,000
Miami Transfer Satellite	126,000		126,000
CUS Mail Dock Upgrades	943,000		943,000
Mail Service Terminal & Equipment	4,600,000		4,600,000
N. Auto Train Terminal Replace. Phase II	8,000,000		8,000,000
Chicago Union Station Redevelopment	600,000		600,000
Lancaster Station	250,000		250,000
30th Street Station Development	10,000,000		10,000,000
HSR - Station Improvement/Design	2,000,000		2,000,000
PHL Structural Restoration	3,000,000		3,000,000
High Speed Rail Program*	14,200,000		14,200,000
VRE Jont Benefits Project		1,000,000	1,000,000
Life Safety Washington to New York*	750,000		750,000
Philadelphia, PA - N Parking Deck	1,200,000		1,200,000
Penn Station Redevelopment	22,500,000		22,500,000
NEC Stations & Customer Service Improv.	6,900,000		6,900,000
Retail Development - NYP & Others	732,000		732,000
Assessment - NEC Stations Inv. & Improv.	250,000		250,000
Leverage State/Local Funds (MARC & VRE)	550,000		550,000
Centralia, WA	281,000	3,730,000	4,011,000
King Street Station Intermodal Project	5,000,000	16,200,000	21,200,000
Sacramento Station Rehabilitation.	500,000		500,000
Pacific Northwest Stations	600,000		600,000
Pacific Northwest Platforms	600,000		600,000
Las Vegas Infrastructure Program*	2,000,000		
Salem, OR Intermodal Station	1,000,000	3,700,000	4,700,000
Total FY98 Station Renovations	86,832,000	24,630,000	109,462,000

* This is the portion of the project related to stations.

FISCAL YEAR 1999 STATION RENOVATIONS

Station	Funding Amtrak	Funding Other	Total
King Street Station Intermodal Project	4,000,000	16,250,000	20,250,000
Minneapolis-St.Paul, MN	500,000		500,000
Raleigh, North Carolina Station Expansion	444,000		444,000
Chicago Union Station	5,519,000		5,519,000
Southern Pines, NC Station Restoration	800,000		800,000
Erie, PA Station Renovation	1,400,000		1,400,000
NEC Stations & Customer Service Improv	4,850,000		4,850,000
Washington Union Station - Lower Level	0	3,200,000	3,200,000
MetroPark Station	600,000		600,000
Wilmington Station	3,000,000	1,900,000	4,900,000
Tukwila, WA Station	500,000	24,200,000	24,700,000
Everett, WA Intermodal Project	1,000,000	40,430,000	41,430,000
Eugene, OR Multimodal Station	500,000	3,600,000	4,100,000
Albany, OR Multimodal Station	500,000	11,000,000	11,500,000
San Diego Station Improvement	800,000	400,000	1,200,000
Salinas Station Improvement	300,000	2,979,000	3,279,000
Sacramento, CA Station Renovation	1,500,000	36,580,000	38,080,000
Great American Station Foundation	1,000,000		1,000,000
Total FY99 Station Renovations	27,213,000	140,539,000	167,752,000

FISCAL YEAR 2000 STATION RENOVATIONS

Station	Funding Amtrak	Funding Other	Total
Intercity Leveraged Station Projects	1,000,000	49,000	1,049,000
Minn-St. Paul Station Repairs	75,000		75,000
Spartanburg, SC Station Improvements	35,000	565,000	600,000
Great American Station Foundation	950,000		950,000
Northern Auto Train Terminal Replac.	4,000,000		4,000,000
Total FY00 Station Renovations	6,060,000	614,000	6,674,000

FISCAL YEAR 2001 STATION RENOVATIONS

Station	Funding		Total
	Amtrak	Other	
Eugene, OR Multimodal Station	250,000		250,000
Washington, DC - Lower Level	500,000	2,000,000	2,500,000
MWRRI - St. Louis Station	1,400,000		1,400,000
MWRRI - Kansas City Station/Track	1,000,000		1,000,000
Metropark Station	990,000		990,000
Wilmington Station		1,900,000	1,900,000
Network Growth Strategy-Psgr.Fac.	2,410,000		2,410,000
Montgomery, WV Station	100,000		100,000
Great American Station Foundation	850,000		850,000
Total FY01 Station Renovations	7,500,000	3,900,000	11,400,000

FISCAL YEAR 2002 STATION RENOVATIONS

Station	Funding		Total
	Amtrak	Other	
Washington Lower Level	1,260,000		1,260,000
Stamford	160,000		160,000
King Street Intermodal Station	530,000		530,000
MetroPark Design Station	460,000		460,000
Everett, WA Intermodal Sta.	390,000		390,000
Albany, OR Multimodal Sta.	290,000		290,000
Wilmington Station	2,085,000		2,085,000
Total FY02 Station Renovations	5,175,000		5,175,000

Data for FY2003 is not yet available.

Mr. Rogers. Please provide data on station operating costs for fiscal years 1998 through 2003.

[The information follows:]

Detailed budget information is not available for FY2003. The following are the costs for FY1998 through FY2001 and FY2002 budget:

Station Costs FY 1996 - FY 2001

Res. Cntr	Station Description	FY98 Actual	FY99 Actual	FY00 Actual	FY01 Actual	FY02 Budget
2162	Stations Services NYP	14,104,090	14,947,760	13,402,611	5,261,969	5,473,365
2163	NYP Mail, Express & Baggage				1,071,040	1,135,160
2164	NYP Customer Serices			-	4,366,667	4,775,010
2165	NYP Tickets			-	3,330,970	3,548,564
2201	Sta Svcs Boston Rt 128 MA	249,741	416,787	494,810	657,420	869,717
2202	Sta Svcs Boston South MA	2,993,449	3,195,030	3,448,202	3,374,657	3,631,373
2203	Sta Svcs Boston Backbay Mass	803,466	821,611	857,698	815,086	896,845
2204	Sta Svcs Essex Jct VT	96,554	101,265	119,855	116,702	127,122
2205	Sta Svcs Hartford CT	414,587	387,751	397,882	413,546	433,506
2206	Sta Svcs Kingston RI	180,643	193,284	223,786	312,759	241,152
2207	Sta Svcs Meriden CT	65,267	67,610	81,817	70,057	71,945
2208	Sta Svcs Montplier Jct VT	7,716	20,709	12,041	8,126	7,248
2209	Sta Svcs New Haven CT	1,061,601	1,154,123	1,133,614	1,094,035	1,145,805
2210	Sta Svcs New London CT	497,701	563,954	504,598	447,249	530,904
2211	Sta Svcs Providence RI	1,247,418	1,310,574	1,038,982	1,160,120	1,277,531
2212	Sta Svcs St Albans VT	74,780	74,900	88,577	87,878	91,396
2213	Sta Svcs	816,454	992,835	477,389	624,481	630,519

	Springfield MA					
2214	Sta Svcs Berlin CT	71,114	72,849	79,386	80,029	82,903
2215	Sta Svcs Westerly RI	74,343	103,469	92,434	85,815	93,311
2216	Sta Svcs White River Jt VT	110,920	126,282	127,514	127,425	136,221
2217	Montreal Service Manager	7,829	19,913	14,938	10,743	14,822
2218	Sta Svcs Worcester MA	127,630	132,440	132,751	158,182	154,233
2219	Unmanned Stations Boston Region	80,129	114,576	55,032	94,273	94,116
2220	Sta Svcs Stamford CT		-	419	1,743	401,204
2321	Sta Svcs Albany NY	1,627,878	1,503,051	1,781,252	1,962,983	1,882,812
2322	Sta Svcs Depew NY	634,145	702,039	725,435	721,430	735,439
2323	Sta Svcs Hudson NY	217,477	227,809	230,893	218,631	217,426
2324	Sta Svcs Niagara Falls NY	147,157	172,732	163,934	223,129	192,647
2325	Sta Svcs Rhinecliff NY	202,168	220,668	203,909	208,860	205,456
2326	Sta Svcs Rochester NY	419,362	469,283	427,985	443,593	482,405
2327	Sta Svcs Syracuse NY	423,732	472,484	540,226	591,022	588,854
2328	Sta Svcs Utica NY	318,987	347,255	310,444	316,473	323,399
2329	Unmanned Stations East	48,457	44,207	89,377	61,979	62,335
2330	Sta Svcs Saratoga Spr NY	101,493	111,628	87,419	86,568	103,035
2331	Sta Svcs Schenectady NY	212,543	238,068	192,686	218,503	223,984
2332	Sta Svcs Buffalo NY	79,207	92,985	79,662	102,797	94,128
2351	Sta Svcs Trenton NJ	712,484	744,507	840,138	845,009	859,061
2353	Sta Svcs Newark NJ	2,197,334	2,398,636	2,499,673	2,506,735	2,678,650

2403	Sta Svcs Wash MDOT (Marc)	146,132	112,539	129,346	133,223	140,731
2416	Staton Svcs Washington Union Station Hea	5,557,072	5,854,256	6,332,481	6,256,187	6,371,317
2417	Ticketing	2,410,184	2,567,173	2,797,776	2,763,564	2,819,501
2421	Sta Svcs Altoona PA	215,939	238,831	247,945	236,613	209,144
2422	Sta Svcs Harrisburg PA	1,081,329	1,073,056	1,211,626	1,278,296	1,300,388
2423	Sta Svcs Johnstown PA	181,672	194,409	195,495	197,363	154,331
2424	Sta Svcs Lancaster PA	335,169	393,462	362,168	374,249	381,466
2425	Sta Svcs Pittsburgh PA	902,220	1,068,075	892,302	940,012	769,082
2426	Sta Svcs North Phila PA	69,315	73,557	156,985	56,557	23,890
2427	Sta Svcs Phila 30th St PA	6,253,625	7,207,905	5,315,111	4,618,132	-
2430	Sta Svc Paoli/Malvrn	133,886	127,539	112,821	101,736	104,896
2432	Unmanned Sta Amtrak Phil	37,410	50,675	29,602	17,825	16,541
2531	Sta Svcs New Carrollton MD	639,414	754,125	761,440	719,133	685,509
2532	Sta Svcs Bwi Airport MD	434,899	511,081	617,369	679,997	704,072
2533	Sta Svcs Baltimore MD	2,677,675	2,915,352	3,182,273	3,117,770	2,993,744
2534	Station Services Wilmington	1,252,682	1,242,740	1,417,351	1,242,722	1,177,250
2536	Unstaffed Stations Mad South	5,449	6,151	8,059	9,682	8,464
2541	Sta Svcs Lorton VA	844,094	765,198	763,796	791,483	814,501
2542	Sta Svcs Alexandria VA	425,077	446,398	476,873	483,839	466,403
2543	Unmanned Stations Washington	33,410	38,156	32,454	28,754	31,448

2544	Sta Svcs Mobile AL	129,052	136,651	141,130	131,124	92,204
2546	Sta Svcs Birmingham AL	224,986	272,827	287,586	291,456	227,144
2547	Sta Svcs Greenville SC	132,474	153,296	132,577	146,699	127,197
2548	Sta Svcs Greensboro NC	350,226	381,216	421,331	429,392	442,733
2549	Sta Svcs Charleston SC	401,188	425,174	464,818	478,704	432,915
2550	Sta Svcs Columbia SC	274,443	311,522	327,979	329,665	256,008
2551	Sta Svcs Fayetteville NC	264,161	265,613	301,273	300,406	307,494
2552	Sta Svcs Florence SC	465,974	405,674	525,051	470,142	425,529
2553	Sta Svcs Raleigh NC	566,702	593,912	691,606	661,742	678,977
2554	Sta Svcs Savannah GA	419,314	514,245	487,760	511,628	484,737
2557	Sta Svcs Charlotte N C	470,073	478,779	586,776	643,816	723,421
2558	Sta Svcs Atlanta GA	865,120	846,981	966,222	973,479	862,645
2559	Sta Svcs Charleston WV	141,696	189,662	135,068	162,451	167,741
2560	Sta Svcs Charlottesvil VA	237,750	278,496	284,284	322,382	317,445
2561	Sta Svcs Huntington WV	64,982	57,543	81,445	72,564	76,291
2562	Sta Svcs Newport News VA	182,371	230,761	284,134	286,649	287,694
2563	Sta Svcs Petersburg VA	192,071	216,609	240,639	215,692	229,274
2564	Sta Svcs Prince WV	58,236	67,877	66,019	69,438	73,098
2565	Sta Svcs Richmond VA	1,057,428	1,176,245	1,233,239	1,243,065	1,281,802
2566	Sta Svcs Tuscaloosa AL	98,700	97,522	96,094	113,092	113,483
2567	Sta Svcs Rocky Mount NC	297,086	268,591	299,159	412,228	544,855
2568	Sta Svcs	161,268	161,194	192,274	203,667	225,226

	Williamsburg VA					
2569	Sta Svcs Lynchburg Va-N&W	90,080	95,335	109,543	116,944	115,972
2570	Station Services Durham, NC	163,403	180,604	180,397	173,397	253,452
2573	Station Services Wilson NC	61,540	120,129	140,621	178,662	201,962
2575	Sta Svcs Meridian MS	16,617	132,054	140,059	200,242	153,712
2591	Sta Svcs Jacksonville FL	1,383,475	1,487,905	1,179,450	1,089,542	950,302
2592	Sta Svcs Lakeland FL	235,302	240,883	255,390	236,472	187,926
2593	Sta Svcs Orlando FL	626,805	659,958	726,262	851,059	857,733
2594	Sta Svcs Ocala FL	122,491	146,629	160,523	205,117	275,454
2595	Sta Svcs St Petersburg FL	217,291	230,555	238,897	193,333	126,602
2597	Sta Svcs Sebring FL	137,993	115,109	118,378	141,615	107,004
2598	Sta Svcs Waldo FL	111,997	105,362	111,196	46,462	-
2599	Sta Svcs Winter Haven FL	194,668	199,233	184,556	125,849	116,510
2600	Sta Svcs Winter Park FL	189,443	195,789	201,272	188,097	196,342
2602	Sta Svcs Tampa FL	531,243	525,145	531,235	642,869	555,209
2603	Sta Svcs Kissimmee FL	131,144	136,148	148,915	146,878	168,275
2604	Sta Svcs Deland FL	157,919	156,685	173,247	165,185	162,972
2605	Sta Svcs Auto Tr Sanford	747,430	756,151	787,670	820,860	849,058
2606	Sta Svcs Deerfield Bch FL	297,211	297,199	401,264	393,358	396,558
2608	Sta Svcs Ft Lauderdale FL	330,890	334,206	347,408	440,532	362,438
2609	Sta Svcs Hollywood FL	392,773	311,279	300,464	341,856	331,958
2610	Sta Svcs Miami	865,123	1,089,122	1,276,198	1,095,800	953,482

	FL					
2611	Sta Svcs W Palm Beach FL	329,766	341,005	369,368	415,444	435,855
2612	Atl Coast Silver Svc Unstaffed Stations	74,895	94,515	79,627	90,355	67,500
2613	Sta Svcs Tallahassee, Florida	107,884	97,114	143,706	105,188	79,719
2614	Sta Svcs Pensacola, Florida	129,658	115,764	129,863	132,024	70,332
2615	Sta Svcs North Dadeland, FL	-	2,786	-	-	-
2671	Sta Svcs Ann Arbor MI	266,737	270,455	292,484	302,501	237,867
2672	Sta Svcs Cincinnati OH	280,858	288,486	305,940	296,770	280,935
2673	Sta Svcs Detroit MI	479,716	539,721	546,775	634,406	570,209
2674	Sta Svcs Ft Wayne IN	(47)	92	362	240	-
2675	Sta Svcs Indianapolis IN	139,338	169,843	239,993	235,357	219,459
2676	Sta Svcs Battle Creek MI	222,597	243,157	229,184	334,611	350,312
2677	Sta Svcs Flint MI	142,187	151,184	164,233	120,084	153,052
2678	Sta Svcs Jackson MI	235,560	242,462	241,205	264,906	152,423
2679	Sta Svcs Lansing MI	119,549	114,658	136,574	118,479	82,533
2680	Sta Svcs Niles MI	221,381	210,470	223,023	216,844	206,273
2681	Sta Svcs Port Huron MI	119,259	117,814	152,032	178,810	104,801
2682	Sta Svcs Kalamazoo MI	221,674	236,276	237,279	259,074	216,867
2683	Sta Svcs Youngstown O	(75)	-	367	20	-
2684	Sta Svcs Akron OH	(260)	-	237	12	-
2685	Sta Svcs Cleveland OH	308,305	408,071	412,195	494,325	424,002
2686	Sta Svcs Toledo	573,988	997,034	1,282,855	1,146,192	771,694

	OH					
2687	Sta Svcs South Bend IN	237,142	259,118	307,330	302,453	247,174
2688	Sta Svcs Elkhart IN	86,976	91,743	95,145	88,140	-
2689	Sta Svcs Dearborn MI	346,578	330,630	344,405	335,139	298,948
2690	Unmanned Stations Hub	52,283	94,355	103,651	199,786	82,909
2721	Sta Svcs Glenview IL	216,712	233,960	227,039	216,030	209,296
2722	Sta Svcs Naperville IL	90,531	104,319	104,549	138,244	181,344
2723	Sta Svcs Joliet IL	128,610	143,822	158,215	131,948	104,354
2724	Sta Svcs Homewood IL	101,306	105,288	96,926	105,544	86,316
2725	CHI Station Services	6,120,668	7,610,813	9,419,875	9,352,655	8,673,704
2726	Sta Svcs Hammond IN	288,487	331,613	361,572	400,084	228,659
2731	Unstaffed Station Cascades North	45,314	43,459	46,000	47,325	139,800
2742	Sta Svcs Fargo ND	158,063	188,990	182,320	191,825	140,476
2743	Sta Svcs Grand Forks ND	150,313	155,022	114,513	155,781	88,911
2744	Sta Svcs Midway MN (Msp)	939,602	1,149,457	1,007,980	954,799	772,304
2745	Sta Svcs Minot ND	149,088	173,230	172,898	176,247	114,281
2746	Sta Svcs Williston ND	127,502	127,987	108,412	124,274	91,744
2747	Sta Svcs Devils Lake ND	911	-	-	-	-
2748	Sta Svcs Winona MN	94,248	123,423	103,059	105,656	90,457
2749	Sta Svcs Lacrosse WI	130,005	127,023	142,619	193,500	137,897
2750	Sta Svcs Columbus WI	101,203	125,981	204,498	126,615	107,611
2751	Sta Svcs Milwaukee WI	659,427	652,798	694,458	763,666	691,885
2752	Unmanned	18,538	11,553	20,864	12,105	6,000

	Stations-Chicago					
2753	Sta Svcs Hastings NE	134,576	124,045	136,914	138,103	98,169
2754	Sta Svcs Lincoln NE	154,909	155,322	152,305	171,594	120,207
2755	Sta Svcs Omaha NE	251,205	269,727	338,103	308,353	232,254
2756	Sta Svcs Ottumwa IA	142,662	164,092	173,858	179,057	130,136
2757	Sta Svcs Alton IL	85,524	100,843	100,563	105,921	58,559
2758	Sta Svcs Bloomington IL	206,371	216,260	212,062	186,061	205,361
2759	Sta Svcs Mount Pleasant, IA	132,731	147,833	80,205	121,485	71,725
2760	Sta Svcs Champaign Urbana	281,553	297,691	304,538	328,208	220,559
2762	Sta Svcs Ft Madison IA	122,716	133,590	146,184	140,893	104,503
2763	Sta Svcs Galesburg Il-Bn	201,241	219,387	215,051	219,833	184,389
2765	Sta Svcs Springfield IL	327,495	353,404	361,497	385,147	376,313
2766	Sta Svcs Garden City KS	119,600	143,616	130,960	142,278	137,787
2767	Sta Svcs Kansas City MO	779,874	783,175	670,146	665,691	497,846
2768	Sta Svcs Newton KS	170,968	208,180	181,258	154,276	117,119
2769	Sta Svcs Topeka KS	142,859	137,888	150,368	167,363	140,313
2770	Sta Svcs Carbondale IL	283,863	308,920	316,317	347,381	324,535
2772	Sta Svcs Jeffersn City MO	128,674	146,661	181,434	166,333	154,769
2773	Sta Svcs Kirkwood MO	188,487	204,891	214,636	223,647	227,434
2774	Sta Svcs St Louis MO	465,332	561,208	623,873	795,095	802,949
2775	Sta Svcs Rugby ND	30,087	22,585	72,553	65,085	60,222
2801	Sta Svcs Little Rock AR	184,931	201,779	253,238	376,948	258,091

2802	Sta Svcs Longview TX	170,824	189,256	295,800	344,750	274,438
2803	Sta Svcs Memphis TN	413,174	370,848	500,279	611,451	454,758
2804	Sta Svcs Texarkana AR	146,300	155,639	168,740	218,810	189,187
2805	Sta Svcs Austin TX	240,987	285,372	298,128	304,932	264,980
2806	Sta Svcs Dallas TX	337,865	404,004	369,781	435,896	329,342
2807	Sta Svcs Ft Worth TX	227,705	244,033	592,038	643,377	486,143
2808	Sta Svcs Hammond LA	100,711	100,993	104,366	111,862	85,117
2809	Sta Svcs Houston TX	303,283	301,426	383,474	448,194	285,971
2810	Sta Svcs Jackson MS	239,588	256,314	272,411	279,464	214,068
2811	Inactive Sta Svcs Mccomb MS	561	-	-	-	-
2812	Sta Svcs New Orleans LA	1,200,448	1,136,021	1,305,230	1,244,910	1,144,619
2813	Unmanned Stations New Orleans	50,983	42,790	46,619	38,249	40,392
2814	Sta Svcs San Antonio TX	434,199	453,760	650,211	664,509	1,158,283
2815	Sta Svcs Temple TX	55,442	92,467	124,183	164,694	101,593
2841	Sta Svcs Grand Junction C	198,077	194,554	207,094	219,140	183,063
2842	Sta Svcs Glenwood Sp CO	150,271	169,381	160,449	173,065	182,578
2843	Sta Svcs Denver CO	1,064,434	1,146,018	1,297,525	1,221,905	830,644
2844	Sta Svcs Salt Lake Cty UT	507,120	469,895	550,672	463,674	390,534
2845	Sta Svcs Ogden UT	1,453	-	-	-	-
2846	Sta Svcs Laramie Wy	584	-	-	-	-
2848	Sta Svcs Shelby MT	140,159	152,325	191,323	206,201	203,597

2849	Sta Svcs Havre MT	124,157	147,420	172,414	169,346	161,915
2850	Sta Svcs Glacier Park MT	75,221	84,563	74,745	79,413	40,065
2851	Sta Svcs Spokane WA	656,009	652,189	622,922	691,453	505,900
2852	Sta Svcs Whitefish MT	300,970	293,853	353,579	296,134	314,211
2853	Sta Svcs Edmonds WA	108,115	112,143	143,559	129,941	145,927
2854	Sta Svcs Eugene OR	441,109	499,370	480,621	568,747	546,069
2855	Sta Svcs Everett WA	140,662	142,923	140,249	155,579	187,253
2856	Sta Svcs Portland OR	1,282,187	1,376,042	1,341,502	1,382,544	1,419,323
2857	Sta Svcs Salem OR	237,702	237,141	249,966	286,598	277,283
2858	Sta Svcs Seattle WA	1,521,177	1,701,743	1,853,243	1,902,536	1,975,766
2859	Sta Svcs Tacoma WA	429,192	418,093	440,421	475,788	472,521
2860	Sta Svcs Vancouver WA	199,807	238,444	211,839	225,265	240,004
2861	Sta Svcs Pasco WA	151,176	161,892	165,464	167,244	108,759
2862	Sta Svcs Centralia WA	175,128	122,788	128,326	133,435	140,060
2863	Sta Svcs Klamath Falls OR	189,756	198,258	235,803	255,797	323,084
2864	Sta Svcs Boise ID	5,194	-	-	-	-
2865	Sta Svcs Albany OR	101,146	110,170	107,501	125,541	148,280
2866	Unstaffed Station WA	1,566	15,984	18,345	8,115	-
2868	Sta Svcs Malta, MT	249	92	490	743	-
2869	Sta Svcs Wolfpoint, Mt.	92,580	62,470	69,229	73,157	92,666
2870	Service Manager Portland	182,324	151,494	181,253	182,650	136,924
2875	Station Services Bellingham, WA	73,790	81,569	117,762	144,015	165,702

2881	Torrance Tkt Office Cto (Inactive)	68,524	-	-	-	-
2883	Unmanned Station Los Angeles (Inactive)	86,539	829	-	-	-
2884	Sta Svcs Glendale CA (Inactive)	-	50	-	-	-
2885	Sta Svcs Oxnard CA	277,697	305,596	349,240	406,504	420,555
2886	Sta Svcs Santa Barbara CA	447,456	435,562	505,046	453,488	483,437
2887	Unstaffed Sta San Joaq	16,644	27,447	13,946	16,034	20,400
2889	Station Services Van Nuys	203,077	172,236	219,829	245,340	246,607
2900	Unstaffed Stations Cascades South	20,014	14,286	9,955	24,177	30,073
2911	Sta Svcs Lajunta CO	135,147	174,448	174,000	136,181	85,725
2912	Sta Sucs Las Vegas NV	1,954	-	-	-	-
2913	Sta Svcs Albuquerque NM	571,597	581,871	580,713	669,902	518,569
2914	Sta Svcs El Paso TX	307,883	337,261	372,239	316,659	230,989
2915	Sta Svcs Flagstaff AZ	357,117	318,224	308,101	333,643	275,440
2916	Sta Svcs Phoenix AZ	152,336	157,786	174,427	202,681	161,998
2917	Sta Svcs Tucson AZ	204,813	186,374	208,904	234,801	168,460
2918	Sta Svcs Lamy NM	116,134	114,778	142,166	145,357	111,698
2919	Sta Svcs Solana Beach	323,822	337,089	381,511	341,461	378,339
2920	Sta Svcs Fullerton CA	754,047	662,465	700,769	659,919	780,728
2921	Sta Svcs Oceanside CA	399,418	423,827	406,205	485,781	491,418
2922	Sta Svcs Raton Station	-	-	111,355	146,777	146,108

2924	Sta Svcs San Bernardino CA	383,652	412,377	405,992	390,805	199,926
2925	Sta Svcs San Diego CA	1,358,982	1,284,359	1,620,435	1,594,508	2,148,983
2926	Sta Svcs Santa Ana CA	331,744	313,260	351,404	355,198	388,260
2927	Unmanned Stations Lax/San	17,984	6,701	6,619	-	6,701
2928	Sta Svcs Anaheim CA	345,587	299,889	357,229	313,938	379,159
2929	Sta Svcs Irvine CA	130,715	130,194	144,257	148,689	160,466
2930	Laupt Shared Station Cost (Inactive)	40,312	40,032	38,190	2,924	-
2931	Lax Metrolink Ticketing	109,862	108,168	111,782	106,906	99,296
2932	Sta Svcs San Juan Capistrano, CA	169,629	162,524	207,625	178,713	171,302
2933	Unmanned Stations Southwest Chief	74,583	111,509	83,479	186,795	81,158
2936	Unmanned Stations Empire Builder	91,327	109,006	124,415	123,581	114,927
2939	Unmanned Stations Texas Eagle	8,369	11,875	20,410	13,340	13,200
2941	Sta Svcs Bakersfield CA	441,662	548,729	565,874	683,211	873,163
2942	Sta Svcs Fresno CA	359,397	415,533	488,897	492,004	501,505
2943	Sta Svcs Hanford CA	207,948	225,883	236,474	234,816	270,011
2944	Sta Svcs Martinez CA	441,187	555,233	616,587	654,698	725,923
2945	Sta Svcs Oakland CA	848,653	947,627	819,780	842,753	807,790
2946	Sta Svcs Reno NV	194,878	197,139	277,957	234,021	185,882
2947	Sta Svcs Modesto CA	179,258	175,430	211,218	245,624	243,173
2948	Sta Svcs Sacramento CA	737,832	814,596	941,302	999,189	1,123,308

2949	Sta Svcs Salinas CA	137,491	99,697	109,731	145,010	140,525
2950	Sta Svcs San Francisco CA	546,536	577,883	646,792	620,298	621,131
2951	Sta Svcs San Jose CA	408,000	331,010	365,659	408,470	401,558
2952	Sta Svcs San Luis Obis CA	419,755	420,034	455,256	448,016	434,625
2953	Sta Svcs Stockton CA	297,845	299,398	352,322	373,112	401,545
2954	Sta Svcs Davis CA	219,175	246,245	440,023	302,470	325,804
2955	Sta Svcs Merced CA	200,159	207,355	240,577	233,318	252,597
2956	Sta Svcs Richmond CA	48,936	1,829	-	(156)	-
2957	Unstaffed Stations Capitols	34,448	26,323	17,110	18,819	23,760
2958	Sta Svcs Emeryville, Calf.	816,465	754,213	688,754	857,717	859,528
2959	Unmanned Sta Lax-Slo	133,956	1,139	12,703	16,393	9,978
2964	Unmanned Stations GM East PL	159,714	153,686	148,872	116,196	139,695
2975	Sta Svcs San Jose Pcs	915	471	-	6	-
7013	Sta Svcs No Station Bos	541,659	485,899	477,419	513,280	599,647
7203	Metrolink Station Svcs Laupt	(2,129)	(914)	-	-	-
7291	Peninsula Sta Svcs - San Francisco	546,930	465,132	687,523	708,866	770,960
7292	Peninsula Sta Svcs - Mill Brae	77,782	66,098	48,665	53,310	197,730
7293	Peninsula Sta Svcs - Burlingame	80,992	97,695	64,863	69,403	72,606
7294	Peninsula Sta Svcs - San Mateo	64,004	63,201	68,285	61,185	71,478
7295	Peninsula Sta Svcs - Hillsdale	66,905	63,736	69,501	71,106	85,335

7296	Peninsula Sta Svcs - Redwood City	31,475	57,993	63,319	43,004	18,462
7297	Peninsula Sta Svcs - Palo Alto	72,591	74,638	76,796	71,079	85,422
7298	Peninsula Sta Svcs - California Ave.	71,649	63,215	68,370	70,205	72,954
7299	Peninsula Sta Svcs - Sunnyvale	73,696	62,131	68,571	75,087	110,103
7300	Peninsula Sta Svcs - Santa Clara	3,947	2,866	5,129	1,165	18,243
7302	Peninsula Sta Svcs - Cahill	153,592	65,243	25,354	286,789	249,036
7303	Peninsula Sta Svcs - South County	92,899	39,792	35,669	26,644	109,551
7304	Peninsula Sta Svcs - Amops	3,489	-	-	-	508,140
7305	Peninsula Sta Svcs - Tvm's	47,107	(1,079)	-	(7,165)	-

Employment

Mr. Rogers. Please update the state-by-state breakdown of Amtrak employment, as shown in last year's hearing record.

[The information follows:]

Amtrak Payroll Operations
Employee Earnings by State of Residence
For Active Employees As of 12/31/2001

State	Employee Count	Total Wages
AL	23	1,193,547.44
AR	32	1,911,800.81
AZ	26	1,269,932.55
CA	3555	146,971,291.71
CO	86	4,939,835.32
CT	620	33,818,580.10
DC	332	13,910,509.37
DE	1105	49,062,114.77
FL	947	41,635,078.33
GA	59	2,789,570.83
IA	14	728,464.51
ID	1	77,524.93
IL	2047	88,767,497.08
IN	1080	44,369,191.61
KS	21	1,092,268.51
KY	6	229,961.64
LA	315	12,608,664.79
MA	2325	118,172,048.07
MD	2407	117,828,268.89
ME	23	1,141,148.50
MI	139	6,852,965.84
MN	74	3,786,389.05
MO	90	4,779,586.43
MS	75	3,602,222.61
MT	46	2,773,493.79
NC	139	6,712,375.01
ND	12	498,523.07
NE	19	1,074,635.91
NH	171	10,308,173.44

NJ	1585	83,872,078.78
NM	62	3,570,480.60
NV	37	1,995,462.05
NY	1950	89,338,291.14
OH	75	3,770,707.23
OK	3	144,135.77
OR	79	3,824,882.56
PA	3054	141,141,515.45
RI	386	20,180,810.34
SC	51	2,467,570.81
SD	1	67,787.27
TN	13	756,464.54
TX	192	10,546,677.21
UT	38	2,400,676.57
VA	805	41,307,626.30
VT	13	654,257.66
WA	452	20,413,229.83
WI	89	4,350,042.51
WV	36	1,559,733.56
Total	24,710	1,155,268,095.09

Source: SAP Payroll System Wage Type 101 - Gross Earnings
As of last payroll run for year 2001.
Active employees only as of 12/31/2001

Accidents and Injuries

Mr. Rogers. Please provide a list of Amtrak's major accidents and impact accidents for 2000, 2001, and 2002 to date.

[The information follows:]

A list of Amtrak's Impact Accidents and Major Accidents as defined in 49 CFR parts 219.201 and 219.5 respectively, is provided in the hard copy attachment.

Amtrak

Impact Accident Report

Created: 03/12/2002 11:32:34 AM

Start Date:01/01/2000
End Date:12/31/2000

SBU: All Amtrak

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State
Narrative									
	Injury Type	Last Name		First Name			Class of Person		
59828	01/06/2000	8	INT	WTR	WTLH	DERAILMENT	$25,000.00	ESSEX	MT
TRAIN NO.#8 OPERATING WITH ENGS 826/815/270 AND 14 CARS DERAILED 2ND ENG UNIT #815 AND 4 CARS UPRIGHT IN LINE. THE CAUSE OF THE DERAIL DEFECTIVE SPRING FROG.									
	SPRAIN	EDWARDS		BYRON			PASSENGERS ON TRAIN		
60132	01/29/2000	29	INT	ETR	ETLH	DERAILMENT	$109,150.00	WILCOX	PA
TRAIN NO.#29 WITH ENGS 41/49 AND 12 CARS ENCOUNTERED A BROKEN RAIL AT MP BF258.9 DERAILING BOTH ENGINES AND 8 CARS, CAUSING EXTENSIVE E DAMAGE.									
	BRUISE	THOMAS		SHARON			WORKER ON DUTY		
	BRUISE	BUCKSON		TERRILL			WORKER ON DUTY		
	SPRAIN	OUTLER		RANDOLPH			PASSENGERS ON TRAIN		
	SPRAIN	MIGNARD		SUSAN			PASSENGERS ON TRAIN		
	SPRAIN	MIGMARD		SUSAN			PASSENGERS ON TRAIN		
60219	02/06/2000	240	NEC	MET	MECU	HWY-RAIL CROSSING	$10,596.89	POUGHKEEPSIE	NY
TRAIN 240 STRUCK AN ABANDONED AUTO ON TRACK NORTH OF POUGHKEEPSIE, NY.									
	SPRAIN	CRIBBS		JENNIFER			WORKER ON DUTY		
	SPRAIN	LONG JR		RAYMOND			WORKER ON DUTY		
	SPRAIN	NICHOLS		DAVID			WORKER ON DUTY		
60267	02/07/2000	90	INT	ETR	ATCT	HWY-RAIL CROSSING	$1,060,000.00	SKIPPERS	VA

Start Date:01/01/2000
End Date:12/31/2000
SBU: All Amtrak

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State
Narrative	Injury Type	Last Name	First Name			Class of Person			

TRAIN NO.#90 WITH ENGS 90/34 AND 9 CARS STRUCK A LOW BOY TRACTOR-TRAILER LOADED WITH A CRANE FOULING MAIN TRACKS 1 & 2 AT MP73.03, RTE ST CROSSING.

60355	02/10/2000	11	WST	WSD	CTSL	DERAILMENT	$32,823.30	OAKLAND	CA

TRAIN 11 DERAILED 3 CARS IN OAKLAND, CA. DUE TO WIDE GAGE IN RAIL.

BRUISE	ALLEN	CORA		WORKER ON DUTY

60540	02/18/2000	2	INT	ETR	GFCT	HWY-RAIL CROSSING	$28,000.00	GRETNA	FL

TRAIN NO.#2 WITH ENGS 835/832 AND 11 CARS STRUCK A TRACTOR-TRAILER TRUCK MOVING OVER CROSSING AT MP SP831.01, A PRIVATE ROAD CROSSING.

BRUISE	SMITH	THOMAS	NONTRESPASSER / ON RAILROAD PROPERTY	

60546	02/23/2000	67	NEC	MID	MIAD	OTHER (describe in narrative)	$27,000.00	ODENTON	MD

TRAIN 67 HAD PANTOGRAPH DAMAGE AT GROVE INTERLOCKING, SOUTH OF BWI, MD. STATION DUE TO BROKEN KUPLER COUPLER

BRUISE	MURPHY	LEE		WORKER ON DUTY

61064	03/15/2000	3	INT	WTR	WTLH	DERAILMENT	$1,085,000.00	CARBONDALE	KS

TRAIN NO #3 WITH ENGS 80/92/52/275 AND 26 CARS DERAILED 9 CARS UPRIGHT AND 7 CARS ON THEIR SIDES. THE CAUSE OF THE DERAILMENT WAS DUE T RAIL.

SPRAIN	IACONO	ROSE	PASSENGERS ON TRAIN	
BRUISE	GEORGIOU	LOUKAS	PASSENGERS ON TRAIN	
BRUISE	CARAVELLO	GIOVONNI	PASSENGERS ON TRAIN	
SPRAIN	ANZALONE	FRANK	PASSENGERS ON TRAIN	

Start Date:01/01/2000
End Date:12/31/2000
SBU: All Amtrak

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State
Narrative									

Injury Type	Last Name	First Name	Class of Person
SPRAIN	MEBANE	EARLINE	PASSENGERS ON TRAIN
BRUISE	MCKEEN	LORI	PASSENGERS ON TRAIN
BRUISE	STROUP	CRYSTAL	PASSENGERS ON TRAIN
FRACTURE	LAMBERT	KATHRYN	PASSENGERS ON TRAIN
SPRAIN	TORRES	TIFFANY	PASSENGERS ON TRAIN
SPRAIN	O'CONNER	ELIZABETH	PASSENGERS ON TRAIN
BRUISE	O'CONNER	WILLIAM	PASSENGERS ON TRAIN
BRUISE	AYON	MARTIN	PASSENGERS ON TRAIN
BRUISE	CUNNINGHAM	LORI	PASSENGERS ON TRAIN
SPRAIN	HARRISON	BRIDGETTE	PASSENGERS ON TRAIN
SPRAIN	DECUIR	HERMAN	EMPLOYEES NOT ON DUTY
SPRAIN	BAYLARK-HARRIS	LUCY	PASSENGERS ON TRAIN
BRUISE	DO	HIEP VAN	PASSENGERS ON TRAIN
BRUISE	LE	SAU THI	PASSENGERS ON TRAIN
BRUISE	CONWAY	MARLA	PASSENGERS ON TRAIN
SPRAIN	SCOTT	STACY	WORKER ON DUTY

Start Date:01/01/2000
End Date:12/31/2000
SBU: All Amtrak

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State
Narrative									

Injury Type	Last Name	First Name	Class of Person
BRUISE	HOLMAN	MARCUS	PASSENGERS ON TRAIN
SPRAIN	KRACHALA	JAMES	PASSENGERS ON TRAIN
SPRAIN	ANZALONE	FRANK	PASSENGERS ON TRAIN
BRUISE	HOWELL	MARJORIE	PASSENGERS ON TRAIN
BRUISE	PROVENCE	DOYK	PASSENGERS ON TRAIN
BRUISE	BERVIG	CAROL	PASSENGERS ON TRAIN
SPRAIN	BERVIG	DALE	PASSENGERS ON TRAIN
SPRAIN	CASON	DUSTIN	PASSENGERS ON TRAIN
SPRAIN	COVINGTON	MARCIA	PASSENGERS ON TRAIN
SPRAIN	CUEVAS	MIGUEL	PASSENGERS ON TRAIN
BRUISE	JACKSON	KEVIN	PASSENGERS ON TRAIN
CUT/LACRTN	RICHARDS	ASHLEY	PASSENGERS ON TRAIN
BRUISE	KRACHALA	SHARON	PASSENGERS ON TRAIN
SPRAIN	PINEDO	ROSIE	PASSENGERS ON TRAIN
SPRAIN	JOHNSON	WILLA	PASSENGERS ON TRAIN
SPRAIN	IACONO	BRANDI	PASSENGERS ON TRAIN

Start Date:01/01/2000
End Date:12/31/2000
SBU: All Amtrak

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State
Narrative									
Injury Type	Last Name	First Name	Class of Person						
BRUISE	ROSENTHAL	ADELE	PASSENGERS ON TRAIN						
BRUISE	THOMAS	SHARON	PASSENGERS ON TRAIN						
CUT/LACRTN	TUCKER	RALPH	PASSENGERS ON TRAIN						
SPRAIN	CUNNINGHAM	STEVEN	PASSENGERS ON TRAIN						
CONCUSSION	O'CONNOR	D.M.	PASSENGERS ON TRAIN						
61085	03/18/2000	YL-50	WST	WSD	CACR	DERAILMENT	$15,000.00	LOS ANGELES	CA
YARD JOB YL-50 SHOVING FROM MAIN #4 (C. P. OLYMPIC) INTO 8TH STREET YARD, DERAILED ALL AXLES AT TURNOUT TO SANTE FE LEAD.									
SPRAIN	CABELLO	JOHN	WORKER ON DUTY						
61255	03/26/2000	1	INT	ETR	GFCT	HWY-RAIL CROSSING	$20,000.00	NEW ORLEANS	LA
TRAIN NO.#1 WITH ENGS 837/826 AND 14 CARS STRUCK A SEMI-TRACTOR TRAILER TRUCK AT MP793.86, OLD GENTILLY RD CROSSING.									
SPRAIN	ESTES	RAY	WORKER ON DUTY						
61448	04/10/2000	712	WST	WSD	CACR	HWY-RAIL CROSSING	$201,957.24	EMPIRE	CA
TRAIN 712 STRUCK AN AUTOMOBILE GOING AROUND LOWERED GATES AT YOSEMITE AVE. CROSSING IN MODESTO, CA.									
61724	04/29/2000	11	WST	WSD	CTSL	HWY-RAIL CROSSING	$11,400.00	CASTROVILLE	CA
TRAIN 11 STRUCK A PICK-UP TRUCK , WHICH DID NOT STOP, AT PRIVATE CROSSING IN SALINAS, CA.									
BRUISE	CHRISTIAN	TOM	NONTRESPASSER / ON RAILROAD PROPERTY						

Start Date:01/01/2000
End Date:12/31/2000
SBU: All Amtrak

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State
Narrative									

Injury Type	Last Name	First Name	Class of Person
SPRAIN	GALLAWAY	JOANNE	PASSENGERS ON TRAIN

62051 05/19/2000 90 INT ETR ATCT HWY-RAIL CROSSING $12,000.00 FORT LAUDERDALE FL

TRAIN NO.#90 WITH ENGS 63/24 AND 9 CARS STRUCK A TRACTOR-TRAILER TRUCK AT MP1006.3, NW 62ND STREET CROSSING. A MALE OCCUPANT IN THE C. TRUCK WAS INJURED BY DEBRIS FROM TRUCK.

Injury Type	Last Name	First Name	Class of Person
SPRAIN	MATHESON	GLARE	PASSENGERS ON TRAIN
BRUISE	DOE	JOHN	NON TRESPASSER / OFF RAILROAD PROPERTY
SPRAIN	CARLSON	WESLEY	WORKER ON DUTY

62201 05/26/2000 44 INT ETR ETLH HWY-RAIL CROSSING $8,000.00 MISHAWAKA IN

TRAIN NO.#44 WITH ENGS 26/45 AND 25 CARS STRUCK A VAN AT MP431.96, MERRIFIELD AVE CROSSING.

Injury Type	Last Name	First Name	Class of Person
BRUISE	DOE (OCCUP 1)	JOHN	TRESPASSER

62240 05/30/2000 43 INT ETR ETLH HWY-RAIL CROSSING $15,791.41 GARFIELD HTS OH

TRAIN NO.#43 WITH ENGS 97/38 AND 12 CARS STRUCK A TRUCK AT MP113, MCCRACKEN RD CROSSING.

Injury Type	Last Name	First Name	Class of Person
SPRAIN	DIAMOND	HINDI	PASSENGERS ON TRAIN

62299 06/04/2000 5 INT WTR WTLH FIRE/VIOLENT RUPTURE $150,342.00 ARVADA CO

TRAIN NO.#5 DEPARTING DENVER WAS DELAYED AT MP9.7 DUE TO DIESEL NO.#34 ON FIRE. THE CAUSE OF THE FIRE WAS A FUEL LEAK

62334 06/06/2000 3 INT WTR WTLH HWY-RAIL CROSSING $7,100.00 HUTCHINSON KS

TRAIN NO.#3 WITH ENGS 52/22/28 AND 23 CARS STRUCK A PICK-UP TRUCK AT MP211.5, T-174, A PUBLIC RD CROSSING

Start Date:01/01/2000
End Date:12/31/2000
SBU: All Amtrak

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State
Narrative									
	Injury Type	Last Name		First Name			Class of Person		
	BRUISE	DOE (DRIVER)		JOHN			NONTRESPASSER / ON RAILROAD PROPERTY		
62765	06/26/2000	131	NEC	NME	NMET	FIRE/VIOLENT RUPTURE	$543,022.00	BRONXVILLE	NY
ENGINE 948 HEP CONVECTOR INSULATION WAS SMOKING AT THE BRONX, NY.									
64704	06/28/2000	948	NEC	WIL	WILN	DERAILMENT	$163,346.00	WILMINGTON	DE
ENGINE 948 DERAILED AT WILMINGTON MAINTENANCE FACILITY.									
62861	06/30/2000	371	INT	WTR	MDWC	HWY-RAIL CROSSING	$350,000.00	ZEELAND	MI
TRAIN NO.#371 WITH ENG 506 PUSHING 5 CARS STRUCK A TRUCK LOADED WITH SAND AT MP18.7, 80TH AVE CROSSING.									
63536	08/05/2000	58	INT	ETR	GFCT	HWY-RAIL CROSSING	$11,818.66	HAMMOND	LA
TRAIN NO.#58 WITH ENGS 73/808/354 AND 10 CARS STRUCK A STALLED FLATBED TRAILER TRUCK AT MP859.98, OLD COVINGTON RD CROSSING.									
	SPRAIN	MICIOTTO		JOE			WORKER ON DUTY		
63650	08/11/2000	850	INT	ETR	ETLH	HWY-RAIL CROSSING	$10,000.00	JEFFERSONVILLE	IN
TRAIN NO.#850 WITH ENGS 508/507 AND 5 CARS STRUCK A DUMP TRUCK AT MP103.37, CO #8 POTTERS LANE CROSSING.									
	BRUISE	CAPEHART		TIMOTHY			NONTRESPASSER / ON RAILROAD PROPERTY		
63748	08/17/2000	90	INT	ETR	ATCT	HWY-RAIL CROSSING	$8,149.30	PETERSBURG	VA
TRAIN NO.#90 WITH ENGS 31/838 AND 9 CARS STRUCK AN AUTOMOBILE AT MP26.65, HALIFAX RD CROSSING									
	SPRAIN	DYE		LAWRENCE			WORKER ON DUTY		

Start Date:01/01/2000
End Date:12/31/2000

SBU: All Amtrak

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State
53782	08/21/2000	97	INT	ETR	ATCT	DERAILMENT	$1,240,000.00	LAKE CITY	SC

Narrative

TRAIN NO.#97 WITH LEAD ENG 18 AND 11 CARS WHILE TRAVELING SOUTH ON THE CSX MAIN, DERAILED LEAD ENGINE AND 11 CARS DUE TO THE DRIVER OF SWEEPER STRIKING THE WEST RAIL OF THE MAINLINE KNOCKING TRACK OUT OF ALIGNMENT.

Injury Type	Last Name	First Name	Class of Person
OTHER BURN	SMITH	VINCENT	WORKER ON DUTY
FRACTURE	CHAPMAN	MAYBELLE	PASSENGERS ON TRAIN
OTHER	WILLIAMS	PHYLLIS	PASSENGERS ON TRAIN
SPRAIN	BALDWIN LITTLE	CHARLOTTE	PASSENGERS ON TRAIN
OTHER	RICH	CARL	PASSENGERS ON TRAIN
OTHER	EDWARDS	JUSTIN	PASSENGERS ON TRAIN
SPRAIN	BAGGERLY JR	JOE	WORKER ON DUTY
BRUISE	BRUMFIELD	CAROLYN	PASSENGERS ON TRAIN
BRUISE	STARK	ALAN	WORKER ON DUTY
BRUISE	CADELL	DEBRA	PASSENGERS ON TRAIN
OTHER	EDWARDS	JOAN	PASSENGERS ON TRAIN
BRUISE	CUMBO	RONALD	WORKER ON DUTY
PALMER		RONALD	WORKER ON DUTY
SPRAIN	RUTLEDGE	JACQUELINE	WORKER ON DUTY

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Impact Accident Report

Created: 03/12/2002 11:32:35 AM

Start Date:01/01/2000
End Date:12/31/2000

SBU: All Amtrak

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State
Narrative									

Injury Type	Last Name	First Name	Class of Person
SPRAIN	PETERSON	JESSIE	WORKER ON DUTY
BRUISE	WORTHINGTON	GEORGE	WORKER ON DUTY
BRUISE	ELDER	JOHNNIE	WORKER ON DUTY
BRUISE	PALACIOS	SILVERIO	WORKER ON DUTY
MINER		BILLY	WORKER ON DUTY
BRUISE	SALCEDO	JEANNETTE	PASSENGERS ON TRAIN
SPRAIN	MCCLARTY	BEATRICE	PASSENGERS ON TRAIN
BRUISE	CLARK	BARBARA	PASSENGERS ON TRAIN
BRUISE	LADWIG	WESLEY	WORKER ON DUTY
BRUISE	BARKOWITZ	ROSLYN	PASSENGERS ON TRAIN
BRUISE	CHAPMAN	LEON	PASSENGERS ON TRAIN
SPRAIN	SHARRIEFF	KAADIR	PASSENGERS ON TRAIN
SPRAIN	RICHARDSON	TIANNA	PASSENGERS ON TRAIN
SPRAIN	RICHARDSON	ALNIESA	PASSENGERS ON TRAIN
SPRAIN	SMITH	YANIQUE	PASSENGERS ON TRAIN
SPRAIN	MCCLAIN	KENYA	PASSENGERS ON TRAIN

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State
Narrative									

Injury Type	Last Name	First Name	Class of Person
BRUISE	BENN-DAYES	TANNISHA	PASSENGERS ON TRAIN
BRUISE	HAYES	JANICE	PASSENGERS ON TRAIN
SPRAIN	GRAY	TANYA	PASSENGERS ON TRAIN
SPRAIN	RICHARDSON	JAMES	PASSENGERS ON TRAIN
BRUISE	LANCER	BETTY	PASSENGERS ON TRAIN
BRUISE	MONTALVO	ANA	PASSENGERS ON TRAIN
CONCUSSION	BONDS	CHARMAINE	PASSENGERS ON TRAIN
BRUISE	PRESSMAN	ETHELLE	PASSENGERS ON TRAIN
BRUISE	WARING	JAMAL	PASSENGERS ON TRAIN
SPRAIN	SYLVAIN	ELUDE	PASSENGERS ON TRAIN
SPRAIN	WRIGHT	JERVIE	PASSENGERS ON TRAIN
BRUISE	PRESSMAN	HENRY	PASSENGERS ON TRAIN
DENSON	RUSSELL		WORKER ON DUTY
SPRAIN	HARDGE	JAMES	PASSENGERS ON TRAIN
SPRAIN	HARDGE	MICHELLE	PASSENGERS ON TRAIN
BRUISE	FRAZIER	BELINDA	PASSENGERS ON TRAIN

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Start Date:01/01/2000
End Date:12/31/2000

SBU: All Amtrak

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State
Narrative									
	Injury Type	Last Name	First Name				Class of Person		
	BRUISE	GIBBS	DANIEL				PASSENGERS ON TRAIN		
	BRUISE	JEAN LOUIS	JOEL				PASSENGERS ON TRAIN		
	BRUISE	JEAN-LOUIS	DAVE				PASSENGERS ON TRAIN		
	SPRAIN	GRANT	SAMUEL				PASSENGERS ON TRAIN		
	SPRAIN	RUDELL	RICHARD				PASSENGERS ON TRAIN		
	SPRAIN	JEAN-LOUIS	MARIE				PASSENGERS ON TRAIN		
63891	08/27/2000	702	WST	WSD	CACR	DERAILMENT	$74,772.72	FRESNO	CA
TRAIN 702 DERAILED AT FRESNO, CA.									
	SPRAIN	HAWKINS	CHARLIE				PASSENGERS ON TRAIN		
64506	09/28/2000	718	WST	WSD	CACR	HWY-RAIL CROSSING	$177,358.22	MODESTO	CA
TRAIN 718 STRUCK AN AUTO GOING AROUND GATES AT YOSEMITE AVE CROSSING IN MODESTO, CA.									
64540	09/30/2000	19	NEC	MET	MECD	REAR END COLLISION	$134,573.79	NEW YORK NEW YORK	NY
TRAIN 219 STRUCK THE REAR OF TRAIN 19 , DERAILING ONE LOCOMOTIVE AND 6 CARS IN NY, NY.									
	SPRAIN	RAYKIEWICZ	FRANCIS				WORKER ON DUTY		
	BRUISE	BOLTON	JUNE				EMPLOYEES NOT ON DUTY		
	BRUISE	HARRIS	THOMASINA				EMPLOYEES NOT ON DUTY		

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Start Date:01/01/2000
End Date:12/31/2000

SBU: All Amtrak

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State
Narrative									

Injury Type	Last Name	First Name	Class of Person
SPRAIN	MARTONE	DONATO	WORKER ON DUTY
SPRAIN	HICKS	SAM	WORKER ON DUTY
SPRAIN	KAPPE	LAWRENCE	WORKER ON DUTY
BRUISE	PETCHOLAN JR	JOSEPH	WORKER ON DUTY
BRUISE	HIGH	MELODY	EMPLOYEES NOT ON DUTY
BRUISE	GRAY	CHARLES	WORKER ON DUTY
BRUISE	HARRIS	THOMASINA	EMPLOYEES NOT ON DUTY
SPRAIN	KAPPE	LAWRENCE	WORKER ON DUTY
BRUISE	HIGH	MELODY	EMPLOYEES NOT ON DUTY
BRUISE	BOLTON	JUNE	EMPLOYEES NOT ON DUTY
SPRAIN	GARRETT	JACQUELINE	WORKER ON DUTY
SPRAIN	MARTONS	DONATO	WORKER ON DUTY
BRUISE	PETCHOLAN JR	JOSEPH	WORKER ON DUTY
SPRAIN	HICKS	SAM	WORKER ON DUTY
SPRAIN	GARRETT	JACQUELINE	WORKER ON DUTY
BRUISE	GRAY	CHARLES	WORKER ON DUTY

Start Date:01/01/2000
End Date:12/31/2000
SBU: All Amtrak

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State
64540	09/30/2000	219	NEC	MET	MECD	REAR END COLLISION	$49,000.00	NEW YORK NEW YORK	NY

Narrative

TRAIN 219 STRUCK THE REAR OF TRAIN 19 , DERAILING ONE LOCOMOTIVE AND 6 CARS IN NY, NY.

Injury Type	Last Name	First Name	Class of Person
SPRAIN	RAYKIEWICZ	FRANCIS	WORKER ON DUTY
SPRAIN	RAYKIEWICZ	FRANCIS	WORKER ON DUTY
BRUISE	BOLTON	JUNE	EMPLOYEES NOT ON DUTY
BRUISE	HARRIS	THOMASINA	EMPLOYEES NOT ON DUTY
SPRAIN	MARTONE	DONATO	WORKER ON DUTY
SPRAIN	HICKS	SAM	WORKER ON DUTY
SPRAIN	KAPPE	LAWRENCE	WORKER ON DUTY
BRUISE	PETCHOLAN JR	JOSEPH	WORKER ON DUTY
BRUISE	HIGH	MELODY	EMPLOYEES NOT ON DUTY
BRUISE	GRAY	CHARLES	WORKER ON DUTY
BRUISE	HARRIS	THOMASINA	EMPLOYEES NOT ON DUTY
SPRAIN	KAPPE	LAWRENCE	WORKER ON DUTY
BRUISE	HIGH	MELODY	EMPLOYEES NOT ON DUTY
BRUISE	BOLTON	JUNE	EMPLOYEES NOT ON DUTY

Start Date:01/01/2000
End Date:12/31/2000
SBU: All Amtrak

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State
Narrative									
	Injury Type	Last Name	First Name				Class of Person		
	SPRAIN	GARRETT	JACQUELINE				WORKER ON DUTY		
	SPRAIN	MARTONE	DONATO				WORKER ON DUTY		
	BRUISE	PETCHOLAN JR	JOSEPH				WORKER ON DUTY		
	SPRAIN	HICKS	SAM				WORKER ON DUTY		
	SPRAIN	GARRETT	JACQUELINE				WORKER ON DUTY		
	BRUISE	GRAY	CHARLES				WORKER ON DUTY		
	SPRAIN	RAYKIEWICZ	FRANCIS				WORKER ON DUTY		
64639	10/05/2000	945	NEC	MID	MIMW	EXPLOSION-DETONATION	$227,000.00	WASHINGTON	DC

ENGINE 945 HAD UNKNOWN OVERVOLTAGE CONDITION AT WASHINGTON, DC IVY CITY YARD.

64642	10/05/2000	950	NEC	MID	MIMW	EXPLOSION-DETONATION	$265,000.00	WASHINGTON	DC

ENGINE 950 HAD UNKNOWN OVER VOLTAGE CONDITION AT WASHINGTON, DC COACH YARD.

64768	10/14/2000	5	INT	WTR	WTLH	DERAILMENT	$34,000.00	DENVER	CO

TRAIN NO.#5 WITH ENGS 73/48 AND 15 CARS DERAILED REAR 2 CARS 70032/1511 WHILE REVERSING OFF WYE ONTO NO.#1 TRACK INTO STATION.

	BRUISE	DONBY	ROBERT				WORKER ON DUTY		
65130	11/04/2000	773	WST	WSD	SDSB	HWY-RAIL CROSSING	$1,259,000.00	MOORPARK	CA

TRAIN 773 STRUCK A TRUCK WHICH FAILED TO STOP AT PRIVATE CROSSING CAUSING TRAIN TO DERAIL AT MOORPARK, CA.

Start Date: 01/01/2000
End Date: 12/31/2000
SBU: All Amtrak

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State
Narrative									
	Injury Type	Last Name		First Name				Class of Person	
	CONCUSSION	SAMES		RAELENE				PASSENGERS ON TRAIN	
	SPRAIN	LEE		YEA				PASSENGERS ON TRAIN	
	SPRAIN	SHUI		XIUHENG				PASSENGERS ON TRAIN	
	SPRAIN	VAN		BRETA				PASSENGERS ON TRAIN	
	SPRAIN	GEBOTT		JORDON				PASSENGERS ON TRAIN	
	BRUISE	LYNCH		CHRIS				PASSENGERS ON TRAIN	
	BRUISE	ALPAGO		JOHN				PASSENGERS ON TRAIN	
	FRACTURE	DUDGEON		MICHAEL				WORKER ON DUTY	
	FRACTURE	MUNOZ		JULIO				TRESPASSER	
	SPRAIN	WILLIAMS		WALTER				PASSENGERS ON TRAIN	
	SPRAIN	BUZBEE		BARBARA				PASSENGERS ON TRAIN	
65318	11/15/2000	271	NEC	MET	MECU	REAR END COLLISION	$80,000.00	RENSSELAER	NY
TRAIN 271 STRUCK TRAIN 267 DUE TO MISJUDGED STOPPING DISTANCE.									
	SPRAIN	SQUIRES		LAURA				WORKER ON DUTY	
	SPRAIN	Warner		Christine				WORKER ON DUTY	
	SPRAIN	SQUIRES		LAURA				WORKER ON DUTY	

Start Date:01/01/2000
End Date:12/31/2000
SBU: All Amtrak

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State
Narrative									
Injury Type	Last Name	First Name					Class of Person		
SPRAIN	Warner	Christine					WORKER ON DUTY		
65318	11/15/2000	267	NEC	MET	MECU	REAR END COLLISION	$60,000.00	RENSSELAER	NY

TRAIN 271 STRUCK TRAIN 267 DUE TO MISJUDGED STOPPING DISTANCE.

SPRAIN	SQUIRES	LAURA	WORKER ON DUTY
SPRAIN	Warner	Christine	WORKER ON DUTY
SPRAIN	SQUIRES	LAURA	WORKER ON DUTY
SPRAIN	Warner	Christine	WORKER ON DUTY

65381	11/17/2000	300	INT	WTR	MDWC	HWY-RAIL CROSSING	$86,500.00	WILMINGTON	IL

TRAIN NO.#300 WITH ENG 504 AND 5 CARS STRUCK AN AUTOMOBILE AT MP54.85, COAL CITY RD CROSSING CAUSING EXTENSIVE DAMAGE TO UPRR SIGNAL AN

BRUISE	LAVEZZI	JAMAE	NONTRESPASSER / ON RAILROAD PROPERTY

65395	11/17/2000	97	INT	WTR	WTLH	HWY-RAIL CROSSING	$125,000.00	INTERCESSION CITY	FL

TRAIN NO.#97 WITH ENG 65 AND 10 CARS STRUCK A PUSH/PULL TRACTOR-TRAILER AT MP A816.27, KUA POWER RD CROSSING CAUSING EXTENSIVE DAMAGE T AND C/1242.

CUT/LACRTN	JACKSON	PRESTON	WORKER ON DUTY
SPRAIN	DOWDY	LEWIS	WORKER ON DUTY

65509	11/26/2000	86	NEC	ACE	ACEW	FIRE/VIOLENT RUPTURE	$1,000,000.00	ODENTON	MD

TRAIN NO.#86 WITH ENGS 913/909 AND 11 CARS WAS DELAYED DUE TO A FIRE IN THE ENGINE ROOM OF UNIT NO.#913. THE CAUSE OF THE FIRE WAS REP HAVE BEEN A BLOWN THYRISTOR FUSE.

Start Date:01/01/2000
End Date:12/31/2000
SBU: All Amtrak

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State
65579	12/05/2000	729	WST	WSD	CACR	HWY-RAIL CROSSING	$6,940.00	SUISUN CITY	CA

Narrative: TRAIN 729 STRUCK AN AUTO GOING THROUGH GATES AT PEABODY RD CROSSING.

Injury Type	Last Name	First Name	Class of Person
BRUISE	EAQUINTA	JAMES	TRESPASSER

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State
65622	12/07/2000	11	WST	WSD	CTSL	OTHER IMPACTS	$668,200.00	WEED	CA

Narrative: TRAIN 11 STRUCK A DERAILED UP TANK CAR, WHICH CAUSED TRAIN 11 TO DERAIL BOTH LOCOMOTIVES & 3 CARS AT BLACK BUTTE, CA

Injury Type	Last Name	First Name	Class of Person
BRUISE	JOSEPH	PAUL	WORKER ON DUTY
SPRAIN	GAUDRY	MONIQUE	EMPLOYEES NOT ON DUTY
BRUISE	FRITZ	ROBERT	EMPLOYEES NOT ON DUTY
SPRAIN	REUBEN	DEREK	EMPLOYEES NOT ON DUTY
SPRAIN	MCGOVERN	GLORIA	EMPLOYEES NOT ON DUTY
BRUISE	OHMAN	ELIZABETH	WORKER ON DUTY
BRUISE	BARKER	RICHARD	WORKER ON DUTY
BRUISE	ANDERSON	RONALD	WORKER ON DUTY
BRUISE	LEE	LOLA	EMPLOYEES NOT ON DUTY
BRUISE	LOPEZ	DANIEL	EMPLOYEES NOT ON DUTY
CUT/LACRTN	KING	DENISE	EMPLOYEES NOT ON DUTY

Start Date:01/01/2000
End Date:12/31/2000

SBU: All Amtrak

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State

Narrative

Injury Type	Last Name	First Name	Class of Person
BRUISE	DEBIASI	ELIZABETH	EMPLOYEES NOT ON DUTY
SPRAIN	PARENTI	RUSSELL	EMPLOYEES NOT ON DUTY
BRUISE	TIMMONS	JEROME	EMPLOYEES NOT ON DUTY
BRUISE	LEE	HAROLD	EMPLOYEES NOT ON DUTY

65771	12/17/2000	1	INT	WTR	SWBG	HWY-RAIL CROSSING	$36,000.00	BALDWIN	LA

TRAIN NO.#1 WITH ENGS 841/805 AND 10 CARS WAS STRUCK BY A GRAVEL TRUCK AT MP107.70, PEN RD CROSSING.

Injury Type	Last Name	First Name	Class of Person
BRUISE	VINSON	JEFF	WORKER ON DUTY
BRUISE	DOE	JOHN	NONTRESPASSER / ON RAILROAD PROPERTY
BRUISE	MOAK	DAVID	WORKER ON DUTY

65841	12/23/2000	757	WST	WSD	NWPL	HWY-RAIL CROSSING	$19,908.00	AUBURN	WA

TRAIN 757 STRUCK A TRUCK PULLING A MOBILE HOME AT A CROSSING IN SUMNER, WA.

Injury Type	Last Name	First Name	Class of Person
SPRAIN	ROGERS	MATT	PASSENGERS ON TRAIN
BRUISE	CRONE	THOMAS	WORKER ON DUTY
BRUISE	BILLINGS-HILL	TINA	PASSENGERS ON TRAIN

65938	12/29/2000	48	INT	ETR	ETLH	HWY-RAIL CROSSING	$55,000.00	LACARNE	OH

TRAIN NO.#48 WITH ENGS 86/91 AND 20 CARS STRUCK A TRACTOR-TRAILER AT MP CD259.20, PERRY RD SR358 CROSSING.

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SBU: All Amtrak

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State
Narrative									
Injury Type	Last Name		First Name			Class of Person			
BRUISE	NOVAK		KIMBERLY			NONTRESPASSER / ON RAILROAD PROPERTY			

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Start Date:01/01/2001
End Date:12/31/2001

SBU: All Amtrak

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State
66475	02/04/2001	4	INT	WTR	WTLH	HWY-RAIL CROSSING	$15,729.00	MACKSVILLE	KS

Narrative: TRAIN NO.#4 WITH ENGS 3/75/1/27/123 AND 29 CARS STRUCK A FIRE TRUCK AT MP277.56, MAIN ST CROSSING

Injury Type	Last Name	First Name	Class of Person
BRUISE	PEPULEAI	ALLENI	PASSENGERS ON TRAIN

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State
66485	02/05/2001	286	NEC	MET	MEEP	REAR END COLLISION	$309,672.00	SYRACUSE	NY

Narrative: TRAIN 286 STRUCK REAR OF CSX FREIGHT EAST OF SYRACUSE, NY.

Injury Type	Last Name	First Name	Class of Person
BRUISE	RODRIGUEZ	DOREEN	PASSENGERS ON TRAIN
BRUISE	SELANDER	DAVID	PASSENGERS ON TRAIN
BRUISE	SCOTT	ROBIN	PASSENGERS ON TRAIN
BRUISE	SMITH	GRACE	PASSENGERS ON TRAIN
BRUISE	STARK	MOLLY	PASSENGERS ON TRAIN
BRUISE	SULIMOWICZ	DAN	PASSENGERS ON TRAIN
FRACTURE	FISHER	RAYMOND	PASSENGERS ON TRAIN
FRACTURE	FRIEDMAN	STAN	PASSENGERS ON TRAIN
DENTAL	HANCOX	JULIE	PASSENGERS ON TRAIN
BRUISE	MAIER	RON	PASSENGERS ON TRAIN
BRUISE	MANDELL	MICHAEL	PASSENGERS ON TRAIN

Start Date:01/01/2001
End Date:12/31/2001

SBU: All Amtrak

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State	Narrative

Injury Type	Last Name	First Name	Class of Person
BRUISE	RYAN	NOEL	PASSENGERS ON TRAIN
BRUISE	RODRIGUEZ	DESTINY (14)	PASSENGERS ON TRAIN
BRUISE	LYNCH	KATHLEEN	PASSENGERS ON TRAIN
BRUISE	LOUSTAUNOU	EMMANUELL	PASSENGERS ON TRAIN
BRUISE	GILL	STEVEN	WORKER ON DUTY
SPRAIN	HAESE	WILLIAM	WORKER ON DUTY
CUT/LACRTN	SCHMIDT	PAUL	WORKER ON DUTY
SPRAIN	CATALDO	SUSAN	WORKER ON DUTY
FRACTURE	CASEMENT	GARY	PASSENGERS ON TRAIN
BRUISE	RODRIGUEZ	ASIA (10)	PASSENGERS ON TRAIN
OTHER	HOWARD	ROBERT	PASSENGERS ON TRAIN
BRUISE	BERMAN	ERIC	PASSENGERS ON TRAIN
BRUISE	CARROLL	TERESA	PASSENGERS ON TRAIN
BRUISE	CIELINSKI	CRAIG	PASSENGERS ON TRAIN
FRACTURE	CURRAN	ANN	PASSENGERS ON TRAIN
BRUISE	DAVIS	BENJAMIN	PASSENGERS ON TRAIN

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Impact Accident Report

Created: 03/12/2002 11:22:44 AM

Start Date:01/01/2001
End Date:12/31/2001

SBU: All Amtrak

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State
Narrative									

Injury Type	Last Name	First Name	Class of Person
BRUISE	DiGREGORIO	LUCILLE	PASSENGERS ON TRAIN
FRACTURE	EGGERT	TODD	PASSENGERS ON TRAIN
BRUISE	RYAN	MAUREEN	PASSENGERS ON TRAIN
FRACTURE	HOFFMAN	LISA	PASSENGERS ON TRAIN
BRUISE	IRONS	MOIRA	PASSENGERS ON TRAIN
BRUISE	JACKSON	ROSALIE	PASSENGERS ON TRAIN
BRUISE	KRAUS	STEVEN	PASSENGERS ON TRAIN
BRUISE	LEWANDOWSKI	DANIEL	PASSENGERS ON TRAIN
BRUISE	LORBERFELD	AUDREY	PASSENGERS ON TRAIN
BRUISE	MEEHAN	COLLEEN	PASSENGERS ON TRAIN
BRUISE	PROCOPIO	HELEN	PASSENGERS ON TRAIN
BRUISE	OLIVET	GLORIA	PASSENGERS ON TRAIN
CUT/LACRTN	BEECHER	CRAIG	PASSENGERS ON TRAIN
BRUISE	EMENS	CAROL	PASSENGERS ON TRAIN

66576	02/09/2001	58		INT	ETR	GFCT	HWY-RAIL CROSSING	$9,538 00	TCHULA MS

TRAIN NO.#58 WITH ENGS 804/826 AND 12 CARS STRUCK AN AUTOMOBILE AT MP150.9 A PRIVATE RD CROSSING CAUSING DAMAGE TO ENG UNIT NO.#804.

Start Date:01/01/2001
End Date:12/31/2001
SBU: All Amtrak

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State
Narrative									
	Injury Type	Last Name			First Name			Class of Person	
	BRUISE	DOE			JOHN			NONTRESPASSER / ON RAILROAD PROPERTY	
66582	02/11/2001	1437		INT	WTR	SWBG	DERAILMENT	$45,000.00	SAN ANTONIO TX

YARD CREW WITH ENG NREX 1437 SHOVING 7 CARS FROM TOWER 121 TO RODDIS SPUR DERAILED C/71091 WHILE PROCEEDING OVER HACKBERRY ST. THE CAU DERAILMENT IS WIDE GAGE.

	SPRAIN	LANDRY			GILBERT			WORKER ON DUTY	
66681	02/15/2001	40		INT	ETR	ETLH	HWY-RAIL CROSSING	$20,000.00	GARY IN

TRAIN NO #40 WITH ENGS 135/396 AND 29 CARS STRUCK AN AUTOMOBILE AT MP BI238.99, CR 9600 COUNTY LINE RD CROSSING, CAUSING EXTENSIVE EQUI DAMAGE.

	SPRAIN	HILL			WILLA			PASSENGERS ON TRAIN	
66747	02/22/2001	40		INT	ETR	ETLH	HWY-RAIL CROSSING	$11,992.00	GARY IN

TRAIN NO.#40 WITH ENGS 810/76 AND 20 CARS WAS STRUCK BY A FORD EXPLORER AT MP241.34, MILLER AND LAKE ST CROSSING.

	BRUISE	WALKER			WILLIAM			TRESPASSER	
67106	03/17/2001	5		INT	WTR	WTLH	DERAILMENT	$3,387,850.00	NODAWAY IA

TRAIN NO.#5 WITH ENGS 140/141 AND 16 CARS DERAILED BOTH ENGINE UNITS AND 11 CARS AT MP419.9, 20 MILES WEST OF CRESTON, IA. THE CAUSE O DERAILMENT HAS BEEN DETERMINED TO BE A BROKEN RAIL.

INT INJURY	SOBOLIK	SALLY	PASSENGERS ON TRAIN	
BRUISE	SUNTOP	RACHEL	PASSENGERS ON TRAIN	
FRACTURE	PICKETT	CHARLOTTE	PASSENGERS ON TRAIN	
FRACTURE	THIES	IRENE	PASSENGERS ON TRAIN	

Start Date:01/01/2001
End Date:12/31/2001

SBU: All Amtrak

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State
Narrative									
Injury Type	Last Name	First Name					Class of Person		
BRUISE	THOMAS	ELIZABETH					PASSENGERS ON TRAIN		
BRUISE	ULA	SADRUL					PASSENGERS ON TRAIN		
SPRAIN	POST	KRISTA					PASSENGERS ON TRAIN		
FRACTURE	ULA	SHAHEDA					PASSENGERS ON TRAIN		
BRUISE	HATTER	THEODIS					WORKER ON DUTY		
SPRAIN	WHITE	ROBERT					PASSENGERS ON TRAIN		
SPRAIN	SOBOLIK	LEO					PASSENGERS ON TRAIN		
BRUISE	BROWN	MICHAEL					EMPLOYEES NOT ON DUTY		
FRACTURE	BROWN II	VENSON					EMPLOYEES NOT ON DUTY		
SPRAIN	GIBSON	RHONDA					EMPLOYEES NOT ON DUTY		
CUT/LACRTN	HEAD	DONALD					EMPLOYEES NOT ON DUTY		
SPRAIN	JONES	WILLIE					EMPLOYEES NOT ON DUTY		
BRUISE	THOMPSON	JACOB					EMPLOYEES NOT ON DUTY		
SPRAIN	HERNANDEZ	ANTONIA					WORKER ON DUTY		
BRUISE	COLEMAN	JIMMIE					WORKER ON DUTY		
SPRAIN	BARNES	DEBRA					WORKER ON DUTY		

Start Date: 01/01/2001
End Date: 12/31/2001
SBU All Amtrak

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State	Narrative
Injury Type	Last Name	First Name	Class of Person							
FRACTURE	FRAZIER	CAREN	PASSENGERS ON TRAIN							
BRUISE	FRAZIER	STEVE	PASSENGERS ON TRAIN							
BRUISE	ROBERTSON	CLAUDEAN	EMPLOYEES NOT ON DUTY							
FRACTURE	CHILDRESS	ROBERT	EMPLOYEES NOT ON DUTY							
SPRAIN	ANDERSON	DORIS	PASSENGERS ON TRAIN							
FRACTURE	HENDERSON	BETH	PASSENGERS ON TRAIN							
PUNCTURE	HENDERSON	DIANE	PASSENGERS ON TRAIN							
SPRAIN	JOHNSON	DELORES	PASSENGERS ON TRAIN							
SPRAIN	CAMERON	LAURA	PASSENGERS ON TRAIN							
FRACTURE	CAPONI	PATRICIA	PASSENGERS ON TRAIN							
BRUISE	LEWIN	KAREN	PASSENGERS ON TRAIN							
BRUISE	GUILLLIAMS	CRYSTAL	PASSENGERS ON TRAIN							
BRUISE	FELCHER	SHARON	PASSENGERS ON TRAIN							
BRUISE	SLAVISH	MARGARET	PASSENGERS ON TRAIN							
BRUISE	HANDEL	GARY	PASSENGERS ON TRAIN							
CUT/LACRTN	RINGER	JOYCE	PASSENGERS ON TRAIN							

Start Date:01/01/2001
End Date:12/31/2001
SBU: All Amtrak

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State
Narrative									
Injury Type	Last Name	First Name	Class of Person						
FRACTURE	MAY	JOSHUA	PASSENGERS ON TRAIN						
SPRAIN	RUSHING	MICKY	PASSENGERS ON TRAIN						
BRUISE	SAHS	PAUL	PASSENGERS ON TRAIN						
FRACTURE	MCNALLY	SUSAN	PASSENGERS ON TRAIN						
SPRAIN	MRUGALA	BENEDICT	PASSENGERS ON TRAIN						
SPRAIN	SHAZIER	KATHY	PASSENGERS ON TRAIN						
BRUISE	SLAVISH	ELIZABETH	PASSENGERS ON TRAIN						
FRACTURE	DUVALL	SUE	PASSENGERS ON TRAIN						
BRUISE	ROBINSON	ARTHUR	PASSENGERS ON TRAIN						
BRUISE	LEWIN	ERIN	PASSENGERS ON TRAIN						
RUDOLPH		LAWRENCE	WORKER ON DUTY						
BRUISE	MAGUIRE	DAVID	WORKER ON DUTY						
CUT/LACRTN	WALKER	SHARON	EMPLOYEES NOT ON DUTY						
67391	04/03/2001	703	WST	WSD	CACR	HWY-RAIL CROSSING	$11,733.00	SACRAMENTO	CA

TRAIN 703 WITH ENGINE 2051 AND 4 CARS WAS STRUCK BY A VEHICLE IN SACRAMENTO, CA.

BRUISE	DOE	JOHN	TRESPASSER						

Start Date:01/01/2001
End Date:12/31/2001
SBU: All Amtrak

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State
67611	04/18/2001	21	INT	WTR	SWBG	HWY-RAIL CROSSING	$11,500.00	JOLIET	IL

Narrative: TRAIN NO.#21 WITH ENGS 20/16 AND 10 CARS WAS STRUCK BY A PICK-UP TRUCK AT MP40.36, LARAWAY RD CROSSING.

Injury Type	Last Name	First Name	Class of Person
BRUISE	LEHMAN	JACK	NONTRESPASSER / ON RAILROAD PROPERTY

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State
67875	05/04/2001	703	WST	WSD	CACR	HWY-RAIL CROSSING	$21,116.00	PLANADA	CA

Narrative: TRAIN 703 STRUCK VEHICLE EAST OF MERCED, CA. THE GATES DID NOT WORK BECAUSE THEY WERE DISABLED BY BNSF MAINTAINER.

Injury Type	Last Name	First Name	Class of Person
SPRAIN	MUSTIN	GEORGE (STEVE)	PASSENGERS ON TRAIN
SPRAIN	GREEN-COLLINS	SUNNY	PASSENGERS ON TRAIN
SPRAIN	BHAIJI	MANSUR	PASSENGERS ON TRAIN

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State
68075	05/20/2001	90	INT	ETR	ATCT	HWY-RAIL CROSSING	$10,000.00	HAMPTON	FL

Narrative: TRAIN NO.#90 WITH ENGS 89/826 AND 9 CARS WAS STRUCK BY AN AUTOMOBILE AT MP S684.63, COUNTY RD 18, NAVARRE ST. CROSSING.

Injury Type	Last Name	First Name	Class of Person
BRUISE	JOHNSON (DRIVER)	MATTHEW	TRESPASSER
BRUISE	SLIKER (OCCUP)	NOAH	TRESPASSER

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State
69011	07/09/2001	91	INT	ETR	ATCT	HWY-RAIL CROSSING	$36,910.00	JESUP	GA

Narrative: TRAIN NO.#91 WITH ENGS 158/176 AND 15 CARS STRUCK A LOWBOY TRACTOR-TRAILER AT MP A542.01, COUNTY RD 60 CROSSING CAUSING EXTENSIVE DAMAG UNIT NO.#158.

Injury Type	Last Name	First Name	Class of Person
BRUISE	HOLLOWAY	DAVID	WORKER ON DUTY
BRUISE	MCBURNETT	MIKE	WORKER ON DUTY

Start Date: 01/01/2001
End Date: 12/31/2001
SBU: All Amtrak

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State
Narrative									
Injury Type	Last Name	First Name					Class of Person		
BRUISE	JOHNS	RONALD					WORKER ON DUTY		
	CLARK JR.	ROBERT					WORKER ON DUTY		
69115	07/13/2001	98	INT	ETR	ATCT	HWY-RAIL CROSSING	$26,483.00	SEVILLE	FL

TRAIN NO.#98 WITH ENGS 60/149 AND 10 CARS STRUCK A FLATBED TRUCK HAULING ROOFING MATERIAL AT MP A727.20, VOLUSIA WOOD YARD RD, A PRIVAT CROSSING, CAUSING EXTENSIVE DAMAGE TO BOTH ENG UNITS AND 5 CARS.

BRUISE	FAILLACE	JOHN					WORKER ON DUTY		
	TOLER	JERRY					WORKER ON DUTY		
69114	07/15/2001	11	WST	WSD	CTSL	HWY-RAIL CROSSING	$43,000.00	NEWARK	CA

TRAIN 11 STRUCK A TRUCK AT NEWARK, CA.

SPRAIN	KEATING	RICHARD					WORKER ON DUTY		
SPRAIN	FIELDS	ANNISE					PASSENGERS ON TRAIN		
69359	07/29/2001	21	INT	WTR	SWBG	DERAILMENT	$6,000,000.00	ANNAPOLIS	MO

TRAIN NO.#21 WITH ENGS 131/76 AND 19 CARS DERAILED BOTH ENGINES AND 7 CARS AT MP105. THE DERAILMENT WAS DUE TO A WASHOUT OF THE TRACK SUBSTRUCTURE WHICH WAS CAUSED BY FLASH FLOODING.

SPRAIN	TACKETT	RICK					PASSENGERS ON TRAIN		
SPRAIN	JACKSON	CURTIS					WORKER ON DUTY		
SPRAIN	BYRD	DARION					PASSENGERS ON TRAIN		
SPRAIN	BYRD	MILDRED					PASSENGERS ON TRAIN		

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Impact Accident Report

Created: 03/12/2002 11:22:44 AM

Start Date:01/01/2001
End Date:12/31/2001

SBU: All Amtrak

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State
Narrative									

Injury Type	Last Name	First Name	Class of Person
BRUISE	SAMPSON	FREEDA	PASSENGERS ON TRAIN
SPRAIN	BYRD	DARION	PASSENGERS ON TRAIN
SPRAIN	BYRD	MILDRED	PASSENGERS ON TRAIN
WILLIAMS		RICKIE	WORKER ON DUTY
SPRAIN	COOPER	GARY	PASSENGERS ON TRAIN
SPRAIN	MUSACHIA	THOMAS	EMPLOYEES NOT ON DUTY
SPRAIN	SANDERS	WILLIAM	WORKER ON DUTY
BRUISE	PRICHETT	GARY	EMPLOYEES NOT ON DUTY
BRUISE	COOPER	ALLEN	EMPLOYEES NOT ON DUTY
SPRAIN	SMITH	EUGENE	PASSENGERS ON TRAIN
SPRAIN	SMITH	WILLIAM	PASSENGERS ON TRAIN
CUT/LACRTN	WILLIAMSON	BERNADINE	PASSENGERS ON TRAIN
SPRAIN	PAYNE	ANGELA	PASSENGERS ON TRAIN
SALDIVAR		ADRIENNE	EMPLOYEES NOT ON DUTY

69515	08/07/2001	664	NEC	MID	WATS	DERAILMENT	$214,596.00	WASHINGTON	DC

AMTRAK HEP-8 LOCOMOTIVE 664 WAS OPERATING SOUTHWARD IN 23 SHOP WHEN IT RAN OVER THE FIXED DERAIL AT THE NORTH END OF 23 SHOP IN THE AP POSITION.

Start Date:01/01/2001
End Date:12/31/2001
SBU: All Amtrak

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State
69584	08/11/2001	92	INT	ETR	ATCT	HWY-RAIL CROSSING	$35,000.00	SWANSEA	SC

Narrative: TRAIN NO #92 WITH ENGS 133/184 AND 20 CARS WAS STRUCK IN THE SIDE OF C/410154 BY A PICK-UP TRUCK AT MP S380.36, WEST SECOND ST CROSSING DERAILMENT OF BOGIE 5689.

Injury Type	Last Name	First Name	Class of Person
BRUISE	DOE (OCCUPANT)	JOHN	TRESPASSER

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State
70007	08/30/2001	392	INT	ETR	GFCT	HWY-RAIL CROSSING	$22,285.00	CENTRALIA	IL

Narrative: TRAIN NO.#392 WITH ENG 6 AND 4 CARS STRUCK A PICK-UP TRUCK AT MP255, HUDSON ST CROSSING.

Injury Type	Last Name	First Name	Class of Person
BRUISE	MILLER	TOM	NONTRESPASSER / ON RAILROAD PROPERTY
SPRAIN	COLLINS	CEDRA	PASSENGERS ON TRAIN

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State
70030	09/01/2001	304	INT	WTR	MDWC	HWY-RAIL CROSSING	$15,000.00	SPRINGFIELD	IL

Narrative: TRAIN NO.#304 WITH ENG 51 AND 4 CARS WAS STRUCK BY A PICK-UP TRUCK AT MP202.3, FAS 625 CROSSING, CAUSING EXTENSIVE DAMAGE TO ENG UNIT N

Injury Type	Last Name	First Name	Class of Person
BRUISE	LAW	JESSICA	NONTRESPASSER / ON RAILROAD PROPERTY
BRUISE	SANDERS	JAMES	NONTRESPASSER / ON RAILROAD PROPERTY

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State
70131	09/11/2001	21	INT	WTR	SWBG	SIDE COLLISION	$597,000.00	HALLSVILLE	TX

Narrative: TRAIN NO.#21 WITH ENGS 163/151 AND 12 CARS WAS INVOLVED IN A COLLISION WITH UNION PACIFIC FREIGHT QHONL-10 AT MP76 CAUSING DERAILMENT O CARS IN BOTH TRAINS.

Injury Type	Last Name	First Name	Class of Person
BRUISE	CHILDRESS	AMERICUS	WORKER ON DUTY
SPRAIN	ESQUIVEL	MARIA	PASSENGERS ON TRAIN
SPRAIN	ESQUIVEL	TOMAS	PASSENGERS ON TRAIN

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Impact Accident Report

Created: 03/12/2002 11:22:45 AM

Start Date:01/01/2001
End Date:12/31/2001

SBU: All Amtrak

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State
Narrative									

Injury Type	Last Name	First Name	Class of Person
BRUISE	RAY	SAMMY	WORKER ON DUTY
SPRAIN	DEE	JOHN	PASSENGERS ON TRAIN
BRUISE	KRUCINE	KURT	WORKER ON DUTY
SPRAIN	CHAPMAN	SYLVIA	PASSENGERS ON TRAIN
BRUISE	LARRY	CURTIS	WORKER ON DUTY
BRUISE	JACKSON	WILLIAM	WORKER ON DUTY
BRUISE	DENNIS-SMITH	MARLENA	PASSENGERS ON TRAIN
SPRAIN	HUNT	KARLA	PASSENGERS ON TRAIN
BRUISE	MAY	DALE	PASSENGERS ON TRAIN
MACKEY		RAYMOND	WORKER ON DUTY
BRUISE	NELSON	PHILLIP	WORKER ON DUTY
BRUISE	VELA	LEE	WORKER ON DUTY
BRUISE	CHAPMAN	CHARLIE	PASSENGERS ON TRAIN
SPRAIN	PRETTYMAN	ROSIE	PASSENGERS ON TRAIN

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State
70167	09/13/2001	5		INT	WTR	WTLH	SIDE COLLISION	$4,890,000.00	WENDOVER	UT

TRAIN NO.#5 WITH ENGS 143/149 AND 15 CARS STRUCK UPRR COAL TRAIN CBY SR-12 WITH 31 CARS, CAUSING TRAIN #5 TO DERAIL BOTH ENGINES 143/14 LEAD 9 CARS.

Start Date:01/01/2001
End Date:12/31/2001

SBU: All Amtrak

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State
Narrative									
Injury Type	Last Name			First Name			Class of Person		
SPRAIN	FRAUWIRTH			MATTHEW			PASSENGERS ON TRAIN		
BRUISE	COLLINS			BETTY			EMPLOYEES NOT ON DUTY		
BRUISE	BUTLER			JUDY			EMPLOYEES NOT ON DUTY		
SPRAIN	LERCH			CONSTANZE			PASSENGERS ON TRAIN		
BRUISE	BROWN			LETTIE			EMPLOYEES NOT ON DUTY		
THIGPEN SR				DAVID			EMPLOYEES NOT ON DUTY		
BRUISE	MCCASKILL			JOHNNY			EMPLOYEES NOT ON DUTY		
BRUISE	MCCASKILL			JOHNNY			EMPLOYEES NOT ON DUTY		
CUT/LACRTN	HEATH			ROBERT			EMPLOYEES NOT ON DUTY		
FRACTURE	SUTTER			JOHN			PASSENGERS ON TRAIN		
SPRAIN	PHILLIPS			GENEVIEVE			PASSENGERS ON TRAIN		
CUT/LACRTN	MCMILLEN			RONALD			WORKER ON DUTY		
BRUISE	FRESQUEZ			SAM			WORKER ON DUTY		
OTHER	SLAYMAKER			AMY			PASSENGERS ON TRAIN		
SPRAIN	KOOI			LA VERNNE			PASSENGERS ON TRAIN		
SPRAIN	JESTER			SUZANNE			PASSENGERS ON TRAIN		

Start Date: 01/01/2001
End Date: 12/31/2001
SBU: All Amtrak

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State

Narrative

Injury Type	Last Name	First Name	Class of Person
SPRAIN	HOSKINS	ALTHEA	PASSENGERS ON TRAIN
BRUISE	CALVIN	LESLIE	PASSENGERS ON TRAIN
SPRAIN	RAMBO	JANET	PASSENGERS ON TRAIN
SPRAIN	POLK	PEGGY	PASSENGERS ON TRAIN
SPRAIN	PORCH	CHERYL	WORKER ON DUTY
SPRAIN	JOSHUA	PATRICK	EMPLOYEES NOT ON DUTY
BRUISE	CALVIN	LESLIE	EMPLOYEES NOT ON DUTY

70244 09/18/2001 943 NEC MID WATS SIDE COLLISION $75,000.00 WASHINGTON DC

A CONSIST OF 1 ENGINE AND 7 CARS WAS SHOVING WEST WHEN IT STRUCK THE SIDE OF A CONSIST OF 1 ENGINE AND 6 CARS IN THE IVY CITY YARD, WAS DC, CAUSING DAMAGE TO 2 CARS.

Injury Type	Last Name	First Name	Class of Person
BRUISE	DAVENPORT	MARY	WORKER ON DUTY
BRUISE	DAVENPORT	MARY	WORKER ON DUTY

70244 09/18/2001 937 NEC MID WATS SIDE COLLISION $175,000.00 WASHINGTON DC

A CONSIST OF 1 ENGINE AND 7 CARS WAS SHOVING WEST WHEN IT STRUCK THE SIDE OF A CONSIST OF 1 ENGINE AND 6 CARS IN THE IVY CITY YARD, WAS DC, CAUSING DAMAGE TO 2 CARS.

Injury Type	Last Name	First Name	Class of Person
BRUISE	DAVENPORT	MARY	WORKER ON DUTY
BRUISE	DAVENPORT	MARY	WORKER ON DUTY

70852 10/29/2001 1 INT WTR SWBG HWY-RAIL CROSSING $16,259.00 NEW ORLEANS LA

Start Date:01/01/2001
End Date:12/31/2001
SBU: All Amtrak

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State

Narrative

Injury Type	Last Name	First Name	Class of Person

TRAIN NO.#1 WITH ENG 8 AND 16 CARS STRUCK A TRACTOR-TRAILER TRUCK THAT FAILED TO STOP AT MP801.57, FRANCE RD CROSSING.

BRUISE	STEELE	JOHN	WORKER ON DUTY
BRUISE	VINSON SR	LARRY	WORKER ON DUTY

71085	11/13/2001	90	INT	ETR	ATCT	HWY-RAIL CROSSING	$6,939.00	POMPANO BEACH	FL

TRAIN NO.#90 WITH ENGS 10/40/196 AND 11 CARS STRUCK A TRUCK AT MP SX1002.31, COPANS RD CROSSING.

ROLAND	JOHN		WORKER ON DUTY

71196	11/23/2001	771	WST	WSD	SDSB	HWY-RAIL CROSSING	$1,176,380.00	CAMARILLO	CA

TRAIN 771 STRUCK A FARM TRACTOR NEAR CAMARILLO, CA, CAUSING THE TRACTOR TO CATCH FIRE.

71425	12/12/2001	714	WST	WSD	CACR	HWY-RAIL CROSSING	$8,644.00	SHAFTER	CA

TRAIN 714 STRUCK A MINVAN NEAR SHAFTER, CA.

WARD	WALTER		WORKER ON DUTY
MILLER	PATRICIA		WORKER ON DUTY

71539	12/20/2001	713	WST	WSD	CACR	HWY-RAIL CROSSING	$8,899.00	FRESNO	CA

TRAIN 713 STRUCK AT AUTO AT WEST AVENUE CROSSING IN FIGARDEN, CA.

BRUISE	DOE	JOHN	TRESPASSER

71628	12/25/2001	19	INT	ETR	GFCT	HWY-RAIL CROSSING	$9,960.00	LULA	GA

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Impact Accident Report

Created: 03/12/2002 11 22:45 AM

Start Date:01/01/2001
End Date:12/31/2001

SBU: All Amtrak

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State
Narrative	Injury Type	Last Name	First Name	Class of Person					

TRAIN NO.#19 WITH ENGS 69/75 AND 13 CARS STRUCK A PICK-UP TRUCK AT MP571.30, SECOND ST CROSSING.

BRUISE DOE JOHN NONTRESPASSER / ON RAILROAD PROPERTY

71576	12/28/2001	90		INT	ETR	ATCT	HWY-RAIL CROSSING	$13,388.00	BUSHNELL	FL

TRAIN NO.#90 WITH ENG 42/17 AND 10 CARS STRUCK A SEMI-TRAILER TRUCK AT MP S776.49, SEMINOLE AVE CROSSING.

SPRAIN CHATMAN ANTHONY WORKER ON DUTY

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Impact Accident Report

Created: 03/12/2002 11:14:33 AM

Start Date:01/01/2002
End Date:03/12/2002

SBU: All Amtrak

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State
Narrative									
	Injury Type	Last Name		First Name			Class of Person		
71774	01/09/2002	N/A	NEC	MID	WATS	FIRE/VIOLENT RUPTURE	$600,000.00	WASHINGTON	DC
YARD EQUIPMENT CAUGHT FIRE DURING A LAYOVER AT THE IVY CITY FACILITY IN WASHINGTON, DC.									
71969	01/23/2002	11	WST	WSD	CTSL	HWY-RAIL CROSSING	$10,000.00	AURORA	OR
TRAIN 11 STRUCK A VEHICLE SOUTH OF PORTLAND, OR.									
	BRUISE	DOE		JOHN		NONTRESPASSER / ON RAILROAD PROPERTY			
72368	02/26/2002	19	INT	ETR	GFCT	HWY-RAIL CROSSING	$31,000.00	TUSCALOOSA	AL
TRAIN NO.#19 WITH ENGS 59/38 AND 10 CARS STRUCK A SAND TRUCK AND TRAILER LOADED WITH SAND AT MP201.28, CRABTREE RD CROSSING.									
	BRUISE	SPEED		CALVIN			WORKER ON DUTY		
	BRUISE	ELDRIDGE		JOHNNY			WORKER ON DUTY		
72410	03/01/2002	5	INT	WTR	WTLH	DERAILMENT	$173,000.00	SACRAMENTO	CA
TRAIN NO.#5 CROSSING OVER SWITCH FROM TRACK 2 TO TRACK 1 DERAILED 4 CARS. THE CAUSE OF THE DERAILMENT IS CURVE WORN STOCK RAIL ON #10 ALLOWED R1 WHEEL OF C/71120 TO RIDE UP ON STOCK RAIL AND DERAIL.									

Amtrak

Major Accident Report

Created: 03/12/2002 10:49:18 AM

Start Date:01/01/2000
End Date:12/31/2000

SBU: All Amtrak

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State
Narrative									
	Injury Type	Last Name		First Name			Class of Person		
60267	02/07/2000	90	INT	ETR	ATCT	HWY-RAIL CROSSING	$1,060,000.00	SKIPPERS	VA
TRAIN NO.#90 WITH ENGS 90/34 AND 9 CARS STRUCK A LOW BOY TRACTOR-TRAILER LOADED WITH A CRANE FOULING MAIN TRACKS 1 & 2 AT MP73.03, RTE ST CROSSING.									
61064	03/15/2000	3	INT	WTR	WTLH	DERAILMENT	$1,085,000.00	CARBONDALE	KS
TRAIN NO.#3 WITH ENGS 80/92/52/275 AND 26 CARS DERAILED 9 CARS UPRIGHT AND 7 CARS ON THEIR SIDES. THE CAUSE OF THE DERAILMENT WAS DUE T RAIL.									
61121	03/17/2000	89	INT	ETR	ATCT	HWY-RAIL CROSSING	$15,817.14	FAYETTEVILLE	NC
TRAIN NO.#89 WITH ENGS 57/60 AND 19 CARS STRUCK A FIRE TRUCK AT MP 208.9, CUMBERLAND ST CROSSING.									
	FATALITY	SHARP		JOHN DOE				TRESPASSER	
61416	04/09/2000	21	INT	WTR	WTLH	HWY-RAIL CROSSING	$12,847.37	VAN HORN	TX
TRAIN NO.#21 WITH DIESELS 97/507/270 AND 12 CARS STRUCK A PICK-UP TRUCK AT MP 691.48, A PRIVATE RD CROSSING									
	FATALITY	HARPER		JOHN		NONTRESPASSER / ON RAILROAD PROPERTY			
61448	04/10/2000	712	WST	WSD	CACR	HWY-RAIL CROSSING	$201,957.24	EMPIRE	CA
TRAIN 712 STRUCK AN AUTOMOBILE GOING AROUND LOWERED GATES AT YOSEMITE AVE. CROSSING IN MODESTO, CA.									
	FATALITY	TALHAN		KARNAIL				TRESPASSER	
62160	05/24/2000	22	INT	WTR	WTLH	HWY-RAIL CROSSING	$62,800.00	GODLEY	IL
TRAIN NO.#22 WITH ENGS 72/90/354/281 AND 20 CARS STRUCK AN AUTOMOBILE AT MP59.9, COUNTY LINE RD CROSSING, CAUSING EXTENSIVE DAMAGE TO T SIGNAL BOX									
	FATALITY	PETRZRIKA		JOHN		NONTRESPASSER / ON RAILROAD PROPERTY			

Start Date: 01/01/2000
End Date: 12/31/2000
SBU: All Amtrak

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State
Narrative									
Injury Type	Last Name			First Name			Class of Person		
62861	06/30/2000	371		INT	WTR	MDWC	HWY-RAIL CROSSING	$350,000.00	ZEELAND MI
TRAIN NO.#371 WITH ENG 506 PUSHING 5 CARS STRUCK A TRUCK LOADED WITH SAND AT MP18.7, 80TH AVE CROSSING.									
FATALITY	WESSNIK			ROBERT			NONTRESPASSER / ON RAILROAD PROPERTY		
63289	07/20/2000	58		INT	ETR	GFCT	HWY-RAIL CROSSING	$11,218.85	SAVAGE MS
(CROSSING ACCIDENT NO.#2) TRAIN NO.#58 WITH ENGS 826/332 AND 10 CARS STRUCK A VAN AT MP39.84, ARKABULA RD CROSSING.									
FATALITY	FLYNN			RALPH			NONTRESPASSER / ON RAILROAD PROPERTY		
63239	07/20/2000	11		WST	WSD	CTSL	HWY-RAIL CROSSING	$12,000.00	MACDOEL CA
TRAIN 11 STRUCK AUTO GOING AROUND GATES AT SHEEP MOUNTAIN RD CROSSING NEAR MACDOEL, CA.									
FATALITY	MOZQUEDA			SALVADOR			TRESPASSER		
63748	08/17/2000	90		INT	ETR	ATCT	HWY-RAIL CROSSING	$8,149.30	PETERSBURG VA
TRAIN NO.#90 WITH ENGS 31/838 AND 9 CARS STRUCK AN AUTOMOBILE AT MP26 65, HALIFAX RD CROSSING									
FATALITY	WHIRLEY			BRENDA			TRESPASSER		
63782	08/21/2000	97		INT	ETR	ATCT	DERAILMENT	$1,240,000 00	LAKE CITY SC
TRAIN NO.#97 WITH LEAD ENG 18 AND 11 CARS WHILE TRAVELING SOUTH ON THE CSX MAIN, DERAILED LEAD ENGINE AND 11 CARS DUE TO THE DRIVER OF SWEEPER STRIKING THE WEST RAIL OF THE MAINLINE KNOCKING TRACK OUT OF ALIGNMENT.									
64214	09/12/2000	782		WST	WSD	SDSB	HWY-RAIL CROSSING	$8,857.96	OXNARD CA
TRAIN 782 STRUCK AN AUTOMOBILE AT OXNARD, CA.									

Amtrak

Major Accident Report

Created: 03/12/2002 10:49:19 AM

Start Date:01/01/2000
End Date:12/31/2000

SBU: All Amtrak

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State

Narrative

Injury Type	Last Name	First Name	Class of Person
FATALITY	PENA	RAMON	NONTRESPASSER / ON RAILROAD PROPERTY

64506 09/28/2000 718 WST WSD CACR HWY-RAIL CROSSING $177,358.22 MODESTO CA

TRAIN 718 STRUCK AN AUTO GOING AROUND GATES AT YOSEMITE AVE CROSSING IN MODESTO, CA.

Injury Type	Last Name	First Name	Class of Person
FATALITY	CHISUM	JOHN	TRESPASSER

64740 10/11/2000 305 INT WTR MDWC HWY-RAIL CROSSING $15,000.00 GODLEY IL

TRAIN NO.#305 WITH ENGS 409/393 AND 13 CARS STRUCK A PICK-UP TRUCK AT MP59.84, COUNTY LINE RD CROSSING

Injury Type	Last Name	First Name	Class of Person
FATALITY	UNZ	JAMES	NONTRESPASSER / ON RAILROAD PROPERTY

65130 11/04/2000 773 WST WSD SDSB HWY-RAIL CROSSING $1,259,000.00 MOORPARK CA

TRAIN 773 STRUCK A TRUCK WHICH FAILED TO STOP AT PRIVATE CROSSING CAUSING TRAIN TO DERAIL AT MOORPARK, CA.

Injury Type	Last Name	First Name	Class of Person
FATALITY	MENDOZA	SERGIO	TRESPASSER

65509 11/26/2000 86 NEC ACE ACEW FIRE/VIOLENT RUPTURE $1,000,000.00 ODENTON MD

TRAIN NO.#86 WITH ENGS 913/909 AND 11 CARS WAS DELAYED DUE TO A FIRE IN THE ENGINE ROOM OF UNIT NO.#913. THE CAUSE OF THE FIRE WAS REP
HAVE BEEN A BLOWN THYRISTOR FUSE.

65649 12/09/2000 470 NEC ACE ACEA HWY-RAIL CROSSING $14,800.00 WINDSOR CT

TRAIN 470 STRUCK A VEHICLE WHICH RAN THROUGH GATE AND FLASHERS AT WINDSOR, CT.

Injury Type	Last Name	First Name	Class of Person
FATALITY	MORETON	JOHN	TRESPASSER

Major Accident Report

Created: 03/12/2002 11.04.58 AM

Start Date:01/01/2001
End Date:12/31/2001

SBU: All Amtrak

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State
Narrative	Injury Type	Last Name	First Name				Class of Person		
66150	01/13/2001	49	INT	ETR	ETLH	HWY-RAIL CROSSING	$21,566.00	LAKE CITY	PA

TRAIN NO.#49 WITH ENGS 78/404 AND 16 CARS WAS STRUCK BY AN AUTOMOBILE AT MP QD99.68, WILLIAMS RD CROSSING.

FATALITY	ARMBRUSTER	MICHAEL	TRESPASSER

66681	02/15/2001	40	INT	ETR	ETLH	HWY-RAIL CROSSING	$20,000.00	GARY	IN

TRAIN NO.#40 WITH ENGS 135/396 AND 29 CARS STRUCK AN AUTOMOBILE AT MP BI238.99, CR 9600 COUNTY LINE RD CROSSING, CAUSING EXTENSIVE EQUI DAMAGE.

FATALITY	ESPINOSA	CELESTINA	TRESPASSER

66686	02/16/2001	851	INT	ETR	ETLH	HWY-RAIL CROSSING	$62,913.00	CRAWFORDSVILLE	IN

TRAIN NO.#851 WITH ENGS 508/77 AND 10 CARS STRUCK A TRACTOR-TRAILER THAT CAUGHT FIRE, AT MP142, CHERRY GROVE CROSSING, CAUSING EXTENSIV DAMAGE TO ENG UNIT NO.#508 AND SCORCHING C/32068, C/31541, C/34050.

FATALITY	FRATICELLI	GILBERTO	NONTRESPASSER / ON RAILROAD PROPERTY

67106	03/17/2001	5	INT	WTR	WTLH	DERAILMENT	$3,387,850.00	NODAWAY	IA

TRAIN NO.#5 WITH ENGS 140/141 AND 16 CARS DERAILED BOTH ENGINE UNITS AND 11 CARS AT MP419.9, 20 MILES WEST OF CRESTON, IA. THE CAUSE O DERAILMENT HAS BEEN DETERMINED TO BE A BROKEN RAIL.

FATALITY	RIEHL	STELLA	PASSENGERS ON TRAIN

67875	05/04/2001	703	WST	WSD	CACR	HWY-RAIL CROSSING	$21,116.00	PLANADA	CA

TRAIN 703 STRUCK VEHICLE EAST OF MERCED, CA. THE GATES DID NOT WORK BECAUSE THEY WERE DISABLED BY BNSF MAINTAINER.

FATALITY	VALLADAO	ELIZABETH	TRESPASSER
FATALITY	VALLADAO	WALTER	TRESPASSER

Start Date: 01/01/2001
End Date: 12/31/2001
SBU: All Amtrak

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State
68688	06/18/2001	525	WST	WSD	CACR	HWY-RAIL CROSSING	$21,980.00	DIXON	CA

Narrative: TRAIN 525 STRUCK A VEHICLE NBAR DIXON, CA.

Injury Type	Last Name	First Name	Class of Person
FATALITY	VANN	PATRICK	TRESPASSER

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State
68983	07/08/2001	3	INT	WTR	WTLH	HWY-RAIL CROSSING	$16,585.00	ALBUQUERQUE	NM

Narrative: TRAIN NO #3 WITH ENGS 128/53/24/88 AND 25 CARS STRUCK AN AUTOMOBILE AT MP894.8, ALAMEDA BLVD CROSSING.

Injury Type	Last Name	First Name	Class of Person
FATALITY	ORTEGA (OCCUP 1)	SHARON	TRESPASSER
FATALITY	ORTEGA (OCCUP 2)	JOSEPH	TRESPASSER
FATALITY	ORTEGA (DRIVER)	FABIAN	TRESPASSER

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State
69115	07/13/2001	98	INT	ETR	ATCT	HWY-RAIL CROSSING	$26,483.00	SEVILLE	FL

Narrative: TRAIN NO.#98 WITH ENGS 60/149 AND 10 CARS STRUCK A FLATBED TRUCK HAULING ROOFING MATERIAL AT MP A727.20, VOLUSIA WOOD YARD RD, A PRIVAT CROSSING, CAUSING EXTENSIVE DAMAGE TO BOTH ENG UNITS AND 5 CARS

Injury Type	Last Name	First Name	Class of Person
FATALITY	AVILES	GILBERTO	NONTRESPASSER / ON RAILROAD PROPERTY

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State
69107	07/14/2001	30	INT	ETR	ETLH	HWY-RAIL CROSSING	$9,592.00	ELLERSLIE	MD

Narrative: TRAIN NO.#30 WITH ENGS 148/671 AND 14 CARS STRUCK A PICK-UP TRUCK AT MP183.96, SHELLSBERG RD CROSSING.

Injury Type	Last Name	First Name	Class of Person
FATALITY	KENNEY	DAVID	TRESPASSER

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State
69114	07/15/2001	11	WST	WSD	CTSL	HWY-RAIL CROSSING	$43,000.00	NEWARK	CA

Narrative: TRAIN 11 STRUCK A TRUCK AT NEWARK, CA.

Start Date:01/01/2001
End Date:12/31/2001
SBU: All Amtrak

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State

Narrative

Injury Type	Last Name	First Name	Class of Person
FATALITY	TREJO	VINCENT	NONTRESPASSER / ON RAILROAD PROPERTY

69224	07/21/2001	7	INT	WTR	WTLH	HWY-RAIL CROSSING	$62,399.00	SPOKANE	WA

TRAIN NO.#7(27) WITH ENGS 163/160 AND 15 CARS STRUCK AN AUTOMOBILE AT MP 62 95, PINES RD CROSSING.

FATALITY	BROWN (OCCUP 1)	BRANDON TRESPASSER
FATALITY	HINDER (DRIVER)	JOSEPH TRESPASSER

69359	07/29/2001	21	INT	WTR	SWBG	DERAILMENT	$6,000,000.00	ANNAPOLIS	MO

TRAIN NO #21 WITH ENGS 131/76 AND 19 CARS DERAILED BOTH ENGINES AND 7 CARS AT MP105 THE DERAILMENT WAS DUE TO A WASHOUT OF THE TRACK SUBSTRUCTURE WHICH WAS CAUSED BY FLASH FLOODING.

69584	08/11/2001	92	INT	ETR	ATCT	HWY-RAIL CROSSING	$35,000.00	SWANSEA	SC

TRAIN NO.#92 WITH ENGS 133/184 AND 20 CARS WAS STRUCK IN THE SIDE OF C/410154 BY A PICK-UP TRUCK AT MP S380.36, WEST SECOND ST CROSSING DERAILMENT OF BOGIE 5689.

FATALITY	DOE (DRIVER)	JOHN TRESPASSER

70187	09/13/2001	5	INT	WTR	WTLH	SIDE COLLISION	$4,890,000.00	WENDOVER	UT

TRAIN NO.#5 WITH ENGS 143/149 AND 15 CARS STRUCK UPRR COAL TRAIN CBY SR-12 WITH 31 CARS, CAUSING TRAIN #5 TO DERAIL BOTH ENGINES 143/14 LEAD 9 CARS.

71035	11/11/2001	776	WST	WSD	SDSB	HWY-RAIL CROSSING	$16,606 00	VAN NUYS	CA

TRAIN 776 STRUCK A VEHICLE AT VAN NUYS, CA.

FATALITY	Ashikian	Khalil TRESPASSER

71085	11/13/2001	90	INT	ETR	ATCT	HWY-RAIL CROSSING	$6,939.00	POMPANO BEACH	FL

Start Date:01/01/2001
End Date:12/31/2001

SBU: All Amtrak

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State

Narrative

Injury Type	Last Name	First Name	Class of Person

TRAIN NO.#90 WITH ENGS 10/40/196 AND 11 CARS STRUCK A TRUCK AT MP SX1002.31, COPANS RD CROSSING.

	FATALITY	DOE	JANE					TRESPASSER	
71196	11/23/2001	771	WST	WSD	SDSB	HWY-RAIL CROSSING	$1,176,380.00	CAMARILLO	CA

TRAIN 771 STRUCK A FARM TRACTOR NEAR CAMARILLO, CA, CAUSING THE TRACTOR TO CATCH FIRE.

	FATALITY	ROMERO	JESUS			NONTRESPASSER / ON RAILROAD PROPERTY			
71425	12/12/2001	714	WST	WSD	CACR	HWY-RAIL CROSSING	$8,644.00	SHAFTER	CA

TRAIN 714 STRUCK A MINVAN NEAR SHAFTER, CA.

FATALITY	DOE (2)	JOHN	NONTRESPASSER / ON RAILROAD PROPERTY
FATALITY	SUREZ	ELROY	NONTRESPASSER / ON RAILROAD PROPERTY
FATALITY	ROMERO	JESUS	NONTRESPASSER / ON RAILROAD PROPERTY
FATALITY	BENISMO	AGULAR	NONTRESPASSER / ON RAILROAD PROPERTY
FATALITY	GUILLERMO	HECTOR	NONTRESPASSER / ON RAILROAD PROPERTY
FATALITY	AGUILER	MARIO	NONTRESPASSER / ON RAILROAD PROPERTY
FATALITY	DOE (1)	JOHN	NONTRESPASSER / ON RAILROAD PROPERTY

National Railroad Passenger Corporation
Safety Information System

Amtrak

Major Accident Report

Created: 03/12/2002 11:12:45 AM

Start Date:01/01/2002
End Date:03/12/2002

SBU: All Amtrak

Incident Nbr	Incident Date	Train Nbr	SBU	Division	Prod Line	Accident Type	Damage	City	State
71872	01/15/2002	3	INT	WTR	WTLH	HWY-RAIL CROSSING	$20,000.00	LA JUNTA	CO

Narrative

TRAIN NO #3 WITH ENGS 180/92/146/170 AND 22 CARS STRUCK A DUMP TRUCK AT MP550.8, COUNTY RD Y CROSSING.

Injury Type	Last Name	First Name	Class of Person
FATALITY	LYNNE	JAMES	NONTRESPASSER / ON RAILROAD PROPERTY

Mr. Rogers. Please provide a table highlighting Amtrak's duty injury statistics over the past five years.

[The information follows:]

Amtrak's on-duty reportable employee injuries for the past five years are reflected in the table below.

Year	FY1997	FY1998	FY1999	FY2000	FY2001
Injuries	924	857	910	896	933

Mr. Rogers. Do grade crossing accidents continue to be your most common accidents?

[The information follows:]

Yes. Grade crossing accidents continue to be among the most common accident types affecting Amtrak and the majority of rail carriers throughout the nation. The rail industry continues to have a significant decline in highway-rail incidents; however, the decline is not fast enough considering the potential exposure. When a highway user chooses to violate the law by trespassing at one of the nation's public or private grade crossings, Amtrak guests, employees, equipment, highway-user, and surrounding communities, all share in the tragedy of a life-threatening incident.

Mr. Rogers. How many grade crossing accidents occurred in fiscal year 2001? How does that compare to 2000?

[The information follows:]

A total of 188 incidents occurred during fiscal year 2001. This represents a 12% reduction when compared to the 214 incidents recorded during fiscal year 2000.

Mr. Rogers. What is Amtrak doing to reduce the number of grade crossing accidents? Are any of these approaches different from those mentioned in last year's hearing record?

[The information follows:]

Following the bombing of the World Trade Towers on September 11, 2001, Amtrak combined the police and safety functions into a single department, the Office of Security and System Safety. This group is currently developing a program that targets reductions in grade crossing incidents and accidents as a major objective. As part of this initiative, Amtrak's Police Department is partnering with local and state agencies to bolster right-of-way enforcement activities. This plan also requires that we monitor incidents involving Amtrak equipment to identify problematic locations or areas in order to best direct our intervention efforts.

We have recently attended meetings with both the Federal Railroad Administration and the Association of American Railroads to identify

current outreach, engineering, and enforcement activities and to determine how Amtrak can best utilize current resources to reduce the frequency of grade crossing incidents and accidents.

As noted in last year's Hearings Record response, Amtrak consistently and aggressively supports the mission of Operation Lifesaver, a national, non-profit education and awareness program, dedicated to ending tragic collisions, fatalities and injuries at highway-rail grade crossings on the railroad rights of way. The foundation of Operation Lifesaver is to utilize three basic principles; Education, Enforcement, and Engineering.

System-wide grade crossing education, enforcement and engineering initiatives

Amtrak continually develops the network of level-one presenters throughout our system each year. This group of highly dedicated and motivated individuals, target their presentations to schools, trucking companies, school bus drivers, local governments, town hall meetings, etc., in an effort to educate the citizen population. Amtrak deploys their educational initiatives according to incident activity, near hit reports, and community requests.

Amtrak partners with local law enforcement agencies to concentrate patrols in problem areas. We continue to apply pressure to increase penalties for grade crossing and trespasser violations through enforcement legislation in towns, cities, and states. Amtrak police has assigned their community resource officers to community outreach and neighborhood watch programs

that prioritize and target locations of trespasser, vandalism, and crossing violation incidents.

Amtrak also concentrates on partnerships with host railroads in the development of grade crossing education and closure programs. We share and compare data on incidents by state, by host railroad, and reported "near hit" activity by Amtrak engineers.

In California, where grade crossing accident incidents are commonplace, Amtrak is actively participating with the Northern and Southern California Grade Crossing Task Force. Public Utilities Commission officers, FRA, Class One railroads and Commuter Agencies, local law enforcement, and city officials have joined together to drive down the number of incidents. This task force recently adopted a nine-step process to address rail safety issues. Beginning with a review of available incident data, the Task Force identifies potential communities or areas for intervention, and working through the State Operation Lifesaver coordinator, creates a grade crossing team to work directly with key community leaders. The goal is to identify potential resources and to train local citizens as Operation Lifesaver presenters.

Amtrak continues to target grade crossing closures as a prime initiative. Recently, our Niles Michigan corridor service closed 17 private grade crossings. Additionally, three public crossings will be closed in 2002 and negotiations are underway to close additional private crossings.

Mr. Rogers. Most recent data shows that trespasser fatalities continue to rise substantially from year to year. Does Amtrak have a problem with trespasser fatalities? How many trespasser fatalities occurred on your system in fiscal year 2001? How does this compare to 2000?

[The information follows:]

Trespasser fatalities are unnecessary, unacceptable and unfortunately, on the rise on all railroads' rights-of-way. A total of 107 trespasser fatalities occurred on our system during fiscal year 2001, compared to 100 during the prior fiscal year. This was in spite of our intensified efforts system-wide. Amtrak's outreach programs educate the public on both highway-rail and trespasser safety, parallel issues that we believe need to be treated with equal emphasis.

Railroad Retirement System

Mr. Rogers. How much does Amtrak pay in retirement benefits for its employees? In comparison, how much does Amtrak pay in retirement benefits for ''orphaned'' railroad employees?

[The information follows:]

The Railroad Retirement Board (RRB), which pays all Railroad Retirement Tax Act (RRTA) retirement benefits, estimates that in Fiscal Year 2001 they paid benefits to Amtrak retirees (including their

spouses and dependents) amounting to $214.1 million of which $150.9 million was for Tier I benefits.

In Fiscal Year 2001, Amtrak transferred $426.6 million to the RRB in railroad retirement obligations of which $180.6 million were for Tier I tax.

The difference which is applicable to excess Tier II RRTA payments was $182.6 million

Mr. Rogers. Please provide the Committee with a copy of the Railroad Retirement Board's letter to Amtrak that identifies Amtrak's railroad retirement payments.

[The information follows:]

See the attached letter (only in hard copy).

UNITED STATES OF AMERICA
RAILROAD RETIREMENT BOARD
844 NORTH RUSH STREET
CHICAGO, ILLINOIS 60611-2092

Bureau of the Actuary

DEC 2 8 2001

Ms. Arlene Friner
Chief Financial Officer
National Railroad Passenger Corporation
60 Massachusetts Ave., NE 4W-206
Washington, D.C. 20002

Dear Ms. Friner:

In accordance with the direction of the House Committee on Appropriations in House Report 101-584, to accompany H.R. 5229, we have prepared estimates of benefit payments related to employment with the National Railroad Passenger Corporation (Amtrak). Below are estimates of the amount of benefits to be paid in fiscal year 2003. These payments will be made to current and former Amtrak employees and their dependents (spouses and survivors).

AMTRAK BENEFIT PAYMENTS (IN MILLIONS)

Social Security Equivalent Benefit Account (SSEB Tier I benefits)	$140.5
National Railroad Retirement Investment Trust (non-SSEB Tier I benefits)	24.2
National Railroad Retirement Investment Trust (Tier II benefits)	71 8
National Railroad Retirement Investment Trust (lump-sum benefits)	0.1
National Railroad Retirement Investment Trust (supplemental benefits)	1.8
Railroad Unemployment Insurance Account	12.3

These estimates are based on Office of Management and Budget economic assumptions, and assume stable Amtrak employment. Benefit levels reflect the Railroad Retirement and Survivors' Improvement Act of 2001.

Printed on recycled paper/with soy ink

Enclosed is additional information regarding these estimates and revised estimates for fiscal years 2001-2002. If you have any questions, please contact Marla Huddleston at 312-751-4779.

Sincerely,

Frank J. Buzzi

Frank J. Buzzi
Chief Actuary

Enclosures

cc: Alex Chavrid
Federal Railroad Administration

Victoria Wassmer
Office of Management and Budget

Richard Goldberg
National Railroad Passenger Corporation

FISCAL YEAR 2001 AMTRAK BENEFIT PAYMENTS (IN MILLIONS)

Social Security Equivalent Benefit Account (SSEB Tier I benefits)	$131.2
Railroad Retirement Account (non-SSEB Tier I benefits)	19.7
Railroad Retirement Account (Tier II benefits)	61.3
Railroad Retirement Account (lump-sum benefits)	0.1
Railroad Retirement Supplemental Account	1.8
Railroad Unemployment Insurance Account	12.2

FISCAL YEAR 2002 AMTRAK BENEFIT PAYMENTS (IN MILLIONS)

Social Security Equivalent Benefit Account (SSEB Tier I benefits)	$137.0
Railroad Retirement Account and National Railroad Retirement Investment Trust (non-SSEB Tier I benefits)	21.1
Railroad Retirement Account and National Railroad Retirement Investment Trust (Tier II benefits)	67.6
Railroad Retirement Account and National Railroad Retirement Investment Trust (lump-sum benefits)	0.1
Railroad Retirement Supplemental Account and National Railroad Retirement Investment Trust	1.8
Railroad Unemployment Insurance Account	11.8

DATA USED IN ESTIMATING FISCAL YEAR 2003 AMTRAK BENEFIT PAYMENTS

RAILROAD RETIREMENT BENEFICIARIES				
	NUMBER AT END OF FY 2002	NUMBER AWARDED IN FY 2003	NUMBER TERMINATED IN FY 2003	NUMBER AT END OF FY 2003
EMPLOYEE (TOTAL)	7,990	553	419	8,124
EMPLOYEE WITH SUPPLEMENTAL ANNUITY	3,500	163	182	3,481
SPOUSE	3,459	229	273	3,415
SURVIVOR	NA	NA	NA	NA

RAILROAD RETIREMENT BENEFIT PAYMENTS IN FY 2003 (IN MILLIONS)					
	SOCIAL SECURITY EQUIVALENT BENEFIT ACCOUNT (SSEB TIER I BENEFITS)	NATIONAL RAILROAD RETIREMENT INVESTMENT TRUST			
		NON-SSEB TIER I BENEFITS	TIER II BENEFITS	LUMP-SUM BENEFITS	SUPPLEMENTAL BENEFITS
AMOUNT	$140.5	$24.2	$71.8	$0.1	$1.8

RAILROAD UNEMPLOYMENT INSURANCE ACCOUNT				
	NUMBER OF BENEFICIARIES IN FY 2003	AVERAGE BENEFIT PER BENEFICIARY IN FY 2003	DAILY BENEFIT RATE (SAME FOR UNEMPLOYMENT AND SICKNESS BENEFITS)	TOTAL FY 2003 PAYMENTS (MILLIONS)
UNEMPLOYMENT	1,040	$3,075	$52.00 OCT-JUN	$3.2
SICKNESS	3,275	$2,780	$55.00 JUL-SEPT	$9.1

NA: Not available.

Mr. Rogers. Of this total, how much is for non-Amtrak beneficiaries, tier II payments, and non-Social Security Equivalent benefits?

[The information follows:]

Based upon information provided by the Railroad Retirement Board (RRB) for fiscal year 2001, $19.7 of Amtrak's excess RRTA of $182.6 million was for non-Social Security Tier I equivalent benefits. The remaining portion represents the excess paid by Amtrak and its employees for non-Amtrak beneficiaries' Tier II benefits (including supplemental pension benefits).

Amtrak's current estimates for excess RRTA for fiscal year 2002 is $173.7 million, of which $21.1 million is applicable to non-Social Security Tier I benefits as provided by the Railroad Retirement Board (RRB). The remaining portion represents the excess paid by Amtrak and its employees for non-Amtrak beneficiaries' Tier II benefits (including Supplemental pension benefits).

Mr. Rogers. What does Amtrak anticipate it will need for RRTA for fiscal years 2002-2004?

[The information follows:]

The following schedule reflects Amtrak's current estimate of Tier II payments and resulting excess RRTA.

($ in millions)	FY2002	FY 2003	FY2004
Projected Tier II payment to RRB	240.6	228.9	232.2
Projected Tier II Benefits Received by Amtrak Retirees	66.9	69.2	71.7
Projected Excess RRTA	173.7	159.7	160.5

Projected Tier II payments are expected to experience upward pressure due to 1) projected RRB's annual increases in the earnings ceilings that are subject to taxation and 2) moderate increases in Amtrak's payroll costs. A reduction in the tax rate on employers effective 1/1/02 and an additional reduction effective 1/1/03 will offset much of the increases. Only moderate increases are projected in the payments to Amtrak retirees.

Mr. Rogers. If Amtrak only had to contribute costs for its own employees (current and retired) into the railroad retirement system, what would these costs be in fiscal year 2002 and 2003? How does this compare to what the Corporation is expecting to pay in these two years?

[The information follows:]

Amtrak expects to pay roughly $230 million per year to the Railroad Retirement Board (RRB) for funding the portion of the industry pension that is greater than the benefits that are comparable to social security. The payments that are comparable to social security are called Tier I,

generally these additional benefits are called Tier II. For agreement-covered employees, these Tier II benefits are in lieu of a supplemental company pension. On a pay-as-you-go basis, the annual cost of providing these Tier II benefits to retirees, whose last railroad employer was Amtrak, is approximately $70 million. The annual difference in the statutory payroll tax and the amount received by retirees is nearly $160 million. The Railroad Retirement Board has never provided Amtrak with an estimate of the actuarial funding requirement for its current workers and retirees. The foregoing values reflect the new tax rate effective 1/1/03.

($ in millions)	FY 2002	FY2003
Projected Tier II payment to RRB	240.6	228.9
Projected Tier II Benefits Received by Amtrak Retirees	66.9	69.2
Projected Excess RRTA	173.7	159.7

Mr. Rogers. RRTA costs have decreased from an estimated $190,000,000 in fiscal year 2002 to $174,000,000. Why are these costs going down?

[The information follows:]

Three changes have reduced the estimated "Excess RRTA" from $190 to $174. The targeted staffing levels for agreement and non-agreement employees are lower than previously planned. The Railroad Retirement and Survivors' Improvement Act of 2001, Public Law 107-90, was signed into law on December 21, 2001. Effective 1/1/02, this law reduced the employer Tier II RRTA tax rate by 0.5% and it

repealed the supplemental annuity work-hour tax rate paid by employers. The cumulative effect of these three changes account for the reduction.

Mr. Rogers. If Amtrak were to undertake major restructuring of its long distance routes in October, as announced, what impact would this have on RRTA payments?

[The information follows:]

The possible long distance route restructuring announced February 1st consisted of the elimination of eighteen routes. This type of action would trigger labor protection for impacted agreement covered employees. Employees entitled to protective payments would continue to be subject to payments to RRTA for the duration of these payments. These payments are for a minimum of six months for affected employees with two or more years of Amtrak service. In the near term, the number of impacted employees not eligible for labor protection (agreement employees with less than two years service and all non-agreement employees) are expected to have minimal impact on RRTA payments.

Insurance Issues

Mr. Rogers. What is your current actual insurance position? Please provide for the Committee a listing of your insurance carriers and the coverage.

[The information follows:]

Except for the risk of damage to Amtrak property resulting from terrorist acts, we believe we are adequately insured. The amount of terrorism coverage for Amtrak's property is limited to $7.5 million as compared to $400 million for all other insured perils. Very limited amounts of additional terrorism property coverage are available at exorbitant prices. While our general liability insurance currently covers terrorist acts to the full policy limit of $500 million, we are uncertain whether terrorist coverage will be available when our program renews in December 2002. Following is a brief summary of the major components of Amtrak's insurance program:

Coverage	Amount
Property	$400 million

Insurance carriers: ERC Frankona, Zurich, Westchester, Royal, Hartford, AIG, Ace, Allianz, Lloyds, Hanover, Scor Re, Essex, LMG

General Liability	$500 million

Insurance carriers: AIG, ERC Francona, Starr Excess, XL, Ace, Chubb, Lloyds

We also maintain the following insurance: cargo, fiduciary liability, crime, directors and officers liability, non-owned aviation liability, employed lawyers professional liability, engineers errors and omissions liability, and boiler and machinery.

Mr. Rogers. Last year, following resolution of a grade crossing accident in Missouri on Union Pacific's track, Amtrak notified Union Pacific that it was unable to pay the

required award and that their insurance company would not do so either. Please discuss this case.

[The information follows:]

Amtrak paid the $33 million judgment in 2001. The liability is fully insured by Amtrak above a $10 million deductible. The insurance is provided by eight insurance companies. One of the eight paid Amtrak its full share of the loss- $4 million. Amtrak has sued the remaining seven to effect recovery. In the meantime, Amtrak has had to cover the amount through operating funds.

Mr. Rogers. Amtrak, in essence, insures itself for the first $10,000,000 in losses. Do you have these reserves in hand? If not, how would you be able to come up with these costs if a tragic accident were to occur?

[The information follows:]

Amtrak funds smaller, predictable losses out of operating revenues and insures against large, unexpected losses. Since the cumulative amount of the smaller losses is somewhat predictable, we believe it is economically more efficient for Amtrak to retain much of this exposure rather than insure it. If we purchased insurance with small deductibles, an insurance company would charge Amtrak a premium large enough to cover the expected losses plus a substantial markup for overhead, profit, premium taxes and other statutory charges, claim processing, and a risk charge for volatility.

Mr. Rogers. As of January, the railroad's insurance company who covered from $10-25 million ceased providing service. Unless another carrier entered the market, railroads are required to now cover up to $25,000,000. Are you able to do this under your current financial situation?

[The information follows:]

Amtrak's insurance deductibles remain at $10 million per accident. As noted in our answer to a previous question, we are concerned that inadequate insurance is available for damage to Amtrak property resulting from terrorist acts. Otherwise, we feel we are adequately insured.

Travel

Mr. Rogers. How much money does Amtrak spend per year on airline tickets? Please answer for the past three years?

[The information follows:]

Amtrak's expenditures on airline tickets for employee travel has declined 48% over the last three years. Those amounts are as follows:

FY2001 - $3,292,527
FY2000 - $5,550,674
FY1999 - $6,380,027

Amtrak's expenditures on airline tickets for Passenger Inconvenience has increased 17% over the last two years. Those amounts are as follows:

FY2001 - $874,572
FY2000 - $745,615
FY1999 - data not available

Amtrak's expenditures on total airline tickets has declined 34% over the last two years. Those amounts are as follows:

FY2001 - $4,167,099
FY2000 - $6,296,289
FY1999 - data not available

Mr. Rogers. Why do Amtrak personnel fly instead of take the train? As part of this response, please indicate what percentage of this travel to areas not served by Amtrak.

[The information follows:]

Amtrak makes every effort to have its personnel travel via train, however, there are situations when Amtrak personnel fly for business travel for the following reasons:

- Response to Operating Emergencies (derailments/accidents where regulatory requirements apply and time is of the essence) - An operating emergency requires a timely response so that an investigation can be performed to determine the cause of an incident before the evidence becomes invalid (i.e. the trail gets cold). This is true not only for serious accidents, but also for cases such as a yard derailment where equipment malfunctions are suspected. Often

equipment must be released for revenue service to prevent it from tying up the main line track, a yard or siding and this cannot be done until an investigation has been completed.

- Cost Effectiveness - With careful planning and the use of discount air carriers, it is often cheaper to fly than incur additional per diem charges for en route meals or to incur even one extra night in a hotel. Many times it is cheaper for Amtrak to spend $250 to fly than to spend $100 on meals, $100 on lodging and have the traveler out of the office for an extra day or two.
- Limited Manpower - Ongoing cuts in human resources have left many departments with limited personnel to do the work regional personnel could do in the past. As a result, air travel is necessary to cover the required territory. Some of this travel is federally mandated to adhere to compliance issues.
- Protect rail revenue - Travel by air is necessary when space on the train is unavailable. Corporate policy allows overnight train travel to include sleeping accommodations. Sleeper capacity is often at a premium. It is often cheaper to fly for $250 than to lose the revenue of a sleeping car, which often sells for $400 a day or more.

In summary, Amtrak business travelers travel by air to respond to operating emergencies, conserve time, save money and preserve train revenue. Amtrak has installed a stringent policy that requires all air travel to be justified both

financially and for purpose. Senior management must approve each business trip involving air travel.

Amtrak does not serve approximately 5% of the cities to which air travel occurred.

FEDERAL RAILROAD ADMINISTRATION

QUESTIONS FOR THE RECORD FROM CHAIRMAN ROGERS

FY 2002 NEW POSITIONS

Mr. Rogers. Last year, Congress approved FRA's request for 13 new FTEs and 26 new positions. Please detail for the Committee how many of these new staff are on board and how many you plan to hire by the end of the year.

[The information follows:]

As of the end of March, four of the new staff are on board: the Economist, the Operating Practices Specialist, one Highway Rail-Grade Crossing Specialist, and the Personnel Management Specialist. The remaining 22 positions will be filled as follows:

Position	Projected On Board
Highway-Rail Grade Crossing Specialist	August
Motive Power and Equipment Specialist	September
Operations Research Analysts (2)	August
Industrial Hygienist	September
Train Control Engineer	August
Safety Lawyer	June
Railroad Security Specialist	June
Safety Inspectors (12)	June
Environmental Analyst	July
Data Base Manager	April

SECURITY POSITIONS

Mr. Rogers. In addition to the 26 new positions approved in the 2002 Department of Transportation and Related Agencies Appropriation Act, the Congress also approved additional FRA security personnel. What is the status of these positions? Have they been filled? If not, when do you anticipate having these positions filled?

[The information follows:]

The Department of Defense Appropriations Act, which was signed into law on January 10, 2002, provided four positions for security needs under safety and operations. While none of these positions have been filled, the recruitment process is well underway.

For the one security specialist position, we expect the position to be filled in early May. The remaining three positions (electronics engineers/computer scientists) will be filled in late June.

ADDITIONAL POSITIONS

Mr. Rogers. Why does the Office of Safety and Operations need twenty additional positions and ten FTEs in 2003? Please provide the Committee with a table showing each position requested, the GS level of the position, the salary range for the position, the location where these staff will be located (headquarters or field), and a brief description of each job.

[The information follows:]

FRA's safety-related activities continue to grow in volume and complexity. The request for additional staff is intended to permit the agency to address the primary causal factors that have been responsible for the steady increase in train accidents over the past four years. Track-caused and human factor-caused accidents are up 13.6 percent and 45.7 percent, respectively in year 2000 from year 1996. These trends must be reversed. The staffing levels sought in this request are intended to reverse the increasing trend in train accident rates and fulfill FRA's safety goals and objectives. FRA's request for 20 additional field positions (10 FTEs) will allow increased surveillance of track structure to reduce the number of track caused accidents and will

permit FRA to better monitor train operations to reduce the number of human factor caused train accidents.

Railroad traffic volume and density have increased, making employees and operations more vulnerable to mistakes in this already dangerous work environment. At the same time, faced with economic challenges, including declining stock prices, many railroads have cut back railroad capital improvement programs by reducing track rehabilitation and rolling stock replacement. Cut backs in supervision have contributed to an increase in human factor caused accidents. These policy changes have had a swift and detrimental impact on safety.

Track-caused rail accidents have increased by 14.4 percent and track-caused derailments have increased over 25 percent in 2000 from 1996. Railroads are spending less for capital improvements and routine maintenance at a time when rail traffic has reached record high levels. In addition, accidents due to broken rails have increased nearly 48 percent from 1996 to 2000 and have become the leading cause of track-caused derailments on mainline track.

Monitoring railroad compliance with track safety requires on-the-ground walking inspections. A track inspector on average takes 70 minutes to inspect a mile of track including turnouts while walking. During the year 2000, FRA and participating State inspectors reviewed 108,182 track-related records and monitored conditions on 220,000 miles of track. FRA and State inspectors were only able to walk 12,122 miles of track in CY 2000. A total of 19,426 defects from walking inspections were reported and civil penalties for 394 track violations were assessed in 2000. FRA realizes some track needs to be inspected more than once a year due to its condition or critical importance to safety. To achieve an effective allocation of resources, FRA has been focusing its inspections in areas requiring more attention. Even with focused enforcement inspection effort that utilizes data to find questionable track conditions, FRA and the States have not been able to reverse the trend of increased track-caused accidents and derailments.

The general system track is owned by 661 different railroads, ranging from the largest Class I freight and passenger railroads to the smallest historic and museum railroads operating only a mile or two of track. The largest freight and passenger railroads employ more than 40,000 maintenance-of-way employees. In addition, many regional and short line railroads also rely

upon scores of contractors to perform needed maintenance. These factors add to the complexity of an inspector's ability to assure compliance with Federal Track Safety Standards. In order for FRA to increase its monitoring of railroad track structure to ensure compliance with Federal Track Safety Standards, 12 Track inspectors (6 field FTEs) are needed. The inspectors will specifically look for wide gage, broken rails, defective switches, and other clearly unacceptable conditions, some of which are being missed by railroad personnel in their inspections.

In addition, FRA is seeking 8 Operating Practice (OP) Inspector positions (4 field FTEs) for the purpose of establishing full time, year round inspections teams that focus on preventing human factor accidents. Between 1996 and 2000, human-factor-caused train accidents have increased 45.7 percent. Also, the property damage cost to the industry from human-factor-caused train accidents totaled $2.6 billion. A key element of FRA's safety enforcement program is performing on-board train inspections (train riding). The Railroad Safety Act of 1970 establishes FRA's authority to conduct these inspections. One reason for human-factor caused train accidents is non-compliance with railroad operating rules. The monitoring of operating rules can only be accomplished through an efficiency-testing program. Besides determining the extent of rules compliance, the program also helps identify employees who need remedial rules training or discipline. FRA's OP inspectors monitor the railroads' efforts by: (1) inspecting efficiency testing records; and (2) accompanying railroad officers when on-board efficiency tests are being conducted. Records inspections and on-board train inspections disclose levels of compliance with, and employees' knowledge of safety-critical rules. This is a time consuming but critical process.

The workload of OP inspectors has also increased by requirements to monitor compliance with recommendations issued by the Switching Operations Fatality Analysis (SOFA). Yard accidents are the largest source of rail employee fatalities, accounting for approximately 45 percent of all employee fatalities. Compliance with yard and switching rules and procedures must be emphasized to prevent, or greatly reduce, the many careless types of casualties to rail employees, which are preventable. The 8 OP inspectors requested by FRA will concentrate on main line efficiency testing and yard and switching operations. In addition, the inspectors will analyze accident/incident data and train and engine service injury data to identify and categorize accident and injury causes, trends and locations. Based on that analysis, inspectors will conduct detailed inspections, both on-

board and on the ground, at specific locations to determine the level of compliance with carrier operating and safety rules. In addition to the detailed review of the accident and injury data, inspectors will review all carrier operational tests and inspections to determine if they are in compliance with Federal regulations. Inspectors will also conduct a detailed safety evaluation of carrier operating procedures to determine the root cause of accidents and injuries. Evaluation findings will be used with carrier officials to develop and implement an effective operational test and inspection program and to modify industry operating practices. The outcome will be a reduction of human-factor-caused accidents and train and engine service injuries.

The location, GS level, and salary range for these positions follow:

Location	Positions	Grade	Salary Range 1/
Field	12 Track Inspectors	GS-12	$54,000
	8 Operations Practices Inspectors		$70,000

1/ Does not include benefits or support costs, e.g., desks, etc.

ANNUALIZATION OF FY 2003 FTES

Mr. Rogers. What will be the cost to annualize these 20 positions, if approved?

[The information follows:]

In FY 2003, FRA requests $1,393,000 for 20 positions and 10 FTEs (6 months funding). In FY 2004, the annualized 20 FTEs will cost an additional $984,000 for a total of $2,377,000.

AUTHORIZED FTES AND ONBOARD PERSONNEL

Mr. Rogers. Please provide a table on authorized FTEs and onboard strength by office. Please note and explain any instances where FTE utilization and onboard personnel is below that originally budgeted for in fiscal year 2002.

[The information follows:]

	FY 2002 FTE Ceiling	On-Board As of 3/22/02	Difference
Safety & Operations	769	755	14 1/

1/ Includes two positions to be filled by political appointees. Of the remaining 12 positions, 4 are firm commitments with employees reporting in April.

POLITICAL APPOINTEES

Mr. Rogers. Please update the political appointee tables found in last year's hearing record.

[The information follows:]

Title	Type of Appointment	Salary
	Fiscal Year 2000	
Administrator	Presidential	$130,200
Deputy Administrator	Non-Career SES	$125,900
Associate Administrator for Policy and Prog. Dev.	Non-Career SES	$130,200
Senior Advisor to the Administrator	Schedule C	$ 95,923
Public Affairs Officer	Schedule C	$ 98,744

Fiscal Year 2001

Administrator	Presidential	$133,700
Deputy Administrator	Non-Career SES	$125,883
Associate Administrator for Policy and Prog. Dev.	Non-Career SES	$133,700
Senior Advisor to the Administrator	Schedule C	$ 87,864
Public Affairs Officer	Schedule C	$ 87,864

Title	**Type of Appointment**	**Salary**

Fiscal Year 2002

Administrator	Presidential	$138,200
Deputy Administrator	Non-Career SES	$125,972
Associate Administrator for Policy and Program Dev.	Schedule C (vacant)	$ 92,060
Senior Advisor to the Administrator	Schedule C (vacant)	$ 92,060
Associate Administrator for Public Affairs	Non-Career SES	$125,972

Note: Some salaries include adjustments for locality pay.

T-16 VEHICLE

Mr. Rogers. In the past, the Committee has funded the T-6, yet this year's budget refers to the T-16. How does this vehicle differ from the T-6?

[The information follows:]

The T-6 vehicle is a Gauge Restraint Measuring System (GRMS) with the primary function of spreading the track gage (distance between the two rails) and measuring the resistance to this spreading action. A weak resistance can indicate unsafe conditions. This test can only be conducted at speeds up to 25 miles per hour due to mechanical and safety limitations.

The T-6 is the only FRA-owned vehicle with GRMS track inspection capability. Traditionally, the condition of track structure has been subjectively determined by visual inspection. Unfortunately, derailments have occurred on track segments following these subjective evaluations. Recent technological advances have made possible the automated non-destructive inspection of track performance under service loads. The GRMS, which is a product of FRA's Office of Research and Development, is an example of these new technologies. It measures track ability to maintain gage under service load conditions. It utilizes a telescoping axle (split-axle) to apply a known gage spreading lateral force to the rail at operating speeds of up to 25 mph. The recorded track movements, under load, can then be used to take corrective action to prevent wide-gage derailments, one of the leading causes of track-related accidents. The FRA has also recently revised its track safety standards to include an alternate performance-based GRMS standard in lieu of some visual inspection requirements. Pursuant to its statutory mandate, FRA needs an independent capability to evaluate track conditions based on the newly established safety standards. FRA intends to maintain a viable GRMS car as a yardstick to guide future technology improvements and to respond to potential requests for rule modifications or waivers. The aging T-6 needs to be replaced with a newer, self-propelled, GRMS vehicle.

The T-16 vehicle is a high-speed Track Geometry Measuring System with the primary function of recording the shape of the track (surface, alignment, gauge, elevation, and curvature). For tracks supporting higher speeds (greater than 80 miles per hour), the precision of track geometry is paramount to operational safety. The T-16 vehicle records the geometry parameters for every foot of track and can be safely towed at speeds up to 160 mph.

The T-16 is the only FRA-owned vehicle that is capable of recording track geometry parameters at speeds up to 160 miles per hour and mark exceptions based on the recently established track safety standards for high-speed rail. It serves as the only FRA research platform for developing and testing newer track inspection technologies. The T-16 is a stainless steel Metroliner coach, manufactured in 1968, that was acquired from Amtrak in 2000. It was subsequently refurbished to support FRA's Office of R&D programs. It was acquired, pursuant to FRA's 5-year Strategic Plan for R&D, and is primarily used by FRA's Office of R&D to conduct track research and track-train dynamics studies on the Northeast Corridor, at the

FRA's high-speed test track near Pueblo, CO, and at other locations, as needed. These studies will support further development of high-speed track and passenger equipment standards, and will allow study and measurement of wheel-rail behavior and ride quality at speeds above 125 mph. Since its commissioning in April 2001, the car has been further equipped with new instrumented wheels sets capable of measuring vertical and lateral dynamic wheel/rail interaction forces, a real-time neural network to predict wheel forces from track geometry data, and a laser-based system for measuring rail profile. This car gives FRA research capabilities, which are not commercially available in North America. During the brief course of its operation, it has proven to be very valuable to FRA, Amtrak, and the Freight railroads in the testing of existing lines for track compliance and ride quality conditions. In addition to its primary R&D mission, it will support the FRA's Office of Safety, as necessary, to complement the T-2000 car's ATIP track geometry surveys.

USE OF T-6 VEHICLE

Mr. Rogers. Is the T-6 in use still?

[The information follows:]

Yes, the T-6 is still in use. Pursuant to the FRA's 5-year Strategic Plan for R&D, the aging T-6 will be replaced with a newer, self-propelled vehicle. Until the new car is delivered in September 2003, FRA will operate the T-6 vehicle to monitor compliance with GRMS requirements.

T-6 AND T-16 COST OF OPERATION

Mr. Rogers. Please provide a table showing the costs to operate the track geometry inspection vehicle for the past five years (T-6 and T-16).

[The information follows:]

(Dollars in Thousands)

FY	T-6			T-16*		
	Government	Industry***	Total	Government	Industry***	Total
1997	62	285	347			
1998	62	320	382			
1999	172	179	351			

FY	T-6			T-16*		
	Government	Industry***	Total	Government	Industry***	Total
2000	120	113	233	14	13	27
2001	51	74	125	589	85	674
2002**	11	55	66	382	76	458

*T-16 Started Testing on High-Speed Routes in March, 2001

**10/1/01 to 01/31/02

***Industry Contribution for Operations

FRA REIMBURSABLES

Mr. Rogers. FRA is projecting $832,000 in reimbursables. What is this from?

[The information follows:]

The reimbursable estimate of $832,000 from non-FRA sources consists of:

Operation Respond Program - $367,000. The FRA and Federal Highway Administration (FHWA) have been jointly working to improve the emergency response to train accidents including those involving passenger equipment and hazardous materials. Funding will support the expansion of the Operation Respond Program to include hazardous materials moving on highways as well as rail.

GIS - $150,000. The Bureau of Transportation Statistics (BTS) and FRA have been working together to expand FRA's Rail Network Geographic Information System into a multi-modal network GIS. To date, BTS has helped with the funding of FRA's original rail network creation and a preliminary effort to locate rail/highway crossings. Funding will continue the cooperative effort toward a multi modal network GIS.

Technical Assistance - $15,000. The Department of State has requested rail-related technical assistance that supports U.S. policy and economic goals. Funding supports FRA's travel-related costs for these efforts.

Waybill Sample Data Base - $300,000. The FRA and Surface Transportation Board (STB) have been jointly funding (on a 50-50 basis) the

creation of the annual Rail Carload Waybill Sample Data Base for several years. The Waybill Sample is the primary rail traffic data source used in rail restructuring analysis, such as rail mergers. FRA has assumed STB's procurement function for this effort, necessitating STB's transfer of funds to FRA. Funding will continue STB's share of the creation of the Waybill Sample.

SAFETY AND OPERATIONS NO-YEAR FUNDS

Mr. Rogers. The Administration is requesting $6,636,000 of the safety and operations appropriation to remain available until expended. Please detail for the Committee what this consists of.

[The information follows:]

The following items are included in the funding requested to remain available until expended:

Contract Support	$ 579,000
Alaska Railroad Liabilities	901,000
Data Management	1,338,000
ATIP	3,169,000
SE Transportation Center	349,000
Other Contracts	300,000
	$6,636,000

GSA RENT

Mr. Rogers. Why are rental payments to GSA increasing by 9.4 percent from fiscal year 2002 to fiscal year 2003? Is this increase largely to house new staff requested in this year's budget?

[The information follows:]

The requested increase includes the following costs:

New Staff	$120,000
Headquarters Rent Increase	193,000
New Field Leases/Relocations (net)	53,000
	$366,000

TASC COSTS

Mr. Rogers. Why are the purchases of goods and services from government accounts increasing by 20 percent from fiscal year 2002 to fiscal year 2003?

[The information follows:]

The increase in purchases and goods and services from government accounts of $454 is primarily a result of the FY 2002 reductions in TASC pursuant to Public Law 107-87 ($175K reduction) and Public Law 107-117 ($150K reduction). This reduction affected items across the board in TASC. As a result, many of the services being provided to FRA by TASC had been delayed or significantly modified in FY 2002.

The FY 2003 budget assumes spending in these areas returns to normal levels.

OPERATION LIFESAVER

Mr. Rogers. How much funding is FRA requesting for Operation Lifesaver in fiscal year 2003? For what purposes?

[The information follows:]

FRA is requesting $1,025,000 for Operation Lifesaver, Inc. (OLI), in FY 2003.

The proposed amount of $1,025,000 for fiscal year 2003 would provide 75 percent matching funds toward the following major activities:

- States Assistance Grants: at least $300,000 would be available to OLI's 49 state programs (there is no program in Hawaii) to carry out innovative community safety programs and expand public education and outreach efforts for key groups such as law enforcement, professional truckers, school bus drivers, and others. For the past several years, 35 to 40 state programs have received between $200,000 and $250,000 annually in state assistance grants through the FRA/OLI grant program, which has leveraged as much as $350,000 in annual contributions from non-Federal sources.

In fiscal year 2003, states will be encouraged to use these funds to develop comprehensive, long-term "community coalitions." Similar partnerships tested in Ohio, Texas, Maine and New Hampshire have illustrated the effectiveness of having both traditional and new partners working together through OLI to involve all local safety interests (mayor's office, law enforcement, emergency responders, firefighters, schools, community leaders, planners, traffic engineers, health professionals) in ongoing, community-based solutions to highway-rail safety and rail trespassing concerns.

- Educational Programs and Materials: approximately $200,000 in FRA funding would be used to create educational materials and important safety training programs for the public, and also for OLI's 49 state coordinators, 200 trainers and approximately 3,000 volunteers nationwide.

- OLI is pursuing new information technologies to enhance its safety education activities. In 2002, OLI is launching cutting edge, interactive educational programs on its website that will appeal directly to young people in middle school and high school, and successfully compete with other popular scholastic web destinations.

  In addition, OLI will be testing web-based highway-rail safety instruction for professional truckers, bus drivers, emergency responders and others, who would be able to view an educational video and complete a test on line in order to receive employer credit for continuing education.

- Public Service Campaign: FRA will contribute $350,000 toward OLI's five-year communications strategy, including the continuation of a new, comprehensive, multi-year public service announcement (PSA) campaign entitled, "Take Safety to Heart" that was launched in 2001, and which has already generated $10.6 million in contributed broadcast time and print advertising space. Developed in cooperation with FRA, the Federal Highway Administration, the railroad industry and representatives of the Nation's law enforcement community, the campaign includes television, radio, and print media components. In order to remain "fresh," however, two to three new television PSAs need to be produced and distributed beginning in 2002.

- OLI Program Delivery: A portion of the FRA grant, which represents about half of OLI's total budget commitment, will support staffing and administrative costs related to carrying out the activities listed above. Program delivery related to FRA funded projects is expected to run between $125,000 and $175,000.

INCREASED STATE PARTICIPATION IN OPERATION LIFESAVER ACTIVITIES

Mr. Rogers. What efforts is FRA undertaking, in conjunction with Operation Lifesaver, to increase states' participation? Are any of these efforts new?

[The information follows:]

FRA and Operation Lifesaver, Incorporated (OLI) have a longstanding, excellent tradition of close cooperation. FRA continues to support OLI through an annual grant which finances, on a 75/25 percent matching funds basis, a number of different activities. These programs include: (1) OLI's States Assistance Grant program increasing safety outreach to critical audiences; (2) OLI Regional Workshops and Symposia, encouraging the exchange of best practices and success stories between state programs; (3) Professional management training of State Coordinators through the biennial state Coordinator summit and State Coordinator Orientation workshops, increasing the efficiency of the Coordinators in managing their wide-ranging state programs; and (4) Development of new educational materials and training programs, increasing the impact and effectiveness of OLI's volunteers and their safety awareness efforts not only to prevent collisions at highway-rail grade crossings, but also to increase pedestrian safety and reduce trespassing on railroad property. OLI will continue the distribution of the award-winning public service announcement campaign, "Take Safety to Heart," which was developed in partnership with FRA, the Association of American Railroads, and the Nation's law enforcement community.

Some of the new activities through which FRA and OLI are working together to improve railroad safety are:

Using funding provided through FRA's grant, OLI will begin work on a new five-year strategic plan to meet new demands nationwide. Specifically, this plan is expected to reflect a growing trend toward the development of

community coalitions, using both traditional and non-traditional partnerships to create permanent public education outreach "teams" to implement OLI safety initiatives at the local level.

Community coalitions have been attempted in other parts of the country: Ohio's Stark County Coalition and the Houston schools Coalition were the first ones attempted, both within the last five years. The recent public education activities coordinated in Maine and New Hampshire to prepare for the new high-speed passenger rail service are similar. Currently, a new, more comprehensive "model" is being tested in California, with five to six community coalitions consisting of the mayor's office, all transportation providers and safety interests in the community, and the full range of OLI partners (railroads, highway departments, FRA, FHWA, FTA, etc.).

In addition to releasing a new safety video for emergency responders, OLI anticipates expanding its outreach efforts through technological advances that include new interactive training tools for professional truck drivers, bus drivers, teachers, students, and the general public.

GRADE CROSSING ACTIVITIES

Mr. Rogers. Please update the information on Operation Lifesaver and other grade crossing support activities found in last year's hearing record.

[The information follows:]

Activity	2000	2001	2002	2003
Total, FRA	**$8,469,000**	**$8,758,584**	**$8,957,257**	**$10,032,695**
Research & Development	**$1,085,000**	**$1,432,000**	**$1,435,000**	**$1,435,000**
Next Generation High-Speed Rail	**$3,897,000**	**$4,291,000**	**$3,500,000**	**$4,300,000**
Safety & Operations	**$3,487,000**	**$3,035,584**	**$4,022,257**	**$4,297,695**
• Operation Lifesaver, Inc.	$950,000	$422,745[2/]	$1,025,000	$1,025,000
• Public Awareness & Outreach	$37,000	$50,000	$50,000	$60,000
• Police Officer Detail	$165,000	$165,000	$165,000	$165,000
• Law Enforcement &	$50,000	$50,000	$50,000	$50,000

Activity	2000	2001	2002	2003
Trespass Prevention				
• Analysis of High Profile Crossings	$15,000	$15,000	$15,000	$15,000
• Airborne Survey of Crossing Elevations	$85,000	$100,000	$100,000	$100,000
• Highway-Rail Crossing Inventory & Data Bases	$80,000	$50,000	$50,000	$50,000
• Information Processing	$285,000	$296,400	$296,400	$296,400
• Regulatory Support Deleuw Cather	$40,000	$40,000	$40,000	$40,000
• Rails-with-Trails	$10,000	$10,000	$10,000	$0
• P, C, & B (approximate)	$1,770,000	$1,836,439	$2,220,857	$2,496,295

[1/] Due to a congressionally mandated rescission, the total grant was $1,022,745. $600K funded under Maglev Funds

FY 2003 REQUEST FOR INFORMATION TECHNOLOGY (IT)

Mr. Rogers. In total, how much funding is FRA requesting for information technology in fiscal year 2003? Please provide a table that shows how this funding will be split across hardware, software, communications, equipment, and contractor support for this year, if approved.

[The information follows:]

	FY 2003
Hardware/equipment	$ 257,000
Software	150,000
Communications	974,000
Contractor Support	494,000
Supplies	5,000
Total	$1,880,000

INFORMATION TECHNOLOGY PROGRAM COST

Mr. Rogers. Please identify for the Committee the total IT program cost, the schedule for completion, and what work will be done each year.

[The information follows:]

Total IT program costs, the schedule for completion, and the work that will be done each year in reference to FRA's overall five year Information Technology initiatives is noted below.

FY 2000 ($.689M)

- Stabilized the network infrastructure
  - Upgrade bandwidth to accommodate increase data traffic;
  - Upgrade WAN Port Speeds and Committed Information Rates (CIR);
  - Upgraded/refurbishment of network equipment – servers, communication servers, routers, switches;

- Migrated toward an intelligent network infrastructure which will broadcast status and fault conditions back to a central monitoring system.
  - Implement new network monitoring devices;
  - Assessed business processes and data flows for performance enhancement;
  - Piloted multiple Internet Access points in the field with firewall protection: (Cambridge, MA access point, Vancouver, WA access point, and Washington, DC access point);

- Development enhanced security systems and procedures;

- Began initial and detailed planning for disaster recovery program – integrated with Continuity of Operations Plan (COOP); and Initial Intranet development;

FY 2001 ($2.566M)

- Intranet development;

- Completed headquarters local area network redesign for enhanced performance and dynamic management;
- Completed ATM backbone initial and detailed transition planning;
- Began Regional local area network redesign for enhanced performance and dynamic management;
- Began headquarters configuration management (CM) deployment – systems, processes, and procedures;
- Began wireless remote access services initial and detailed transition planning; and
- Continued security upgrades.

FY 2002 ($4.147M)

- Complete ATM backbone implementation; load balance multiple Internet access points in the field;
- Begin voice (Voice Over Internet Protocol (VOIP)), data, video and multimedia integration implementation;
- Complete wireless remote access services deployment;
- Complete headquarters and regional configuration management deployment;
- Begin Headquarters and Regional desktop and mobile computing device standardization;
- Begin upgrade from Windows 98 to Windows 2000;
- Complete Regional local area network redesign for enhanced performance and dynamic management;
- Begin secure Virtual Private Network (VPN) initial and detailed transition planning;

- Complete implementation of a comprehensive Headquarters disaster recovery program – integrated with COOP; and

- Continuation of network monitoring and management systems and procedures.

FY 2003 ($1.88M)

- Pilot a data mart initiative;

- Complete voice, video, multimedia integration and tuning across the ATM backbone;

- Complete Headquarters and Regional desktop and mobile computing device standardization;

- Complete secure VPN implementation;

- Complete upgrade from Windows 98 to Windows 2000; and

- Complete implementation of a comprehensive Regional disaster recovery program – integrated with COOP.

INFORMATION TECHNOLOGY PROGRAM DELAYS

Mr. Rogers. Has this project encountered any technical delays or difficulties, to date? If so, please explain the problems to the Committee and discuss how they are being resolved.

[The information follows:]

This project has not encountered any technical delays or difficulties to date.

FRA-WIDE IT INITIATIVE

Mr. Rogers. Is this the last year of funding for FRA's IT initiative? If not, please detail what work is anticipated in 2004 and why this project has extended past its four-year timetable.

[The information follows:]

This is not the last year for FRA's IT initiative. In 2004, Data Warehouse implementation will begin. Our original IT enhancement program was scheduled to be completed by FY 2003, however, funding for the first year was not sufficient enough to begin the major initiatives within the overall project. The first year was spent stabilizing our existing infrastructure while beginning pilot testing to ensure that our original plans were still viable. Once we began the process, we felt it was more feasible to delay the project one year in order to complete all the major infrastructure changes before beginning the implementation of the data warehousing initiative.

CRASH TESTING PASSENGER CARS, COMMUTER CARS, AND LOCOMOTIVES

Mr. Rogers. Does FRA plan to continue crash testing passenger cars, commuter cars, and locomotives in 2003? Please describe for the Committee what testing you have conducted over the past two years and what is planned for the remainder of 2002 and in 2003.

[The information follows:]

Yes, FRA plans to continue passenger car crash testing in FY 2003. Over the last two years, FRA has conducted three in-line impact tests; a single car into a barrier, two coupled cars into a barrier, and a train-to-train impact test. Two simulated grade-crossing impact tests are scheduled for April or May 2002 in which a single rail passenger car will impact a large steel coil. Two different structural designs will be tested. A series of three impact tests of passenger cars modified with a crash energy management system are planned for FY 2003.

FRA also plans to continue locomotive crash tests in FY 2003. FRA has evaluated simulation models and conducted static tests for a variety of locomotive sub-structures, such as the short hood, collision posts, and anti-

climbers. In FY 2002, full-scale train-to-train collision tests will be initiated and continue in FY 2003. Five train-to-train tests are planned to evaluate rear end collisions, locomotive-to-locomotive override, head-to-head collisions at an angle, a grade crossing collision, and a regular head-on collision.

CRASH TEST RESULTS

Mr. Rogers. What findings have been noted as a result of these crash tests? What problems, if any, have been identified with passenger rail cars, commuter cars and /or locomotives? How is FRA addressing these findings?

[The information follows:]

FRA has found, from the three in-line impact tests of conventional passenger rail cars (including commuter cars), that: (1) high crash force is needed to initiate the crash, followed by lower force to continue the crash, (2) vertical car motion induced by the impact may affect the occupants in different ways, (3) coupled connections between cars can initiate lateral buckling of the train, (4) almost all the crash energy is focused on the leading cab car, and (5) an uncontrolled crash of a cab car can initiate an override of the locomotive. The tests confirmed our analysis that conventional cars designed with a strong buff load requirement may result in a large risk to the occupants in the leading car. FRA expects the passenger cars modified with the Crash Energy Management system to significantly reduce the risk to the occupants in the leading car.

The static locomotive tests have just begun. The strength of the S-580 locomotive collision post (Association of American Railroads Standard) that was statically tested exceeds the design requirements. Simulator runs for the upcoming full-scale collision tests will make it possible to get the maximum benefits from the testing.

FRA's Office of Safety is fully involved in the review of the test results. However additional tests are needed before FRA determines what, if any, changes to the existing regulations will be required.

FUNDING FOR CRASH TESTS

Mr. Rogers. How much funding is FRA requesting in 2003 to continue these crash tests? How does this compare to prior years? As part of this response, please provide the cost per crash test, annotated by equipment, software, contractor support, and analysis.

[The information follows:]

For FY 2003, FRA is requesting $6,450,000 for the Train Occupant R&D program. The additional $1,100,00 over FY 2002 funding is a transfer of funds from the Railroad Systems Safety program, which is to analyze passenger car accident survivability, and for fire safety, glazing, and emergency egress tests for passenger rail equipment. Prior year funding breaks out as follows:

FY 2000	$3,600,000
FY 2001	$5,338,000
FY 2002	$5,350,000

Of the sum requested in FY 2003, $3,500,000 is for passenger car safety activities and $2,950,000 is for locomotive safety activities.

For the Passenger Car Crash Tests, FRA is requesting $2,200,000 in 2003, about the same amount as the last three years, to continue these tests. Because each crash test is unique in its objective, scope and equipment involved, the cost, as well as its breakdown, of each is different. The first two passenger car impact tests cost about $2,000,000 each. In general, about half of the cost of each test was for data analysis, the other half for test vehicle preparation, instrumentation and conducting the test. FRA uses contractor support and technical support from the Volpe National Transportation Systems Center to conduct the tests. Software and equipment costs are minimal. All of the test equipment was donated by the rail industry. The estimated cost of the last and most complex test to date of train-to-train impact test series is about $2,500,000.

For the Locomotive Crash Tests, FRA is requesting $2,000,000 in FY 2003, the same amount as last year. FRA is estimating each full-scale test will cost approximately $750,000 to $1,000,000, mainly due to having fewer crash dummies in the locomotive test than for the passenger car tests. Data

analysis will cost about half of the total cost. FRA uses contractor support and technical support from the Volpe National Transportation Systems Center to conduct the tests. Software and equipment costs are minimal. Most of the test equipment is being donated by the rail industry. There will be costs to repair the damaged locomotive for each new test, and these are unknown because these costs will depend on the amount of damage to the test locomotive.

MARSHALL UNIVERSITY AND UNIVERSITY OF NEBRASKA

Mr. Rogers. Please provide the Committee with more details on the Marshall/Nebraska project contained in your budget request. What specifically are these universities studying? What is the length of this project? What results have you seen to date?

[The information follows:]

The Marshall/Nebraska project began as a result of an earmark in the FY 2000 appropriation, which directed FRA to grant the two universities $250,000 to develop an "integrated track stability assessment and monitoring system using site-specific geo-technical/spatial parameters and remote sensing technologies." Further earmarks in the FY 2001 budget allocated $750,000 to the Marshall/Nebraska project to "develop and test track stability data processing and feedback system". The FY 2002 appropriations have increased funding to the Marshall/Nebraska project to $1,600,000 and directed FRA to expand the work scope beyond track and structures to include human factors, equipment defects, and failures associated with existing train control methods. The FRA has held preliminary meetings with the University of Nebraska and agreements have been reached on a work plan that will include track and structures and human factors programs that should compliment existing research activities. Plans are underway for similar meetings with Marshall University will be held in the near future.

MARSHALL UNIVERSITY AND UNIVERSITY OF NEBRASKA PROJECT FUNDING

Mr. Rogers. Why is FRA decreasing the amount of funding for work being done at Marshall and Nebraska from $1,600,000 in fiscal year 2002 to $500,000 in fiscal year 2003?

[The information follows:]

The $1,600,000 in FY 2002 to Marshall and Nebraska Universities is a congressional earmark that exceeded the $500,000 requested by FRA in FY 2002. The $500,000 requested in FY 2003 does not represent a reduction from what was requested in FY 2002.

STATUS OF THE INTEGRATED RAILWAY REMOTE INFORMATION SYSTEM

Mr. Rogers. In 2002, Congress provided funding for the integrated railway remote information system. What is the status of the project?

[The information follows:]

FRA is working diligently to make this award in a manner consistent with congressional direction and in accordance with acquisition regulations. FRA has met with Transportation Technology Center Inc. (TTCI) representatives to discuss the objectives and approach to be followed. TTCI has provided FRA with its request for data confidentiality. FRA is currently evaluating these requirements relative to acquisition regulations and the rights of the public under the Freedom of Information Act. FRA expects these issues to be resolved and an award made in the near future.

EVALUATION OF THE INTEGRATED RAILWAY REMOTE INFORMATION SYSTEM

Mr. Rogers. When does FRA plan to evaluate this initiative as directed by the conference report?

[The information follows:]

FRA will monitor the project undertaken with the funding provided in the FY 2002 appropriation and report to Congress as soon as the results become available. The statement of work, which FRA anticipates will be finalized by June 2002, will identify the major project milestones and reporting requirements.

BALTIMORE RAIL INFRASTRUCTURE STUDY

Mr. Rogers. In 2002, Congress provided funding for a railroad infrastructure study in Baltimore. What is the status of this study. When do you anticipate it being completed? What have you found to date?

[The information follows:]

FRA has met with the other parties to this study identified in the Conference Report – Maryland DOT, Amtrak, CSX Corporation and Norfolk Southern Corporation, retained a contractor to undertake the study, and has begun an internal review of past initiatives to address passenger and freight rail movements through Baltimore including those activities associated with the Northeast Corridor Improvement Project. At the present time, FRA is attempting to identify the willingness of these parties to participate in the funding of the study. This is a critical issue since the total amount of funding available will determine the scope and schedule of the study. At this stage, therefore, the completion date is uncertain and FRA has no results to report to the Committee.

FREIGHT RAIL STUDY ALONG I-81 AND I-95 CORRIDORS

Mr. Rogers. Similarly, in 2002, Congress provided funding for a freight rail study of the I-85 and I-95 corridors. What is the status of this study? Are the states of Tennessee and Virginia participating in this work? When do you anticipate it being completed? What have you found to date?

[The information follows:]

The Virginia Department of Rail and Public Transportation (DRPT) has assumed the leadership of the potential non-federal participants in this study and is presently working with the Tennessee Department of Transportation and the Norfolk Southern Corporation to develop agreement on a proposed scope for the study. While FRA has met with DRPT and reviewed preliminary drafts of the statement of work, FRA is presently awaiting final decisions by these non-Federal participants on both these important issues. DRPT expects to complete the study by the end of calendar year 2002; however, there is not yet an agreed to schedule for the effort. At this preliminary stage, there are no results to report.

FY 2002 SECURITY INITIATIVES

Mr. Rogers. How much funding does FRA plan to spend on security initiatives in 2002? As part of this answer, please discuss your ongoing R&D work in railroad systems and infrastructure security issues.

[The information follows:]

Approved funding for FY 2002 includes $400,000 in the base for Research and Development, and the $1,000,000 in supplemental funding provided to FRA in the Department of Defense (DOD) appropriations.

Of the $1,000,000 in supplemental funds, a total of $750,000 is being used to hire 4 new employees and to increase inspector travel.

The remaining $250,000, combined with the $400,000 in the base, results in a total of $650,000 being spent by FRA on R&D security initiatives in FY 2002. Ongoing R&D work in railroad systems and infrastructure security issues includes an evaluation of the recent railroad vulnerability assessment performed by Association of American Railroads and its member railroads.

FRA will continue to research the application of existing security technologies to railroads. For instance, FRA has been working with the Office of the Secretary (OST), Amtrak, and the Federal Aviation Administration to evaluate portable bomb/explosive detection and trace technology for potential use in detecting such hazards on the Nation's railroads, particularly on passenger trains and in rail stations. Also, FRA is currently working with OST to establish a partnership project between the DOD's Technical Support Working Group (TSWG) and FRA to develop Railroad Inspection Guidelines for both freight and passenger train security. TSWG is providing $175,000 to fund this project.

FY 2003 SECURITY INITIATIVES

Mr. Rogers. In total, how much funding are you requesting for security initiatives in 2003? As part of this answer, please detail your planned R&D activities under railroad systems and infrastructure security.

[The information follows:]

The total funding requested for security in the FY 2003 budget is $1,075,000. Of these funds, $675,000 will be used to fund the costs associated with the 4 positions and a portion of the travel (approximately $100,000) approved in the FY 2002 supplemental appropriation.

The remaining funds ($400,000) are requested for R&D security initiatives. For FY 2003 and beyond, there are a variety of proposed R&D activities under the railroad systems and infrastructure security sub accounts. In FY 2003 FRA will concentrate on further research into the use of explosive detection devices, along with passenger screening technology and vulnerability assessments. Portable bomb/explosive detection and trace technology also will be explored to detect such hazards on passenger trains. In addition, advanced yard trespassed detection technology will be evaluated. These efforts will be coordinated with the Federal Aviation Administration and the Transportation Security Administration to ensure the railroad industry takes advantage of all promising technologies.

PROBLEMS ARISING FROM SEPTEMBER 11

Mr. Rogers. What are the key problems that have arisen since September 11th that suggests FRA should spend more money in the security area?

[The information follows:]

Fortunately, there have not been any major rail related problems or incidents that have arisen since September 11th. However, September 11th was a profound wake-up call stressing the critical importance of maintaining a pro-active role in the prevention of terrorism in the rail environment. Particularly, since aviation is significantly enhancing air travel security, other modes of transportation may become more attractive to terrorists. The rail environment may be seen as more of a "soft target". With thousands of miles of open unprotected track and shipments of potentially life threatening hazardous materials and unprotected food products, FRA must work to ensure that the movements of the Nation's cargo and people are performed in a safe, secure, and efficient manner.

LOCOMOTIVE RESEARCH AND DEVELOPMENT

Mr. Rogers. Please detail for the Committee how FRA will use $675,000 for locomotive research and development. Why is this funding necessary? If this a multi-year investment, and if so, are any of the railroads cost-sharing in the endeavor?

[The information follows:]

FRA plans to spend $400,000 for a cooperative demonstration project with a railroad and a manufacturer of a new technology to reduce fuel consumption significantly and therefore reduce emissions. The funding will permit installation of equipment on locomotives providing the locomotive engineer with real time train handling guidance, which will reduce the in-train forces and fuel consumption. This funding is necessary to undertake the demonstration project, which will result in fuel savings. It is anticipated that the railroad and manufacturer will provide some matching resources.

FRA plans to spend the remaining $275,000 to assess the technical and economic feasibility of alternative fuels and top-of-rail lubrication systems. Laboratory testing of one or two systems may be undertaken.

LOCOMOTIVE RESEARCH AND DEVELOPMENT IN THE RAIL INDUSTRY

Mr. Rogers. Why aren't the freight rail industry or manufacturers of rail equipment doing this research?

[The information follows:]

The FRA is undertaking this research, rather that the freight rail industry or manufacturers of rail equipment, because this research is aimed at the public benefits of reducing emissions, improving fuel efficiency, and reducing the Nation's reliance on imported petroleum.

FRA EXPERTISE IN LOCOMOTIVE RESEARCH AND DEVELOPMENT

Mr. Rogers. What expertise does FRA have in this area and how will you do this work?

[The information follows:]

The FRA has a program manager and an office director who have extensive experience with locomotives and they will monitor this work, which will be conducted by contractors.

TRANSPORTATION TECHNOLOGY CENTER SUPPORT

Mr. Rogers. Why do you propose a $500,000 increase in your TTC support? How will these funds be used?

[The information follows:]

The $500,000 increase in Transportation Technology Center (TTC) support would fund several items that were deferred from prior years. When the high-speed test track was rebuilt in 1998, only part of the catenary wire was replaced. Since then, the wire has worn considerably from endurance tests

with Amtrak's *Acela* and other trains. Road and parking lot repairs were deferred to enable roof repairs on some of the buildings.

The total of $925,000 requested for TTC support would fund the following:

$200,000	Replace the roofs on the testing lab and the program management building.
100,000	Bring fire sprinkling system in the program management building up to current building code requirements.
250,000	Rebuild and repair old portion of catenary on the high-speed test track and replace worn power pick-up (contact) wiring.
250,000	Road and parking lot repairs and repaving.
125,000	Engineering and design for a maintenance building to support testing on the high-speed test track.

A maintenance building is needed to service trains being tested on the high-speed test track. The $125,000 requested will provide the design and engineering work for this facility to properly plan for construction.

PTC IN R&D AND NGHSR

Mr. Rogers. Why is FRA requesting $1,250,000 for positive train control tests and evaluations under the research and development account when this work is being funded out of the next generation high-speed rail account? Please detail the differences between work in the two accounts? What would happen if Congress did not fund this endeavor?

[The information follows:]

FRA is requesting $1,250,000 in the research and development account to carry out independent tests and evaluations of the positive train control demonstration projects being demonstrated under the Next Generation High-Speed Rail program. The Next Generation High-Speed Rail program is funding the development and deployment of positive train control systems in Michigan and Illinois to demonstrate the feasibility of applying the technology to achieve higher speeds and is working with the railroad industry to achieve system-wide interoperability standards and methods for Positive Train Control (PTC) systems. The work to be carried out under the Research and Development account in FY 2003 will be a detailed assessment of the safety and technical aspects of various train control

technology alternatives using an advanced computer model to attain quantitative safety estimates. This "baselining" of train control approaches is mandated by the new FRA rule for microprocessor-based train control systems developed in partnership with the railroads, rail labor, supply organizations, and others under the Railroad Safety Advisory Committee (RSAC) process.

The time required and the costs of performing safety analysis such as proposed in this project are critical deterrents to the widespread deployment of PTC systems. Funding this work will remove a major impediment to ultimate PTC deployments. If Congress does not approve these funds, the deployment of PTC will continue to be hindered.

PTC EVALUATIONS

Mr. Rogers. Does this duplicate train control evaluations being done at TTC?

[The information follows:]

No, it does not. The work being carried out at TTC consists of Positive Train Control (PTC) component evaluations and the testing of various radios, radio frequencies, and communications protocols which will be crucial for successful deployment of PTC as well as general operations of the railroads. The work proposed in the research and development account for FY 2003 is for computer modeling to generate quantified risk assessments for complete train control system technologies in their railroad operating contexts.

RESEARCH AND DEVELOPMENT PROJECTS

Mr. Rogers. Please provide a table identifying the costs associated with each Railroad Research and Development program (i.e. equipment, operations, and hazardous materials; track, and vehicle track interaction; safety of high-speed ground transportation; and research and development facilities and equipment). This table should specify the cost of each activity within the programs and briefly describe the purpose and status of each activity, similar to that shown in last year's hearing record.

[The information follows:]

FEDERAL RAILROAD ADMINISTRATION
FY 2003 R&D PROJECTS
(Dollars in Thousands)

Program Activity/Project	FY 2003 Request
RAILROAD SYSTEM ISSUES	
Railroad Systems Safety	$1,900
Perform research to enhance high-speed rail safety for equipment performance, track performance, train control, system operations and test equipment; evaluate the performance of high-speed rail systems with respect to accident avoidance and accident survivability; evaluate effect of noise in HSR operations; evaluate Electromagnetic Field (EMF) effects; investigate improved weather forecasting methods to avoid potential accidents.	
Performance-Based Regulations	$ 250
Evaluate methods for developing performance-based regulations for their applicability to FRA's regulatory safety process.	
Railroad Systems and Infrastructure Security	$ 400
Evaluate new security technologies for application to the railroad environment in the areas of computer security, vandalism, and terrorist threats.	
Locomotive R&D	$ 675
Examine promising fuel and engine technologies and advance specific innovations that promise exceptional efficiency and environmental benefits	

by assessing the technologies that could improve energy efficiency and reduce environmental effects for railroads.

Subtotal, Railroad System Issues $3,225

HUMAN FACTORS

Train Operations $2,928
Evaluate vigilance monitoring technologies; develop and validate methodologies to measure workload stress and fatigue; classify scheduling, staffing, and work environment factors; research crew resource management and conduct task analyses; develop effective teaming strategies; analyze unsafe behavior and practices; develop improved systems to improve safety culture; research the effect of workload transition on safety; design innovative knowledge display interface systems; study high-speed rail human factors issues; and evaluate PTC system design relating to physical and cognitive limitations of the human-machine system.

Yard & Terminal $ 550
Study maintenance-of-way job characteristics; examine ergonomic design of yard and terminals with a focus on how those issues contribute to human factors yard and terminal incidents and accidents.

Subtotal, Human Factors $3,478

ROLLING STOCK AND COMPONENTS

On-Board Monitoring Systems $1,680
Develop and enhance sensors, conduct feasibility tests via a 5-10 car Advanced Train Demonstration; demonstrate improved monitoring capability of ECP brake system, brake piston travel surveillance, ride quality, derailment detection, wheel overload conditions, advanced air and electronic coupler, advanced parking brake with remote release, and hot bearing detection; develop a train dynamic simulator model.

Wayside Monitoring Systems $ 532
Evaluate new generation of equipment defect detection systems; evaluate prototype wayside inspection station; conduct safety analysis of wayside detector data.

Material & Design Improvements $ 275
Evaluate nondestructive wheel test methods to develop in-service wheel inspection methods; develop in-situ0 detection systems; perform studies of wheel stress and thermal capacity; evaluate wheel tread build up.

Subtotal, Rolling Stock and Components
$2,487

TRACK AND STRUCTURES

Inspection Techniques $1,525
Improve capability to detect internal rail defects and track hazards; deploy FRA track-testing vehicle to assess performance-based method of inspecting track gage strength; develop and demonstrate methods to detect and prevent weak vertical track support; conduct field testing to measure and correlate relevant track parameters for improved condition assessment, and to determine optimum inspection and maintenance frequency; develop non-destructive methods for safety inspection of steel and timber railroad bridges; study the feasibility of remote monitoring of bridge structural integrity and safety; develop methods to automate the interpretation and presentation of inspection data; develop and apply probabilistic inspection methods.

Material and Component Reliability $1,100
Develop methods for reducing rail wear, fatigue, and other rail failures. Assess effects of rail maintenance grinding and lubrication on rail life; assess new rail welding processes to reduce field weld failures; assess the safety of new track and bridge materials and components; apply risk analysis methods to better predict component failures.

Track and Structure Design and Performance $ 1,100
Assess effects of heavier axle loads on track safety and performance, on primary routes and on short lines; develop track degradation models; determine criteria and methods to upgrade existing track to effectively support high speed passenger and conventional freight service; improve capability to understand and control factors which cause and resist track

shift, buckling, and pull-aparts; determine methods for constructing and maintaining track transition zones to provide improved performance and resistance to deterioration; develop performance-based track standards.

University of Nebraska & Marshall University $ 500
Develop and test a track stability data processing and feedback system for track safety.

Subtotal, Track and Structures
$ 4,225

TRACK AND TRAIN INTERACTION

Derailment Mechanisms and Prevention $ 1,700
Assess vehicle safety due to track geometry defects and track degradation; assess vehicle/track interaction safety due variations in wheel/rail forces and contact conditions; study wheel climb, track panel shift, and other related derailment modes; study effects of track lubrication and other friction modifiers on derailment safety; assess vehicle/track interaction safety in turnouts and ways to reduce the high forces they generate.

Vehicle /Track Performance $ 1,650
Provide research and other technical services for the development and implementation of performance-based vehicle/track interaction, track geometry, and track strength safety standards; assess safety of vehicle/track interaction under axle loads of 36 tons and higher; develop modeling and simulation tools for predicting vehicle/track interaction; analyze the rates of vertical and lateral vehicle motions that impacts the ride safety of seated, walking, and/or lying passengers.

Subtotal, Track and Train Interaction
$ 3,350

TRAIN CONTROL

Train Control Infrastructure Studies $ 1,250
Foster implementation of infrastructure-related devices for advanced train control systems and technologies.

Subtotal, Train Control

$ 1,250

GRADE CROSSINGS

Grade Crossings – Human Factors $ 835
Evaluate passive crossing safety and commuter crossing safety; evaluate optimal acoustic warning systems; evaluate driver behavior at highway-rail grade crossings for freight, commuter rail, and high-speed operations; evaluate driver education programs; review grade crossing data sources and analyze accident causes; develop human factors guidelines for ITS grade crossing applications.

Grade Crossings – Infrastructure $ 600
Provide support to the development and dissemination of national guidelines for grade crossing hazard reduction, ITS integration, and field operational tests of promising obstacle/intruder detection technologies for grade crossings and along railroad rights-of-way.

Subtotal, Grade Crossings

$1,435

HAZARDOUS MATERIALS TRANSPORTATION

Hazmat Transportation Safety $ 400
Evaluate tank car service environment, including accident forces; study tank car reliability; evaluate new tank car designs for 286,000 GRL tank cars; evaluate safety of transporting radioactive materials by rail.

Damage Assessment & Inspection $ 350
Evaluate new and innovative non-destructive techniques for inspecting tank car welds and the tank shell for cracks and flaws, especially for insulated and jacketed tank cars.

Tank Car Safety $ 250
Evaluate new tank car steels, tank car closures, intermodal tank integrity and thermal integrity of tank cars; evaluate tank car fatigue and critical flaw size for damage tolerance analysis; develop and evaluate tank car puncture models.

Subtotal, Hazardous Materials Transportation
$1,000

TRAIN OCCUPANT PROTECTION

Locomotive Safety $2,950
Validate freight and passenger locomotive models; evaluate crashworthiness of current designs; conduct full-scale override collision tests, including new anti-climber designs; conduct demonstrations of improved cab emergency egress in accident situations; evaluate crashworthiness of improved fuel tank designs; investigate ride quality and noise issues; investigate cab interior enhancements.

Passenger Car Safety/Performance $3,500
Analyze and test cab car structures for crashworthiness; evaluate design concepts for crash energy management (CEM); test train to train and grade crossing CEM equipment; analyze accident survivability by evaluating equipment performance; conduct fire safety, glazing, and emergency egress tests.

Subtotal, Train Occupant Protection
$6,450

R&D FACILITIES AND TEST EQUIPMENT

TTC Support $ 925
Provide site improvements at the Transportation Technology Center to maintain a state-of-the-art facility, to meet regulatory requirements, and to ensure that it can adequately support Government research requirements.

Track Research Instrumentation Platform $ 500
Implement capabilities for ultrasonic inspection, gage restraint measurement, rail profile and deflection measurement, wheel force prediction, and precise positioning on an FRA track research vehicle

Subtotal, R&D Facilities and Test Equipment
$1,425

FY 2003 USER FEES

Mr. Rogers. The fiscal year 2003 proposes railroad users fees totaling $59,000,000. Congress has repeatedly denied imposing these user fees. Why does the administration continue to push these fees?

[The information follows:]

The Administration believes collecting railroad user fees is the fairest method for paying for the cost of this program. While Congress has not re-instituted user fees over the past several years, Congress did approve a program for fiscal years 1991-1995 that was successfully implemented by the Department and which appropriately placed the responsibility for funding the cost of the railroad safety program with the program's primary beneficiaries, the railroad industry. The Administration is hopeful that Congress will adopt this recommendation and re-establish the railroad safety user fee program.

USER FEE EQUITY

Mr. Rogers. Even though the railroads paid the user fee through fiscal year 1996, now they fiercely oppose the reinstatement of this fee because they believe it is an inequitable tax. In a recent letter to the Committee, the Association of American Railroads wrote "*these taxes would divert capital funds that are absolutely necessary for investment in railroad infrastructure and equipment, both of which have a direct bearing on safety and service. At a time when railroads are being called upon to meet growing demands for freight and passenger traffic, such a tax would be counterproductive and inconsistent with the goals of national transportation policy. In fact, similar agencies, such as the Occupational Safety and Health Administration, do not collect user fees from those whom they regulate*". How do you respond to this argument?

[The information follows:]

To the best of our knowledge, the railroad industry has never supported the user fee program, even during the initial period when the program was first established in 1991 through 1995. Clearly, if the railroad industry is assessed $59,000,000 to cover a portion of the cost of the railroad safety program in fiscal year 2003, these funds will not be available for other

expenditures by the individual railroads, some of which may well have been spent on capital projects. Recognizing that the railroad safety program is an important one, the issue then becomes one of appropriately allocating responsibility for the program cost. Since the railroad industry is the most direct beneficiary of the program, the Administration has recommended that it bear the responsibility for a portion of the cost of the program, the $59,000,000 included in the Administration's budget request.

With respect to other agencies or programs, user fee programs exist across the government. Overall, user fees collections were $133.7 billion in 2001 and are estimated to increase to $141.6 billion in 2002 and $154.3 billion in 2003. Within the Department's fiscal year 2003 request, in addition to railroad safety inspections, user fees are proposed for hazardous materials transportation safety activities and Coast Guard commercial navigation assistance. These programs have been selected for funding by user fees because the program benefits accrue to a limited number of private individuals or groups rather than broadly to the public at large.

COST SHARING

Mr. Rogers. Please provide a table showing the research and development cost sharing over the past five years, by category (equipment, operations, and hazardous materials; track and vehicle track interaction; safety of high speed ground transportation; and research and development facilities and equipment). Also, explain what the cost-shared money was used for.

[The information follows:]

The following information lists and explains the estimated R&D cost sharing with non-Federal entities for fiscal years 1998 through 2002. The amounts of cost sharing include estimated values of services, equipment, and materials contributed in-kind to the projects.

R&D COST SHARING
(In thousands of dollars)

Equipment, Operations, and Hazardous Materials

FY	Federal Funds	Non-Federal Funds	Total Funds	Percent Non-Federal
1998	$5,659	$2,296	$7,955	29
1999	$7,468	$1,300	$8,768	15
2000	$9,300	$ 829	$10,129	8
2001	$11,424	$1,222	$12,646	10
2002	$12,650	$ 875	$13,525	6

The majority of the cost sharing under this program in FY 1998 and FY 1999 was the industry's contribution of equipment for the advanced braking and the bearing defect detection projects, which were completed. Industry participated with labor support for the wayside defect detection project. Other cost sharing includes in-kind contributions of technical expertise, test dummies, instrumentation, and equipment and related shipping costs for test projects under the locomotive and passenger car crashworthiness programs. Some in-kind contributions of time and training materials occurred in the data analysis for the Switching Operations Fatalities Analysis (SOFA) project. In the human factors program, there has been increased participation of industry in site visits conducted as part of the research efforts. FRA has and continues to participate on a cooperative basis with the tank car industry to develop damage tolerance techniques for tank cars and to evaluate the tank car-operating environment.

Track and Vehicle Track Interaction

FY	Federal Funds	Non-Federal Funds	Total Funds	Percent Non-Federal
1998	$6,950	$5,750	$12,700	45
1999	$6,950	$5,640	$12,590	45
2000	$7,864	$5,299	$13,163	40
2001	$8,282	$4,695	$12,977	36
2002	$10,425	$4,839	$15,264	32

More than half of the cost sharing under this program is provided by industry contribution to the Facility for Accelerated Service Test. Other significant cost-sharing are provided by industry support to the bridge research and rail flaw detection programs and by individual railroad contributions of train crews for test operations of FRA's Gage Restraint Measurement System and T-16 cars. The University of Massachusetts is cost-sharing on the use of ground penetrating radar for track subsurface inspection and West Virginia University is also cost-sharing on the use of composites in wood tie and bridge rehabilitation projects.

Railroad Systems Issues (Safety of High-Speed Ground Transportation)

FY	Federal Funds	Non-Federal Funds	Total Funds	Percent Non-Federal
1998	$4,650	$ 60	$4,710	1
1999	$4,800	$ 246	$5,046	1
2000	$4,800	$ 236	$5,036	1
2001	$4,640	$ 60	$4,700	1
2002	$5,150	$ 60	$5,210	1

Cost sharing under this program is limited due to the nature of the program. A majority of the work to date has been to conduct safety assessments of foreign high-speed rail technologies in support of rulemaking for the FRA's Office of Safety. This type of research generally does not receive cost sharing from industry. In FY 2002 limited cost sharing has been continued for passenger car crashworthiness and fire safety testing. In addition, FRA continues to leverage our technical expertise with the Department of Energy to support the transportation environmental characterizations of electromagnetic fields ($100,000 per year for 3 years); and with FAA support to monitor non-ionizing radiation safety issues. These programs are not direct cost-sharing. Finally, it has not been determined if the two earmarked projects in FY 2002 will include cost sharing.

R&D Facilities & Equipment

FY	Federal Funds	Non-Federal Funds	Total Funds	Percent Non-Federal
1998	$770	$1,040	$1,810	57
1999	$500	$ 901	$1,401	64

2000	$500	$1,000	$1,500	67
2001	$923	$ 628	$1,551	40
2002	$925	$ 790	$1,715	46

A portion of FRA's research funding supports projects that are conducted at the Transportation Technology Center (TTC) near Pueblo, CO. This facility constitutes a world-class proving ground encompassing over 50 miles of rail track and other test facilities. TTC is operated for the FRA under a Care, Custody, and Control contract with Transportation Technology Center, Inc. (TTCI), a wholly owned subsidiary of the Association of American Railroads. Under this contract, TTCI is required to maintain the facility, using funds from overhead rates charged to non-FRA projects. Therefore, the amount of cost sharing can vary from year to year.

USER FEES

Mr. Rogers. As identified by the previous question, railroads already share the costs of the research and development program with FRA. Wouldn't enacting this user fee be double billing?

[The information follows:]

The beneficiaries of FRA's research and development program are railroad companies (freight, intercity passenger, and commuter), railroad employees, railroad passengers, and freight shippers. It is appropriate that these beneficiaries pay for the cost of the FRA research and development program, and the Administration believes that the user fees are the appropriate means to recover those costs.

NORTHEAST CORRIDOR IMPROVEMENT PROGRAM

Mr. Rogers. Last year, FRA had over $3,000,000 in unobligated balances for the Northeast Corridor Improvement Program but believed that these funds would be obligated prior to the end of 2001. Your current budget request shows that $3,000,000 will be obligated in FY 2002, but will remain as an obligated balance at the end of fiscal year 2003. The work is done on this program. Why do we have an obligated balance in this program? What is this money set aside for?

[The information follows:]

As of April, 2002, the FRA continues to maintain a $3,000,000 unobligated balance in the Northeast Corridor Improvement Program account as a reserve pending the final outcome of a law suit brought by the Massachusetts Bay Transportation Authority (MBTA) relating to design errors at South Station. The MBTA first filed suit in 1989 with the United States Court of Federal Claims (Case # 283-89). Following a decision from this Court, considered to be adverse to its interests, the MBTA appealed the matter to the United States Court of Appeals for the Federal Circuit (case # 00-5071). The Federal Court reversed and remanded the case for assessment of damages. The Court of Federal Claims (Judge Weinstein) will conduct an evidentiary hearing to determine damages during the spring of 2002. At the end of this process, final damages will be set and the remaining balance in the NECIP account will be obligated and expended.

STATUS OF THE RHODE ISLAND RAIL DEVELOPMENT PROJECT

Mr. Rogers. What is the status of the Rhode Island rail project? Please describe for the Committee the work that is completed, ongoing, and still to begin as well as include a timetable for the project that shows original and current timetables.

[The information follows:]

The status of the Rhode Island Rail Project is as follows:

- The track undercutting program (lowering track at four overhead bridges) has been completed. Several hundred feet of track have been

shifted to provide required horizontal clearance between the tracks used by high-speed intercity trains and those used by freight trains. Bridge jacking, an alternative to track undercutting, has been completed at Garnet Street, and a new bridge was built at Lincoln Avenue.

- Jacking of the Rocky Hollow Bridge is underway. Construction of a new bridge at Route 10/Cranston, largely funded by FHWA, continues on schedule. The "boat section", a 2,700-foot concrete structure being built in an area where sub-soil and bridge stability issues prohibit undercutting, and numerous shifts in track and clearance work around Providence Station, will be advertised within the next few weeks. Both of these projects have slipped a few months since answers to similar questions were provided last year. The Wellington Avenue railroad bridge, which presented unique environmental challenges, and track shifts and clearance work near Warwick station will be put out for construction bid late this spring.

- The goal of the Freight Improvement Project is to complete all work by late 2003, approximately 18 months later than the completion date of the original schedule. Permitting issues relating to construction in environmentally sensitive areas and design changes to reflect the growing likelihood that commuter rail service might dramatically increase train frequencies are responsible for much of the delay.

RHODE ISLAND RAIL

Mr. Rogers. What is the current unobligated balance for this project?

[The information follows:]

The entire $54,900,000 appropriated for the Rhode Island Freight project has been obligated. The unobligated balance is zero.

RHODE ISLAND RAIL UNPAID OBLIGATIONS

Mr. Rogers. Why do you project $10,417,000 in unpaid obligations at the end of fiscal year 2003? When will it be spent and on what?

[The information follows:]

Based on the pattern of outlays for this project and the current estimate that construction will not be completed until late in calendar year 2003, it is expected that approximately $10,417,000 will remain as an unpaid obligation in FY 2003.

CURRENT COST ESTIMATE OF PENNSYLVANIA STATION PROJECT

Mr. Rogers. Last year, the Pennsylvania Station redevelopment project was estimated to cost $815,000,000 to complete, an increase of almost $27,000,000 from fiscal year 2001. What is the current cost estimate? If it is higher than $815,000,000, please explain why.

[The information follows:]

The current cost estimate for the Pennsylvania Station Redevelopment Project remains at approximately $815,000,000.

PENNSYLVANIA STATION TIFIA LOAN EXTENSION

Mr. Rogers. In September 1999, the Department of Transportation announced that the Pennsylvania Station redevelopment project was receiving a TIFIA loan. In September 2001, the Department had to extend the TIFIA loan for 6 months because PSRC was unable to meet all the requirements to access the loan. What is the status of the TIFIA loan? Has PSRC met all the requirements to gain access to the loan? If not, what are the outstanding issues?

[The information follows:]

The PSRC has recently requested an additional extension of its TIFIA loan agreement, since it has not yet been able to satisfy the conditions of that

agreement. The Department of Transportation is reviewing the request and expects to respond to PSRC in the near future.

The outstanding issues of the TIFIA loan agreement include: the submission to the Department of a credit rating agency letter identifying the senior debt of the project as investment grade; evidence that the senior debt has been issued; a detailed plan of finance; executed leases with the Port Authority of New York and New Jersey, Amtrak, and the US Postal Service; and executed developer and operating agreements and grant agreements, all in a form satisfactory to the Department. Until these funding requirements are met, there will be no TIFIA loan disbursements.

PENNSYLVANIA STATION TIFIA LOAN EXTENSION

Mr. Rogers. Will the Department need to extend the loan again?

[The information follows:]

The Department is reviewing the Pennsylvania Station Redevelopment Corporation's (PSRC) request for an additional extension of its TIFIA loan agreement and expects to respond to PSRC in the near future.

STATUS OF PENNSYLVANIA STATION FUNDING

Mr. Rogers. Has all project funding been secured or must further actions be completed to obtain the needed funding? What funding is still not yet secured?

[The information follows:]

A number of significant actions are required by the Pennsylvania Station Redevelopment Corporation before all project funding is secured. The Metropolitan Transportation Authority grant agreement for $35 million has yet to be executed, the Urban Development Corporation senior bond funding for up to $155 million still must be issued, and the funding requirements contained in the TIFIA loan agreement must be satisfied before the TIFIA loan funds are made available.

ACTIONS NEEDED TO COMPLETE PENN STATION PROJECT

Mr. Rogers. What major actions has PSRC undertaken in the past year to advance the status of this project? For example, have leases been signed with the landlord or any of the principal parties? Has the bond rating been obtained? Has a finance plan been completed? Has pre-construction work begun? Have a developer or a builder been selected yet?

[The information follows:]

Last spring, the PSRC received a letter from the United States Postal Service (USPS) stating that its Board of Governors had instituted a freeze on capital spending and was suspending all further commitments for facility projects for the balance of the fiscal year. The decision was unrelated to the merits of any particular project but reflected a need to address financial challenges facing USPS system-wide. As the Penn Station/Farley Project could not proceed without the cooperation of USPS, the owner of the James A. Farley Post Office building, PSRC internal activities (e.g. lease negotiations and signings, bond ratings, and financings) were put on hold.

During the months that followed, PSRC developed a strategy to bring the USPS back into the Project. After months of negotiations, USPS and PSRC are close to completing an agreement that will allow the Project to proceed with USPS's participation. The next step is for the parties to draft a new Memorandum of Understanding (MOU) to replace the original August 7, 1998 MOU. PSRC expects this to be completed in the spring of 2002.

At the same time, Amtrak and PSRC are negotiating a new agreement to govern Amtrak's participation in the Project. The PSRC expects this to be completed in the spring of 2002. The positive negotiations between PSRC and USPS have allowed PSRC to begin to focus on other aspects of the Project.

CONSTRUCTION SCHEDULE FOR PENN STATION REDEVELOPMENT PROJECT

Mr. Rogers. What is the current construction schedule for this project? Please compare it to an earlier schedule, which anticipated that construction work would begin in the fall of 2000, with a construction period to last about 48 months.

[The information follows:]

It is now anticipated that construction will begin in 2002 with work scheduled to be completed in about 48 months. The PSRC construction schedule for the project was overly optimistic and based, in part, on the anticipation of early awards of contracts to develop, build, operate and maintain the facility. This approach did not generate sufficient interest in the construction community. As a consequence, PSRC pursued an alternative strategy of using a single consortium as a developer/operator and that consortium has now been selected.

PENSYLVANIA STATION REDEVELOPMENT PROJECT UNOBLIGATED BALANCE

Mr. Rogers. According to your budget, the project will have an unobligated balance of $39,957,000 at the end of fiscal year 2003. Why?

[The information follows:]

FRA and the PSRC have discussed the allocation, possible scope of work and budget for the unobligated balance of $39,957,000. FRA anticipates entering into grant agreements with PSRC, once PSRC completes its negotiations with the United States Postal Service.

PENNSYLVANIA STATION REDEVELOPMENT PROJECT SCOPE OF WORK

Mr. Rogers. When and what will these dollars be spent on?

[The information follows:]

The current project scope includes: design and construction for fire and life safety improvements in the Farley building; design and construction for the passenger platforms below the building; and design, construction and contingencies for renovation of the Farley building into an intermodal station. Project funds will be expended upon completion of grant agreements between the FRA and PSRC.

FRA'S WORK TO EXPEDITE TUNNEL SAFETY REPAIRS

Mr. Rogers. Is FRA working with Amtrak, New Jersey Transit, and Long Island Rail Road to expedite fire and life safety repairs in the six river tunnels adjoining the Pennsylvania Station?

[The information follows:]

FRA has been working with Amtrak to identify priorities for fire and safety repairs in the New York tunnel. Amtrak, New Jersey Transit and the Long Island Railroad have developed plans and schedules which have been reviewed by FRA and are now part of the discussion between FRA and Amtrak to define the scope of work to be undertaken with the $100 million appropriated for this purpose in the FY 2002 Department of Defense Appropriation Act. FRA anticipates entering into a grant agreement with Amtrak to fund New York tunnel fire and life safety improvements from these funds in the near future.

CHALLENGES TO EXPEDITING FIRE AND LIFE SAFETY REPAIRS

Mr. Rogers. What do you believe are the biggest challenges to expediting the fire and life safety repairs? Please do not limit your answer to cost issues.

[The information follows:]

In addition to the cost and source of funding, the next most significant challenge to expediting the fire and life safety modernization of the tunnels is the limited time available to undertake the work. The tunnels are among the most intensively used transportation facilities in North America and are an essential component to the mobility and economic vitality of the New York City region. There are only short windows of time in each day when major work activities can be undertaken in the tunnels without massive disruption of commuter and intercity passenger transportation. Fire and life safety improvements must compete for time within these short windows with work required for maintaining the facilities to accommodate existing operations.

HIGH-SPEED TRAIN CONTROL SYSTEMS

Mr. Rogers. Your budget request for fiscal year 2003 does not seek funding for train control systems in the Detroit-to-Chicago corridor or the Chicago-to-St. Louis corridor. Has work on each of these corridors been completed?

[The information follows:]

The Incremental Train Control System (ITCS) is installed on 66 miles of the Detroit-to-Chicago corridor between Kalamazoo and Niles, Michigan. All trains on the line are equipped, supporting eight passenger trips per day and two freight trains per week. In January 2002, ITCS went into full revenue high-speed service, supporting 90 mph passenger speeds. Approximately 45 miles are now operational and the remaining 21 miles are undergoing checkout testing and will be activated in April 2002. Project funding through FY 2002 will support verification and validation of the system, mapping and debugging the wireless communication network, and testing and evaluation to permit increasing speeds to the design maximum of 110

mph. A part of the FY 2003 request is targeted at extending the coverage of this system, but in Indiana rather than Michigan, to capitalize on the fact that all trains on that part of the corridor are already equipped, and to realistically determine the costs and issues of extending an operating Positive Train Control (PTC) system.

The system being designed and installed by Lockheed Martin on the Chicago-to-St. Louis corridor has progressed beyond the critical design review stage. Initial installation and testing will commence in April 2002. Revenue service is scheduled to start in the beginning of 2003. The overall North American Joint PTC Program budget was estimated at $60 million. Federal funding provided through FY 2002 now fully funds the Federal share and the Illinois DOT and AAR funding are assured. Therefore, full funding is now available for the system design and integration prime contract, which is on a fixed-ceiling basis.

FRA proposes that the bulk of the FY 2003 request be targeted at the major remaining issues of achieving industry interoperability of PTC systems nationally, as well as the reliability and maintainability issues that will determine whether these systems really perform adequately in practice.

NORTH AMERICAN JOINT POSITIVE TRAIN CONTROL PROGRAM

Mr. Rogers. It appears that your budget just rolled over the Michigan and Illinois train control money into a new category–the North American joint positive train control project. Please describe for the Committee this new project and how it differs from the work on the above-mentioned corridors.

[The information follows:]

The funding request for FY 2003 is targeted more broadly at industry-wide deployment of positive train control (PTC) to build directly on the efforts to date. FRA proposes to continue the consensus-based approach already underway with the North American Joint PTC (NAJPTC) Program Management Committee, to address the major issues of interoperability assessment tools, subtle system reliability and maintainability issues (such as radios or global positioning system units with low sensitivity and hence intermittent operation), and the development of universal modules to work

with the developing industry standard onboard computer systems such as a module capable of interpreting all of the various types of cab signal inputs used nationally. In the communications area, FRA will continue to work cooperatively with the industry Wireless Communications Task Force (WCTF).

The NAJPTC program remains responsible for completing the Illinois DOT PTC system, but will increase its involvement in the Incremental Train Control System being deployed in Michigan as well as interfacing with systems sponsored by individual railroads such as the CSX Communications Based Train Management system, the BNSF Hi-Rail Limits Protection project, and the Amtrak and New Jersey Transit systems on the Northeast Corridor. This approach will support implementation of the strategy to standardize locomotive onboard computers, radios, and displays to obtain maximum interoperability of the onboard systems. The FY 2003 request is targeted much more broadly than in prior years, but builds directly on the efforts to date.

The NAJPTC Committee is the logical venue to oversee this program because it consists of key managers and engineers from the AAR, FRA, State of Illinois DOT and all the major railroads, who are responsible for train control in their respective organizations. The committee constantly interacts with the suppliers, state agencies, and other organizations in the field of train control systems. Similarly, the WCTF has representation from all major railroads and from suppliers and other agencies.

NAJPTC PROGRAM COST SHARING

Mr. Rogers. Will freight railroads, manufacturers, and states be cost sharing in this new program, as they did with Michigan and Illinois train control projects? If so, please describe the cost sharing arrangement? If not, please explain why.

[The information follows:]

FRA strives to attain maximum cost sharing in all aspects of the Next Generation program and will continue to do so. Funding will be awarded through cooperative agreements that acknowledge contributions by all parties. FRA anticipates that railroads and supplier organizations will continue to provide some direct cost share as well as extremely valuable in-

kind contributions such as access to personnel, locomotives, crews, and operations that would be very expensive if purchased separately for test purposes.

Realistically, the ability to obtain cost sharing depends on the relative perceived benefits to the contributor. Michigan DOT and Illinois DOT both perceive major benefits to their citizens from the improved transportation capabilities on the Chicago - Detroit corridor and the Chicago - St. Louis corridor and have provided cost sharing accordingly. On the other hand, Indiana will benefit much less directly from improving the Chicago - Detroit corridor operations, yet is supportive of the overall effort as part of the Midwest Regional Rail Initiative that will ultimately connect Indianapolis with Chicago, Cincinnati and Louisville. In the near term, these circumstances will mean somewhat reduced cost sharing for the technology development effort until the future of high-speed corridor development is better defined.

NAJPTC PROGRAM VS R&D TRAIN CONTROL

Mr. Rogers. How does this work differ from the $1,250,000 train control request under the research and development account?

[The information follows:]

The Next Generation High-Speed Rail program is funding the development and deployment of positive train control systems in Michigan and Illinois to demonstrate the feasibility of applying the technology to achieve higher speeds. As part of this effort, the Next Generation program is working with the railroad industry to achieve system-wide interoperability standards and methods for Positive Train Control systems. The activity to be carried out under the research and development account in FY2003 will be a detailed assessment of the safety and technical aspects of the positive train control systems prior to any future deployments elsewhere.

TRAIN CONTROL COMMUNICATIONS TESTING - TTC

Mr. Rogers. Your fiscal year 2003 budget requests an increase of $250,000 for train control communications testing at TTC. Why is this increase necessary? How is this money being used? How does this work differ from the North American joint positive train control project?

[The information follows:]

The FRA FY 2002 budget request for train control communications testing was $1,000,000. The increased funding is necessary to upgrade the research, development and testing of railroad radio communications protocols and communication-based railroad applications at the Transportation Test Center (TTC), and to strengthen the TTC's Wireless Communications Testbed (WCTB). The WCTB will provide enhanced objective testing of digital radio frequency communications technologies under realistic railroad operating conditions. Examples of the projects under review for funding include:

Pretesting application development support: Experience on many projects shows that pretesting (first in the lab, then at a non-revenue site) is key to successful technical development and cost-effective testing. Developers and systems integrators could test the performance of train control applications and subsystems such as positive end-of-train position determination systems, location determination systems, delivery of movement authorities, braking performance prediction, advance crossing starts, electronic track warrant, and radio delivery of locomotive database updates, defect detectors, stand-alone broken-rail detection, switch monitoring, new wayside interface unit (WIU) designs, new grade crossing equipment, and others.

Developing a communications management unit test infrastructure: To make effective use of either dedicated networks or commercial services, CMUs will be installed and tested on mobile equipment to permit flexible use of channels and bands to help assure the reliability of digital communication which is essential for positive train control communications.

Testing of Communications Based Train Control (CBTC) Applications at High-Speed: CBTC is essential to the development of positive train control. The TTC will test the various wayside monitoring systems that communicate critical safety and operational information through RF links. The testing

will also examine the performance of RF and GPS antennas that are known to degrade at speed.

The work being done at the WCTB will complement the NAJPTC Project by developing state-of-the-art digital communications systems that will be used in positive train control systems including the NAJPTC. Testing of the communications protocol specified for the test trains and track maintenance force vehicles used in the NAJPTC Project will be performed. This involves installing one or more 900 MHz base stations and antenna structures as a basic infrastructure investment for the test facility.

MILWAUKEE-TO-MADISON TRAIN CONTROL PROJECT

Mr. Rogers. What is the status of the Milwaukee-to-Madison train control project? Have the dollars been awarded yet? How will they be used? Does this fit into the North American project?

[The information follows:]

The Milwaukee-to-Madison train control project is still in the program definition phase. Wisconsin DOT (WIDOT), the freight railroads in the corridor and Amtrak are involved in discussions to resolve the type of train control technology to employ. FRA and WIDOT have had initial discussions to define the scope of effort to be undertaken with Federal funds. As a consequence, the funds have not yet been obligated. WIDOT has indicated that the funds are needed to support analyses of various positive train control options and to support the planning and initial implementation of a selected system.

Although the WIDOT request for funds was outside the scope of the NAJPTC project, FRA will coordinate this project with the NAJPTC efforts.

POSITIVE TRAIN CONTROL ON HIGH-SPEED RAIL CORRIDORS

Mr. Rogers. Has FRA identified the costs to place positive train control on the 11 high-speed rail corridors? If so, please specify the cost by corridor and identify who would be responsible for the costs.

[The information follows:]

FRA has not identified the costs to place positive train control on all 11 high-speed rail corridors. Five years ago, FRA contracted for an examination of the costs and business benefits of positive train control. Among the corridors assessed were two segments of high-speed rail corridors (Buffalo - Syracuse and Seattle - Portland). The cost of equipping Buffalo - Syracuse with PTC was approximately $15 million, and the cost of equipping Seattle - Portland with PTC was approximately $21 million. The study also examined a number of factors that could have the effect of either raising or lowering the cost estimates. On these corridors, about 45 percent of the estimated cost of PTC was for equipment on-board locomotives and maintenance equipment, 15 percent for wayside equipment, 20 percent for control center equipment, and 20 percent for design, testing, and contingencies. The costs of extending these corridor segments would be relatively small, since the rolling stock and control center costs would already be covered.

The costs would generally be the responsibility of the railroad(s) which owned the rolling stock, track, and control center, unless they agreed to a different allocation of the costs, or unless funding were to be provided by some other entity such as the Federal, state, or local government.

HIGH-SPEED NON-ELECTRIC PASSENGER LOCOMOTIVE DEMONSTRATION PROGRAM

Mr. Rogers. In 1999, FRA signed a contract with Bombardier to develop a non-electric high-speed locomotive. Last year, FRA told the Committee that assembly of the system was to be completed in April 2000, extensive testing would be conducted in late 2000, and demonstrations would occur in early 2001. Were these time frames met?

[The information follows:]

The locomotive was completed in the fall of 2000, low-speed testing was completed in March 2001, and extensive high-speed testing (up to 156 mph) was successfully completed in September of 2001 at the Transportation Technology Center. The locomotive was then returned to Bombardier for some minor modifications and updates to match those completed on the Acela Express power car operating on the Northeast Corridor. Demonstrations are expected to begin in May 2002.

STATUS OF HIGH-SPEED NON-ELECTRIC PASSENGER LOCOMOTIVE DEMONSTRATION PROGRAM

Mr. Rogers. What is the status of this project? Have there been any problems with this project?

[The information follows:]

Approximately 20,000 miles of high-speed testing of the non-electric locomotive was successfully completed in September 2001, at the Transportation Technology Center. The locomotive reached speeds of 156 mph and demonstrated reliable, quiet and almost smokeless operation. The locomotive was then returned to Bombardier for some minor modifications and updates to match those completed on the *Acela Express* power cars operating on the Northeast Corridor. The largest source of delays on the project was associated with developing software interfaces between the numerous computerized control systems aboard the locomotive. Other minor modifications and testing are to be completed in April 2002. The demonstration program is expected to begin in May 2002.

FUNDING FOR HIGH-SPEED NON-ELECTRIC PASSENGER LOCOMOTIVE DEMONSTRATION PROGRAM

Mr. Rogers. Why are you requesting $2,100,000 for this project in fiscal year 2003 when the locomotive has been developed, tested, and demonstrated? How will these funds be used?

[The information follows:]

The FY 2003 request will support integration and testing of the Advanced Locomotive Propulsion Systems (ALPS) lightweight generator-turbine module and corridor-specific testing required by FRA rules for speeds above 90 mph outside the Northeast Corridor, along with possible modifications to enhance locomotive performance. The nature and scope of these efforts will depend on the results of tests undertaken in FY 2002 and initial demonstrations. Enhanced performance capabilities which may be desirable include: assembling a trainset with push-pull operating capability; modifying the locomotive to be directly compatible with conventional passenger cars rather than requiring a transition car as is now necessary; and capability to function in a trainset with an electric or diesel locomotive in multiple unit operations and/or on third rail power.

HIGH-SPEED NON-ELECTRIC PASSENGER LOCOMOTIVE DEMONSTRATION PROGRAM COST SHARING

Mr. Rogers. Will Bombardier continue to match this appropriation on a dollar-for-dollar basis in 2003?

[The information follows:]

Cost sharing with Bombardier on any agreements beyond the $26 million ($13 million Federal) awarded to date remains to be negotiated. As in the past, every effort will be made to maximize cost sharing. A major determining factor in obtaining cost sharing will be the outcome of the intensive ongoing debate about the future of passenger rail service in the United States and the role to be played by high-speed corridors.

HIGH-SPEED NON-ELECTRIC PASSENGER LOCOMOTIVE REVENUE SERVICE

Mr. Rogers. When will the revenue service demonstration be completed?

[The information follows:]

The concept demonstration, where the trainset is made available for short demonstrations in a number of locations, is expected to begin in May 2002 and continue for 6 months. After this phase is completed, the locomotive will be operated in scheduled revenue service in two or three corridors for a period of up to one year to assess its performance in day-to-day operation. FRA expects this to be concluded by the end of 2003.

MARKETING OF THE HIGH-SPEED NON-ELECTRIC PASSENGER LOCOMOTIVE

Mr. Rogers. Does Bombardier have any states or railroads interested in procuring this system? If so, please provide the Committee with a list of interested parties and when, if applicable, they would like delivery of this type of vehicle.

[The information follows:]

FRA is not involved in marketing activities undertaken by Bombardier. Bombardier's interaction with the FRA on this project has been primarily at the technical level, i.e., development, testing and demonstration of the non-electric locomotive. FRA did solicit expressions of interest from States to host demonstrations of the non-electric locomotive and received letters of interest from the following States: California, Georgia, Illinois, Indiana, Michigan, New York, North Carolina, South Carolina, Virginia, Wisconsin and the Southern Rapid Rail Transit Commission (Alabama, Louisiana, Mississippi).

ADVANCED LOCOMOTIVE PROPULSION SYSTEMS PROGRAM

Mr. Rogers. What is the status of the Advanced Locomotive Propulsion System (ALPS) project?

[The information follows:]

Significant technical progress has been made on all of the critical components of the ALPS System, although not without some technical setbacks as can be expected of a program of this complexity offering such a large step forward in the state of the art.

Fabrication of the high-speed generator was completed and testing initiated in March 2001. Technical difficulties encountered during this testing necessitated some redesign and rework which is now underway. Testing is expected to resume in September 2002. A key supplier who fabricated the composite cylinders ("rings") used to build-up the flywheel rotor has left this line of business. The time required to find and to qualify a new vendor for the parts and some minor defects discovered in the most recent flywheel ring delivered have delayed flywheel assembly. While the remaining rings are fabricated, the partially completed flywheel will be tested to verify the operation of the magnetic bearings and auxiliary systems. The magnetic bearings for the rotor and the enclosure components are complete. Initial spin testing of the partially assembled flywheel rotor is expected to begin in May 2002, and testing of the completed rotor is planned for February 2003. Stationary testing of the flywheel-turbine-alternator combination is to begin in June 2003. Testing of the combination flywheel and turbine-alternator module on the Bombardier locomotive is scheduled to begin in February 2004 and be completed by May 2004.

ADVANCED LOCOMOTIVE PROPULSION SYSTEMS PROGRAM INTEGRATION

Mr. Rogers. How will the ALPS project be integrated into the non-electric high-speed rail locomotive?

[The information follows:]

Demonstration of the ALPS project with the Bombardier High-Speed Non-Electric Locomotive is planned in two phases. Phase I involves testing the

locomotive using the ALPS turbine-generator propulsion power package. Phase II integrates the flywheel energy storage module to demonstrate improved acceleration and increased system efficiency. The turbine-generator package being developed on the ALPS project is designed to be a "drop-in" replacement for the current Bombardier locomotive propulsion package, requiring minimal integration. The use of the high-speed generator will result in significant weight savings relative to the existing configuration. The flywheel energy storage module will be installed into an auxiliary carbody, which will be electrically connected to the propulsion system of the locomotive.

ADVANCED LOCOMOTIVE PROPULSION SYSTEMS PROGRAM TOTAL COST

Mr. Rogers. What is the total cost of the ALPS program? How is this broken out (federal, non-federal)?

[The information follows:]

Total Federal funding planned through the end of FY 2002 for ALPS is $22.7 million. In addition, approximately $3.5 million worth of cash and in-kind cost sharing has been provided to the ALPS program by non-Federal sources. The FY 2003 request for ALPS is $3,800,000; FY 2004 is expected to be the last year for which funds will be required to complete the currently planned ALPS project activities.

ADVANCED LOCOMOTIVE PROPULSION SYSTEMS PROGRAM COMPLETION

Mr. Rogers. When will development of the ALPS program be completed?

[The information follows:]

The ALPS program is scheduled to end with tests and rolling demonstrations at the Transportation Technology Center. The current technology development plan is for this testing to be completed by May 2004.

ADVANCED LOCOMOTIVE PROPULSION SYSTEMS PROGRAM TESTING AND DEMONSTRATION

Mr. Rogers. When will testing and demonstration of the ALPS program occur? As part of this answer, please provide a schedule for the program and include potential demonstration sites.

[The information follows:]

Demonstration of the ALPS project with the Bombardier High-Speed Non-Electric Locomotive is planned in two phases. Phase I involves testing the locomotive using the ALPS turbine-generator propulsion power package. The current schedule calls for testing and demonstration of the ALPS turbine/generator system beginning in November 2003 and extending through January 2004.

Phase II integrates the flywheel energy storage module to demonstrate improved acceleration and increased system efficiency. Integration and testing of the flywheel tender car with the Bombardier locomotive is scheduled in February 2004 and extending into May 2004.

All testing and demonstration of the ALPS system is currently planned for the Transportation Technology Center in Pueblo Colorado and is presently scheduled to conclude in late spring 2004.

ALPS Program Schedule		
Task	Projected Start	Projected Finish
Generator Rework and Testing	In Progress	January 2003
Turbo Alternator Integration and Testing	January 2003	May 2003
Flywheel Assembly and Testing	In Progress	May 2003
Propulsion System Lab Testing	May 2003	September 2003
Turbo Alternator Testing in Bombardier Locomotive	November 2003	February 2004
ALPS System Testing in Bombardier Locomotive	February 2004	May 2004

STATUS OF THE NEW YORK STATE ROHR TURBOLINER UPGRADE PROGRAM

Mr. Rogers. What is the status of New York State's remanufacturing of the RTL, non-electric train sets? Was the first one delivered in April 2000 or was it further delayed? How many are now running on the Empire Corridor?

[The information follows:]

Currently no RTL trainsets are in operation although the RTL-2 trainset modified in the early 1990s' is undergoing maintenance and is expected to return to service in the near future. The first 'RTL-3' trainset was delivered in August 2000 but was returned to the vendor for rework after several months of testing. Changes were made to the heating/air-conditioning, wheel slip control and electrical systems; testing is expected to resume in April 2002. Presuming successful testing after these modifications, this and one other RTL-3 trainset should enter service this summer. Currently, no RTL trainsets are operating on the corridor.

NEW YORK STATE ROHR TURBOLINER UPGRADE DELIVERY

Mr. Rogers. Has a contract been signed to remanufacture the remaining five trainsets? What is the planned delivery date for these sets?

[The information follows:]

A contract was signed between the New York State Department of Transportation (NYSDOT) and Super Steel Schenectady in August 2000 to remanufacture the remaining five trainsets. NYSDOT and Amtrak are jointly funding this effort. Deliveries are expected to begin in early 2003 with three trainsets delivered in 2003 and the remaining two being delivered by mid-2004.

IMPACT ON RTL OF AMTRAK DEFERRAL

Mr. Rogers. Did Amtrak's deferral of state-sponsored programs affect this project?

[The information follows:]

NYSDOT is aggressively pursuing the project. There is considerable concern over the issue of possible Amtrak deferrals, but to date it has not impacted the work on this project.

GRADE CROSSING HAZARD MITIGATION DEMONSTRATION PROJECT

Mr. Rogers. Your fiscal year 2003 budget for mitigating grade crossing hazards states that $3,000,000 shall be used to support "the completion of a demonstration program, which evaluates multiple solutions and provides a methodology to states and their partners". Please describe for the Committee what demonstration program you are referring to and how much of the total budget request it consists of.

[The information follows:]

As discussed under the heading "Grade Crossing Hazard Mitigation and Low-Cost Innovative Technologies" FRA is requesting $3,000,000 targeted at continuing the demonstration of a comprehensive methodology by which states and their partners can successfully address and mitigate grade crossing risks, the largest single risk associated with railroad operations. The entire $3,000,000 is requested to address the problem on multiple levels, including risk estimation and modeling, enhancing sensor systems, cost-effective and practical mitigation techniques, and linking of grade crossing warning systems to advanced train control systems.

LOWCOST INNOVATIVE TECHNOLOGIES

Mr. Rogers. What options is FRA currently studying under the low cost innovative technologies program? As part of this answer, please include information on the design of each technology, the benefits and problems with the technology, the costs of the technology, the location of the testing, and the ability to implement this technology nationwide.

[The information follows:]

FRA has solicited project concepts using a Broad Agency Announcement that makes the innovative technology funding available to the widest possible selection of states, railroads, supply companies, universities, and individuals. In FY 2003, FRA proposed to continue this successful approach to solicit new projects. Several projects now underway are described below:

Enhanced Passenger Information System - This project by the State of Oregon DOT has been funded with a total of $500,000 in two fiscal years. The concept is to create an integrated network of train location information and display systems to provide passengers in stations and on platforms with current information about pending train arrivals, including at outlying stations where there is no attendant on duty. The system is also integrated with the connecting Amtrak Thruway bus service sponsored by ODOT. The system is making use of digital radio networks sponsored as part of other Next Generation High-Speed Rail demonstrations in the Pacific Northwest. Initial systems for testing are installed in the Portland and Eugene Amtrak stations. ODOT has worked with Amtrak West and agencies in Washington State and California so that the system under development will become a West Coast standard, and will be available nationally.

Radio-Based Wayside Testers (RBWT) - This project proposed by Harmon Industries, funded at $472,729, was to develop and produce test equipment capable of monitoring digital train control communications for test and diagnostic purposes. Without such equipment, maintenance personnel have no way to determine system operational status to troubleshoot problems. One RBWT unit was constructed and is in daily use on the Michigan Incremental Train Control System Project, where it has been instrumental in achieving high-speed revenue service. This experience has proven that similar test equipment will be essential to keep any positive train control

system functioning properly. A significant issue will be the ability to generalize such test equipment to handle various train control system radio frequencies and message structures.

Diesel Locomotive Active Noise Quieting - This project proposed by BBN, funded at $952,184 over four fiscal years, is to apply "active noise" suppression techniques to reduce the noise of diesel locomotives. This technique uses sound monitors, digital computers, power amplifiers and rugged speakers in the locomotive exhaust stack to instantaneously create "anti-noise" which cancels the undesired locomotive noise before it escapes from the locomotive stack. This could not only reduce general community noise exposure, but also be a major benefit in enclosed spaces with high operations densities such as major urban stations. The concept was proven to work in "brassboard" configurations on actual locomotives in Chicago and Los Angeles, and in tandem with redesigned passive noise silencers achieved marked quieting of the heavy rhythmic diesel noise. Anticipated costs to equip a locomotive with a production model are in the $35,000 range. The major problem with the technology is that BBN has stated they are not interested in marketing the technology with their own resources and will proceed only on a full cost-reimbursement basis. To date, FRA has been unsuccessful in interesting locomotive manufacturers in pursuing the development.

Automatic Laser Wheel Profile System - This project proposed by Image Map, funded at $292,750, has produced a laser wheel image system now installed near Chicago Union Station. The system was built to apply laser scanning technology to take a highly accurate profile of every wheel which passes; use the new automatic equipment identifiers on cars to match the wheel information with prior scans; and process the information to report impending wheel defects or to highlight unusual or unsatisfactory wear trends. This information could not only improve day-to-day operational reliability and reduce maintenance costs, but also can provide diagnostic information to detect subtle problems with car running gear before they become safety or ride quality issues. Other units of this system are in revenue use in Denmark and have been tested on Norfolk Southern freight lines. The system is installed in a pit beneath the track in yard trackage near Chicago Union Station, and has been tested to satisfactorily obtain wheel images. The potential benefit of this location is that trains on the developing Midwest high-speed corridors traverse it repeatedly, along with conventional Amtrak trains, commuter trains, and some freight trains. If any wheel defects

are detected, the train is entering a terminal where repairs can be made immediately without disrupting the operation. The disadvantage has been that yard movements also occupy the track repeatedly, confusing the system logic as to when it should open the shutters and record wheel profiles. The system is expected to see widespread national deployment when the wheel detection logic issues are resolved.

Determining the Safety Level of Railroad Systems - This project at the University of Virginia (UVA), funded with $994,000 in two fiscal years, is producing a model called ASCAP: Axiomatic Safety Critical Assessment Program which simulates train operations over a route in great detail, including work of dispatchers, train crews, and associated systems such as the track, radio networks, and train control systems. To date, the work has focused on determining the relative safety of proposed positive train control systems. However, a train control system affects all aspects of train operations. To assess a train control system, the entire operation must be modeled and error probabilities assigned to all personnel and equipment in the system. Once this capability is established, the obvious possibility exists to apply the model to perform risk assessments of new grade crossing technologies, for example; or to determine the relative benefits of new motive power technologies. The potential benefits of the approach are enormous; the difficulties lie in calibrating the model and dealing with the almost infinite complexity of alternatives that occur on a real operating railroad. As a result of the positive train control deliberations of the Railroad Safety Advisory Committee, the ASCAP approach presently has consensus approval from railroads, rail labor organizations, and suppliers, who are all contributing efforts toward making the model a practical approach to assess these issues. FRA is working with UVA first to assure the model achieves basic credibility, then to expand its utility to other aspects beyond positive train control.

FUNDING FOR GRADE CROSSING MITIGATIONS AND LOW COST INNOVATIVE TECHNOLOGIES

Mr. Rogers. Please provide a table for the Committee highlighting what was funded in fiscal years 2001 and 2002 for grade crossing mitigations and low cost, innovative technologies. What is anticipated for fiscal year 2003?

[The information follows:]

Projects:	FY 2001 Awarded	FY 2002 Estimated	FY 2003 Estimated
TRB High-Speed Rail IDEA Program	$500,152	$500,000	$500,000
Precise Location Data for Better Emergency Response	368,677		
Risk Modeling of Advanced Railroad Technologies	689,676	450,000	450,000
Aerial Digital Mapping of Corridors	36,900		
Volpe Center Technical Support	1,100,000	900,000	900,000
Grade Dec Model Development	74,885		
Communications Testing at TTC	150,000		
Communications Technical Support - DoC / ITS	150,000		
Added Features for Radio Based Test System	65,329		
Locomotive Radio Interference Mitigation System		104,485	
Testing of Real Time Passenger Information System		268,000	
High Gain Same-Frequency Radio Repeater Test		36,458	
Funds Available for BAA Awards:		541,057	2,450,000
TOTAL	$3,135,619	$2,800,000	$4,300,000

In the remainder of FY 2002 and in FY 2003, FRA will continue to use the successful Broad Agency Announcement and the Transportation Research Board High-Speed Rail Innovations Deserving Exploratory Analysis Program, to solicit, evaluate, and award technology projects under the two budget categories.

SEALED CORRIDOR FUNDING

Mr. Rogers. Please highlight for the Committee how funding has been spent on the Sealed Corridor for the past three years. What benefits have been derived from this funding?

[The information follows:]

Over the past three years, the State of North Carolina has received a total of $3.85 million of Federal funding from the Section 1103 program of TEA 21 and the Next Generation High-Speed Rail Program. With these funds, the State increased the number of installations of four-quadrant gates, long gate arms, median barriers, four-quadrant gates with median barriers, and closing crossings on the Sealed Corridor. In the segment between Charlotte and Greensboro, 70 percent of the projects are complete, including 25 crossing closures, and the remaining 30 percent are under construction or awaiting construction to begin. In the Greensboro to Cary segment, 47 percent of the projects are complete and 29 percent are authorized for construction. The remaining 24 percent are in design or in review with the railroad. Of the nine projects in the final segment between Cary and Raleigh, eight are complete and the ninth is authorized for construction.

The benefits from these investments were evaluated in a study by the Volpe National Transportation Systems Center. The assessment evaluated 52 crossings treated between Charlotte and Greensboro between March 1995 and December 2000. The assessment determined that approximately five lives have been saved at those crossings since March 1995, and the sealed corridor investment has very favorable cost to benefit ratios. An additional four lives were projected to be saved at those crossings in the next five years, and additional lives will surely be saved when the remainder of the corridor crossings are improved or closed.

COMPLETION OF THE CHARLOTTE-GREENSBORO SEALED CORIDOR

Mr. Rogers. Last year, FRA testified that the initial segment of the sealed corridor (between Charlotte and Greensboro) would be completed in the third quarter of 2002. Is this still scheduled to occur? If not, please explain why the delay occurred?

[The information follows:]

Presently, 70 percent of the projects are complete, including 25 crossing closures. The remaining 30 percent are under construction or awaiting construction to begin. Of these, at least nine projects (30 percent) are expected to be completed in the next calendar year.

CHARLOTTE-RALEIGH SEALED CORRIDOR

Mr. Rogers. Will the entire corridor from Charlotte to Raleigh, be sealed by the fourth quarter of fiscal year 2002? If not, please explain why.

[The information follows:]

The current schedule calls for completion of the public grade crossing projects in the sealed corridor initiative by the end of December 2004. Progress is being made throughout the corridor, although some delays have occurred due to the need to coordinate sealed corridor initiatives with highway construction projects, negotiate with municipalities, and coordinate with grade crossing separation projects and related road closures. Remote monitoring of grade crossing warning systems may also be delayed until a new railroad signal system is installed as part of the North Carolina Railroad Improvement Project in 2003.

FUNDING FOR THE SEALED CORRIDOR

Mr. Rogers. Does FRA plan on requesting additional funds for the sealed corridor in future fiscal years? If so, what work would be done?

[The information follows:]

Whether additional funds will be needed in future years will be determined by the costs of treating or closing the private crossings and the potential expansion of the sealed corridor concept as the high-speed rail corridor is developed from Raleigh northwards towards Richmond, Virginia and southwards towards South Carolina from Raleigh and Charlotte.

TRANSFER OF SEALED CORRIDOR TECHNOLOGIES

Mr. Rogers. Will the technologies deployed on this corridor be transferable to other high-speed rail corridors? Have any been used yet?

[The information follows:]

The technologies deployed in North Carolina continue to be adopted by other states, for other high-speed corridors as well as the general railroad network. The excellent results from the Sealed Corridor project, including the preliminary results of five lives saved as presented in the assessment report, have been extensively shared with other states through organizations such as the Standing Committee on Rail Transportation of Association of American State Highway and Transportation Officials and the appropriate research committees of the Transportation Research Board. FRA also conducted a planning workshop at the Transportation Research Board annual conference in January 2002 to inform representatives from the newly designated corridor states and others of the benefits of the Sealed Corridor approach.

States such as Michigan are using some of the technologies such as median barriers, while Florida has installed four-quadrant gates as well as median gates to provide full closure of crossings. New York State is planning to use four-quadrant gates and other technologies in the Empire corridor. Mississippi and Alabama are working with the Norfolk Southern and CSX railroads on comprehensive corridor improvement plans and have begun to implement major grade crossing hazard mitigation programs, deploying

some of the techniques from the Sealed Corridor and closing crossings. The Illinois Commerce Commission is deploying 74 four-quadrant gates on the Chicago-St. Louis corridor where high-speed operations will be permitted when the new Positive Train Control system is in operation.

FY 2002 HIGH-SPEED RAIL CORRIDOR FUNDING

Mr. Rogers. FRA received $5,900,000 for high-speed rail corridor planning activities in 2002. Please detail for the Committee how this funding was spent, by project.

[The information follows:]

Congress earmarked the entire $5,900,000 for projects as follows:

$1,000,000 for the Southern California Council of Governments; $600,000 for the Gulf Coast Corridor; $50,000 for the Southeast Corridor; $3,000,000 for the Florida Corridor; and $1,250,000 for the California high speed rail corridor. FRA has notified the intended funding recipients of the funding availability and is working with them to develop the cooperative agreements required to initiate the projects.

CORRIDOR PLANNING ACTIVITIES

Mr. Rogers. For fiscal year 2003, FRA is requesting $1,700,000 for high-speed rail corridor planning activities. How do you plan to spend the monies?

[The information follows:]

FRA will solicit applications for planning activities from designated high-speed rail corridors. Examples of potential projects include preliminary engineering, transportation performance model development, strategic planning, operating plan development, route alternative analysis, financing alternative development and necessary environmental studies.

PITTSBURGH & BALTIMORE MAGLEV PROJECTS

Mr. Rogers. In January 2001, the Secretary of Transportation announced that two projects (Pittsburgh and Baltimore) were chosen to demonstrate the benefits of the maglev program. Please describe for the Committee the status of these two projects, including what they plan to demonstrate, explaining why these two projects were picked from the seven options, what needs to be done in fiscal years 2001, 2002, and 2003, and how much funding each project received to date.

[The information follows:]

Both of the selected projects are in the midst of a two-year program to complete a Draft Environmental Impact Statement (DEIS), investment grade revenue estimates, and a refined financial and partnership plan required prior to selection by the Secretary of a single project for deployment.

When deployed, each of these projects will demonstrate the potential of maglev technology in revenue service to provide needed additional high-speed transportation capacity with minimum adverse environmental impact.

A multi-disciplined selection review committee from the Department reviewed the project descriptions received from the seven competing projects in June 2000. The committee reported to the Secretary on the strengths and weaknesses of each project with respect to 10 criteria, to assist him in selecting the most promising projects to receive continued Federal support for the pre-construction planning. The Secretary selected the Pittsburgh and Baltimore Projects based upon the selection review committee's evaluations.

After selection by the Secretary in January 2001, both projects initiated programs that will result in completion of DEISs, investment grade revenue estimates, and refined financial and partnership plans by the end of CY 2002. Based upon a comparison of the results of these studies, the Secretary should be in the position to select the project to proceed to the construction phase of this program by the spring of 2003. The selected project will proceed to complete a Final EIS, finalize arrangements to secure non-Federal financing, and complete engineering required prior to the decision on the FY 2004 appropriation and, if funded, commence construction in early FY 2004.

In FY 1999, 2000, and 2001, $14,594,335 in Federal funds was obligated for the Pittsburgh project, and $10,390,585 was obligated for the Baltimore project. With non-Federal matching shares, $21,891,502 and $15,585,877, respectively, have been made available for pre-construction planning of the two projects to date. The FY 2002 Transportation appropriation directs that an additional $1,250,000 and $1,175,000 in FY 2002 funds be made available to the Pittsburgh and Baltimore projects, respectively.

NEVADA-CALIFORNIA MAGLEV PROJECT

Mr. Rogers. What is the status of the Nevada-California maglev project? Please describe where this project is in the process and how the money appropriated to date will be used.

[The information follows:]

Along with the other six projects competing for selection by the Secretary for continued Federal participation in pre-construction planning, the California-Nevada Super Speed Train Commission submitted a project description to FRA in June 2000. The proposed project was described as a 35-mile long, two-station system, connecting Las Vegas to the California-Nevada State Line at Primm. After consideration of the strengths and weaknesses of the seven competing projects, as evaluated by a multi-disciplined selection review committee from the Department, the Secretary did not select the Nevada-California project for continued participation in the Maglev Deployment Program.

However, the FY 2001 Transportation appropriation earmarked $1,000,000 to fund the efforts of the California-Nevada Super Speed Train Commission for continued pre-construction planning and environmental impact assessments. Under the terms of a cooperative agreement with FRA, the Commission is completing a supplemental project description that describes a 163-mile project that would extend from Las Vegas to Barstow in California. This work is scheduled to be complete in June 2002.

Additional work will be funded by an earmarked appropriation of $1,175,000 to the Commission contained in the FY 2002 Transportation appropriation. A proposed scope of work for the use of these funds is expected from the Commission at the beginning of April 2002. Upon review

and approval by FRA, a cooperative agreement for the use of these funds will be executed by June 2002.

REQUEST FOR FY 2003 FUNDING FOR MAGLEV

Mr. Rogers. What, if any funding, is DOT requesting for maglev in fiscal year 2003?

[The information follows:]

The FY 2003 budget does not request any funding for the Maglev Deployment Program, or any other maglev activity.

STATUS OF LOW-SPEED MAGLEV PROGRAM

Mr. Rogers. Please describe for the Committee the status of the low-speed maglev program and identify which projects have received funding to date, where are these projects located, and what they plan to demonstrate? As part of this response, please include information on the Seraphin project.

[The information follows:]

Sections 3015 (c) and 1218(i) of the Transportation Equity Act for the 21st Century (TEA-21), as amended by the TEA-21 Restoration Act, authorized a total of $35,000,000 for grants for the research and development of low-speed magnetic levitation technologies for public transportation purposes in urban areas to demonstrate energy efficiency, congestion mitigation, and safety benefits. However, available funding has been limited by obligation limitations. The Federal Transit Administration (FTA) combined the two TEA-21 statutory provisions into a comprehensive Urban Maglev Program that includes research, development and assessment of both superconducting and other technologies.

FTA solicited Urban Maglev Program proposals through a Federal Register Notice on January 29, 1999. Eight proposals were received and evaluated, and five were selected for funding. These five are due to be completed by mid-2003.

The Pittsburgh Airborne Shuttle System project, also called the General Atomics Project in recognition of the lead company, was awarded

approximately $8,000,000 at 80 percent Federal share; the General Atomics team is providing approximately $2,000,000. An additional $2,000,000, earmarked in FY 2001 for the General Atomics project has been awarded. General Atomics and Pennsylvania Department of Transportation are examining full scale testing and initial deployment at the California University of PA, California, PA.

An award of $1,000,000 was made through the Department of Energy to Sandia National Laboratories for the development of Segmented Rail Phased Induction Motor (SERAPHIM), as a result of a Congressional earmark of the same amount in the FY 2000 appropriation. The purpose of the project is to develop and demonstrate a propulsion system for Urban Maglev, called SERAPHIM. Sandia National Laboratories received an earmark of $2,000,000 for further development of SERAPHIM, and Colorado Intermountain Fixed Guideway Authority received an earmark of $2,000,000 for their airport link project, both in FY 2001. These two organizations are partnering with Maglev Technology, Inc. (now called Maglev Technology Group, LLC), whose proposal under the FTA competition was rated high. The Colorado DOT partnered with the three mentioned entities and is providing a 20 percent cost share for the development of a low-speed Maglev for use in a system that would link Denver International Airport to Vail, over 150 miles away.

Maglev Urban System Associates of Baltimore, MD, another highly ranked proposal in the FTA Urban Maglev competition, received an award of $1,000,000 with an equal match from the company to determine the viability of Japanese developed Chubu-HSST for use in the United States. The low-speed Maglev technology has undergone over 60,000 miles of testing and certified for use in Japan where a few Prefectures are reported to be considering the technology for implementation.

Maglev 2000 of Florida Corporation, another successful candidate in the FTA competition, received an award of $1,000,000 with an equal match from Florida Department of Transportation to demonstrate the feasibility of a superconducting electrodynamic suspension (repulsive force) technology based on the concept of American scientists Drs. Gordon Danby and James Powell.

The fifth team is MagneMotion, Inc. for the Boston area, which is working to create a full scale proof of concept prototype as well as developing the

full scale system design and costing. One of the higher rated original proposals, at a funding level of approximately $530,000, it is also one of the lower cost efforts. A potential location for deployment has not yet been identified.

A technical support contractor, Science Applications International Corporation (SAIC), and the Volpe National Transportation Systems Center have been retained by FTA to assist in technical and programmatic aspects of the Urban Maglev program.

FY 2002 funding and future FY 2003 funding are proposed to be utilized to support promising technologies from the above projects and/or fund one more project that was ranked high in the FTA open competition, and additional technical assistance.

FY 2001 TEA-21 FUNDING FOR GRADE CROSSINGS

Mr. Rogers. Please describe how the $5,250,000 guaranteed by TEA-21 for highway-rail grade crossings was allocated in fiscal year 2001 and describe the purposes.

[The information follows:]

The $5,250,000 appropriated in FY 2001 was completely earmarked and allocated as shown in the following table:

Funding for Grade Crossing Hazard Elimination
FY 2001

Corridor	State	Funding ($000)	Purpose
Pacific Northwest	Oregon	1,500	Provide support for a pedestrian/ bicycle project adjacent to the UP line to eliminate a severe trespassing problem in Salem, OR. Total project cost is $3.5 million, with additional funding being provided by the city of Salem, the school district, the Oregon National Guard, Safeway Stores, the UP and others.
California	California	125	Upgrade one crossing at Van Nuys Blvd. by installing median barriers that will require purchase of land to widen the roadway. Connect the crossing warning systems to the video monitoring system already in place to monitor driver response to these improvements. These funds will be matched 50/50 from local sources.

Corridor	State	Funding ($000)	Purpose
Chicago Hub			
	Minnesota	250	Close three public crossings, install a locked gate at one crossing, construct/ reconstruct roadway and realign one crossing and install flashing lights and gates at one crossing in Dresbach Township, Winona County, MN.
	Wisconsin	500	Upgrade eight crossings in Jefferson, Milwaukee and Waukesha Counties.
Total		750	
Gulf Coast			
	Louisiana	500	Upgrade two crossings at Jordan Street and Louisa Street in Orleans Parish.
	Mississippi	560	Upgrade three crossings in Long Beach and Biloxi, Harrison Counties, and one in Hancock County.
	Alabama	440	Upgrade five crossings in Escambia County.
Total		1,500	
Southeast			
	Georgia	125	Develop a corridor plan for the 162 crossings in the segment between Atlanta and downtown Macon identifying crossings for closure and making recommendations on the treatments required for all remaining crossings.
	Virginia	750	Provide additional funding for the pedestrian overpass in Prince William County, the Rt. 722 Caroline County highway overpass, and improve the circuitry at one crossing in Hanover County.
Total		875	
Keystone	Pennsylvania	500	Complete the engineering and design for a highway overpass, and continue design for one bypass road and one pedestrian overpass, which together will eliminate the last three public crossings on the corridor.
Total		**5,250**	

FY 2002 TEA-21 FUNDING FOR GRADE CROSSINGS

Mr. Rogers. Has the $5,250,000 guaranteed funding been allocated for fiscal year 2002 yet? If so, please list who received the funding and for what purposes.

[The information follows:]

The $5,250,000 appropriated in FY 2002 was completely earmarked, as shown in the following table:

Funding for Grade Crossing Hazard Elimination
FY 2002

Corridor	State	Funding ($000)	Purpose
	New York	1,500	Conduct preliminary engineering for two proposed grade separation projects, improve ten grade crossings and close one crossing.
California	California	200	Continue with the upgrade to one crossing at Van Nuys Blvd. By installing median barriers that will require purchase of land to widen the roadway. Connect these crossing warning systems to the existing video monitoring system. These funds will be matched 50/50 from local sources.
Chicago Hub			
	Minnesota	250	Continue with the closure of three public crossings, installing a locked gate at one crossing, constructing/ reconstructing roadway and realigning one crossing, and installing flashing lights and gates at one crossing in Winona County, MN.
	Wisconsin	250	Close 23 private crossings in Jefferson and Dane Counties by providing alternate access, installing one culvert or consolidating with other crossings. Five crossings can be closed outright.
Total		500	
Gulf Coast			
	Louisiana	500*	Upgrade one crossing at Louisa Street and other crossings in Orleans Parish.
	Mississippi	1,000	Upgrade six crossings: three in Harrison County, two in Hancock County and one in Jackson County. All crossings to be equipped with standard flashing lights and gates with Constant Warning Time devices.
	Alabama	500*	Upgrade 12 crossing surfaces and make other improvements in Cleburne, Calhoun, Baldwin and Mobile Counties.
Total		2,000	

Corridor	State	Funding ($000)	Purpose
Southeast			
	South Carolina	800	Upgrade eight crossings in Richland County.
	Virginia	250	Upgrade several crossings in the Richmond area.
Total		1,050	
Total		**5,250**	

*Anticipated allocation being coordinated with the three states.
FRA expects to work with FWHA and the States to have these funds allocated as shown in the table by the end of the third quarter of FY 2002.

OTHER TEA-21 GRADE CROSSING PROJECTS

Mr. Rogers. If the Committee did not earmark all these funds, are there any significant projects that FRA believes are especially meritorious?

[The information follows:]

Without Congressional earmarking and pursuant to section 1103 of TEA-21, FRA and FHWA would have solicited applications from the 28 eligible States with the intent of identifying how the available funds could be used most effectively. FRA is aware of the following projects that could be leading candidates for funding:

1. There is a particularly complex, hazardous crossing in Martinez, CA that received funding in FY 1999 to develop mitigation alternatives and conduct preliminary engineering. This private industrial crossing has all of the worst elements of risk and it services a major liquefied petroleum gas (LPG) storage terminal. The road leading from the LPG storage/industrial area goes across one main line track, then through a single-lane tunnel under the Capital Route, and immediately on exiting the tunnel crosses six tracks where LPG tank cars are stored and switched. Drivers have no sight distance to see trains approaching as their trucks emerge from the tunnel. Warning systems have recently been upgraded by the railroad with standard lights and gates for the road traffic exiting the tunnel, replacing the original "wig-wag" mechanical signs. The road "T's" into the main highway, controlled only by a STOP sign. Drivers are forced to stop on the tracks while waiting for the highway

traffic to clear. Tanker trucks for petroleum products and double-trailer sand trucks are the major traffic on the road. Each day, 26 passenger trains and 10 to 12 freight trains use both rail lines, including one round trip of tank cars carrying acid to a chemical plant.

The alternative selected by the State is to construct a new crossing that will tie into an existing signalized intersection. This new crossing was built by the State and FHWA as part of the construction of an additional highway span over the tracks for Route 680. This new crossing has only two tracks and is equipped with flashing lights, gates, traffic light preemption and realigned adjacent tracks.

The State does not have sufficient funds to finish the project which would include constructing a parallel roadway, a new tunnel under the Capital Route mainline, and closing the crossings at Martinez. The cost for this work is estimated at $2,000,000.

2. In the Empire Corridor of New York State, a risk assessment study evaluated the risks presented by grade crossings to both highway and rail users. It estimated the risk at each crossing, the impact of anticipated higher train speeds and the risks to passengers on the trains, and a total risk for the corridor. Six crossings are particularly hazardous, their total risk being approximately equal to the total risk presented by the other 21 crossings. By treating these six crossings, risk in the corridor could be reduced by 50 percent. New York State DOT has developed a plan for closures, grade separations and other treatments. The FY 2002 pending allocation to New York of $1.5 million will go towards the treatment of these six crossings. More than $11,000,000 is needed for all 27 crossings.

3. Eight of the 28 States involved in designated high-speed rail corridors have never received funding under the Section 1103 program. Approximately $125,000 per state (a total of $1,000,000) is needed for these eight states to conduct inventories and collect engineering data for the crossings in order to develop treatment priorities and identify crossings for closure. Additional funds for the 20 other eligible states are required to continue to develop and implement their improvement and closure programs. As proven by the assessment of North Carolina's Sealed Corridor Initiative, the innovative, cost effective techniques being deployed by many states save lives.

4. In Pennsylvania's Keystone Corridor, the Commonwealth is proposing to eliminate the last three public crossings by building one grade separation, one pedestrian overpass, and one bypass connector road. Once completed, the 104-mile corridor will be completely sealed between Philadelphia and Harrisburg. The corridor is electrified and 125 mph operations will be feasible. The State was allocated $500,000 in FY 1999 to begin engineering and design of the three projects. The State requested $1,500,000 in FY 2001 to complete engineering and design, but only $500,000 was allocated. Approximately $9,000,000 is needed for construction. The Commonwealth will seek additional Federal funds to construct these projects and will match the Federal funds dollar for dollar.

FY 2002-2003 INITIATIVES TO REDUCE GRADE CROSSING/TRESPASSER FATALITIES

Mr. Rogers. What innovative techniques do you have planned for the remainder of 2002 and into fiscal 2003 that will help decrease the number of grade crossing and trespasser fatalities?

[The information follows:]

Several innovative projects have been launched in 2002 or expanded to further FRA's efforts to reduce the number of grade crossing and trespasser fatalities.

- Law Enforcement Liaison – The FRA initiated a Regional Police Liaison Officer Program to work with the regional crossing managers to increase FRA's outreach efforts and strengthen partnerships with the law enforcement community. In 2002 FRA added a regional law enforcement liaison in Region 5, bringing the total number of liaisons to four. Efforts are underway to recruit a law enforcement liaison in each of the remaining four regions and headquarters.

  The law enforcement liaisons are working to standardize the curriculum for the Grade Crossing Collision Investigation Course (GCCIC) for accreditation by law enforcement training academies. For example, the Region 1 liaison officer, along with the FRA regional grade crossing team, is working with the Massachusetts

Criminal Justice Training Council to submit the GCCIC as a required part of their curriculum.

- Commercial Motor Vehicle Driver Training – Another continuing focus of FRA efforts this year is professional truck driver training and education forums. As reported last year, Swift Trucking Company, one of the Nation's largest trucking companies, partnered with FRA and Operation Lifesaver, Inc. (OLI) to develop an in-house railroad safety training module for its drivers, and has trained three of its training staff as OLI Presenters. This year 10,438 commercial truck drivers received an Operation Lifesaver presentation.

  Another major partnership FRA is developing is with St. Paul Insurance Company, one of the top three property insurers in the nation. The company insures school bus companies and fleet operators—both automobile and truck. St. Paul is interested in working with FRA to promote rail safety among its insured. This would be a nationwide effort.

- Trespass Prevention – A trespass abatement initiative is continuing in Pitsford, New York. The project involves 24-hour video monitoring of a railroad bridge. An warning message is given when trespassers are detected. The camera has already recorded incidents in which trespassers, after hearing the message, left the scene immediately prior to a train's arrival.

- FRA is working with Transport Canada and OLI to revise OLI's Community Trespass Prevention Guide. The objective is to make the guide a more useful tool for communities in both countries wishing to implement a trespass prevention program.

- Rails with Trails-Lessons Learned: FRA, in partnership with FHWA, is managing a contract that will examine the safety and liability issues associated with multiuse recreational trails on or adjacent to active rail lines and transit rights-of-way. The report, the first of its kind, is expected to be finalized early Summer 2002.

- Grade Crossing Inventory Outreach Initiative: FRA is conducting four workshops throughout the country for State DOT and railroad

representatives to discuss ways to improve the DOT Grade Crossing Inventory reporting system and to facilitate timely updating. The DOT Grade Crossing Inventory is the only national database of the nation's grade crossings and is an important tool used by state and local entities to prioritize projects and design the appropriate engineering solutions to improve safety at grade crossings.

- Education Outreach: FRA is partnering with Frito Lay Corporation and Albertson's Grocery Stores in Region 8 to develop, promote and implement a rail safety contest. At least 138 Albertson's stores in Northern Idaho, Washington and Oregon will participate. Posters promoting the contest will be located at the Frito Lay display in each store. Over 3.3 million ads will be distributed in the Albertson's' sales flyer each week. Three rail safety quiz questions must be answered correctly in order to win.

- Emergency Notification System (1-800) Demonstration Project: FRA developed software to be used in a pilot project for emergency notification at highway-rail grade crossings. In partnership with the Commonwealth of Pennsylvania, a group of eight short line railroads and the 911 Clinton County Communication Center, the software was developed to allow one centralized call-in center to handle calls from all the participating railroads. This demonstration project will allow FRA to determine the adaptability of the software for use by other railroads. The State of Texas is now using the software and FRA is in discussions with a regional railroad in Kentucky to participate in the program.

- Wayside Horn Demonstration Projects: FRA is working with the communities of Roseville, California and Mundelein, Illinois to study the human factors influencing driver behavior when an audible warning is sounded as a train approaches. The projects involve installing pole-mounted horns at grade crossings that are activated at the same time as the flashing lights and gates. Video monitoring will gather data to determine if the wayside horn is an adequate substitute for the locomotive horn in warning drivers of an approaching train.

- 4-Quadrant Gate Installation: FRA will be monitoring a project with the State of Illinois that involves deploying 4-quadrant gate systems at 74 grade crossings in the high-speed corridor between Chicago and St.

Louis.

- The Nestor Vision Systems grade crossing characterization system, using advanced video content extraction for hazard detection and mitigation, also known as a smart vision system, has begun a demonstration in the South Florida rail corridor between Miami and West Palm Beach. The video system monitors the performance of the grade crossing warning system, the passage of trains through the crossing, and will alert the local dispatcher should a vehicle or other obstruction block the crossing.

- As part of the North American Joint Positive Train Control Project in Illinois, Lockheed Martin will link high-speed trains to the warning systems at crossings to provide warning to motorists.

- As part of the Incremental Train Control System being demonstrated in Michigan, all grade crossings along the 40-mile test segment are receiving advance activation by all freight trains, as well as all passenger trains operating at 90 mph on the corridor. An additional 21 miles of the corridor in Southwest Michigan are undergoing checkout testing.

- Laser scanning of territory along the high-speed corridors in Oklahoma will be completed shortly. The laser scanning will map the profile and provide extremely accurate engineering data on the corridors and each crossing, such as sight distance, road alignment, and identifying humped crossings to help evaluate grade crossing risk.

- FRA is working with FHWA to develop concepts using sensor technology, signage, warning devices and education to warn drivers of vehicles with low ground clearance approaching highway-rail crossings of a high-profile (hump) crossing ahead and provide information for an alternate route. Emphasis is on developing concepts for a sensor system that will measure the road clearance of heavy vehicles and relay the information to a notification system.

- A Memorandum of Cooperation with Transport Canada is being developed to cover research and demonstrations to improve grade crossing safety. Topics that the US and Canada will cooperate on

include locomotive horn optimization, use of light-emitting diodes in signals, second-train warning signs and examining the causes of accidents for both motorists and trespassers.

- The FRA is providing guidance to the Minnesota DOT in their efforts to develop a low cost warning system that can be deployed at passive crossings.

TRESPASSING – LEADING CAUSE OF RAILROAD FATALITIES

Mr. Rogers. In 1997, FRA statistics showed that, for the first time, trespassing became the leading cause of railroad fatalities. Is this still the case?

[The information follows:]

Yes. While the number of trespass fatalities has declined slightly each year since 1997, it remains the leading cause of railroad fatalities. Preliminary figures for 2001 report 505 trespass deaths.

FY 2001-2002 GRADE CROSSING FUNDING/PROJECTS

Mr. Rogers. Please breakdown in detail how you are using fiscal years 2001 and 2002 funds that were appropriated to cover grade crossing issues including PC&B costs and contract funds. As part of this discussion, please provide information on who received the funding and what are the anticipated results.

[The information follows:]

Appropriation/ Project	FY 2001 Funding	FY 2002 Funding	Recipient	Expected Results
TOTAL, FRA	**$8,758,584**	**$8,957,257**		
RESEARCH & DEVELOPMENT	**$1,432,000**	**$1,435,000**		
Freight Car Reflectorization	12,000	10,000	Volpe Center	Freight cars will be more visible to drivers, helping them avoid striking the train. Report published.
Evaluation of Wayside Horns Optimal Acoustic Warning	15,000	20,000	Volpe Center	Locomotive horns will be optimized for sound quality and effectiveness while reducing noise pollution in surrounding communities.
Driver Behavior Accident Causation Driver Education	250,000 (Equipment 140K) (Track 110K)	250,000 (Equipment 140K) (Track 110K)	Volpe Center	To gain a better understanding of how drivers react to grade crossings and why accidents happen in order to educate drivers.
Compendium of Grade Crossing Findings	50,000	20,000	Volpe Center	Develop a compendium of findings from research conducted on grade crossings.
Train Detection	100,000	75,000	Association of American Railroads	Examine causes for loss of contact between rail and wheels, resulting in intermittent operation of grade crossing warning device (gate bobble).
Illumination Guidelines	15,000	15,000	Volpe Center	The use of street lights to illuminate trains at night so drivers can see and avoid running into the train.
Photo Enforcement	50,000	50,000	Volpe Center	Evaluate a video neural network with computer interpretation being demonstrated at five grade crossings in Florida and a video system to detect trespassers in Pittsford, New York.
Obstacle/Intrusion Detection	75,000	75,000	Volpe Center	Building on the HSR Crossing Technology project, examine the obstruction detection systems suitable for use at grade crossings and expand for use along the right-of-way.

Appropriation/ Project	FY 2001 Funding	FY 2002 Funding	Recipient	Expected Results
Volpe Center Support	75,000 (Equipment) 50,000 (High Speed Rail)	75,000 (Equipment) 50,000 (Track)	Volpe Center Volpe Center	Support for assessing hazard elimination projects. Expand Corridor Risk Analysis for high-speed corridors to additional corridors.
Passive & Private Crossings (new)	50,000	75,000	Volpe Center	Examine demonstrations at passive crossings and develop the groundwork for a more extensive future program involving other modes.
Review Available Data Sources (new)	75,000	75,000	Volpe Center	Examine data elements and databases to determine additional information that should be collected to analyze the causes of accidents at grade crossings.
National Warrants (new)	50,000	50,000	Volpe Center	Develop criteria or warrants for analyzing grade crossings and determining the types of warning devices that should be installed.
Criteria & overall evaluation methodology	125,000	125,000	Volpe Center	Determine criteria for developing an evaluation methodology usable for all grade crossing R&D projects.
State-of-the art planning tools for crossing consolidation	100,000	175,000	Volpe Center	To develop new cost/benefit planning tools for rationalizing the planning process to enable crossings to be closed and consolidated while making improvements to highways and transit systems.
Assess sections 1010 & 1036 Demonstration and Next Generation High Speed Rail Broad Agency Announcement	175,000 (Track)	100,000 (Track)	Volpe Center	Evaluate the technology demonstration projects funded under the Section 1010 & 1036 program in ISTEA (4-quadrant gate with obstruction detection in CT and Vehicle Arrestor Barrier in IL), and assess Broad Agency Announcement submittals.
Standardized before/after evaluations	115,000	120,000	Volpe Center	Develop standardized before/after evaluation techniques to measure safety effectiveness of research projects.

Appropriation/ Project	FY 2001 Funding	FY 2002 Funding	Recipient	Expected Results
Crossing Ranking Capability	25,000	50,000	Volpe Center	Building upon the risk assessment techniques for analyzing grade crossings, develop a user-friendly technique for evaluating and ranking grade crossings to improve allocation of funding resources.
High Speed Rail Crossing Technology	25,000 (Track)	25,000 (Track)	Volpe Center/Battelle Labs	To examine signaling and train control, obstruction detection and warning devices and barrier system technologies available for use in high-speed corridors. Develop methodology to evaluate improved safety provided by additional devices.
NEXT GENERATION HIGH-SPEED RAIL:	**$4,291,000**	**$3,500,000**		
Mitigating Grade Crossing Hazards	1,994,000	1,500,000	Broad Agency Announcement Awardees	Broad Agency Announcement awards to date will include radar vehicle detection systems/computer video traffic recording systems.
Transportation Research Board High Speed Rail IDEA Program	500,000	500,000	Transportation Research Board	The Transportation Research Board IDEA Program, supported by FRA, FHWA, NHTSA, and FTA, competitively solicits concepts, conducts peer review, and awards innovative technology projects nationwide to support development of High-Speed Rail and Intelligent Transportation Systems. Examples of completed projects include a very-wide field of view camera suitable for automated monitoring of grade crossings and a scanning radar antenna for surveillance systems.
Low Cost Innovative Technologies	1,098,000	800,000	Broad Agency Announcement Awardees	Awards under the latest Broad Agency Announcement program have not been announced.

Appropriation/ Project	FY 2001 Funding	FY 2002 Funding	Recipient	Expected Results
North Carolina Sealed Corridor	699,000	700,000	North Carolina Department of Transportation	The North Carolina Sealed Corridor Initiative will treat every crossing in the 174-mile Charlotte to Raleigh segment of the high-speed rail corridor with innovative crossing devices like median barriers, long gate arms, and 4-quadrant gates. Redundant crossings will be closed.
SAFETY & OPERATIONS:	**$3,035,584**	**$4,022,257**		
Operation Lifesaver, Inc.	422,745 (Reflects a recision ordered by Congress; an additional $600K funded under Maglev funds)	1,025,000	Operation Lifesaver, Inc.	Public education about the laws regarding grade crossings and trespassing, the dangers at grade crossings and on rail rights-of-way and the importance to obey traffic and trespass laws.
Public Awareness and Outreach	50,000	50,000	Various printing contractors, packing and shipping firms, equipment rental firms, conference organizers, Operation Lifesaver suppliers, etc.	Promotional and audio-visual materials, conference registrations and display booth space and supplies. Materials are used or distributed when making presentations to schools, community groups, workshops, conventions, etc.
Police Officer Detail	165,000	165,000	Selection of national liaison officer is pending. Selection of the four remaining regional officers is pending	The police officer detail is an outreach program with the law enforcement community to raise awareness of crossing safety and trespass prevention. One officer is detailed full time to Washington, and one each detailed part-time to the eight FRA regions.

Appropriation/ Project	FY 2001 Funding	FY 2002 Funding	Recipient	Expected Results
Outreach to Law Enforcement and Trespass Prevention	50,000	50,000	International Association Chiefs of Police, National Sheriffs Association, National Fraternal Order of Police, etc. for conference display booth space, registration fees, and GPO printing for pamphlets, brochures, and for other promotional items.	Outreach to judges, prosecutors and the law enforcement community to enhance their knowledge of crossing safety and trespass prevention issues, and materials to support FRA's regional managers promotion of highway-rail crossing safety and trespass prevention programs.
Analysis of High-Profile Crossings	15,000	15,000	West Virginia University and local survey firms	Research and analysis of problems associated with and alternatives for, high-profile crossings and low-clearance vehicles.
Airborne survey of crossing elevations	100,000	100,000	US Army Corp of Engineers, St. Louis, MO	For airborne measurement of ground elevation and collection of data to be used in analysis of high-profile crossings on high exposure rail corridors.
Highway-Rail Crossing Inventory & Data Bases	50,000	50,000	INDUS	Simplify and refine the Highway-Rail Crossing Inventory and collision databases reporting and report production and accident prediction procedures, and display on the internet.
Information Processing	296,400	296,400	INDUS	Supports Highway-Rail Crossing Inventory and crossing module of the Accident/Incident Report Processing.
Regulatory Support	40,000	40,000	DeLeuw Cather	Assistance in preparation of EIS for train horn NPRM.

Appropriation/ Project	FY 2001 Funding	FY 2002 Funding	Recipient	Expected Results
Rail-with-Trails	10,000	10,000	Reimbursable agreement with FHWA to fund development of best-practices for rails-with-trails, contractor not yet selected	Best-practices for design and operation of rails-with-trails projects.
Personnel, Compensation, and Benefits (Approximate)	1,836,439	2,220,857		Supports staff dedicated to the crossing and trespasser program.

FY 2003 GRADE CROSSING FUNDING

Mr. Rogers. Please break down in detail all requested funds for grade crossing activities in the fiscal year 2003 budget, including PC&B costs, contracts, and other costs.

[The information follows:]

	FY 2003
Railroad Research and Development	
Equipment, Operations and Hazardous Materials	$835,000
Track and Vehicle Interaction	$600,000
Subtotal, R&D	**$1,435,000**
Next Generation High-Speed Rail	
Mitigating Grade Crossing Hazards	$3,000,000
Low-Cost Innovative Technologies	$1,300,000
Subtotal, NGHSR	**$4,300,000**
Safety and Operations	
Operation Lifesaver, Inc	$1,025,000
Public Awareness and Outreach	$60,000
Police Officer Detail	$165,000
Outreach to judges, prosecutors, law enforcement and the public and trespass prevention	$50,000
Analysis of High Profile (Hump) Crossings Problem	$15,000
Airborne Survey of Crossing Elevation	$100,000
Highway-Rail Crossing Inventory and Data Bases	$50,000
Support Collection and Processing of National Inventory and Grade Crossing Accident data bases and internet access	$296,400
Regulatory Support	$40,000
Safety and Operations PC&B (approximate)	$2,496,295
Subtotal, Safety and Operations	**$4,297,695**
Total, FRA	**$10,032,695**

TOP 16 STATES WITH MOST GRADE CROSSING ACCIDENTS

Mr. Rogers. Please list the states that have the most grade crossing accidents (top 16) and break down this information to separate fatalities and collisions. Are these the same states as identified in last year's hearing record?

[The information follows:]

State	Crossing Collisions	Deaths	Percentage of Total Fatalities for 2001[1] (417 Total Fatalities)
Texas	360	38	9.1
Illinois	212	31	7.4
California	175	53	12.7
Indiana	166	19	4.6
Louisiana	159	22	5.3
Ohio	140	21	5.0
Georgia	122	19	4.6
Florida	112	14	3.4
Total for Top 8 States	***1,446***	***217***	***52.0***
Iowa	110	16	3.8
Wisconsin	104	10	2.4
Alabama	103	9	2.2
Mississippi	101	22	5.3
Tennessee	96	10	2.4
Michigan	96	11	2.6
Arkansas	86	9	2.2
Minnesota	82	9	2.2
Total for Top 16 States	***2,224***	***313***	***75.1***

Compared to last year's table, the State of North Carolina has dropped out of the top 16 and has been replaced by Florida.

1/ 2001 data is preliminary.

GRADE CROSSING ACCIDENTS/FATALITIES AND TRESPASSER FATALITIES

Mr. Rogers. Please update the table found in last year's hearing record that shows the number of crossing accidents, crossing deaths, and trespass deaths to include data on 1993 through 2001, and to date in 2002.

[The information follows:]

Year	Crossing Collisions	Crossing Deaths	Trespass Deaths
1993	4,892	626	523
1994	4,979	615	529
1995	4,633	579	494
1996	4,257	488	471
1997	3,865	461	533
1998	3,508	431	536
1999	3,489	402	479
2000	3,502	425	463
2001*	3,219	417	505
% Change 1993 to 2001	-34.1%	-33.4%	-3.4%

Data for 2002 is not yet available.

*2001 data is preliminary as of March 1, 2002.

CLOSED GRADE CROSSINGS

Mr. Rogers. In the past three years, how many crossings were closed? Please answer on a state-by-state basis.

[The information follows:]

FRA is the custodian for the U.S. Department of Transportation National Crossing Inventory File. This File contains crossing identification, location and physical information about every crossing in the nation, public, private and pedestrian, at-grade and grade separated. It also contains the information as to whether or not the crossing is open or closed. This data and updates are provided voluntarily by both states and railroads.

Since providing updates to the file is voluntary, the accuracy of the data is only as good as the information submitted by the States and railroads. Many States have not updated their records in many years. To improve this, both FRA and FHWA have proposed legislative language that would require the States and railroads to update crossing inventory records at least once every three years to insure that the crossing information data is current and accurate.

FRA does not receive information on the exact number of crossings that have been closed unless the states and/or railroads voluntarily submit this information by "closing" the crossing in the National Crossing Inventory File. Analyzing this File to determine the number of crossing records that have been closed with an effective date within the last three years (1999 - 2001) is the only way that FRA can estimate the number that have been closed. These data are shown in the following Tables for (1) public at-grade crossings and (2) total at-grade crossings (public and private) by state.

Since 1991, FRA has strongly encouraged a program of closing 25 percent of all crossings in the nation. As of December 2001, a total of 46,386 crossings have been closed (16 percent). FRA believes that many more crossings have been closed, but they have not been reported by the states and railroads.

CLOSED PUBLIC AT-GRADE CROSSINGS BY STATE
as of 03/06/02

State	1999	2000	2001	State Total
AL	23	6	75	104
AK	0	0	0	0
AR	2	25	12	39
AZ	5	0	17	22
CA	14	0	40	54
CO	0	0	123	123
CT	0	0	7	7
DC	0	0	0	0
DE	0	0	0	0
FL	25	0	12	37
GA	18	0	17	35
HI	0	0	0	0
IA	27	46	166	239
ID	4	0	44	48
IL	107	1176	770	2053
IN	151	4	84	239
KS	351	66	339	756
KY	6	0	(22)	6
LA	1	5	35	41
MA	34	0	27	61
MD	5	0	2	7
ME	0	0	(1)	0
MI	47	4	2	53
MN	14	4	486	504
MO	74	1	303	378
MS	6	8	86	100
MT	2	0	15	17
NC	58	71	(13)	129
ND	125	29	1113	1267
NE	138	1	832	971
NH	0	0	0	0
NJ	3	0	0	3
NM	1	0	108	109
NV	0	0	0	0
NY	63	0	34	97
OH	25	0	(3)	25
OK	3	96	293	392
OR	0	0	30	30
PA	16	52	102	170
RI	0	0	0	0
SC	36	47	9	92
SD	0	0	13	13
TN	2	0	(8)	2
TX	54	179	610	843
UT	27	10	13	50
VA	5	21	7	33
VT	0	0	0	0
WA	92	0	49	141
WI	90	120	182	392
WV	5	1	22	28
WY	20	22	31	73
Totals	1679	1994	6110	9783

( ) denotes an increase in the number of crossings

TOTAL OF CLOSED AT-GRADE CROSSINGS (PUBLIC AND PRIVATE) BY STATE
as of 03/06/02

State	1999	2000	2001	State Total
AL	49	6	114	169
AK	0	0	0	0
AR	2		44	18 64
AZ	9	0	29	38
CA	74	6	288	368
CO	3	0	139	142
CT	0	0	19	19
DC	0	0	0	0
DE	0	2	0	2
FL	58	0	32	90
GA	41	0	29	70
HI	0	0	0	0
IA	77	66	237	380
ID	11	1	91	103
IL	175	1841	913	2929
IN	232	5	248	485
KS	368	75	507	950
KY	21	0	(24)	21
LA	1	8	23	32
MA	71	0	37	108
MD	13	0	7	20
ME	1	1	(1)	2
MI	52	35	3	90
MN	32	7	515	554
MO	121	4	325	450
MS	30	9	1185	1224
MT	54	0	42	96
NC	109	75	(18)	184
ND	224	44	1118	1386
NE	237	2	918	1157
NH	0	0	0	0
NJ	18	0	0	18
NM	7	0	116	123
NV	2	0	0	2
NY	221	0	17	238
OH	53	0	(24)	53
OK	18	128	326	472
OR	0	0	11	11
PA	66	97	135	298
RI	0	0	0	0
SC	73	48	4	125
SD	0	0	13	13
TN	14	0	(8)	14
TX	76	306	830	1212
UT	37	11	72	120
VA	36	22	(1)	58
VT	0	0	14	14
WA	141	1	95	237
WI	156	225	284	665
WV	19	10	43	72
WY	50	253	97	400
Totals	3052	3332	8894	15278

( ) denotes an increase in the number of crossings

GRADE CROSSING FATALITIES BY STATE

Mr. Rogers. Please update the state-by-state listing of grade crossing fatalities from last year's hearing record.

[The information follows:]

State	1999 Fatalities	2000 Fatalities	2001[1] Fatalities	Percent Change[2]
Alabama	12	10	9	-10.0
Alaska	0	0	0	0.0
Arizona	1	8	6	-25.0
Arkansas	15	27	9	-66.7
California	24	27	53	96.3
Colorado	3	6	3	-50.0
Connecticut	0	2	0	-100.0
Delaware	1	0	1	N/A
District of Columbia	0	0	0	0.0
Florida	19	15	14	-6.7
Georgia	7	10	19	90.0
Idaho	2	11	1	-90.9
Illinois	54	31	31	0.0
Indiana	26	23	19	-17.4
Iowa	10	6	16	166.7
Kansas	8	11	5	-55.0
Kentucky	4	5	10	100.0
Louisiana	20	14	22	57.1
Maine	0	1	0	-100.0
Maryland	1	1	1	0.0
Massachusetts	2	1	0	-100.0
Michigan	15	13	11	-15.4
Minnesota	13	6	9	50.0
Mississippi	17	15	22	46.7

[1] 2001 data is preliminary.
[2] Percentage based on 2000 to 2001.

State	1999 Fatalities	2000 Fatalities	2001[1] Fatalities	Percent Change[2]
Missouri	9	17	4	-76.5
Montana	4	1	1	0.0
Nebraska	7	7	3	-57.1
Nevada	0	0	0	0.0
New Hampshire	0	0	0	0.0
New Jersey	5	5	8	60.0
New Mexico	3	0	8	N/A
New York	4	5	8	60.0
North Carolina	3	14	6	-57.1
North Dakota	1	6	2	-66.7
Ohio	21	15	21	40.0
Oklahoma	14	12	9	-25.0
Oregon	2	0	6	N/A
Pennsylvania	4	8	8	0.0
Rhode Island	0	0	0	0.0
South Carolina	8	10	4	-60.0
South Dakota	0	0	1	N/A
Tennessee	4	8	10	25.0
Texas	41	52	38	-26.9
Utah	5	2	2	0.0
Vermont	0	0	0	0.0
Virginia	2	3	1	-66.7
Washington	3	1	5	400.0
West Virginia	1	1	1	0.0
Wisconsin	7	15	10	-33.3
Wyoming	0	0	0	0.0
Total	402	425	417	-1.9

N/A = Not Applicable.

GRADE CROSSING COLLISIONS

Mr. Rogers. Please provide a similar state chart that identifies the number of grade crossing collisions for the past three years.

[The information follows:]

State	1999 Collisions	2000 Collisions	2001* Collisions	Percent Change since 1999
Alabama	124	95	103	-16.9
Alaska	3	7	4	33.3
Arizona	33	29	29	-12.1
Arkansas	105	115	86	-18.1
California	204	174	175	-14.2
Colorado	33	36	34	3.0
Connecticut	8	8	3	-62.5
Delaware	11	10	7	-36.4
District of Columbia	0	2	0	0.0
Florida	95	86	112	17.9
Georgia	136	128	122	-10.3
Idaho	20	33	20	0.0
Illinois	202	217	212	5.0
Indiana	193	194	166	-14.0
Iowa	99	109	110	11.1
Kansas	77	67	62	-19.5
Kentucky	62	69	79	27.4
Louisiana	180	181	159	-11.7
Maine	7	8	9	28.6
Maryland	18	19	17	-5.6
Massachusetts	10	12	17	70.0
Michigan	122	134	96	-21.3
Minnesota	102	91	82	-19.6
Mississippi	134	113	101	-24.6
Missouri	99	88	64	-35.4

State	1999 Collisions	2000 Collisions	2001* Collisions	Percent Change since 1999
Montana	19	24	16	-15.8
Nebraska	64	55	50	-21.9
Nevada	6	2	2	-66.7
New Hampshire	6	3	2	-66.7
New Jersey	24	36	36	50.0
New Mexico	19	17	24	26.3
New York	31	41	31	0.0
North Carolina	99	113	79	-20.2
North Dakota	17	17	17	0.0
Ohio	146	148	140	-4.1
Oklahoma	84	89	68	-19.0
Oregon	30	30	43	43.3
Pennsylvania	58	69	68	17.2
Rhode Island	0	0	0	0.0
South Carolina	64	80	65	1.6
South Dakota	15	11	20	33.3
Tennessee	90	90	96	6.7
Texas	365	388	360	-1.4
Utah	19	18	20	5.3
Vermont	6	2	0	-100.0
Virginia	55	54	43	-21.8
Washington	51	45	38	-25.5
West Virginia	31	20	20	-35.5
Wisconsin	109	122	104	-4.6
Wyoming	4	3	7	75.0
Total	3,489	3,502	3,218	-7.8

*2001 data is preliminary

GRADE CROSSING TRESPASSER ACCIDENTS/FATALITIES

Mr. Rogers. Please provide a table showing the number of grade crossing accidents, trespasser actions, and fatalities that have occurred since 1985, similar to the table in last year's hearing record.

[The information follows:]

Year	Public Crossing Collisions	Public Crossing Fatalities	Trespasser Fatalities
1986	6,353	537	391
1987	5,868	578	398
1988	5,859	598	453
1989	5,979	757	441
1990	5,233	648	543
1991	4,861	565	524
1992	4,465	536	533
1993	4,437	584	523
1994	4,503	572	529
1995	4,153	524	494
1996	3,788	449	471
1997	3,414	419	529
1998	3,086	385	536
1999	3,090	363	479
2000	3,016	369	463
2001[1]	2,826	382	505

[1] 2001 data is preliminary

GRADE CROSSING ACCIDENTS

Mr. Rogers. How many grade crossing accidents and fatalities have occurred in fiscal year 2002 to date? Please compare this to fiscal year 2001.

[The information follows:]

Highway-Rail Grade Crossing Accidents and Fatalities
FY 2002 Versus FY 2001
FY Year-to-Date
(Oct1 – Dec 31)

	FY 2001	FY 2002	Percentage Change
Highway-Rail Grade Crossing Accidents	947	774	-18.3
Highway-Rail Grade Crossing Fatalities	86	108	+25.6

2002 is preliminary as of March 5, 2002.

STATUS OF WEST VIRGINIA RAIL DEVELOPMENT PROJECT

Mr. Rogers. What is the status of the West Virginia rail development project? Please describe for the Committee the work that is completed, ongoing, and still to begin as well as include a timetable for the project that shows original and current timelines.
[The information follows:]

The Department of Transportation and Related Agencies Appropriation Act of 2001, P.L. 106-346 (October 23, 2000) authorized $15 million for capital cost associated with track, signal, and crossover rehabilitation and improvements on the MARC Brunswick line in West Virginia.

A plan was developed after several meetings with CSX Transportation Co. (CSXT), Maryland Rail Commuter (MARC), West Virginia State Rail Authority (WVSRA), Amtrak and the FRA to install bi-directional signals

on both main tracks between Harpers Ferry and Martinsburg (20 miles), install two new sets of 45 MPH crosssovers to replace existing 15 mph crossovers and construct a layover/service facility at Martinsburg in order to eliminate a 25 mile deadhead equipment move for two train sets twice each day.

In January 2001, the FRA authorized CSXT to proceed with preliminary engineering, plans and cost estimates for the proposed project. After review and concurrence by all parties, the FRA authorized CSXT in June 2001, to proceed with final engineering design, preparation of required environmental documents and procurement of long lead items. FRA signed a categorical exclusion determination for track and signal work in January 2002. Documents authorizing track and signal construction work were sent to CSXT in February 2002. Upon concurrence by CSXT, FRA will have obligated $13,185,000 for this project.

Final designs and environmental documents for the Martinsburg layover/servicing facility are expected to be complete in the spring of 2002.

Construction of the layover/service facility is anticipated to be finished by June 2003.

The track and signal work is expected to be put in service as segments are completed with the final work due for completion in early 2003.

UNOBLIGATED BALANCE FOR THE WEST VIRGINIA RAIL PROJECT

Mr. Rogers. What is the current unobligated balance for this project?

[The information follows:]

As of March 7, 2002 the unobligated funds for this project stand at $11,795,000. On February 8, 2002 FRA sent documentation to CSX awarding $9,980,000 for track and signal construction work. Signed copies have not yet been received from CSX. However, FRA expects that these funds will be obligated in the very near future.

The remaining unobligated balance of $1,815,000 for the West Virginia rail improvements will be used to construct a layover/service facility at Martinsburg, W. VA.

FY 2003 OBLIGATED BALANCES FOR THE WEST VIRGINIA RAIL PROJECT

Mr. Rogers. Why do you project $3,971,000 in obligated balances for this project at the end of fiscal year 2003? What will it be spent on and when?

[The information follows:]

The billing cycle between the time that the CSXT Corp. actually spends the money and the time that FRA is presented with a bill for approval ranges from 4 to 10 months. While we expect the West Virginia Rail Project work will be completed in the summer of 2003, it is our estimate that approximately $3,971,000 will remain unpaid at the end of FY 2003. The funds should outlay in the first quarter of FY 2004.

ALASKA RAILROAD OBLIGATIONS

Mr. Rogers. How much funding has Alaska Railroad obligated, to date from the dollars appropriated in fiscal years 1996-2002?

[The information follows:]

A total of $128,198,000 appropriated funds were obligated in fiscal years 1996-2001. FRA is working with the Alaska Railroad Corporation to obligate the $20,000,000 appropriated in the Transportation bill and $10,200,000 reimbursable funds from DOD for FY 2002.

ALASKA RAILROAD'S TRAIN CONTROL PROJECT

Mr. Rogers. What is the status of Alaska Railroad's train control project? As part of this response, please detail the problems the Railroad has experienced, how they will be resolved, the new schedule for the project, and the amount of unobligated dollars attached to this work.

[The information follows:]

The Alaska Railroad's contractor for its positive train control (PTC) system, GE Harris (since renamed GE Transportation Systems Global Signaling, or GETS GS), informed the railroad in early 2001 that it was requesting an end to the contract for Phase 3 of the program. The Alaska Railroad and GETS GS signed a settlement agreement on January 9, 2002, to terminate the contract. Under the terms of the agreement, the Alaska Railroad receives a credit of $2 million in lieu of cash to purchase conventional signaling equipment from GETS GS.

The Alaska Railroad procured control center computers and displays from GE Harris under Phase 1 of the program, and installed a digital data link backbone communications system under Phase 2. Phase 3, which was terminated, was for the development of the on-board equipment for locomotives and maintenance-of-way vehicles. However, a differential Global Positioning System (GPS) track survey was completed for the entire rail line to support location determination and two temporary differential GPS stations were installed. Phase 4 was to have been the procurement of on-board equipment for all locomotives and maintenance-of-way vehicles.

The Alaska Railroad has been surveying the railroad supply industry since October 2001, to determine how to continue implementing a PTC system using the successfully implemented Phase 1 computer-assisted dispatch system to issue movement authorities. The Alaska Railroad currently is developing a revised project scope and will submit it to FRA in March 2002 for review. The Alaska Railroad indicates that it will propose continuing with the multi-phase approach first envisioned. This will allow the Alaska Railroad to test components of the system and achieve the benefits as technology and funding become available to continue towards a full implementation of PTC with integrated movement planning.

All funds have been obligated.

STATUS OF HIGH-SPEED RAIL DEVELOPMENT

Mr. Rogers. What is the status of high-speed rail development on corridors outside of the Northeast Corridor? Please answer by corridor.

[The information follows:]

Pacific Northwest Corridor (Washington State and Oregon)

Corridor development efforts by Washington and Oregon have resulted in significantly expanded service since the corridor was designated in 1992. The frequency of service between Portland and Seattle expanded from one system train per day to three trains per day. Service from Seattle to Vancouver, BC resumed in 1995 with one train per day and service from Portland to Eugene now has two trains per day. Between 1999 and 2000, ridership on the Eugene-Portland-Seattle-Vancouver *Cascades* increased 18 percent from 450,000 to 530,000 trips and was also up in 2001 despite the September 11 attack effects on all travel. Overall Washington State service had grown to 658,000 passenger train riders in 2001 from 200,000 in 1993.

Four TALGO trainsets, two acquired by Washington DOT and two by Amtrak, are used to provide the service. The State took delivery of two custom built TALGO trains in late 1998 for use in the Eugene, Portland, to Seattle corridor and Amtrak began service in January 1999. Amtrak purchased two similar TALGO trains that operate between Seattle and Vancouver, BC, and provide a second daily round trip between Seattle and Bellingham, WA. Oregon has leased a fifth TALGO train for service between Eugene and Portland, OR and Seattle.

Seattle's King Street Station is being refurbished and construction of a train maintenance facility in Seattle is underway. Other station improvements are underway along the route. The State has spent some $174 million for improved intercity passenger rail since 1996. FRA has provided $5.15 million in TEA-21, Section 1103(c) funding through FY 2001. Voter-approved reductions in transportation taxes have necessitated a readjustment of Washington's investment plans; trackage and facilities that are used by Sound Transit on the Seattle-Tacoma and Seattle-Everett portions will receive some $82 million of needed improvements. Funding for other portions of the line is being sought. The legislature is preparing a new

funding package for passenger and freight rail that is expected to go the voters in May 2002.

Oregon will continue its Amtrak services throughout the coming year but no service expansion is planned at this time. The legislature has provided $5 million per year in FY 2002 and 2003 in operating funds but no capital funding. There were 180,000 passengers in Oregon in 2001. FRA has provided $3.025 million in TEA-21, Section 1103(c) funding through 2001.

California Corridor

Since the 1980s, the State of California has been making significant investments, in conjunction with Amtrak, the local governments, and the railroads, in equipment and facilities for the existing California corridor - the main lines linking the Bay Area, Los Angeles, and San Diego, as well as connecting routes to Sacramento. These lines serve 90 percent of the State's population and support multiple uses, including intercity and commuter trains. California has invested about $756 million in improved intercity passenger rail since 1996. FRA has provided $6.075 million in TEA-21, Section 1103(c) funding through FY 2001.

In 2001, total California passenger train ridership was 7.6 million. Los Angeles to San Diego is Amtrak's second heaviest corridor with up to 12 passenger trains per day handling 1.66 million riders in 2001. The Sacramento to San Jose *Capitol* corridor, which is the fastest growing corridor in the State, handled one million riders in 2001 and carries nine passenger trains a day. The *San Joaquin* carried 712,000 riders in 2001 with 4 daily roundtrips between Bakersfield and Oakland. The State has received a total of $6.1 million under the TEA-21, Section 1103(c) March 2001, (and predecessor Section 1010 of ISTEA) program for high-speed routes, to close redundant crossings and provide upgrades at the remaining public and private crossings in the corridor. The California Department of Transportation and FRA are cooperating in a project to apply risk management techniques to the *San Joaquin* route to identify the most effective means to reduce grade crossing hazards. A draft report on this effort is in review and the final report is expected by mid-2002.

The California High-Speed Rail Authority (Authority) has been charged with developing a plan for the financing, construction and operation of a high-speed train network for the State capable of achieving speeds of at least

200 mph, consistent with the *High-Speed Rail Summary Report and Action Plan* prepared by the Authority's predecessor organization known as the California Intercity High-Speed Rail Commission. The Authority's Final Business Plan, published in June 2000, recommended a Statewide HSR network of 703 miles linking Sacramento and San Francisco in the north with Los Angeles and San Diego in the south. The new line would be an electrified, double tracked, completely grade-separated system and cost $25 billion. The Plan recommends that the State modify its strategy for implementing high-speed rail in California by deferring a public vote on the project until a program environmental impact report (PEIR) is completed. Five million dollars has been appropriated and $14 million has been requested to complete the PEIR, estimated to cost $25 million. In January 2001, three teams of consultants began environmental and engineering studies of the proposed 703-mile system.

California and Amtrak have formed a partnership to plan and undertake improvements on the State's conventional passenger railroads. These important routes will offer incrementally upgraded Amtrak service while serving as vital feeder lines in the event the larger, Authority-sponsored project reaches fruition. Some $91 million from California's Public Transportation account is funding 3 large projects and an additional $95 million is proposed in the State Transportation Improvement Program for rail projects.

California already operates trains up to 90 mph on track of the former Santa Fe Railway south of Los Angeles. There is a proposal before the FRA to increase speeds from 90 to 110 mph on a short segment between Los Angeles and San Diego. FRA has awarded a cooperative agreement to support the project. Among the first steps is the preparation and submission of a waiver request to FRA that must be approved if the speeds are to be increased.

Chicago Hub Network - Midwest Regional Rail Initiative

In August 1998, nine Midwestern states, led by the Wisconsin Department of Transportation, released a blueprint/business plan for preserving, improving and expanding rail passenger services (including high-speed rail) within the Midwest region. The study sponsors included the States of Illinois, Iowa, Michigan, Missouri, Wisconsin, Minnesota, Indiana,

Nebraska, and Ohio, as well as Amtrak. The FRA provided $200,000 to the initial effort.

A March 2000 draft report indicated that a 3,000-mile regional rail system centered in Chicago and operating as a hub-and-spoke system at speeds up to 110 mph over existing track would be feasible. The study projected that the system would have a benefit to cost ratio of 1.8 to 1, and a revenue to cost ratio of 1.36 to 1 or cover its operating costs and recover the State share of capital costs. Capital costs for the entire system (consisting of seven major spokes, some of which subdivide at a distance from Chicago to serve multiple endpoints) were estimated at $4.1 billion over the 10 years required to rebuild current trackage. The States are now seeking project endorsement and funding commitments to advance project planning and implementation. Amtrak, working with the States, has made plans to acquire equipment to be used in high-speed service, with an initial order of 13 trainsets proposed. This effort is on hold while funding sources are identified.

Illinois (Chicago Hub Network: Chicago-St. Louis spoke)

Illinois has made noteworthy investments in the designated Chicago-St. Louis spoke of the Chicago Hub Network. Positive train control, grade crossing improvements, and route rationalization in the St. Louis area has been prominent among these investments; progress has also been made in the environmental work for the route.

Governor Ryan's "Illinois First" initiative provided some $100 million to rail projects of which $70 million was targeted for the Chicago to St. Louis high-speed rail corridor. Extensive rehabilitation work by the Union Pacific began in 2001 on the Joliet to Springfield portion to bring the track up to Class 6 standards, preparing for speeds of up to 110 mph. The FRA has provided about $5.1 million for grade crossing hazard elimination (TEA-21, Section 1103(c)) for the corridor through FY 2001.

The Illinois Department of Transportation, together with Amtrak, has developed a plan for non-electric services, with tilt suspension technology and top speeds primarily at 110 mph. The State's proposed system would offer eight round trips per day between Chicago and St. Louis with downtown-to-downtown trip times of 3 to 3.5 hours, saving two hours over existing schedules. State-estimated capital costs for the Chicago-St. Louis

spoke are in the $400 million range, including grade crossing hazard elimination costs. Current lines would be upgraded over a three-year period.

The State of Illinois, FHWA and FRA published a draft environmental impact statement for the Chicago to St. Louis corridor in June 2000. Illinois is now working with FRA and FHWA on the final environmental impact statement for Chicago to St. Louis.

Illinois, together with FRA and all of the major freight railroads represented by the Association of American Railroads, is participating in a $60 million joint program for a Positive Train Control system demonstration on a portion of the Chicago-St. Louis corridor. Under FRA's Next Generation High-Speed Rail Program, grants totaling $28 million will have been made to Illinois through fiscal year 2002, to be matched by about $12 million in State funds and $20 million of railroad industry contributions.

The program is addressing major positive train control system interoperability issues among the various railroads, as well as installing a demonstration system on the Illinois corridor segment. The demonstration system will use differential Global Positioning Systems aboard locomotives, digital ratio and advanced computers to monitor the location of trains in the rail system and oversee operation by locomotive engineers to prevent collisions and over speed derailments. The system on the Chicago-St. Louis corridor will be controlled from Union Pacific's Harriman Dispatch Center in Omaha.

The State received a $3 million grant from FRA in FY 1995 under the Next Generation High Speed Rail Program for a project to eliminate the bottleneck that exists in approaching the passenger terminal in St. Louis. The Federal funds were matched by $750,000 of State funds. The project rehabilitated six miles of track and the signal system between Granite City and East St. Louis, IL. These improvements are now complete and have shortened the running time by 15 minutes.

Michigan (Chicago Hub Network: Chicago-Detroit Spoke)

The State of Michigan and Amtrak have been making improvements in track, signals, stations, and equipment to incrementally upgrade the Chicago to Detroit designated high-speed corridor. The State has invested about $58 million through FY 2001. Michigan has received a total of $ 5.675 million

from the TEA-21, Section 1103(c) program for grade crossing hazard elimination through FY 2001.

Since 1995, Michigan has received grants from FRA's Next Generation High-Speed Rail Program to install and demonstrate an advanced communications-based train control system on a 70-mile segment of the Amtrak-owned portion of the corridor between Kalamazoo, Michigan and the Indiana State line. The State and Amtrak have matched the Federal funds with funding to upgrade the track for Class 6 (110 mph) operation and with fencing and station improvements. The State and Amtrak have been very active in closing grade crossings as well to support the high-speed initiative. The Incremental Train Control System being developed by General Electric Transportation Systems Global Signaling has been in 100 mph test operation on an initial 20-mile section. Wayside hardware installation is nearing completion on the entire 70-mile segment. Revenue high-speed service at 90 mph began on January 7, 2002.

Wisconsin and Minnesota (Chicago Hub Network: Chicago, Milwaukee, Twin Cities spoke)

In addition to the studies undertaken as part of the Midwest Regional Rail Initiative, the State of Wisconsin has pursued detailed studies of key segments of the Chicago-Milwaukee-Twin Cities spoke. Wisconsin is completing its environmental assessment and preliminary engineering work for 110 mph service on the Milwaukee to Madison portion of the corridor.

A request for qualifications and proposals has been issued for a public-private venture to rehabilitate and improve the Milwaukee Amtrak station. The FY 2002 FRA appropriation contains $2.5 million for the General Mitchell International Airport rail station project in Milwaukee, and $2 million for positive train control activities. FRA has provided a total of $2.1 million in TEA-21, Section 1103(c) funding through FY 2001. At the present time, six round trips operate between Milwaukee and Chicago with ridership of 500,000 in FY 2001. In addition, one long distance train, the *Empire Builder*, operating between Chicago and the Pacific Northwest, serves this portion of the corridor.

Indiana and Ohio (Chicago Hub Network: spokes between Chicago-Indianapolis- Cincinnati/Louisville; Chicago-Toledo-Cleveland; Cleveland-Columbus-Cincinnati)

In 2001, Ohio announced a $200 million grade crossing initiative to treat its major grade crossing issues. Indiana has received a total of $1.4 million in TEA-21, Section 1103(c) funding through 2001.

Gulf Coast Corridor (Louisiana, Mississippi, Alabama, Texas)

The Gulf Coast High-Speed Rail Corridor links New Orleans, Louisiana with Houston, Texas; Mobile, Alabama; Meridian, Mississippi; Birmingham Alabama and Atlanta, Georgia. Planning and grade crossing activities will predominate in the immediate future as the Gulf Coast Corridor fulfills the prerequisites for proposed future investments.

The States are planning to upgrade existing rail lines to 110 mph service and are preparing a strategic plan. FRA is formulating a cooperative agreement with the Southern Rapid Rail Transit Commission, which is leading the planning effort, for an additional $900,000 earmarked in FY 2002 Next Generation High-Speed Rail program funding that will be equally matched by the States. Amtrak has also provided $1 million in planning funds. There is an environmental impact analysis underway by the Research and Special Programs Administration to relocate the Mobile to New Orleans portion of the CSX corridor. Commercial remote sensing technologies are being employed to the corridor and preliminary findings will be available by the end of 2002. The $4 million study is expected to be completed in 2003.

FRA has provided a total of $3.525 million in TEA-21, Section 1103(c) funding through FY 2001 and the Gulf Coast Corridor will receive another $2 million in FY 2002 for grade crossing work. Alabama has dedicated $5 million per year in grade crossing funding to the high-speed corridor. Mississippi has spent $4.6 million in FHWA Section 152 funds that was matched by $640,000 in Norfolk Southern railroad contributions. Ninety grade crossings in Mississippi on the high-speed rail corridor have been treated or eliminated.

Southeast Corridor (As Originally Designated: Washington, D.C.-Richmond, Va.-Raleigh, Greensboro, and Charlotte, N.C.)

The States of Virginia and North Carolina have completed a high-speed study for the Southeast Corridor. North Carolina has been working with Virginia, South Carolina and Georgia to extend high-speed rail from Washington DC - first to Richmond, Raleigh and Charlotte, then Charlotte to

Atlanta/Macon and finally from Raleigh to Columbia, Savannah and Jacksonville. The two States have created the Virginia-North Carolina High Speed Rail Commission to provide legislative oversight for the project.

Virginia and North Carolina, together with the FHWA and FRA, have prepared a draft Tier I Environmental Impact Statement for the Southeast Corridor and have recently begun a series of public outreach meetings. The second study phase - Tier II - will include more specific analysis and evaluate the impacts of track location, station arrangement and final design. The Tier II studies may take anywhere from a few months to several years to complete. Once completed, these studies will be used to acquire the permits needed for construction.

Activities thus far in each of the States of the originally designated Southeast Corridor are described below:

Virginia

With the assistance of the Commonwealth, the railroads, and other interested parties, Amtrak and FRA collaborated on a detailed investigation of the fixed plant improvements that would provide reliable, 2-hour, 110 mph service between Union Station in Washington, and a revitalized and reopened Main Street Station in the heart of Richmond. The *Report to Congress: Potential Washington-Richmond Improvements* was completed in May 1999. The study's prime conclusion is that such expedited, center-to-center service is possible on a reliable basis, without adverse effects on commuter and freight services, provided that a staged program of carefully targeted and adroitly designed improvements to the infrastructure is methodically pursued.

The State has spent a total of $14.4 million on improvements to the Richmond to Washington corridor through FY 2001. For fiscal year 2000, the Commonwealth's legislature approved a total of $65.7 million for high-speed rail in the Richmond-Washington corridor as a down payment towards the full $348 million project. The State is now contracting for the work with available funds. The City of Richmond owns Main Street Station and has set in motion a three-phase $30 million renovation of the downtown station that could result in its reopening later this year. The FRA has provided a total of $6.245 million in TEA-21, Section 1103(c) funding through FY 2001.

Virginia completed a study on upgrading the signal and communications systems on the rail corridor from Washington, DC through Richmond to Charlotte, NC. The study recommends improvements to the signal system that will accommodate increased frequencies and speeds for passenger trains.

The State conducted an I-64 Major Investment Study between Richmond and Newport News that included a comprehensive analysis of intercity rail alternatives. The Richmond and Hampton MPOs and the Commonwealth Transportation Board have adopted the Locally Preferred Alternative. The study recommends the widening of I-64, but it also recommends that rail service be upgraded by double tracking the existing CSX rail line, increasing passenger train speeds to 110 mph, and increasing frequencies to 8 round trips per day. The total cost of the proposed rail improvements is $245 million.

The Virginia Department of Rail and Public Transit recently released a report that studied the feasibility of a high-speed rail corridor between Richmond and Hampton via Petersburg and the U.S. Route 460 corridor. The study found that it would cost approximately $236 million to upgrade the 75-mile route for 110 mph service. Selecting a route through Petersburg was a major issue that the study left unanswered.

North Carolina

In 1999, the North Carolina Department of Transportation purchased the North Carolina Railroad that stretches from Charlotte to Greensboro (90 miles) for $71.6 million. North Carolina has invested almost $115 million total to buy the line, equipment, and upgrade stations, track and signal work.

The State's sealed corridor initiative for the Charlotte to Durham and Cary to Raleigh segments of the high-speed corridor from Raleigh to Charlotte has increased safety by closing redundant crossings and providing the appropriate treatment for crossings in the entire corridor. These treatments cover 168 public crossings. A statistical evaluation of efforts completed to date indicates that five lives have already been saved. The State has received Next Generation High Speed Rail program funding and TEA-21, Section 1103(c) funding through FY 2001 totaling $11.4 million toward this effort.

North Carolina and Virginia formed a 12-member bi-State commission to review and encourage development of high-speed train service from Washington, D.C. to Charlotte. The Commission held its first meeting on November 28, 2001. As part of their duties, the members will meet with railroad officials, State and local officials and other interested parties. If the commission finds it feasible and desirable to establish high-speed rail service, the group will recommend necessary legislative actions and a funding program.

North Carolina has taken the lead in the preparation of the environmental impact analysis of the high-speed rail corridor in those two states. The Tier I Draft Environmental Impact Statement (EIS) was circulated for public comment and draft recommendations were made. Completion of the final EIS and Record of Decision (ROD) are to be completed by late 2002. Following the ROD, preparation of Tier 2 environmental documents will commence covering specific pieces of work in detail.

NCDOT and the Virginia Rail and Public Transportation Department met with CSX representatives to begin negotiations for the purchase of the S line from Raleigh to Richmond. The S line is an assembled right of way but the track has been removed.

Southeast Corridor Extensions

Since its original designation, the Southeast Corridor has also been extended east from Richmond to Newport News; south from Raleigh to Columbia, SC, Savannah, GA, and Jacksonville, FL; and southwest from Charlotte, NC to Atlanta and Macon, GA, with a connection between Atlanta/Macon and Savannah/Jacksonville.

South Carolina, North Carolina and Georgia are participating in a $200,000 study of the Charlotte-Atlanta-Macon portion of the Southeast Corridor. The study will determine the ridership, operations and upgrading requirements for high-speed (110 mph) service. The Atlanta to Macon portion of the corridor is a high priority for Georgia DOT for commuter rail into downtown Atlanta.

Georgia also participated in securing Southeast Corridor extensions that would serve Atlanta and Macon as well as Savannah. With $375,000 in TEA-21, Section 1103(c) funds, the State is evaluating the crossings on its

designated lines and developing appropriate improvement plans that will prioritize closures, consolidations, separations, and upgrading efforts. Only one long distance train per day operates through Atlanta: Amtrak's *Crescent*.

The Atlanta to Macon portion of the corridor is a high priority for Georgia DOT for commuter rail into Atlanta. Studies have been undertaken and preliminary engineering has been completed. The State is now negotiating for the purchase of the line from Norfolk Southern Railroad.

Work is also underway on the return of passenger trains to an intermodal facility on the downtown Atlanta site of the former Terminal Station. The State is negotiating with Norfolk Southern for the purchase of the property. A plan for the new station and finding of no significant impact from the environmental review has been obtained. The state is seeking financing alternatives to construct the station.

Florida

On November 7, 2000, Florida voters approved an amendment to its Constitution directing the State Legislature, Governor and Cabinet to proceed with the development of a high-speed ground transportation system. This system is required to use effective and efficient technologies capable of operating at speeds in excess of 120 miles per hour and must consist of dedicated rails or guideways separated from motor vehicular traffic. The Amendment also dictates that the system must ultimately link the five largest urban areas of the State and that construction must begin by November 1, 2003. At the 2001 regular legislative session, the Florida Legislature enacted the Florida High Speed Rail Authority Act. This Act created a nine-member High Speed Rail Authority. The Authority is charged with planning, administering and managing the preliminary engineering and preliminary environmental assessment of the intrastate high-speed rail system. The Act also requires that the first segment of the system be developed and operated between St. Petersburg, Tampa and Orlando with future service to Miami. State funding of $4.5 million was appropriated to the Authority for its activities in the current fiscal year. However, the Governor recently rescinded $1.2 million of these funds.

The High Speed Rail Authority's recent report said that the first leg of the mandated statewide high-speed train system should run from Tampa to Orlando and construction can begin by next year's deadline. All decisions

remain with lawmakers. The report is merely a recommendation dependent on funding from the legislature.

The cost of the first leg, which would begin running in 2007, is estimated to range from $1.2 billion to more than $6 billion depending on the technology employed and the maximum operating speeds. The report stated that if the State were to meet its November 2003 construction deadline, the system would have to be built either along Interstate 4 or on an existing railroad right-of-way. While private money can be used to run a high-speed train, some public money will have to be invested to build the facility, according to the report.

FRA's FY 2002 appropriation contains an earmark for $3 million for the Florida High-Speed Rail Authority to continue planning activities and for an environmental impact study. FRA is working with Florida DOT and the Florida High-Speed Rail Authority to award a cooperative agreement for these purposes. FRA has also provided $4 million in TEA-21, Section 1103(c) funding to Florida through FY 2001.

Empire Corridor: New York City-Albany-Buffalo/Niagara Falls, New York

Improvements supported by the State of New York since the 1980s have made possible operations at up to 110 mph on the Albany-New York portion of the route. The RTL turbine-powered equipment, remanufactured in a public/private partnership in which the State, FRA, and Amtrak have participated, will help make possible the line's noteworthy performance when completed.

New York State and Amtrak together plan to re-equip and incrementally improve the 160-mile New York to Schenectady line for up to125 mph service, and to upgrade the line west of Schenectady to Buffalo/Niagara Falls. The State and Amtrak developed a $200 million plan ($140 million for plant improvements/$60 million for equipment rebuilding) to reduce travel time (New York City-Albany in two hours; Albany-Buffalo in six and one half hours) in the corridor.

The State is actively involved in an effort to relocate Amtrak's Empire and NEC operations to a new station in the U.S. Postal Service's Farley Building in New York City. The new Albany/Rensselaer station will open in June

2001. Station rehabilitation work is underway in Utica and Rome while studies to upgrade Buffalo and Rochester are ongoing.

A five-year grade crossing improvement plan (estimated at $ 30.7 million) is also being instituted in the Empire Corridor. The plan includes closing 15 crossings, constructing 6 highway and 5 pedestrian bridges, and upgrading 5 crossings. The New York State DOT and FRA are also cooperating to test a locked barrier gate at a private crossing. If successful, this locked gate could be used at five additional private crossings in the corridor.

Northern New England Corridor

With Boston as its hub, the newly designated corridor will serve destinations in Maine, New Hampshire, Vermont and Montreal, Canada. On December 15, 2001, Amtrak began serving Portland, ME from Boston's North Station with four times a day *Downeaster* service. Amtrak estimates ridership at 360,000 people per year, or an average of 877 per day. In its first week of service, ridership averaged 860 passengers per day. Amtrak hopes to increase the speed of its trains from the current 59 mph maximum to 79 mph, thereby reducing trip time by 15 minutes.

On January 3, 2002, a kick-off meeting was held in Nashua, NH for the Boston-Montreal high-speed rail feasibility study. Jointly funded by FRA, and the Transportation Departments of Massachusetts, Vermont, and New Hampshire, phase I of the study will focus on ridership forecast, infrastructure, public participation and institutional issues. The first phase of the study is scheduled for completion by mid-September 2002.

South Central Corridor

The South Central Corridor extends southward from Tulsa to Oklahoma City, Oklahoma, Dallas-Fort Worth to Austin and San Antonio, Texas with a branch from Little Rock, Arkansas through Texarkana and Dallas, Texas.

Using existing NGHSR demonstration funding, FRA is working with the Oklahoma Department of Transportation to perform precision aerial digital mapping of the developing high-speed corridor between Dallas-Fort Worth, Oklahoma City, and Tulsa. This new technique produces a digital record of the right-of-way accurate to millimeters, along with matching video views. These highly accurate records of corridors have already been very useful for

both States and railroads, not only to identify grade crossing hazards but also to design track and infrastructure upgrades without the need for additional detailed surveys. Both ODOT and the Burlington Northern Sante Fe Railroad have already expressed strong interest in completing such a survey on the developing corridor in Oklahoma.

Keystone Corridor (Pittsburgh-Philadelphia, PA, with through service to New York City)

The Keystone Corridor is electrified between Harrisburg and Philadelphia, is almost completely grade-separated from the highway grid, and enjoys direct track access to Center City Philadelphia and, via the Northeast Corridor Main Line, to Midtown Manhattan. In recent years, Amtrak (the line's owner and manager) has invested over $30 million in addressing deferred maintenance on the 104-mile Harrisburg-Philadelphia portion.

The State is proposing to eliminate the remaining three public highway grade crossings on the Harrisburg to Philadelphia portion. FRA allocated $500,000 in 1999 in TEA-21, Section 1103(c) funding to begin preliminary design for the grade separation and bypass road needed to eliminate these 3 crossings and an additional $500,000 in 2001. This design work will be completed in 2002.

The Commonwealth and Amtrak have agreed to undertake an aggressive five-year capital investment program in the corridor worth $140 million, shared 50/50. Travel times will be reduced to 90 minutes along the 104-mile route. This partnership will lead to the acquisition of all-electric equipment capable of linking Harrisburg with the urban centers of Philadelphia and New York. Also, the partnership will support track and tie replacements, communications and signaling upgrades, catenary and electrification work, structure repairs, a new intermodal station at Harrisburg International Airport and station improvements at Lancaster, Harrisburg and Elizabethtown.

HIGH-SPEED RAIL SERVICE

Mr. Rogers. What are the main hurdles to initiating high-speed rail service outside the Northeast corridor? Is cost the main obstacle?

[The information follows:]

High-speed passenger rail service will require substantial capital investment, and this is the largest hurdle facing the implementation of high-speed rail. Most high-speed initiatives would superimpose this service on existing rail lines, many with limited capacity and physical constraints to high-speed operation. The Next Generation High Speed Rail program is designed to help address the cost issue by developing technologies that offer higher speeds at lower costs. Of particular note is the 150 mph light-weight non-electric locomotive, powered by an FAA certified jet (gas turbine) engine, which has undergone extensive tests at the Transportation Technology Center in Pueblo, CO and which will be tested in other corridors across the country; and the North American Joint Positive Train Control Project which is designed to facilitate safe operation of high speed service in a mixed railroad environment including high speed, conventional intercity, commuter and freight rail service.

WHICH STATES CAN FUND HIGH SPEED RAIL?

Mr. Rogers. If the high-speed rail bond proposal or some other type of federal financing is not enacted into law, which states can afford the cost to develop and initiate the high-speed rail services they are currently planning?

[The information follows:]

Every state involved in high-speed rail development has indicated a need for a Federal funding partner. Most states are already supporting existing passenger rail operations and will continue to do so. However, given the very high cost for developing high-speed rail, it would take a long time for states to implement high-speed rail without significant Federal contributions.

HIGH-SPEED RAIL IN AMERICA

Mr. Rogers. Unlike the 160-180 mile per hour TGV trains or the Shinkansen service in Japan, the proposed new U.S. trains would run at 100-120 miles per hour. While this would be an improvement over the typical 80 miles per hour speeds of present day passenger trains, do you believe that is sufficient to coax people from cars and trains in these corridors?

[The information follows:]

From a marketing standpoint, far more important than top speeds are door-to-door travel times and reliability. Integral to decision making or planning for high-speed rail services, whether at 90, 110, or higher speed levels, is a careful investigation of rail operations and fixed facilities to eliminate bottlenecks and to expedite train movements. For example, within congested urban terminal areas, an increase of speed from 15 to 30 mph over just one mile can save two minutes of travel time. FRA's commercial feasibility study of high-speed ground transportation (*High-Speed Ground Transportation for America,* report issued in 1997) showed that—even with 90-110 mph top speeds—a reliable system offering marked reductions in overall travel times could, under the best circumstances, derive up to 70 percent of its traffic from other modes.

INCREASE IN DERAILMENTS

Mr. Rogers. Last year, the Inspector General reported that derailments increased by 20 percent. Please provide the Committee with the statistics to support this figure and discuss the trends in derailments. For example, are there any carriers that are having a particular problem with derailments recently?

[The information follows:]

The number of annual derailments from all causes increased by 23.3 percent between 1998 and 2001, and by 2.6 percent from 2000 to 2001. During the same periods, however, the number of derailments on main tracks at speeds greater than 10 miles per hour declined more than 1 percent. Track-caused derailments increased 30 percent and equipment-caused derailments increased 19 percent, respectively, between 1998 and 2001.

FRA believes that the increase in derailments from track and equipment causes is related to maintenance practices. In addition, the increasing operation of heavier freight cars, from the previous gross weight of 131.5 tons to the present 143 tons, is accelerating the rates of wear and fatigue on track and bridge components.

The mergers and realignments that have occurred during the past four years complicate the evaluation of accident trends on individual carriers. For instance, both CSX and Norfolk Southern have greatly increased in size by acquiring portions of Conrail. It would be extremely difficult to normalize pre- and post-acquisition trends to draw valid conclusions on either carrier. FRA observed a significant one-year increase in track-caused accidents on CSX in 2000. But through an intensive maintenance effort by CSX management and labor, under a compliance agreement between CSX and FRA, that trend was reversed with a 25 percent reduction in 2001.

DERAILMENTS—ALL RAILROADS

CAUSE	1998	1999	2000	2001
Equipment	254	260	288	302
Human Factor	446	518	591	531
Other	233	22	209	256
Signal	14	20	35	26
Track	810	940	989	1,052
TOTAL	1,757	1,760	2,112	2,167

DERAILMENTS

Mr. Rogers. What is FRA doing to identify and solve these problems? Please answer on a railroad-by-railroad basis for the Class Is and more generally for the other railroads

[The information follows:]

FRA monitors its accident/incident databases to identify carriers reporting derailments. Because of FRA's limited track inspector resources, FRA concentrates its safety activities in those areas that pose the greatest safety

risk. Among the strategies that FRA is employing to reduce track caused accidents are:

- Increasing Track Geometry Inspections, including use of the T-16 on a part time basis. The T-16 instrumentation car is equipped to move at high speeds making it adaptable to certain high-production track geometry survey work as well as supporting the Office of Railroad Development in safety research projects.

- Working with railroads to improve the quality of track inspection and the quality of track maintenance. FRA has successfully promoted efforts by several large railroads to strengthen and enhance their track inspection and maintenance management systems. Management oversight is encouraged as an essential element to achieve quality inspections and maintenance.

- Conducting more intensive team inspections. During a team inspection, FRA inspectors "sweep" a railroad facility or line segment. A "sweep" maximizes inspector effectiveness in detecting and recording instances of non-compliance. In 2001, FRA inspected 229,739 miles of track, an increase of 2.6 percent over 2000.

- Making greater use of enforcement tools, such as Special Notices for Repair to resolve systemic non-compliance. The Special Notice is normally a speed restriction that requires the railroad's chief engineering office to certify the correction of the non-complying conditions before the restriction will be lifted.

- Initiating a rail replacement and maintenance program evaluation that identifies "best practices" in an attempt to reduce the occurrence of rail service failures from broken rails and broken joint bars. These are the leading causes of accidents on main tracks. The most severe track caused accidents are likely to occur from higher train speeds and traffic density. These factors, coupled with the effects of heavier freight cars, are severely taxing the integrity of rails and rail joints, which is placing greater demands for improved rail flaw detection and rail management practices by the railroads. FRA will support initiatives for railroads to improve the effectiveness of these strategies.

- Targeting yards with significant amounts of rail traffic or hazardous materials traffic for team inspections and other intensive surveillance. Yards presently account for the greatest number of track caused derailments, with the greatest problem found to be defective ties and fasteners. A yard derailment has the potential to become critical owing to the presence of large numbers of freight cars carrying all sorts of commodities, and the usual proximity of people, including railroad employees, neighbors, and the public.

FRA employed several of these approaches when numerous problems were observed at CSX Transportation. FRA conducted a Safety Assurance and Compliance Program team audit of the carrier's track maintenance practices, which included large scale FRA team inspections throughout the CSX system, automated Track Geometry inspections, and outreach sessions with labor and management to gain their input about the nature of the track problems. Subsequently, FRA entered into a track maintenance Compliance Agreement with CSX Transportation, wherein the railroad agreed to adopt a number of new procedures to improve the quality of track inspections and track maintenance. In addition the railroad hired approximately 100 additional track inspectors. The results of this approach resulted in a 25 per cent reduction in track-caused train accidents from 2000 to 2001. Because of the vast amount of time and resources required, FRA is severely limited in how often it could employ this intensive and comprehensive approach to improving track safety.

Recently, FRA started to work with the Union Pacific Railroad to improve track inspections and maintenance, following a reported increase in train accident rates at that carrier. The Union Pacific Railroad and FRA are coordinating efforts to adopt some of the best practices that proved so successful on the CSX in reducing track-related derailments.

BUDGET MEASURES TO ADDRESS INCREASED DERAILMENTS

Mr. Rogers. Do you have any specific measures (new) in your budget to address these problems.

[The information follows:]

FRA has requested 12 additional track inspector positions for FY 2003. FRA currently has 54 track inspectors, which equates to one inspector for every 4,074 miles of track. FRA intends to use the additional track inspectors to conduct intensive team inspections of mainline track in areas where the safety data indicates poses the greatest risk of derailments. The additional inspector resources will also be used conduct team inspections of major rail yards and yards that have significant concentrations of hazardous material shipments. FRA believes that team inspections permit FRA to cover more trackage in a coordinated fashion, vastly improving the efficiency to FRA inspection activities.

The 12 additional track inspectors requested in the FY 2003 budget, coupled with the additional track inspection positions that were approved in the FY 2002 budget, will permit FRA to achieve its goal of conducting continuous team inspections on mainline track and yard tracks simultaneously. Without these additional resources, FRA must shift resources back and forth between yard inspections and mainline inspections.

Furthermore, FRA will continue to perform increased track geometry inspections, using the T-16 track geometry car from FRA's Office of Research and Development to supplement the Office of Safety's own track geometry inspection vehicle, the T-2000. The T-2000 is capable of inspecting about 30,000 miles of track per year. Given that the Nation has 220,000 miles of railroad track, it is vitally important for FRA to increase its track geometry inspection capabilities.

RAILROAD REHABILITATION AND IMPROVEMENT FINANCING (RRIF) PROGRAM

Mr. Rogers. In July 2000, FRA issued the final rule on the railroad rehabilitation and improvement financing program. Please update the Committee on what progress has been made since the issuance of the rule, identify which railroads, if any, have received a loan under this program, and the terms of the loan.

[The information follows:]

Since the issuance of the final rule, FRA has met with over 20 prospective applicants with projects that could total $569 million in financial assistance. On June 11, 2001, a 25-year loan was approved for the I&M Rail Link. The financing agreement has not been executed because the railroad's bank has not accepted the loan offer. A loan for the Arkansas & Missouri Railroad is currently in the final stage of the approval process. The repayment period for this loan is 25 years. The interest rates will be set 10 days prior to the execution of the financing agreements with the railroads.

RRIF PROGRAM LOANS

Mr. Rogers. If no railroads have received a loan yet, please explain why. What are the main obstacles?

[The information follows:]

As reflected in the I&M Rail Link transaction, Federal loans to projects involving multiple private sector partnerships that often take time to complete.

Another obstacle has been FRA's inability to use the investigation charge provided for in the RRIF statute. The charge was to be used by FRA to make the determinations and findings needed to make a loan. The statutory language, however, does not give FRA sufficient authority to outlay the investigation charge. A technical correction to the RRIF statute allowing use of the charge would enable FRA to obtain contractor support to expedite the evaluation of RRIF applications.

RRIF PROGRAM STAFF WORK

Mr. Rogers. What staff work is necessary for this program? Is there any funding or staffing work planned for in the remainder of fiscal year 2002 or in fiscal year 2003? If so, please describe.

[The information follows:]

During the remainder of FY 2002, and in FY 2003, FRA staff will be evaluating pending applications which, to date, have the potential for approximately $500 million in financial assistance. During FY 2003, FRA also will be monitoring the project implementation and financial performance of the loans approved in FY 2002, and in early FY 2003.

RRIF FUND AWARD PREFERENCE

Mr. Rogers. Does FRA plan to give any preference to any type of railroad when awarding RRIF funds (i.e. passenger railroads, Class I, smaller railroads)?

[The information follows:]

FRA does not plan to give preference to any particular type of railroad. Consistent with the RRIF statutory project priorities, FRA will give preference to creditworthy projects that enhance public safety, enhance the environment, promote economic development, enable United States companies to be more competitive in international markets, are endorsed by the plans prepared under section 135 of title 23 U.S.C. by the State or States in which they are located, or preserve or enhance rail or intermodal service to small communities or rural areas.

INTEREST IN RRIF PROGRAM

Mr. Rogers. Who has expressed any interest in RRIF financing? To what extent have Class I railroads expressed an interest in applying for RRIF funds?

[The information follows:]

A wide variety of prospective applicants ranging from railroads to localities, government sponsored authorities and Amtrak have expressed interest in RRIF financing. The Burlington Northern Santa Fe has indicated interest for projects addressing public needs and the Kansas City Southern has expressed interest in undertaking a project jointly with Amtrak. Last year the President of the Canadian National announced the railroad's willingness to fund part of the Credit Risk Premium for RRIF funding requested by its connecting shortline railroads.

AMTRAK ELIGIBILITY FOR RRIF PROGRAM FUNDS

Mr. Rogers. Is Amtrak eligible for these funds? If so, have they expressed an interest in the program?

[The information follows:]

Amtrak is statutorily eligible for RRIF financing. Amtrak has expressed interest in a project using right-of-way owned by the Kansas City Southern Railway to extend the *Crescent* service on a new route through east Texas to Dallas. The potential RRIF project would fund track rehabilitation and train communication improvements.

CREDIT RISK PREMIUM CONTRIBUTIONS BY NON-RAILROAD ENTITIES

Mr. Rogers. Does DOT anticipate that municipalities or entities other than railroads might contribute to the required credit risk premiums to receive credit assistance? Have any done so yet?

[The information follows:]

The State of Oregon has committed to providing the credit risk premium for

the loan to the Mount Hood Railroad application. The State of New York is considering contributing the credit risk premium for a RRIF applicant that is completing an application. The State of Arkansas has secured the statutory authority needed to provide credit risk premiums for its small railroads seeking RRIF funding.

AMTRAK REFORM COUNCIL REPORT

Mr. Rogers. What is your analysis of the Amtrak Reform Council 's report? What, if any, merit do you see in the ARC's recommendations for restructuring and rationalization of the national intercity passenger rail system and the proposed business model?

[The information follows:]

The ARC report is a valuable addition to the debate that is needed to identify a new policy on the future of intercity passenger rail service and the role of the Federal Government. The ARC report offers its vision for the future of passenger rail service. The Administration is reviewing the ARC report along with other visions of the future such as those proposed by Senator Hollings in S. 1991 and Senator McCain in S. 1958, as part of the formulation of the Administration's position on intercity passenger rail policy. But, as this Committee is aware, none of these visions address the most difficult aspect of turning policy into reality, which is how do we pay for it. Answering that latter question is also part of the ongoing discussions within the Administration.

FRA'S ROLE ON THE AMTRAK REFORM COUNCIL

Mr. Rogers. Until last November, the FRA has taken an active role representing the Secretary of Transportation as a member of the Amtrak Reform Council. Since last November, the FRA abstained from Council discussions and has not voted or provided comment on any proposals. Please explain who made this decision and why?

[The information follows:]

The decision was made by the Secretary based upon the unanimous recommendation of his senior advisors, who are involved in Amtrak policy development. The reason behind this decision is simple. The ARC was

established as an independent commission. After the ARC made its finding last November that Amtrak would not achieve the statutory goal of operating self-sufficiency, the ARC was obligated to prepare its recommendations on a restructured and rationalized national intercity rail passenger system. The Department did not wish to appear to be influencing the independence of the ARC nor did the Department wish to have the ARC's recommendations mistakenly construed as being those of the Administration.

FRA AND AMTRAK REFORM COUNCIL ACTIVITIES

Mr. Rogers. Was the decision to cease participation in Council activities communicated to the congressional Committees that established the Secretary's membership in the 1997 Reform Act? If so, please provide a copy of this correspondence.

[The information follows:]

There was no formal communication to Congress regarding this decision.

FY 2002 AMTRAK REFORM COUNCIL FUNDING

Mr. Rogers. The ARC was not funded in fiscal year 2002. At what point in the year will the ARC run out of money?

[The information follows:]

The Fiscal Year 2002 Department of Transportation and Related Agencies Appropriations Act provides $225,000 for the ARC's expenses in FY 2002. The ARC began the year with a carryover of $304,785 for a total of $529,785 available this year. At the current rate of expenditure for salaries and related costs, the ARC will run out of money in late April or early May, 2002.

PROJECTED UNOBLIGATED BALANCES

Mr. Rogers. Please provide the current unobligated balances for each FRA program.

[The information follows:]

FEDERAL RAILROAD ADMINISTRATION
STATUS OF FUNDS
(Dollars in thousands)

	Total Budgetary Resources	Actual Obligations thru 3/31/02	Current Unobligated Balance	Known Commitments	Planned Obligations	Revised Unobligated Balance
Safety and Operations	122,296	48,799	73,497	45,347	23,300	4,850
Local Rail Freight Assistance	607	0	607	0	607	0
Railroad Research and Development	36,407	10,309	26,098	12,190	11,282	2,626
Northeast Corridor Improvement Program	3,059	0	3,059	0	3,059	0
Pennsylvania Station Redevelopment Project	39,957	0	39,957	0	39,957	0
Grants to the National Railroad Passenger Corporation	933,609	833,221	100,388	0	100,100	288
Amtrak Reform Council	530	401	129	129	0	0
Next Generation High-Speed Rail	38,090	1,318	36,772	11,721	22,051	3,000
Alaska Railroad Rehabilitation	20,000	0	20,000	0	20,000	0
West Virginia Rail Development	11,762	0	11,762	9,980	1,782	0
TOTAL	1,206,317	894,048	312,269	79,367	222,138	10,764

SPEND OUT OF UNOBLIGATED BALANCES

Mr. Rogers. For each program's unobligated balances, please detail when this money will be spent.

[The information follows:]

FEDERAL RAILROAD ADMINISTRATION
STATUS OF FUNDS
(Dollars in thousands)

						Cumulative Spending Plan	
	Unobligated Balance as of 3/31/02	Known Commitments	+	Planned Obligations	=	Total Projected Obligations	Thru June 30	Thru Sept 30
Safety and Operations	73,497	45,347		23,300		68,647	31,354	68,647
Local Rail Freight Assistance	607	0		607		607	0	607
Railroad Research and Development	26,098	12,190		11,282		23,472	13,925	23,472
Northeast Corridor Improvement Program	3,059	0		3,059		3,059	0	3,059
Pennsylvania Station Redevelopment Project	39,957	0		39,957		39,957	0	39,957
Grants to the National Railroad Passenger Corporation	100,388	0		100,100		100,100	100,100	100,100
Amtrak Reform Council	129	129		0		129	129	129
Next Generation High-Speed Rail	36,772	11,721		22,051		33,772	32,407	33,772
Alaska Railroad Rehabilitation	20,000	0		20,000		20,000	20,000	20,000
West Virginia Rail Development	11,762	9,980		1,782		11,762	11,762	11,762
TOTAL	312,269	79,367		222,138		301,505	209,677	301,505

ACCIDENT RATES

Mr. Rogers. Please update the data on Class I railroads with the highest and lowest accident rates as shown in last year's hearing record.

[The information follows:]

(Excludes Highway-Rail Accidents)

	2001 Accidents	Accidents Per Million Train-Miles
Norfolk Southern Corporation	218	2.42
Grand Trunk Western Railroad Incorporated	15	2.95
CSX Transportation	346	3.19
SOO Line Railroad Company	30	3.58
Burlington Northern Santa Fe Corporation	584	3.58
Amtrak (National Railroad Passenger Corporation)	148	3.84
Union Pacific Railroad Company	881	5.10
Illinois Central Railroad Company	66	6.10
Kansas City Southern Railway Company	88	11.49

Note: 2001 data is preliminary, as of March 2002.

STATE PARTICIPATION

Mr. Rogers. Please update your listing of FRA's inspection resources by region, federal staff levels, state staff levels and explain any differences between federal and state levels.

[The information follows:]

FEDERAL AND STATE STAFFING LEVELS

Region	Federal	State
1	45	11
2	64	41
3	60	24

4	54	9
5	61	16
6	53	9
7	40	38
8	45	14
Total	422	162

The difference between the Federal and state staffing levels is due primarily to the fact that state participation in FRA's Railroad Safety State Participation Program is voluntary. Currently only 30 states have elected to participate in this Program and the degree of participation varies widely from state to state. While some states have many safety inspectors in all five FRA inspection disciplines, most states have only a few safety inspectors and do not cover every discipline.

The allocation of state inspectors by region and among the technical inspection disciplines is dependent on each state's priorities. Upon request, FRA will suggest inspection areas that a state may wish to pursue, based upon accident and compliance history, rail traffic patterns and headquarters assignments for FRA inspectors.

FRA allocates inspectors nationwide based on risk, whereas individual states hire inspectors for a variety of reasons. States have different funding levels, and provide different services to satisfy both state and Federal objectives. FRA's allocation of Federal inspectors is done independently of any existing allocation of state inspectors. States have inspectors because they want more inspection coverage compared to states that have elected not to have state inspectors. If FRA's allocation of Federal inspectors to a state were reduced because a state has its own inspectors, states with inspectors would be subsidizing those without inspectors. States would be discouraged from having a State Participation Program with FRA under these conditions. However, in those FRA Regions where State Participation Programs do exist, FRA makes every effort to coordinate inspection activities between state and Federal inspectors to avoid duplication of effort and leverage the resources of both the participating state agency and FRA.

There is one significant staffing difference between FRA and state rail safety participation programs: states may elect to concentrate their signal

inspection activities on highway-rail grade crossing warning devices. FRA's signal and train control inspectors have responsibility for signals governing train movements as well as grade crossing signals. Federal State Rail Safety Participation regulations, 49 CFR Part 212, allow states to qualify inspectors to work exclusively inspecting grade crossing warning devices for compliance with Federal regulations that dictate railroad inspection, maintenance and testing requirements for such devices.

INSPECTORS AUTHORIZED/ON BOARD

Mr. Rogers. How many federal rail safety inspectors are authorized today and how many are on board?

[The information follows:]

	FTE 2002 FTE Ceiling	Current-On-Board (As of 2-28-2001)
Inspectors	422	435 1/

1/ Reflects FRA's strategy to have more inspectors on-board than the ceiling in order to maximize FTE ceiling. However, on-board strength never exceeds budget position ceiling.

INSPECTION DATA

Mr. Rogers. Please update the chart on your inspector workload as shown from last year's hearing record.

[The information follows:]

	1998	1999	2000	2001 1/
Track:				
Number of inspections	12,498	12,735	12,344	13,939
Miles inspected	253,230	230,636	223,870	229,739
Records inspected	120,357	117,585	108,756	105,199
Defects recorded	61,386	73,473	64,676	84,911
Signal:				
Number of inspections	5,020	5,004	5,614	6,424

Units inspected	43,910	38,703	42,999	75,363
Records inspected	74,662	95,009	77,913	60,583
Defects recorded	22,510	22,338	20,871	22,967
Motive Power and Equipment:				
Number of inspections	14,282	15,977	17,948	19,617
Locomotives inspected	22,517	25,228	28,525	30,778
Cars inspected	551,033	589,632	618,096	613,866
Defects recorded	104,498	118,091	137,679	156,345
Operating Practices:				
Number of inspections	13,890	15,447	16,330	17,855
Complaints received	1,182	855		
Defects recorded	30,086	40,848	34,706	35,359
Hazardous Materials:				
Number of inspections	10,468	9,454	9,303	10,931
Tank cars inspected	72,756	70,615	67,638	86,561
Defects recorded	20,548	16,295	19,793	22,924

1/ Preliminary data as of March 5, 2002.

FY 1996-2002 SAFETY WORKFORCE

Mr. Rogers. Please update the breakdown of your inspector work force by position by providing data for fiscal years 1996 through 2002.

[The information follows:]

	FY 1996 Actual	FY 1997 Actual	FY 1998 Actual	FY 1999 Actual	FY 2000 Actual	FY 2001 Actual	FY 2002 Estimate
FIELD:							
Administrators, coordinators, Managers, safety improvement team 1/	42	40	45	42	53	54	54
Technical specialists 2/	59	59	56	40	63	71	68
Inspectors	298	282	292	319	286	304	300
Subtotals, INSPECTORS	399	381	393	401	402	429	422
Other	50	58	57	64	58	57	64
Subtotal, SAFETY FIELD WORKFORCE	449	439	450	465	460	486	486
HEADQUARTERS:							
Professionals	72	72	74	78	86	84	90
Other	10	8	10	11	9	9	10
Subtotal,							
HEADQUARTERS	82	80	84	89	95	93	100
Total, SAFETY	531	519	534	554	555	579	586

1/ Includes regional administrators, deputy regional administrators who are the line supervisors for all inspectors in their region, managers and their assistants for highway-rail crossing safety and trespass prevention, special project coordinators who work in concert with the regions to address safety issues, and members of the safety improvement and development team responsible for developing and delivering technical training to the inspector workforce

2/ Experts that provide technical direction/oversight to inspectors with regard to the performance of inspections by insuring that the appropriate criteria are used and discrepancies are identified.

STATE PARTICIPATION

Mr. Rogers. Please update the state-by-state inspector data found in last year's hearing record.

[The information follows:]

FY 2002 RAILROAD SAFETY STATE PARTICIPATION PROGRAM

STATE	TRACK	MP&E	OP	HM	S&TC	XING	TOTAL
AL	1	2	0	0	0	0	3
AZ	1	1	1	2	1	0	6
CA	5	6	9	3	2	0	25
FL	2	1	2	1	1	0	7
ID	0	0	0	1	0	0	1
IL	3	0	1	2	3	0	9
IA	2	0	0	0	0	0	2
ME	2	0	0	0	0	0	2
MD	2	1	1	0	1	0	5
MA	0	0	0	0	0	1	1
MS	1	0	0	0	0	1	2
MO	2	0	1	0	0	2	5
MT	0	2	0	0	0	0	2
NE	1	1	0	0	0	0	2
NV	1	1	1	1	0	0	4
NH	1	0	0	0	0	0	1
NJ	0	0	0	2	0	0	2
NM	0	0	1	0	0	1	2
NC	1	1	0	0	1	0	3
NY	3	4	0	0	0	0	7
OH	4	2	2	3	0	3	14
OR	2	2	1	1	0	1	7
PA	3	2	1	1	0	0	7
SC	1	1	0	0	0	0	2
TN	2	2	1	0	2	0	7
TX	3	3	4	3	1	0	14
UT	1	1	0	0	1	0	3
VA	2	1	0	0	0	0	3
WA	1	0	1	1	0	1	4
WV	2	3	2	1	2	0	10
TOTAL	49	37	29	22	15	10	162

FY 2001 SAFETY INSPECTIONS

Mr. Rogers. How many miles of track, freight cars, locomotives, and track miles with signals and train control systems were inspected last year? How does this compare to the two previous years.

[The information follows:]

Below is a comparison of preliminary 2001 inspection data with that of the previous two years. FRA collects the number of signal and train control devices inspected each year, but not the number of track miles with signal and train control systems.

	2001 1/	Percent Change From 2000	Percent Change From 1999
Track Miles Inspected	229,739	+2.6	-.4
Freight Cars Inspected	648,627	+1.6	+7.0
Locomotives Inspected	30,778	+7.9	+22.0
Signal Units Inspected	75,363	+75.3	+94.7

1/ Preliminary data as of March 8, 2002.

FY 1997-2001 SAFETY TRENDS

Mr. Rogers. Please provide statistical data on railroad safety trends for the past five years using a variety of performance measures.

[The information follows:]

CASUALTIES IN ALL ACCIDENTS/INCIDENTS

Year	Fatalities	Nonfatal Cases	Total Casualties
1997	1,063	11,767	12,830
1998	1,008	11,459	12,467
1999	932	11,700	12,632
2000	937	11,643	12,580
2001 1/	961	10,519	11,480

TOTAL ACCIDENTS/INCIDENTS
Excludes Highway-Rail

Year	Train Accidents	Highway-Rail Incidents	Other Incidents	Total Accidents/ Incidents
1997	2,397	3,865	10,437	16,699
1998	2,575	3,508	10,418	16,501
1999	2,768	3,489	10,519	16,776
2000	2,983	3,502	10,433	16,918
2001 1/	2,919	3,219	9,402	15,540

TRAIN ACCIDENT DAMAGES AND RATES
Excludes Highway-Rail

Year	Train Accidents	Reportable Damages	Accidents Per Million Train Miles
1997	2,397	210,729,344	3.54
1998	2,575	233,897,694	3.77
1999	2,768	245,089,634	3.89
2000	2,983	263,211,899	4.13
2001 1/	2,919	302,615,788	4.11

1/ Preliminary data as of March 5, 2002.

HIGHWAY-RAIL INCIDENTS AND CASUALTIES

Year	Number of Incidents	Total Deaths	Total Nonfatal
1997	3,865	461	1,540
1998	3,508	431	1,303
1999	3,489	402	1,396
2000	3,502	425	1,219
2001 1/	3,219	417	1,131

HIGHWAY-RAIL INCIDENTS AND RATE

Year	Number of Incidents	Number Per Million Train Miles
1997	3,865	5.71
1998	3,508	5.14
1999	3,489	4.90
2000	3,502	4.84
2001 1/	3,219	4.54

EMPLOYEE ON DUTY CASUALTIES AND RATE

Year	Fatalities	Nonfatal Cases	Total Cases	Cases Per 200,000 Hours Worked
1997	37	8,295	8,332	3.31
1998	27	8,398	8,425	3.27
1999	31	8,622	8,653	3.39
2000	24	8,423	8,447	3.44
2001 1/	22	7,575	7,597	3.19

TRESPASSERS CASUALTIES AND RATE
Excludes Highway-Rail

Year	Fatalities	Nonfatal Cases	Total Cases	Cases Per 1,000,000 Train Miles
1997	533	516	1,049	1.55
1998	536	513	1,049	1.54
1999	479	445	924	1.30
2000	463	414	877	1.21
2000 1/	505	393	898	1.27

1/ Preliminary data as of March 5, 2002.

HAZARDOUS MATERIAL ACCIDENTS

Mr. Rogers. Please update the data on trends in hazardous materials accidents as shown in last year's hearing record.

[The information follows:]

Year	Accidents involving release of hazardous materials	Cars Releasing	Fatalities (Train Accidents)
1985	54	109	0
1986	51	79	1
1987	50	89	0
1988	44	74	0
1989	55	84	0
1990	35	90	0
1991	47	83	0
1992	27	33	0
1993	29	58	0
1994	36	43	0
1995	27	50	0
1996	34	69	2
1997	31	38	0
1998	43	67	0
1999	42	76	0
2000	35	75	1
2001[1]	31	55	

[1] 2001 is preliminary as of March 5, 2002.

SAFETY STATISTICS

Mr. Rogers. Please chronicle all major hazardous materials-related accidents/incidents during calendar year 2000, 2001, and 2002, to date. As part of this response note the date, location, railroad type, type of hazardous material, fatalities, injuries, evacuations, and cost of damage.

[The information follows:]

The following major hazardous materials-related accidents/incidents occurred during calendar year 2000 through February 2002.

Date:	January 16, 2000
Location:	Kiel, Wisconsin
Railroad:	Wisconsin Central Railroad
Type of hazmat:	Methanol
Fatalities/injuries:	None
Evacuations:	240
Other complications:	
Estimated cost:	$112,000
Probable cause:	Derailment

Date:	January 29, 2000
Location:	Highland Park, Michigan
Railroad:	Consolidated Rail Corporation
Type of hazmat:	Phenol
Fatalities/injuries:	None
Evacuations:	72
Other complications:	
Estimated cost:	Not reported
Probable cause:	Derailment

Date:	January 21, 2000
Location:	Philadelphia, Pennsylvania
Railroad:	RSI Leasing, Inc.
Type of hazmat:	Ferric chloride solution
Fatalities/injuries:	None
Evacuations:	None
Other complications:	
Estimated cost:	$92,500

Probable cause:	Unloading fitting cracked during product transfer
Date:	January 21, 2000
Location:	Flint, Michigan
Railroad:	CSX Transportation
Type of hazmat:	Liquefied Petroleum Gases
Fatalities/injuries:	None
Evacuations:	700
Other complications:	Fire
Estimated cost:	Not reported
Probable cause:	Car was leaking, stopped over a switch heater-causing car to catch fire
Date:	February 1, 2000
Location:	Parmele, North Carolina
Railroad:	CSX Transportation
Type of hazmat:	Environmentally hazardous liquid
Fatalities/injuries:	None
Evacuations:	259
Other complications:	Fire
Estimated cost:	$640,140
Probable cause:	Derailment
Date:	February 12, 2000
Location:	Fort Lauderdale, Florida
Railroad:	CSX Transportation
Type of hazmat:	Petroleum distillates
Fatalities/injuries:	None
Evacuations:	10
Other complications:	
Estimated cost:	Not reported
Probable cause:	Shipper overfilled tank car
Date:	February 15, 2000
Location:	Kinder, Louisiana
Railroad:	Union Pacific Railroad
Type of hazmat:	Sulfuric acid
Fatalities/injuries:	None
Evacuations:	8

Other complications:	Highway 165 closed
Estimated cost:	$3,000
Probable cause:	Condensation on car, car was not leaking

Date:	March 16, 2000
Location:	Anaheim, California
Railroad:	Union Pacific Railroad
Type of hazmat:	Acetic acid
Fatalities/injuries:	None
Evacuations:	350
Other complications:	
Estimated cost:	$175,000
Probable cause:	Derailment

Date:	March 19, 2000
Location:	Harahan, Louisiana
Railroad:	Illinois Central Railroad
Type of hazmat:	Hydrochloric acid
Fatalities/injuries:	None
Evacuations:	200
Other complications:	
Estimated cost:	Unknown
Probable cause:	Unsecured car by shipper

Date:	March 20, 2000
Location:	Sterling Heights, Michigan
Railroad:	Consolidated Rail Corporation
Type of hazmat:	Hydrochloric acid
Fatalities/injuries:	None
Evacuations:	2400
Other complications:	
Estimated cost:	Not reported
Probable cause:	

Date:	March 20, 2000
Location:	Miami, Florida
Railroad:	CSX Transportation
Type of hazmat:	Hydrogen peroxide
Fatalities/injuries:	None
Evacuations:	200

Other complications:
Estimated cost: $72,050
Probable cause: Derailment

Date: March 20, 2000
Location: Houston, Texas
Railroad: Halterman Company (shipper)
Type of hazmat: Flammable liquid, nos
Fatalities/injuries: None
Evacuations: None
Other complications:
Estimated cost: $50,000
Probable cause:

Date: March 30, 2000
Location: Greensboro, North Carolina
Railroad: Worth Chemical Company (shipper)
Type of hazmat: Hydrochloric acid
Fatalities/injuries: None
Evacuations: 700
Other complications:
Estimated cost: $5,000
Probable cause: PVC valve broken during unloading of product

Date: April 10, 2000
Location: Lansdale, Pennsylvania
Railroad: CSX Transportation
Type of hazmat: Tetrachloroethylene
Fatalities/injuries: None
Evacuations: 30
Other complications:
Estimated cost: $2,000
Probable cause: Derailment

Date: April 11, 2000
Location: Farwell, Texas
Railroad: Burlington Northern Santa Fe
Type of hazmat: Ethers, nos
Fatalities/injuries: None
Evacuations: 14

Other complications:	
Estimated cost:	$10,200
Probable cause:	Derailment

Date:	April 25, 2000
Location:	Danville, Kentucky
Railroad:	Norfolk Southern Railway
Type of hazmat:	Sodium dithionite
Fatalities/injuries:	None
Evacuations:	1000
Other complications:	Fire
Estimated cost:	$575,000
Probable cause:	Moisture in container causing fire

Date:	May 1, 2000
Location:	Wenatchee, Washington
Railroad:	Amerigas Propane (shipper)
Type of hazmat:	Liquefied Petroleum Gas
Fatalities/injuries:	None
Evacuations:	4
Other complications:	
Estimated cost:	$667
Probable cause:	Sample valve leak

Date:	May 3, 2000
Location:	New Iberia, Louisiana
Railroad:	Burlington Northern Santa Fe
Type of hazmat:	Xylene
Fatalities/injuries:	None
Evacuations:	2000
Other complications:	
Estimated cost:	$1,130,600
Probable cause:	Derailment

Date:	May 5, 2000
Location:	Colton, California
Railroad:	Union Pacific Railroad
Type of hazmat:	Hydrochloric acid
Fatalities/injuries:	None
Evacuations:	150

Other complications:	
Estimated cost:	$76,500
Probable cause:	Car leaking from bottom
Date:	May 6, 2000
Location:	Mount Hebron, Alabama
Railroad:	Burlington Northern Santa Fe
Type of hazmat:	Sodium chlorate solution
Fatalities/injuries:	None
Evacuations:	None
Other complications:	
Estimated cost:	$163,350
Probable cause:	Derailment
Date:	May 19, 2000
Location:	Dilworth, Minnesota
Railroad:	Burlington Northern Santa Fe
Type of hazmat:	Coal tar distillates
Fatalities/injuries:	None
Evacuations:	30
Other complications:	
Estimated cost:	Not reported
Probable cause:	Derailment
Date:	May 27, 2000
Location:	Eunice, Louisiana
Railroad:	Union Pacific Railroad
Type of hazmat:	Corrosive liquid, Acrylic acid, Toluene diisocyanate, Propylene dichloride, Phenol, Dicyclopentadiene, Pentanes, Hexane, Thia-4-Pentanal, Corrosive liquid, Methyl chloride
Fatalities/injuries:	None
Evacuations:	2500
Other complications:	
Estimated cost:	$13,622,497
Probable cause:	Derailment
Date:	May 27, 2000
Location:	Basile, Louisiana
Railroad:	Union Pacific Railroad

Type of hazmat:	Ethylene oxide
Fatalities/injuries:	None
Evacuations:	2500
Other complications:	
Estimated cost:	$777,929
Probable cause:	Same derailment as above

Date:	June 6, 2000
Location:	Houston, Texas
Railroad:	Union Pacific Railroad
Type of hazmat:	Corrosive liquid, nos
Fatalities/injuries:	1 injury
Evacuations:	None
Other complications:	
Estimated cost:	Unknown
Probable cause:	Packing gland on valve leaking

Date:	June 9, 2000
Location:	Social Circle, Georgia
Railroad:	CSX Transportation
Type of hazmat:	Ammonium nitrate
Fatalities/injuries:	None
Evacuations:	None
Other complications:	
Estimated cost:	$280,000
Probable cause:	Derailment

Date:	June 10, 2000
Location:	Slaton, Texas
Railroad:	Burlington Northern Santa Fe
Type of hazmat:	Propionic acid
Fatalities/injuries:	None
Evacuations:	100
Other complications:	
Estimated cost:	$3,575
Probable cause:	Bottom outlet valve leaking

Date:	June 10, 2000
Location:	Harpursville, New York
Railroad:	St. Lawrence and Hudson Railroad

Type of hazmat:	Methyl chloride, LP Gas, sodium hydroxide sulfuric acid, no reported release
Fatalities/injuries:	None
Evacuations:	Four schools as a precautionary measure
Other complications:	
Estimated cost:	$937,000
Probable cause:	Derailment, track defect/heat kink

Date:	June 18, 2000
Location:	Columbus, Ohio
Railroad:	Norfolk Southern Railroad
Type of hazmat:	Corrosive liquid
Fatalities/injuries:	None
Evacuations:	14
Other complications:	
Estimated cost:	$116,000
Probable cause:	Derailment

Date:	June 18, 2000
Location:	Wayne, Oklahoma
Railroad:	Burlington Northern Santa Fe
Type of hazmat:	Corrosive liquid, nos
Fatalities/injuries:	None
Evacuations:	25
Other complications:	
Estimated cost:	$5,000
Probable cause:	Derailment

Date:	June 19, 2000
Location:	New Waverly, Indiana
Railroad:	Norfolk Southern Railway
Type of hazmat:	Residue Propylene, slight vapor release
Fatalities/injuries:	None
Evacuations:	100 (25 families)
Other complications:	
Estimated cost:	$212,000
Probable cause:	Equipment defect, stiff truck/harmonic rock

Date:	July 7, 2000

Location:	Bensenville, Illinois
Railroad:	Canadian Pacific Railway
Type of hazmat:	Propionic acid
Fatalities/injuries:	None
Evacuations:	10
Other complications:	Improper placarded container
Estimated cost:	Not reported
Probable cause:	Strong herbicide smell

Date:	July 10, 2000
Location:	Houston, Texas
Railroad:	Union Pacific Railroad
Type of hazmat:	Cresylic acid
Fatalities/injuries:	2 injuries
Evacuations:	None
Other complications:	
Estimated cost:	Not reported
Probable cause:	Deteriorated safety relief valve "O" ring

Date:	July 12, 2000
Location:	Matanuska, Alaska
Railroad:	Alaska Railroad
Type of hazmat:	Gasoline
Fatalities/injuries:	None
Evacuations:	None
Other complications:	
Estimated cost:	$358,578
Probable cause:	Derailment/top operated, bottom outlet valve leaked

Date:	July 15, 2000
Location:	Oak Park, Michigan
Railroad:	Canadian Pacific Railway
Type of hazmat:	Nitric oxide
Fatalities/injuries:	None
Evacuations:	10
Other complications:	
Estimated cost:	
Probable cause:	Cylinder valve loose

Date:	July 19, 2000
Location:	Henderson, Kentucky
Railroad:	PB&S Chemical Co. (shipper)
Type of hazmat:	Sulfuric acid
Fatalities/injuries:	None
Evacuations:	None
Other complications:	
Estimated cost:	$71,990
Probable cause:	RR crew pulled car still attached to unloading hose

Date:	July 21, 2000
Location:	Flint, Michigan
Railroad:	CSX Transportation
Type of hazmat:	Liquefied Petroleum Gas
Fatalities/injuries:	None
Evacuations:	10
Other complications:	
Estimated cost:	Not reported
Probable cause:	Insecure closure fittings

Date:	July 23, 2000
Location:	Riverdale, Illinois
Railroad:	CSX Transportation
Type of hazmat:	Hydrochloric acid
Fatalities/injuries:	None
Evacuations:	20
Other complications:	
Estimated cost:	$18,000
Probable cause:	Derailment

Date:	July 25, 2000
Location:	Flint, Michigan
Railroad:	CSX Transportation
Type of hazmat:	Liquefied Petroleum Gas
Fatalities/injuries:	None
Evacuations:	10
Other complications:	
Estimated cost:	Not reported
Probable cause:	Insecure closure fittings

Date:	July 26, 2000
Location:	Roanoke, Virginia
Railroad:	Norfolk Southern Railway
Type of hazmat:	Sulfuric acid
Fatalities/injuries:	1 injury
Evacuations:	None
Other complications:	
Estimated cost:	Not reported
Probable cause:	

Date:	August 2, 2000
Location:	New Orleans, Louisiana
Railroad:	New Orleans Public Belt Railroad
Type of hazmat:	Dimethyl sulfide
Fatalities/injuries:	None
Evacuations:	20
Other complications:	
Estimated cost:	Not reported
Probable cause:	

Date:	August 3, 2000
Location:	Birmingham, Alabama
Railroad:	CSX Transportation
Type of hazmat:	Gasoline
Fatalities/injuries:	None
Evacuations:	10
Other complications:	
Estimated cost:	Not reported
Probable cause:	Insecure closure fittings

Date:	August 5, 2000
Location:	Seattle, Washington
Railroad:	Union Pacific Railroad
Type of hazmat:	Flammable liquid, corrosive
Fatalities/injuries:	None
Evacuations:	None
Other complications:	
Estimated cost:	$60,100
Probable cause:	Insecure loading causing shift and leak

Date:	August 14, 2000
Location:	Malta, Montana
Railroad:	Burlington Northern Santa Fe
Type of hazmat:	Carbon disulfide
Fatalities/injuries:	None
Evacuations:	50
Other complications:	U.S. Highway 2 closed
Estimated cost:	Not reported
Probable cause:	Derailment

Date:	August 29, 2000
Location:	Fort Edward, New York
Railroad:	Canadian Pacific Railway
Type of hazmat:	Ammonia, anhydrous
Fatalities/injuries:	None
Evacuations:	900
Other complications:	
Estimated cost:	$70,829
Probable cause:	Improper car repair to a valve on car

Date:	September 3, 2000
Location:	Dacula, Georgia
Railroad:	CSX Transportation
Type of hazmat:	Other regulated material, nos, & methanol
Fatalities/injuries:	None
Evacuations:	None
Other complications:	
Estimated cost:	$1,109,838
Probable cause:	Derailment

Date:	September 5, 2000
Location:	Midland, Michigan
Railroad:	Dow Chemical Co. (shipper)
Type of hazmat:	Butadienes, inhibited
Fatalities/injuries:	None
Evacuations:	100
Other complications:	
Estimated cost:	Not reported
Probable cause:	Leaking sample valve

Date:	September 29, 2000
Location:	Woodbridge, New Jersey
Railroad:	Consolidated Rail Corporation
Type of hazmat:	Liquefied Petroleum Gas
Fatalities/injuries:	None
Evacuations:	300
Other complications:	
Estimated cost:	Not reported
Probable cause:	Derailment

Date:	October 4, 2000
Location:	Frisco, Texas
Railroad:	Burlington Northern Santa Fe
Type of hazmat:	Butyl acrylate, methyl acrylate, no release
Fatalities/injuries:	None
Evacuations:	None
Other complications:	
Estimated cost:	$583,000
Probable cause:	Track defect and equipment defect (Irregular cross-level, track defect, and insufficient side bearing clearance)

Date:	October 6, 2000
Location:	Axis, Alabama
Railroad:	Atofina (shipper)
Type of hazmat:	Styrene Monomer, Inhibited
Fatalities/injuries:	None
Evacuations:	None
Other complications:	
Estimated cost:	$85,755
Probable cause:	Polymerizing shipment

Date:	October 13, 2000
Location:	Marietta, Pennsylvania
Railroad:	Norfolk Southern Railway
Type of hazmat:	Hydrochloric acid solution
Fatalities/injuries:	None
Evacuations:	70
Other complications:	
Estimated cost:	$5,500

Probable cause:	Inner liner of tank car failed
Date:	October 31, 2000
Location:	Riverdale, Illinois
Railroad:	CSX Transportation
Type of hazmat:	Hydrochloric acid solution
Fatalities/injuries:	None
Evacuations:	20
Other complications:	
Estimated cost:	Not reported
Probable cause:	Leaking bottom outlet valve
Date:	October 31, 2000
Location:	Bellemont, Arizona
Railroad:	Burlington Northern Santa Fe
Type of hazmat:	Environmentally hazardous liquid
Fatalities/injuries:	None
Evacuations:	70
Other complications:	None
Estimated cost:	$25,000
Probable cause:	Derailment
Date:	November 4, 2000
Location:	Scottsbluff, Nebraska
Railroad:	Burlington Northern Santa Fe
Type of hazmat:	benzene, major leak of 100,000 gallons
Fatalities/injuries:	12 residents treated at Scottsbluff Hospital
Evacuations:	2000 residents
Other complications:	None
Estimated cost:	$614,800
Probable cause:	Mechanical defect in coupler (draft) system
Date:	November 5, 2000
Location:	Ossian, Iowa
Railroad:	I & M Rail Link
Type of hazmat:	Denatured Alcohol
Fatalities/injuries:	None
Evacuations:	None
Other complications:	
Estimated cost:	$91,232

Probable cause:	Derailment
Date:	November 13, 2000
Location:	Harrison, Texas
Railroad:	Union Pacific Railroad
Type of hazmat:	Methanol
Fatalities/injuries:	None
Evacuations:	250
Other complications:	
Estimated cost:	$123,500
Probable cause:	Derailment
Date:	November 20, 2000
Location:	Ayer, Massachusetts
Railroad:	Guilford Rail System
Type of hazmat:	Methanol
Fatalities/injuries:	None
Evacuations:	100
Other complications:	
Estimated cost:	Not reported
Probable cause:	Defective gasket between valve & flange
Date:	November 22, 2000
Location:	Winchester, Kentucky
Railroad:	CSX Transportation
Type of hazmat:	Ammonia, anhydrous
Fatalities/injuries:	None
Evacuations:	48
Other complications:	
Estimated cost:	Not reported
Probable cause:	Packing gland leaking vapors
Date:	November 29, 2000
Location:	Ayer, Massachusetts
Railroad:	Springfield Terminal Railroad
Type of hazmat:	Methanol
Fatalities/injuries:	None
Evacuations:	35
Other complications:	
Estimated cost:	Not reported

Probable cause:	Bottom outlet flange leak
Date:	December 2, 2000
Location:	Sheboygan, Wisconsin
Railroad:	
Type of hazmat:	Phenol
Fatalities/injuries:	1 fatality to chemical plant employee
Evacuations:	None
Other complications:	
Estimated cost:	Net reported
Probable cause:	Improper pressurization of car by operator
Date:	December 8, 2000
Location:	Crestview, Florida
Railroad:	CSX Transportation
Type of hazmat:	Ammonium nitrate
Fatalities/injuries:	None
Evacuations:	None
Other complications:	
Estimated cost:	$75,100
Probable cause:	Derailment
Date:	December 18, 2000
Location:	Plymouth, Minnesota
Railroad:	Canadian Pacific Railway
Type of hazmat:	Sulfur, molten
Fatalities/injuries:	None
Evacuations:	None
Other complications:	
Estimated cost:	$800,000
Probable cause:	Derailment
Date:	December 21, 2000
Location:	Philadelphia, Pennsylvania
Railroad:	CSX Transportation
Type of hazmat:	Sulfuric acid
Fatalities/injuries:	None
Evacuations:	None
Other complications:	
Estimated cost:	$201,094

Probable cause: Derailment

Date: January 2, 2001
Location: Sahuarita, Arizona
Railroad: Union Pacific Railroad
Type of hazmat: Sulfuric Acid
Fatalities/injuries: None
Evacuations: 50
Other complications:
Estimated cost: Not reported
Probable cause: Derailment

Date: January 3, 2001
Location: Chattanooga, Tennessee
Shipper: Bulkmatic Transport Co.
Type of hazmat: Sulfuric Acid
Fatalities/injuries: 1 injury
Evacuations: None
Other complications:
Estimated cost: $75,425
Probable cause: PVC valve failure causing employee injury from acid

Date: January 29, 2001
Location: Amsterdam, Missouri
Railroad: Kansas City Southern Railway
Type of hazmat: Sodium Hydroxide
Fatalities/injuries: None
Evacuations: None
Other complications:
Estimated cost: $965,000
Probable cause:

Date: February 18, 2001
Location: Leeds, Alabama
Railroad: Norfolk Southern Railway
Type of hazmat: Ammonium nitrate
Fatalities/injuries: None
Evacuations: 150
Other complications:

Estimated cost: $11,000
Probable cause: Derailment

Date: February 27, 2001
Location: Simpson, North Carolina
Railroad: Norfolk Southern Railway
Type of hazmat: Caustic alkali liquid
Fatalities/injuries: None
Evacuations: 50
Other complications:
Estimated cost: Not reported
Probable cause: Manway cover gasket failure

Date: March 3, 2001
Location: Mystic, Iowa
Railroad: I & M Rail Link
Type of hazmat: Alcohols, nos
Fatalities/injuries: None
Evacuations: None
Other complications:
Estimated cost: $612,000
Probable cause: Derailment

Date: March 4, 2001
Location: Marietta, Texas
Railroad: Union Pacific Railroad
Type of hazmat: Other regulated substances, solid, nos
Fatalities/injuries: None
Evacuations: None
Other complications:
Estimated cost: $4,080,000
Probable cause: Derailment

Date: March 11, 2001
Location: Calhoun, Louisiana
Railroad: Kansas City Southern Railway
Type of hazmat: Carbon dioxide refrigerated liquid
Fatalities/injuries: None
Evacuations: 50
Other complications:

Estimated cost:	Not reported
Probable cause:	Leaking valve
Date:	March 25, 2001
Location:	Gadsden, Alabama
Railroad:	CSX Transportation
Type of hazmat:	Sodium hydroxide solution
Fatalities/injuries:	None
Evacuations:	500
Other complications:	
Estimated cost:	$40,300
Probable cause:	Derailment
Date:	April 7, 2001
Location:	Monroe, Louisiana
Railroad:	Sodium hydroxide solution
Type of hazmat:	None
Fatalities/injuries:	None
Evacuations:	50
Other complications:	
Estimated cost:	Not reported
Probable cause:	Derailment
Date:	April 18, 2000
Location:	Bussey, Iowa
Railroad:	Burlington Northern Santa Fe
Type of hazmat:	Fuel oil
Fatalities/injuries:	None
Evacuations:	None
Other complications:	
Estimated cost:	$493,059
Probable cause:	Derailment
Date:	April 24, 2001
Location:	Point of Rocks, Maryland
Railroad:	CSX Transportation
Type of hazmat:	Potassium hydroxide solution
Fatalities/injuries:	None
Evacuations:	None
Other complications:	

Estimated cost:	$629,910
Probable cause:	Derailment

Date:	May 5, 2001
Location:	Orange, Texas
Railroad:	Union Pacific Railroad
Type of hazmat:	Propylene
Fatalities/injuries:	None
Evacuations:	38
Other complications:	
Estimated cost:	Not reported
Probable cause:	Derailment

Date:	May 11, 2001
Location:	Mount Pleasant, Wisconsin
Railroad:	Union Pacific Railroad
Type of hazmat:	Petroleum distillate
Fatalities/injuries:	None
Evacuations:	24
Other complications:	
Estimated cost:	Not reported
Probable cause:	Derailment

Date:	May 15, 2001
Location:	Hobson, Ohio
Railroad:	Norfolk Southern Railway
Type of hazmat:	Methyl methacrylate inhibited
Fatalities/injuries:	None
Evacuations:	15
Other complications:	
Estimated cost:	Not reported
Probable cause:	Bottom outlet valve failure

Date:	June 11, 2001
Location:	Kansas City, Kansas
Railroad:	Union Pacific Railroad
Type of hazmat:	Maleic anhydride
Fatalities/injuries:	None
Evacuations:	40
Other complications:	Highway closed

Estimated cost:	Not reported
Probable cause:	Unknown

Date:	June 17, 2001
Location:	Wilmington, Ohio
Railroad:	CSX Transportation
Type of hazmat:	Sodium hydroxide solution
Fatalities/injuries:	None
Evacuations:	None
Other complications:	
Estimated cost:	$441,347
Probable cause:	Derailment, car fell 60' from bridge

Date:	June 24, 2001
Location:	New Orleans, Louisiana
Railroad:	New Orleans Public Belt Railroad
Type of hazmat:	Ethyl acrylate, inhibited
Fatalities/injuries:	None
Evacuations:	2
Other complications:	
Estimated cost:	Not reported
Probable cause:	Unknown

Date:	June 24, 2001
Location:	North Platte, Nebraska
Railroad:	Union Pacific Railroad
Type of hazmat:	Phosphorus, white, solution
Fatalities/injuries:	None
Evacuations:	6
Other complications:	
Estimated cost:	$150
Probable cause:	

Date:	July 18, 2001
Location:	Baltimore, Maryland
Railroad:	CSX Transportation
Type of hazmat:	
Fatalities/injuries:	None (other than 22 fire fighters)
Evacuations:	Five block area
Other complications:	In Howard Street tunnel

Estimated cost:	Not yet determined
Probable cause:	Not yet determined
Date:	July 20, 2001
Location:	Ruddock, Louisiana
Railroad:	Canadian National/Illinois Central Railroad
Type of hazmat:	Styrene, no release
Fatalities/injuries:	None
Evacuations:	None
Other complications:	
Estimated cost:	$589,938
Probable cause:	Derailment, track defect, irregular track alignment
Date:	August 5, 2001
Location:	Magnolia, Texas
Railroad:	Burlington Northern Santa Fe
Type of hazmat:	Acrylic acid, acetic anhydride
Fatalities/injuries:	None
Evacuations:	107 households/24 hrs.
Other complications:	State highway 249 closed
Estimated cost:	$690,799
Probable cause:	Derailment, track defect, rail base broken
Date:	August 10, 2001
Location:	Emhouse, Texas
Railroad:	Burlington Northern Santa Fe
Type of hazmat:	Phenol
Fatalities/injuries:	None
Evacuations:	None
Other complications:	
Estimated cost:	$1,357,540
Probable cause:	Derailment
Date:	August 14, 2001
Location:	Mobile, Alabama
Railroad:	Terminal Railway
Type of hazmat:	Acrylamide
Fatalities/injuries:	None
Evacuations:	700
Other complications:	

Estimated cost:	$338,260
Probable cause:	Derailment

Date:	August 25, 2001
Location:	Avon, Indiana
Railroad:	CSX Transportation
Type of hazmat:	Acetaldehyde
Fatalities/injuries:	None
Evacuations:	15
Other complications:	
Estimated cost:	Not reported
Probable cause:	Defective "O" ring on safety relief valve

Date:	August 30, 2001
Location:	Mulvane, Kansas
Railroad:	Burlington Northern Santa Fe
Type of hazmat:	White asbestos
Fatalities/injuries:	None
Evacuations:	140 people
Other complications:	
Estimated cost:	$42,002
Probable cause:	Derailment

Date:	August 31, 2001
Location:	Slaton, Texas
Railroad:	Burlington Northern Santa Fe
Type of hazmat:	Flammable liquid, nos
Fatalities/injuries:	None
Evacuations:	16
Other complications:	
Estimated cost:	$308,800
Probable cause:	Derailment

Date:	September 2, 2001
Location:	Detroit, Michigan
Railroad:	Canadian Pacific Railway
Type of hazmat:	Sulfuric acid
Fatalities/injuries:	None
Evacuations:	None
Other complications:	In Detroit River Tunnel

Estimated cost:	$400,000
Probable cause:	Derailment

Date:	September 6, 2001
Location:	Jacksonville, Florida
Railroad:	Union Pacific Railroad
Type of hazmat:	Acetone
Fatalities/injuries:	None
Evacuations:	130
Other complications:	Fire
Estimated cost:	Not reported
Probable cause:	Derailment

Date:	September 12, 2001
Location:	Anchorage, Alaska
Railroad:	Alaska Railroad
Type of hazmat:	Environmentally hazardous liquid, nos
Fatalities/injuries:	1 injury
Evacuations:	None
Other complications:	
Estimated cost:	$2,000
Probable cause:	Vapor line plug not in place (shipper cause)

Date:	October 7, 2001
Location:	Tangipaoa, Louisiana
Railroad:	Canadian National/Illinois Central Railroad
Type of hazmat:	Sodium hydroxide, 2000 gallons lost
Fatalities/injuries:	None
Evacuations:	200 people in a half-mile radius, 2 days
Other complications:	None
Estimated cost:	$835,000
Probable cause:	Equipment defect, truck hunting and weld crack in tank car

Date:	November 5, 2001
Location:	Monroe, Louisiana
Railroad:	Union Pacific Railroad
Type of hazmat:	Flammable liquids, nos
Fatalities/injuries:	None
Evacuations:	20

Other complications:	
Estimated cost:	$1,010
Probable cause:	Liquid line valve insecure

Date:	November 6, 2001
Location:	Rebecca, Georgia
Railroad:	CSX Transportation
Type of hazmat:	Phosphoric acid
Fatalities/injuries:	None
Evacuations:	None
Other complications:	
Estimated cost:	$505,000
Probable cause:	Derailment

Date:	November 7, 2001
Location:	Jacksonville, Texas
Railroad:	Union Pacific Railroad
Type of hazmat:	Acetone, burned
Fatalities/injuries:	None
Evacuations:	250 people in a 3 mile radius
Other complications:	None
Estimated cost:	$657,185
Probable cause:	Human failure, failed to comply with signal indication

Date:	November 30, 2001
Location:	Florence, Arizona
Railroad:	Copper Basin Railway
Type of hazmat:	Sulfuric acid
Fatalities/injuries:	None
Evacuations:	None
Other complications:	
Estimated cost:	$230,000
Probable cause:	Derailment

Date:	December 2, 2001
Location:	Santa Anna, Texas
Railroad:	Burlington Northern Santa Fe
Type of hazmat:	Trichlorethane

Fatalities/injuries:	None
Evacuations:	3
Other complications:	
Estimated cost:	$18,300
Probable cause:	Derailment

Date:	December 10, 2001
Location:	CSX Transportation
Railroad:	Ammonium Nitrate
Type of hazmat:	None
Fatalities/injuries:	None
Evacuations:	None
Other complications:	
Estimated cost:	$355,490
Probable cause:	Derailment

Date:	January 18, 2002
Location:	Minot, North Dakota
Railroad:	Canadian Pacific Railroad
Type of hazmat:	Anhydrous ammonia, 15 cars breeched
Fatalities/injuries:	One fatality, 20 injuries
Evacuations:	Minot Airport closed, Highway 52 closed
Other complications:	None
Estimated cost:	$1,080,000
Probable cause:	Broken rail joint

EMPLOYEE CASUALTY RATES

Mr. Rogers. Please update the chart depicting chronological trends in the casualty rates for railroad employees on duty as shown in last year's hearing record.

[The information follows:]

CASUALTY RATES FOR EMPLOYEES ON DUTY
(Employee Casualties per 1 Million Employee Work Hours)

YEAR	TOTAL CASUALTIES	RATE
1981	47,903	10.10
1982	36,110	9.01
1983	30,477	8.35
1984	33,423	9.00
1985	29,868	8.57
1986	22,444	6.97
1987	22,037	7.12
1988	22,616	7.44
1989	22,232	7.69
1990	21,010	7.59
1991	19,661	7.41
1992	17,789	6.88
1993	15,410	5.93
1994	13,111	5.06
1995	10,811	4.24
1996	9,232	3.66
1997	8,332	3.31
1998	8,425	3.27
1999	8,653	3.39
2000	8,423	3.44
2001[1]	7,575	3.19

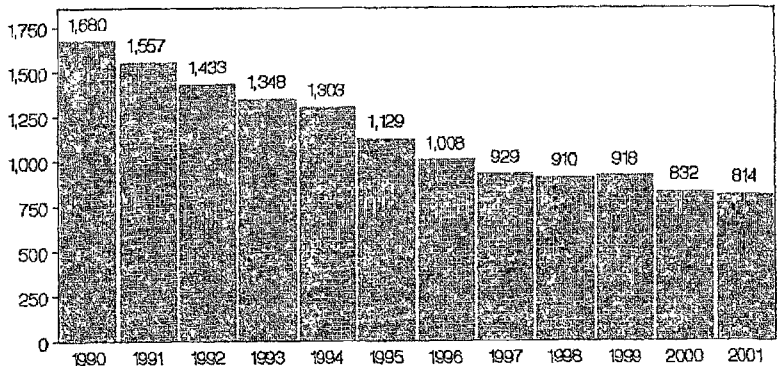
[1] Preliminary data as of March 5, 2002

EMPLOYEE CASUALTY RATES

Mr. Rogers. Please update the graphs showing the historical trend of serious injury and total rates per 200,000 man-hours.

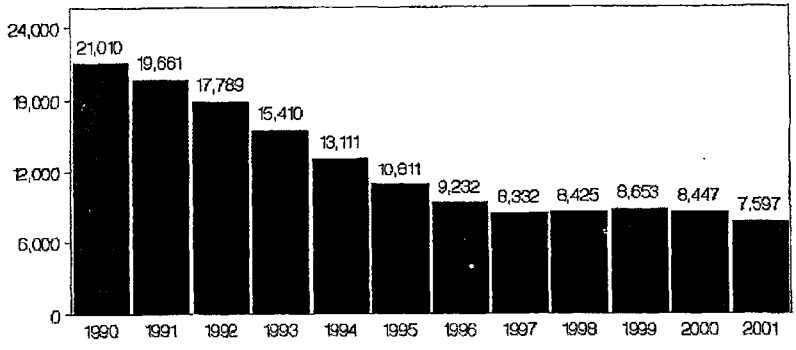
[The information follows:]

SERIOUS INJURIES TO EMPLOYEES



EMPLOYEE ON DUTY CASUALTIES

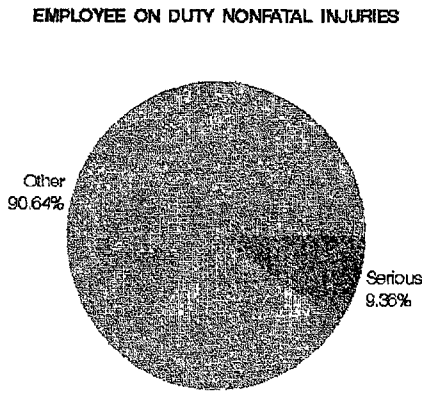
2001 Counts Are Preliminary

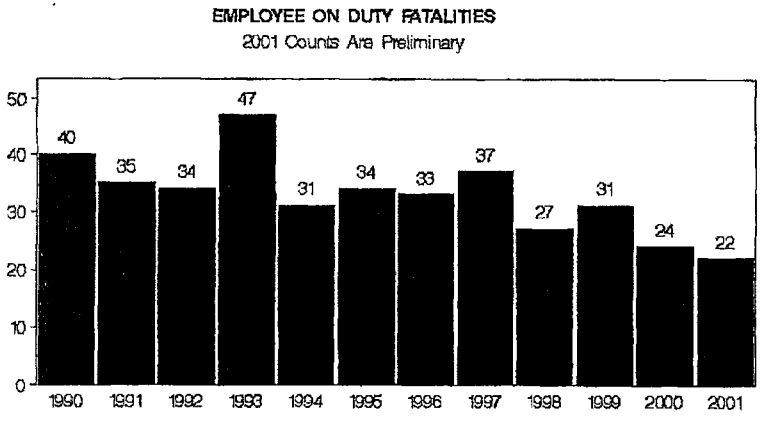


EMPLOYEE ACCIDENTS/INJURIES

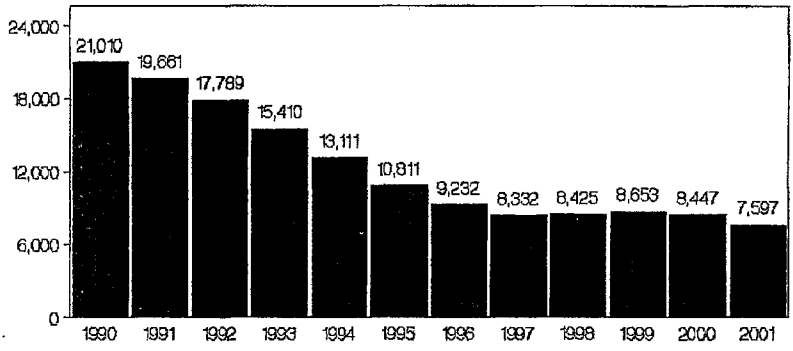
Mr. Rogers. Please update the graphs on employee railroad accidents and injuries from last year's hearing record.

[The information follows:]

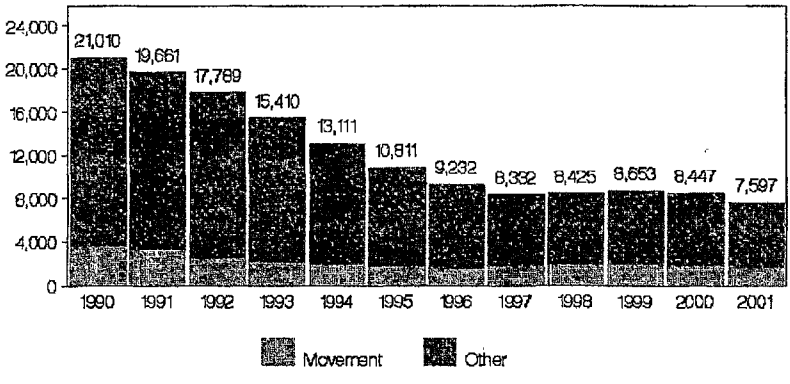




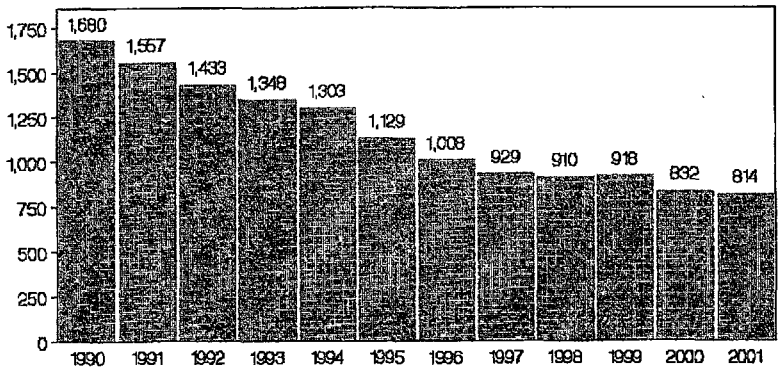
EMPLOYEE ON DUTY CASUALTIES
2001 Counts Are Preliminary



EMPLOYEE ON DUTY, MOVING ON—TRACK EQUIPMENT VS OTHER EVENTS
2001 Counts Are Preliminary

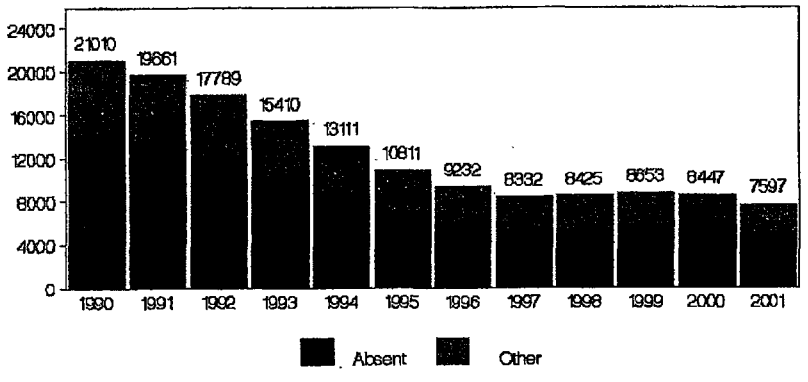


SERIOUS INJURIES TO EMPLOYEES



EMPLOYEE CONDITIONS CAUSING DAYS ABSENT FROM WORK

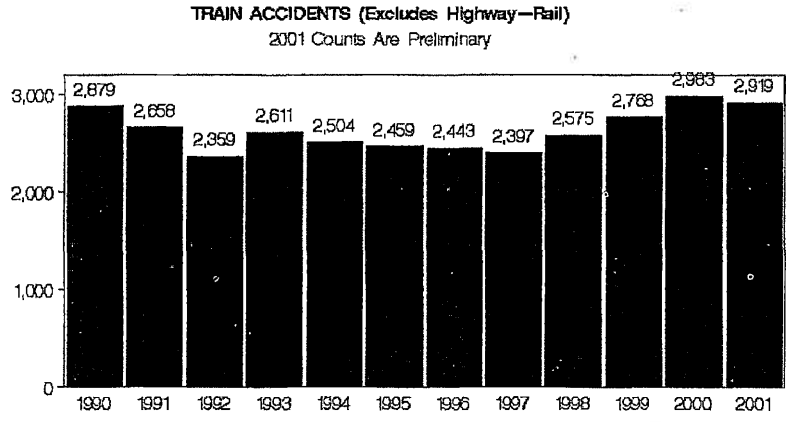
2001 Counts Are Preliminary

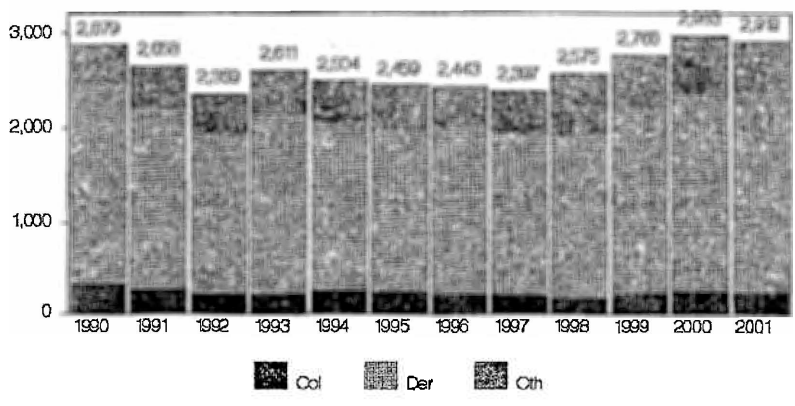


TRAIN ACCIDENTS

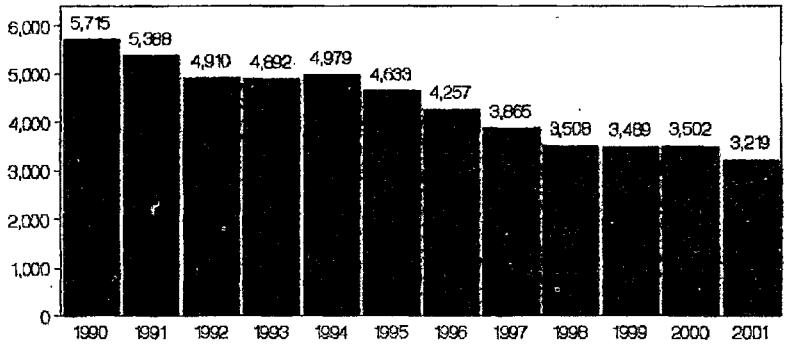
Mr. Rogers. Please update for the record the graphs on train accidents as shown in last year's hearing record.

[The information follows:]

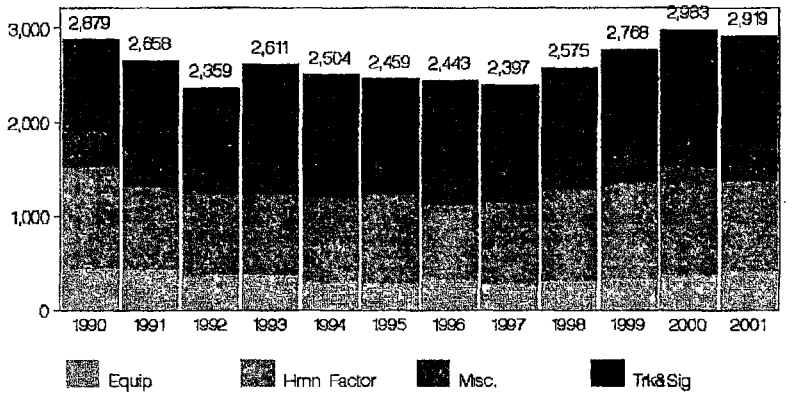




HIGHWAY–RAIL INCIDENTS
2001 Counts Are Preliminary

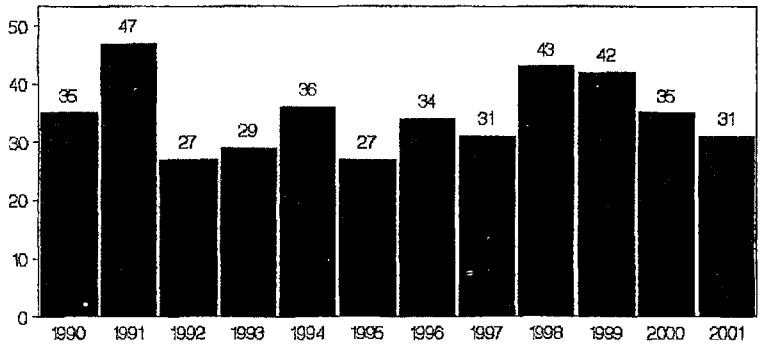


TRAIN ACCIDENTS BY PRIMARY CAUSE (Excludes Highway–Rail)



HAZARDOUS MATERIAL RELEASES (Excludes Highway–Rail)

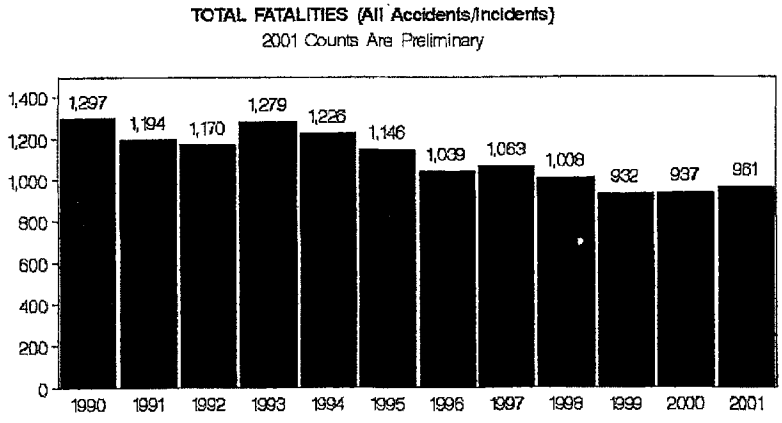
2001 Counts Are Preliminary

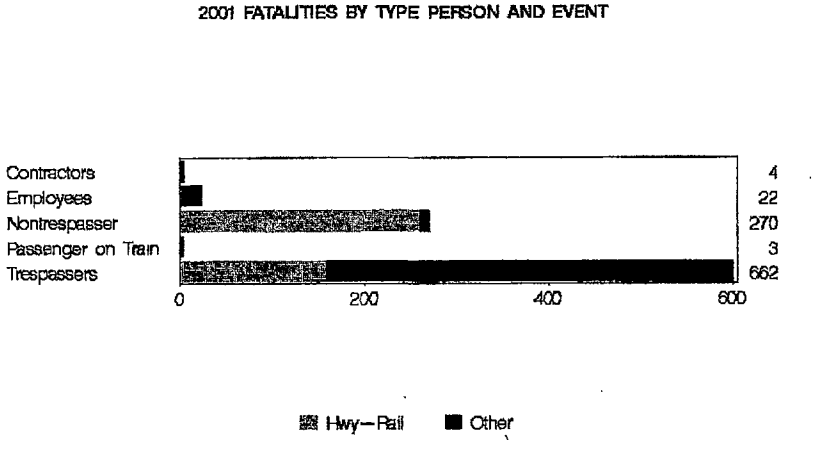


RAIL FATALITIES

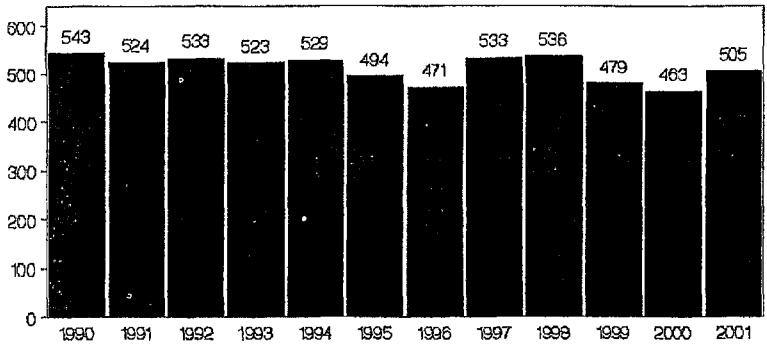
Mr. Rogers. Please update for the record the graphs on rail fatalities from last year's hearing record.

[The information follows:]

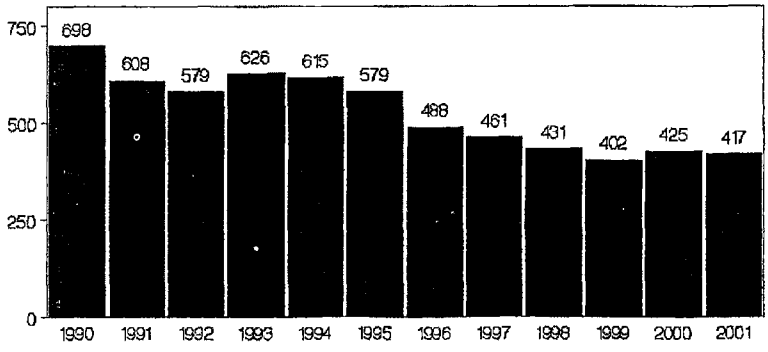




TRESPASSING FATALITIES (Not At Highway—Rail)
2001 Counts Are Preliminary



HIGHWAY—RAIL FATALITIES
2001 Counts Are Preliminary



TRAIN ACCIDENTS

Mr. Rogers. Please provide a chart showing train accidents, including and not including highway-rail accidents for fiscal years 1986 onwards.

[The information follows:]

YEAR	NOT INCLUDING HIGHWAY-RAIL ACCIDENTS	INCLUDING HIGHWAY-RAIL ACCIDENTS	TOTAL TRAIN ACCIDENTS AND INCIDENTS
1986	2,620	2,761	32,871
1987	2,512	2,647	32,293
1988	2,854	3,051	33,556
1989	2,898	3,080	33,160
1990	2,879	3,045	31,175
1991	2,658	2,814	29,296
1992	2,359	2,531	26,849
1993	2,611	2,785	24,740
1994	2,504	2,669	22,466
1995	2,459	2,619	19,593
1996	2,443	2,584	17,691
1997	2,397	2,560	16,699
1998	2,575	2,745	16,503
1999	2,768	2,924	16,776
2000	2,983	3,193	16,918
2001[1]	2,919	3,219	15,540

1 Prelimanary data as of March 5, 2002.

ACCIDENT TRENDS

Mr. Rogers. Please provide a chart showing the accident rates per year including highway-rail accidents, as compared to the number of train miles (in millions), similar to the chart shown in last year's hearing record.

[The information follows:]

Year	Train Accidents	Accident Rate
1978	11,277	15.00
1982	4,589	8.00
1985	3,430	6.01
1986	2,761	4.87
1987	2,647	4.55
1988	3,051	5.01
1989	3,080	4.96
1990	3,045	5.00
1991	2,814	4.88
1992	2,531	4.26
1993	2,785	4.54
1994	2,669	4.07
1995	2,619	3.91
1996	2,584	3.85
1997	2,560	3.78
1998	2,745	4.02
1999	2,924	4.10
2000	3,193	4.42
2001[1]	3,134	4.42

1 Preliminary data as of March 5, 2002

TASC COSTS

Mr. Rogers. Please update the administrative services costs as shown in last years's hearing record.

[The information follows:]

(Dollars in Thousands)

TASC Activity	FY 2002 Estimate	FY 2003 Estimate	Difference
Disability Resource Center	27	31	4
Substance Abuse & Testing	31	38	7
DOT Connection	17	21	4
TASC Fitness Center	6	5	-1
Motor Pool	38	44	6
Transit Benefit Program	196	247	51
Parking Management	1	2	1
Shuttle Bus	1	1	--
Contract Labor Support	3	3	--
Facilities SVCS-Nassif	1	1	--
Mail Services	49	58	9
Postage	50	57	7
Warehouse	33	45	12
Satellite Copiers	88	102	14
Direct Copier Maintenance	17	19	2
Paper Services	6	7	1
Digital Document Center	103	136	33
Contracted Printing	192	253	61
Initial Distribution	5	6	1
Library Services	65	80	15
Graphics	72	95	23

TASC Activity	FY 2002 Estimate	FY 2003 Estimate	Difference
Multi Media and Photo Services	30	37	7
Dockets Operations	37	45	8
Rent	48	15	-33
Space Management	23	27	4
HDQTRS 2000	40	61	21
Passports & Visas	1	1	--
Security & Investments	49	58	9
Personnel Security	16	19	3
Voice Cable and Wire	86	925	151
Networks IDN	11	14	3
Consolidated Server SVC	29	31	2
Messaging Dir SVCS	126	144	18
Departmental Programs	18	22	4
Procurement Operation	1	2	1
WCIS	3	3	--
Fed. Lab. Consortium	1	1	--
Unemployment Comp.	19	22	3
FEMA Co-op Facility	9	13	4
CIS/GIS	3	3	--
Total, FRA TASC	2,240	2,694	454

CIVIL PENALTY COLLECTIONS IN RECENT YEARS

Mr. Rogers. How much did FRA collect in civil penalties in 1997, 1998, 1999, 2000, 2001 and 2002 to date?

[The information follows:]

FRA's largest civil penalty collections occur each year in the summer and early fall, when FRA concludes negotiations with major railroads by the end of each fiscal year. Therefore, the settlement amount shown below for the first five months of FY 2002 is not reflective of what will likely be collected through the end of the year. The FRA has collected the following amounts in civil penalties in recent fiscal years:

FY	Collected
1997	$3,792,380
1998	$5,216,345
1999	$6,046,050
2000	$4,340,095
2001	$7,645,905
2002	$833,550

CIVIL PENALTY TRENDS

Mr. Rogers. What trends, if any, are found in FRA's civil penalty collections over the past decade? If the penalties have declined substantially (more than 10 percent), please explain why.

[The information follows:]

Over the last decade, FRA has collected about $76 million in civil penalties. The amount collected in a single year has ranged from as much as $16.6 million to as little as $3.5 million. In FY 2001, the amount was $7.6 million. The highest collection totals were in the early 1990s, when we liquidated a large backlog of pending cases that had built up due to under-staffing. The total amount collected varies with a number of factors, including compliance levels, number of inspections, priorities other than civil penalties, and enforcement policy. FRA's policy is to focus its limited enforcement

resources primarily on the types of violations that pose the most serious safety hazards.

STATUS OF LOCOMOTIVE HORN RULEMAKING

Mr. Rogers. What is the status of FRA's proposed rule on the use of locomotive horns at highway-rail crossings?

[The information follows:]

FRA is in the process of completing a final rule that is responsive to the concerns of commenters, including members of Congress. FRA solicited comment on a significant number of issues in the NPRM, and received nearly 3000 written comments during an unprecedented public outreach effort by FRA staff. In addition, oral testimony was received from hundreds of individuals and organizations at 12 public hearings held in 9 states during 2000. The comments have necessitated additional data collection and verification analyses, as well as other relevant topical studies. While time-consuming, these projects will ensure that FRA is not only responsive to public input, but will comply fully with all statutory and regulatory requirements governing the rulemaking process.

For the 98 percent of public highway-rail crossings in communities across the Nation without whistle bans, the proposal will provide a unique opportunity to mitigate adverse noise impacts from locomotive horns by creating quiet zones. FRA also expects to be able to include other provisions that will mitigate horn impacts on communities.

NUMBER OF COMMUNITIES IMPOSING WHISTLE BANS

Mr. Rogers. How many communities across the United States have imposed whistle bans (nighttime or 24 hours)? What impact will this rule have on these communities?

[The information follows:]

Based upon primary data collected in coordination with the Association of American Railroads, and information provided to the FRA and updated voluntarily by states and railroads, there are currently 2,508 highway-rail crossings in approximately 260 communities in 24 states that have whistle

bans in effect. For purposes of the rulemaking, FRA has experienced some difficulty in ascertaining precisely how many highway-rail crossings are subject to such bans because railroads and states are not presently required to regularly update highway-rail crossing inventory records.

In crafting a final rule, FRA has painstakingly and deliberately sought to provide whistle ban communities flexibility, where possible, in maintaining the silence of locomotive horns. The Final Rule will specifically elaborate the means by and conditions under which whistle bans may be retained, and options for maximizing community decision-making flexibility.

COMMUNITY COSTS TO SILENCE LOCOMOTIVE HORNS

Mr. Rogers. If your rule is adopted, requiring that horns be sounded at virtually all public at-grade crossings (159,000), what options do these communities have available to them to alleviate the effects of locomotive horn noise? How much will it cost to implement these various options? What funding sources are available to the communities, excluding appropriations earmarks, to pay for these necessary activities?

[The information follows:]

Under the terms of the proposed rule, communities have several options available to them. Whenever practicable, FRA encourages the closure or consolidation of unnecessary or redundant highway-rail crossings. In some locations, crossing closure is not feasible for a number of reasons affecting the mobility in particular communities. Grade separation through the construction of highway overpasses or underpasses is a highly effective means of eliminating the risk of train-vehicle collisions but is invariably costly.

In the Notice of Proposed Rulemaking (NPRM), the cost of *Supplementary Safety Measures* was estimated between $11,000 per crossing for traffic channelization devices to as much as $244,000 for a four-quadrant gate installation at a multi-lane grade crossing where no automatic warning devices presently exist. The total cost of *Supplementary Safety Measures* for the entire Nation has been estimated at $119 million over a 20-year period. However, there is significant variability in the relative costs of such equipment based upon regional exigencies such as proximity to and availability of suppliers and labor.

While Congress provided no specific authorization of funds for the creation of quiet zones, highway safety infrastructure improvements are eligible for a variety of FHWA-administered Surface Transportation Program (STP) and National Highway System funds. Eligible projects may qualify for funds under Sections 130 and 152 of the STP, as well as the Optional Safety Category of funds associated with those programs. Determinations about which projects could receive funds are made by State Departments of Transportation or Public Utility Commissions, which are required to base such decisions on an objective analysis of the relative safety risks associated with each public highway-rail crossing in accordance with 23 CFR Part 924. Therefore, the use of Section 130 funds for the purpose of creating quiet zones would be appropriate only if the safety gains associated with the improvements would justify the project's priority ranking compared to other competing highway-rail crossing improvement projects.

Surface Transportation Program funding beyond the 10 percent safety set-aside may also be employed at the discretion of the state without regard to the priority ranking system required for the safety set-aside programs. The same would be true of National Highway System funds for those crossings that remain on the NHS. Elimination of at-grade crossings on the NHS is specifically enumerated as a specific goal under the 1994 U.S. DOT Action Plan for Rail-Highway Grade Crossing Safety. Use of Federal-aid funds for these projects would be based on need, and the availability of funds as determined by individual states.

LOCOMOTIVE HORN FINAL RULE TIMETABLE

Mr. Rogers. What is the timetable to finalize the locomotive horn rule? Is it already in effect?

[The information follows:]

The Notice of Proposed Rulemaking was published January 13, 2000. During an extended comment period for the proposal, the FRA conducted twelve public hearings in nine states, in addition to hundreds of dedicated outreach sessions to communities across the Nation. FRA staff are completing additional safety, environmental, economic and other analyses required to be responsive to the input of commenters, including members of Congress. Once complete, the FRA will forward the Final Rule and associated administrative components to the Office of the Secretary of

Transportation for review. The Secretary will ask the Office of Management and Budget to initiate its regulatory evaluation and approval process. Once all necessary Executive Branch clearances are received, the final rule will be published in the *Federal Register*. FRA anticipates publishing a final rule later this year.

FRA'S KEY SAFETY RULEMAKINGS

Mr. Rogers. What are FRA's five key safety rulemakings?

[The information follows:]

First, the Railroad Safety Advisory (RSAC) has reported a proposed rule that would revise existing signal and train control regulations to make them more performance based and hasten the introduction of new technology. This rulemaking is critical to facilitating the development and deployment of Positive Train Control (PTC) systems that can prevent collisions, overspeed derailments, and incursions into work zones. The National Transportation Safety Board has placed implementation of systems to maintain positive train separation on its list of "Most Wanted" safety recommendations. This Notice of Proposed Rulemaking (NPRM) was published in the Federal Register on August 8, 2001 (66 FR 42352). The comment period was extended until November 8, 2001. The RSAC Working group has met to discuss the comments, and consultations with members continue with the purpose of finalizing recommendations for resolution of issues raised by the public comments. On May 17, 2000, the RSAC Report entitled *Implementation of Positive Train Control Systems* was forwarded to Congress.

Second, FRA is preparing a final rule for Use of Locomotive Horns at Highway-Rail Crossings, a proceeding that is important for the future grade crossing safety. The proposed final rule will accomplish legislative directives to enhance grade crossing safety in a way that respects community interests while assuring safety. A Notice of Proposed Rulemaking was published on January 13, 2000. FRA held 12 hearings and a technical conference to receive oral comments. FRA received more than 3,000 comments.

Third, on December 11, 2001, an interim final rule (new Part 214) was published in the Federal Register that prohibits dispatchers located in foreign

countries from dispatching railroad operations that occur in the United States (extraterritorial dispatching) through January 10, 2003 with 3 exceptions. The interim final rule solicited comments from the public that would be reviewed before issuance of a final rule. On February 12, 2002, FRA conducted a public hearing on this proposal. Testimony was received from the two major Canadian railroads and the American Train Dispatchers Division of the Brotherhood of Locomotive Engineers. Dispatching is an essential safety function, and FRA is concerned that effective oversight, including application of U.S. laws and regulations, can only be assured if the agency with jurisdiction over the railroad operations in question can exercise direct authority over the dispatching function and persons who perform the function.

Fourth, FRA is considering a rule on whether to require that reflective material (which is now required on highway trailers) be applied to freight cars and locomotives to reduce side-impact vehicle-train collisions at highway-rail crossings. FRA has published an economic analysis of the issue of reflectorization and has been responding to comments in the docket. FRA has also been meeting with interested parties to provide briefings and receive additional information. FRA is preparing a Notice of Proposed Rulemaking.

Fifth, on March 8, 2002, the FRA Administrator and the Surface Transportation Board approved the Safety Integration Plan final rules to address safety concerns that may arise in railroad mergers. The final rule was published in the Federal Register on March 13, 2002.

FRA is also finalizing for publication a response to petitions for reconsideration of the final rule on Power Brakes. The final rule was published January 17, 2001 after two notices of proposed rulemaking and a serious, but ultimately unsuccessful, attempt to resolve the issue through the RSAC. An amendment extended the effective date of the rule until May 31, 2001. Final rule amendments responsive to certain of the requests for reconsideration are in the final stages of clearance.

RULEMAKINGS COMPLETED IN THE LAST YEAR

Mr. Rogers. What rulemakings were completed in the last year?

[The information follows:]

Final rules:

- Freight Power Brake: Final rule issued May 17, 2001, effective May 31, 2001. (Petitions for reconsideration pending.)
- Safety Integration Plans: Final Rule completed March 8, 2002. Publication in the Federal Register on March 13, 2002.
- Gage Restraint Measurement System Amendment: Final Rule amendment published January 10, 2001; effective June 9, 2001.
- Bridge Worker Safety amendment to eliminate waist belts: Published in the Federal Register on January 15, 2002.
- Alcohol and drug conforming amendments (implementing revision to 49 CFR part 40): Final Rule published August 9, 2001.

Interim final rule:

- U.S. Locational Requirements for Dispatching of US Rail Operations: Interim Final Rule published December 11, 2001. Public hearing held February 12, 2002.

Notices of proposed rulemaking (NPRMs):

- PTC Performance Standards: NPRM published August 1, 2001.
- Random Drug Testing of Foreign Crews: Proposed rule published December 11, 2001. Public hearing held February 14, 2002.
- Roadway Maintenance Machines: NPRM issued January 10, 2001.
- Cab Sanitation: NPRM issued January 1, 2001. Full RSAC concurred with recommendations for final rule resolution December 2001.

FINAL REGULATIONS AND ANY NEW REGULATORY PROJECTS ISSUED OR PURSUED SINCE LAST YEAR

Mr. Rogers. Please list all final regulations, ANPRMS, NPRMs, and any new regulatory projects issued or pursued since last year.

[The information follows:]

- Freight Power Brake: Final rule issued May 17, 2001, effective May 31, 2001. (Petitions for reconsideration pending.)
- PTC Performance Standards: NPRM published August 1, 2001.
- U.S. Locational Requirements for Dispatching of US Rail Operations: Interim Final Rule published December 11, 2001. Public hearing held February 12, 2002.
- Random Drug Testing of Foreign Crews: Proposed rule published December 11, 2001. Public hearing held February 14, 2002.
- Safety Integration Plans: Final Rule completed March 8, 2002. Publication in the Federal Register on March 13, 2002.
- Roadway Maintenance Machines: NPRM issued January 10, 2001.
- Gage Restraint Measurement System Amendment: Final Rule amendment published January 10, 2001; effective June 9, 2001.
- Cab Sanitation: NPRM issued January 1, 2001. Full RSAC concurred with recommendations for final rule resolution.
- Bridge Worker Safety amendment to eliminate waist belts: Published in the Federal Register on January 15, 2002.
- Alcohol and drug conforming amendments (implementing revisions to 49 CFR Part 40): Final Rule published August 9, 2001.
- Locomotive Crashworthiness: Proposed rule in development within the RSAC.
- Event Recorder Revisions: Proposed rule in development within the RSAC.
- Blue Signal Protection – Proposed rule in development within the RSAC.
- Occupational noise exposure for operating employees (cab noise): Proposed rule in development within the RSAC.

CURRENT REGULATORY BACKLOG

Mr. Rogers. What is the current regulatory backlog? What is the nature and status of each of these projects.

[The information follows:]

The March 11, 2002 summary of FRA's pending workload, showing the nature and status of each of these projects follows.

U.S. Department
of Transportation

Federal Railroad
Administration

Overview of the Railroad Safety Regulatory Program and Standards-Related Partnership Efforts

March 11, 2002

Legend:

ANPRM	**Advance Notice of Proposed Rulemaking**
ItalicsIndicates project has been identified for development through the Railroad Safety Advisory Committee or a similar forum for collaborative rulemaking	
NPRM	**Notice of Proposed Rulemaking**
RSAC	**Railroad Safety Advisory Committee**
SACP	**Safety Assurance and Compliance Program**

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NOTES:

Centralized Docket Management System - Dockets established after October 7, 1998, are available on the DOT Centralized Docket Management System facility and can be accessed over the Internet (http://dms.dot.gov). Detailed information is available at the Web site to assist in viewing documents.

Revised Docket Filing Procedures for FRA Rulemaking and Adjudicatory Dockets - Final Rule (64 FR 70193) - This final rule amends certain FRA rules to provide accurate information to the public regarding filing requirements for FRA proceedings. The final rule is effective 2/14/00.

RSAC Website - See the RSAC website for details on pending tasks at: http//rsac.fra.dot.gov. Public Website contains all of the documents provided at meetings. The secured site is accessible by Working Group and Task Force members and provides minutes and working documents and information from Working Group and Task Force meetings.

Roadway Worker Safety. Consensus achieved in formal negotiated rulemaking; final rule published 12/16/96; effective 1/15/97. Denial of AAR and APTA petitions for reconsideration published 4/21/97.

Passenger Equipment Safety Standards. NPRM based on working group recommendations was published 9/23/97. Public hearing held 11/21/97. Final rule published 5/12/99 (64 FR 25540).

Passenger Train Emergency Preparedness. NPRM based on working group recommendations was published 2/24/97 with significant additions, and a notice of public hearings was published 3/6/97. Public hearings were held in Chicago on 4/4/97 and in New York City on 4/7/97. Final rule published 5/4/98 (63 FR 24630).

Railroad Safety Advisory Committee:

The last full Committee meeting was held on 4/23/01. The eighteenth meeting scheduled for 9/20/01 (postponed for national emergency) was held on February 13, 2002. Since its first meeting in 1996, the RSAC has accepted seventeen tasks. Below is a review of the RSAC initiatives to date.

Last RSAC Working Group Activity Update published in the Federal Register (67 FR, 2507, dated 1/17/02.

Task No.	Subject	Status
96-1	Power Brake Regulations, freight, general revision	Working group charter extended to 1/15/97 to produce NPRM; impasse reached at 12/4/96 meeting, and subsequent efforts to renew talks were not successful. FRA withdrew task at 6/24/97 meeting. FRA published second NPRM 9/9/98 (63 FR 48294) reflective of what FRA has learned through the collaborative process. Public hearings 10/26/98 and 11/13/98; technical conference 11/23-24/98. Submission of written comments date due extended to 3/1/99. Public meeting 5/27/99 on FRA motive power and equipment database. Final rule published 1/17/01 (66 FR 4104). An amendment extending the effective date of the final rule until 5/31/01, was published on 2/12/01 (66 FR 9905); and a subsequent amendment further deferred the compliance date for providing a written record of a test required under 232.409(c) until further notice (66 FR 29502; 5/31/01) . FRA is reviewing petitions for reconsideration and has published amendments to Subpart D of the final rule (66 FR 36983; 8/1/01). FRA prepared responses to the remaining issues. Remaining responses to petitions for reconsideration submitted to Federal Register for publication.

96-2	Track Safety Standards, general revision	Consensus achieved; in balloting that concluded 11/21/96, RSAC voted to accept Working Group report and recommend NPRM. NPRM published 7/3/97; public hearing held 9/4/97; comment period closed 9/15/97. Final rule published 6/22/98; effective 9/21/98. FRA prepared an amendment to the final track rule providing for the use of Gage Restraint Measurement System technology (GRMS). Both the GRMS final rule amendment and the proposed Safety Standards for Roadway Maintenance Machines were approved by the full RSAC in a mail ballot during August. The GRMS final rule amendment published 1/10/01(66 FR 1894) and Roadway Maintenance Machines NPRM published 1/10/01 (66 FR 1930). On 1/31/01, FRA published a notice extending the effective date of the GRMS amendment to 4/10/01 (66 FR 8372). On 2/8/01, FRA published a notice delaying the effective date until 6/9/01, in accordance with the Regulatory Review Plan (66 FR 9676) The GRMS rule was reviewed and has been finalized. (Completed)
96-3	Railroad Communications (including revision of Radio Standards and Procedures)	Final meeting of Working Group held 1/23/97. Working Group provided consensus NPRM to RSAC at 3/24/97 meeting. RSAC voted to accept the NPRM on 4/14/97. NPRM published 6/26/97. Final rule published 9/4/98 (63 FR 47182). (Completed)
96-4	Tourist Railroads	Open task to address needs of tourist and historic railroads. On 4/1/96 RSAC authorized the formation of a Working Group to monitor and assist completion of the steam locomotive regulations task. Planned future activities involve review of other regulations for possible adaptation to the safety needs of tourist and historic railroads.
96-5	Steam-Powered Locomotives, revision of inspection standards	Tourist & Historic Working Group met with task force representatives 9/3/97. NPRM approved by full committee on 2/17/98. NPRM published 9/25/98 (63 FR 51404). Public hearing held 2/4/99. Task Force developed and Working Group approved recommendations in response to comments received. NPRM approved by full Committee ballot 9/29/99. Final rule published 11/17/99 (64 FR 62828). Effective 1/18/00. (Completed)
96-6	Locomotive Engineer Qualification and Certification, general revision	Task accepted 10/31/96; first working group meeting held 1/7-9/97. NPRM approved by full committee 5/14/98. NPRM published 9/22/98 (63 FR 50625). Final rule published 11/8/99 (64 FR 60966). (Completed)
96-7	Roadway Maintenance Machines (On-Track Equipment) Safety Standards	Task accepted 10/31/96. Task assigned to the existing Track Standards Working Group and a Task Force was established. The Task Force finalized a proposed rule which was approved by the full RSAC in a mail ballot in August 2000. The NPRM was published 1/10/01 (66 FR 1930). The Task Force met 2/27-28 to review comments. Next: Working Group and Full RSAC approval.

96-8	Locomotive Crashworthiness and Working Conditions (planning task)	Planning task accepted 10/31/96; planning group met 1/23/97; two task statements were accepted by the full Committee at 6/24/97 meeting [see 97-1, 97-2]. Planning task is COMPLETED. (Completed)
97-1	Locomotive Crashworthiness	Task accepted 6/24/97; Working Group held initial meeting 9/8-9/9/97. A Task Force on engineering issues was established by the Working Group to review collision history and design options. The Working Group reviewed results of research, reached agreement regarding desired technical and performance-based standards, and is currently drafting performance-based standards for freight and passenger locomotives to present to the RSAC. An accident review task force has evaluated the potential effectiveness of suggested improvements. An NPRM has been prepared and circulated, and the Working Group met to review the draft on 10/9-10/01 in Washington, DC. Meeting held 1/17 and 1/18/02 to go over the proposed redrafts. AAR and the RR caucus presented revised crashworthiness standards for consideration by the Working Group. The Working Group reached tentative agreement for a proposed rule. The RIA is being revised to reflect the changes. Full RSAC review after approval of the Working Group.
97-2	Locomotive Cab Working Conditions	Task accepted 6/24/97; working group held initial meeting 9/10-11/97. The Working Group established task forces on noise and temperature. Sanitation: A draft sanitation NPRM was circulated to the Working Group for approval, with ballots requested by 11/3/00. The NPRM on Sanitation was published 1/2/01 (66 FR 136). A public hearing was held 4/2/01. Refinement and substantive changes were incorporated into the rule language. A meeting was held on 8/21/01 to discuss comments in response to the NPRM on sanitation. Agreement was reached on resolution of the comments to the NPRM, subject to review of meeting minutes capturing these agreements. Working Group gave concurrence to send recommendations to full RSAC for ballot vote. Ballot completed by 12/10/01 with the full RSAC concurring with recommendations for final rule resolution. Final rule being prepared. Noise: The full Working Group met in October and November and reached tentative agreement on most of the significant issues related to the noise NPRM. The Cab Working Group met 4/3-4/5/01 to refine recommendations to the FRA for Noise Standards. A full draft NPRM on noise exposure standards will be circulated to the Working Group for consideration. Cab Temperature and Vibration: The Cab Working Group has also considered issues related to cab temperature and is expected to consider additional issues (such as vibration) in the future.

97-3	Event Recorders (data survivability, inspection, etc.)	Task accepted 6/24/97, working group first met 9/12/97. The Working Group and Task Force have conducted meetings. The Event Recorder Working Group is completing preparation of an NPRM. The draft NPRM went to the Working Group on 5/21/01 for comment and FRA has reviewed the comments. The new draft NPRM and Reg Eval were sent to the Working Group on 1/30/02. Working Group to meet to seek consensus.
97-4, 97-5, 97-6	Positive Train Control	Tasks accepted 9/30/97 and assigned to single working group. Rulemaking: The Processor-based signal and train control system (PTC) NPRM was approved by consensus at the full RSAC meeting on 9/14/00. NPRM was published 8/10/01 in the Federal Register (66 FR 42352). The comment period was extended to 11/8/01. The working group has reviewed the comments and made recommendations for resolution of most major issues. Efforts continue to complete recommendations for consideration by the full RSAC. Report: Data and Implementation Task Force completed report on the future of PTC systems; report accepted for forwarding to FRA by full Committee vote at 9/8/99 meeting. FRA enclosed report with letter Report to Congress signed 5/17/00. Meeting schedule: The Working Group met 12/4-6/01 in San Antonio, TX. The Working Group continues to meet to track progress toward PTC implementation. Task forces on Human Factors and the Axiomatic Safety-Critical Assessment Process (risk assessment) continue to work Monitoring of implementation continues.
97-7	Calculation of Damages for Reportable Train Accidents	Task accepted with modification 9/30/97. Working initial meeting held 2/8/99. The Working Group designed a survey form to collect data about damages to railroad property. The pilot survey started 8/1/00 and ended 1/31/01. Working Group meeting was held 5/21-23/01 to review the report from the pilot. Meetings held 11/14-15/02 in St. Louis and on 1/23-24/02. The Working Group has agreed to terminate action on this task after reviewing the options. The Working Group has provided a close out report for full RSAC action at the 2/13/02 meeting. At the 2/13 meeting, the full RSAC agreed to terminate action.
00-1	Blue Signal Protection of Workers	Task accepted 1/28/00; working group formed. First meeting was held 10/16-18/00; the second from 2/27-3/31/01 and the third meeting on 3/19/22/01. Additional meetings were held 5/1-3/01 and 6/19-21/01. Meeting held 10/23-25/01 in Orlando, Florida. Reached consensus on several issues. Meeting held 1/28-31/02. FRA has committed to draft an NPRM that attempts to resolve the issues among the parties.

01-1	Developing conformity of FRA's regulations for accident and incident reporting to revised regs of the OSHA, and to make appropriate revisions to the FRA Guide	Task accepted 4/23/01, by the full RSAC and assigned to the Accident/Incident Working Group. Working Group met on 5/21-23/01 and the task was discussed. Four task forces were set to review changes and/or modifications. To date, these task forces have identified a series of minor modifications to the Reporting Guide/regulations for consideration that will be presented to the Working Group for approval. A target date of 9/15/01 was set for reporting the recommended changes. The Working Group met 9/11/01 in Chicago;, meeting was dismissed due to national emergency. A dditional meetings was held are scheduled for 11/14-15/01 and , and11/23-24/02 in Baltimore, MD. Next meeting is being held 3/12-13/02.

SAFETY RULES AND REPORTS--GENERAL

Accident/Incident Reporting

Summary: The Rail Safety Enforcement and Review Act barred FRA from adjusting the monetary threshold for reporting of train accidents until the methodology was revised. In addition, FRA identified the need to comprehensively revise these regulations, which had not been revised since 1974. The report of the Committee of Conference on the Department of Transportation and Related Agencies Appropriation Act, 1996, directed FRA to issue a final rule in this proceeding by 6/1/96.

History: An NPRM was issued 8/19/94, followed by public hearings and written comment. A public regulatory conference was convened 1/30-2/3/95 in an effort to resolve outstanding issues. A notice of decision to issue a supplemental NPRM was published 7/3/95, but was withdrawn in a notice published on 1/24/96.

Status: Completed. Final rule was issued 5/30/96 and published 6/18/96 (61 FR 30940). Stay requests were denied, and technical amendments were published 11/22/96 (61 FR 59368). A notice of availability of custom software was also published 11/22/96 (61 FR 59485). On 12/16/96, the Administrator signed final rule amendments, which were published 12/23/96 (61 FR 67477). Final rule became effective 1/1/97. Industry training partnerships have been executed.

Next steps:

(1) FRA offered RSAC a task on 9/30/97 to review the definition of events required to be reported as train accidents, as requested by the Committee on 6/24/97. By request of the Committee, the task was limited to determination of damages qualifying an event as a reportable train accident. A Working Group has been formed and held its initial meeting 2/8/99. The Working Group designed a survey form to collect specific data about

damages on railroad equipment. The survey began 8/1/00 and ended 1/31/01. The survey was voluntary, but most of the larger freight railroads participated, as well as four passenger railroads. Report was completed last week of April 2001. The Working Group met 5/21-23/01 to review the report. Pilot proved to be unworkable. A statement recommending termination of the task has been adopted and forwarded to the full RSAC for consideration on 2/13/02.

(2) FRA offered an additional task at the RSAC meeting of 4/23/01 which was accepted by the full RSAC and assigned to the Accident/Incident Working Group. The task concerns amendments needed to conform Part 225 to the Occupational Safety and Health Administration's revised record keeping and reporting rule (1/18/01). In addition, the RSAC approved the review of, need for, and content of, various proposed changes to the Reporting Guide. The Working Group met on 5/21-23/01. The task was discussed and four task forces were set to review changes and/or modifications to the Reporting Guide/regulations for consideration that will be presented to the Working Group for consideration. A target date of 9/15/01 was set for reporting the changes. The Working Group met on 9/11/01, with meeting dismissed due to national emergency. The next meeting was held is scheduled 11/14-15/01 in St. Louis, MO. The Working Group has met and made good progress. The Task Force on remote control met on December 11, 2001, and the Working Group met 1/23-24/02 in Baltimore, MD.

Blue Signal Protection

Summary: On 8/16/93, FRA published a final rule permitting one or more utility employees to associate themselves with a train crew for the purpose of performing normal operating functions that require employees to go on, under or between rolling stock, without use of blue signal protection (which is ordinarily appropriate for mechanical duties). During the proceeding it was noted that rules for locomotive engineers working alone were not clearly defined. FRA published a final rule amendment governing single engineers working alone on 3/1/95, but granted a requested suspension of the amendment on 6/9/95 pending development of additional facts. Since that time, additional blue signal issues have continued to emerge, including application of the requirements to contractors performing the subject functions on railroad property.

Status: On 10/31/96, the RSAC advised FRA that this project should not be proposed for early tasking, given conflicting demands on the resources of member organizations. RSAC accepted task at the 1/28/00 full Committee meeting. A Working Group has been formed and held its first meeting on 10/16-18/00 in Washington, DC. The second and third meetings were held 2/27-3/1/01 in San Diego, CA and 3/20-3/22/01 in St. Louis, MO. Additional meetings were held 05/1-3/01 in Atlanta, GA and 06/19-21/01 in Orlando, FL. The group met 10/23-25/01, in Orlando, FL; reaching tentative consensus on several issues. The next meeting was held 1/28-31/02. FRA has committed to draft an NPRM that attempts to resolve the issues among the parties.

Bridge Displacement Detection Systems (Report)

Summary: The Federal Railroad Safety Authorization Act of 1994 required FRA to submit a report on systems to detect bridge displacement of the type that caused the derailment of the Sunset Limited at Mobile, Alabama, 9/22/93.

Statutory deadline: 5/2/96

Status: Completed. A technical evaluation report was published 6/23/94 and made available to the respective committees. A formal report was issued and forwarded to the Congress on 4/11/00.

Control of Alcohol and Drug Use - Foreign Crews - NPRM (Application of Random Testing and Other Requirements to Employees of a Foreign Railroad Who Are Based Outside the United States and Perform Train or Dispatching Service in the United States).

Summary: In general, FRA's regulation on the control of alcohol and drug use (49 CFR Part 219) currently applies to all railroads that operate on the general rail system of transportation in the United States. However, part 219 presently exempts from certain subparts operations by foreign railroads and certain small railroads. Currently an employee of a foreign service whose primary reporting point is outside the U.S. but who performs service in the U.S. subject to the hours of service laws (train, dispatching, or signal) is exempt from pre-employment and random testing. FRA prepared a rule proposing to limit the exemption to Foreign Railroad's Foreign-Based Employees who perform signal service in the U.S.

Status: The NPRM was published December 11, 2001. On February 14, FRA conducted a public hearing on the NPRM, which would address a limited number of trains entering the U.S. for relatively short distances from Canada. (Currently, Mexico crews hand off trains at the border). Testimony was received from labor organizations representing operating crews. Representatives from Transport Canada and the Canadian embassy attended but did not speak. The comment period was extended through March 14 in order to receive post-hearing submissions.

Event Recorder Next-Generation Performance Standards

Summary: The National Transportation Safety Board has noted the loss of data from event recorders in several accidents due to fire, water and mechanical damage. In issuing final rules for event recorders which became effective 5/5/95, FRA noted the need to provide more refined technical standards. NTSB proposed performance standard for data survivability.

Background: Conducted an initial meeting of an informal working group comprised of AAR, RPI, and labor, and co-chaired by NTSB and FRA experts, on 12/7/95 to consider development of technical standards. At the RSAC meeting on 7/24-7/25/96, the AAR agreed to continue this inquiry, and on 11/1/6, AAR reported to the RSAC the status of work on proposed industry standards. On 3/5/97, NTSB issued recommendations regarding testing and maintenance of event recorders as a result of finding in the investigation of the BNSF accident of 2/1/96 at Cajon Pass, California. On 3/24/97; the RSAC indicated its desire to receive a task to consider NTSB recommendations with respect to crash survivability, testing and maintenance.

Status: RSAC accepted task 6/24/97. The Event Recorder Working Group first met 9/12/97. The Working Group and Task Force have conducted meetings and a draft proposed rule is being reviewed. The NPRM went to the Working Group on 5/21/01 for comment which is integrating comments received. (Task No.97-3). This new draft of the NPRM and the Regulatory Evaluation was forwarded to the Working Group on 1/30/02. A Working Group meeting is being scheduled in early 2002.

Florida Overland Express

Summary: FRA received a petition for a rule of particular applicability for operations over a new high-speed railroad between Miami and Tampa via Orlando. The State of Florida had established a dedicated funding stream of $70 million per year towards creation of this new private/public partnership.

Status: Received petition for rule of particular applicability 2/18/97. FRA issued NPRM 12/12/97 (62 FR 65478). Comment period closed. FRA reviewed comments received and held a public hearing on 11/23/98 to discuss a variety of issues. The State of Florida withdrew its support and funding for this project 1/99, suspending all activity on development. **The rulemaking was terminated** (65 FR 50952; 8/22/00).

Freight Car Safety Standards; Maintenance-of-Way Cars

Summary: Cars not in compliance with the Freight Car Safety Standards may be operated at track speed in revenue trains if they are company-owned, stenciled cars. FRA published an NPRM 3/10/94 to close this loophole. FRA requested the Association of American Railroads to amplify its comments by letter of 12/20/94.

Status: AAR response received 8/4/95 is under review. FRA offered a task to the RSAC to resolve final rule issues on 9/30/97; following an objection from the AAR, the matter was prevented from coming to a vote. FRA will prepare a Termination Notice.

Locomotive Crashworthiness and Working Conditions

Summary: The Rail Safety Enforcement and Review Act of 1992 required FRA to conduct a proceeding regarding locomotive crashworthiness and working conditions and to issue regulations or submit a report. Areas for consideration included structural means of preventing harm to crew members in collisions (collision posts, anticlimbers, etc.) and matters related to safety, health and productivity (e.g., noise, sanitation).

Statutory deadline: 3/2/95

Background: FRA conducted research, outreach, and a survey of locomotive conditions and finalized a report to the Congress transmitted by letter of 9/18/96. The report conveyed data and information developed by FRA to date, closed out those areas of investigation for which further action is not warranted, and defined issues that should be pursued further in concert with the industry parties, either for voluntary or regulatory action. On 10/31/96, the RSAC accepted a preliminary planning task. The Locomotive Crew Safety Planning Group met 1/23/97, and subsequent consultations led to preparation of task statements.

Status: RSAC accepted two tasks 6/24/97. (RSAC Task 97-1, locomotive crashworthiness; and Task 97-2, locomotive cab working conditions).

Locomotive Crashworthiness Working Group met 9/8-9/97 and established a task force on engineering issues that has been active in reviewing collision history and design options. The Working Group reviewed the results of research and is drafting performance-based standard. The review of collision data for use in the regulatory action was completed in 9/00. An accident review task force has evaluated the potential effectiveness of suggested improvements. A draft NPRM has been circulated to the Working Group, which met 10/9-10/10/01 to review the draft and consider economic issues. Next meeting was held 1/17 and 18/02 to go over proposed drafts. AAR and the Railroads presented revised crashworthiness standards for consideration by the Working Group. The Working Group reached tentative agreement on the elements of a proposed rule, subject to FRA's review of the data and economic implications. Upon completion of the review, FRA will provide a revised NPRM draft for review.

Locomotive Cab Working Conditions Working Group met for the first time 9/10-11/97 and established task forces on noise and temperature.

Sanitation. The Working Group approved a draft NPRM on cab sanitation, which was approved by the full committee on 12/7/00. The NPRM was published 1/2/01 (66 FR 136). A public hearing was held 4/2/01; and the docket remained open through 5/1/01. Refinement and substantive changes were incorporated into the rule language. A meeting was held 8/2/01 to discuss the comments in response to the NPRM. Agreement was reached on resolution of the comments to the NPRM, subject to review of meeting minutes capturing agreements. Verbal

consent given by the Working Group to send to full RSAC for ballot vote. Full RSAC approved by ballot voting. Ballots were due by December 10, 2001. Final rule being prepared.

Noise exposure. The Cab Working Group met in October and November of 2000 on the issue of occupational noise exposure for cab employees and achieved tentative agreement on most of the significant issues. The Working Group met 4/3-4/5/01 to refine recommendations to the FRA for Noise Standards. A full draft NPRM on Noise exposure Standards will be circulated to the Working Group for consideration.

Temperature. The Cab Working Group has also considered issues related to cab temperature, but could not reach agreement to proceed.

The Cab Working Group is expected to consider additional issues (such as vibration) in the future.

Locomotive Engineer Certification; Miscellaneous Revisions

Summary: The final rule for locomotive engineer certification became effective in 1991, but certain issues were left unresolved. Experience under the rule has raised additional issues. Examples of issues under review include the status of operators of specialized maintenance-of-way equipment and types of conduct for which decertification is appropriate.

Status: Completed. An interim final rule amendment dealing with agency practice and procedure concerning engineer certification appeals was published 10/12/95. Issues related to procedures on the properties, offenses warranting decertification, periods of decertification, operation of specialized equipment, etc., are pending. The RSAC accepted this task on 10/31/96. The Working Group's initial meeting was held 1/7-1/9/97. Final meeting to review proposed rule language was held 10/7-10/9/97, and task force on hearing and vision met 10/21/97 to finalize language. The full committee voted 5/14/98 to recommend issuance of the NPRM forwarded by the Working Group. The NPRM was published 9/22/98 (63 FR 50625) (RSAC Task 96-6.) The Working Group met to resolve issues presented in public comments, and on 1/28/99 the RSAC voted to transmit recommendations regarding issues for which the Working Group had received comments. The final rule was published 11/8/99 (64 FR 60966); effective date 1/7/00. (FRA Docket No. RSOR-9. Notice 12).

Northeast Corridor (NEC) Signal & Train Control

Summary: Amtrak is planning operations to 150 mph on portions of the NEC and is implementing improvements to the automatic train control system that will provide positive stop and continuous speed control capabilities. FRA's Northeast Corridor Safety Committee (NCSC) met 9/20/94 and approved a set of performance criteria for the new system.

Status: Completed. On 1/30/97, Amtrak provided to FRA a draft system concept for the Advanced Civil Speed Enforcement System (ACSES), including conditions for operation on designated territories on the south and north ends of the NEC. Final details were received by FRA on 7/9/97. A notice of Proposed Order for the new signal and train control system authorizing speeds to 150 miles per hour (135 mph on the South End with only high-speed trains equipped under "flanking protection") was published 11/20/97 (62 FR 62097), and written comments were due by 12/22/97. As a result of requests, a public hearing was set for 2/17/98 (63 FR 3389), and the comment closing date was extended to 2/24/98. Final Order of Particular Applicability published 7/22/98 (63 FR 39343); effective 8/21/98. Amendments to the Order of Particular Applicability published 10/19/00 (65 FR 62975). The amendments include a new implementation schedule and technical changes. The order was further amended to provide a temporary procedure for operations in the case of failed on-board equipment (66 FR 1718; 1/9/01).

Northeast Corridor Safety (NEC) Committee

Summary: This committee has not met recently because of funding constraints under the advisory committee cap (now removed) and as a result of the need to intensively address specific issues with Amtrak and other NEC operators related to recent corridor improvements and the beginning of Acela Express service at speeds to 150 mph. Issues addressed in past years included signal/train control criteria to support these new high-speed operations, emergency response, coordination of freight and passenger service on the NEC, vandalism and trespassing. The committee's work has prompted important safety research, legislative proposals and regulatory action.

Background: The NEC Safety Committee was created pursuant to the Railroad Safety Improvement Act of 1988, as amended by the Rail Safety Enforcement Act of 1992. The statute provided for the Committee to expire on January 1, 1999, or on such date as the Secretary deems to be appropriate. It has served as an effective forum for interested parties to address safety issues related to the operation of the Nation's foremost high-speed passenger line. There is a continuing need for advice on safety issues, but since it is not necessary to re-activate the statutory Committee, it has been re-established as a discretionary committee. An NEC forum was held 12/11/01.

Passenger Equipment Safety Standards

Summary: The Federal Railroad Safety Authorization Act of 1994 (enacted 11/2/94) required FRA to issue initial passenger safety standards within 3 years and complete standards within 5 years. The agency was authorized to consult with industry parties outside the Federal Advisory Committee Act, making it possible to conduct an informal negotiated rulemaking.

Statutory deadline: 11/2/97 (initial); 11/2/99 (final).

Status:

Phase I: An initial meeting of the Passenger Equipment Safety Working Group (passenger railroads, operating employee organizations, mechanical employee organizations, and representatives of rail passengers) was held on 6/7/95, and the group met regularly to develop an NPRM. Manufacturer/supplier representatives served as associate members. FRA prepared an ANPRM indicating the issues under review by the working group, which was published 6/17/96 (61 FR 30672). The Working Group held its final meeting on the NPRM 9/30-10/2/96, having reached consensus on a portion of the issues presented. An NPRM was published 9/23/97 (62 FR 49728). The public hearing was held 11/21/97 (see 62 FR 55204; 10/23/97). Comments were due 11/24/97. Final Working Group meeting on the initial standards was held 12/15-12/16/97, and an additional meeting on intercity and high speed issues was held 1/6/98. The final rule was published 5/12/99 (64 FR 25540). Final rule amendments responsive to petitions for reconsideration on issues regarding inspection, testing and maintenance of passenger cars were published 7/3/00 (65 FR 41284). FRA is finalizing additional amendments in response to petitions for reconsideration.

Phase II: The first phase of this rulemaking activity, including the passenger emergency preparedness proceeding described below, resulted in comprehensive safety standards for passenger service. Phase II will address enhancements based on ongoing research, development of detailed standards by the American Public Transportation Association (APTA) Passenger Rail Equipment Safety Standards (PRESS) task force, and other identified needs. This phase commenced in 2000 and will be progressed through targeted rulemakings as research results and consultations mature. Held a research needs workshop with APTA in April 2000.

Passenger Train Emergency Preparedness

Summary: The Federal Railroad Safety Authorization Act of 1994 required FRA to issue emergency preparedness standards for passenger service. Initial standards were required within 3 years and complete standards within 5 years. The agency was authorized to consult with industry parties outside the Federal Advisory Committee Act, making it possible to conduct an informal negotiated rulemaking.

Statutory deadline: 11/2/97 (initial); 11/2/99 (final)

Background: An initial meeting of the Working Group for passenger train emergency preparedness standards was held on 8/8/95. The group met 2/6-7/96 to develop elements of an NPRM and met jointly with the Passenger Equipment Safety Standards Working Group on 3/26/96 to consider related issues, including the implications of Emergency Order No. 20 and recommendations of the National Transportation Safety Board. The

Working Group included representatives of passenger railroads, operating employee and dispatcher organizations, and rail passenger organizations, and an advisor from the National Transportation Safety Board. The Working Group approved draft rule text, which was incorporated in an NPRM forwarded for review and clearance. Changes requested during review and clearance were provided to the working group during the week of 12/16/96.

Status: Completed. The NPRM was published 2/24/97 (62 FR 8330), and a notice of public hearings was published 3/6/97 (62 FR 10248). Public hearings were held in Chicago on 4/4/97 and in New York City on 4/7/97. Written comments were due by 4/25/97. The Working Group met 8/28/97 and agreed in principle to revisions for inclusion in the final rule. The final rule was published 5/4/98 (63 FR 24630), and a correction notice was published 7/6/98 (63 FR 36376).

NOTE: **The following order is closely associated with the two prior entries:**

Emergency Order No. 20

Summary: This order deals with the safety of push/pull and electric multiple unit service. The order was issued 2/20/96 (61 FR 6876; 2/22/96), and amended 2/29/96 (61 FR 8703; 3/5/96). Intercity and commuter passenger railroads were required to adopt operating rules providing for observance of reduced speed where delays are incurred in blocks between distant signals and signals at interlocking or controlled points. Marking of emergency exits and testing of emergency windows was required. Interim system safety plans were required to be filed.

Status: The order has been fully implemented. On 3/26/96, the Passenger Equipment Safety Working Group and the Emergency Preparedness Working Group met jointly to consider implementation issues and crossover issues with the two rulemaking proceedings and recent recommendations of the National Transportation Safety Board. The American Public Transportation Association and its members have undertaken a number of actions in response to the emergency order, including development of comprehensive system safety plans. Codification, revision or termination of provisions will be considered during the second phase of passenger safety standards rulemaking.

Positive Train Control

Evaluation of needs and feasibility (implementation):
Summary: These tasks involve defining PTC functionalities, describing available technologies, evaluating costs and benefit of potential systems, and considering implementation opportunities and challenges, including demonstration and deployment. (RSAC Tasks 97-4 and 97-5).

Status: Accepted by RSAC 9/30/97. Monitoring of implementation continues. Data and Implementation Task Force completed report on future of PTC, which as accepted by the full RSAC on 9/8/99. Meetings of Working Group were held 3/26/01, 8/14-15/01 and 12/4-12/6/01, with discussion focusing on projects and development of the risk assessment tool kit.

Performance Standards for PTC Systems
Summary: Existing signal and train control regulations are built around relay-based controllers and traditional track circuits, but technology is rapidly advancing. This task requires revising various regulations, including 49 CFR Part 236, to address the safety implications of processor-based signal and train control technologies, including communication-based operating systems. The purpose of the effort is to encourage deployment of innovative technology by providing a predictable environment. (RSAC Task 97-6). The concept of PTC refers to the ability to prevent train-to-train collisions, over speed derailments and casualties to roadway workers who are within authorized work zones along the railroad.

Status: Accepted by RSAC 9/30/97. The proposed rule on processor-based signal and train control systems was approved by consensus at the full RSAC meeting on 9/14/00. **The NPRM was published in the Federal Register on 8/10/01 (66 FR 42352).** The comment period was extended until 11/8/01. The Working Group met 12/4-6/01 in San Antonio, TX, and efforts continue to develop recommendations for resolution of issues raised by the public comments.

Progress Report to the Congress:
Summary: The Swift Rail Development Act of 1994 required FRA to submit a status report on the implementation of positive train control as a follow-up to the 7/94 Report entitled *Railroad Communications and Train Control.*

Statutory deadline: 12/31/95

Status: The Report was issued in letter format and forwarded to the Congress on 5/17/00. It enclosed the RSAC Report entitled ***Implementation of Positive Train Control Systems*** (approved 9/8/99).

Power Brakes

Summary: The Rail Safety Enforcement and Review Act (1992) required FRA to revise the power brake regulations. The statute required adoption of requirements for 2-way end-of-train telemetry devices (EOTs) and "standards for dynamic brakes."

Statutory deadlines: Final rule by 12/31/93; 2-way EOTs to be used on trains operating greater than 30 miles per hour or in mountain grade territory to be equipped by 12/31/97.

Status: FRA published an NPRM 9/16/94 and conducted six days of public hearings ending 12/94. Due to strong objections to the NPRM, additional options were requested from passenger interests by 2/27/95 and from freight interests by 4/3/95. Further action is as follows:

1) ***Passenger standards revision:*** FRA requested the Passenger Equipment Safety Standards Working Group to incorporate new proposals for revisions of the power brake regulations in the NPRM for passenger equipment safety. Working Group proceedings on the elements of the NPRM concluded 10/2/96 without full agreement on power brake elements. See Passenger Equipment Safety Standards for final rule action.

2) ***Freight standards revision:*** On 4/1/96, the RSAC accepted the task of preparing a second NPRM. The Working Group initiated its efforts in May, and on 10/31/96 the RSAC extended the deadline for a final report until 1/15/97. At the working group meeting 12/4/96, an impasse was declared, and subsequent efforts to revive discussions were not successful. On May 29, FRA notified the working group by letter that the task will be formally terminated. FRA withdrew task at 6/24/97 full Committee meeting. FRA prepared second NPRM reflective of what was learned through the collaborative process. NPRM published 9/9/98 (63 FR 48294) (FRA Docket No. PB-9, Notice No. 13). (RSAC Task 96-1--terminated). Public hearings were conducted on 10/26/98 and 11/13/98 and a technical conference was held on 11/23-24/98. Final date for submission of comments extended until 3/1/99. The final rule was published 1/17/01 (66 FR 4101). An amendment extending the effective date of the final rule until 5/31/01, was published on 2/12/0101 (66 FR 9905); and a subsequent amendment further deferred the compliance date for providing a written record of a test required under 232.409(c) until further notice (66 FR 29502; 5/31/01) . FRA is reviewed petitions for reconsideration and has published amendments to Subpart D of the final rule (66 FR 36983; 8/1/01). Remaining responses to petitions for reconsideration sent to the Federal Register for publication in February.

3) **Two-way end-of-train devices: Completed.** FRA published notice on 2/21/96 that this issue would be separated from the balance of the freight issues and expedited for completion of a final rule. A public regulatory conference was

convened 3/5/96 to explore remaining issues, and written comments were due 4/15/96. (Railroads also agreed to an expedited schedule that will ensure application of this technology by 12/15/96 on 2% or greater grades and by 7/1/97 for other trains.) The final rule was published 1/2/97 (62 FR 278) (FRA Docket No. PB-9, Notice No. 6), and it became effective 7/1/97. FRA received two petitions for reconsideration ("local train" definition and implementation date for smaller railroads). A notice denying the request to delete the tonnage restriction for local trains and granting extension of the compliance date for railroads with fewer than two million work hours was published 6/4/97 (62 FR 30461). On 11/4/97, held technical conference on petition of American Short Line Railroad Association regarding operation of very light trains over grade territory (see 62 FR 52370; 10/7/97); subsequently granted certain relief.

On 1/16/98, FRA published NPRM to clarify application of two-way EOT requirements to intercity passenger trains with express equipment at the rear (63 FR 195). Final rule was issued 5/1/98 (63 FR 24130). (FRA Docket No. PB-9, Notice No. 11).

Note: On 2/6/96, the Administrator issued Emergency Order No. 18, requiring use by the BNSF of 2-way EOTs or equivalent protection for heavy grade operations over the Cajon Pass (61 FR 505; 2/9/96).

Railroad Communications (including Radio Standards and Procedures)

Summary: Completed. In submitting the required report to the Congress on Railroad Communications and Train Control on 7/13/94, FRA noted the need to revise existing Federal standards for radio communications in concert with railroads and employee representatives.
Status: Completed. On 4/1/96, the RSAC accepted the task of preparing an NPRM, including consideration of communication capabilities required in railroad operations. The Working Group presented a consensus NPRM to the full Committee on 3/24/97, and the Committee voted to recommend issuance of the NPRM to the Administrator in balloting that ended 4/14/97. NPRM issued 6/11/97 and published 6/26/97 (62 FR 34544) (FRA Docket No. RSOR-12, Notice No. 4). Comment period closed 8/25/97. Final rule published 9/4/98 (63 FR 47182). (FRA Docket No. RSOR-12, Notice No. 5). (RSAC Task 96-3).

Regulatory Reinvention

Summary: In response to the Administration's call for regulatory review, elimination and reinvention, FRA took several actions to repeal obsolete regulations and simplify agency processes that affect external customers. Major elements of this effort are included in regulatory revision efforts described under other headings.

Status: Completed. Interim final rule amendments reducing frequency of reporting regarding signal and train control systems (49 CFR Part 233), simplifying review requirements for certain modifications of signal systems (49 CFR Part 235), and making conforming changes regarding inspection of ATC/ATS/ACS (49 CFR Part 236) published 7/1/96 (61 FR 33871). **These Interim Final Rule amendments have been adopted as a permanent final rule published 9/28/01 (66 FR 49556).**

Note: FRA's proposed 1999 rail safety reauthorization legislation, introduced in the 106th Congress as H.R. 2683 and S. 1496, included provisions to permit flexibility for railroads to make accident/incident reports less frequently than monthly and to eliminate outdated requirements for notarization of reports. No action was taken on this legislation. As a result, these provisions are under consideration for legislative proposals to be considered by the 107th Congress.

Roadway Worker Safety

Summary: In requiring the review of the Track Safety Standards, the Rail Safety Enforcement and Review Act (1992) required FRA to evaluate the safety of maintenance-of-way employees. In addition, the Brotherhood of Maintenance-of-Way Employes and the Brotherhood of Railroad Signalmen petitioned FRA to issue "on-track safety" rules.

Background: FRA published a notice 8/17/94 initiating a formal negotiated rulemaking. The negotiated rulemaking committee reported a statement of principles 5/17/95 and completed an NPRM draft 8/95. NPRM published 3/14/96 (61 FR 10528); initial written comments were due 5/13/96. Public hearing held 7/11/96.

Status: Completed. The final rule was published 12/16/96 (61 FR 65959); effective 1/15/97. Petitions for reconsideration were denied in a notice published 4/21/97. A consolidated hearing on waiver petitions was held 5/22/97, and written comments were due by 6/9/97. FRA issued decisions on individual petitions as investigations and analysis were completed.

Safety Integration Plans

Summary: In response to the proposed acquisition of Conrail by Norfolk Southern and CSX Transportation, FRA suggested, and the Surface Transportation Board required, that the petitioners file with the Board of Safety Integration Plans (SIPs). In coordination with the Board, FRA proposed regulations requiring preparation and FRA review of SIPs in connection with future railroad mergers.

Status: FRA and the STB jointly issued an NPRM 12/31/98 (63 FR 72225) to institutionalize the SIP process to ensure that proper safety planning and safety investments are undertaken during a merger. The proposed rule spells out the types of transactions that will require SIPs and outlines the roles of FRA and the STB in overseeing

the SIP process. On March 8, 2002, the FRA Administrator and the STB approved the SIP final rule to address safety concerns that may arise in railroad mergers. The final rule will be published in the Federal Register on March 13, 2002.

Small Railroads; Interim Policy Statement

Summary: The Small Business Regulatory Enforcement Fairness Act of 1996 amended the Regulatory Flexibility Act and required, among other things, that each agency establish small business communication and enforcement programs.

Statutory deadline: 3/29/97

Status: Interim policy statement published 8/11/97 (62 FR 43024). Public meeting to address definition of "small entity" was held on 9/28/99. FRA is preparing a final policy statement.

Steam Locomotives

Summary: A committee of steam locomotive experts from tourist and historic railroads sought a partnership with FRA to revise the steam locomotive regulations. The revisions relieve regulatory burdens while updating and strengthening the technical requirements.

Status: Completed. Revision of the Steam Locomotive Inspection regulations was tasked to the RSAC on 7/24/96. A task force of the Tourist and Historic Railroads Working Group worked actively toward finalization of a final rule. NPRM rule text agreed upon within the task force was approved by the Tourist and Historic Working Group on 9/3/97 and provided to the RSAC on 9/30/97. The full RSAC approved the consensus NPRM by mail ballot 2/17/98. NPRM published 9/25/98 (63 FR 51404) (FRA Docket No. RSSL 98-1, Notice No. 1). (RSAC Task 96-5). Public hearing held 2/4/99. Task Force formulated recommendations in response to comments received. The recommendations were accepted by the working group and the full Committee voted to incorporate the recommendations in the final rule. The final rule was published 11/17/99 (64 FR 62828) (FRA Docket No. RSSL 98-1, Notice No. 3); effective date 1/18/00.

Roadway Maintenance Machines [Track Motor Vehicle and Roadway Equipment Safety]

Summary: A 1990 petition to FRA from the Brotherhood of Maintenance-of-Way Employes asked FRA, among other requests, to propose standards for MOW equipment related to the safety of persons riding or operating that equipment. FRA elected not to pursue that issue at that time given other pending workload. However, this issue was renewed during the deliberations of the RSAC Track Safety Standards Working Group.

Status: On 10/31/96, the RSAC accepted a task of drafting proposed rules for the safety of this equipment. A task force of the Track Safety Standards Working Group was formed to address this issue. The NPRM on Roadway Maintenance Machines and the final rule amendment on the Gage Restraint Measurement System were approved by the full RSAC in a mail ballot during August. The GRMS final rule amendment was published 1/10/01 (66 FR 1894) and Roadway Maintenance Machines NPRM was published 1/10/01 (66 FR 1930). The Roadway Maintenance Equipment Task Force met 2/27-3/1/02 to review comments on the NPRM.

Tourist Railroad Report / *Review of Regulatory Applicability*

Summary: The Swift Rail Development Act of 1994 required FRA to submit a report to the Congress regarding FRA's actions to recognize the unique factors associated with these generally small passenger operations that often utilize historic equipment.

Statutory deadline: 9/30/95

Status: Report submitted to the Congress 6/10/96. The RSAC authorized formation of a Tourist and Historic Railroads Working Group 4/1/96. The Working Group held its initial meeting 6/17-6/18/96 and has monitored and assisted completion of the steam locomotive regulations task and will continue its oversight of task force activities, including the possible development of requirements for the training of steam locomotive operators and maintenance personnel. Planned future activities involve review of other regulations, such as track safety, emergency preparedness, and passenger equipment safety standards for possible adaptation to the safety needs of tourist and historical railroads. (RSAC Task 96-4).

Track Safety Standards

Summary: The Rail Safety Enforcement and Review Act (1992) required FRA to revise the Track Safety Standards, taking into consideration, among other things, the "excepted track" provision. Other prominent issues include updating the standards to take advantage of research findings for internal rail flaw detection and gage restraint measurement. FRA also proposes to adopt track standards for high-speed service.
Statutory deadline: Final rule by 9/1/95.

Background: FRA published an ANPRM 11/6/92 and conducted workshops in the period 1/93-3/93. The RSAC accepted the task of preparing an NPRM on 4/2/96. The Track Safety Standards Working Group reported a draft NPRM to the full committee on 10/31/96. In balloting that concluded 11/21/96, RSAC voted to accept the Working Group report and recommend issuance of the NPRM.

Status: Completed. NPRM signed 6/19/97 and published 7/3/97 (62 FR 36138) (FRA Docket No. RST-90-1, Notice No. 5). Hearing held 9/4/97; comment period closed 9/15/97. Additional comment was invited regarding certain high-speed track geometry issues by notice of 12/12/97 (62 FR 65401) not later than 12/22/97. Final rule published 6/22/98 (63 FR 33991) (FRA Docket No. RST-90-1, Notice No. 8); effective 9/21/98.

Gage Restraint Measurement System amendment. The final rule amendment on Gage Restraint Measurement System (GRMS) standards and the NPRM on Roadway Maintenance Equipment were approved by the full RSAC in a mail ballot during August. The GRMS final rule amendment was published 1/10/01(66 FR 1894) and Roadway Maintenance Machines NPRM was published 1/10/01 (66 FR 1930). On 1/31/01, FRA published a notice extending the effective date of the GRMS amendment to 4/10/01 (66 FR 8372). On February 9, 2001, FRA published a notice delaying the effective date until 6/9/01, in accordance with the Regulatory Review Plan (66 FR 9676). The GRMS rule has been reviewed and is final.

U.S. Locational Requirement for Dispatching of U.S. Rail Operations

Summary: New 49 CFR Part 241 would require all dispatching of railroad operations that occur in the United States to be performed in the United States, with certain exceptions.

Status: The interim final rule (new Part 241) published December 11, 2001, prohibits dispatchers located in foreign countries from dispatching railroad operations that occur in the United States (extraterritorial dispatching) through January 10, 2003, with three exceptions. The first exception permits extraterritorial dispatching in the event of an emergency. Second, the rule permits continued extraterritorial dispatching of the very limited track segments in the U.S. that were regularly being so dispatched in December 1999. Third, the rule allows limited extraterritorial dispatching from Canada and Mexico of new fringe border operations in the United States. Railroads wishing to commence additional extraterritorial dispatching petitions may petition FRA for a waiver. The interim rule also solicits comments from the public that would be reviewed before issuance of a final rule. FRA held a public hearing on the rule on February 12, 2002. Testimony was received from the two major Canadian railroads and the labor organization representing the Brotherhood of Locomotive Engineers.

HIGHWAY-RAIL CROSSING SAFETY

Commercial Driver Disqualification - Railroad-Highway Grade Crossing Violation

Summary: To enhance the safety of commercial motor vehicle (CMV) operations on our nation's highways and complete action initiated in response to the requirements specificed in section 403 of the ICC Termination Act of 1995, the Federal Motor Carrier Safety Administration revised its regulations (49 CFR Parts 383 and 384) to require that CMV drivers who are convicted of violating Federal, State, or local laws or regulations pertaining to railroad-highway grade crossings be disqualified from operating a CMV.

Status: Completed. Final rule published on 09/02/99 (64 FR 48104).

Grade Crossing Signals (Inspection, Testing and Maintenance)

Summary: FRA issued a final rule for inspection, testing and maintenance of automated warning devices 9/30/94, and the rule went into effect 1/1/95 (49 CFR Part 234). During the initial year, FRA worked with railroads and signal employees to disseminate information, conduct training, and identify any areas of ambiguity or weakness in the standards. At a technical resolution committee (TRC) meeting during the week of 3/13/95 that included participation by railroads, the Brotherhood of Railroad Signalmen, and States, several issues were identified that require clarification or refinement. An interim manual dated 4/14/95 incorporated the findings of the TRC.

Status: Completed. Interim final rule amendments published 6/20/96 (61 FR 31802). **The final rule has been adopted from the Interim Final Rule (66 FR 49557; 9/28/01).**

Locomotive Visibility / Auxiliary Alerting Lights

Summary: In 1991, FRA initiated a new phase of research on locomotive conspicuity in relation to safety at highway-rail crossings. The Amtrak Authorization and Development Act of 1992 mandated that the research be completed and that a regulation be issued to apply alerting lights to locomotives.

Statutory deadline: Final rule by 6/30/95.

Background: FRA published a "grandfathering rule" on 2/3/93 and amendments on 5/13/94. After the research was substantially completed in early summer of 1995, FRA briefed the industry parties on the results, discussed options for regulatory action, and elicited additional information concerning railroads' progress in equipping their fleets. A Notice of Proposed Rulemaking was published on 8/25/95. The AAR and the ASLRA requested a technical conference to perfect the rule for final issuance, and that conference was held 11/28/95. Written comments were due by 12/12/95.

Status: Completed. Final rule was published 3/6/96 (61 FR 31802). Equipping of locomotives used as lead units at speeds exceeding 20 mph was required to be completed by 12/31/97, as provided by law.

Private Highway-Rail Grade Crossings

Summary: The Secretary's Action Plan for Grade Crossing Safety (6/94) commits FRA to conducting a special safety inquiry on private crossings.

Status: Conducted workshop on possible guidelines 7/93; timing of further action to be determined.

Selection of Grade Crossing Automated Warning Devices

Summary: FRA published a Notice of Proposed Rulemaking 3/2/95 (60 FR 11649) and received over 3,000 written comments through 6/14/95.

Status: Termination notice published 8/8/97 (62 FR 42733).

Use of Locomotive Horns (Whistle Bans)

Summary: Legislation enacted with the Swift Rail Development Act of 1994 required FRA to issue regulations providing for the use of train horns at highway-rail crossings.

Statutory deadline: Final rule 11/2/96 (most hazardous crossings), 11/2/98 (other crossings). Note: deadlines were superceded by legislation barring FRA from issuing a final rule before 7/1/01.

Background: This legislative mandate anticipated FRA follow up to Emergency Order No. 15, which addressed local whistle bans on the Florida East Coast Railroad between Jacksonville and Miami. FRA released a report on the national impacts of local whistle bans on 6/1/95 and conducted an extensive program of public outreach to make communities aware of the forthcoming rulemaking and to seek information on supplementary safety measures that would support allowance of quiet zones in communities sensitive to train horn noise. Contacts were established with 160+ jurisdictions known to have whistle bans in place. FRA representatives met with or addressed forums of state and local officials and community groups. Met with AAR/BRS/AAHSTO/FHWA 12/13/95 to address technical specifications for 4-quadrant gates.

Numerous congressional offices encouraged FRA to continue outreach and data collection. FRA advised the Congress that the deadline for an initial final rule would not be met as a result. Immediately prior to adjournment, the 104th Congress enacted the FAA reauthorization bill (PL 104-264; 10/9/96), which included amendments to the original

whistle ban legislation. In general, the legislation affirmed the latitude available to the Secretary to provide for phase-in of regulations and focus on safety results.

Status: NPRM published 1/13/00 (65 FR 2230) (Docket No. FRA-1999-6439, Notice No. 1). Written comments were due 5/26/00. FRA held 12 public hearings and a technical conference to receive oral comments. Received and reviewed more than 3,000 comments (combined for the NPRM and draft environmental impact statement). Labor, Health and Human Services Appropriations Act, 2001, bars issuance of final rule before 7/1/01 (Pub. L. No. 106-554; 12/21/00.) Preparing final rule.

Completion of the Department of Transportation's Technical Working Group recommendations on new standards for the use and implementation of highway-rail grade crossing warning devices (cross bucks, lights, gates, grade separation).

Summary: The FRA and the Federal Highway Administration are co-chairs of the Working Group whose members include representatives of the Federal Transit Administration (FTA), the National Transportation Safety Board (NTSB), the Association of American Railroads, the American Shortline and Regional Railroad Association, state transportation agencies, county transportation agencies, the supply industry and academia. A report will be published by the end of Calendar Year 2001. The final report is in final draft approval with only final technical changes to be reviewed by the TWG members. Final approval of the last technical changes to print by FHWA should be completed by the first half of 2002.

The FRA and Operation Lifesaver, Inc. (OL) completed the development of new Public Service Announcements (PSA) to promote highway-rail grade crossing safety and railroad trespasser prevention.

Summary: The PSAs were be developed with a $350,000 federal grant. Focus group sessions were completed in July 2000, and PSA concepts were reviewed and approved by representatives of FRA, OL, the Association of American Railroads, the International Association of Police Chiefs and other Federal/State and industry partners. Production of the PSAs was completed by December 31, 2000. Airing of the PSAs began in February 2001.

New Directions for Hazardous Materials Safety by Rail

Summary: The movement of hazardous materials throughout the railroad industry provides an excellent example of the dynamic interrelationship between shippers, carriers, freight car builders, repair companies, and Federal, State, and Tribal governments. Under authority delegated to us by the Secretary of Transportation, we administer a safety program that oversees the movement of hazardous materials (including dangerous goods), such as petroleum and chemical products and nuclear shipments throughout the Nation's rail transportation system. Our agency also has authority to oversee the movement of a package marked to indicate compliance with a Federal or international standard, even if such a package does not contain a hazardous material. Our current hazardous materials safety regulatory program and standards-related partnerships include the following items:

- Hazardous Materials Incident Reduction Program
- Tank Car Facility Conformity Assessment Program
- Spent Nuclear Fuel and High-Level Nuclear Waste Program
- Rulemaking, Approvals, and Exemptions
- Standards-Related Partnerships

Hazardous Materials (HazMat) Incident Reduction Program:

Data collected by the Research and Special Programs Administration shows about 1100 HazMat releases per year from bulk packages such as tank cars that do not result from a derailment or other transportation accident. That number has remained relatively consistent for over 10 years. It is important to note that despite FRA's focus on shippers in the past, our efforts have not resulted in dramatic safety improvements in this area. The largest decline in HazMat releases resulted from a Federal rulemaking that increased the burst pressure of rupture discs on tank cars, an industry outreach effort to communicate the risk of disc failures, and an industry effort to install surge-suppression devices below the disk on tank cars.

It is observed that non-accident related releases of a HazMat generally result from a Federal or industry standard that was allowed to progress to failure. To prevent releases, the agency and industry must focus on the detection of in-process failures, such as deterioration of gaskets, threaded closures, shell corrosion, and the progression of fatigue cracks in tank shell material. Failures also include training programs that fail to deliver the needed knowledge and skills to operating personnel.

Starting in September of 2000, the agency developed a new performance plan to help reduce the number of in-process failures in transportation. The plan first reviews national

performance trends based on accident/incident data and FRA field inspection activity. The findings from the review are then made part of the HazMat Division's National Performance Goals (NPG). Implementation of the NPG follow one or more of the following areas:

- Continued review of accident/incident data
- Continued review of inspection data
- Field assessments, audits, and interviews
- Regionally-based inspections based on areas identified as high risk
- Mechanical design improvements
- Operating improvements
- Outreach programs:
- Industry associations
- Plant labor and management safety meetings
- Seminars and conferences
- Training and education

Tank Car Facility Conformity Assessment Program:

Chapters 51 and 201 of Title 49, United States Code (formerly the Hazardous Materials Transportation Act and the Federal Railroad Safety Act of 1970) provide DOT with sweeping regulatory authority to oversee the construction of bulk packages used in the rail transportation system, such as tank cars and covered hoppers. The Secretary of Transportation has delegated the enforcement of Chapter 51 and its implementing regulations to the FRA. Although part of FRA's program since 1967, the agency's attention to the manufacturing and maintenance details of tank car construction was *ad hoc*, and generally associated with tank car failures. Beginning in September 2000, the agency established a comprehensive plan to oversee the facilities that have the potential to introduce defects into the manufacturing and maintenance cycle of tank cars.

Currently, the North American tank car industry consists of 20 locations that fabricate and assemble tank cars and more than 100 locations that assemble and repair tank cars. There are also about 350 additional locations that provide manufacturing and maintenance services to tank car internal lining and coatings and to service equipment, such as valves and fittings. Overseeing this industry requires a coordinate effort of nationally-based and regionally-based inspection efforts, all focused at preventing failures from entering the transportation system. The national program is a work product in FRA's initiative to improve quality in tank car manufacture, repair, and maintenance programs. The plan is an integral part of the Hazardous Materials Safety program because of the heavy reliance on tank cars to transport the majority of hazardous materials by rail.

The program is designed with three objectives. The first objective is to gauge and improve the level of compliance with Federal regulations at facilities where DOT specification tank

cars and other tank cars used to transport hazardous materials are manufactured, repaired, inspected, tested, qualified, or maintained. The second objective is to provide improved uniformity with regard to inspection activities and facilitate on-the job training through a program that brings inspectors together in a manner that is not generally possible. The third objective is to fortify the overall rail safety program through an improvement in quality at these facilities.

Safety Compliance Oversight Plan for Spent Nuclear Fuel and High-Level Nuclear Waste:

The FRA has regulatory oversight for the safety of railroad operations within the United States. Ranking at the top of FRA's priorities is the safety of rail shipments involving Spent Nuclear Fuel (SNF)[1] and High-Level Radioactive Waste (HLRW)[2]. These materials have been transported safely by rail in the United States for more than 40 years. In the mid-1980s, partly as a result of the rail shipments from the Three Mile Island Nuclear Power Plant, FRA implemented its High-Level Nuclear Waste Rail Transportation Inspection Policy[3] for all known rail shipments of SNF and HLRW. Under FRA's Inspection Policy, there has never been a rail accident or incident involving the transportation of SNF or HLRW that has resulted in a release of the material from the packaging. Furthermore, there has never been a single death or injury resulting from a rail

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1 The Nuclear Waste Policy Act of 1982 (NWPA) defines "spent nuclear fuel" as "fuel that has been withdrawn from a nuclear reactor following irradiation, the constituent elements of which have not been separated by reprocessing."

2 NWPA defines "high-level radioactive waste" as "(A) the highly radioactive material resulting from the reprocessing of spent nuclear fuel, including liquid waste produced directly in reprocessing and any solid material derived from such liquid waste that contains fission products in sufficient concentrations; and (B) other highly radioactive material that the Commission, consistent with existing law, determines by rule requires permanent isolation." The term "Commission" as used in the definition means the Nuclear Regulatory Commission.

3 See Appendix A "*Federal Railroad Administration High-Level Nuclear Waste Rail Transportation Inspection Policy*".

shipment of radioactive material.

Nevertheless, past rail shipping campaigns have shown that the nature of the potential hazards associated with radioactive materials elicits a high degree of public awareness and concern regarding the safety and integrity of SNF and HLRW shipments by rail. Furthermore, these shipments are projected to increase dramatically in volume in the foreseeable future; 75 to 90 percent of the SNF and HLRW will be transported by rail. Total annual shipments of these materials are expected to increase from the current 15 to 25 shipments per year to between 400 to 600 shipments per year within the next decade.

Development of the SCOP involved a coordinated effort between FRA, DOE, the Association of American Railroads (AAR), railroad labor organizations, and representatives of affected States. FRA wishes to acknowledge the invaluable contribution of its safety partners whose insight and wisdom were instrumental in formulating the policies and procedures that are incorporated into the SCOP.

In developing the SCOP, FRA has revised its previous policy to include the following safety enhancements in planning, inspection, training, and oversight activity areas:

Planning

- FRA, DOE, the offeror or agent, and the rail carriers will consider track classification in the route selection process to ensure that the highest-rated track is utilized.

- FRA will prepare an accident prediction model for the highway-rail grade crossings along the route. FRA will assist DOE in coordinating with appropriate State, local, and tribal agencies in route planning activities, using this model.

- The Department of Transportation's (DOT) Office of Intelligence and Security will assist FRA in coordinating safety precautions, such as the identification of "safe havens," with the offeror, law enforcement officers, and intelligence communities.

Inspections

- FRA will arrange for a track geometry car to operate over designated routes.

- FRA will conduct visual inspections of bridges along the designated routes and review railroads' bridge inspection programs to ascertain structural integrity.

- FRA will review the rail carrier's rail flaw detection vehicle data to ensure that a rail flaw detection vehicle has been operated over the designated route, and necessary rail repairs are made prior to shipments.

- The SCOP requires that every train involved in the transportation of SNF and HLRW be equipped with a 2-way End-of-Train (EOT) braking device, regardless of train length. Prior to each shipment, and during each crew change point along the route, FRA will endeavor to inspect trains to ascertain that EOTs are operational.

Along a designated route, FRA will inspect all automated warning devices, at highway-rail grade crossings along the route, to ascertain that they are operational.

Training/Oversight

- FRA will assist DOE, and the offeror or agent, in the development of Emergency Response training and safety briefings. FRA also will liaison with the rail industry to verify that requisite training and briefings have been performed.

- Prior to the first shipment, and at least annually for subsequent shipments, FRA will review emergency response plans for designated routes and recommend modifications, if necessary.

- Prior to the first shipment, and at least annually for subsequent shipments, FRA will conduct the necessary reviews to ensure that train crews are properly certified, trained, and experienced in operating over the designated routes.

- FRA will place Operating Practices personnel in the rail carriers' dispatching centers for the first shipment on designated routes, and will review dispatching procedures periodically for subsequent shipments.

- Prior to the first shipment, and for subsequent shipments, as appropriate, FRA will focus on Operation Lifesaver training in communities along designated routes.

- FRA will continue to prioritize complaints regarding designated routes, and will continue to expedite the investigation and resolution of these complaints.

Rulemaking, Approvals, and Exemptions:

Standards-Related Partnerships:

Chapter 9, Article 906(1) and (2), NAFTA, states:

Recognizing the crucial role of standards-related measures in promoting and protecting legitimate objectives, the Parties shall. . . .work jointly to enhance the level of safety and of the protection of human, animal, and plant life and health, the environment and consumers. . . . .the Parties shall, to the greatest extent practicable, make compatible their respective standards-related measures, so as to facilitate trade in a good or service between the Parties.

To accomplish the goals of NAFTA, the United States, Canada, and Mexico have agreed to develop standard-related measures, based on the *United Nations Recommendations on the Transport of Dangerous Goods* (orange book). One part of the standard concerns the design, construction, inspection, testing, and maintenance of tank cars. The development of the standard follows actions taken by the North American Free Trade Agreement, Land Transportation Standards Subcommittee (LTSS), Working Group on the Transportation of Dangerous Goods (Group 5) on June 11, 1998 in Montreal, Quebec, Canada. To meet this objective, Canada, Mexico, and the United States agreed to promote the development of an industry-sponsored standard-related measure for tank cars (North American Model Standard for Tank Cars [NAMS-TC).
Canadian General Standards Board:

Industrial Applications in Partnerships: To assist the industry in complying with new rules and to further research in inspection and test methods, FRA and the industry have partnered in the following safety initiatives:

- Maintenance Program Development
- Railcar operating environment stub-sill working group
- Reliability engineering research
- Tank car specimens for nondestructive examination research
- Critical flaw size research
- Fatigue crack growth properties of steels research
- Acoustic emission testing research
- Tank car damage assessment research
- Tank car fire protection research
- Tank car puncture resistance research
- Pressure relief valve sizing research
- Tank car design and use parameters for 286,000 gross rail loads research and rulemaking

Tank Car Crashworthiness and Retest

Summary: Research and Special Program Administration Dockets HM-175A and HM-201 addressed further improvements in tank car crashworthiness, and adoption of advanced non-destructive testing to improve tank retest procedures, respectively.

Status: Completed. Final rules published 9/21/95 (60 FR 49048).

OTHER SAFETY PROJECTS AND PARTNERSHIP EFFORTS

Bridge Structural Safety

Summary: Following a survey of bridge conditions and railroad inspection practices, FRA determined that regulatory action is not necessary, but that FRA should continue to exercise an oversight role regarding bridge structural safety programs. FRA issued an interim statement of policy 4/27/95, with comments due 6/26/95.

Status: Comments support continued FRA partnership role. FRA issued a final bridge statement of policy for safety of railroad bridges that establishes suggested criteria for railroads to use to ensure the structural integrity of bridges that carry railroad tracks. The statement was published in the Federal Register on 8/30/00 (65 FR 52667).

Note: On 2/12/96, the Administrator issued Emergency Order No. 19, which removed from service a bridge on the Tonawanda Island Railroad in New York State pending necessary structural repairs (61 FR 628; 2/16/96). In 12/16/99, the Administrator reissued Emergency Order No. 22, which removed from service a bridge on the Oregon Pacific Railroad in Oregon State pending inspection of repairs to assure safety (64 FR 71844; 12/16/99). This Emergency Order was partially lifted by order of 1/20/00 (65 FR 5018; 2/21/00).

Discolored Wheels

FRA has granted a master waiver of the Freight Car Safety Standards permitting continued use of discolored heat-treated, curved plate wheels, which have superior resistance to thermal abuse. Data gathered under the waiver, together with results of analysis already provided, may support a permanent change in the regulation.

Environmental Impacts

FRA revised its Procedures for Considering Environmental Impacts to update or eliminate outdated references to programs or statutory authorities that no longer exist and to correct inconsistencies with the Council on Environmental Quality's National Environmental Policy Act implementing regulations. The revised procedures were published in the Federal Register on 5/26/99 (64 FR 28545).

Hours of Service Electronic Recordkeeping

Current hours of service record keeping uses paper and ink, but a major railroad has been given relief to keep electronic records. Other railroads have expressed interest, and similar waivers will involve similar issues. At FRA's invitation, the AAR submitted a petition seeking a master waiver for use of electronic record keeping. However, individual railroads have elected to proceed separately, and FRA is processing each on its merits. Permanent amendments to the recordkeeping and reporting requirements may be proposed. FRA is assisting railroads in developing electronic systems by providing guidance materials.

Remote Control Locomotives

Current regulations contemplate operation of a locomotive exclusively from within the cab, and provision for the safety of the operation is made within that context. FRA has previously proposed a test program to gather more data on various types of operations. FRA has also held an informal safety inquiry regarding use of one-person crews and remote control locomotives on the Wisconsin Central (see 61 FR 58736; 11/18/96). On 5/15/00, FRA published a notice of a technical conference to examine the current status of safety issues related to this technology (65 FR 31056). The technical conference was held on 7/19/00. Total meeting attendance, including presenters, was approximately 120. The Technical Conference focused on the changes in RCL operations that have occurred over the past five years. A Notice of Safety Advisory 2001-01, which establishes recommended minimum guidelines for the operation of remote control locomotives was published 02/14/01 (66 FR 10340).

Shared Use of General Railroad System - Joint Statement of Agency Policy

Completed. FRA and the Federal Transit Administration (FTA) have been working together to develop a policy concerning safety issues related to light rail transit operations on the general railroad system, how the two agencies intend to coordinate use of their respective safety authorities, and the waiver process related to shared use operations. A proposed joint statement of policy was published 5/25/99 (64 FR 28238) with comments due on 7/30/99. Comment period extended on 7/28/99 to10/29/99 (64 FR 40931). Additional extension on 10/28/99 to 1/14/00 (64 FR 58124). FRA issued a final joint policy statement describing the extent of its statutory jurisdiction over railroad passenger operations and explaining how it will exercise its jurisdiction. The statement was published 7/10/2000 (65 FR 42526). (Docket No. FRA-1999-5685.)

Shared Use of General Railroad System - FRA Jurisdiction Policy Statement

Completed. FRA issued a proposed statement of agency policy on 11/1/99 (64 FR 59046) (FRA Docket No. FRA-1999-5685, Notice No. 4) describing the extent of its statutory jurisdiction over railroad passenger operations (which covers all railroads except urban rapid transit systems not connected to the general railroad system) and to explain how it will exercise that jurisdiction. Comments were due by 1/14/00. Final Policy Statement published 7/10/2000 (65 FR 42529).

TOFC/COFC Securement

Summary: Following a serious accident at Smithfield, N.C., on 5/16/94, FRA formed a partnership with major railroads and labor organizations to evaluate and improve securement of intermodal loads. A report to the Secretary dated 9/15/94 documented the initial results of that effort.

Status: FRA held a meeting on 2/22/95 that focused on an item-by-item discussion of the status and progress made within the industry with respect to the seven recommendations identified in the report to the Secretary. The AAR has established an Intermodal Equipment Handling Task Force that has developed a number of training aids. A follow-up TOFC/COFC loading and securement safety survey was conducted during 1996. FRA conducted additional loading and securement field evaluations during July-August 1997. Joint training activity brought together railroads, TTX and FRA to maintain strong emphasis on compliance with AAR loading requirements. FRA continues to monitor securement of trailers and trucks in transportation and to work on this issue through SACP's on individual railroads. In 8/99, FRA inspectors began bi-regional team audits, with 18 inspections per team to be completed by August 2001. To date, the survey of intermodal loading facilities is progressing as planned. The deficiencies found are tracking at a rate similar to previous studies. As of 8/01/01, the teams had surveyed 7,636 railcars, 3,745 trailer platforms, and 10,872 container platforms. A total of 3,095 deficiencies were noted. Team audits were scheduled to continue another eighteen months.

Train Dispatcher Training

FRA submitted a report to the Congress on 1/5/95 regarding the functions of contemporary train dispatching offices. The report noted that traditional pools of candidates for recruitment of train dispatchers are no longer adequate to the need. In partnership with the American Train Dispatchers Department/BLE (ATDD), FRA identified the need for a model train dispatcher training program.

Experts from Amtrak, the ATDD, the Burlington Northern/Santa Fe Railroad and FRA developed a list of elements for dispatcher training programs. Required competencies and training program elements have been abstracted from this effort for a model program. The RSAC was briefed on this effort on 3/24/97, with participants in the training task force indicating reluctance to attempt a "one size fits all" regulatory approach. More recent discussion in the RSAC has indicated a renewed interest by the ATDD in development of uniform minimum standards for dispatcher training and qualification.

In May 2001, the FRA Office of Research and Development published ***Understanding How Train Dispatchers Manage and Control Trains*** (DOT/FRA/ORD-01/02), which is available at http://www.fra.dot.gov/volpe/html/rndpubs.html.

SAFETY ADVISORIES/DIRECTIVES/BULLETINS

Advisories	
2002-01	Importance of Clear Safety Procedures - Highway-rail grade crossing warning systems. This advisory addressed the importance of clear, precise and unambiguous railroad safety procedures to ensure the safety of highway-rail grade crossing warning systems or wayside signal systems that are temporarily removed from service. Published 1/23/02 (67 FR 3258).
2001-3	Failures of Airbrake Angle Cocks from Ellcon-National. This advisory recommends the immediate replacement or installation of retrofit kit for Ellcon- National Model 7000 Thread-to-Thread and Model 7270 Thread-to-Flange Angle Cocks, at both ends of airbrake system. Published 05/01/01 (66 FR 21811).
2001-2	Structural Integrity of Cast Steel Draft Sills. This advisory establishes recommended minimal guidelines for inspection, and operation of Trinity Industries covered hopper cars, with draft sills manufactured by American Steel Foundries. Also guidelines if car is involved in derailment and/or found defective. Published 03/12/01 (66 FR 14432).
2001-1	Remote Control Locomotives. This advisory establishes recommended minimal guidelines for the operation of remote control locomotives. Published 02/14/01 (66 FR 10340).
2000-3	Switching Operations. This advisory provides safety practices to reduce the risk of serious injury or death both to railroad employees engaged in switching operations and to the general public. Published 11/2/00 (65 FR 65895).
2000-2	Signal Units. This advisory recommends replacement of certain components in Harmon Industries' "Electro Code 4" and "Electro Code 4 Plus" intermediate signal units.
2000-1	Model B1 relays. This advisory asks railroads to inspect and test certain relays for which there is a concern regarding potential malfunction. Published 5/11/00 (65 FR 30474).
99-3	Securement of floor beam cross-members on RoadRailer trailers: Safety practices to prevent the highway tandem wheel on RoadRailer trailers from falling onto the rails on moving trains. Published 11/10/99 (64 FR 61377).
99-2	[Not issued.]
99-1	Lifting or jacking of railroad equipment: Safety practices related to lifting or jacking of railroad equipment in order to remove trucks or repair other components on a piece of railroad equipment which requires individuals to work beneath railroad equipment while it is raised. Published 8/16/99 (64 FR 32300).

98-3	Safe Use of Prescription and Over-the-Counter Drugs: Safety practices for the safe use of prescription and over-the-counter drugs by safety-sensitive railroad employees. Published 12/24/99 (63 FR 71334)
98-2	Emergency application of airbrakes: Safety practices to reduce the risk of casualties caused by failure to activate the available two-way end-of-train telemetry device (two-way EOT) to initiate an emergency brake application beginning at the rear of the train when circumstances require an emergency application of the train airbrakes. Published 6/5/98 (63 FR 30808).
98-1	Vision standards of certified locomotive engineers: Addresses the vision standards of certified locomotive engineers in order to reduce the risk of accidents arising from vision impaired engineers. Published 5/28/98 (63 FR 29297).
97-3	Authorization of train movements past stop indications of absolute signals: Safety practices to reduce the risk of accidents arising from conflicting train movements when train dispatchers and control operators authorize movements past a stop indication of an absolute signal. Published 9/18/97 (62 FR 49047).
97-2	Failure to properly secure unattended rolling equipment: Safety practices to reduce the risk of casualties from runaway locomotives, cars, and trains caused by failure to properly secure unattended rolling equipment left on sidings or other tracks. Published 9/18/97 (62 FR 49046)
97-1	Protection of trains and personnel from hazards caused by severe weather conditions: Safety practices to reduce the risk of casualties from train derailments caused by damage to tracks, roadbed and bridges resulting from uncontrolled flows of water and similar weather-related phenomena. Note: This was amended on November 12, 1997, by revising the recommendations concerning the transmission of flash flood warning to train dispatchers or other employees controlling the movement of trains. Published 9/4/97 (62 FR 46794).
	Directives
97-1	Review of operational tests and inspection programs and review of train dispatching procedures in non-signaled territory: Safety practices to evaluate the integrity of all railroads' programs of operational tests and inspections to ensure that safety-critical information is accurately conveyed and acknowledged for operations in non-signaled Direct Train Control (DTC) territory. Published 6/30/97 (62 FR 35331).
97-2	Initiating emergency application of train airbrakes descending heavy grades: Safety practice to prevent run-away trains on heavy grades of 2 percent or greater by initiating emergency application of airbrakes whenever train speed exceeds maximum authorized speed

	by five miles or more. Published 2/27/97 (62 FR 9014).
	Bulletins
97-1	Loss of dynamic braking due to unintentional activation of emergency MU fuel-line cut-off device: Safety practices for certain locomotives equipped with emergency MU fuel-line cut-off devices located inside the locomotive control compartment at a location which enables the cut-off device to be activated unintentionally. Published 1/30/97 (62 FR 4569).

Unnumbered: Recommended safety practices for Direct Train Control Operations. Published 12/3/96 (61 FR 64191).

PENDING PETITIONS AND SUGGESTIONS FOR RULEMAKING

Docket No.	Dated	Status
		Petitions for Rulemaking[4]
93-2	11/5/93	BMWE Petition for Bridge Safety Standards Summary: Requests issuance of rules for construction, maintenance, repair and inspection of structural components of railroad bridges. Status: FRA published a final policy statement on bridge structural safety 8/30/00 (65 FR 52667). FRA determined that regulations are not necessary at this time. FRA continues to address bridge safety issues directly with individual railroads and through emergency orders. CLOSED.
94-1	5/19/94	BLE Petition for Positive Train Separation Summary: Requests rulemaking to make changes to 49 CFR Part 236 (Rules, Standards and Instructions) to lower the speeds at which signal and train control systems are required, establish visibility standards for wayside signals, and require that at least two signals in advance display less than clear indications if a stop is required. Status: This petition was referred to the PTC Working Group. With BLE participation, RSAC has focused on use of innovative technology to address the purposes of the petition. *See* Report of the RSAC to the Federal Railroad Administrator entitled *Implementation of Positive Train Control Systems* (September 1999).
96-1	8/22/96	UTU Petition Regarding HelperLink Technology Summary: Requests regulations governing use, testing and calibration of electronic devices used to control automatic airbrakes on helper locomotive consists. Status: This petition and issues regarding this technology were incorporated into Freight Power Brake rulemaking and were addressed in the final rule (§232.219(c); 66 FR 4104, 4206; 1/17/01). CLOSED.
98-1	12/23/97	BMWE Petition; Bridge Worker Safety Amendments Summary: Requests elimination of use of body belts to conform to OSHA rule amendment. Status: Interim Final Rule published 1/15/02 (67 FR 1903).

[4]FRA rules of practice (49 CFR Part 211) prescribe requirements that must be met by petitions for rulemaking. Some petitions do not contain all required information. FRA generally retains the those petitions for further consideration, rather than dismissing them, so that the issues can be more fully developed.

Docket No.	Dated	Status
98-2	3/25/98	BMWE Petition for Crane Safety and Training of Crane Operators Summary: Requests rulemaking through RSAC to address crane operator training, crane inspection, and load rigging and hoisting issues. Status: Petition is pending consideration by the Roadway Equipment Task Force of the Track Safety Standards Working Group. Discussion in full RSAC indicated that informal consultations should assist FRA in describing need for and parameters of possible task. Members of Track Safety Standards Working Group have been requested to consult.
98-3	4/14/98	BLE Petition to Prohibit Operation of Locomotive in Position Opposite of Normal Status: The FRA Administrator responded to the petition letter on 05/5/98. Issue to be handled in SACP.
98-4	3/20/98	UTU Petition for Exemption from Personal Liability Summary: Requests rulemaking to exempt all train and engine service employees from personal liability for violations of FRA safety regulations "for which such employees have no power or authority to comply." Alternately, FRA is requested to grant the employees the power to refuse to operate equipment which is not in compliance with Federal law. Status: Pending.
2000-8422	11/16/00	BLE Petition for Rulemaking for Remote Control Locomotives. Summary: BLE requests commencement of a rulemaking restricting use of remote control technology. Status: Safety Advisory 2001-1 was published 2/14/01. FRA will review need for further action.
2001-10494	8/14/01	UTU Petition to repeal 49CFR § 240.7. Summary: UTU requests that the FRA initiate a rulemaking to repeal 49 CFR § 240.7 governing movement of locomotives by non certified personnel. Status: Pending. FRA sent an acknowledgment letter.
Other Suggestions for Rulemaking		
Locomotive Safety Standards Summary: AAR suggested by letter that FRA undertake a review and revision of the Locomotive Safety Standards. Status: RSAC was advised of the request, and FRA has noted the need to include this activity in future planning.		

Training and Certification of Safety-Critical Employees Status: By letter of 5/8/00, UTU and BRS requested that this topic be considered by the RSAC. FRA has presented to RSAC information regarding current regulatory requirements and possible areas of exploration. Parties have been invited to assist in refining and developing the suggestion. Item is carried on RSAC agenda.
Safety Appliances Summary: Numerous railroads and manufacturers have noted the need to revise 49 CFR Part 231, the Railroad Safety Appliance Standards. NAFTA harmonization issues deserve consideration. Status: FRA staff had previously prepared a proposed revision to this part, and FRA has noted the need to include this activity in future planning.

ENFORCEMENT CASES IN LAST THREE YEARS

Mr. Rogers. Please present data showing the number of civil penalty enforcement cases processed for each of the last three years and the amount collected.

[The information follows:]

It is important to understand that the cases in the "assessed" column do not bear a one-to-one relationship to the cases in the "collected" column. FRA assesses civil penalties continuously, but for purposes of efficiency and impact aggregates cases for periodic settlement. Necessarily, some cases settled this year were assessed last year and some cases assessed this year will not be settled until next year.

	Assessed		Collected	
FY	Cases	Amount	Cases	Amount
1999	960	$8,761,000	1122	$6,046,050
2000	991	$9,481,250	769	$4,340,095
2001	1215	$10,792,750	1483	$7,645,905

ENFORCEMENT CASES BY CLASS OF RAILROAD

Mr. Rogers. How many enforcement cases did FRA bring each of the past three years against Class I (large) and other small (Class II, III) railroads? Please specify the number of cases and amounts collected by class.

[The information follows:]

	Large RR	Large RR	Small RR	Small RR
FY	Cases	Collections	Cases	Collections
1998	733	$3,579,915	334	$621,405
1999	741	$4,651,100	109	$321,825
2000	576	$3,559,615	75	$248,280
2001	899	$5,604,099	274	$970,022

ENFORCEMENT CASE BACKLOG

Mr. Rogers. What is the current status of FRA's enforcement case backlog? How does this backlog compare to the prior three years?

[The information follows:]

FRA always has a certain number of cases open at any time, and that number rises and falls throughout the year according to the usual rhythm of settlement activity. Therefore, FRA does not consider its entire inventory of open cases a "backlog." Major railroad cases, which comprise the great majority of civil penalty cases, generally do not remain open for long. Settlements with major railroads occur at least once a year, usually in late summer or early fall. However, settlements with small railroads and hazardous materials shippers do not present the same economies of scale in terms of closing them. Rather than negotiating settlement on dozens of cases in one large conference, as we do with the major railroads, these cases are usually closed one at a time. FRA attorneys must often focus on higher priority enforcement, regulatory, litigation, or other duties, which means that many of these smaller cases stay open for longer periods. However, we have steadily made progress on these cases. The open cases listed below are against large and small railroads and hazardous materials shippers.

	Open Cases	Penalty Amount
March 1999	1256	$11,894,900
March 2000	1222	$10,783,750
March 2001	1140	$10,539,750
March 2002	1142	$10,729,250

FY 2003 CONSULTING SERVICES FUNDS

Mr. Rogers. Please break down in detail the actual use of moneys provided under your consulting service budget request.

[The information follows:]

FRA CONSULTING SERVICES
(Dollars in Thousands)

FY 2003 Account/Project	Estimate
Safety and Operations:	
Intermodal GIS Network	100
Stracnet Update	10
FRA-Wide IT Initiative	444
Toxicological Testing	128
Web-Site Support	310
Total, S&O	$ 992

Intermodal GIS Network

This contract is a continuation of work started in 1994 to geolocate the majority of highway-rail grade crossings, mileposts, accidents, and other rail safety-related locations to the national rail GIS computer network. This network is a major tool in recording and analyzing safety data.

The requested funding will support the enhancement and maintenance of the existing 1:1,000,000 scale rail network GIS data base as well as upgrades and enhancements to the GIS software. In addition, these funds will support a few modifications to the 1:100,000-scale rail network.

Stracnet Update

The contract supports annual updates to the strategic rail network. This network allows FRA to provide rail density specifications required by the Department of Defense for strategic rail planning.

FRA-Wide IT Initiative

Contract support will be provided to assess currently implemented, new, and expanded functions and will determine the next steps to be taken in planned upgrades and changes. The contractors will also be reviewing and assessing current technologies in the area of wireless remote, ATM and implementing the most cost effective and productivity enhancing processes.

Toxicological Testing

Contract includes reviews and procedural examinations of laboratory toxicological testing (whole blood, urine, and post-mortem tissue analysis) in the FRA contract laboratory. Other responsibilities include periodic comprehensive proficiency testing of the FRA laboratory to ensure compliance with established test protocols and quality assurance procedures. Adjunct responsibilities include periodic audits of selected railroad and drug programs and performing various technical reviews of FRA drug and alcohol programs.

Web-Site Support

Supports enhancements to current web sites, and on-going input and updates to information in the web site for safety and legal documents.

OPERATION RESPOND COST BENEFITS AND CURRENT STATUS

Mr. Rogers. What are the costs, benefits, and current status of FRA's involvement in the Operation Respond project?

[The information follows:]

Costs:

FY 1996:	$125,000
FY 1997:	$153,000
FY 1998:	$103,000
FY 1999:	$104,000
FY 2000:	$104,000
FY 2001:	$353,000

FY 2002: $353,000

Benefits and Current Status:

Starting in FY 2001, the Operation Respond project consists of two components. The first component relates to the establishment and operation of the Southeastern Transportation Safety Center (Safety Center) in Meridian, Mississippi. The second component involves the activities of Operation Respond, Inc. Both components are concerned with the education and training of first responders to accidents involving trains (law, fire and rescue personnel), including ensuring the availability of essential and updated information in a responsive manner. Data needs include information related to passenger train schematics and the identification of shipments, especially the movement of hazardous materials. Daily, over 1 million tons of hazardous materials moves over the Nation's railroad system. An accident/incident involving hazardous materials can be catastrophic.

The Safety Center was established in 2001 in order to meet a critical need for a comprehensive intermodal regional safety training facility for emergency (first) responders in the Southeast. The Safety Center will provide initial, advanced and refresher training for first responders in surface transportation incidents/accidents, including terrorist acts. The Safety Center includes more than 300 acres of land. This feature allows for a realistic placement of track, freight and passenger equipment and other training aids.

During FY 2002, the Safety Center is in the process of obtaining equipment (donated), developing its physical plant, and refining the educational curriculum.

Operation Respond Incorporated supports and supplements the efforts of the Safety Center by providing its Operation Respond Emergency Information (OREIS) software to "trainees." OREIS provides first responders with vital information during the critical, initial stages of an incident. For passenger railroads, OREIS provides detailed schematics of locomotives and passenger cars, giving first responders the vital information they need to quickly begin lifesaving search and rescue operations, fuel and electrical system hazard isolation and fire suppression activities. In addition to schematics, OREIS provides these responders with information about hazardous materials

aboard freight railroads through a secure and direct computer connection with databases maintained by various carriers.

Since its inception, OREIS, with funding assistance from FRA, has been installed in over 1,000 locations and over 15,000 first responders have received training. As of the end of 2001, all Class I railroads in the United States and Canada are on line with OREIS. Also, various shortline railroads now participate in the system.

OPERATION RESPOND FUNDING REQUEST FOR FY 2003

Mr. Rodgers. Is FRA requesting any funding for Operation Respond in Fiscal Year 2003? If so, how much and for what purposes?

[The information follows:]

For FY 2003, FRA is requesting $353,000 to fund Operation Respond. The funding will enable FRA to further support the aims and objectives of the Southeastern Transportation Safety Center (Safety Center) in Meridian, Mississippi, and also to continue to support the needs of first responders regarding essential train information features (i.e., car configurations – location of emergency windows, ladders, etc.), and shipment identification, especially the identification of hazardous materials movements.

To respond to a terrorist or other criminal action involving rail passengers, first responders must have quick access to accurate and dependable information and passenger car schematic diagrams. This information is essential to prevent unnecessary lost of lives and injuries to rail passengers and rescue personnel. During FY 2003, in cooperation with Amtrak and other concerned parties, the Safety Center will facilitate rail-passenger-oriented skills development and training initiatives for law enforcement personnel. These initiatives are intended to sharply enhance the ability of these personnel (law and fire/rescue) to deal with various scenarios related to emergency conditions, including terrorist acts. In addition, this funding request will supplement previous efforts associated with the planning and establishment of the Safety Center. These earlier endeavors related to various organizational, administrative, and operational considerations. For example, arranging for the shipment and placement of donated equipment. Also for FY 2003, $4,000 is requested for Operation Respond Incorporated, to provide additional software packages to first responders. While over

1,200 sets of the Operation Respond Emergency Information System (OREIS) software have been installed in various locations throughout the country, especially in the Northeast, additional coverage is desirable. Among the features of OREIS is the ability of first responders to directly interface with the hazardous materials files of participating carriers. This feature allows for the immediate identification and/or verification of the chemical contents of a movement and, thus, vital emergency response information.

FRA SUPPORT FOR OPERATION RESPOND

Mr. Rogers. How much longer does FRA anticipate financing this project?

[The information follows:]

FRA anticipates the need to fund the Southeastern Transportation Safety Center (Safety Center) in Meridian, Mississippi Safety Center for an additional four years, until the facility is fully operational and self-sufficient (including equipment, physical plant, staffing, and fiscal considerations). Regarding Operation Respond Incorporated, additional funding will be requested for four years to continue the distribution of the Operation Respond Emergency Information System software.

STATUS OF NTSB RECOMMENDATIONS

Mr. Rogers: What recommendations has the NTSB made to FRA within the past five years? What is the status of each of these recommendations?

[The information follows:]

During the past five years (January 1, 1997 through March 31, 2002), the NTSB has made 65 recommendations to FRA. Of the 22 recommendations that have been closed, 14 of the recommendations were closed following "Acceptable," "Acceptable Alternative Action, or "Acceptable Action/Superseded," six recommendations were classified as "Unacceptable Action," and one was classified as "Reconsidered." A synopsis of the closed recommendations follows:

Year	Acceptable Action	Acceptable Alternative Action	Acceptable Action Superseded	Reconsidered	Unacceptable Action	Total Issued
1997	8	0	1	1	3	13
1998	3	1	0	1	3	8
1999	1	0	0	0	0	1
2000	0	0	0	0	0	0
2001	0	0	0	0	0	0
2002	0	0	0	0	0	0
Total	12	1	1	2	6	22

Of the 43 NTSB recommendations that have remained open for the past five year period, 20 are classified "Open-Acceptable Response or Action," 14 are classified "Open-Unacceptable Response." Additionally, FRA has submitted responses to eight recommendations that are waiting for NTSB classification. In addition, FRA has recently received one new recommendation for which our initial reply has been formulated and is undergoing agency review prior to release.

The following table represents the current classification of all safety recommendations that were issued in the last five years that remain open:

Year	Acceptable Response or Action	Unacceptable Response	NTSB Awaiting FRA's Initial Reply	FRA Reply Received by NTSB	Total Open
1997	3	3	0	0	6
1998	7	8	0	0	15
1999	6	2	0	0	8
2000	2	1	0	4	7
2001	2	0	1	3	6
2002	0	0	1	0	1
Total	20	14	2	7	43

Recapitulation:

Year	Open Acceptable Responses, or in Process of Classification	Open Unacceptable Responses	Total Open	Closed Acceptable Action, Alternative Action, or Superseded	Closed Unacceptable Action	Total Closed	Total Received
1997	3	3	6	10	3	13	19
1998	7	8	15	5	3	8	23
1999	6	2	8	1	0	1	9
2000	6	1	7	0	0	0	7
2001	6	0	6	0	0	0	6
2002	1	0	1	0	0	0	1
Total	29	14	43	16	6	22	65

Classification of NTSB Safety Recommendations
January 1, 1997 Through March 31, 2002

Closed–Acceptable Action
R-97-01 Color Vision Testing - Engineers
R-97-02 Engineer Certification Requirements
R-97-14 Passenger Car Interior Quick-Release Mechanisms
R-97-16 Passenger Car - Emergency Exit Marking
R-97-18 Passenger Car - Inspection and Maintenance
R-97-19 Passenger Car - Functionality Exterior Door
R-97-20 Passenger Car - Flammability
R-97-57 Movable Miter Rails
R-98-26 Revise CFR 220 - Track Warrants
R-98-29 Federal Oversight-Dispatcher Centers
R-98-41 Modify Grade Crossing Database
R-99-12 Review Norfolk Southern's Part 240 Submission

Total = 12

Closed–Acceptable Alternative Action
R-98-67 Heat Treatment/Hardness Testing of Weld Repairs

Total = 1

Closed–Acceptable Action/Superseded
R-97-13 Positive Train Separation-Passenger Trains

Total = 1

Closed-Reconsidered
R-97-21 Train Dispatcher Record of Train Movements
R-98-71 Recommended Procedures-Purging Tank Cars

Total = 2

Closed–Unacceptable Action
R-97-10 Failure Modes and Effects Analyses
R-97-12 Redundant Systems for Commuter-Passenger Trains
R-97-58 Survey of Movable Bridges
R-98-05 Separate Dynamic Brakes from Power Brake Law
R-98-27 Prohibit "after-arrival" orders
R-98-55 Incorporate Safety Advisory 97-1 into Regulation

Total = 6

Total CLOSED = 22

Open–Acceptable Response
R-97-11 Separate Records for Passenger Operations
R-97-15 Passenger Car - Emergency Exiting
R-97-17 Passenger Car - Independent Power Sources
R-98-02 Loaded Weight Information
R-98-04 Research Maximum Speed based on weights
R-98-06 Dynamic Brake Indicator in Controlling Locomotive
R-98-07 Formal Training for Retainer Settings
R-98-17 Prohibit Bottling of Air
R-98-44 Traffic Controllers-Communications Midwest &Wilson Roads
R-98-56 Positive Seat Securement System for Passenger Cars
R-99-03 Review CSX Inspection and Maintenance
R-99-13 Develop and Require Crew Resource Management Training
R-99-14 Identify and Replace Faulty Electro Code 4 Capacitors
R-99-31 Engineering Changes - Midwest Steel

R-99-32 Weld Quality - Nippon Sharyo
R-99-33 Nonvisual Inspections-MU Locomotives/Cars
R-00-09 Audit AAR Equipment Databases
R-00-11 Inspection Standards Intermodal Cars
R-01-01 Hazardous Materials Advisory Bulletin
R-01-02 Develop Inspection Criteria for Pressure Relief Devices
Total = 20

Open–Unacceptable Response
R-97-09 Recording of Crew Voice Communications
R-97-55 Traction Motor Current
R-97-56 Tests and Inspections Event Recorders
R-98-01 Controls and Switches in Locomotives
R-98-03 Review Train Handling Practices
R-98-28 Dispatcher Selection and Training
R-98-30 Event Recorder Crashworthiness
R-98-42 Ensure Identification Number Posted at all Crossings
R-98-54 Identify and replace shallow foundation bridges
R-98-57 Event Recorder Specifications be in Locomotive Records
R-98-68 Prohibit Anhydrous Hydrogen Fluoride in Tank Cars with TC 128 steel
R-99-02 Fatigue (Scientifically Based Hours of Service Regulations)
R-99-53 Cognitive Alerter System
R-00-10 Require Car Floors be Inspected

Total = 14

Open– FRA Initial Reply Received by NTSB
R-00-01 Establish Criteria for Use of Medications
R-00-02 Develop and Publish Hazard Information
R-00-03 Educational Program for Medication Hazards
R-00-04 Establish Post-Accident Testing Requirement
R-01-12 Review Track Inspection Procedures
R-01-17 Modify Post-Accident Toxicological Testing Requirements
R-01-21 Evaluate Lone Engineer safety requirements
R-02-01 Require railroads to upgrade recorders to capture position of crossing gates
Total = 8
Open-Awaiting FRA's Initial Response

R-01-06 Develop/Implement Positive Train Control

Total = 1

Total OPEN = 43

GRAND TOTAL = 65

The following is a listing and narrative for each NTSB recommendation to FRA between January 1, 1997 and March 31, 2002.

Narrative for each Safety Recommendation Received since January 1, 1997:

R-97-01. **Color Vision Testing - Engineers - "Revise the current color vision testing requirements for locomotive engineers to specify, based on expert guidance, the test to be used, testing procedures, scoring criteria, and qualification standards."**

In its letter of August 15, 1997, FRA advised NTSB that a working group within RSAC is developing a notice of proposed rulemaking (NPRM) to revise the locomotive engineer certification regulation, and as a part of that rulemaking, this recommendation would be addressed. NTSB advised October 9, 1997, pending a successful rulemaking in response to this recommendation, this Safety Recommendation has been classified as "Open--Acceptable Response."

Since FRA's initial reply to the Board, an NPRM for revision to 49 CFR Part 240 *Qualification and Certification of Locomotive Engineers*, was published in the *Federal Register* on September 28, 1998. After researching comments received, FRA subsequently published a Final Rule for 49 CFR Part 240, *Qualification and Certification of Locomotive Engineers*, in the *Federal Register* on November 8, 1999. The revised provisions therein became effective January 7, 2000. In the final rule, FRA revised Section 240.121 *Criteria for Vision and Hearing Acuity Data*, and also added a new Appendix F, *Medical Standards Guidelines*, to the regulation. These actions, it is believed, now satisfy the full intent of the Board's recommendation.

FRA provided a lengthy and comprehensive update in our letter of April 11, 2000, to the Board. We explained in detail the new "Appendix F to Part 240 - Medical Standards Guidelines," which provide for acceptable vision test methods, and criteria that should be employed to determine whether a person has failed the particular testing protocol. Based upon FRA's actions, it is believed that the full intent of the Board's recommendation has been met by our revision of the color vision testing requirements for locomotive engineers, to base them on expert guidance, and by specifying the type of accepted tests and their individual failure criteria.

Current Status: The Board advised FRA in its letter dated July 14, 2000, that it had noted FRA had issued its Final Rule for 49 CFR Part 240, which became effective January 7, 2000. The Board noted that the rule contained revisions to Section 240.121, "Criteria for vision and hearing acuity data," and added a new Appendix F to Part 240, "Medical Standards Guidelines." Based on these revisions, the Board classified Safety Recommendation R-97-01 as "Closed–Acceptable Action."

R-97-02. **Engineer Certification Requirements - "Require as a condition of certification that no person may act as an engineer with a known medical deficiency, or increase of a known medical deficiency, that would make that person unable to meet medical certification requirements."**

In its initial reply letter of August 15, 1997, FRA advised NTSB that a working group within RSAC is developing a notice of proposed rulemaking (NPRM) to revise the locomotive engineer qualification and certification regulation to address this recommendation. NTSB on October 9, 1997, advised pending a successful rulemaking in response to this recommendation, this Safety Recommendation has been classified as "Open--Acceptable Response."

Since FRA's last update to the Board, an NPRM for revision to 49 CFR Part 240 *Qualifications for Locomotive Engineers*, was published in the *Federal Register* on September 28, 1998. After researching comments received, FRA subsequently published a Final Rule for 49 CFR Part 240, *Qualification and Certification of Locomotive Engineers*, in the *Federal Register* on November 8, 1999. The revised provisions therein became effective January 7, 2000. In the final rule, FRA added a new paragraph (f) to Section 240.121, *Criteria for Vision and Hearing Acuity Data*, which

requires each certified locomotive engineer to notify his or her employing railroad's medical department of any vision or hearing deterioration which fails to meet one or more of the standards of this regulation.

FRA provided an update in our letter of April 11, 2000, to the Board. We explained that a new paragraph (f) had been added to Section 240.121 *Criteria for Vision and Hearing Acuity Data,* in the Final Rule. This new rule is shown below:

> "(f) As a condition of maintaining certification, each certified locomotive engineer shall notify his or her employing railroad's medical department or, if no such department exists, an appropriate railroad official if the person's best correctable vision or hearing has deteriorated to the extent that the person no longer meets one or more of the prescribed vision or hearing standards or requirements of this section. This notification is required prior to any subsequent operation of a locomotive or train which would require a certified locomotive engineer."

Based upon FRA's action of placing the responsibility on each certified locomotive engineer to advise his or her railroad employer whenever his or her best correctable vision has deteriorated to the extent it no longer meets one or more of the prescribed vision standards, it is believed that the intent of the Board's recommendation has been met. We therefore requested the Board classify Safety Recommendation R-97-2 as "Closed–Acceptable Action."

Current Status: The Board advised FRA in its letter dated July 14, 2000, that it the Board noted FRA had issued its Final Rule for 49 CFR Part 240, which became effective January 7, 2000. The Board noted that the rule contained revisions to Section 240.121, "Criteria for vision and hearing acuity data," and added a new Appendix F to Part 240, "Medical Standards Guidelines." Based on these revisions, the Board classified Safety Recommendation R-97-02 as "Closed–Acceptable Action."

R-97-09. **Recording of Crew Voice Communications - "Amend 49 CFR Part 229 to require the recording of train crewmembers' voice communications for exclusive use in accident investigations and with appropriate limitations on the public release of such recordings."**

FRA provided its initial reply to the Board on February 28, 1998, indicating it is continuing to review this recommendation. FRA expressed several reservations about the use of electronic monitoring of employees' conversations in the workplace, whether or not work related. FRA cited the fact that a special statutory exception has been required in the aviation context to prevent inappropriate use of voice recordings following events drawing significant notoriety. Enacting fully effective regulations in the absence of special-purpose legislation thus does not appear to be feasible. The Board has not yet utilized the power conferred under its charter statute to recommend such legislation.

Despite these reservations, FRA continues to evaluate this recommendation with a view toward offering a more fully considered response. FRA's review would be aided by clarification of the Board's intent.

Current Status: In its letter of September 30, 1999, the Board responded to FRA's initial reply. The Board responded to FRA's questions by suggesting this agency contact the Federal Aviation Administration, and the Coast Guard, to obtain an understanding of how these issues were resolved in the aviation and maritime industries. The Board also indicated that legislation to address voice recording privacy issues in all modes of transportation is included in the Safety Board's reauthorization bill pending before Congress. Because FRA's reply indicates a lack of positive action, the Safety Board classified Safety Recommendation R-97-09 as "Open–Unacceptable Response."

R-97-10. **Failure Modes and Effects Analyses - "Require comprehensive failure modes and effects analyses, including a human factor analysis, for all signal system modifications."**

FRA provided its initial reply to the Board on February 28, 1998. Therein, FRA basically agreed that failure modes and effects analyses are useful tools, however to apply this application to every situation where signals may be altered or relocated would **become** a highly subjective exercise dependent on the judgment of the individual analyst. FRA emphasized to the Board that existing measures already taken, in the form of Emergency Order No. 20, Locomotive Engineer Certification Rules, and operational tests, address the particular issues underscored by the Silver Spring accident. FRA indicated that positive train control (PTC) systems

capable of maintaining train separation and enforcing other movement restrictions should be our objective. FRA concluded its reply by indicating that through the RSAC, a review of PTC technology is underway, and that FRA will urge inclusion of failure modes and effects analyses as a part of the safety acceptance procedure for new methods of operation.

Current Status: In its letter of September 30, 1999, NTSB responded to FRA's reply. The Board expressed its disappointment that the FRA has concluded that failure modes analyses would be burdensome if applied to all cases. Because the FRA has rejected this recommendation, the Safety Board has classified Safety Recommendation R-97-10 as "Closed–Unacceptable Action."

R-97-11. **Separate Records for Passenger Operations - "Develop and maintain separate identifiable data records for commuter and intercity rail passenger operations."**

FRA provided its initial reply to the Board on February 28, 1998. FRA indicated it had accomplished these improvements in automated data format for all reports filed on or after January 1, 1997.

The issue referred to in the Board's recommendations concerns the ability to accomplish machine sorts of accident/incident data specific to individual passenger rail operations. The FRA has been collecting accident, incident and operational data from most major commuter railroads directly, and analysis of that data has not been a problem. However, data for railroads using Amtrak to provide service as a contract operator have been included in Amtrak reports, along with intercity results. Difficulties have also existed where freight railroads serve as contract operator. In July 1995, the Federal Railroad Administration sent a letter to the commuter railroads using Amtrak to provide service. The letter requested that beginning January 1996 these railroads were to report injuries, accidents and operation data (train miles, passenger miles, etc.) under their own reporting initials. The commuters could request Amtrak to report for them, but Amtrak could not aggregate the commuters' data into the Amtrak reports. Due to logistical problems and Amtrak software problems this request could not be fulfilled in 1996.

In the interim the FRA issued revisions to the Railroad Accident Reporting Rule that mandated a number of changes in reporting. A second

letter was sent in February 1997 to commuter railroads instructing them to comply with the Federal Regulations on accident reporting. Data for these railroads are now being reported to FRA in a format that permits clear identification of the entity on whose behalf the service is provided. For 1997 and subsequent years, the FRA will be able to report frequency and rates of accidents and casualties by intercity service, commuter service and rail freight. In its letter of September 30, 1999, the Board responded to FRA indicating that it was pleased that the FRA is implementing the recommendation. Pending successful separation of commuter and intercity passenger data, the Safety Board has classified Safety Recommendation R-97-11 as "Open–Acceptable Response."

FRA provided updated information to the Board in our letter dated May 21, 2001, indicating that FRA is continuing the effort to collect commuter and other passenger safety data by railroad. The National Passenger Railroad Corporation (Amtrak) has now separated the commuter service reporting from its intercity service. That began in 1997. For the Maryland Rail Commuter (MARC) System, both Amtrak and CSX Transportation, Inc., have to separate this information. This made FRA analysis more complex, but we continue to agree with NTSB that it is worthwhile.

When FRA finds this kind of problem with other railroads, it has met with the railroad to improve the reporting. In 2000, the FRA discovered a similar problem with Steam Town Railroad: a contractor was doing the service for Steam Town and including their train miles, employee hours, injuries and accident in their data. That has been resolved. In 2001, FRA will be receiving three sets of reports for the Northeast Illinois Regional Commuter Rail Corporation (NIRC), which operates several commuter lines in Chicago, Illinois. One set of records will come from NIRC for those commuter routes that NIRC owns and operates. A second set of records will be received from NIRC for service that Burlington Northern Santa Fe Railway provides under contract for NIRC. And the third set of records will be received from NIRC for service that Union Pacific Railroad provides under contract to NIRC. These three sets will be combined to generate the composite totals for NIRC in the areas of: operational miles, employee hours worked, passenger miles operated, passengers carried, casualties to persons, rail equipment accidents, and highway-rail grade crossing accidents.

FRA recognizes that this task is larger than just separating the commuter services that Amtrak provides under contract at various locations in the Nation. FRA proposed at the Railroad Safety Advisory Committee meeting held on April 23, 2001, that a new task be accepted by RSAC, and a working group be formed to revise the present FRA Guide for Preparing Accident/Incident Reports. Subject to acceptance by member organizations, part of the proposed revision of FRA's Guide will be a more complete explanation of the reporting requirements necessary to get information about passenger service when another carrier/provider is performing train operations.

Current Status: The Board in its letter dated September 19, 2001, indicated that pending notification that the FRA has developed and is maintaining separate identifiable data records for commuter and intercity rail passenger operations, Safety Recommendation R-97-11 remains "Open–Acceptable Response."

R-97-12. **Redundant Systems for Commuter-Passenger Trains - "Require, in the interim of a positive train separation control system being available, the installation of cab signals, automatic train stop, automatic train control, or other similar redundant systems for all trains where commuter and intercity passenger railroads operate."**

FRA provided its initial reply to the Board on February 28, 1998. FRA basically indicated that signal-based technology is expensive, and passenger operators cannot achieve significant increases in safety on the lines that they utilize, absent parallel investments by freight operators (which are often the owners and/or dominant users of the lines on which passenger trains operate). Fortunately, innovative train control systems are emerging that can meet the safety needs identified by the Board in this recommendation. In summary, FRA indicated its concurrence that implementation of more capable train control systems can contribute significantly to the safety of passenger rail service. In general, where collision risk would otherwise be high, appropriate train control systems are already in place. On September 30, 1997, FRA asked the RSAC to take on three related tasks that explore the future of positive train control (PTC). These tasks address costs and benefits of PTC (including business benefits), the readiness of available technology, and possible timetables for making interoperable PTC a reality on major rail lines. The RSAC formed a working group that includes advisors from the Board's staff. An early

product of the RSAC effort will be a proposed revision to current signal and train control regulations, recognizing and creating a predicable environment for new forms of train control that can accomplish positive train separation and other safety functions at reduced cost, permitting more wide scale application.

Current Status: In its letter of September 30, 1999, NTSB responded to FRA's reply. The Board expressed its disappointment that the FRA has decided to wait until PTS is available rather than require alternative redundant systems. Accordingly, the Safety Board classified Safety Recommendation R-97-12 as "Closed–Unacceptable Action."

R-97-13. **Positive Train Separation-Passenger Trains - "Require the implementation of positive train separation control systems for all trains where commuter and intercity passenger railroads operate."**

FRA provided its initial reply to the Board on February 28, 1998, indicating the same response as given for R-97-12 above.

Current Status: In its letter of September 30, 1999, NTSB responded to FRA's reply. The Board indicated it was pleased that the FRA considers the presence of passenger service a leading criterion for installing PTS. The Board indicated its hope that the pace of development will accelerate, pointing out that to date, the industry's development of train control systems has been discouraging. One item that remains to be addressed is when PTS installation will become a mandatory part of passenger operations. Pending a requirement that PTS be implemented where commuter and intercity passenger railroads operate, the Safety Board has classified Safety Recommendation R-97-13 as "Open–Acceptable Response."

In its letter of June 12, 2001, the Board advised that it acknowledges the ongoing work of the FRA's Railroad Safety Advisory Committee, which in 1997 established a working group to address PTC, and that the working group has also done preliminary work to identify specific rail corridors where a PTC system would have the greatest impact. Because the Board was issuing new Safety Recommendation R-01-06 to FRA that incorporates the intent of Safety Recommendation R-97-13, the Board further advised that Safety Recommendation R-97-13 had been classified as "Closed–Acceptable Action/Superseded."

R-97-14. **Passenger Car Interior Quick-Release Mechanisms - "Require all passenger cars to have easily accessible interior emergency quick-release mechanisms adjacent to exterior passageway doors and take appropriate emergency measures to ensure corrective action until these measures are incorporated into minimum passenger car safety standards."**

FRA provided its initial reply to the Board on February 28, 1998, indicating that the Board is aware that a majority of passenger cars are equipped as suggested in the recommendation. FRA has taken action under Emergency Order No. 20 to improve emergency egress from rail passenger cars. In addition, as an interim action the Safety Board and FRA have worked with two passenger railroads to eliminate the requirement for use of special tools to access the emergency quick release mechanism, and those actions are completed (on MARC and SEPTA). In response to the Board's earlier recommendations, FRA has issued proposed rules to require the relocation of manual release mechanisms to a position adjacent to the exterior door (62 FR 49728, 49807; Sept. 23, 1997). The NPRM on Passenger Equipment Safety Standards proposes to require a retrofit of remaining cars, within 2 years of the effective date of the final rule (vice 10-15 years as proposed by the commuter authorities). FRA will endeavor to resolve this issue expeditiously following conclusion of the public comment period.

Since FRA's initial reply, FRA published its Final Rule for Title 49 CFR Part 238, *Passenger Equipment Safety Standards*, in the *Federal Register* on May 12, 1999. The final rule was effective July 12, 1999, and contained new provisions to address manual override devices that are capable of releasing the door to permit it to be opened without power from inside the car (See Sections 238.235 and 238.439). NTSB advised FRA in a letter dated September 30, 1999, that once the Board has carefully evaluated the FRA's final rules on Passenger Equipment Safety Standards, and Passenger Train Emergency Preparedness, the Board will reply to Safety Recommendation R-97-14.

FRA provided a comprehensive update for this recommendation in our letter to the Board dated March 12, 2001. FRA informed the Board that based upon FRA's actions of promulgating these new rules, and our previous action under Emergency Order No. 20, we believe that the full intent of the Board's recommendation has been accomplished. FRA

requested the Board to consider classifying Safety Recommendation R-97-14 as "Closed–Acceptable Action."

Current Status: The Board in its letter dated July 27, 2001, indicated that FRA's final rule for 49 Code of Federal Regulations (CFR) Part 238, "Passenger Equipment Safety Standards," that became effective July 12, 1999, addresses Safety Recommendation R-97-14 and provides a requirement for easily accessible interior emergency quick-release mechanisms adjacent to exterior passageway doors. The Board further advised Safety Recommendation R-97-14 was classified "Closed–Acceptable Action."

R-97-15. **Passenger Car - Emergency Exiting - "Require all passenger cars to have either removable windows, kick panels, or other suitable means for emergency exiting through the interior and exterior passageway doors where the door could impede passengers exiting in an emergency and take appropriate emergency measures to ensure corrective action until these measures are incorporated into minimum passenger car safety standards."**

FRA responded to the Board on February 28, 1998, indicating action has already been take to improve emergency egress and is exploring other options to ensure adequate egress capacity under all emergency scenarios, including those suggested by the Board. However, neither kick panels nor removable windows in doors have been satisfactorily demonstrated as to feasibility, and neither is capable of increasing safety risk if misapplied to *exterior* doors.

Emergency windows are provided under current regulations to provide reliable egress in the exceptional case where doors are inoperative, are blocked by accident debris, or lead to areas that are unacceptable as evacuation routes for other reasons. FRA has taken emergency action to ensure that emergency windows are operative and properly marked, and the Passenger Train Emergency Preparedness NPRM includes a requirement for periodic inspection into the future. The Passenger Equipment Safety Standards Working Group has evaluated kick panels in exterior doors as unacceptable for passenger safety reasons.

The Working Group agreed that new passenger cars be required to have manual releases capable of opening car body side doors from both

inside and outside the cars. The Working Group further agreed that persons be able to easily access and utilize the manual releases without the use of special tools or implements. Additionally, the Working Group agreed to strengthen existing emergency window exit requirements by specifically directing that each bi-level car have four window exits on each level and that each sleeper car have an emergency window exit in each sleeping compartment. These proposals are contained in the NPRM referenced above.

Removable windows in doors may be feasible, but the available dimensions for these installations in current door designs are not encouraging. Existing door windows claimed to be usable for egress are generally vertical in their longest dimension and are located well above the center of gravity of the average person, severely limiting their utility for high capacity and rapid egress. The degree of responsiveness of the glazing to blows designed to remove the window is also open to serious question. Accordingly, the American Public Transit Association task force on Passenger Rail Equipment Safety Standards is examining the full range of options for kick panels and removable windows. In addition the Volpe National Transportation Systems Center is evaluating egress capacity on a systems level. These complementary efforts will be brought together as the second NPRM for Passenger Safety Standards is developed in 1998.

The first practical application of the NTSB suggestion will be made under the Tier II standards in the Passenger Equipment Safety Standards, which requires a kick-out panel or window. Under design drawings, Amtrak is incorporating an elongated window in its passageway doors. This problem is relatively simple for a high-speed trainset in which the end door on the car always leads to another passenger car, so the degree of risk (collateral safety risk and cost) associated with the innovation is small.

Since FRA's initial reply, FRA published its Final Rule for Title 49 CFR Part 238, *Passenger Equipment Safety Standards*, in the *Federal Register* on May 12, 1999. The final rule was effective on July 12, 1999. NTSB advised FRA in a letter dated September 30, 1999, that once the Board has carefully evaluated the FRA's final rules on Passenger Equipment Safety Standards, and Passenger Train Emergency Preparedness, the Board will reply to Safety Recommendation R-97-15.

FRA provided a comprehensive update for this recommendation in our letter of March 12, 2001. FRA informed the Board that based upon FRA's actions of promulgating these new rules, if was FRA's belief that the full intent of the Board's recommendation has been accomplished.

Current Status: The Board in its letter dated July 27, 2001, indicated that it questioned why no provisions were made for Tier I equipment in the final rule and would appreciate receiving an explanation of the FRA's rationale for not including this equipment. The Board indicated that it would also appreciate being informed if the FRA plans to address emergency exiting through the interior and exterior passageway doors in existing and new passenger cars categorized as Tier I equipment through other means. Pending further response from FRA, the Board classified Safety Recommendation R-97-15 as "Open–Acceptable Response."

R-97-16. **Passenger Car - Emergency Exit Marking - "Issue interim standards for the use of luminescent or retro reflective material or both to mark all interior and exterior emergency exits in all passenger cars as soon as possible and incorporate the interim standards into minimum passenger car safety standards."**

FRA responded to the Board on February 28, 1998, indicating FRA ordered interim improvements in emergency signage in February of 1996 under Emergency Order No. 20. FRA is preparing a final rule for Passenger Train Emergency Preparedness based upon a February 1997 proposal that includes use of luminescent and retro reflective materials as recommended.

Temporary marking and instruction requirements were contained in Emergency Order No. 20 (Notice No. 1, 61 FR 6876; February 22, 1996) (Notice No. 2, 61 FR 8703; March 5, 1996). Railroads have complied with those requirements. In a joint meeting of working groups supporting the development of NPRMs for Passenger Equipment Safety Standards and Passenger Train Emergency Preparedness held on March 26, 1996, it was agreed that future marking should be luminescent on the inside (where no light source may be available under worst case conditions) and retro reflective on the outside (to respond to portable lighting used by emergency responders).

FRA published the Notice of Proposed Rulemaking on Passenger Train Emergency Preparedness on February 24, 1997 (62 FR 8330), and the

comment period closed on April 25, 1997. Comments from the National Transportation Safety Board dated June 2, 1997, generally support the NPRM. The NPRM provides, at section 239.107, for luminescent marking of door exits and retro reflective marking of doors designated for emergency rescue access. Similar provisions are made for window egress and access in a proposed amendment to section 223.9. FRA has reviewed the docket and has discussed the remaining issues in the proceeding with the Working Group, which includes an advisor from the staff of the NTSB. FRA is preparing a final rule for issuance at the earliest possible date.

Since FRA's initial reply, FRA published its Final Rule for Title 49 CFR Part 238, *Passenger Equipment Safety Standards*, in the *Federal Register* on May 12, 1999. The final rule was effective on July 12, 1999. NTSB advised FRA in letter dated September 30, 1999, that once the Board has carefully evaluated the FRA's final rules on Passenger Equipment Safety Standards, and Passenger Train Emergency Preparedness, the Board will reply to Safety Recommendation R-97-16.

Current Status: The Board advised FRA in its letter dated February 3, 2000, that it noted that the new standards contained in 49 CFR 239.107(a)(1) require all door exits intended for emergency egress to be conspicuously and legibly marked with luminescent material or properly lighted. The standards also require all door exits intended for emergency access by emergency responders to be marked with retroreflective material. Based on FRA's implementation of these new requirements, the Safety Board has classified Safety Recommendation R-97-16 as "Closed–Acceptable Action."

R-97-17. **Passenger Car - Independent Power Sources - "Require all passenger cars to contain reliable emergency lighting fixtures that are each fitted with a self-contained independent power source and incorporate the requirements into minimum passenger car safety standards."**

FRA responded to the Board on February 28, 1998, indicating the proposed passenger equipment safety standards address emergency lighting, but would permit continued use of battery power common to all emergency lighting circuits in the particular car. The concept of a power source at each fixture, as a regulatory requirement, is novel and was introduced by the Board well after the NPRM entered clearance. Accordingly, FRA had only

limited opportunity to evaluate this suggestion in cooperation with the Passenger Equipment Safety Standards Working Group.

FRA findings in recent accidents support the Safety Board's implied concern that placement of electrical conduits and battery packs below the floor of passenger coaches can result in damage that leads to the unavailability of emergency lights precisely at the time they are most needed. However, from initial investigation it is not certain whether current "ballast" technology provides illumination of sufficient quality with reliable maintainability. FRA will work with the PRESS task force to determine appropriate action. FRA would appreciate any technical advice that the Board staff may be able to offer regarding successful strategies employed by in other transportation modes.

FRA has already presented this issue to the Passenger Equipment Safety Standards Working Group and will aggressively pursue this option for more reliable emergency illumination.

Since FRA's initial reply, FRA published its Final Rule for Title 49 CFR Part 238, *Passenger Equipment Safety Standards*, in the *Federal Register* on May 12, 1999. The final rule was effective on July 12, 1999. NTSB advised FRA in letter dated September 30, 1999, that once the Board has carefully evaluated the FRA's final rules on Passenger Equipment Safety Standards, and Passenger Train Emergency Preparedness, the Board will reply to Safety Recommendation R-97-17.

FRA provided a comprehensive update for this recommendation in our letter of March 12, 2001. FRA informed the Board that based upon FRA's actions of promulgating these new rules, it was FRA's belief that the full intent of the Board's recommendation has been accomplished.

Current Status: The Board in its letter dated July 27, 2001, indicated that although FRA's final rule addresses emergency lighting for passenger cars ordered on or after September 8, 2000, or placed in service for the first time on or after September 9, 2002, the final rule does not address the emergency lighting problems identified in the Board's accident report for the existing passenger car fleet nor does it require an independent power supply. The electrical power for the emergency lighting in the passenger cars in the Silver Spring accident was generated from the locomotive, and the distribution conduit and wiring located under the derailed equipment was

destroyed or damaged beyond the capability of providing power to the emergency lighting. The Board advised that pending receipt of information on how the FRA will address emergency lighting fixtures, provide for a self-contained independent power source in passenger cars that were in service prior to September 9, 2002, and provide for a self-contained independent power supply in new equipment, Safety Recommendation R-97-17 was classified as "Open–Acceptable Response."

R-97-18. **Passenger Car - Inspection & Maintenance - "Provide promptly a prescribed inspection and maintenance test cycle to ensure the proper operation of all emergency exit windows as well as provide that the 180-day inspection and maintenance test cycle is prescribed in the final rule."**

FRA responded to the Board on February 28, 1998, indicating Passenger railroads completed emergency window inspections under E.O. 20 by April 20, 1996. Most railroads have continued to include these inspections in periodic inspections of the equipment. FRA is preparing final rules based on proposals for regular inspection at a 180-day cycle. FRA may take interim action pending the effective date of the final rule, if necessary by amending the emergency order.

As further information, we are advised that commuter railroads are voluntarily including checks of emergency windows in their periodic maintenance programs.

Since FRA's initial reply, FRA published its Final Rule for Title 49 CFR Part 238, *Passenger Equipment Safety Standards*, in the *Federal Register* on May 12, 1999. The final rule was effective on July 12, 1999. NTSB advised FRA in a letter dated September 30, 1999, that once the Board has carefully evaluated the FRA's final rules on Passenger Equipment Safety Standards, and Passenger Train Emergency Preparedness, the Board will reply to Safety Recommendation R-97-18.

FRA provided a comprehensive update for this recommendation in our letter of March 12, 2001. FRA informed the Board that based upon FRA's actions of promulgating these new rules, we believe that the full intent of the Board's recommendation has been accomplished.

Current Status: The Board in its letter dated July 27, 2001, indicated that FRA's approach to this recommendation for Tier II equipment is

considered an acceptable alternative approach to the intent of the Board's recommendation. Therefore, based on the sampling methods outlined in the May 4, 1998, final rule, both of which must meet a 95-percent confidence level, Safety Recommendation R-97-18 is classified "Closed–Acceptable Action."

R-97-19. **Passenger Car - Functionality Exterior Door - "Require that all exterior emergency door release mechanisms on passenger cars be functional before a passenger car is placed in revenue service, that the emergency door release mechanism be placed in a readily accessible position and marked for easy identification in emergencies and derailments, and that these requirements be incorporated into minimum passenger car safety standards."**

FRA responded to the Board on February 28, 1998, indicating the RSAC Passenger Equipment Safety Standards Working Group agreed that easily accessible exterior emergency door release mechanisms be required on new passenger cars. See NPRM on Passenger Equipment Safety Standards (62 FR 49728, 49807; Sept. 23, 1997). The NPRM on Passenger Train Emergency Preparedness would apply marking/instruction requirements to all cars so equipped, including the present fleet (62 FR 8330, 8358; February 24, 1997).

Unlike discussions concerning interior emergency door release mechanisms intended for quick use by passengers to exit a train in a life-threatening situation, however, there was no strong advocacy within the Working Group to retrofit existing passenger cars with emergency door release mechanisms on car exteriors. Such exterior mechanisms would principally be used by emergency-response personnel to gain access to passenger cars and rescue individuals unable to exit the train on their own either through a door or an emergency window exit. In response to the recommendation, FRA and the Working Group will further evaluate implementing this requirement on existing cars in the second phase of the rulemaking. FRA will advise the Working Group of this issue as the initial final rule is crafted, and railroads impacted by the relocation of the interior release can evaluate whether to include the exterior release in their program.

FRA agrees that existing exterior releases should be maintained in functional condition and will seek agreement to ensure that periodic inspection requirements included in the initial final rule include specific

attention to this issue (although arguably the matter is covered by the language already proposed).

Despite FRA's regulatory proposal and lack of active opposition, FRA continues to have concerns with respect to marking the exterior releases and providing instructions for their use on the outside of the vehicle. This is a difficult issue, since prominent markings and instructions to operate a simple pull ring or lever constitute an open invitation for vandalism (which can result, among other things, in undetected loss of emergency equipment). Incidents of vandalism might necessitate separate locking of out-of-service equipment, and we would certainly want assurance that the locking was disengaged at each door location before the equipment was placed in service. Should this not be done, passengers might be unable to exit trains and rescuers would not be able to enter, at least at the subject door locations. An alternate approach is appropriate training for emergency responders with respect to entry into passenger equipment. Training of emergency responders was a key point of discussion for finalization of the rule on Passenger Train Emergency Preparedness. There was broad agreement that access to equipment should be a key element of training that passenger railroads should make available.

Since FRA's initial reply, FRA published its Final Rule for Title 49 CFR Part 238, *Passenger Equipment Safety Standards*, in the *Federal Register* on May 12, 1999. The final rule was effective on July 12, 1999. NTSB advised FRA in a letter dated September 30, 1999, that once the Board has carefully evaluated the FRA's final rules on Passenger Equipment Safety Standards, and Passenger Train Emergency Preparedness, the Board will reply to Safety Recommendation R-97-19.

FRA provided a comprehensive update for this recommendation in our letter of March 12, 2001. FRA informed the Board that based upon FRA's actions of promulgating these new rules, we believe that the full intent of the Board's recommendation has been accomplished. FRA requested the Board to consider classifying Safety Recommendation R-97-19 as "Closed–Acceptable Action."

Current Status: The Board in its letter dated July 27, 2001, indicated that the final rule for 49 CFR Part 239 provides a requirement for the emergency door release mechanism placement to be in a readily accessible position and for marking it for easy identification in emergencies and

derailments. That final rule also promotes scheduled inspection, maintenance, and repair of emergency window and door exists. The rule specifically calls for the repair of all imperative window and door exists before returning the car to service. The Board advised that Safety Recommendation R-97-19 was classified as "Closed–Acceptable Action."

R-97-20. **Passenger Car - Flammability - "Require that a comprehensive inspection of all commuter passenger cars be performed to independently verify that the interior materials in these cars meet the expected performance requirements for flammability and smoke emissions characteristics."**

FRA responded to the Board on February 28, 1998, indicating FRA altered the Passenger Equipment Safety Standards NPRM after it had entered clearance to address fire safety for existing equipment. Section 238.105 of the proposed rule (62 FR 49728, 49800) would require railroads to conduct tiered fire safety analyses to identify vulnerabilities in the various series of the existing passenger car fleet and to take responsive action as indicated.

FRA believes that this approach addresses the intent of the concerns raised in the Board's report on the Silver Spring accident. As noted in the Board's report, "Had the materials [in the cab car] met current [FRA] performance criteria ... the outcome would not have been any different because of the presence of diesel fuel as an ignition source. The fire would have spread quickly whether the interior materials of the MARC passenger cars had met current performance criteria regarding flammability and smoke emissions characteristics...."

NTSB-RAR-97/02 at 63-64. Further, the Board took strong exception to the adequacy of the current criteria, stating that they are "not useful in predicting the safety of the interior environment of a passenger car in a fire." Id. We assume therefore, that the Board intended a review of fire safety in existing cars that both considers the discrete hazards of materials that might vary widely from criteria in existing rail and transit guidelines and the likelihood that those hazards might combine to create unacceptable fire safety risks. The analysis called for the NPRM would require that, to extent practicable given available knowledge, these issues be fully considered.

In addition, FRA has consulted with the Office of the Secretary of Transportation and other Department of Transportation modal administrations with respect to the status of fire safety standards and research. The Office of the Secretary is responding to the Board regarding our intermodal coordination. Please note that FRA is continuing its contract research through the National Institute for Standards and Technology to improve the quality and replicability of materials testing criteria and methods and is also maintaining liaison with efforts of the transit industry and the National Fire Protection Association to work toward a better-integrated systems approach to fire safety.

Since FRA's initial reply, FRA published its Final Rule for Title 49 CFR Part 238, *Passenger Equipment Safety Standards*, in the *Federal Register* on May 12, 1999. The final rule was effective on July 12, 1999. NTSB advised FRA in a letter dated September 30, 1999, that once the Board has carefully evaluated the FRA's final rules on Passenger Equipment Safety Standards, and Passenger Train Emergency Preparedness, the Board will reply to Safety Recommendation R-97-20.

FRA provided a comprehensive update for this recommendation in our letter of March 12, 2001. FRA informed the Board that based upon FRA's actions of promulgating these new rules, we believe that the full intent of the Board's recommendation has been accomplished.

Current Status: The Board in its letter dated July 27, 2001, indicated that their review of the final rule, specifically Section 238.103, Fire Safety, shows that FRA now has a requirement for railroads to perform the recommended inspection. The Board further advised that Safety Recommendation R-97-20 was classified as "Closed–Acceptable Action."

R-97-21. **Train Dispatcher Record of Train Movements - "Update 49 CFR Part 228.17, Train Dispatcher's Record of Train Movements, to include the same parameters for electronic record keeping of the dispatcher's record of train movements."**

FRA responded to the Board on February 28, 1998, indicating that Section 228.17 states information collection requirements that are equally applicable, whether the record of train movements is maintained in hard copy or electronic format. At the CSXT operations center in Jacksonville, some of this data loads automatically to the sheet from other computer

systems, while the dispatcher must manually enter other data. During routine inspections, FRA has worked to ensure that the computer-based train sheet is capable of receiving all pertinent fields of information (as it has been for several years) and which dispatchers routinely enter that information (which sometimes is not done in the wake of an accident due to distraction by other tasks). In addition, FRA has encouraged the railroad to provide for automatic data transfer of weather information.

FRA will continue to work with the railroad at Jacksonville, and with other carriers, to promote sound record keeping in compliance with 49 CFR Part 228. However, for the present this is a compliance issue that must be handled with all of the dispatcher desks at Jacksonville with respect to each of the 1,400 train sheets generated daily. We are not aware of any regulatory change that could simplify this quality control task, but would certainly be willing to discuss any specific suggestions. Without question, use of electronic record keeping should enhance the information available for safety purposes, and we believe that is very much the case presently when all pertinent systems are utilized. Retrievable data in a contemporary dispatching center is normally far more extensive and historically reliable than data derived from a traditional hand-written train sheet. Centralized traffic control system records (signal event logs) provide detailed information that can be analyzed to determine train movements. Dispatcher voice tapes and computer-aided dispatching systems document authorities and information conveyed to train crews. Weather information is separately maintained in electronic or hard copy format following electronic delivery from a commercial service that provides very detailed data and forecasts. This wealth of information is available for accident investigation and other purposes. Future revisions to Part 228 could include inputs to the "train sheet" from sources not presently tapped. However, it would be important to clearly identify our core objectives and the safety results that we would expect to achieve before proceeding. Whether or not technically associated with the "train sheet," this data is useful today for a variety of purposes.

The Board advised FRA in letter dated September 30, 1999, that the Board disagrees that ensuring the proper preparation of computer-based train sheets is a compliance problem that can be solved by enforcement. During the Silver Spring investigation, our investigators found that the CSX's electronically prepared train sheets were of limited value because they lacked information required by regulation. The Safety Board agrees that electronic data retrieval and recording from all pertinent systems can and

should be used to enhance safety. Complete system data can be particularly useful in accident investigations. The Board also agrees that the FRA should clearly identify its objectives and desired safety results before revising 49 CFR Part 228.17. We are also prepared to cooperate with FRA in developing such objectives. Pending further action, the Safety Board classified Safety Recommendation R-97-21 as "Open–Acceptable Response."

FRA provided the Board with updated information in our letter of May 21, 2001, advising that FRA continues to believe that the absence of:

1. MARC Train 286's train activity after its departure from Point of Rocks, Maryland, when it was required to make a reverse movement to crossover and go around a disabled freight train;
2. the weather information, and,
3. the fact that the accident occurred,

from the CSX's computer generated train sheet for MARC Train 286, relates to a compliance and enforcement matter, rather than a result of inadequacy of the regulation. Section 228.17, Title 49 CFR Part 228, "Train Dispatcher's Record of Train Movements," requires this information, whether train sheets are kept manually or electronically. While it is true that the regulation does not refer to electronic means of recordkeeping these data, the same application of Section 228.17 is required for both manually kept train sheets, and for electronic applications. FRA would be willing to meet with representatives of the Board to discuss fully the specific revisions to Section 228.17 that would aid the Board in future accident investigations.

Current Status: The Board in its letter dated September 19, 2001, indicated that it had reviewed its position on this recommendation and now agrees with the FRA that the computer-generated train sheet problem identified by the Board in its investigation of the Silver Spring accident relates more to compliance and enforcement issues in Section 228.17, Title 49 CFR Part 228, "Train Dispatcher's Record of Train Movements," and that computer generated train sheets are covered by the regulations. Consequently, the Safety Board advised that Safety Recommendation R-97-21 is classified "Closed–Reconsidered."

R-97-55. **Traction Motor Current - "Inform the railroad industry that traction motor current is not a valid indicator of throttle position, and the requirement to record throttle position contained in 49 CFR**

Part 229.5(g) cannot be met by recording traction motor current. Ensure that all operators currently using traction motor current as a substitute for throttle position modify their event recording systems to monitor and record throttle position directly."

This Safety Recommendation was received January 6, 1998. FRA responded to the Board with its initial response on December 18, 1998, indicating that this recommendation refers to the manner in which throttle handles operate on some locomotives used in commuter and rapid transit operations. The throttle handles in these locomotives were designed to serve two purposes, which differs from freight service locomotives. The forward direction from the starting position indicates the level of traction effort demand requested. The reverse direction from starting position indicates the level of braking demand requested. The movement of this handle through its range of operation in both directions again differs from freight locomotives in that there are no discrete notches or positions, but rather a continuous movement.

The RSAC Event Recorder Working Group in its effort to address the event recorder crashworthiness established a task force to work on Data Elements that need to be recorded on a new generation event recorder. This task force had several meetings from the end of 1997 through April 1998. The participants in this task force were representatives from rail labor, major railroads, the National Transportation Safety Board, equipment manufacturers and the Federal Railroad Administration. Task force members individually prepared a list of data elements that they wished to be recorded on the new generation of event recorders. During the course of several meetings, these lists were consolidated and streamlined based on their importance and the cost involved to implement them.

One of the most discussed data channels to be monitored was that of throttle position. FRA in consultation with the event recorder working group members will make a more detailed definition for the throttle position in the future event recorder proposed rule, which will be presented to the RSAC for consideration. The definition will clearly indicate that the throttle position will reflect the locomotive operator's intention on request for tractive effort in the form of discrete notches.

Therefore, based upon this preliminary action, and until we are able to develop a Notice of Proposed Rulemaking to incorporate the intent of the Board's recommendation in the definition of an "Event Recorder," FRA

requested the Board to consider this Safety Recommendation as "Open--Acceptable Response."

In its letter dated May 6, 1999, the Board advised FRA that it was pleased to learn that FRA intends to address the intent of this recommendation once the RSAC has concluded its work. Pending an opportunity to review the final rule, the Safety Board has classified Safety Recommendation R-97-55 as "Open–Acceptable Response."

Current Status: In the Board's letter dated December 6, 2000; the Board advised FRA that in the past 22 months, another five event recorders were destroyed in three separate accidents. The Board cited an accident on November 17, 1999, at Carnes, Iowa, on the Union Pacific Railroad; an accident on January 17, 1999, at Bryan, Ohio, on Consolidated Rail Corporation; and an accident on March 15, 1999, at Bourbonnais, Illinois, involving the National Railroad Passenger Corporation (Amtrak). The Board expressed its disappointment that the commitments made by the FRA to develop standards through RSAC have not been realized. As a result of this lack of progress, the Board classified Safety Recommendation R-97-55 as "Open–Unacceptable Response."

R-97-56 - **Tests and Inspections Event Recorders - "Pending the results of your Railroad Safety Advisory Committee Event Recorder Working Group and your implementation of suitable requirements concerning event recorder system maintenance, require that microprocessor-based event recorders equipped to perform self-tests be subject to the testing and inspection procedures currently applicable to all other types of event recorders."**

This Safety Recommendation was received January 6, 1998. FRA responded to the Board with its initial response on December 18, 1998, indicating that the issue of inadequate event recorder testing and inspection is not new to the Safety Board. As a result of its investigation of an accident involving the derailment of a freight train near Cajon, California, in February 1996, the Board made four safety recommendations to FRA regarding event recorders (R-96-070 through -073). Among those recommendations was one, R-96-070, that specifically addressed event recorder maintenance and inspection procedures, which reads as follows:

"Revise 49 Code of Federal Regulations 229.25(e)(2) to require that event recorders, including microprocessor-based event recorders that are equipped with a self-test function, be tested during the quarterly inspections of the locomotive in such a manner that the entire event recording system, including sensors, transducers, and wiring, is evaluated. Such testing should include, at a minimum, a review of the data recorded during actual operation of the locomotive to verify parameter functionality as well as cycling all required recording parameters and determining the full range of each parameter by reading out recorded data."

Upon receipt of Safety Recommendations R-96-070 through -073, FRA advised the RSAC in June 1997 of those Safety Recommendations. At that time, FRA requested RSAC to accept the task of reviewing and suggesting revisions to Section 229.135, *Event Recorders*, of Title 49 Code of Federal Regulations (CFR). The RSAC accepted this task and appointed a working group to perform the research and work necessary to address Safety Recommendations R-96-070 through -073. Because of NTSB's advocacy for the development of standards for the crashworthiness of these devices, the working group also began exploring the subject of "Crashworthiness of Event Recorders." A representative from NTSB participates in the meetings of this working group as a non-voting member.

Upon receipt of this Safety Recommendation, FRA requested that the RSAC accept this additional task of developing testing and inspection requirements for Event Recorders. The RSAC accepted this task, and assigned it to the Event Recorder Working Group. This group had previously been formed to address the issue of event recorder crashworthiness and maintenance. This working group will develop testing, maintenance and inspection requirements for new generation event recorders.

This task force had several meetings from the end of 1997 to April 1998. The following are the results of the task force effort to address the testing, maintenance and inspection issues:

Self Test A self testing event recorder has the ability to monitor its operation and display an indicator to the locomotive operator when any data required to be stored is not stored or data does not match the inputted data.

Testing The event recorder testing will be consistent with the manufacturer pre-delivery verification testing and determine that the full range of all required data parameters are being recorded and are readable. A record of the test will be maintained until the next required test is performed.

There are other issues like frequency of testing and method of verifying the operation of the event recorder through periodic inspection that has to be explored in more detail. FRA requested the Board to consider this Safety Recommendation as "Open--Acceptable Response."

In its letter dated May 6, 1999, the Board advised FRA that it understands that when the RSAC has completed its work, the FRA intends to address the intent of this recommendation within a proposed rulemaking. Pending an opportunity to review the final rule, the Safety Board has classified Safety Recommendation R-97-56 as "Open–Acceptable Response."

Current Status: In the Board's letter dated December 6, 2000; the Board advised FRA that in the past 22 months, another five event recorders were destroyed in three separate accidents. The Board cited an accident on November 17, 1999, at Carnes, Iowa, on the Union Pacific Railroad; an accident on January 17, 1999, at Bryan, Ohio, on Consolidated Rail Corporation; and an accident on March 15, 1999, at Bourbonnais, Illinois, involving the National Railroad Passenger Corporation (Amtrak). The Board expressed its disappointment that the commitments made by the FRA to develop standards through RSAC have not been realized. As a result of this lack of progress, the Board classified Safety Recommendation R-96-56 as "Open–Unacceptable Response."

R-97-57. **Movable Miter Rails - "Expand the scope of your track safety standards to include special track work such as movable miter rails and ensure that the condition and operation of special track work are included, when appropriate, in all Federal Railroad Administration track inspections."**

FRA provided its initial reply to the Board for this recommendation in our letter dated December 18, 1998. FRA advised the Board that we recently issued our final rule on Federal Track Safety Standards to update and enhance its track safety regulatory program. The final rule was published in the *Federal Register* on June 22, 1998, with an effective date of

September 21, 1998. The final rule contains provisions that we believe fully addresses the Board's concerns in relation to this issue. The final rule contains a revised Subpart F, *Inspection*, beginning on page 34040. The Subpart F, Section 213.235 on page 34041, has been re-entitled from reading, "*Switch and track crossing inspections*," to "*Inspection of switches, track crossings, and lift rail assemblies or other transition devices on moveable bridges*." This section specifically addresses the Board's recommendation to require that all lift rail assemblies or other transition devices on moveable bridges be inspected on-foot at least monthly. In the case of track that is used less than once a month, any such devices shall be inspected on foot before any train movements are authorized. The amendment adds only a requirement to inspect on foot, and is not intended to impose additional functional requirements for transition devices beyond what is already required under the Track Safety Standards. FRA considers these items of special trackwork to be no less critical than switches, turnouts, or track crossings, and they should be subject to monthly on-foot visual inspections by a person fully qualified under the requirements of Section 213.7, "*Designation of qualified persons to supervise certain renewals and inspect track*," as found in this same *Federal Register* on pages 34030 and 34031.

Current Status: In its letter dated May 6, 1999, the Board advised FRA that it was pleased to learn that FRA, effective September 21, 1998, amended the Federal Track Safety Standards to require that a qualified inspector inspect on foot all lift rail assemblies or other transition devices on moveable bridges at least once a month. Based on FRA's response, the Safety Board classified Safety Recommendation R-97-57 as "Closed–Acceptable Action."

R-97-58. **Survey of Movable Bridges - "Provide, in full or summary form, the results of the Federal Railroad Administration Movable Bridges Survey to all railroads and rail rapid transit agencies."**

This Safety Recommendation was received on January 6, 1998. FRA responded to the Board with its initial response on December 18, 1998, indicating that, immediately following the November 23, 1996, derailment at Secaucus; FRA inspectors conducted a survey of the practices of maintenance and inspection of rail end transition devices throughout the United States. Every movable railroad bridge in the Nation was accounted

for, and every one equipped with rail-end transition devices was included in the survey. Non-operational bridges without transition devices were not investigated.

The list of bridges to be surveyed was derived from the files maintained by FRA and the Coast Guard of bridges over navigable waters of the United States, and included one swing bridge over a non-navigable waterway. FRA and participating State track safety inspectors performed the investigation over a period of three months, and included signal and train control inspectors at those bridges over which train movements are governed by signal systems.

The survey revealed no systemic or general problems with the maintenance, inspection or condition of the rail-end transition devices, or the safety of train movements over movable bridges. However, a wide variation exists in the terminology used to describe these components in various areas and on different railroads. This problem was not well known until the survey results were compiled, and it has complicated the work of preparing a useful detailed report.

Resolving the terminology question will take several more months of directed work by the inspectors, including revisiting many bridges during their regular inspections, photographing examples of the various types of transition rails. FRA then plans to work with several railroads and railroad suppliers to resolve differences in terminology that could hinder clear communication related to these devices.

A summary of the survey report at this time would include no information that would affect the safety of railroad operations, since the survey revealed no specific safety problems of which the railroad industry should be advised. The full report in its present form would not contain a significant amount of concise, useful information until the terminology problem is resolved.

In light of the above, FRA plans to continue with this project to develop common, useful terminology related to rail-end transition devices on movable bridges. After that question is resolved, FRA plans to develop practical maintenance and inspection criteria that can be used by railroad and FRA personnel in evaluating and protecting the safety of train operations over movable bridges. In all this work FRA will work closely with railroad

engineering and maintenance personnel, railroad suppliers, and the American Railway Engineering and Maintenance of Way Association.

At this time and until we can develop standard industry-wide terminology, FRA believes that it would not be good policy to issue a premature, sketchy report with no safety implications and no practical use.

Therefore, based upon our action to-date, and our intended future action, FRA requested the Board to consider this Safety Recommendation as "Open - Acceptable Response," until we are able to provide movable bridge safety information to the industry in a proper and meaningful form.

In its letter dated May 6, 1999, the Board advised FRA that it was disappointed to learn that the FRA is reluctant to provide the results of the survey as requested because of a lack of standardized terms to describe moveable bridge component. The Safety Board was pleased that the survey results will be part of an effort to develop common terminology and maintenance and inspection criteria. We believe, however, that a timetable for completing the recommended action is necessary to ensure timely dissemination of the survey to the rail industry. Pending dissemination of the survey, the Safety Board classified Safety Recommendation R-97-58 as "Open–Unacceptable Response." After receipt of the Board's response, FRA has finalized this survey and on November 9, 1999, provided a copy to the Association of American Railroads (AAR) requesting dissemination to their members. We also have transmitted the survey to the Federal Transit Administration (FTA) for their furtherance to rail rapid transit operators.

FRA advised the Board in our letter dated March 24, 2000, of FRA's action of providing the "Report of Results of National Survey - Rail End Transition Devices on Moveable Bridges," to the AAR and FTA for further dissemination to railroads and rail rapid transit operators. Based upon this action, FRA requested that the Board consider classification of Safety Recommendation R-97-58 as "Closed–Acceptable Action."

Current Status: The Board advised FRA in its letter dated October 11, 2000, that the Safety Board was disappointed with the summary information provided by the FRA. The summary did not contain such basic information as the numbers and types of bridges inspected or the types of defective conditions detected or revealed. Because the Safety Board does

not consider the summary to be responsive to this recommendation, Safety Recommendation R-97-58 is classified "Closed–Unacceptable Action."

R-98-01. **Controls and Switches in Locomotives - "Alert Locomotive Manufacturers and Railroad Operators about the dangers posed by improperly located safety significant controls and switches in locomotives."**

This Safety Recommendation was received on February 25, 1998. FRA provided its initial response to the Board on March 17, 1999, indicating that on January 30, 1997, FRA published a Notice of Safety Bulletin in the *Federal Register* (Vol. 62, No. 20, page 4569) addressing recommended safety practices for certain locomotives equipped with emergency fuel line cut-off devices located inside the locomotive control compartment at a location which enables the cut-off device to be activated unintentionally. A copy of this Notice, marked "Safety Bulletin 97-1" is enclosed for your review. It recommended that all railroads inspect locomotives to ensure that the cut-off device is not located in such a way that it may be inadvertently activated. If the device is so located, it should be relocated or provided with a safe guarding device that would prevent unintentional activation. Until any improperly cut-off devices are relocated or protected to prevent unintentional operation, the locomotive is not permitted to operate in the lead position. FRA has utilized its field inspection personnel to ensure that all locomotives are being provided with these corrective measures. Therefore, based upon our action, FRA requested the Board to consider this Safety Recommendation as "Closed--Acceptable Action."

Current Status: In its letter dated January 11, 2000, the Safety Board indicated that shortly after the accident, FRA issued a Safety Bulletin about improperly located fuel cut-off devices. The Safety Board is disappointed, however, that the FRA has not taken subsequent steps to advise manufacturers and operators to be alert for the potential of other improperly located controls and switches. Pending FRA action in response to this recommendation, Safety Recommendation R-98-01 has been classified as "Open–Unacceptable Response."

R-98-02. **Loaded Weight Information - "Require railroads to ensure that the actual loaded weights of cars in a train are provided to the train crewmembers or, if the loaded weights are unknown, to**

implement a method to ensure that the maximum loaded weight is assigned."

This Safety Recommendation was received February 25, 1998. FRA provided its initial response to the Board on March 17, 1999, indicating that this issue has been of concern to FRA following the investigation of the former Southern Pacific Transportation Company accident at San Bernardino, California. As the Board is aware, in that accident which occurred in heavy mountain grade territory, NTSB found the primary cause of the accident to be the excessive weight of the train as compared to that reported to the train crew. Complicating the situation was that the train crew had been furnished erroneous information regarding available and operative dynamic brakes. These factors led to a flawed decision by the train crew in developing train-handling strategies for negotiating the grade safely.

In other accidents, the safety of trains negotiating mountain grades has also been of great concern to the Board, and to the FRA. The accident involving freight cars from a Montana Rail Link train rolling down a mountain grade and colliding with a stopped helper locomotive consist at Helena, Montana, on February 2, 1989, resulted in NTSB's Safety Recommendation R-89-82 for two-way end-of-train devices. And, on December 14, 1994, a westbound Atchison, Topeka and Santa Fe Railway (ATSF) intermodal train collided with the rear end of a standing westbound Union Pacific Railroad unit coal train near Cajon, California. NTSB's investigation of this accident disclosed that due to a restriction or blockage in the train line near the head-end of the following ATSF train, there was insufficient available train braking force to enable this train to stop. The Board's Safety Recommendation, R-95-44, again reiterated the need for two-way end-of-train devices. On January 2, 1997, FRA published a final rule in the *Federal Register*, entitled, "49 CFR Part 232 - Two-Way End-of-Train Telemetry Devices," which with some exceptions, required operable devices of this type on all freight trains. This final rule was effective July 1, 1997, and this additional safety measure is now in place. Despite the additional safety measure of the two-way end-of-train device, FRA agrees with the Board that additional measures need to be in place to ensure that train crew members are provided with proper information concerning the weight of their train to base decisions on proper train handling and ability to stop their train in all types of terrain.

During the development of the NPRM entitled, "Brake System Safety Standards for Freight and Other Non-Passenger Trains and Equipment," as published in the *Federal Register* on September 9, 1998 (63 FR 48294), this Safety Recommendation by the Board was fully considered. As quoted from page 48314 of that publication, a discussion concerning this aspect is as follows:

> "FRA views the establishment of these comprehensive operating rules and training plans as the most effective means by which to minimize the possibility of future incidents caused by excessive reliance on dynamic brakes by the train crew as a method of controlling the speed of a train in its descent through a difficult grade, as was the case in the San Bernardino incident. FRA views it as unfortunate, and potentially reckless, the increasing number of train handling and power brake instructions issued by freight railroads that emphasize the use of dynamic brakes without including prominent warnings that such systems may not be relied upon to provide the margin of safety necessary to stop short of obstructions and control points or to avoid over speed operation. Such instructions, while not yet affirmatively misleading to seasoned locomotive engineers, threaten to overcome the good judgment of safety critics and regulators by leading to excessive reliance upon these systems. Given the ever-increasing weight and length of freight trains, and the severe grades that they are often required to negotiate en route, the need for locomotive engineers who are thoroughly trained and knowledgeable in all aspects of train handling is paramount for continued safety in the rail industry."

While there have been long established practices in place on railroads to determine weights of cars and tonnage of trains for use by train crews and train dispatchers, there has never been a Federal safety regulation requiring that this information be made available to train crew members, or to ensure its accuracy. The NPRM for "Brake System Safety Standards for Freight and Other Non-Passenger Trains and Equipment," as published in the *Federal Register* on September 9, 1998, indicates FRA's intention to promulgate a Federal requirement to address this issue, which is the substance of this Safety Recommendation. New Section 232.111, "Train Handling Information," as contained in the NPRM on page 48361 of the September 9, 1998, *Federal Register*, is quoted below:

> "Section 232.111 Train Information Handling.

(a) Each railroad shall adopt, comply with, and make available to FRA upon request written procedures to ensure that a train crew employed by the railroad is given accurate information on the condition of the train brake system and train factors affecting brake system performance and testing when the crew takes over responsibility for the train.

(b) The procedures shall provide that each train crew coming on duty be informed of:

1. The total weight and length of the train;

2. Any special weight distribution that would require special train handling procedures;

    1. The number and location of cars with cut-out or otherwise ineffective brakes and the location where they will be repaired;

    2. If a Class I or Class IA brake test is required prior to the next crew change point, the location at which that test shall be performed;

    3. A record of train configuration changes since the last Class I brake test; and

    4. Any train brake system problems encountered by the previous crew of the train."

Also, as quoted from page 48336 of the *Federal Register* of September 9, 1998, in the "Section- by-Section Analysis" portion of the NPRM, the following discussion of FRA's intended specific action on this specific Safety Recommendation of the Board is shown:

"Section 232.111 Train Information Handling.

This section contains proposed requirements regarding the handling of train information. The purpose of these train-information handling requirements is to ensure that train crews are given accurate information on the condition of the train

brake system and other factors that affect the performance of the train brake system when they assume responsibility for the train. This section contains a list of specific information FRA proposes to require railroads to furnish train crewmembers about the train and the train's brake system at the time they take over the train. FRA believes that train crews need this information in order to avoid potentially dangerous train handling situations and to be able to comply with various Federal safety standards. Most railroads already provide their train crews with most of the information required in this proposal or have a process set up which is capable of transmitting such information, thus the impact of this proposed requirement should be relatively minor.

It should be noted that, FRA has left the method in which railroads will convey the required information to the train crews to the discretion of the railroad since FRA feels that each individual railroad is in the best position to determine the method in which to dispense the required information based on the individual characteristics of its operations. However, the means for conveying the required information will be part of the written operating requirements, and railroads will be required to follow their own requirements."

Written comments concerning this NPRM were due by March 1, 1999. Two public hearings and a technical conference were held. The Board was advised that following FRA's review of the comments received, it would make a judgment concerning any changes to this proposed rule before issuance. Therefore, based upon this intended action, FRA requested the Board to consider this Safety Recommendation as "Open–Acceptable Action," until such time as a final rule similar to the above was successfully issued.

Current Status: In its letter dated January 11, 2000, the Safety Board indicated that it was pleased that FRA had proposed changing the regulations to require that any train crew coming on duty be told about the total weight of the train. The Safety Board wanted to know whether the new regulation would implement a method of ensuring that the maximum weight would be assigned if the loaded weight was unknown. Pending Safety Board review of the rule, the Safety Board classified Safety

Recommendation R-98-02 as "Open–Acceptable Response." The final rule was published 1/17/01 (66 FR 4101). An amendment, extending the effective date of the final rule until 3/31/01, was published on 2/12/01

(66 FR 9905). On 3/19/01, the AAR submitted an official petition for reconsideration of the final rule. FRA will correspond with the Board in the near future to advice them of the final actions taken on Safety Recommendation R-98-02.

R-98-03. **Review Train Handling Practices - "Require Railroads to review steep-grade train-handling practices and, if necessary, make changes that will preserve a margin of stopping ability should a dynamic braking system fail."**

This Safety Recommendation was received February 25, 1998. FRA provided its initial response to the Board on March 17, 1999, indicating that FRA took action on February 27, 1997, by publishing a Notice of Safety Bulletin 97-2 in the *Federal Register* (Vol. 62, No. 38, page 9014), addressing a recommended safety practice to stop trains on heavy descending grades of 2 percent or greater by initiating an emergency application of the train's air brakes whenever the train speed exceeded the maximum authorized speed by five miles per hour or more. A copy of this Notice, marked as "Safety Bulletin 97-2" is enclosed for your review.

This Notice gives recognition of the difficulty or impossibility of stopping a train on a heavy grade once a critical train speed is attained. The Notice strongly recommends that railroads take additional precautions. Therefore, based upon our action, FRA requested the Board to consider this Safety Recommendation as "Closed--Acceptable Action."

Current Status: In its letter dated January 11, 2000, the Safety Board indicated that Safety Bulletin 97-2 issued by FRA contains only a recommended safety practice to stop trains on heavy descending grades, and is not mandatory in nature, and as a consequence allows railroad discretionary compliance. It also does not address the issue of dynamic braking failure or the preservation of a margin of stopping ability. Pending further action to address stopping ability given dynamic braking failure, Safety Recommendation R-98-03 is classified as "Open–Unacceptable Response."

R-98-04. **Research Maximum Speed based on weights - "Carry out research, investigation and analysis to determine maximum authorized train speed for safe operation of trains of all weights, using speed-based margins of safety that can be easily measured by train crewmembers."**

This Safety Recommendation was received February 25, 1998. FRA provided its initial response to the Board on March 17, 1999, indicating that FRA is in general agreement with the Board's recommendation, and desires to outsource this research as soon as funding is available. Steps have been taken to secure funding to allow this research to be conducted by the Volpe Center. The Volpe Center has conducted similar research of this type using its TOES model, and will begin researching the available literature on this subject as soon as funds become available, hopefully before the end of fiscal year 1999. It is our intention to work in concert with the railroad industry on this important matter. Therefore, based upon FRA's intended action, we requested the Board to consider this Safety Recommendation as "Open--Acceptable Action."

Current Status: In its letter dated January 11, 2000, the Safety Board indicated that it is pleased that the FRA agrees with this recommendation and intends to contract for the recommended research when funding is available. The Safety Board encourages the FRA to seek funding for this research. Assuming that the FRA will find funds in a reasonable amount of time, Safety Recommendation R-98-04 has been classified as "Open–Acceptable Response."

R-98-05. **Separate Dynamic Brakes from Power Brake Law - "Separate the dynamic brake requirements from the Power Brake Law rulemaking and immediately conclude rulemaking to require that railroads verify that the dynamic braking system on all locomotives equipped with dynamic brakes are functioning properly before trains are dispatched."**

This Safety Recommendation was received February 25, 1998. FRA provided its initial response to the Board on March 17, 1999, indicating that the substance of this new recommendation, other than that portion requesting the dynamic brake requirements, be separated from the Power Brake Law rulemaking. This recommendation is somewhat similar to Safety Recommendation R-90-24, which was issued to the Federal Railroad

Administration (FRA) by the Board on July 20, 1990. At that time the Board issued two Safety Recommendations relating to dynamic braking to the Federal Railroad Administration, R-90-23 and R-90-24. Safety Recommendation R-90-24 recommended "FRA revise its regulations to require that if a locomotive unit is equipped with dynamic brakes that the dynamic brakes function." This recommendation is presently classified by NTSB as "Open--Awaiting Response." Because of the similarity of R-90-24 and recently issued R-98-5, the following provides background information and a review of FRA's efforts to address the Board's concerns about the proper functioning of dynamic brakes on locomotives so equipped.

Following receipt of NTSB's Safety Recommendation R-90-24, the Rail Safety Enforcement and Review Act amended Section 202 of the Federal Railroad Safety Act of 1970 (recodified at 49 U.S.C. 20141), and mandated in part, that FRA, "where applicable, prescribe regulations that establish standards on dynamic braking equipment." In attempting to properly address this previous safety recommendation of the Board, and the Congressional mandate, together with other general revisions, FRA issued in December 1992, an Advance Notice of Proposed Rulemaking (ANPRM) to revise its Power Brake Law regulation. See 57 FR 62546. This ANPRM contained various proposed revisions to its Power Brake Regulation, and sought comments and suggestions from all affected parties. This ANPRM also included the issue of dynamic braking seeking to address Safety Recommendation R-90-24. In order to determine the types of requirements or standards that should be developed regarding the design and use of dynamic brakes, FRA requested comments from interested parties regarding the reliability, testing, and cost of dynamic brakes as well as the types of information that are or could be provided to the engineer regarding the availability and operation of the devices. See 57 FR 62555. A Notice of Proposed Rulemaking (NPRM), see 59 FR 47676, was subsequently issued in 1994. The comments that were received from numerous parties concerning dynamic brakes and other proposed revisions were discussed in detail in the 1994 NPRM.

A final rule was not issued at that time. Upon creation of the Railroad Safety Advisory Committee (RSAC) in 1996, this issue of revision of the Power Brake regulations, to include dynamic brake issues, was tasked to a working group within RSAC in May 1996. After much discussion, consensus could not be reached on several issues in that forum. Therefore, FRA withdrew this task from the RSAC on June 24, 1997, and has since

drafted a new NPRM on Power Brake regulation revisions, which was issued on September 9, 1998 (63 FR 48294). Two public hearings and a technical conference have been held. The comment period ended March 1, 1999. The NPRM contained provisions for dynamic braking. Section 232.109 proposed that:

(a) The locomotive engineer be informed in writing of the operational status of the dynamic brakes of each unit in the consist at the time he takes charge.

(b) Inoperative or ineffective dynamic brakes must be repaired within 30 days or at periodic inspection.

(c) A tag bearing the words "inoperative dynamic brake" shall be displayed in the cab as soon as the defective condition is discovered.

(d) Railroads will be permitted to declare dynamic brakes "deactivated" by taking certain steps.

(e) Railroads shall have written operating requirements governing use of dynamic brakes that also cover situations where dynamic brakes are not available.

(f) The operating rules listed above shall be included in the locomotive engineer certification process.

FRA also separated the requirements for dynamic brakes in "passenger operations" from "freight operations." FRA has since issued an NPRM for Passenger Equipment Safety Standards in September 1997 (see 62 FR 49728). Section 238.231, paragraph (j), and Section 238.303, paragraph (c) (15), of this NPRM contains provisions for dynamic brakes in passenger operations. Paragraph (j), in Section 238.231 - "Brake system," proposed that:

"(j) Locomotives equipped with blended brakes shall be designed so that:

(1) The blending of friction and dynamic brake to obtain the correct retarding force is automatic;

(2) Loss of power or failure of the dynamic brake does not result in exceeding the allowable stop distance;

(1)The friction brake alone is adequate to safely stop the train under all operating conditions; and

(2) Operation of the friction brake alone does not result in thermal damage to wheels or disc rotor surface temperatures exceeding the manufacturer's recommendation.

Paragraph (c)(15), in Section 238.303 - "Exterior calendar day mechanical inspection of passenger cars and unpowered vehicles used in passenger trains," proposes that:

"(c)(15) All secondary braking systems are working."

The comment period for the Passenger Equipment Safety Standards NPRM has ended, and FRA has conducted public hearings. FRA issued the final rule on 5/12/99 (64 FR 25540).

Concerning that portion of Safety Recommendation R-98-5 recommending that FRA separate the dynamic brake requirements from the Power Brake rulemaking, FRA believed this action would have not been cost effective at that time, and would have resulted in additional delay to the rulemaking then in process. Final rules on Passenger Equipment Safety Standards and the Power Brakes address the dynamic brake issue. FRA believes the issuance of these final rules would have been delayed further if the dynamic brake requirements had been separated from these two NPRMs. FRA requested the Board to reconsider its recommendation for separation of the dynamic brake requirements from the Power Brake and Passenger Equipment Safety Standards rulemakings.

FRA appreciated and acted upon the Board's earlier suggestion that requirements for two-way end-of-train devices be separated from our Power Brake rulemaking to result in earlier action. This resulted in equipping of trains on major railroads a full six months prior to the statutory deadline. However, in this case, determining what action is appropriate clearly constitutes a major challenge. As the Kelso accident dramatically illustrates, dynamic brakes are not fail safe devices; accordingly, placing excessive

reliance on dynamic braking as a strategy for descent on heavy grades is not a wise course of action.

Based upon the significant amount of resources and efforts directed toward resolution of this issue, FRA requested the Board to consider Safety Recommendations R-90-24 and R-98-5 as "Open--Acceptable Response," until such time as the final rules for the Passenger Equipment Safety Standards and Power Brakes for freight operations were published. FRA has now provided a more definitive response to the Board's concerns on dynamic brake requirements.

Current Status: In its letter dated January 11, 2000, the Safety Board indicated that it does not agree with FRA's position that removing the dynamic brake requirements from the present rulemaking activities will delay the recommended action. Based on the response, the Safety Board has classified Safety Recommendation R-98-05 as "Closed–Unacceptable Action." Note: Since the Board's closure of Safety Recommendation R-98-05, FRA has since published the final rule on 1/17/01 (66 FR 4101). An amendment extending the effective date of the final rule until 3/31/01, was published on 2/12/01 (66 FR 9905). On 3/19/01, the AAR submitted an official petition for reconsideration of the final rule. Section 232.109, "Dynamic Brake Requirements" within the final rule provides for the following:

(1)Requires locomotive engineer (LE) to be informed as to operational status of dynamic brakes on all units in the consist at the initial terminal and other locations where he first takes control. Information may be provided in any format, record to be maintained in cab of the controlling locomotive;

(2)Requires inoperative dynamic brakes to be repaired within 30 days of detection, or at 92-day maintenance cycle, whichever occurs first. Record of repair to be maintained for 92 days;

(3)Provides an option for the railroad to declare locomotive's dynamic brakes "deactivated" without requiring removal of equipment. Eliminates proposed requirement to stencil such locomotives;

(4)Mandates training on railroads which require the use of dynamic brakes (DB);

(5)Prohibits placement of locomotive with inoperative dynamic brakes as lead locomotive unless they are capable of controlling dynamics on trailing units and are able to display deceleration rate or total train dynamic brake retarding force to engineer (equipped with accelerometer or dynamic brake indicator);

(6)Requires new locomotives (ordered 1.5 years or placed in service 3 years after issuance of rule) to be equipped with dynamic brake indicator capable of displaying total train dynamic brake retarding force;

(7)Requires rebuilt locomotives (placed in service 3 years from issuance) to be equipped with either an accelerometer or dynamic brake indicator;

(8)Requires adoption of 5 mph over-speed requirement by railroads when trains descending grades of 1 percent or greater.

Although FRA believes that is has satisfied the intent of this recommendation by issuance of the final rule on January 17, 2001, there is no further communications necessary by FRA as the Board previously classified Safety Recommendation R-98-05 as "Closed-Unacceptable Action."

R-98-06. **Dynamic Brake Indicator in Controlling Locomotive - "Require railroads to ensure that all locomotives with dynamic braking be equipped with a device in the cab of the controlling locomotive unit to indicate to the operating engineer that the real-time condition of the dynamic brakes on each trailing unit."**

This Safety Recommendation was received February 25, 1998. FRA provided its initial response to the Board on March 17, 1999, indicating that the substance of this new recommendation is essentially the same as Safety Recommendation R-90-23, which was issued to FRA by the Board on July 20, 1990. At that time the Board issued two Safety Recommendations relating to dynamic braking to FRA, R-90-23 and R-90-24. Safety Recommendation R-90-23, recommended that "FRA study, in conjunction with the Association of American Railroads (AAR), the feasibility of developing a positive method to indicate to the operating engineer in the cab of the controlling locomotive unit the condition of the dynamic brakes on all

units in the train." This recommendation is presently classified by NTSB as "Open--Unacceptable Response." Because of the similarity of Safety Recommendations R-90-23 and recently issued R-98-6, the following provides background information and a review of FRA's efforts to address the Board's concerns about the requirements within these two Safety Recommendations.

Following receipt of NTSB's Safety Recommendation R-90-23, the Rail Safety Enforcement and Review Act amended Section 202 of the Federal Railroad Safety Act of 1970 (recodified at 49 U.S.C. 20141), and mandated in part, that FRA, "where applicable, prescribe regulations that establish standards on dynamic braking equipment."

In attempting to properly address this previous safety recommendation of the Board and the Congressional mandate, together with other general revisions, FRA issued in December 1992, an Advance Notice of Proposed Rulemaking (ANPRM) to revise its Power Brake Law regulation. See 57 FR 62546. This ANPRM contained various proposed revisions to its Power Brake Regulation, and sought comments and suggestions from all affected parties. This ANPRM also included the issue of dynamic braking seeking to address Safety Recommendation R-90-23. In order to determine the types of requirements or standards that should be developed regarding the design and use of dynamic brakes, FRA requested comments from interested parties regarding the reliability, testing, and cost of dynamic brakes as well as the types of information that are or could be provided to the engineer regarding the availability and operation of the devices. See 57 FR 62555. An NPRM, see 59 FR 47676, was subsequently issued in 1994. The comments that were received from numerous parties concerning dynamic brakes and other proposed revisions were discussed in detail in the 1994 NPRM.

A final rule was not issued at that time. Instead, parties were requested to suggest alternative approaches. Upon creation of the RSAC in 1996, this issue of revision of the Power Brake regulations was tasked to a working group within RSAC, in May 1996. The Working Group developed four specific issues for detailed review. These four issues were:

- If a locomotive is equipped with dynamic brakes, do or must they work?

- Whether the level of dynamic brakes can or should be

continuously monitored and conveyed to the engineer, and how the locomotive engineer is notified if the dynamic brakes do not work?

- Establishment and maintenance of records concerning dynamic brakes on locomotive units.

- How should en route failures of the dynamic brake be handled?

After much discussion, consensus could not be reached on several issues in that forum. Therefore, FRA withdrew this task from the RSAC on June 24, 1997. A wealth of information had been gathered regarding the operation, testing, and maintenance of dynamic brakes in the five years since publishing of the ANPRM, and FRA has used this information and then drafted a new NPRM containing revisions to the Power Brake regulation. This NPRM entitled, "Brake System Safety Standards for Freight and Other Non-Passenger Trains and Equipment," was published in the *Federal Register* on September 9, 1998. A complete discussion of the RSAC Working Group's consideration of this issue is found on pages 48312 through 48315 of the *Federal Register*, Volume 63, No. 174, Wednesday, September 9, 1998. FRA provided the Board with a copy of this publication for their ready reference. From pages 48314 and 48315, the following discussion of issues is quoted with respect to this specific Safety Recommendation:

> "In both the ANPRM (57 FR 62555) and in the 1994 NPRM (59 FR 47687), FRA requested comments from the industry on possible methods of providing information regarding the status of dynamic brakes to the engineer in the cab of the controlling locomotive. The only workable option presented to FRA in the comments received was the equipping of locomotives with a dynamic brake display. Although FRA recognizes that the technology for dynamic brake displays with the ability to provide the type of information sought by FRA in the 1994 NPRM is not readily available today, several commenters suggested that it is currently being developed. Consequently, FRA is not ready or willing to require the use of such indicators at this time. However, FRA believes that the benefit of such an indicator would be to alert engineers that they have diminished or excessive dynamic capabilities, thus permitting the engineer to control the braking of their train in the safest possible manner. In order to fully evaluate the

viability and potential use of dynamic brake indicators designed to test the electrical integrity of the dynamic brakes at rest and to display the available total train dynamic brake retarding force at each speed in 5-mph increments in the cab of the controlling locomotive, FRA again seeks comments from all interested parties regarding the following specific issues:

(1) What is the status on the future availability of dynamic brake indicators capable of providing the information discussed above?

(2) What are the current cost estimates associated with the acquisition and installation of such indicators?

(3) What quantitative and/or qualitative operational or safety benefits can be derived from the use of these dynamic brake indicators?

(4) What alternative methods are available for providing the same information that a dynamic brake indicator would provide to a locomotive engineer?"

We also direct the Board's attention to the "Section-by-Section Analysis" portion of this *Federal Register*, as found on page 48336. The following is quoted in relation to this Safety Recommendation:

"Only limited information regarding the technical feasibility, availability, and cost of incorporating dynamic brake indicators and/or displays in the locomotive cab has been provided to the FRA in response to questions posed in the ANPRM and the 1994 NPRM. See 57 FR 62555 and 59 FR 47687. FRA recognizes that the technology for dynamic brake displays with the ability to provide information regarding the total train dynamic brake-retarding force, at certain speed increments, in the cab of the locomotive has not been developed for industry-wide implementation on a cost-effective basis at this time. At the same time, FRA maintains that such an indicator would provide great benefits to engineers in alerting them to diminished or excessive dynamic braking capabilities, thus permitting the engineer to control the braking of their train in the safest possible manner. Previous discussions regarding the capabilities and limitations of

dynamic brakes provided in the ANPRM, the 1994 NPRM, and the preamble to this NPRM have clearly shown that in order to completely test the functioning of dynamic brakes the train must be moving. However, these discussions have also clearly concluded that while running tests of dynamic brakes provide information to the locomotive engineer regarding the availability of dynamic brakes, such tests are limited to the specific moment they are performed. Thus, running tests do not provide continuous information on the current status of the dynamic brakes to the locomotive engineer. Because dynamic brakes could fail at any time, FRA feels there is merit in the development of technology whereby engineers are able to continuously monitor the operation of their available dynamic brakes. FRA once again seeks comments from all interested parties regarding the following specific issues:

(1) What is the status on the future availability of dynamic brake indicators capable of providing the information discussed above?

(2) What are the current cost estimates associated with the acquisition and installation of such indicators?

(3) What quantitative and/or qualitative operational or safety benefits can be derived from the use of these dynamic brake indicators?

(4)What alternative methods are available for providing the same information that a dynamic brake indicator would provide to a locomotive engineer?"

Written comments concerning this NPRM were due by March 1, 1999. Two public hearings and a technical conference were held. FRA advised the Board that following a review of the comments received; it would make a judgment concerning the issue of requiring dynamic brake indicators in the cab of the controlling locomotive unit to indicate to the operating engineer the real-time condition of the dynamic brakes on each trailing unit before the publication of the final rule.

Based on this intended action, FRA requested the Board to consider Safety Recommendations R-90-23 and R-98-6 as "Open--Acceptable Response."

Current Status: In its letter dated January 11, 2000, the Safety Board indicated that it recognized that the rulemaking was in progress and understood the need to collect extensive information, before developing a new power brake requirement. Following review of the NPRM response, the FRA would be better positioned to mandate the type of device that would best meet the intent of this recommendation. Pending Safety Board review of the final rule, Safety Recommendation R-98-06 was classified "Open–Acceptable Response." The final rule was published 1/17/01 (66 FR 4101). An amendment, extending the effective date of the final rule until 3/31/01, was published on 2/12/01 (66 FR 9905). On 3/19/01, the AAR submitted an official petition for reconsideration of the final rule. FRA will correspond with the Board in the near future to advise them of the final actions taken on Safety Recommendation R-98-06.

R-98-07. **Formal Training for Retainer Settings - "Require railroads to implement formal training on correct retainer setting and use procedures for train crewmembers who may set or use air brake retainer valves.**

This Safety Recommendation was received February 25, 1998. FRA provided its initial response to the Board on March 17, 1999, indicating that virtually all railroads have long-standing procedures which describe the function and proper use of retaining valves (referred to as retainers) when and where their use is required, which is typically in heavy grade territory as specified, or whenever, in the judgment of the engineer and conductor, their use is necessary to properly control the train when operating on a descending grade. These procedures are usually found in the railroad's air brake and train handling instructions. The timetable special instructions will further identify the specific territory in which retainers are to be used, along with any detailed procedures as to the specific number of retainers to be applied and any other pertinent instructions.

Due to the site-specific nature of the use of retainers, the formal familiarization process is normally handled at the local level by operating supervisors intimately familiar with the territory and procedures. This familiarization covers both engineers and train service employees. As you

are aware, these procedures are relatively simple and merely involve turning a valve, or rod, to a desired position, on a specified number of cars. Once the requisite numbers of retainers are set, it becomes the responsibility of the locomotive engineer to properly control the speed of the train. Under Title 49, Code of Federal Regulations, Part 240, the engineer is required to be properly trained on the type of service they will perform. This would include operations utilizing retainers.

New (inexperienced) locomotive engineers that operate in territory where retainers are used practice these procedures under the direct supervision of an experienced, journeyman locomotive engineer during their familiarization/qualification trips. The journeyman locomotive engineers execute these procedures on a daily basis when operating in this territory.

Additionally, railroads typically have elements of instruction on the function and use of retainers in their various training programs, both initial and recurring, and in their periodic operating rules classes, usually conducted annually. FRA believes, however, that the use of retainers is more correctly one of supervisory oversight of these types of operations, rather than a training issue.

FRA's Operating Rules Program Manager consistently reviews and discusses operating rules and practices compliance with railroad representatives to ensure that employees are receiving proper instruction and training on operating rules and instructions, and that they have a proper understanding thereof. This process is further supported by operating practices inspectors and specialists who constantly conduct field inspections and periodic compliance audits to reinforce that the instruction and training is being conducted in accordance with the railroad's program, that employees do understand the rules and instructions, and that carrier supervision is adequate. This would certainly involve operation in heavy grade territory, to include the use of retainers. These efforts are ongoing.

With the exception of a relatively few locations, the use of retainers in the railroad industry is practically obsolete, due to the advent of new technology, such as modern air brake equipment which incorporates a brake pipe pressure maintaining feature, locomotives equipped with high capacity dynamic brakes, and with the Federal requirement for two-way end-of-train devices that became effective July 1, 1997.

The Notice of Proposed Rulemaking for "Brake System Safety Standards for Freight and Other Non-Passenger Trains and Equipment," as published in the *Federal Register* on September 9, 1998 (63 FR 48294), indicated FRA's intention to promulgate a Federal requirement to address the issue of training requirements for brake systems. While the limited use of retainers by train crewmembers is not addressed therein, this basic concern is addressed with respect to training on operation of two-way end-of-train devices.

On page 48337 of the *Federal Register* of September 9, 1998, the "Section-by-Section Analysis" provides discussion of the need for training requirements of conductors and engineers for operation of two-way end-of-train devices. The following is quoted from that publication:

> "Paragraph (c) proposes to require that each railroad which operates trains required to be equipped with two-way EOTs develop and implement a training program which specifically addresses the testing, operation, and maintenance of the devices. The final rule requiring the use of two-way EOTs became effective July 1, 1997. Since that time, FRA has discovered numerous operating and mechanical employees who do not understand when the devices are required or how the inspection and testing of the devices is to be accomplished. Furthermore, FRA believes that it is vital for those employees responsible for the use of the devices (i.e., engineers and conductors) to be intimately familiar with the use and operation of the devices to ensure that the full safety potential of the devices is utilized and available. Consequently, FRA believes that adequate training must be provided to those employees responsible for the inspection, testing, operation and use of two-way EOTs."

Therefore, it was FRA's intention to publish new training requirements in Section 232.203,Title 49, CFR. The following is quoted from the NPRM as found on page 48362 of the September 9, 1998, *Federal Register*:

> "232.203 (c) Each railroad that operates trains required to be equipped with a two-way end-of-train telemetry device pursuant to subpart E of this part, shall adopt, comply with, and make available to FRA upon request a training program which specifically addresses the testing, operation, and maintenance of

two-way end-of-train devices for employees and contractors that are responsible for the testing, operation, and maintenance of the devices."

Therefore, based upon the technological changes that have and are occurring in the industry, and our intended action to ensure adequacy of training of train crew members on more modern and prevalent train braking appliances, FRA requested the Board to reconsider this Safety Recommendation, and consider classification of "Closed–Reconsidered."

NTSB provided a response to FRA's initial reply on January 11, 2000. It indicated the Board needs additional information regarding the usage of retainers prior to granting an alternative classification and that conflicting information has surfaced that would indicate retainers may still be in (or subject to) use. One interesting fact is the lack of an industry initiative to remove retainers from freight cars that would result in significant cost savings. The Safety Board would appreciate information from the FRA ensuring that retainers are not subject to usage by railroad crewmembers for operational purposes. Presently, it is classified by the Board as "Open–Response Received."

FRA provided information to the Board in a letter of August 2, 2000, indicating that after reviewing our initial response to Safety Recommendation R-98-7, we believe that we inadvertently gave the Safety Board the wrong impression regarding the use of retainers—that they are essentially obsolete. We stated in our initial response, "With the exception of a relatively few number of locations, the use of retainers in the railroad industry is practically obsolete...." Our intent was not to indicate that retainers could be removed from all freight cars. In the few locations that we referred to, especially in mountain-grade territory, retainers are still in use and needed under certain operating conditions. We conducted a recent inquiry of selected railroads and determined that retainers are still being used in certain locations by at least the following major railroads: Burlington Northern Santa Fe Railway Company; CSX Transportation, Inc.; Canadian National/Illinois Central; Norfolk Southern Corporation; CP Rail System/SOO District; and Union Pacific Railroad Company. The only additional information that we can share with the Safety Board at this time regarding Safety Recommendation R-98-07 is that a rulemaking is underway to revise regulations governing the power-braking systems and equipment used in freight and other non-passenger railroad train operations. The

Notice of Proposed Rulemaking was published in the *Federal Register* on September 9, 1998, and the comment period closed on January 15, 1999. As we develop the final rule, we will consider the training issues you raised regarding the use of retainers. Until we publish the final rule, FRA requested that the Safety Board classify Safety Recommendation R-98-7 as "Open–Acceptable Response."

Current Status: The Board in its letter of November 24, 2000, advised that the Safety Board understood that FRA was developing a final rule and would consider the training issues addressed in this recommendation. Pending further response, Safety Recommendation R-98-07 was classified "Open–Acceptable Response." The final rule was published 1/17/01 (66 FR 4101). An amendment extending the effective date of the final rule until 3/31/01, was published on 2/12/01 (66 FR 9905). On 3/19/01, the AAR submitted an official petition for reconsideration of the final rule. FRA will correspond with the Board in the near future to advise them of the final actions taken on Safety Recommendation R-98-07.

R-98-17. **Prohibit Bottling of Air - "Issue a regulation that requires the brake pipe pressure to be depleted to zero and an angle cock to remain open on standing railroad equipment that is detached from a locomotive controlling the brake pipe pressure."**

FRA responded to the Board with its initial reply on August 25,1998, indicating that an NPRM regarding power brakes and freight operations was in the advanced stages of completion. FRA advised the Board that to the extent possible without causing further delay of the ongoing process, every effort would be made to address this recommendation in this NPRM.

Current Status: NTSB advised FRA in its letter dated November 9, 1998, that the Safety Board was pleased to learn FRA was addressing this recommendation in the proposed revisions to 49 Code of Federal Regulations. Pending publication of the final rule that met the intent of this recommendation, the Board classified Safety Recommendation R-98-17 as "Open–Acceptable Response." The final rule was published 1/17/01 (66 FR 4101). An amendment, extending the effective date of the final rule until 3/31/01, was published on 2/12/01 (66 FR 9905). On 3/19/01, the AAR submitted an official petition for reconsideration of the final rule. FRA will correspond with the Board in the near future to advise them of the final actions taken on Safety Recommendation R-98-17.

R-98-26. **Revise CFR 220 - Track Warrants - "Revise Code of Federal Regulations Part 220 - Radio Standards and Procedures to address track warrants and other current railroad operating practices."**

FRA responded to the Board with its initial reply on August 25,1998, indicating that prior to receipt of this new Safety Recommendation, in June 1996, FRA established the Railroad Safety Advisory Committee (RSAC) to implement a more consensual approach to rulemaking. One of the initial tasks that FRA recommended RSAC to accept was that of reviewing Title 49, Code of Federal Regulations (CFR), Part 220, "Radio Standards and Procedures" for purpose of revision and modernization. The RSAC accepted this task and in June 1996 convened a working group comprised of rail industry and labor representatives to recommend any necessary revisions to this entire rule. In a series of meetings that followed, the working group examined extensive data and debated how to make the regulations more flexible, thereby improving compliance, and whether to mandate radios and other forms of wireless communications to convey emergency and need to know information. After studying these and other issues, the working group proposed to require wireless communications devices, including radios, for specified classifications of railroad operations and roadway workers. This part would therefore be retitled to reflect its proposed coverage to other means of wireless communications such as cellular telephones and data radio terminals. The working group also gave consideration to the revision of previous Subpart C - *Train Orders*, of 49 CFR Part 220, "Radio Standards and Procedures," which is most germane to this NTSB Safety Recommendation. Subpart C, and specifically Section 220.61, *Transmission of train orders by radio,* had been in effect since August 1, 1977, when train orders were the primary method of issuing main track authority to trains as well as slow and cautionary orders. This was before the advent of more modern forms of main track authorities such as Track Warrants, Direct Traffic Control, Form D, etc., that later came into wide-spread use on the Nation's railroads. These more modern forms of main track authority are considered present day derivatives of the traditional "train order." With the large-scale discontinuance of train orders by the majority of railroads during the late 1980's and the substitution of the newer authorities previously mentioned, the term "train order" became largely antiquated, except for a few railroads that still continue to use them. Despite the use of the specific term *train order* in Section 220.61, the definition of train order in Section 220.5 clarified that "Train Order means any mandatory directive issued as authority for the conduct of a railroad operation which is transmitted by

radio." In the suggested revision to this rule, the working group recognized that the use of the largely antiquated and specific term "train order" was in need of change to a more comprehensive term that would encompass the more modern forms of authorities used by the Nation's railroads, e.g., Track Warrants, Track Bulletins, Form D, etc. This change to a more encompassing term would also assist in avoiding any confusion on the part of operating employees and others within the rail industry that may arise from the former term of "train order" and the requirements when transmitting by radio or other wireless communications.

In the writing of the Notice of Proposed Rulemaking (NPRM), FRA substituted the term "mandatory directive" for "train order" wherever that term appeared in Section 220.61. In addition, former Subpart C, which addressed the transmission of train orders by radio, was integrated into Subpart B that now covers all radio procedures, and Section 220.61 was retitled "Radio transmission of mandatory directives." This NPRM was subsequently published in the *Federal Register* on Thursday, June 26, 1997, and retitled 49 CFR Part 220, "Railroad Communications." Within this NPRM, Section 220.9, "Requirements for trains," a proposed requirement is set forth that "each occupied controlling locomotive in a train shall have a working radio, and each train shall also have communications redundancy, i.e., a working radio on another locomotive in the consist or other means of working wireless communications." The NPRM also contained requirements for normal and emergency use of both radio and wireless communications.

The comment period in relation to the NPRM ended August 25, 1997. After review and consideration of the comments received, the Final Rule was published in the *Federal Register* on September 4, 1998. The Final Rule, containing the modified provisions to address track warrants and other current railroad operating practices as requested by the Board in this Safety Recommendation, went into effect on January 4, 1999. In addition, Section 220.61 was strengthened by clarifying that the conductor and engineer shall each have a written copy of the mandatory directive. In the past, FRA's inspections and accident investigations have found situations where the crew shared only one copy. Further, radio transmitted mandatory directives received en route that have been fulfilled or cancelled are to be "X'd" out and retained for the duration of the train crew's work assignment. This enables FRA and carrier officers an opportunity to inspect the mandatory directives at the end of a trip for compliance with the regulation. FRA

believes that the full intent of the Board's Safety Recommendation has now been achieved by issuance of this Final Rule. FRA requested that the Board favorably consider classification of Safety Recommendation R-98-26 as "Closed--Acceptable Action."

Current Status: NTSB advised FRA in its letter dated June 29, 1999, that the Board was pleased to learn that FRA has issued a final rule, effective January 4, 1999, modifying 49 CFR Part 220 as requested. Accordingly, the Safety Board has classified Safety Recommendation R-98-26 as "Closed–Acceptable Action."

R-98-27. **Prohibit "after-arrival" orders - "Require railroads to discontinue permanently the use of after-arrival orders in dark (non-signalized territory)"**

FRA responded to the Board with its initial reply on August 25,1998, indicating that following the June 22, 1997 accident, FRA representatives participated in NTSB's accident investigation and also conducted a separate independent investigation. As a result of the initial findings developed, FRA issued Safety Directive (SD) 97-1, which addressed safety practices relevant to operations in Direct Train Control (DTC) territory. FRA recognized that existing train dispatcher procedures in non-signaled DTC territory, pertaining to the issuance of movement authorities, could be modified to reduce the risk of similar collisions. Accordingly, FRA made several recommendations in SD-97-1, two of which dealt with "after-arrival" orders. The first required a procedural change to the issuance of movement authorities in those instances in which a train meet is included by having the train dispatcher specifically state in the movement authority, "This track warrant includes a requirement to meet another train." The second recommendation required the railroads to review their operating rules and practices pertaining to operations in non-signaled territory to determine what further enhancements were warranted to improve safety, including the elimination of the use of "after-arrival" orders. Subsequent FRA audits of train dispatchers' offices nationwide disclosed that the overwhelming majority of offices had eliminated the use of "after-arrival" orders in non-signaled DTC territory. FRA will continue to review these safety-critical procedures whenever conducting future dispatcher audits. FRA believes that the above actions taken to provide additional train dispatching safeguards in non-signaled DTC territory fully address the safety recommendation of the

Board. Therefore, FRA requested the Board to consider this Safety Recommendation as "Closed--Acceptable Action."

Current Status: NTSB advised FRA in its letter dated June 29, 1999, that the Board notes that FRA has responded to this recommendation by requiring that railroads review their operating rules and practices for nonsignaled territory to identify potential safety enhancements, including the elimination of after-arrival orders. The Safety Board is aware that such safety reviews may result in a significant reduction in the use of after-arrival orders in nonsignaled territory; however, it is convinced that permitting this unsafe operating practice poses a risk to rail safety. The Safety Board is disappointed with the FRA's decision not to prohibit the use of after-arrival orders. Accordingly, Safety Recommendation R-98-27 is classified "Closed–Unacceptable Action."

R-98-28. **Dispatcher Selection and Training - "Develop and establish dispatcher selection and training standards, dispatcher trainer standards, and workload limits for dispatchers by January 1, 2000."**

This Safety Recommendation was received on June 25, 1998. FRA responded to the Board with its initial response on March 17, 1999, indicating that this new Safety Recommendation is somewhat similar to previous Safety Recommendation R-87-66 that was addressed to FRA by the Board several years ago. That recommendation read as follows:

> "Conduct a thorough study of the selection process, training, duties, and responsibilities of train dispatchers to determine if the workload is beyond the normal job stress level, and determine what selection and training standards are used for train dispatchers. In addition, FRA was asked to establish selection and training standards and workload limits for dispatchers."

Subsequent to the issuance of Safety Recommendation R-87-66, Congress passed in 1992 the Rail Safety Enforcement and Review Act. Section 17 of the Act required the Secretary of Transportation to review the train dispatcher work environment and report the results to Congress. FRA performed this review and rendered a report to Congress in January 1995. A copy was provided to NTSB with FRA's reply on December 15, 1995.

The 12-month delay resulted from the determination that some of the issues were outside the scope of FRA's expertise, and would require additional study by experts in the health and human factors community.

Based upon FRA's reply, the Board advised on December 20, 1995, of their disappointment that FRA had not specifically addressed several of NTSB's concerns in the recommendation. The Board indicated that they would be reassured if the FRA's recommendations within the Report to Congress dealt more precisely with the shortcomings and concerns that were cited in the Report. The Board further cautioned FRA against emphasizing the value of technological advances or increased training and continues to classify Safety Recommendation R-87-66 as "Open--Acceptable Response." (Safety Recommendation R-87-66 was subsequently closed by the Safety Board on June 25, 1998, as "Closed–Unacceptable Action/Superseded.)

FRA's Office of Research and Development is currently addressing the Board's previous Safety Recommendation R-87-66 as well as this new Safety Recommendation, R-98-28. The project is entitled "Training Requirements for Railroad Dispatchers" and is being conducted by a contracted firm, Foster-Miller, Inc., headquartered at Waltham, Massachusetts. The final report for Phase I of this project was made available January 30, 1999.

Phase II of this project, a "Workshop on Train Dispatcher Training: Preparing for the 21st Century," was conducted on October 1, 1998, in Chicago, Illinois. The workshop served three purposes:

(1) to disseminate the results of Phase I;

(2) to provide a forum in the railroad industry on dispatcher training issues;

(3) to inform the FRA of research needs regarding the dispatcher job.

Dispatcher selection and recruitment were notably mentioned as concerns several times during the workshop. FRA's Office of Research and Development has considered the issue of dispatcher selection and has a study design dated March 1993 available for a project on this topic. However, it is not clear that such a project should be undertaken at this time.

First, many of the tasks involved in setting requirements for the training of dispatchers are the same as those that are required for the selection of dispatchers: job analysis, job performance, etc. The report that summarizes Phase I of the dispatcher-training project should provide sufficient information to the railroads to allow them to proceed with the remaining tasks inherent in the process of designing a rational selection methodology for dispatchers. Second, a rational selection methodology is best left to the individual railroads since they know best what qualities they desire in their employees. Personnel selection professionals are abundantly available who can work with the railroads to use job analysis information and knowledge of the corporate culture of the individual railroad to devise appropriate selection tools. FRA will continue to monitor the railroad industry regarding this issue.

FRA does not consider it necessary to address dispatcher trainer standards at this time. The use of information contained in the Phase I report on dispatcher training should help to standardize training practices and ensure that trainers have a common base of knowledge that is presented professionally. The workshop participants did not focus on this issue, which indicates that it is not a recognized problem within the industry.

FRA's Office of Research and Development is currently conducting a study of dispatcher workload, stress, and fatigue. Foster-Miller, Inc is also conducting the project. At this stage, the project is testing unobtrusive field methods to determine the level of workload, stress, and fatigue experienced by dispatchers at various types of desks, e.g., freight, passenger, etc., and on different work shifts. In addition, this project has assisted FRA's Office of Safety to document procedures to assess the workload at particular dispatching desks. The total effort will provide a picture of the amount of work at a particular desk, the workload experienced by the dispatcher(s) at that desk, the fatigue and stress experienced by the dispatcher(s) as a result of the amount of work, the type of desk, and the shift. This will begin to define the issue of workload limits for dispatchers, and efforts to do so before then are premature.

Until such time that the study being conducted on dispatcher workload, stress, and fatigue has been completed by Foster-Miller, Inc., and we have had the opportunity to fully analyze these findings, FRA requested the Board to consider this Safety Recommendation as "Open--Acceptable Response."

Current Status: NTSB advised FRA in its letter dated June 29, 1999, that the Board recognizes and supports the FRA's Office of Research and Development for a study of training requirements for railroad dispatchers and a second study of dispatcher workload, stress, and fatigue. However, the Safety Board determined in its investigation of this accident, and from a dispatcher related accident in Fall River, Wisconsin, in October 1986, (issuing R-87-66) to the FRA) that dispatcher training standards were still a problem that needed to be resolved. The Safety Board encourages the FRA to include dispatcher-training standards in their referenced study. Pending a concurring response, the Safety Board has classified Safety Recommendation R-98-28 as "Open–Unacceptable Response."

R-98-29. **Federal Oversight-Dispatcher Centers - "Evaluate your surveillance and enforcement activities at dispatcher centers and take appropriate corrective action to ensure that Federal oversight is adequate and effective."**

This Safety Recommendation was received on June 25, 1998. FRA responded to the Board with its initial response on March 17, 1999, indicating that following the June 22, 1997 accident at Devine, Texas, FRA representatives participated in NTSB's accident investigation and also conducted a separate independent investigation. As a result of the initial findings developed, FRA issued concise and accepted best practices instructions to all operating practices inspectors on the procedures to conduct a dispatcher office audit. These enforcement practices were issued to each operating practices inspector when they received their revised enforcement manual. These procedures are shown under the caption "Train Dispatching Office Assessment Work Plan." FRA provided the Board with a set of these internal FRA instructions. FRA further advised the Board that we will continue to review these safety-critical procedures whenever conducting future dispatcher audits.

FRA believes that this action taken to provide additional train dispatching surveillance and enforcement procedures to our operating practices inspectors throughout the nation fully addresses this safety recommendation of the Board. Therefore, FRA requested the Board to consider this Safety Recommendation as "Closed--Acceptable Action."

Current Status: NTSB advised FRA in its letter dated June 29, 1999, that the Board was pleased to learn that the FRA has developed and

issued the best practice instructions for its inspectors who audit operating practices at railroad dispatching centers. Based on these efforts, the Safety Board has classified Safety Recommendation R-98-29 as "Closed–Acceptable Action."

R-98-30. **Event Recorder Crashworthiness - "Working with the railroad industry, develop and implement event recorder crashworthiness standards for all new or rebuilt locomotives by January 1, 2000."**

This Safety Recommendation was received on June 25, 1998. FRA responded to the Board with its initial response on March 17, 1999, indicating that FRA is in general agreement with the Board's recommendation that crashworthiness standards are necessary and desirable for all new and rebuilt locomotives in the future. As noted in the Board's letter, NTSB investigations of previous accidents, e.g., Corona, California, Knox, Indiana, and Mobile, Alabama, as well as the accident at Devine, Texas, and others, provide sufficient evidence to indicate that the present construction of event recorders on locomotives does not always result in adequate protection of valuable data following an accident. The preservation of this data is obviously necessary for the proper determination of facts during accident investigations to aid in the prevention of similar future occurrences.

FRA published its original rule requiring that an event recorder would be required on the lead locomotive of all trains operating over 30 mph in the *Federal Register* on July 8, 1993, with an effective date of November 5, 1993. This rulemaking was in relation to NTSB's Safety Recommendation R-89-50 that arose from NTSB's investigation of the collision of two Iowa Interstate Railroad freight trains on July 30, 1988, in Altoona, Iowa. In that accident, neither train was equipped with an event recorder. (It should be noted that the Board had originally issued Safety Recommendation R-78-44 in 1978 recommending that FRA "promulgate regulations to require locomotives used in trains on main tracks outside of yard limits to be equipped with operating event recorders." That recommendation arose from NTSB's investigation of a November 9, 1977, derailment of a Louisville and Nashville freight train at Pensacola, Florida. Because FRA had not satisfied this requirement, in 1985 NTSB classified Safety Recommendation R-78-44 as "Closed--Unacceptable Action.") This rule became Section 229.135 of Title 49 Code of Federal Regulations (CFR). Section 229.135 was amended

May 26, 1995; to require the preservation of data recorded by the event recorder device for 30 days following accidents required to be reported to FRA for use by NTSB and/or FRA in their investigations.

Based upon the issuance of additional NTSB Safety Recommendations (R-96-70 through 73) relating to locomotive event recorders that arose from the February 1, 1996 tragic accident near Cajon, California, FRA advised the RSAC in June 1997 of those Safety Recommendations. At that time, FRA requested RSAC to accept the task of reviewing and suggesting revisions to Section 229.135, *Event Recorders*, of 49 CFR. The RSAC accepted this task and appointed a working group to progress the research and work necessary to address Safety Recommendations R-96-70 through 73. Because of NTSB's advocacy for the development of standards for the crashworthiness of these devices, the working group also began exploring the subject of "Crashworthiness of Event Recorders." A representative from NTSB participates in the meetings of this working group as a non-voting member.

The RSAC Event Recorder Working Group has developed suggested preliminary specifications for the Certification of the Crashworthy Event Recorder Memory Module. The general thrust of this work is that each manufacturer, that provides event recorders intended for use in achieving the requirements of the new rule, shall certify that each event recorder memory module has been successfully tested for crashworthiness in accordance with specifications to be developed and made a part of an

Appendix to 49 CFR Part 229. Testing criteria are being developed that would provide definitive requirements to preclude destruction of data from:

Test	Limits
Fire	
High Temperature	1000 °C for 1 hour
Low Temperature	260 °C for 10 hours
Impact Shock	482-722 g's (10-15 msec)
Static Crush	25,000 pounds of force for 5 minutes
Fluid Immersion	48 hours

Hydro-Static Pressure 100 feet for 48 hours

The Event Recorder Working Group presented its preliminary report on this subject to the full RSAC at its September 9, 1998 meeting. Additional work is still required by the Working Group, and an upgraded preliminary report will be presented to the full RSAC at its next scheduled meeting in January 1999. Once the final report has been prepared and the full RSAC has approved the certification of event recorder crashworthiness standards, FRA will draft a Notice of Proposed Rulemaking to revise 49 CFR Part 229 to include these requirements. Naturally, FRA will need to allow sufficient time thereafter for receipt and consideration of comments before drafting and publishing a Final Rule.

FRA endeavored to meet the January 1, 2000, completion date as recommended by NTSB for this requirement. FRA believes that the above actions being taken will fully address this safety concern and recommendation of the Board. Therefore, FRA requested the Board to consider this Safety Recommendation as "Open--Acceptable Response," until such time we are able to publish a Final Rule which incorporates the Board's recommendation.

NTSB advised FRA in its letter dated June 29, 1999, that the Board was pleased to learn that the FRA is in general agreement that crashworthiness standards are necessary and desirable for all new and rebuilt locomotives and that it intends to revise 49 CFR Part 229 to include definitive testing criteria to preclude destruction of data. Based on the FRA's stated intention that it will implement event recorder crashworthiness testing standards, the Safety Board has classified Safety Recommendation R-98-30 as "Open--Acceptable Response."

Current Status: In the Board's letter dated December 6, 2000; the Board advised FRA that in the past 22 months, another five event recorders were destroyed in three separate accidents. The Board cited an accident on November 17, 1999, at Carnes, Iowa, on the Union Pacific Railroad; an accident on January 17, 1999, at Bryan, Ohio, on Consolidated Rail Corporation; and an accident on March 15, 1999, at Bourbonnais, Illinois, involving the National Railroad Passenger Corporation (Amtrak). The Board expressed its disappointment that the commitments made by the FRA to develop standards through RSAC have not been realized. As a result of

this lack of progress, the Board classified Safety Recommendation R-98-30 as "Open–Unacceptable Response."

R-98-41. **Modify Grade Crossing Database - "Modify the Grade Crossing Inventory System to include information on (1) the sight distances available to a motorist and (2) the presence of curves on the roadway and on the tracks. Direct the States to include these data as a part of the regularly scheduled updates of the database."**

FRA provided its initial response to the Board in its letter of April 6, 1999. FRA advised that revisions have been made in the National Highway-Rail Crossing Inventory (Inventory) expanding the length of each crossing record in the National File to include 32 additional data elements. This expansion was started in October 1998. Some additional elements include space for signal preemption, school bus usage, passenger train counts, whistle/horn bans, latitude/longitude positions, and an emergency phone number. Eight new blank fields were also added, four each for States and railroads. In addition, a narrative explanation is now available. States and railroads may use these fields to add specific data on sight distance, curvature, or any other descriptions that suit their own definitions. FRA is distributing these changes and is encouraging providing the new data. Additionally, FRA's data processing contractor will begin actively collecting this data from States and railroads this summer.

There are several definitions for determining the sight distance in the four quadrants at crossings, and these may also change with the four seasons of the year. Most States have their own definitions and procedures for obtaining a value for the sight distance and/or an overall single "sight distance" rating for a crossing. The imposition of a single, uniform definition would be controversial, at best, and probably detrimental to existing State procedures and safety. The mass of data these additions would create makes the utility of the data questionable. For example, the measurements would be taken from at least three locations along the roadway from the nearest rail, for four different quadrants, with the possibility of a different value for each season of the year, i.e., potentially 48 different values. Thus, FRA does not plan to make this addition, but will provide space in the file record for States to optionally include sight distance, curvature, and/or descriptions according to their own definitions.

Further, FRA has no authority to direct the States to do anything regarding the Inventory. The Inventory Program is voluntary. FRA has

"assigned" responsibility for the inclusion and updating of specific data elements to States and/or railroads and continually encourages each to update this data regularly. FRA has developed procedures and computer programs (e.g., a program named "GX" for *Grade Xing* or *Grade Crossing*), which are provided at no cost to States and railroads to permit easy updating and submittal of data by either hard copy or computer disc. Soon, they will be able to submit updates electronically, similar to e-mail transmissions.

Current Status: In its letter of January 4, 2000, the Board responded that it was pleased to learn that FRA has expanded the Inventory to include additional data elements as well as a narrative explanation if needed. The Safety Board also understands that FRA lacks authority to require additional data, but notes that the presence of additional elements to be collected will help ensure that additional data collection will occur. The opportunity exists, however, for FRA to establish guidelines concerning when to collect data, what data to collect, and how to calculate sight distances. The Safety Board relies on the American Association of State Highway and Transportation Officials' handbook that contains guidelines to assist highway engineers by providing suggested formulas for calculating the sight distances at grade crossings. The FRA should consider incorporation of these formulas into suggested sight distance reporting for the Inventory and include a specific entry requirement on the report form. Based on FRA's response, the Safety Board has classified Safety Recommendation R-98-41 as "Closed–Acceptable Response."

R-98-42. **Ensure Identification Number Posted at all Crossings - "Encourage the railroads to ensure that the U.S. Department of Transportation identification number is properly posted at all grade crossings."**

FRA responded to the Board with its initial response on April 6, 1999, indicating that FRA has consistently encouraged both railroads and States to assign and display the US DOT/AAR Crossing Inventory identification number at all crossings. This is specifically called for in Chapter 2 of the "Highway-Rail Crossing Inventory Instructions and Procedures Manual" dated December 1996.

In 1973, FRA worked with the American Railway Engineering Association (now AREMA) and the Association of American Railroads (AAR) to define and publish the standards for a crossing identification number sign to be used by all railroads and States for posting the US

DOT/AAR Crossing Inventory Number at all crossings. These standards were published in the initial 1974 Inventory Instructions and Procedures Manual and again in the most recent version dated 1996.

The Intermodal Surface Transportation Efficiency Act of 1991, (ISTEA) provided for the eligibility of using Surface Transportation Program (STP) funds for procurement and posting of the identification number signs by the States (see 23 USC 133.B.10 which states that eligible funds may be used for "...development and establishment of management systems..."). Additionally, FRA has promoted the posting of "1-800 toll-free telephone number Emergency Notification" signs at all public and private at-grade crossings that utilize the crossing number. After completion of the Conrail acquisition, approximately 125,000 crossings (about 47 percent of all at-grade crossings) will be equipped with "1-800" signs. FRA requested the Board to consider this Safety Recommendation as "Closed--Acceptable Action."

Current Status: In its letter of January 4, 2000, the Board responded that it appreciates FRA's prior efforts; however, during this investigation, they found that a third of the crossings (19) did not have identification numbers posted, and two had the wrong number posted. Thus, Safety Recommendation R-98-42 is classified as "Open–Unacceptable Response."

R-98-44. **Traffic Controllers and Communications Midwest Road and Wilson Road - "In cooperation with the Federal Highway Administration, the Indiana Department of Transportation, and the National Steel Corporation's Midwest Steel Division, take immediate steps to provide traffic controllers to supervise and coordinate the safe movement of highway and railroad traffic at the Midwest Steel and Wilson Road grade crossings. Ensure that the traffic controllers are able to communicate directly with highway and railroad traffic, and keep the controllers assigned to this duty until permanent engineering changes to these grade crossings can be identified and implemented."**

This Safety Recommendation was received on August 12, 1998. FRA responded to the Board with its initial response on October 7, 1998, indicating that following the June 18, 1998 accident, FRA representatives participated in NTSB's accident investigation, and also conducted a separate independent investigation of potential remedial measures applicable to Midwest Road and adjacent crossings on this rail corridor. As a result of the

initial findings, two major meetings were arranged with all interested parties involved. These meetings were conducted on June 24, and on July 31, 1998. The following agencies and organizations were present during each of these meetings: Consolidated Rail Corporation, Federal Highway Administration, FRA, Indiana Department of Transportation, Indiana Harbor Belt Railway, Indiana Port Commission, National Railroad Passenger Corporation (Amtrak), National Steel Corporation, National Transportation Safety Board, Northern Indiana Commuter Transportation District, and the Portage, Indiana Police Department.

During the June 24 meeting, the details as known at the time of the June 18 collision were discussed at length. The current configuration of the storage area between the Conrail and NICTD main tracks, which can become an entrapment area for vehicular traffic, and the other dangerous situations were reviewed. This discussion also covered possible interim measures, including closing crossings that could be taken to preclude a recurrence.

The discussion at the July 31 meeting centered upon the two separate incidents where trains made emergency stops to avoid collisions with trucks in the area. At this meeting, agreement was reached to close one crossing at the west end of National Steel, i.e., the "Continental Can Crossings." Plans were also discussed to secure flagging protection for the Midwest and Wilson Road crossings as an interim measure until these crossings can be permanently closed. Also, agreement was reached with the parties involved that traffic coordinators will be positioned at both crossings during times of each crossing use.

Because of different considerations at each crossing, i.e., different ownerships and unique situations, the Board was provided with a detailed discussion concerning the interim corrective action steps taken for each crossing:

Continental Can Crossing - Interim Corrective Action: National Steel agreed to close and lock the west gate entrance to National Steel known as Continental Can Crossing. This action eliminates the number of crossings over Conrail and NICTD's main line tracks in this general vicinity from three to two. This west entrance will remain locked at all times and only be used in an emergency. Also, anytime the west entrance is to be used, National Steel will notify both NICTD and Conrail as soon as possible

of the type and length of use and special precautions that National Steel will have in place during the use of the crossing, which would include a properly trained and equipped traffic controller.

Midwest Road - Interim Corrective Actions: Following the June 18 collision, Midwest Road, a private crossing owned by National Steel, was closed for vehicular traffic until additional arrangements could be made to eliminate or minimize the potential of a future similar accident from occurring.

National Steel operates around the clock, seven days per week, with minimal operations conducted on weekends. Their normal schedule for receiving and shipping by truck is from 6:30 a.m. until 3 p.m., Monday through Friday. However, truck shipments are still received and dispatched outside of these normal weekday hours and on weekends. A check of vehicular traffic counts at Midwest Road during July 1998 indicates that the majority of truck counts occur between 6 a.m. and 4 p.m. After 4 p.m., the count of vehicular traffic was found to be less than 10 trucks per hour during weekdays.

In consultation with the City of Portage, Conrail and NICTD Police, it was recommended that a traffic controller (flagman) would be most effective at the Midwest Road crossing if used only during the peak traffic hours (6 a.m. to 11 a.m., and 1 p.m. until 4 p.m.). It was the opinion of these police representatives that if a traffic controller were assigned at this location around the clock, seven days per week, after a short period the presence of the traffic controller would become ineffective. The rationale given was that drivers would become accustomed to continually seeing a traffic controller, and they would tend to dismiss or disregard the purpose for which the traffic controller was present.

On June 25th, National Steel reopened Midwest Road, committing to FRA that the following safeguards would be in place by July 9. This agreement did not preclude National Steel from taking any additional actions that will improve safety or awareness of the vehicles users of this crossing.

1. **Traffic Controller***. Beginning July 9, 1998, National Steel initially began using security personnel to act in the capacity as a traffic controller at Midwest Crossing. The traffic controller position, filled by the security person, has been in place during the peak vehicular

traffic hours (6 a.m. to 11 a.m., and 1 p.m. until 4 p.m.), each day Monday through Friday since that date. National Steel hired four additional employees for security positions who were then provided training to provide coverage to this new position responsibility. On September 3, 1998, National Steel established the permanent position of traffic controller, with sufficient personnel trained in flagging duties to fill this position. The trained employees are also equipped with reflectorized vests, hard hats, whistles, and with both day and night flagging equipment. The traffic controllers are able to communicate with highway traffic by means of hand signals and flagging equipment. National Steel has assigned two trained employees each day as traffic controllers at Midwest Road, to allow rotation of employees on the traffic controller position every two or three hours. One employee will perform actual traffic controller duties for a two or three-hour period while the other remains in the heated main gate office. The two employees will then rotate, thereby alleviating the need of one employee being outside performing this duty for the full eight hours. This is deemed to be necessary to maintain maximum alertness on the part of the traffic controller, and to give consideration to the need for relief, especially during cold weather situations. National Steel has also provided their assurance to FRA that this position will be maintained until the new overpass has been completed and is in operation.

Efforts are presently underway to provide the traffic controllers at Midwest Road with direct telephone lines to communicate with the Conrail train dispatcher at Dearborn, Michigan, and NICTD dispatcher at Michigan City, Indiana. The traffic controllers are equipped with private radios capable of reaching the attended main gate, where a telephone is to be installed providing direct telephone connections to both railroad dispatchers at this main gate location. Both railroads are cooperating and telephone line installations are targeted to be operational in the very near future. In the interim, the main gate that presently does have a telephone has been provided the 1-800 telephone numbers to both railroad dispatcher offices, and to their signal departments. When direct communication lines are operational, FRA will advise the Board. FRA will monitor to ensure these installations are effective as soon as possible.

* On August 19, at approximately 3 p.m., a single trailer semi-truck exiting the National Steel facility crossed the Conrail main lines and was about to cross the NICTD main lines, the gates started to lower and came down onto the truck. The truck driver stopped, and the National Steel security person acting as a traffic controller informed the truck driver to back the truck to clear the tracks. In so doing the driver broke the NICTD gate and cleared the tracks. The security person told the truck driver to pull his truck to the left to clear the Conrail tracks. The truck driver either stalled his engine or shut it off. Soon after this, an Amtrak westbound passenger train approached the crossing on the Conrail track that was obstructed by the semi-trailer. The Amtrak engineer observed the obstruction and applied the train's air brakes into emergency application. The train stopped approximately 150 yards short of the crossing.

While the above indicates the value of having a traffic controller present at the crossings, and the actions taken that may have assisted in the avoidance of a collision between the NICTD train and the truck, it also underscores the dangerous storage area between the Conrail and NICTD tracks. For this reason, further discussions between FRA and the railroads have transpired that resulted in the railroads concurring to placing a permanent speed restriction in effect to reduce the speed of Amtrak and NICDT commuter passenger trains from the present 79 mph maximum authorized speed, to a speed of 65 mph over both crossings.

2. **Lighting at the crossing.** National Steel agreed to improve lighting at the Midwest Road highway-rail grade crossing. National Steel has since installed a 60-foot tall light pole that has six 1,500-watt lights directed at the Conrail and NICTD trackage over Midwest Road crossing. During this construction and installation, National Steel consulted with Conrail and NICTD representatives and obtained their concurrence that the arrangement of lighting did not interfere with or pose any hazard to railroad operations.

3. **Scheduled arrival time for trucks.** National Steel agreed to seek solutions to the problem of trucks lining up along U.S. Highway 12 waiting to enter National Steel at Midwest Road. In the past, truck drivers have arrived during the night, and parked along U.S. Highway

12 until the facility opened to receive them. This practice contributed to a general congestion problem not only on Highway 12, but also on Midwest Road when National Steel did open. A plan was developed to schedule arrival times for each truck, and to require that drivers not arrive before this scheduled arrival time. The City of Portage Police Department has agreed to aggressively patrol this section of Highway 12 to ensure that this past problem is alleviated.

4. **Restriction on trucks entering and leaving at night.** National Steel agreed that it would not allow trucks with a total length greater than 58 feet into its facility after dark. If trucks over 58 feet in length need to use the Midwest road crossing after dark, a traffic controller (flagman) will be called to provide protection for truck traffic over the railroad crossings.

5. **Use of "Pre-Scale Tickets" to reduce congestion on Midwest Road.** National Steel agreed to establish a procedure of issuing "Pre-Scale Tickets", to a majority of the inbound trucks to their facility. Prior to the June 18 accident, trucks entering their facility were required to stop at National Steel's main gate to receive a "scale ticket," which at times caused congestion with several inbound trucks stacking up and potentially causing them to stop on the railroad tracks at Midwest Road crossing. Because National Steel controls approximately 80 percent of all trucks inbound to their facility, the issues of "pre-scale tickets" to the majority of drivers will eliminate the need for trucks to stop at the main gate, and will allow them to continue on to the scale for weighing. This new procedure should alleviate congestion arising from this past practice.

6. **Improvement in Cautionary Signage for Vehicular Traffic.** National Steel agreed to place additional cautionary signs to inform vehicular traffic of the hazards at the Conrail and NICTD tracks over Midwest Road crossing. Prior to the June 18 accident, there were cautionary signs in place in advance of the NICTD trackage, however none were in place in advance of the Conrail trackage intersecting Midwest Road. National Steel has now installed additional signs reading, "DO NOT STOP ON TRACKS" at locations that will warn and remind drivers of vehicles in both directions over both the NICTD and Conrail sets of tracks at the Midwest Road crossing.

All of the above improvements have been completed, with the exception of the installation of direct telephone lines to the railroad dispatchers for use by the traffic controllers.

NICTD, Conrail, INDOT, the Federal Highway Administration (FHWA), and FRA are currently working to determine what improvements can be made to the highway-rail grade crossing signals and gates, and the interconnected highway traffic signals at Midwest Road. This group is focusing on what can be done with the existing equipment to improve traffic safety. The plan at present is to remove the inside gates and lights between the Conrail and NICTD main lines. This action will prevent trucks from becoming trapped in the storage area between the two railroad's main tracks. FRA has also recommended to National Steel to improve the crossing surface to allow vehicles to exit the crossing more rapidly. National Steel has agreed to accomplish this surface improvement, and indicated that work would be started on October 1, 1998. Also, FRA is working with INDOT to improve traffic signs on Highway No. 12 that warn motorists of the special circumstances at this crossing. INDOT has this issue in the design stage at this time.

Wilson Road - Interim Corrective Actions: Wilson Road was originally classified as a public road, constructed to provide access to two proposed lakeshore housing developments in the late 1950's. Since that time, the Indiana Port Commission purchased the private developments and all property access presently is for industrial purposes. While the designation is still public and all agreements are to that effect, there are no reasons for the general public to use this road. This crossing is used only for vehicles with loads that exceed 80,000 pounds, which is beyond the weight limit for the existing overpass that provides access into the industrial complex known as the Port of Indiana.

Following the June 18 accident, and during our subsequent meetings and discussions, representatives of the Indiana Port Commission agreed to provide the following additional safeguards on an interim basis until the new overpass has been completed and is in operation. The following agreed to safeguards do not preclude the Indiana Port Commission from taking any additional actions that will improve safety or awareness of the users of this crossing:

1. **Traffic Controller.** This issue has not as yet been resolved. A traffic controller is not yet in place. The Indiana Port Commission agreed to provide a Traffic Controller at the Wilson Road crossing during the hours it is in use to safely direct and coordinate highway traffic. The FRA has received commitments from NICTD and Conrail to install chain link gates at Wilson Road. These gates (locked gates north and south of the railroad tracks) once in place, would only be opened by the Port of Indiana security personnel and the security personnel would be required to stay at the crossing and coordinate (flag) all vehicular traffic moving across both the NICTD and Conrail tracks at Wilson Road.

   Because of the legal question of this possibly being a public crossing, the railroads involved have been reluctant to follow through to install fences with padlocks due to possible litigation. Because of the limited number of trucks that use this crossing, there is a reluctance to provide a full time traffic controller. FRA estimates that a maximum of 12 trucks per day actually need to use this crossing because of excess weight being transported, and none would need to use this crossing if their weight were reduced. FRA also believes that there is considerable other automobile traffic that uses Wilson Road that is not necessary. It is for this reason that some Conrail employees utilize Wilson Road to gain access to their Burns Harbor Yard, for which entrance and exit is available at another location.

   Because of this situation, FRA has informed all parties to meet on October 7, 1998 to bring successful resolution of this matter. The parties have been informed that FRA will seek to have Wilson Road completely closed unless the fencing with padlock is installed, with a properly trained and equipped traffic controller available to open the gate when trucks need to use this crossing to unload or load. FRA expected this issue to be resolved by the end of October 1998.

   The issue of providing direct telephone line connections to each of the railroad dispatcher offices also has not as yet been resolved. FRA is still working with National Steel and the railroads on this issue by exploring alternative options. If the crossing remains open, some form of structure would need to be constructed to house a telephone, as the railroads are reluctant to provide railroad radios for use by traffic controllers. FRA will continue to seek a satisfactory solution to

this communication issue between traffic controllers and railroad dispatcher offices.

2. **Safety Instructions to Vehicular Drivers.** The Indiana Port Commission has made arrangements to ensure that all vehicular drivers using Wilson Road to gain access into and out of the Port are provided with information and instruction for safe passage. This information will consist of the restrictions and safeguards that have been established since the June 18 collision.

3. **Prohibit Use of Crossing during darkness.** The Indiana Port Commission will not allow trucks to use Wilson Road after dark. At this time, it is not anticipated that trucks will need to use the Wilson road crossing after dark, however, if this should become necessary, additional lights will be installed at the crossing.

Additional Precautionary Outreach Efforts applicable to both crossings: In addition to the above, the following actions have or are being taken:

(1) On August 26, 1998, the FRA, in conjunction with Conrail, NICTD, Amtrak, the City of Portage, Porter County, and the Indiana State Police, conducted a general traffic safety enforcement blitz, lasting seven hours, at Midwest and Wilson Roads. As part of the safety blitz, each business in the area was entered and Operation Lifesaver (OL) information was distributed to truck drivers loading or unloading within each plant. Representatives made themselves available to answer questions about Highway Grade Crossing Safety. The City of Portage Police also conducted random safety inspections and distributed OL information to trucks passing through the area. More than 600 drivers were contacted. Another blitz of this nature was scheduled for October 28, 1998. Enclosed is a copy of the material that was distributed to the truck drivers.

(2) National Steel has agreed to have their Training Department incorporate Operation Lifesaver (OL) materials into their on-going training. National Steel conducts an "Occupational Safety and Health Day", once each year for the purpose of providing refresher training to all of its employees, which includes the drivers of the two trucking companies that they own. Including OL material into this one day of

annual training will increase the awareness of the railroad dangers involved, and reinforce the need for caution by the drivers that use Midwest and Wilson Roads.

Permanent Solution - Both Midwest and Wilson Roads: Plans for a new overpass with a weight capacity of 150,000 have been in progress for the past two years. The engineering work has been completed, and a target date for completion has been established as the fall of 1999. (Although FRA has not yet provided an update to the Board, the engineering and design work for the highway overpass was completed in 2000. Scheduled completion of the overpass is projected for December 2002.)

A representative from American Consulting Engineers (ACE) made a presentation on their preliminary finding of a feasibility study for east/west access north of the railroad from National Steel (Midwest Road) to an overpass that crosses the railroads located 3/4 mile east at the Port of Indiana. ACE stated they would complete the study by mid-September 1998. At that time, INDOT will review the study to determine if further engineering work is needed to address the additional traffic that will use the overpass. It is our understanding that ACE completed their study on August 29, 1998, and the group will met on September 11, 1998, for discussion of the overpass construction plan.

FRA believes that the interim actions that have and are being taken to provide additional safeguards at these two crossings partially address the urgent safety recommendation of the Board. Once the remaining issues involved in the Safety Recommendation are resolved, they will remain in place until the construction of the new overpass has been accomplished. Because the FHWA and INDOT have jurisdiction over the completion of the highway overpass, FRA believes it is pursuing all actions contemplated by the Board in its recommendation. FRA will continue to monitor to ensure that all aspects that were agreed to by National Steel, the Indiana Port Commission, and the railroads involved, are maintained until the long-term solution is achieved. Therefore, FRA requested the Board to consider this urgent Safety Recommendation as "Open--Acceptable Action."

Current Status: The Board, after receiving and evaluating FRA's initial response to this Safety Recommendation, advised in its letter of January 26, 1999, that the Safety Board was pleased to learn that the FRA shares the Board's concerns about the situation that exists at each of these

crossings and that interim safeguards are in place until permanent solutions, such as grade separation and related engineering modifications, can be developed. Until the FRA is able to advise us that all aspects of this recommendation are in place, the Safety Board has classified Safety Recommendation R-98-44 as "Open–Acceptable Response."

R-98-54. **Identify and replace shallow foundation bridges - "Require that all railroads identify and perform a one-time risk assessment of the bridges on their systems that have shallow foundations of similar construction to the bridge 504.1 that failed in the Kingman, Arizona, accident, and require replacement of those bridges determined to be susceptible to undermining and loss of the supporting foundation structure."**

FRA responded to the Board with its initial response on February 26, 1999, indicating that on August 9, 1997, Amtrak train number 4, the Southwest Chief, derailed on a track owned and operated by The Burlington Northern and Santa Fe Railway Company about five miles east of Kingman, Arizona. The derailment resulted from the failure of a timber trestle under the track after a flash flood washed out the soil on which the substructure of the trestle was founded. The National Transportation Safety Board (NTSB) and the Federal Railroad Administration investigated the derailment.

Following this derailment, and because of a number of fairly recent train derailments caused by unexpected track damage from moving water, on September 4, 1997, FRA issued a Safety Advisory, SA 97-1, which constitutes a set of guidelines intended to reduce the possibility of similar occurrences. FRA deemed it appropriate to issue this safety advisory to provide railroads with recommended procedures that reflect best industry practice for special track inspections. The procedures include:

prompt notification of dispatchers of expected bad weather;

limits on train speed on all track subject to flood damage, following the issuance of a flash flood warning, until special inspection can be performed;

identification of bridges carrying Class 4 or higher track which are vulnerable to flooding and over which passenger trains operate;

availability of information about each bridge, such as identifying marks, for those who may be called to perform a special inspection;

training programs and refresher training for those who perform special inspections; and

availability of a bridge maintenance or engineering employee to assist the track inspectors in interpreting the inspectors' findings.

This Safety Advisory was amended on November 14, 1997, to clarify the guidelines related to the communication of weather warnings from the National Weather Service and commercial providers of specialized weather reports. A copy of Safety Advisory 97-1, as amended, is attached as Appendix A.

Subsequent to the issuance of the SA 97-1, FRA published a major revision of the Federal Track Safety Standards, Title 49, Code of Federal Regulations (CFR), Part 213. This final rule was issued in the *Federal Register* on July 3, 1997. This rulemaking had been carried out over a multi-year period. All interested persons and entities were invited and encouraged to participate in the formulation of the revised regulation.

The rulemaking addressed the issues raised in SA 97-1, and considered inclusion of those provisions into the regulation. One commenter referred to the Notice of Safety Advisory 97-1, issued by FRA on September 4, 1997. See 62 Fed. Reg. 46793. The commenter recommended that the provisions contained in the advisory be adopted as regulations under this section. In the final rule issued on July 3, 1997, the rule adopted was as proposed in the NPRM, and did not incorporate the procedures outlined in the Notice of Safety Advisory 97-1. As was stated in SA 97-1, FRA believes that, "49 CFR 213.239 is necessarily general in nature, because it is not practical to specify in a minimum safety standard all the conditions which could trigger a special inspection, nor the manner in which any particular special inspection should be conducted. Of course, all such inspections should be conducted so as to effectively prevent derailments, and the procedures included in the safety advisory are designed to aid railroads in performing effective inspections."

In the Section-by-Section portion of the final rule, on page 36153, the following is shown with respect to Section 213.239–Special Inspections:

"The RSAC recommended no change to this section, and likewise, FRA proposed no change to the language in the regulation. However, FRA believes that an explanation of agency policy interpreting the section is in order. Although this section contains a sample list of surprise events that routinely occur in nature, FRA does not view this provision as limited to only the occurrences listed or to only natural disasters. "Other occurrences" which include such natural phenomena as temperature extremes, as well as unexpected events that are human-made, *e.g.*, a vehicle that falls on the tracks from an overhead bridge, a water main break that floods a track roadbed, or terrorist activity that damages track. This interpretation is not new; FRA has always viewed this section to encompass sudden events of all kinds that affect the safety and integrity of track."

Thus, it was decided by the participants and by FRA that the provisions of SA 97-1 should remain as issued, and not be written into a regulation. However, the rule text in the former Track Safety Standards at 49 CFR § 213.239 was revised in the new regulation, at 49 CFR § 213.239 for conventional rail, i.e., classes 1 through 5, and, at 49 CFR § 213.367 for the newly defined high speed rail, i.e., classes 6 through 9.

§ 213.239 Special Inspections. (In effect on date of accident, August 9, 1997 for all classes of track)	*§ 213.239 Special inspections.* Revision effective on September 21, 1998 for Track Classes 1 through 5 (Conventional Rail):
In the event of fire, flood, severe storm, or other occurrence that might have damaged track structure, a special inspection must be made of the track involved as soon as possible after the occurrence.	***In the event of fire, flood, severe storm, or other occurrence which might have damaged track structure, a special inspection shall be made of the track involved as soon as possible after the occurrence and, if possible, before the operation of any train over that track.***

	§ 213.367 Special inspections. Revision effective on September 21, 1998 for Track Classes 6 through 9 (High Speed Rail):
	In the event of fire, flood, severe storm, temperature extremes or other occurrence which might have damaged track structure, a special inspection shall be made of the track involved as soon as possible after the occurrence and, if possible, before the operation of any train over that track.

FRA's analysis of this recommendation indicates that the Board desired FRA to require railroads to do three things:

1. Identify every bridge susceptible to undermining and loss of foundation support,

2.Perform a one-time risk assessment on each bridge so identified, and

3.Replace each bridge so identified with an invulnerable structure.

With respect to the identity of every bridge susceptible to undermining and loss of foundation support, SA 97-1 called for railroads to identify and investigate all bridges over which passenger or high-speed freight trains operate to determine if they are susceptible to damage from flash floods or other severe weather phenomena. Every railroad fitting this category reported to FRA before the end of 1997 that their bridges had been identified and classified as to hazards and risks presented by flash floods, either due to shallow foundations or stream bed configuration.

Subsequent investigations by FRA safety inspectors have shown these reports to be truthful and complete. Therefore, FRA believes the intent of identifying the bridges in question has been accomplished by FRA and the

railroad industry without the need to issue a regulation compelling the action.

With respect to that part of the Board's recommendation that FRA require a risk assessment on each susceptible bridge, Safety Advisory 97-1 called for the railroads to determine the vulnerability of each bridge of this type that they had identified. Each affected railroad has performed the initial one-time risk assessment and evaluation on each identified susceptible bridge during 1997 and 1998. In addition, these evaluations will continue on an annual basis as a part of the annual joint bridge/track inspections called for in SA 97-1, and during the annual bridge inspections that are the industry standard as referenced in FRA's Interim Statement of Agency Policy on the Safety of Railroad Bridges, issued on April 27, 1995. Thus, the intent of this part of the Board's recommendation has not only been accomplished, but also exceeded by FRA and the railroad industry without the need for a regulation. FRA believes that the issuance of a regulation in this matter is not necessary to achieve the element of safety desired. A continuing procedure of inspection, evaluation and assessment is an effective means of countering the hazards presented by flash floods or other natural phenomena. The continuing programs of inspection called for in SA 97-1 and the FRA Bridge Policy Statement enhance the effectiveness of the actions taken in this respect beyond that which would be provided with a one-time risk assessment.

The Board further recommended that FRA require the replacement of all susceptible bridges. Although FRA has published SA 97-1 that calls for railroads to take specific, effective actions to protect the safety of trains during severe weather events, FRA has not initiated a rulemaking to mandate the replacement or removal from service of any bridges. It is for this reason that the bridges and other locations on the affected railroads that are susceptible to damage in these occurrences have been identified, and procedures are now in place to assure that trains do not operate over structures that might have been weakened or damaged in these storms. The one bridge that FRA ordered removed from service, under Emergency Order No. 19 in 1996, was structurally deficient and was not subject to sudden damage from a severe weather event.

The affected railroads have implemented the provisions of Safety Advisory 97-1. They are programming replacement and rehabilitation of bridges as part of their normal capital replenishment programs. The

potential expense and loss of service associated with susceptible bridges is being factored into the economic and safety decisions affecting the selection of bridges for replacement. The railroads are protecting the safety of train operation over their bridges in accordance with the provisions of SA 97-1 without resorting to the entire replacement of all bridges having shallow foundations.

The complete replacement of railroad bridges susceptible to damage from flash floods on the Nation's railroads cannot be justified from the standpoint of safety or economics. With SA 97-1, FRA and the railroads have instituted the procedures necessary to protect the safety of trains during flash floods, by restricting train speeds and improving storm warning and track inspection procedures. If a bridge is damaged, but no train approaches or crosses it, then the damage to the bridge is a service and expense issue to the railroad, but it is not a safety hazard. As long as timely weather warnings are obtained and prompt, competent inspections can be performed to protect the safety of railroad operations, FRA cannot justify a regulation calling for the replacement of railroad bridges.

FRA has taken actions that meet the Board's intent on all three parts of this safety recommendation, even though we have not addressed these issues in rulemaking. Based upon our actions, FRA requested that the Board consider classifying Safety Recommendation R-98-54 as "Closed–Acceptable Alternative Action."

Current Status: In its letter of July 29, 1999, the Board advised that it was pleased to learn that the FRA, through Safety Advisory 97-1, prompted railroads to perform a one-time risk assessment to determine those bridges that are susceptible to foundation failure. The Safety Board understands that railroads, in reports submitted to FRA in compliance with SA 97-1, have documented hazards and risks for bridges that carry passenger trains and high-speed freight trains. The Safety Board requested copies of information submitted by railroads about the bridges found to have been at high risk and information as to whether any of these bridges were identified for immediate replacement based on risk. Until convinced that the voluntary program outlined in the FRA's response will enhance the safety of these bridges and also preclude the possibility of another accident, the Safety Board has classified Safety Recommendation R-98-54 as "Open–Unacceptable Response."

R-98-55. **Incorporate Safety Advisory 97-1 into Regulation - "Incorporate the intent of Safety Advisory 97-1 into minimum safety standards for special inspection procedures for bridges that would be at risk during severe weather."**

FRA provided its initial reply to the Board in our letter of February 26, 1999. FRA advised it has published a major revision to the Federal Track Safety Standards after a cooperative rulemaking under the Railroad Safety Advisory Committee (RSAC). The RSAC and FRA considered including some or all of the provisions of Safety Advisory 97-1 as a regulatory provision, but it was found to be unnecessary owing to the adoption of the provisions of SA 97-1 without regulatory incentives. The Track Safety Standards carry a requirement for special inspections following floods or other occurrences that might have damaged the track structure, including track-supporting structures. The revision, found in 49 CFR §213.239 calls for these special inspections to be made before the operation of trains over the subject track wherever possible. The railroads have adopted the inspection procedures called for in SA 97-1 and the revised Track Safety Standards.

The Section-by-Section Analysis to 49 CFR §213.239 in the preamble to the Final Rule carries the rationale behind the decision to not incorporate SA 97-1 into the regulation. This rationale is justified by the fact that the provisions of SA 97-1 have been adopted by the railroad industry without the need of promulgating regulations.

To expand on this, the Safety Advisory is an official expression by the Federal Government of the actions that are expected to be taken in compliance with 49 CFR §213.239. It promulgates a standard of care to which every railroad can be held in a non-regulatory civil proceeding. Were it to be placed into a regulation, the only additional incentive given railroads to comply would be the threat of civil penalties imposed by FRA. As the Board is aware, railroad managements have other incentives to protect their property and prevent accidents and casualties. Avoiding the expense, in addition to potential human casualties, associated with derailments involving bridges is a major incentive. The widespread benefit gained by the Nation and the railroad industry from SA 97-1 does not arise from the fact that the Federal government said "Do this, or else." It comes from the awareness by railroad managers and employees of the circumstances surrounding the Kingman derailment, a strong desire to avoid a recurrence, and an

understanding that the actions called for will be effective in avoiding this type of occurrence again.

If SA 97-1 were in the form of a regulation, FRA would not have the flexibility to modify it for greater effectiveness. It would have to be set forth in more detail, in order to be enforceable, but the only provisions that could withstand the regulatory evaluation process would be those that are essentially necessary for a minimum safety standard. Because the operative provisions of SA 97-1 have been adopted by the railroad industry, and because FRA has the necessary regulatory authority in 49 CFR §213.239 to see to its continuance, FRA requested that the Board consider classifying Safety Recommendation R-98-55 as "Closed–Acceptable Alternative Action."

Current Status: In its letter of July 29, 1999, the Board advised that it was satisfied that Safety Advisory 97-1 would provide the railroads with voluntary inspection guidelines that reflect the best industry practices intended to reduce the possibility of similar accidents under similar circumstances. The Safety Board indicated it was disappointed to learn that the FRA has, by not incorporating the intent of the safety advisory into minimum safety standards, decided to permit railroads to adopt or ignore Safety Advisory 97-1's best practices. Since no mention was made of any further action, the Safety Board has classified Safety Recommendation R-98-55 as "Closed–Unacceptable Action."

R-98-56. **Positive Seat Securement System for Passenger Cars - "Include in the passenger car safety standards a requirement for positive seat securement systems to provide against the disengagement and undesired rotation of seats in all new passenger cars purchased after January 1, 2000, and require the incorporation of such a system into existing passenger cars when they are scheduled for overhaul."**

FRA responded to the Board with its initial response on February 26, 1999, indicating that NTSB's investigation of the Kingman derailment also raised issues concerning seat securement. Inspection of the train's seats indicated that none had become separated from their floor mountings. However, 18 seat assemblies were found with their rotating locking mechanisms not engaged. The Board indicated that a disengaged seat lock could result in an uncontrolled rotation of the seat assembly, even in cases of a minor derailment, which may result in serious injuries to passengers. The

Board cited the August 23, 1990, Batavia, Iowa, accident report in which the Board had stated its concern regarding Amtrak's seat locks and indicated that seats can become unlocked either because passengers disengage the locking mechanisms en route, or because they are defective. Following that accident, the Board issued Safety Recommendation R-91-71 to Amtrak. Amtrak implemented Safety Recommendation R-91-71, which initiated procedures for on-board-service personnel to periodically check passenger seats en route for unlocked anti-rotational devices, and to take action to ensure seats are functional.

Following the Kingman derailment, the Board indicated that absolute assurance of locked anti-rotational devices by on-board personnel is not possible because passengers can readily disengage the mechanism to rotate the seat to suit their personal requirements. Also, they may fail to ensure that the locking mechanism is again positively engaged. Further, on-board service personnel may not be able to provide the constant vigilance necessary to ensure that the seat locking mechanisms have been properly restored, because it is not readily visible. The Board concluded that the current procedures used to check and ensure that passenger car seat locks are functional and engaged are inadequate. The Board feels that one solution may be to employ a positive locking mechanism that requires use of a special keying feature accessible only to crewmembers, such as a coach key. Also, this type of feature could effectively eliminate seat manipulation by passengers. As the Board is aware, FRA has been in the process of developing rulemaking on Passenger Equipment Safety Standards. The Federal Railroad Safety Authorization Act of 1994, enacted November 2, 1994, required FRA to issue initial passenger safety standards within 3 years (by November 2, 1997) and complete standards within 5 years (by November 2, 1999). The agency was authorized to consult with industry parties outside the Federal Advisory Committee Act, making it possible to conduct an informal negotiated rulemaking.

An initial meeting of the Passenger Equipment Safety Working Group (passenger railroads, operating employee organizations, mechanical employee organizations, and representatives of rail passengers) was held on June 7, 1995, and the group met regularly to develop an NPRM. Manufacturer/supplier representatives served as associate members. FRA prepared an Advanced Notice of Proposed Rulemaking indicating the issues under review by the working group, which was published June 17, 1996 (61 FR 30672). The working group held its final meeting on the NPRM on

September 30 through October 2, 1996, having reached consensus on a portion of the issues presented. An NPRM was published September 23, 1997 (62 FR 49728). The public hearing was held November 21, 1997 (see 62 FR 55204; 10/23/97). Comments were due November 24, 1997. A final working group meeting on the initial standards was held December 15 and 16, 1997, and an additional meeting on intercity and high-speed issues was held January 6, 1998. FRA issued the final rule for the first phase of the rulemaking on 5/12/99 (64 FR 25540). Work has begun on additional passenger safety regulations.

The NPRM as published in the *Federal Register* on September 23, 1997, proposed Section 238.233, "Interior Fittings and Surfaces," include provisions for securement of passenger car seats. However, the issue of special locking features to prevent the rotation of seats by passengers was not addressed. The FRA received the Board's Safety Recommendation R-98-056 on September 22, 1998, which was after the closure of the public comment on the NPRM. At the time the Board's recommendation was received the final rule text had been prepared, and was in the review process. Because we are overdue on issuing a final rule for initial passenger safety standards within 3 years (by November 2, 1997) as required by the Federal Railroad Safety Authorization Act of 1994, the Board's recommendation cannot be incorporated into that rulemaking at this time.

However, FRA plans to initiate a second phase of rulemaking in 2001. The issue of requiring special features to prevent passengers from rotating seats will be addressed at that time. Amtrak is currently aware of the Boards recommendation, and is developing prototype seat locking mechanisms that will hopefully meet the intent of the recommendation.

Therefore, until our rulemaking on the second phase of Passenger Equipment Safety Standards has been concluded, FRA requested the Board consider classifying Safety Recommendation R-98-56 as "Open–Acceptable Response."

Current Status: In its letter of July 29, 1999, the Board indicated they appreciate FRA's intention to initiate a second phase of rulemaking that will be used to discuss the need for positive seat securement systems for passenger cars. Based on FRA's pledge of rulemaking this year, the Safety Board has classified Safety Recommendation R-98-56 as "Open–Acceptable Response."

R-98-57. **Event Recorder Specifications be in Locomotive Records - "Require that event recorder system specifications be kept as part of the locomotive's records."**

FRA responded to the Board with its initial reply on February 26, 1999, indicating that the Board's investigation of the Kingman accident also found that Amtrak did not have the necessary software capability to read out all the data recorded on its own event recorders following this accident. The Board found that Amtrak was unaware that valuable additional data had been recorded on its event recorders; six more parameters were actually recorded but not extracted by the Amtrak Integrated Function Computer analysis program. The Board pointed out that the problem of mismatched software readout programs being used to read event recorder information is not new to the Safety Board, citing that hundreds of software readout programs and versions of those programs are used to read out today's solid state event records. The Board further noted that there are no industry-wide procedures or Federal regulations to address documentation of locomotive event recorders or readout system specifications. The Board emphasized that these specifications are necessary to conduct accurate readouts of event recorder data, and concluded that the event recorder system specifications should be kept as a part of the locomotive records, and that they be kept up to date. The Board indicated these records should include, at a minimum:

1. the name, version, and date of the readout program intended for use with the recorder currently installed on the locomotive;

2. the manufacturer, model number, and serial number of the event recording device and its associated components (to include the air brake manifold, axle generator or equivalent, and signal conditioning devices) currently installed on the locomotive;

3. a complete list of parameters that the recording system is currently configured to record; and

4. the recording system's manufacturer-prescribed modification, revision, and software-hardware version numbers.

From the Board's discussion, FRA ascertains that the Board wants this information to be kept not on each locomotive, but rather as a part of the

locomotive records that are maintained at a stationary office location. This seems plausible for reason that the Board states, that "Physical inspections of the locomotive to determine the recording system specifications can be impractical, or, in the case of severe accidents, impossible, because of component damage."

The Board is aware that present regulations require all railroads to provide FRA and/or National Safety Transportation Board (NTSB) the entirety of the raw information stored in the event recorder in accident cases when requested. See 49 CFR §229.135(d)(1). The Board is correct that the present regulation does not require railroads to document the extent and entirety of the raw information that is being recorded. FRA is in general agreement with the Board that this information should be made a part of each locomotive's record at the location on the railroad where that locomotive's record is maintained.

Accordingly, on January 28, 1999, this safety recommendation was provided to all members of the RSAC Event Recorder Working Group for their consideration in making a recommendation to FRA. As the Board is aware, this group has been meeting regularly for the past 18 months, and has been charged to develop recommendations to FRA for rulemaking in relation to the new generation of crashworthy event recorders. This group is nearing completion of their work and should have their final recommendations to FRA during 2001.

Once we have RSAC's recommendations, it is FRA's intention to draft rulemaking to address the crashworthiness standards for event recorders. In addition, the rulemaking will incorporate revisions to Section 229.135 Event Recorders, to require railroads to keep the event recorder system specifications as outlined by the Board as a part of the locomotive records at the location where the locomotive's records are maintained. Until such time was we are able to finalize rulemaking in this regard, FRA requested that the Board consider classifying Safety Recommendation R-98-57 as "Open--Acceptable Action."

In its letter of July 29, 1999, the Board indicated it was pleased to learn that the FRA intends to revise 49 CFR Part 229.135, "Event Recorders," to require railroads to keep the event recorder systems specifications as part of the locomotive's records. Based on FRA's

response, the Safety Board has classified Safety Recommendation R-98-57 as "Open–Acceptable Response."

Current Status: In the Board's letter dated December 6, 2000; the Board advised FRA that in the past 22 months, another five event recorders were destroyed in three separate accidents. The Board cited an accident on November 17, 1999, at Carnes, Iowa, on the Union Pacific Railroad; an accident on January 17, 1999, at Bryan, Ohio, on Consolidated Rail Corporation; and an accident on March 15, 1999, at Bourbonnais, Illinois, involving the National Railroad Passenger Corporation (Amtrak). The Board expressed its disappointment that the commitments made by the FRA to develop standards through RSAC have not been realized. As a result of this lack of progress, the Board classified Safety Recommendation R-98-57 as "Open–Unacceptable Response."

R-98-67. **Heat Treatment/Hardness Testing of Weld Repairs - "Inform all tank car repair facilities of the circumstances of the April 2, 1997, failure of a railroad tank car and release of anhydrous hydrogen fluoride in Memphis, Tennessee, and urge them to review and modify, if necessary, their practices for heat treatment and hardness testing of weld repairs to prevent additional tank car weld failures from hydrogen-assisted cracking."**

FRA provided its initial reply to the Board on June 2, 1999. FRA advised that shortly after the tank car failure, the FRA began to investigate the root causes of the incident. FRA urged the Association of American Railroads (AAR) to also investigate the anhydrous hydrogen fluoride tank car incident by reassessing the industry's welded-insert repair procedures, the requirements for hardness testing of welds and heat-affected zones, and the requirements for post-weld heat treatment. The significance of this action was to assemble a group of subject-matter experts to critically review the AAR standards and to make recommendations before the public in an open forum. The AAR docket, public forum, and publication of the results (similar to Federal rule making) will ensure that all tank car facilities have knowledge of the incident and that the AAR publishes an appropriate repair procedure in its Tank Car Manual and that each facility performs its repair procedures in accordance with the manual.

In 1997, the AAR formed a task force comprised of metallurgists, reliability, mechanical, and corrosion engineers, individuals qualified in non-

destructive examination, quality assurance representatives, and representatives from both the FRA and Transport Canada. In July 1998 and January 1999 the task force presented several recommendations to the Tank Car Committee and the public concerning filler material and post-weld heat treatment requirements for welded repairs to anhydrous hydrogen fluoride tank cars. The recommendations propose the use of a low-hydrogen electrode, where the tensile strength of the deposited material does not exceed 85 ksi or a carbon equivalent of 0.42. The task force further recommended a preheat and interpass temperature of 300 degrees Fahrenheit and a post-weld heat treatment temperature between 1150 and 1225 degrees Fahrenheit for one hour per inch thickness of material, with a minimum one hour hold time. These recommendations will help ensure that the weld metal is not susceptible to hydrogen-assisted cracking.

The task force is currently reviewing the methods and instrumentation for hardness testing of welds and the heat-affected zone and the number of readings required to ensure satisfactory results. Once completed, the AAR will circulate the results by letter ballot informing the all tank car facilities about the requirements for heat treatment and hardness testing of welded repairs to anhydrous hydrogen fluoride tank cars.

Based on the Board's recommendation, Transport Canada and the FRA requested AlliedSignal, Incorporated to withdraw from service its entire fleet of Class DOT-112 tank cars manufactured from AAR TC128 steel. In a mutual agreement, AlliedSignal could place the cars back into service only after nondestructive examination and hardness testing of the weld and heat-affected zone of the weld area complied with Federal law. Transport Canada and FRA are monitoring the inspections.

The Board advised FRA in its letter of December 29, 1999, that it was pleased to learn that the AAR, at FRA's request, formed a task force to address the circumstances of the tank failure by developing changes to the AAR's Tank Car Manual. The Board also noted that the AAR will circulate the changes to all tank car facilities. Pending review of the changes after they have been incorporated into the AAR's Tank Car Manual, the Safety Board classified Safety Recommendation R-98-67 as "Open–Acceptable Alternative Response."

In FRA's letter of July 2, 2001, provided an update to the Board for Safety Recommendation, R-98-67. FRA advised that an AAR task force

comprised of metallurgists, reliability, mechanical, and corrosion engineers, individuals qualified in non-destructive examination, quality assurance representatives, and representatives from both FRA and Transport Canada was formed to address this issue. The task force made several recommendations that have been adopted into the AAR's Tank Car Manual through the publication of an AAR Casualty Prevention Circular (CPC-1115). A copy of that circular was provided to the Board with this letter.

Current Status: In its letter dated October 29, 2001, the Board advised that the circular provided by FRA modified the M-1002 requirements for the manufacture and repair of tank cars used in anhydrous hydrogen fluoride service. The Board further advised that the formation of the task force and the resulting recommendations and modifications are an acceptable alternative approach that meets the intent of the recommendation. The Board classified Safety Recommendation R-98-67 as "Closed–Acceptable Alternate Action."

R-98-68. **Prohibit Transportation of Anhydrous Hydrogen Fluoride in Tank Cars with TC 128 steel -"Prohibit the transportation of anhydrous fluoride in tank cars manufactured of TC128 steel."**

FRA provided its initial reply to the Board on June 2, 1999. The Safety Board has recommended that FRA forbid the use of AAR steel specification AAR TC128 given that its exposure to anhydrous hydrogen fluoride causes the formation of hydrogen blisters. The Safety Board's recommendation was partially based on a 1985 Chemical Manufacturer Association's (CMA) quantitative study on the performance history of tank car steels used in anhydrous hydrogen fluoride service. The CMA study simply collected the number of Class DOT-105A tank cars that were found with hydrogen blisters that resulted in a welded insert repair. The study did not include the performance history of all tank cars constructed from AAR TC128 steel, tank cars constructed from ASTM A515 or A516 steels (the steels commonly used within the industry), or tank cars constructed to Class DOT-112A (the specification of the car that failed).

To update the 1985 CMA report, the FRA, in cooperation with the Hydrogen Fluoride Industry Practices Institute (HFIPI), is studying the performance history of the entire fleet of tank cars used in anhydrous hydrogen fluoride service. The study asks for information on the age of the car, the steel specification, the steel-making practice (e.g., normalizing or

calcium-argon blown, or both), the results of all inspections, and if welded inserts were applied. It is apparent in the data collected to date that there is a correlation between the steel-making practice and the number, type, and size of elongated inclusions within the steel and subsequent blister formation. This observation is in agreement with the scientific literature and in particular to the findings in *"Hydrogen Blistering of Steel in Anhydrous Hydrofluoric Acid"* (Schuyler) mentioned in your letter.

Of the 26 tank cars manufactured from AAR TC128 steel, five had blisters. These cars were manufactured under the same building order. Visual observations of the cars show that hydrogen blisters formed only in specific tank "rings." Since the majority of the tank rings and heads were free of blisters, the evidence supports again that there is an association between hydrogen blister formation and the steel-making practice from heat-to-heat and from car-to-car.

To produce steel with very few elongated inclusions, HFIPI currently recommends steel with low sulfur content, reduced oxygen, and inclusion shape control (calcium-argon blown [CAB]). Although the HFIPI recommended practice suggest the use of ASTM-A516 steel, the steel-making practice may be applied to other steels as well, such as AAR TC128. Several shippers of anhydrous hydrogen fluoride also specify full-ultrasonic examination of the plate material for inclusions. These practices have resulted in the near elimination of hydrogen blisters within the tank envelope. Although the task force has not finalized its recommendations to the AAR Tank Car Committee, there is strong support for specifying an inclusion-shaped controlled steel-making practice, or equivalent. This approach focuses on the root causes of hydrogen blister formation, the inclusions, and establishes a performance standard as part of the steel-making practice for plate used in anhydrous hydrogen fluoride service rather then eliminating a particular specification of steel.

The Board advised in its letter of December 29, 1999, that FRA's response indicated that there might be methods of manufacturing TC-128 steel, and other steels, to reduce or eliminate inclusions that enhance blister formation in anhydrous hydrogen fluoride. The Board felt this to be informative, TC-128 steel is not currently allowed in the manufacture of tank cars intended for the transportation of this material. The Board pointed out that this safety recommendation addresses existing tank cars, and it is not convinced that these tank cars can be used to safely transport anhydrous

hydrogen fluoride, and therefore classifies Safety Recommendation R-98-68 as "Open–Unacceptable Response."

In FRA's letter of July 2, 2001, provided an update to the Board for Safety Recommendation, R-98-68. FRA advised that its investigation of the entire fleet of anhydrous hydrogen fluoride tank cars, visual observations, and review of the scientific literature clearly shows that hydrogen blister formation is a function of the number, shape, and size of elongated inclusions manufactured within the steel. That is, outside of AAR TC128 steel, other steels also show evidence of hydrogen blister formation. Our research shows that by using normalized steel or inclusion-shaped controlled rolled steel it nearly eliminates hydrogen blister formation within the tank envelope. The AAR Casualty Prevention Circular, CPC-1115, addresses requirements pertaining to steel making practices for TC-128 to provide resistance to hydrogen-induced cracking and blistering.

Current Status: In its letter dated October 29, 2001, the Board advised that although TC-128 steel is not currently allowed in the manufacture of tank cars intended for the transportation of AHF, we remain concerned about the 26 tank cars that were manufactured from TC-128 that continue to transport AHF. The Board indicated that it is not convinced that these tank cars can be used to safely transport AHF. Pending FRA's response, the Board advised that Safety Recommendation R-98-68 will remain classified as "Open–Unacceptable Response."

R-98-71. **Recommended Procedures-Purging Tank Cars - "Cooperate with the Compressed Gas Association, Inc., in its efforts to revise its *Recommended Procedures for Nitrogen Purging of Tank Cars*, to specify a minimum threshold temperature for nitrogen that is based on an engineering analysis of ductile-to-brittle transition temperatures of tank car steels."**

This Safety Recommendation was received on December 9, 1998. FRA responded to the Board with its initial response on February 4, 1999, indicating that both the National Transportation Safety Board and the Federal Railroad Administration (FRA) investigated this incident. The Safety Board and FRA's post-incident investigation revealed a 31-inch circumferential crack in the bottom center of the tank. To assist in the investigation and to determine the cause of failure, the Safety Board conducted a metallurgical analysis of the fracture face from the tank wall.

Based on these reports, the FRA and industry have revised the Association of American Railroads' Tank Car Manual to require written procedures, training, supervision, and appropriate equipment to prevent the introduction of liquid nitrogen into a tank. The FRA and the industry also have established a task force to review the Safety Board's concern with respect to the fracture behavior of tank car steels and the need to protect the steel from brittle failure. FRA advised the Board that it would keep NTSB updated on our progress.

The Board in letter dated March 18, 1999, advised FRA that it was pleased to learn that a task force has been established to review the fracture behavior of tank car steels and the need to protect tank car steels from brittle failure resulting from exposure to liquid nitrogen. Pending the establishment of a minimum threshold temperature for nitrogen in cooperation with the Compressed Gas Association, Inc., the Board has classified Safety Recommendation R-98-71 "Open–Acceptable Response."

Current Status: In its letter dated July 25, 2001, the Board indicated it had received correspondence dated August 15, 2000, from the Compressed Gas Association (CGA), advising that a meeting was held on January 25, 1999, and was attended by members of the CGA, the FRA, the Association of American Railroads, and the National Institute of Standards and Technology. According to the CGA correspondence, the participants discussed the temperature referenced in the CGA publication CGA-P-16, Recommended Procedures for Nitrogen Purging of Tank Cars and the definition of ductile-to-brittle transition temperature (DBTT). The Board was advised that, in the meeting, participants agreed that -20 degrees Fahrenheit (F) is the minimum temperature that ensures that (1) the liquid nitrogen is fully gasified and is warmed sufficiently not to create excessive thermal stresses in the tank car, and (2) the steel from which the tank is constructed is not cooled below the expected DBTT where the steel becomes subject to brittle fracture. The Board advised that based on the information provided by the CGA, Safety Recommendation R-98-71 is classified "Closed–Reconsidered."

R-99-02. **Fatigue (Scientifically Based Hours of Service Regulations) - "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."**

FRA provided its initial response to the Board in our letter dated October 7, 1999. FRA expressed that it is essentially in concurrence with the Board's expression of the need to adequately address fatigue on the nation's railroads. In our initial reply, we briefly summarized our past attempts at achieving a change in the federal hours of service laws (HSL) to allow for its modernization, and explained the goals we were then pursuing. We explained that for the last session of Congress, Secretary of Transportation Rodney Slater, in his letter of July 26, 1999, provided to The Honorable Al Gore, President of the Senate, and The Honorable J. Dennis Hastert, Speaker of the House of Representatives, a bill entitled the "Federal Railroad Safety Enhancement Act of 1999," requesting its introduction and referral to the appropriate committees. Included in this bill, as Section 106, are provisions relating to fatigue and hours of service similar to the proposals sent forward to Congress last year. The proposed legislation would require each affected railroad to submit a fatigue management plan to FRA that addresses the following subjects:

education and training on the physiological and other human factors that affect fatigue, as well as strategies to counter fatigue;

-joint labor/management initiatives concerning the identification, diagnosis, and treatment of sleep disorders that could contribute to fatigue;

-methods of avoiding increased fatigue due to the need to respond to emergency situations, such as derailments and natural disasters;

-scheduling practices that improve work/rest cycles and minimize cumulative sleep loss and fatigue;

-methods used to determine that current and future staffing levels are adequate to ensure that current and anticipated workloads can be handled without exacerbating fatigue on the part of affected employees;

-alertness strategies to address acute sleepiness and fatigue while an employee is on duty;

-opportunities to obtain restful sleep at lodging facilities; and

-how to minimize disturbances of the employee's rest within the carrier's control during rest periods.

FRA was hopeful that Congress would enact this proposed legislation so that there would be fatigue management plans throughout the rail industry. Congress did not pass the bill. FRA will submit a reauthorization bill to the Congress. In the meantime, FRA is aggressively and successfully pursuing responses to the fatigue issue as it presents itself on the major railroads. FRA requested that this Safety Recommendation be classified as "Open–Acceptable Response."

Current Status: The Board advised in its letter of May 4, 2000, that although FRA has taken positive steps in the area of education and research, it has not acted decisively to obtain legislative authority to revise the antiquated hours-of-service regulations. The Board indicated that although they applauded FRA's attempt to establish fatigue management plan authority, it continues to be disappointed in FRA's overall response to this recommendation. The Board concluded that pending acceptable action by FRA, Safety Recommendation R-99-02 is now classified as "Open–Unacceptable Response."

R-99-03. **Review CSX Inspection and Maintenance - "Review both the implementation and the management oversight of CSX Transportation's track inspection and maintenance programs for the Ohio River Subdivision and take the actions necessary to ensure the safe passage of trains and the safe shipment of hazardous materials through the area."**

FRA provided its initial response to the Board in our letter dated October 6, 1999. FRA advised that it has been working closely with representatives of CSXT management and labor, and the Office of Congressman Bob Wise of West Virginia. In the fall of 1998, Congressman Wise and FRA Administrator Molitoris attended a public meeting in Huntington, West Virginia, to discuss rail safety issues. As a result of that meeting, a partnership consisting of CSXT management, the Brotherhood of Maintenance of Way Employees, and FRA was formed to solve safety issues. In addition, FRA instituted its first Safety Assurance and Compliance Program (SACP) Manpower Initiative with CSXT. The Manpower Initiative is data-driven and will help the FRA/labor/management partnership determine if there are adequate numbers of track maintenance forces in place to perform required maintenance. CSXT has submitted a Safety Action Plan (SAP), describing what measures it will take to correct roadway maintenance deficiencies, including systemic roadbed drainage

problems. FRA will monitor compliance with the SAP through follow-up site-specific safety audits.

Current Status: The Board advised FRA in its letter dated March 29, 2000, that the Safety Board was pleased to learn that the FRA, in cooperation with CSXT's management and the Brotherhood of Maintenance of Way Employees, has reviewed CSXT's train inspection and maintenance programs for the Ohio River Subdivision. The Board noted that some of the conditions and issues raised were found to have relevance to system wide conditions that CSXT corrected. Before the Safety Board will consider closing this recommendation, we request an evaluation by your agency of the actions taken by CSXT in response to the FRA's concerns and recommendations. Pending assurances that FRA considers CSXT's actions will ensure the safe passage of trains and the safe shipment of hazardous materials through the area, the Safety Board has classified Safety Recommendation R-99-03 as "Open–Acceptable Response."

R-99-12. **Review Norfolk Southern's Part 240 Submission - "Review Norfolk Southern's 49 Code of Federal Regulations 240 submission, Certification of Locomotive Engineers, specifically Section 5: Training, Testing, and Evaluating Persons Not Previously Certified," to determine whether the company's training program is adequate for training new engineers and require that any deficiencies found be corrected."**

FRA provided its initial response to the Board in our letter dated January 12, 2000. FRA advised the Board that NS's engineer certification program was submitted to FRA in November 1991. The program was reviewed and approved. In 1995, following FRA inspection activity, NS modified and resubmitted the program. The program has gone unchanged since that time. Following receipt of this recommendation, FRA has reviewed the program, specifically Section 5, and believes the program complies with the regulation. The program covers all subject matter specified. Regarding feedback concerns of student performance, the NS program requires that student engineers receive five separate "skills performance tests" during Phase II or the hands-on portion of the training program. FRA notes that the student engineer had not yet completed all of his training at the time of the accident, which may explain why he was deficient in some aspects of training. Further, a student engineer may operate only under direct and immediate supervision of an instructor

engineer (49 CFR § 240.107(c)(3)). NS failed to adhere to this express requirement of the regulation in this instance. FRA will monitor future compliance by NS to prevent this situation from recurring. FRA is aware that any of these programs are only effective if they are fully implemented and given proper oversight. FRA routinely conducts audits of engineer certification programs, and will monitor NS training activities to assure the certification program is complied with. FRA has taken the actions recommended by the Board, and will continue to do so in the future, not only on NS, but with all railroads in the Nation. Therefore, FRA requested that the Board consider FRA's response as "Closed–Acceptable Action."

Current Status: The Board advised FRA in its letter dated August 17, 2000, that the Board noted FRA's conclusion that programs are only effective if fully implemented and given proper oversight. The Safety Board feels that the FRA's Locomotive Engineer Certification Program is a vital safety program that demands thorough oversight by FRA to prevent future accidents. Based on FRA's actions, Safety Recommendation R-99-12 is classified "Closed–Acceptable Action."

R-99-13. **Develop and Require Crew Resource Management Training - "In cooperation with Class I railroads, the American Short Line and Regional Railroad Association, the Brotherhood of Locomotive Engineers, and the United Transportation Union, develop and require, for all crewmembers, crew resource management training that addresses, at a minimum:**

1. crewmember proficiency,

2. situational awareness,

3. effective communication and teamwork,

4. strategies for appropriately challenging and questioning authority.

FRA provided its initial response to the Board in our letter dated January 12, 2000. FRA advised the Board that this recommendation is one that will require a considerable amount of dialogue with the relevant interested parties named. FRA will formally ask the Railroad Safety Advisory Committee Planning Group at its next meeting scheduled for

January 28, 2000, to consider the task of evaluating this recommendation. Representatives of the Class I railroads, the American Short Line and Regional Railroad Association, the Brotherhood of Locomotive Engineers, and the United Transportation Union will be invited to participate in the evaluation of that recommendation. The RSAC Planning Group will be presented with another closely related issue -- that is, the numerous requests we have received from U.S. Senators and Representatives requesting that Federal standards be developed for the training and certification of train conductors. In order to determine the further need for qualification and certification of safety-critical railroad employees, a planning task was presented for acceptance at the meeting, held January 28, 2000. The planning task included a preliminary assessment of the roles and responsibilities of employees who perform various safety sensitive functions, the review of existing training and qualification requirements and programs, and the evaluation of related safety data. FRA incorporated Safety Recommendation R-99-13 in this same planning task. Based upon FRA's intended action to task the RSAC with evaluation of CRM training in the rail industry, FRA requested that the Board consider classifying Safety Recommendation R-99-13 as "Open–Acceptable Action."

Current Status: The Board advised FRA in its letter dated August 17, 2000, that it was pleased to learn that FRA has agreed to the dialogue necessary for the development of crew resource management training. While the Board notes that use of the RSAC would be a suitable method to begin dialogue, we are concerned that resources needed for the development of CRM may be diverted to other worthwhile projects. The Board requested that FRA keep them informed of the project's progress. The Board classified Safety Recommendation R-99-13 as "Open–Acceptable Response."

R-99-14. **Identify and Replace Faulty Electro Code 4 Capacitors - "Direct Harmon Industries and the railroad carriers to identify and replace all faulty Electro Code 4 capacitors. Ensure through follow-up inspections, that corrective actions have been taken."**

FRA provided its initial response to the Board in our letter dated January 12, 2000. FRA advised the Board that it is issuing a Notice of Safety Advisory to address this concern. This Advisory is presently in the clearance process for circulation at the present time. FRA is strongly recommending that each railroad having a signal system which uses any

"Electro Code 4" or "Electro Code 4 *Plus*" intermediate signal unit immediately do the following:

1. Identify each 211S, 211SRP, and 212A module within their signal system.

2. Replace or upgrade every 211S, 211SRP, or 212A module within their signal system as soon as possible.

3. Each railroad having 211D, 211SRP, or 212A modules contact Harmon Industries Riverside Operations Repair and Return Facility for further information pertaining to upgrades.

Once FRA has issued the Notice of Safety Advisory to the rail industry, and after sufficient time has elapsed to allow the railroad industry to take the responsive actions, FRA will commence follow-up inspections to ensure that the identified modules have been replaced or upgraded. Therefore, until FRA has issued this Notice of Safety Advisory, FRA requested the Board consider classifying Safety Recommendation R-99-14 as "Open–Acceptable Response."

Current Status: The Board advised FRA in its letter dated August 17, 2000, that it was pleased to learn that FRA issued a Notice of Safety Advisory, on June 2, 2000, to the rail industry recommending that each railroad using the Harmon Industries Module to identify and address reliability concerns. The Board also noted FRA's intention to follow up on actions taken by the railroads. Pending assurances that satisfactory corrective action has been taken, Safety Recommendation R-99-14 is classified "Open–Acceptable Response."

R-99-31. **Engineering Changes - Midwest Steel - "Work together with the Federal Highway Administration, the National Steel Corporation, the Norfolk Southern Corporation, and the Northern Indiana Commuter Transportation District to make, within 2 years, permanent engineering changes to the Midwest Steel highway-rail grade crossing that will minimize or eliminate safety hazards at that crossing."**

Similar recommendations were also issued by the Board to each of the agencies or corporations identified in the above recommendation. Based upon a cooperative effort, a single response was agreed to by all of these

parties. A joint reply was addressed to the Board, dated November 5, 1999, with signatures for each of the agencies and corporations that were addressed. This letter outlined the various steps that had been taken to date to alleviate safety hazards, and plans for the ultimate engineering changes to eliminate this crossing. Based upon this cooperative joint effort, which will take two years to complete, FRA in a separate letter to the Board dated May 8, 2000, requested that Safety Recommendation R-99-31 be classified as "Open–Acceptable Action."

Current Status: The Board advised FRA in its letter dated November 13, 2000, that the Board was pleased by this cooperative effort, and pending completion of this effort, Safety Recommendation R-99-31 was classified as "Open–Acceptable Response."

R-99-32. **Weld Quality - Nippon Sharyo - "Determine the extent of the weld quality assurance inadequacies demonstrated by Nippon Sharyo Ltd., in its collision post welds, and implement corrective action as necessary to ensure the strength of the collision posts."**

FRA provided its initial response to the Board in our letter dated May 8, 2000. FRA stated that we would contact and obtain engineering drawings of the collision posts and quality assurance plans and data for all passenger cars that Nippon Sharyo, Ltd., manufactured for use in North America. After reviewing this information, FRA will discuss the findings with Nippon Sharyo. If any inadequacies in their weld quality assurance process are identified, FRA will request that Nippon Sharyo, Ltd., provide a plan to correct and inspect the vehicles manufactured during the time interval in question. Further, FRA will take steps to ensure that the owners of this equipment implement corrective action(s) specified by the manufacturer as necessary to ensure the strength of the collision posts. This investigation and analysis was expected to take a minimum of six months (target completion date September 2000, since revised to December 31, 2001). Based upon FRA's intended action, and until FRA has been able to satisfy the intent of this recommendation, FRA requested that the Board classify Safety Recommendation R-99-32 as an "Open–Acceptable Response."

Current Status: The Board advised FRA in its letter dated November 13, 2000, that FRA's target completion date for this action was September 2000. The Safety Board contacted Mr. Ed English of FRA's staff, and learned that FRA is still working on its review of the welds.

Pending notification that the review and any necessary corrective actions are completed, Safety Recommendation R-99-32 is classified as "Open–Acceptable Response."

R-99-33. **Nonvisual Inspections-MU Locomotives/Cars - "Require 100-percent nonvisual inspection of all collision post attachment welds made on multiple-unit locomotives and passenger cars during manufacture, and require that inspection records be retained for the life of the car."**

FRA provided its initial response to the Board in our letter dated May 8, 2000. FRA stated that FRA will consider modifying Title 49 Code of Federal Regulations, § 238.211(a)(1)(I) *Collision Posts*, as part of Phase II of its ongoing rulemaking, to require a 100-percent non-visual inspection of all collision post attachment welds made on multiple unit locomotives and passenger cars. These inspections would be made at the manufacturing time and would require that records be retained for the life of the car. Phase II of the rulemaking, or portions thereof, are to be worked on throughout calendar year 2000 and rulemaking is expected to be completed by the end of calendar year 2001. Until FRA has had the opportunity to satisfy the intent of the Board's recommendation, FRA requested that the Board classify Safety Recommendation R-99-33 as an "Open–Acceptable Response."

Current Status: The Board advised FRA in its letter dated November 13, 2000, that pending implementation of this recommendation, Safety Recommendation R-99-33 is classified "Open–Acceptable Response."

R-99-53. **Cognitive Alerter System - "Revise the Federal regulations to require that all locomotives operating on lines that do not have a positive train separation system be equipped with a cognitive alerter system that cannot be reset by reflex action."**

FRA provided its initial response to the Board in our letter dated May 8, 2000. We stated that FRA continues its efforts with rail labor and management to develop a positive train separation system which will negate some of the need for an optimum alerter system as recommended by the NTSB. Also, the recently issued Passenger Equipment Safety Standards require that after November 8, 1999, each passenger train not equipped with a positive train separation system be equipped with a working dead man or

alerter, and any locomotive ordered after September 8, 2000, and delivered after September 9, 2002, must be equipped with a working alerter. FRA also continues to work with rail labor and management to alleviate the crew fatigue issue that is the root cause of crew inattentiveness. Based upon on going efforts, FRA requested that the Board consider Safety Recommendation R-99-53 as an "Open–Acceptable Response."

Current Status: The Board advised FRA in its letter dated November 13, 2000, that it understands that the recently issued Passenger Equipment Safety Standards require that each passenger train not equipped with a positive train separation system be equipped with a working "dead man" or alerter. The Board also understands that any locomotive ordered after September 8, 2000, and delivered after September 9, 2002, must be equipped with a working alerter. The Safety Board is disappointed that the FRA's new safety standards apply only to passenger locomotives and not to freight locomotives. The Board also requested advice as to when FRA will require all locomotives operating on lines without positive train separation systems to be equipped with a cognitive alerter system that cannot be reset by reflex action. Because the FRA's new regulations do not require freight locomotives not equipped with a positive train separation system to be equipped with a cognitive alerter system, Safety Recommendation R-99-53 is classified "Open–Unacceptable Response."

R-00-01. **Establish Criteria for Use of Medications - "Establish, with assistance from experts on the effects of pharmacological agents on human performance and alertness, procedures or criteria by which train operating crewmembers who medically require substances not on the U. S. Department of Transportation's list of approved medications may be allowed, when appropriate, to use those medications when performing their duties.**

FRA received this recommendation in the Board's January 13, 2000 letter. This recommendation was also addressed to each of the individual modes of the Department of Transportation (Federal Aviation Administration, Federal Motor Carrier Safety Administration, the Federal Transit Administration, and the U. S. Coast Guard). Because of the wide scope of this recommendation, the Office of the Secretary of Transportation assembled representatives from each mode to discuss this recommendation, and to establish uniform criteria. FRA worked with the Office of Secretary

of Transportation and the other modes to develop a uniform position and plan to implement this recommendation.

FRA provided its initial response to the Board in our letter dated August 17, 2000. FRA stated that DOT's response to the Board's recommendation to develop the subject list outlines our concern. FRA agrees with DOT and has addressed this situation over the years with success by requiring this situation be administered professionally as a fitness for work decision between the employee and a medical professional. FRA's rule covering this area, Title 49 Code of Federal Regulations (CFR), 219.103, requires the employee to garner the treating medical practitioner's decision that use of the substance(s) is consistent with the safe performance of the employee's duties.

FRA's experience with our industry indicates that our current policy is working. Most of the larger railroads utilize the General Code of Operating Rules that address this safety issue from a systemic approach as follows:

"1.5 Drugs and Alcohol— The use or possession of alcoholic beverages while on duty or on company property is prohibited. Employees must not have any measurable alcohol in their breath or in their bodily fluids when reporting for duty, while on duty, or while on company property. The use or possession of intoxicants, over-the-counter or prescription drugs, narcotics, controlled substances, or medication that may adversely affect safe performance is prohibited while on duty or on company property, except medication that is permitted by a medical practitioner and used as prescribed. Employees must not have any prohibited substances in their bodily fluids when reporting for duty, while on duty, or while on company property (Enclosure 1)."

In FRA's opinion, this rule, by itself, does not satisfy Part 219 requirements. However, the railroads have supplemented this rule by issuing guidance to their employees concerning the need for the employees to consult with medical practitioners in determining whether particular medications will affect safe job performance. The Union Pacific's Policy for example, is as follows:

"Employees must not report for duty or be on company property under the influence of, or use while on duty, any over-the-counter or prescription drug or medication which may in any way adversely affect their

alertness, coordination, reaction, response, or safety. If an employee is in doubt as to whether an over-the-counter or prescription drug may have an adverse effect on alertness, coordination, reaction, response, or safety, the employee should take the following steps:

3. The employee's treating medical practitioner or any other medical practitioner who has evaluated the individual should make a good faith judgment in writing, with notice of the employee's assigned duties and on the basis of the available medical history, that the use of the substance by the employee at the prescribed or authorized dosage applicable is consistent with the safe performance of the employee's duties. A copy of this documentation must be kept in the employee's possession while on duty;

4. The substance must be used only in the manner and dosage, and for the purpose prescribed or authorized; and

5. In the event the employee is being treated by more than one medical practitioner, at least one treating medical practitioner should be informed of all medications authorized or prescribed and should make a good faith judgment, in writing, that the combination of medications is consistent with the safe performance of the employee's duties. A copy of this documentation must be kept in the employee's possession while on duty, and the employee must observe any restrictions imposed with respect to use of medications in combinations.

Note: Every employee must recognize that the unauthorized use of another person's prescription is illegal and may cause a positive test result, which would be a violation of Union Pacific's drug and alcohol testing policy."

In addition to making these provisions part of their Operating Codes, railroads have also addressed the issue in their employee training courses. For example, the Southeastern Pennsylvania Transportation Authority (SEPTA) teaches each of its employees on SEPTA's Drug Free Workplace Policy guide (Enclosure 3). Operating employees are required to report the medications to the Medical Department or their supervisor prior to reporting for work. The Medical department will determine the work status of the employee. SEPTA provides a partial list which must be reported and indicates the employee should confer with the Medical Department

regarding questions on medications not listed. SEPTA's policy covers both prescription and non-prescription drugs.

Recently, FRA has raised the threshold for review of this critical safety area. The Part 219 Alcohol and Drug Program Compliance Manual at Enclosure 2 has been distributed throughout the industry through education/training seminars to both management and labor. This document tells our safety partners what the Part 219 rule requires, what FRA's expectations are, how and at what level FRA inspectors will assess the implementation, and in a companion manual, we guide the inspectors in assessing violations and developing remedies.

FRA does not believe it is feasible to develop a list of approved medications that may be used safely by safety-sensitive employees. Similarly, even if it could be developed, and reasonably and practically kept current, ease of reference does not appear feasible. To develop a list continuously would be virtually impossible. There would always be a "lag time" in which certain drugs are not listed, others would have been dropped from the list, and still others would have their name changed. Additionally, a list of this size would not be practical for the reason that very few individuals would spend the time and effort to review it, especially if a health care provider approved their prescription medication.

An additional and more serious problem with any list is that it would not address the interaction between different drugs and would give the individual using the list a false sense of security when they are using several drugs with potential adverse interactions. Also, each individual responds differently to the same drug or combination of drugs. In essence, this is the whole purpose of FRA's requirement for involvement of medical personnel in determining appropriate use of prescription medications. FRA requested that Safety Recommendation R-00-01 be classified as "Open-Acceptable Response."

Current Status: At this time, the Board is assessing FRA's initial reply, and has not as yet provided a classification for Safety Recommendation R-00-01. We are considering this recommendation as "Open–FRA Reply Received."

R-00-02. **Develop and Publish Hazard Information - "Develop, then periodically publish, an easy-to-understand source of information**

for train operating crewmembers on the hazards of using specific medications when performing their duties."

FRA received this recommendation in the Board's January 13, 2000 letter. This recommendation was also addressed to each of the individual modes of the Department of Transportation (Federal Aviation Administration, Federal Motor Carrier Safety Administration, the Federal Transit Administration, and the U. S. Coast Guard). Because of the wide scope of this recommendation, the Office of the Secretary of Transportation assembled representatives from each mode to discuss this recommendation, and to establish uniform criteria. FRA worked with the Office of Secretary of Transportation and the other modes to develop a uniform position and plan to implement this recommendation. FRA provided its initial response to the Board in our letter dated August 17, 2000.

FRA provided its initial response to the Board in our letter dated August 17, 2000. FRA stated that the implementation of a list that expressly prohibits use of medications is fraught with the same problems identified with establishment of a list approving certain medications. Here again, FRA does not believe this type of list would be effective in diminishing inappropriate use of prescription or OTC medications. As noted previously, such a list would be difficult to keep updated and would give false assurances to individuals performing safety-sensitive functions that if a substance was not on the list, it could safely be taken while performing a safety sensitive job. FRA will continue to emphasize the importance of having employees consult with medical practitioners concerning the effect of medication on safe job performance and will direct the industry to continue to stress education and training of supervisors and operators. FRA is making this issue a priority in all compliance and enforcement reviews, accident investigations, and complaint investigations. Additionally, FRA has recently published a set of guidance documents, which clearly provide guidance to FRA inspectors, railroad employers, and our labor partners on this critical subject. FRA will monitor the effect of this effort and adjust as we see the need. FRA requested that Safety Recommendation R-00-02 be classified as "Open-Acceptable Response."

Current Status: At this time, the Board is assessing FRA's initial reply, and has not as yet provided a classification for Safety Recommendation R-00-02. We are considering this recommendation as "Open–FRA Reply Received."

R-00-03. **Educational Program for Medication Hazards - "Establish and implement an educational program targeting train operating crewmembers that, at a minimum, ensures that all crewmembers are aware of the source of information described in Safety Recommendation R-00-02 regarding the hazards of using specific medications when performing their duties."**

FRA received this recommendation in the Board's January 13, 2000 letter. This recommendation was also addressed to each of the individual modes of the Department of Transportation (Federal Aviation Administration, Federal Motor Carrier Safety Administration, the Federal Transit Administration, and the U. S. Coast Guard). Because of the wide scope of this recommendation, the Office of the Secretary of Transportation assembled representatives from each mode to discuss this recommendation, and to establish uniform criteria. FRA worked with the Office of Secretary of Transportation and the other modes to develop a uniform position and plan to implement this recommendation. FRA provided its initial response to the Board in our letter dated August 17, 2000.

FRA provided its initial response to the Board in our letter dated August 17, 2000. FRA stated, "as previously discussed concerning recommendation R-00-02, such a listing and implementation of programs to utilize such a listing is not achievable. FRA's current methodology of mandating a medical professional be involved in the fitness for work decision, reviewing employer polices and programs to support this mandate, monitoring drug involvement in accidents through our testing protocols, and emphasizing this critical safety issue at every opportunity provides the best opportunity for enhanced safety. FRA requested that Safety Recommendation R-00-03 be classified as "Open-Acceptable Response."

Current Status: At this time, the Board is assessing FRA's initial reply, and has not as yet provided a classification for Safety Recommendation R-00-03. We are considering this recommendation as "Open–FRA Reply Received."

R-00-04. **Establish Post-Accident Testing Requirements - "Establish, in coordination with the U.S. Department of Transportation, the Federal Motor Carrier Safety Administration, the Federal Transit Administration, and the U.S. Coast Guard, comprehensive toxicological testing requirements for an appropriate sample of fatal highway,**

railroad, transit, and marine accidents to ensure the identification of the role played by common prescription and over-the-counter medications. Review and analyze the results of such testing at intervals not to exceed every 5 years."

FRA received this recommendation in the Board's January 13, 2000 letter. This recommendation was also addressed to each of the individual modes of the Department of Transportation (Federal Aviation Administration, Federal Motor Carrier Safety Administration, the Federal Transit Administration, and the U. S. Coast Guard). Because of the wide scope of this recommendation, the Office of the Secretary of Transportation assembled representatives from each mode to discuss this recommendation, and to establish uniform criteria. FRA worked with the Office of Secretary of Transportation and the other modes to develop a uniform position and plan to implement this recommendation. FRA provided its initial response to the Board in our letter dated August 17, 2000.

FRA provided its initial response to the Board in our letter dated August 17, 2000, stating that FRA has in place an extensive and effective post-accident toxicological testing program. Following a qualifying accident, FRA conducts drug testing on all fatally injured employees and a large percentage of surviving employees. Tests are conducted for the five illegal drugs, for which the DOT tests, plus two of the more common prescription medications. In addition, FRA's program has the capability of testing for any additional prescribed or OTC medications identified through our investigation that may have contributed to the cause of a fatal accident.

FRA believes these procedures address the concerns expressed by the Board's recommendation for testing of prescription and OTC medications in fatal accidents. In the past, FRA has also provided urine, blood, and tissue specimens to the Board for additional testing following certain major train accidents. We are not aware of any instances where the Board has found additional drugs or OTC medications in these specimens under circumstances indicating involvement in the cause of the accident. In addition, the results of FRA's post-accident testing over the years have never indicated a causal relationship between the use of prescription medications and the crash event.

FRA will continue to review the mission of this testing program and when the need is established that additional testing is indicated, FRA will plan and program to accomplish the need.

In summary, FRA shares the Board's concern about the potential impact of the use of prescription and OTC medications by safety-sensitive transportation personnel. FRA will continue to emphasize with the industry that this is an important matter that requires constant vigilance and is part of the "safety goal" that FRA is striving toward. Emphasizing education and training as a part of FRA and industry endeavors should meet the intent of the Board's recommendations. FRA advised it would keep the Board apprised of the outcome of these efforts. FRA requested that Safety Recommendation R-00-04 be classified as "Open-Acceptable Response."

Current Status: At this time, the Board is assessing FRA's initial reply, and has not as yet provided a classification for Safety Recommendation R-00-04. We are considering this recommendation as "Open–FRA Reply Received."

R-00-09: **Audit the Association of American Railroads (AAR) and individual railroad equipment databases to determine whether adequate quality control procedures have been incorporated to ensure that database information is complete, accurate, and secure. Direct the Association of American Railroads and the individual railroads to correct all identified deficiencies.**

FRA provided its initial response to the Board in our letter dated October 27, 2000. The Board was advised that FRA has addressed the AAR Intermodal Car Performance Committee regarding this recommendation, and requested their input as to the methods FRA could use to audit the directed databases. It appears that each railroad maintains their own database, as well as each private car owner. The unified UMLER cannot be relied upon to capture all repairs made to railroad cars. Further, many repairs are made on a contract basis and billed directly to the car owner, and retained by the car number. It appears that the AAR may be required to generate a new field in the UMLER record, and require all car owners (railroad or private) to record any repair made to a well car in a specific format. FRA is currently working with AAR to determine the scope of the number of car owners, the number of cars, and the documentation that must be amended to accommodate this recommendation. Based upon this cooperative joint

effort, which we estimate will take at least one full year to complete, FRA requested the Board to consider classifying Safety Recommendation R-00-09 as "Open–Acceptable Response."

Current Status: The Board advised FRA in its letter dated June 12, 2001, that it notes FRA has requested the AAR Intermodal Car Performance Committee's input regarding methods the FRA could use to audit AAR and individual railroad equipment databases. The FRA's response also indicates that the agency is currently working with AAR to determine the number of car owners, the number of cars, and the documentation that must be amended to address this recommendation. The Board is concerned, however, that "one full year" will be required to complete this effort. The Board also stated that in its final report on the Crisfield accident, it had concluded that the lack of documentation for the repair made to DTTX 72318 prevented the Board from definitively determining the cause of the original 20-inch lateral fatigue crack. The Board also determined that the improper and undocumented repair of the car contributed to the accident. The Board urges the FRA to complete the audit of the AAR and individual railroad databases as soon as possible so that any deficiencies can be corrected. Pending the completion of this action, Safety Recommendation R-00-09 is classified "Open–Acceptable Response."

R-00-10. **Require that double-stack well car floors be inspected and that all foreign objects be removed before loading.**

FRA provided its initial response to the Board in our letter dated October 27, 2000. The Board was advised that the AAR's Intermodal Loading Standard Operating Procedure (SOP) currently requires that each well be inspected for debris, and its removal if found. FRA reviewed this SOP and determined that it requires the same level of inspection as recommended by the Board, and has been in place for over a year. FRA emphasized the importance of conducting this pre-departure inspection to the Intermodal Car Performance Committee. The AAR is considering publishing an additional circular letter to all members requesting that they review the Intermodal SOP, and ensure that it is being followed at each of their facilities. Based on the AAR's action of developing this SOP, and their intended action of publishing an additional circular letter to its members, FRA requests that the Board consider classifying Safety Recommendation R-00-10 as "Closed–Acceptable Alternative Action."

Current Status: The Board advised FRA in its letter dated June 12, 2001, that it noted FRA's response to Safety Recommendation R-00-10 indicates that the agency has reviewed the AAR's Intermodal Loading Standard Operating Procedure (SOP) and determined that it requires the same level of inspection as that recommended by the Safety Board. The Board also reviewed the AAR's SOP in its investigation of this accident. In its final report of the Crisfield accident, the Board addressed the AAR's Intermodal Loading SOP, as quoted as follows:

> "Despite the fact that the AAR SOP requires that foreign objects be removed from rail car wells or surfaces, inspecting the wells of intermodal cars before loading is not included as a safety check on the AAR Intermodal Securement Safety Audit Form, nor is it listed as a securement failure on the Internal and Inter-road Securement Failure Report. Although these forms cover postloading and predeparture securement and inspection comprehensively, the only preloading consideration is to ensure that containers and trailers are structurally sound with closed and locked doors and that trailer hitches, IBCs, and other loading equipment are in safe working order. In short, the primary emphasis is on the importance of load securement and postloading inspection. In the loates AAR video, the removal of foreign objects is briefly mentioned by a narrator, standing next to an intermodal flatcar, who says, "Ice and snow can build up and prevent a container from making proper contact. Brake shoes, IBCs, and rocks can also prevent a container from seating properly, so remember to remove these items before loading a container." This segment takes about 30 seconds of the 17-minute video and could be easily missed. The topic of removing foreign objects before loading intermodal cars is mentioned in passing without emphasis or example, and the only reason cited for its importance is the need to ensure the container is seated correctly. The FRA has no inspection standards and procedures for intermodal cars. As you know, in the final report of this accident, the Board concluded the following: Had the railroad industry or the FRA placed sufficient emphasis on ensuring a complete preloading inspection of all well cars, the structural failure of DTTX 72318 may not have happened."

The Safety Board maintains that, because of FRA's oversight responsibility for the Class I railroads, the FRA should require that double-stack well car floors be inspected and that all foreign objects be removed before loading.

Based on FRA's response, Safety Recommendation R-00-10 is classified "Open–Unacceptable Response.

R-00-11. **Revise 49 Code of Federal Regulations Part 215 to include comprehensive safety inspection standards and procedures for all intermodal cars.**

FRA provided its initial response to the Board in our letter dated October 27, 2000. The Board was advised that FRA initiated a comprehensive audit of Trailer-on-Flat Car, and Container-on-Flat Car (TOFC/COFC) loading and securement in August 1999. This audit is planned to span eighteen months, and cover the entire country. Each major railroad and almost every Class II railroad that handles TOFC/COFC traffic will be visited, and facilities ranging from several trailers per week to hundreds of thousands of containers or trailers per year will be audited. The results of this comprehensive audit will allow FRA to make a fact-based judgment as to the action required. One option would be to revise 49 Code of Federal Regulations, Part 215, but there may be a more appropriate course of action. FRA will present the results of the TOFC/COFC Audit to NTSB with an action plan after close of the data acquisition/analysis phase of the project.

Current Status: The Board advised FRA in its letter dated June 12, 2001, that it noted that FRA initiated a comprehensive audit in August 1999 and will use this information to make a fact-based judgment either to revise 49 Code of Federal Regulations Part 215 or to take another appropriate course of action. FRA states that they will present the results of the audit to the Board with an action plan after the close of the data acquisition/analysis phase of the project. Pending receipt of the recommended revisions, Safety Recommendation R-00-11 is classified as "Open–Acceptable Response."

R-01-01. **Issue an advisory bulletin reminding shippers of hazardous materials that any time a change is made in the constituents of hazardous materials shipped, they should verify the compatibility of all tank car components, such as valves and gaskets, with all of the commodities to be transported.**

On March 12, 2001, the Board issued the above new safety recommendation to FRA. FRA provided its initial response to the Board in our letter dated May 24, 2001, indicating its agreement with the Board's

recommendation as demonstrated by our previous work in ensuring that tank car owners and shippers are fully aware of their statutory requirements. On June 14, 1996, the Research and Special Programs Administration (RSPA) issued an advisory with guidance to shippers of their responsibilities related to hazardous materials transportation. While the advisory was the result of an investigation of an aircraft accident in Florida, the advisory outlines shippers' responsibilities regardless of transport mode. The advisory clearly states that shippers have a responsibility to ensure that, under normal transportation conditions, packages of hazardous materials offered for transportation will not experience a release of material or a reduction in the packaging integrity. The FRA will issue a similar notice to remind shippers of their regulatory responsibility with particular emphasis on compatibility of components.

Current Status: The Board advised FRA in its letter dated June 12, 2001, that it noted that FRA would issue a similar notice to remind shippers of their regulatory responsibility with particular emphasis on compatibility of components. Pending the issuance of a new advisory bulletin reminding shippers of hazardous materials that any time a change is made in the constituents of hazardous materials shipped, they should verify the compatibility of all tank car components, such as valves and gaskets, with all of the commodities to be transported, Safety Recommendation R-01-01 is classified "Open–Acceptable Response."

R-01-02. **Evaluate, with the assistance of the Research and Special Programs Administration, the Association of American Railroads, and the Railway Progress Institute, the deterioration of pressure relief devices through normal service and then develop inspection criteria to ensure that the pressure relief devices remain functional between regular inspection intervals. Incorporate these inspection criteria into the U.S. Department of Transportation Hazardous Materials Regulations.**

On March 12, 2001, the Board issued the above new safety recommendation to FRA. FRA provided its initial response to the Board in our letter dated May 24, 2001, indicating that the FRA agrees with this recommendation and had been taking action to address the issue. On August 7, 2000, RSPA issued exemption DOT-E 12095, to authorize an alternative tank car qualification program to that prescribed in 49 CFR Part 180, Subpart F. Developed by FRA, in cooperation with industry, this program permits the owner to establish different tank car operating procedures or test

intervals based on the results of a damage-tolerance evaluation or service reliability assessment. The exemption requires that tank car owners (those entities identified through the reporting marks) collect and analyze the service equipment inspection and test results for any given lading and, based on the analysis, adjust the inspection and test frequency to ensure that the design level of reliability and safety of the equipment is met. As of this letter, more than 75 companies hold party status to this exemption. Additionally, on April 25, 2001, the FRA, RSPA, Transport Canada, Railway Progress Institute, and the Association of American Railroads-member companies formed a government/industry task force to study the issues surrounding the Clymers, Indiana, tank car failure and develop a method to gather data to support future changes to pressure relief device test and inspection protocol. FRA advised that it would advise the Safety Board was this work progresses.

Current Status: The Board advised FRA in its letter dated June 12, 2001, that it noted that FRA indicated that, at a meeting of the AAR Tank Car Committee on April 25, 2001, a task force was appointed to address the Safety Board's recommendation; specifically, to develop a method to gather data to support future changes to pressure relief device test and inspection protocol. Based upon FRA's response and pending completion of the recommended actions, Safety Recommendation R-01-02 is classified as "Open–Acceptable Response."

R-01-06. **Facilitate actions necessary for development and implementation of positive train control systems that include collision avoidance, and require implementation of positive train control systems on main line tracks, establishing priority requirements for high-risk corridors such as those where commuter and intercity passenger railroads operate.**

Current Status: On June 12, 2001, the Board issued the above new safety recommendation to FRA. FRA is at this time finalizing its initial response, and will advise the Board of our intended course of action within the near future. At this time, this recommendation is being considered classified as "Open–Awaiting FRA's Initial Response."

R-01-12. **Revise your procedures to ensure that all Federal Railroad Administration track inspectors obtain current track classification documentation before they inspect a track.**

On August 6, 2001, the Board issued the above new safety recommendation to FRA. FRA provided its initial response to the Board in our letter dated November 27, 2001, indicating that it is revising the 2001 Track Compliance Manual, which is expected to be reissued soon, and will contain instructions that would satisfy the intent of the Board's recommendation. FRA also advised that it issued Technical Bulletin T-01-01, on October 31, 2001, to instruct and guide track inspectors until regional distribution of the Compliance Manual has been accomplished. FRA also advised that it is taking steps to emphasize the importance of this issue during various training sessions of our field personnel, and enclosed a copy of recently issued Technical Bulletin T-01-01 for the Board's reference.

Current Status: At this time, the Board is assessing FRA's initial reply, and has not as yet provided a classification for Safety Recommendation R-01-12. We are considering this recommendation as "Open–FRA Reply Received."

R01-17. **Modify 49 Code of Federal Regulations 219.201(B) as necessary to ensure that the exemption from mandatory postaccident drug and alcohol testing for those involved in highway-rail grade crossing accidents does not apply to any railroad signal, maintenance, and other employees whose actions at or near a grade crossing involved in an accident may have contributed to the occurrence or severity of the accident.**

On September 24, 2001, the Board issued the above new safety recommendation to FRA. FRA provided its initial response to the Board in our letter dated January 31, 2002, indicating FRA had considered the Safety Board's findings and this recommendation, and agrees that the exemption portion of our alcohol and drug testing regulation at 49 CFR Section 219.201(b) should be narrowed from its present universal exclusion of all railroad employees from post-accident toxicological testing when highway-rail grade crossing accidents occur. FRA also agrees with the Safety Board's support of FRA's policy of exempting train crews from post-accident testing after grade crossing accidents. As the Safety Board recognizes, the train crew is unlikely to have contributed to the occurrence or severity of a grade crossing accident since there is little chance of avoiding a motor vehicle once it is on the tracks because the crew has a short sight distance and a long stopping distance. FRA realizes that signal

maintainers have a greater likelihood of contributing to the occurrence or severity of a grade crossing accident, as evidenced by the McLean accident. However, the issue of modifying the exception to 49 CFR Section 219.201(b) to subject signal maintainers to FRA post-accident toxicological testing following a highway-rail grade crossing accident, is distinct from subjecting other types of railroad maintenance personnel to similar testing following a highway-rail grade crossing accident. With two exceptions: (1) For pre-employment testing only, applicants are considered covered employees, and, 2) FRA conducts post-accident testing whenever an on-duty railroad employee is killed, regardless of whether that person was a covered employee; 49 CFR Part 219 applies only to covered employees, defined in 49 CFR Section 219.5 as persons assigned to perform service subject to the hours of service laws (49 U.S.C. Chapter 211). Section 228.5 of FRA's hours of service regulations, 49 CFR Part 228, defines covered employees as those who are: (1) engaged in or connected with the movement of trains; (2) involved in the dispatching or receiving of orders pertaining to train movements; or (3) engaged in installing, maintaining, or repairing signal systems. Train crews (e.g., engineers, conductors, brakemen), train dispatchers, and signal maintainers are covered employees. However, other types of maintenance employees, such as maintenance-of-way (track) workers and mechanics, are not.

FRA will explore this issue fully during our next review of revisions to our present regulations on control of alcohol and drug use. We will examine under what circumstances signal maintainers would be required to submit specimens for post-accident toxicological testing as we modify the present total exemption from 49 CFR Section 219.201(b) following a highway-rail grade crossing accident. FRA will give consideration to the issue that an active warning system would need to be in place at a crossing site involved in a highway-rail grade crossing accident, to allow sufficient justification to warrant post-accident toxicological testing of a signal maintainer. We will also give consideration to the possibility of expanding the scope of 49 CFR Part 219 to include more than covered employees to allow post-accident toxicological testing of other railroad maintenance workers if sufficient reasons for justification can be determined. Once we have considered the necessary adjustments to the present exemption to 49 CFR Section 219.201(b), we will issue a notice of proposed rulemaking to receive comments from all interested parties prior to issuing a final rule modifying this present exception. I wish to emphasize that on August 9, 2001, FRA

concluded an extensive revision of Part 219; accordingly, this issue will be addressed at an appropriate time in light of other programs and priorities.

Current Status: At this time, the Board is assessing FRA's initial reply, and has not as yet provided a classification for Safety Recommendation R-01-17. We are considering this recommendation as "Open–FRA Reply Received."

R01-21. **Evaluate the applicability to U.S. operations of the safety requirements established by Transport Canada for lone-engineer operation on the Quebec North Shore and Labrador Railway, and implement any found to have interim utility for U.S. passenger trains that operate in areas now lacking a system of positive train control.**

On December 20, 2001, the Board issued the above new safety recommendation to FRA. FRA provided its initial response to the Board in our letter dated February 14, 2002, indicating FRA recognizes that the ultimate preventative measure to such collisions are positive train control systems and we have taken a pro-active approach in the development, standardization, and implementation of such systems. However, we also realize such systems must be economically viable to succeed. It is our belief that these systems will eventually be adopted by the Nation's railroads as innovative technology reduces costs. Until such systems become the norm in railroad operations, FRA is focusing its attention on a root cause of major railroad accidents: signal violations. As noted in your investigation, the root cause of this collision was the engineer's failure to properly determine the governing signal indication for his movement.

FRA agrees with the Safety Board's recommendation that an evaluation of railroad operating practices should to be undertaken to identify the factors in-play that result in signal violations. We have evaluated the procedures utilized by the Quebec North Shore and Labrador Railway (QNS&L) and found that most of the recommendations relate to single-person train operations, i.e., the engineer is the sole crewmember on the train. QNS&L operates through remote and inaccessible areas, and procedures were established to address the safety of individuals working in this environment. However, there are a number of procedures relating to lone-engineer operations that warrant further consideration, e.g., engineer fatigue counter measures, increased management oversight responsibilities, and calling signal indications over the radio.

FRA has also evaluated the data obtained from the Nation's largest railroads concerning locomotive engineer misconduct that led to the revocation of the engineer's certificate. The primary cause of decertification in the U.S. is *stop signal* rule violations. Over the past nine years the number of stop signal violations has steadily increased. Given the fact that stop signal violations result in a significant number of fatalities each year and account for the largest share of damage to railroad property and equipment, FRA believes an in-depth study of these violations should to be undertaken. Consequently, FRA has initiated a special study and analysis of stop signal violations that will be akin to the Switching Operations Fatality Analysis (SOFA) performed by an ad hoc group comprised of rail labor, rail management, and FRA. This collaborative effort was extremely successful in the past and resulted in *The SOFA Five Lifesaver* recommendations that were subsequently implemented nationally by the rail industry. Following the group's findings and subsequent recommendations, FRA will notify the Safety Board and apprise it of any steps we have taken to address these findings.

Current Status: At this time, the Board is assessing FRA's initial reply, and has not as yet provided a classification for Safety Recommendation R-01-21. We are considering this recommendation as "Open–FRA Reply Received."

R02-01. **For all railroads that install new or upgraded grade crossing warning systems that include crossing gates and that are equipped with event recorders, require that the information captured by those event recorders include the position of the deployed gates.**

Current Status: On February 2, 2002, the Board issued the above new safety recommendation to FRA. FRA is at this time formulating its initial response, and will advise the Board of our intended course of action within the near future. At this time, this recommendation is being considered classified as "Open–Awaiting FRA's Initial Response."

NTSB VOICE RECORDER RECOMMENDATION

Mr. Rogers. NTSB recommended that voice recorders be installed in all locomotives. What progress has FRA made in complying with this recommendation?

[The information follows:]

Since our last update, FRA has raised this issue on the agenda of the Railroad Safety Advisory Committee (RSAC), which declined to consider the matter. FRA nevertheless met with representatives of affected employees and railroads to discuss this recommendation and received their individual views. Those representatives expressed uniform and apparently firm opposition to any requirement for recording any conversations in the cab. Accordingly, the Board and FRA must be mindful that the process of implementing any requirement for voice recording would be difficult and would involve some distraction from attention to other safety priorities.

Unlike event recorders, which can appropriately be used by railroads to evaluate performance of personnel and equipment prior to an accident, the case of voice recorders rests exclusively on their utility in the context of accident investigation. To date, FRA has not been persuaded that the additional information that would be yielded by this technique would be sufficient to offset the cost of installing the technology, maintaining it, and conducting sufficient compliance oversight to reasonably assure its proper functioning. However, we appreciate that this is a matter to which the Board attaches great importance.

Legislation to address voice recording privacy issues in all modes of transportation is included in the Safety Board's reauthorization bill pending before Congress.

STATEMENT OF THE
RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION
U.S. DEPARTMENT OF TRANSPORTATION
TO THE SUBCOMMITTEE ON TRANSPORTATION OF THE
HOUSE APPROPRIATIONS COMMITTEE

In FY 2003, RSPA is seeking a total of $124.5 million in budget authority to support its critical safety programs with 64% of this budget offset by user fees from companies that ship and transport hazardous materials.

The Administration has called for an "active, but limited" Government that empowers States, cities and citizens to make decisions and promotes innovation in the private sector. The President's Management Agenda addresses key government-wide initiatives including strategic management of human capital, competitive sourcing, improved financial performance, expanded electronic government and budget and performance integration. RSPA's FY 2003 budget request supports priorities in a coordinated and coherent plan that focuses on our core competencies as an agency and on our mission of public safety. Our request is:

- Results oriented, not process oriented. RSPA will tie the taxpayers' dollars we request to the results we promise. Our programs clearly state the important results that RSPA will deliver. We have developed measurable and accountable outcomes and outputs that directly link to this budget request. Further, RSPA's hazardous materials, pipeline safety, emergency transportation and university research programs have identified performance goals with measurable results.

- Citizen-centered. RSPA will continue to develop and support our locally based hazardous materials and pipeline inspector employees, improve public safety education and training initiatives and support e-government and citizen access. For example, our most important FY 2003 initiative, Information Technology Infrastructure (IT), will aggressively adopt information technology systems that help generate, capture and disseminate knowledge and information that supports our stakeholders – individual citizens, state and local governments and industry partners. This will enhance electronic access and support e-government for our agency responsibility areas that directly involve our safety mission. In light of the events of September 11, we will

ensure that information access empowers people and maintains the necessary safeguards for security protection.

- Market-based, programs and initiatives that actively promote private-sector innovation and competition. RSPA will use taxpayers' resources as a catalyst to support and encourage private-public partnership solutions to transportation problems. This includes continued management of the University Transportation Center Program and Commercial Remote Sensing program, which are built on partnerships with state, local and private sector entities.

RSPA's most important FY 2003 initiative is to remedy a weak IT infrastructure that cannot efficiently help our safety inspectors, customers and stakeholders. We request an increase of $3.6 million to solve this debilitating problem. Without this funding RSPA cannot provide swift and user-friendly access to critical safety information. For example, our 435 pipeline inspectors (85 federal and 350 state) need immediate and easy access to leaks and compliance history during their inspections so they can assess and order, through enforcement action, the repair of defects that would otherwise go unnoticed. Modernizing our IT infrastructure will yield a minimum 10 percent annual increase in the number of enforcement actions mandating repair of pipeline defects. Unrepaired defects can lead to accidents resulting in loss of life as happened in Bellingham, Washington and Carlsbad, New Mexico. Similarly, a modern IT infrastructure will enable our Hazardous Materials inspectors to access hazmat data directly from the intranet, resulting in a savings of at least 5% of their workday, and this labor savings in turn would be used for additional enforcement-related work. This IT funding will also remedy the following systemic problems:

•Currently, RSPA's information network can only support 23 concurrent dial-in users; it should be able to support 150. Over 100 field staff, 30 headquarters staff who telecommute intermittently, and numerous state and local governments all need access to our network

•Our regional staff cannot transmit significant data loads over the network during peak hours because it ties up the network for indefinite periods of time. Large reports and graphical information take anywhere from five to 30 minutes to transmit via dial-up 56K modems. Further, regional safety inspectors and telecommuting staff cannot access the network from outside the office.

•Currently, RSPA has network coverage eight hours a day, five days a week. During the Bellingham, Washington and the Carlsbad, New Mexico gas pipeline accidents, we discovered that the capabilities of the Internet could broaden our ability to provide information to the public and our inspectors in the field. Based on this discovery we realize that the communications network operations absolutely must be extended to 24 hours a day, 7 days a week.

•Over 40% of our Hazardous Materials Safety regional personnel use outdated machines running on first generation Pentium platforms with a speed of 200 MHZ or less, containing 16 MB RAM, and hard drives of 1 GB or less. The other 60% are using machines that do not meet industry standards for memory and processor speeds of 900 MHz, 256 RAM, 10 GB hard drives. In fact, 55% of RSPA's personal computers cannot even use MS Office, which requires a basic platform of 600 MHz, 256 RAM. To remedy this problem, RSPA must replace two-thirds of its current inventory of equipment.

•RSPA's IT infrastructure cannot keep pace with the use of e-commerce and improved customer outreach to conduct business, as is the trend in the marketplace. RSPA's IT infrastructure can support only a few strategically focused products and services (e.g., collection of hazardous materials user registration fees via an Internet based website). This use of e-commerce and improved customer outreach to conduct business is a winning combination. However, RSPA is severely limited in exploiting this winning combination by the shortcomings in our IT infrastructure.

For **Pipeline Safety**, a program funded entirely by user fees from oil and gas companies, RSPA requests $64.5 million, a net increase of $6.4 million over FY 2002. We are requesting 15 new positions for our Integrity Management Program and our Community Assistance Technical Services (CATS) Program. This funding is vital to implement an integrity management program for natural gas transmission pipelines, and to ensure that we have regionally based inspectors dedicated to working with communities to improve security preparedness, environmental oversight of hazardous liquid storage tanks, and operator qualification programs. These technologies will enable pipeline operators to identify and eliminate defects before they result in death, injuries, and environmental damage. RSPA's research and development (R&D) program will focus on pipeline integrity issues and will

enable us to develop new technologies to reveal defects in pipelines, establish regulatory standards for leak detection, and develop technologies for locating plastic pipelines. These technologies will enable pipeline operators to identify and eliminate defects before they result in death, injuries, and environmental damage. In order to maximize the effective use of research dollars for these efforts, the Budget proposes to consolidate RSPA pipeline safety R&D with the pipeline infrastructure R&D program managed by the Department of Energy.

In **Hazardous Materials Safety,** (we propose to fund $6.0 million of this program from hazardous materials registration fees) RSPA requests $23.8 million, an increase of $2.6 million. The increase will expand our on-line hazardous materials registration program, a program that reduces the paperwork burden on businesses and speeds the registration process. The increase will also fund two needed engineering positions and contractor support for processing the ever-expanding number of hazardous materials exemptions. Exemptions allow companies to introduce more efficient packaging designs and other improvements that meet or exceed established safety standards, but are not in strict compliance with the regulations. Increasingly, exemption applications involve new technologies that require in-depth technical evaluation. New technologies usually result in new and often better products, materials, and packaging, but RSPA is frequently unable to process applications for exemptions within the statutory, 180-day time limit called for in 49 U.S.C. 5117(c). These two new positions will directly support private sector companies in bringing their products to market sooner, thereby increasing their competitiveness. Lastly, this increase will also fund mandatory salary costs.

For **Emergency Transportation,** RSPA requests $2.1 million, a net base increase of $0.2 million (excluding the $2.5 million DOD supplemental) made up of $0.1 million for mandatory pay costs and another $0.1 million to pay for a Department of Defense (DOD) military liaison in our Office of Emergency Transportation. This DOD function is necessary because the military is a crucial partner in executing DOT's responsibilities during large disasters. RSPA executes the Department's responsibility for emergency preparedness and response recovery in all domestic and national security emergencies affecting civil transportation. RSPA's responsibilities have expanded in recent years to include transportation consequences of incidents of weapons of mass destruction (WMD) and cyber terrorism (computer hacking which can destroy or deny access to vital transportation computer

systems). To respond to these threats, RSPA operates the Department's Crisis Management Center (CMC) and manages the Regional Emergency Transportation Coordinator (RETCO) program. The CMC and the RETCO programs play a key role in providing supplies, materials and water during times of emergency to victims of natural and man-made disasters.

For **Research and Technology,** RSPA requests $3.0 million, an increase of $0.2 million for mandatory pay costs. Base funding will enable RSPA to identify future multi-modal transportation trends, needs and opportunities; manage multi-modal research and development (R&D) planning; and manage the strategic planning process for transportation R&D. This planning process analyzes R&D programs throughout DOT to avoid duplication of effort and to share technologies affecting all modes of transportation. Additionally, RSPA will continue to manage the Department's University Transportation Centers (UTC) program and Commercial Remote Sensing program.

In **conclusion,** our FY 2003 budget request will enhance the safety, security and efficiency of transportation. Our IT Infrastructure program will broaden access to vital pipeline and hazardous materials information to both our inspectors in the field who need to enforce safety regulations and to communities who need information to know how to live safely next to pipelines. Our IT Infrastructure program will also improve the productivity of those field inspectors and expand strategically focused E-Government products and services, such as on-line hazardous materials registration. RSPA will continue to look for opportunities to use private-public partnerships to reduce costs to the taxpayer while providing access to new technologies for developing businesses and safer communities. RSPA appreciates the opportunity to present and justify this FY 2003 Budget request.

QUESTIONS FOR THE RECORD FROM CHAIRMAN ROGERS

PIPELINE SAFETY AUTHORIZED STAFFING

Mr. Rogers. Please provide a table showing Office of Pipeline Safety staffing authorized by staff position (IMP inspectors, community technical inspectors, budget analysts, etc.) for each fiscal year 1996-2002, and the total requested for 2003.

[The information follows:]

Position Type	1996*	1997*	1998*	1999*	2000	2001	2002	2003 Request
IMP Inspectors							12	18
Community Assistance Inspectors							6	11
Inspectors	60	60	60	60	60	60	60	60
Other Regional Staff	5	5	5	5	5	6	6	5
Regulations				4	4	4	7	10
State Program Oversight				10	10	12	12	15
Program Dev., Damage Prevention, R&D, Mapping,				17	17	17	20	21
Enforcement (inc. Counsel)	0	0	0	3	3	3	4	5
Training	4	4	4	4	4	4	4	0
AA Office	1	1	1	1	2	3	4	5
Total	105	105	105	105	105	109	135	150

*OPS did not retain specific records of employees by categories requested prior to FY1999.

PIPELINE SAFETY PERSONNEL INCREASE IN FISCAL YEAR 2002

Mr. Rogers. Please provide a table showing information on any new positions provided in the fiscal year 2002 appropriation bill. Include information on titles, duties they perform, where they are located (in the field or in headquarters), and whether they are currently filled.

[The information follows:]

Staff Positions	New Positions	Filled
IMP Inspectors	12 Field	8
Community Technical Assistance Inspectors	5 Field 1 HQ	0
Regulatory Development, Interpretation, and Support	4 HQ	0
Legal Compliance Support	2 HQ	1
Data Support	2 HQ	0

Mr. Rogers. The pipeline safety budget for fiscal year 2003 is requesting 15 new positions or 7.5 new FTEs. Please provide a table, similar to that found on page 393 of last year's record, showing the staff your are requesting in the office of pipeline safety and what positions these staff will hold (inspectors, budget analysts, etc.).

[The information follows:]

Staff Position	Positions Requested	FTE Requested
IMP Inspectors	6	3
IMP Regulatory Development, Interpretation, and Support	2	1
Trans-Alaska Pipeline System and Alaska Natural Gas System	2	1
Community Technical Assistance Inspectors	5	2.5

Mr. Rogers. Please identify for the Committee what these new positions are, why they are necessary, and what costs are associated (salaries and administrative) with the new positions.

[The information follows:]

- 10 new positions for integrity management (5 new FTE)
  - 6 integrity management program (IMP) inspectors
  - 2 integrity inspectors for Trans-Alaska Pipeline System rights-of-way renewal and long-term Alaska natural gas transportation

system planning and design and oversight
  - 2 Integrity planning specialists to: a) evaluate national and local level energy impacts that originate from pressure reductions or shut-downs for integrity testing and repairs; b) evaluate regulatory interpretations and exemption requests; and, c) develop and track company-specific performance measures.

- 5 Community Assistance and Technical Service inspectors (2.5 new FTE)
  - 5 regional specialists to work with communities to improve two-way communication, security and emergency response preparedness, environmental oversight, and operator qualification programs with operators about development which could affect pipeline integrity, assist with plans to improve security and emergency response, and perform tank and operator qualification inspection.

Our plans call for eight of the positions (4 FTE) to be hired at the GS-14 level and 7 (3.5 FTE) to be hired at the GS-13 level, although some variance is possible based on the response to our recruitment efforts. We estimate that, collectively, these 7.5 FTE will cost RSPA approximately $700,000 in costs necessary to cover their payroll and benefits and an additional $400,000 for administrative costs (including training, travel, equipment, and space).

Mr. Rogers. Please provide a table that shows the current on-board staff (full-time permanent positions and full-time equivalents) for the Office of Pipeline Safety. Please break out this data by headquarters and regional staff.

[The information follows:]

Location	Full-time Permanent Staff On Board
Eastern Region	12
Southern Region	9
Central Region	16
Southwest Region	12

Western Region	17
Total – All Regions	66
Headquarters	35
TSI	4
Total*	105

Mr. Rogers. Does the Office of Pipeline Safety have any vacancies currently? How many?

[The information follows:]
Yes. Thirty.

Mr. Rogers. If so, please provide information on what positions are unfilled, where are these positions located. What is the plan to fill these positions?

[The information follows:]

Location	Vacancies	Inspector Vacancies	Other Vacancies
Eastern Region	1	1 – CATS	
Southern Region	5	1 – CATS 3 - Inspectors	1 Program Assistant
Central Region	3	1 – CATS 2 - Inspectors	
Southwest Region	6	1 – CATS 4 – Inspectors	1 Program Assistant
Western Region	2	1 – CATS 1 – Inspector	
Headquarters	13	1 – CATS 1 – IMP Devel Specialist	1-Sr. Engineer (Security & Tech Support) 2-Regulatory Specialists 2-Sr. Engineers (R&D Planning) 1-Sr. Engineer (R&D Mgt) 1-Program/Data Analysts 1-Sr. Engineer (State Program Specialist) 1-Compliance Specialist 2-Program Assistant

TSI	0		
Total Regions & HQ	30	17	13

RSPA is currently recruiting applicants for IMP inspector and Senior Engineer positions. The headquarters vacancies represent new positions and position descriptions are being developed. We anticipate recruiting for all positions to be underway this summer.

PIPELINE SAFETY RISK MANAGEMENT INITIATIVE

Mr. Rogers. Please identify all the funding requested for risk management initiatives in Fiscal Year 2002 and itemize the request including risk assessment, compliance, training, state grants, and other functional areas.

[The information follows:]
RSPA estimated that only $200,000 would be spent on risk management initiatives in FY 2002. RSPA requested no funds in FY 2002 or FY 2003 from any other budget elements to support these risk management initiatives, including risk assessment, compliance, state grants, or other budget areas.

Mr. Rogers. During fiscal year 1997, RSPA began a risk management demonstration project with a few pipeline companies. Last year you stated that RSPA has successfully concluded consultation and review with 7 companies. Please describe for the Committee the participants and results of the risk management program demonstration projects. Include the name of each participant; information on how many companies were selected; why they were chosen; where their pipelines are located; when each project started its work; and your assessment of the performance of each participant with respect to safety and environmental protection.

[The information follows:]
In April 2001, the RSPA submitted a report to Congress on the status and preliminary results of the Risk Management Demonstration Program. This report, titled "Beyond Compliance: Creating a Responsible Regulatory Environment that Promotes Excellence, Innovation, and Efficiency," is available at http://ops.dot.gov/ReportToCongress042501.htm. It contains detailed information on the program, its participants and their projects, as

well as our assessment of the performance of both the Program and its participants.

RSPA successfully concluded the consultation and review process with 7 of the 12 pipeline companies that formally expressed interest in participating in the Risk Management Demonstration Program. The seven companies are listed in a table following this response. Each of these companies voluntarily applied for acceptance into the program. RSPA chose these companies because of their potential to: (1) provide superior safety, environmental protection, and service reliability; and (2) systematically help RSPA test risk management as a regulatory alternative. RSPA also considered other factors, such as the company's willingness to openly communicate with RSPA and our state partners, willingness to test new technologies, corporate commitment to the program, and existing performance record. To date, we formally approved the Risk Management Programs of 6 of the10 companies; we will soon request public comment on approval of 1 additional company.

We are actively auditing each of the approved companies against an established set of program review protocols and against the legally enforceable work orders that were produced upon approval of their programs. Although our auditing continues, RSPA believes that each of the companies with formally approved programs has clearly demonstrated their management of safety and environmental protection can produce results superior to those of companies that merely comply with the minimum standards established by existing regulations. Each of the companies have, in concert with the RSPA, sharpened their focus on the greatest risks to the integrity of their pipelines, applied appropriate risk controls, and enhanced communication with affected communities.

The preliminary results of the risk management initiative indicate that risk management is best used in combination with, rather than as a replacement for, existing regulations. RSPA is now directing the risk management demonstration project work and the pipeline industry into the integrity management approach. We incorporated the knowledge gained in the risk management program into our integrity management rulemaking, including the systematic identification and control of risks and characteristics of risk management.

The following table lists the seven companies with whom RSPA has successfully concluded the consultation and review process.

Company	Approved	Affected State(s)
Equilon	03/18/98	Colorado, Louisiana, New Mexico, Texas
Chevron	02/17/99	Idaho, Utah
Phillips	08/10/98	Texas
Kinder Morgan	12/31/98	Arkansas, Colorado, Iowa, Illinois, Indiana, Kansas, Louisiana, Missouri, Nebraska, Oklahoma, Texas, Wisconsin, Wyoming
Mobil	08/10/98	Illinois
Duke	Candidate	Alabama, Arkansas, Illinois, Indiana, Kentucky, Louisiana, Mississippi, Missouri, New Jersey, New York, Ohio, Pennsylvania, Tennessee, Texas, West Virginia
Northwest	01/11/00	Colorado, Idaho, Oregon, Utah, Washington, Wyoming

Mr. Rogers. Do you anticipate that additional states will participate in the demonstration project? How many are interested?

[The information follows:]
Affected states participated in the demonstration project by assisting OPS in its review of operators' risk management project proposals. We are not aware of additional states that are interested in participating in the demonstration project.

Mr. Rogers. What is the current split between natural gas and liquid petroleum pipelines for the demonstration project?

[The information follows:]
Of the six RSPA approved demonstration projects, four are hazardous liquid projects and two natural gas projects. RSPA is working with one additional natural gas candidate.

PIPELINE SAFETY SYSTEM INTEGRITY INITIATIVE PILOT PROGRAM

Mr. Rogers. Last year you testified that the system integrity initiative (SII) pilot program was part of an effort to test more effective approaches to oversight. That this would provide a broad-based examination of the operator's safety and pipeline integrity programs, including many areas not currently considered during a typical inspection could result in improved performance. How many operators are you working with under this pilot program?

[The information follows:]
In early 2002, RSPA terminated the system integrity initiative (SII), in order to focus resources on the integrity management program. OPS was working with two companies at the time it ended SII. The following table shows how IMP builds on SII strengths:

Key SII Strength / Limitation	**Corresponding IMP Feature or Element**
Focuses on a few select companies	Includes all operators
Addresses the entire pipeline system	Focuses on High Consequence Areas to begin with; expected future expansion to all segments
Allows OPS Inspectors to address internal inspection and other integrity areas beyond current regulations	Explicitly codifies requirements for internal inspection, risk assessment, etc.
Uses multiple region teams with expert consultants	Uses multiple region teams with expert consultants
Detailed inspection protocols to ensure consistent inspection, quality documentation, and follow-up	Even more detailed inspection protocols including web-based inspection reports and status reports
Promotes focus on most likely or most consequential accidents	Explicitly requires risk analyses that proactively investigate potential accident causes
Encourages examination of operating history and incorporation of lessons learned	Protocols explicitly address analysis of operating incidents and development of lessons learned in risk management models and O&M procedures

Promotes integration of data from various sources to support management decision-making	Explicitly requires information integration and protocols address data sources and integration processes in detail

Mr. Rogers. What information or results do you expect to obtain from the SII pilot program? Has it resulted in changes to the inspection process?

[The information follows:]
The SII pilot, now ended, provided insight on how a more broad-based examination of an operator's safety and pipeline integrity programs, could result in improved performance. The pilot looked at many areas not currently considered during a typical inspection. RSPA worked with the operators to address the most significant pipeline system integrity issues, including areas not completely or explicitly covered in the regulations. RSPA provided oversight to operator efforts to conduct comprehensive internal assessment and audits for compliance to maintain continued regulatory compliance. RSPA ensured the operator had an effective compliance audit plan, and conducted field and records validation to assure its effective implementation. This improved communication and information sharing, focused resources on the most important risks to pipeline safety. We are drawing from this comprehensive, system-wide examination of integrity issues as we continue to develop and review protocols we will use in long- term enforcement of the Integrity Management rules.

Mr. Rogers. Has the system integrity initiative been successful?

[The information follows:]
The SII Program was a major step forward in applying the lessons learned from the Risk Management Demonstration Program and other sources to improve OPS inspection processes.

Mr. Rogers. When will the system integrity initiative be completed and how do you plan on comparing the results of this pilot to your regular program?

[The information follows:]
The system integrity initiative is completed. The results of the initiative were integrated into the current OPS standard inspections and it provides a framework for the comprehensive integrity management inspections.

INTEGRITY MANAGEMENT

Mr. Rogers. OPS is moving toward having pipeline companies identity safety risks to their pipelines and develop "integrity management" plans for addressing those risks. Please list the rules associated with integrity management, their current status, when they were finalized, or when you estimate finalization.

[The information follows:]

- Pipeline Safety: Areas Unusually Sensitive to Environmental Damage
  - Final rule published December 21, 2000.

- Pipeline Integrity Management in High Consequence Areas (Hazardous Liquid Operators With 500 or More Miles of Pipelines)
  - Final rule published December 1, 2000.

- Pipeline Integrity Management in High Consequence Areas (Repair Criteria) for Hazardous Liquid Operators With 500 or More Miles of Pipelines
  - Final rule published January 14, 2002.

- Pipeline Integrity Management in High Consequence Areas (Hazardous Liquid Operators With Less Than 500 Miles of Pipelines)
  - Final rule published January 16, 2002.

- High Consequence Areas for Gas Transmission Pipelines
  - Notice of Proposed Rulemaking Published January 9, 2002.
  - Final rule expected Summer 2002.

- Pipeline Integrity Management in High Consequence Areas (Gas Transmission Pipelines)
  - Notice of Proposed Rulemaking expected this year.
  - Final rule expected 2003.

Mr. Rogers. Large hazardous liquid operators were to develop integrity management programs no later than March 31, 2002. How many operators does this entail and have each of them developed the programs? How many miles of pipeline does this cover?

[The information follows:]
By March 31, 2002, sixty-six operators were required to establish integrity management programs covering a cumulative 157,000 miles of hazardous liquid pipeline. All operators developed programs although the majority needs to make improvements that RSPA identified in inspections. This summer, RSPA will begin more comprehensive inspections to determine the extent to which operators have complied with the March 31 deadline.

Mr. Rogers. What is the status of RSPA's review of large hazardous liquid operator's integrity management programs?

[The information follows:]
Between February and April 2002, RSPA inspected the sixty-six affected operators to evaluate their compliance with the rule's first deadline requiring identification by December 31, 2001, of all pipeline segments that can affect HCAs. At this time, OPS also conducted an assessment of each operator's readiness to comply with the rule's March 31, 2002 deadline to implement an integrity management program. In August 2002, OPS will begin its comprehensive inspections to evaluate operator compliance with the March 31 deadline.

Mr. Rogers. Last year you stated that OPS was still refining the review protocols it will follow in examining each company documentation process. Have these been finalized yet?

[The information follows:]
RSPA finalized the review protocols it uses to evaluate operators' compliance with the rule's first deadline requiring identification by December 31, 2001, of all pipeline segments that can affect high consequence areas. These protocols can be viewed at http://primis.rspa.dot.gov/imdb/ChkList.imd.

RSPA is continuing development of the review protocols it will use during comprehensive inspections to be conducted this summer of operators' compliance with the March 31 deadline addressing integrity management program implementation. This second set of protocols will be a much expanded version of the completeness check protocols (also available at http://primis.rspa.dot.gov/imdb/ChkList.imd).

PIPELINE SAFETY IN-LINE INSPECTION TECHNOLOGIES

Mr. Rogers. Last year (page 403), you stated that about 11 percent of hazardous liquid pipelines and 65 percent of gas pipelines couldn't accommodate ILI tools because of alignment, destruction valves and diameter issues. To reduce the mileage of pipe that cannot accommodate ILI tools, RSPA issued a final rule to require that new and certain replacement pipelines be designed and constructed to accommodate the passage of ILI tools on April 12, 1994. You also stated that about 20 percent of the currently unpiggable gas pipelines could accommodate ILI tools by installing temporary launchers and receivers and temporarily bypassing certain valves. Has the rule been successful? Can more pipelines now accommodate ILI tools because of the rule?

[The information follows:]
Yes. All new pipelines, replacement pipelines, and pipeline components installed since 1994 can accommodate ILI tools. This means that the percentage of pipelines that are "piggable" is increasing year-by-year. However, we do not collect data that would quantify the increase. The most significant obstacle to conducting in-line inspection (ILI) surveys is the configuration of the older pipelines that cannot accommodate ILI tools. About 20 percent of the currently unpiggable gas pipelines could accommodate ILI tools by installing temporary launchers and receivers and temporarily bypassing certain valves. RSPA is encouraging an increase in ILI through our integrity management series of rulemakings, which currently, or soon will, require that gas transmission and hazardous liquid pipelines in high consequence areas that cannot be pigged must either undergo a hydrostatic test, or, in some cases, use various "direct assessment" technologies to inspect the pipe. We supported research efforts to develop ways for ILI to detect mechanical damage and stress corrosion cracking (SCC) and are now issuing a series of broad agency announcements (BAA) to invite proposals for pipeline safety research.

Mr. Rogers. What are your next steps to ensure that more miles of pipeline can accommodate ILI tools? What are the obstacles?

[The information follows:]
RSPA is now preparing to issue a Notice of Proposed Rulemaking to require gas transmission pipeline operators to develop and implement IMP in high consequence areas. Over the past 18 months, we issued IMP rules for

hazardous liquid pipelines in high consequence areas. The operation of the IMP rules will encourage pipeline operators to take measures to allow their pipelines to accommodate ILI tools, due to the expense of ILI alternatives. Hydrotesting, for example, may actually be more expensive than ILI because of the need to shut-down the entire line and to dispose of contaminated water. And, "direct assessment" alternatives will also be costly. The costs of the alternatives will encourage operators to install launchers/receivers, bypass unpiggable line sections, or take other measures to facilitate the use of ILI tools. In any case, the IMP rules will require inspections of the pipeline that are at least the equivalent of ILI, even if the operator chooses not to make a line piggable.

UNDERSTANDING THE CAUSES OF INCIDENTS

Mr. Rogers. OPS does not collect comprehensive information on the causes of pipeline accidents. OPS uses only about half dozen categories of causes and thus a large proportion (25 percent from 1989 through 1998) of causes are cited as "other." Both GAO and the Department's Inspector General were critical of the quantity and quality of information that RSPA collects on the causes of pipeline accidents. Last year, you stated that RSPA is moving forward on improving accident reports. Specifically, how will these improved accident reports result in better data?

[The information follows:]
RSPA redesigned the natural gas transmission incident and hazardous liquid accident forms, and is now receiving reports on these revised forms. The revised forms include 25 unique cause categories proposed by the American Society of Mechanical Engineers (ASME) B31.4 pipeline accident data committee. For example, the old forms provided "Outside Force Damage" included excavation damage caused by the operator, excavation damage caused by others, and a variety of natural force damage subcauses such as flooding, earthquake, landslides, lightning, and frost. The new accident forms separate excavation damage causes and natural force damage causes into discrete, separate cause elements. Similarly, the "Corrosion" cause on the old form has been replaced on the revised forms with distinct categories for "Internal Corrosion" and "External Corrosion." These changes will greatly improve the accident information for accident trending.

Mr. Rogers. List the rules associated [with] regulatory revisions of accident data and their current status. When do you expect each to be finalized?

[The information follows:]
A rulemaking was not required to revise the natural gas transmission incident and annual reports. A cost burden assessment was finalized via Federal Register notices [Docket No. RSPA-98-4957; Notice 21 (8/02/2000); Docket No. RSPA-98-4957-50 (5/08/2001)] and subsequent OMB approval for additional data collection. RSPA began collection of natural gas transmission incident information on 1/01/2002.

For the hazardous liquid lines, the reporting threshold changed from 50 barrels to 5 gallons. The improvements to the cause categories for the revised hazardous liquid accident form, was completed in January 2002 [NPRM- Docket No. RSPA-2001-8663, Notice 1 (05/20/2001); Final Rule- Docket No. RSPA-2001-8663-19 (01/08/2002)]. The effective date for reporting was thirty days subsequent to final rule, or 02/07/2002.

RSPA is currently collecting information for both revised forms (natural gas transmission incident report and hazardous liquid accident report). RSPA met with representatives from the American Gas Association and the natural gas distribution industry to discuss similar revisions to the natural gas distribution incident and annual reports. RSPA will pursue improvements in the natural gas distribution form with a cost burden assessment via Federal Register notices this calendar year, for collection beginning in CY 2003.

UNAPPROPRIATED BALANCE IN THE PIPELINE RESERVE FUND

Mr. Rogers. In tabular format, provide the unappropriated balance of the Pipeline Reserve Fund on September 30, 2000, September 30, 2001 and the current unappropriated balance.
[The information follows:]

September 30, 2000	$16,758,035.40
September 30, 2001	$14,404,162.37
Current	$12,889,169.00

ONE-CALL PROGRAM

Mr. Rogers. For several years, RSPA has testified that 39 states have effective one-call notification programs. Has the number of states changed? If not, what is the main reason why more states have not implemented an effective program?

[The information follows:]
We previously described an effective one-call notification program as one wherein operators of underground facilities must be members of the notification system, and excavators must call to have lines located before commencing excavation. The 39 states we referred to three years ago have such programs.

Since then, however, we have revised our concept of an effective program. Using the Common Ground report, we identify best practices as stronger enforcement of state one-call legislation, greater public awareness of damage prevention, and increased participation from underground utility operators. Further, more effective programs form coalitions that include facility operators, state and local officials to encourage adoption of better damage prevention practices.

In order to implement more effective programs, states need to seek stronger State legislation to protect underground utilities from damage and to encourage adoption of damage prevention and one-call best practices. RSPA provides technical assistance to States to complete the process in order to help promote and adopt our new safety initiatives. We work with the Common Ground Alliance, an organization dedicated to damage prevention and the promotion of Common Ground Best Practices, to review states' one-call notification programs and their effectiveness.

STATES WITHOUT EFFECTIVE ONE-CALL PROGRAMS

Mr. Rogers. List the states that do not have effective one-call notification systems in place.

[The information follows:]
All states have one-call notification systems in place with varying levels of effectiveness. The following sixteen States, California, Florida, Georgia, Iowa, Kansas, Maine, Michigan, Mississippi, New Jersey, New Mexico,

New York, North Carolina, Pennsylvania, South Dakota, Utah and Virginia, are working to improve one-call notification systems. These states are using grant funding to implement one-call system best practices identified by Common Ground, a study of one-call systems, which was funded by the Office of Pipeline Safety.

RELATIONSHIP BETWEEN ONE-CALL PROGRAMS AND PIPELINE ACCIDENTS

Mr. Rogers. Two years ago, RSPA indicated that the states with one-call notification programs have seen a reduction of pipeline accidents caused by third party damage. RSPA stated that it had initiated a performance measure project wherein participating states collect data on one call centers and incident statistics to support your position. Last year, you stated that the newly formed Common Ground Alliance (CGA) would collect the data. Has the CGA collected the data? What are the results of the data?

[The information follows:]
In February 2001, CGA established a permanent data gathering committee whose charter is to plan and design a nationwide system to collect, analyze, and disseminate information on damage to underground utilities. The plan is being developed in conjunction with the American Public Works Association (APWA) and the one-call industry, both of whom have representatives on CGA. In spring 2002, RSPA expects to enter into a cooperative agreement with CGA to help fund this effort. As part of the agreement, CGA will:

- Identify, with APWA, the excavation damage exposure data that will be most useful in assessing State excavation damage prevention programs.

- Determine, with one-call systems, what tools and resources would be needed to support the data collection efforts.

- Develop the tools needed to support data collection efforts and training materials to ensure that the proper data is consistently collected.

- Develop a plan that OPS could implement for using the collected data to periodically assess State excavation damage prevention programs.

Mr. Rogers. Please provide a table, similar to page 406 of last year's record, indicating funding RSPA is requesting for one-call activities. Please include information on all one-call programs, including public education and compare your 2003 request with the 2001 and 2002 enacted level. If the 2003 level is less than the 2002 level, please explain why.

[The information follows]:
In FY 2003 the level requested for Interstate Oversight Grants is less than the 2002 level. The amount for these grants have been consolidated into the basic Pipeline Safety grants because the personnel who perform the interstate inspections are housed within the same state agency as those who perform the balance of the inspections on intrastate pipelines.

Damage Prevention Activity	FY 2001 Enacted	FY 2002 Enacted	FY 2003 Request
State 1-call grants	$1 million	$1 million	$1 million
Damage Prevention Grants	$4.913K	$0	$0
Interstate oversight grants	$0	$2 million	$0
Damage prevention community technical assistance/public ed	$500K	$3.413K	$3.413K

2001 DAMAGE PREVENTION GRANTS

Mr. Rogers. In fiscal year 2001 RSPA had $5,000,000 for damage prevention grants. When were the grants distributed? How much and to whom were the grants made?

[The information follows:]
Due to Congressional across the board cuts, damage prevention grants were funded at $4,913,000. RSPA awarded 22 grants to State agencies in September 2001, totaling $3.6 million. We awarded 2 additional grants in January 2002, totaling an additional $0.6 million. The successful States and projects are provided in the following:

State and Project Title	Amount ($1000s)
1. Virginia State Corporation Commission	240

2. Virginia State Corporation Commission	104
3. Virginia State Corporation Commission	60
4. Virginia State Corporation Commission	192
5. Michigan Public Service Commission	300
6. North Carolina Utilities Commission	37.6
7. North Carolina Utilities Commission	142.8
8. South Dakota One-Call Notification Board	55
9. South Dakota One-Call Notification Board	17.5
10. Kansas Corporation Commission	241.9
11. Maine Public Utilities Commission	152
12. Kansas Corporation Commission	16.8
13. Mississippi Public Service Commission	300
14. Iowa Department of Commerce	190.4
15. Florida Dept. of Agriculture and Consumer Services	50
16. New York State Dept. of Public Service	300
17. New Mexico Public Regulation Commission	151
18. Georgia Public Service Commission	300
19. Kansas Corporation Commission	17
20. Kansas Corporation Commission	260
21. Utah Division of Information Technology Services	300
22. Pennsylvania Dept. of Labor and Industry	300
23. California Public Utilities Commission	142
24. New Jersey Board of Public Utilities	300

Mr. Rogers. Last year you stated you would have information on potential reductions to pipeline incidents resulting from the damage prevention grant program. How much has this program reduced pipeline incidents.

[The information follows:]
The first grants were awarded about five months ago and we just began to distribute the first advance funds to the grantees. We believe that all of the grant projects, which support damage prevention best practices, will ultimately enhance safety for pipelines and other buried utilities. RSPA is examining how we may provide assistance to the Common Ground Alliance to help foster creation of a national data depository to help track effectiveness of the grant program and provide other needed safety and trending information.

INTERSTATE OVERSIGHT GRANT PROGRAM

Mr. Rogers. In 2002, your budget proposed and Congress approved reducing and changing the grant program. Instead of $5,000,000 for damage prevention grants, RSPA now provides $2,000,000 for interstate oversight grants in 2002. When were the grants distributed? How much and to whom were the grants made?

[The information follows:]
The allocation of the $2,000,000 will occur about midyear of FY 2002. Based on current application and certification documents, the allocation for interstate grants will go to nine state agencies in the gas program and six state agencies in the liquid program. These programs are:

Arizona CC	Gas and Liquid
California SFM	Liquid
Connecticut DPIC	Gas
Iowa UB	Gas
Michigan PSC	Gas
Minnesota DPS	Gas and Liquid
New York PSC	Gas and Liquid
Ohio PUC	Gas
Virginia	Liquid
Washington UTC	Gas and Liquid
West Virginia	Gas

INTERSTATE OVERSIGHT GRANT PROGRAM VERSUS THE DAMAGE PREVENTION GRANT PROGRAM

Mr. Rogers. Is the interstate oversight grant program more successful than the damage prevention grant program?

The damage prevention and interstate oversight grant programs are two different initiatives serving separate aspects of the pipeline safety program. The Damage Prevention Grant Program (TEA-21) is a special grant to fund one-time projects to enhance State damage prevention programs through the implementation of Common Ground Best Practices. These projects generally focus on intrastate pipeline facilities and the local community.

The interstate oversight grants are used for compliance and enforcement efforts to promote State participation in the oversight of interstate pipelines. Under this program, State inspectors would join Federal inspectors on projects of a regional and national focus. The interstate oversight program has been in effect for over 25 years, on a limited basis to supplement our national inspection efforts. This new grant funding puts additional emphasis on the importance of state assistance and assures that states can provide the assistance needed. Three States entered the interstate program in recent years, and we are expecting additional participation in the future.

GRANT PROGRAMS VERSUS TECHNICAL ASSISTANCE PROGRAM

Mr. Rogers. In 2002, RSPA reduced its grant program from nearly $5,000,000 to $2,000,000. It provided the nearly $3,000,000 difference to a non-grant program, the damage prevention community technical assistance/public education program. What evidence do you have that the technical assistance program is working better than the grant program?

[The information follows:]
This funding was used for three distinct purposes: 1) to promote State implementation of damage prevention best practices developed under our Common Ground study team – using funds provided by Congress in FY 2000 and FY 2001; 2) to fund in FY 2002 a new Damage Prevention / Community Assistance and Technical Services program ($3,413,000 consisting of $500,000 base from Public Education Campaign and $2,913,000 from Damage Prevention Grants); and 3) in FY 2002, to fund State compliance and enforcement activities relating to damage prevention under a new Interstate Oversight Agreement program ($2,000,000) which addresses both damage prevention and broader compliance needs.

Each of these purposes meets the specific, but different, needs of the damage prevention community – all underground utility facility owners, one-call centers, excavators and construction companies, and other emergency response planning and permitting governmental agencies whose mission brings them into contact with our Nation's underground infrastructure. Each purpose, however, complements and reinforces the others and they collectively promote effective damage prevention activities.

The three different purposes are not really comparable. Effective grant use is measured by organizational change. Technical assistance would be judged by how well we complemented State and local objectives. The compliance and enforcement grants should be judged by how well State concerns about interstate operators were addressed. We continue to issue grants to States to implement the Common Ground damage prevention best practices by stimulating State agencies to develop and improve programs that meet State needs. We have, to date, issued over $4 million in grants, and expect to award the remaining funds this fiscal year. Our initial round of twenty-four grants is helping States across the Nation improve their efforts to protect underground infrastructure through implementation of best practices relating to mapping, marking, locating, planning and other phases of underground utility damage prevention.

RSPA is just beginning the funding of the Community Assistance and Technical Services, so evidence of its efficacy will take additional time to develop. The Community Assistance and Technical Services program will provide direct assistance (i.e., educational information, technical service, presentations, facilitation of local or regional damage prevention alliances, etc.) at the local level. The need for these changes appears clear from the rapidly growing demand for involvement of RSPA in community-based damage prevention and emergency/security programs. This program is geared to help communities face issues related to existing pipelines. We will assist communities and governmental organizations with questions related to permitting repair of the pipelines required by our integrity management rules. As resources allow, the program will also help communities and governmental organizations with siting and permitting of new pipeline infrastructure or conversion of service of existing pipelines where the community has issues related to assessment of the risk of pipeline failures.

Funding for Interstate Oversight Agreement grants goes directly to fund inspections and investigations of pipeline safety compliance and enforcement of regulatory damage prevention and integrity management requirements. These funds enable States, for the first time, to focus resources not in competition with other pipeline oversight responsibilities to the task of ensuring the adequacy of pipeline operator damage prevention activities and for involvement in the development of related programs and standards.

DAMAGE PREVENTION COMMUNITY TECHNICAL ASSISTANCE/PUBLIC EDUCATION PROGRAM

Mr. Rogers. What have you spent the nearly $3,000,000 provided for the damage prevention community technical assistance/public education program on Common Ground.

[The information follows:]
Congress provided $3,413,000 in FY 2002 for damage prevention community technical assistance that is being used for contractual support. The status of contract award varies, but actual and planned activities are itemized below:

- $0.90 million for development of public education materials, for fire service, city and county planning and zoning officials. This includes an orientation to pipeline safety for State and local officials and officials with damage prevention, land use or siting responsibilities. This also includes officials who grant permits for construction associated with repairs of pipelines.
- $0.50 million for CGA support.
- $0.60 million for gas integrity rule support relating to design and other factors needed for impact zone delineation, developing oversight protocols, plus work needed to evaluate national consensus standards addressing accident and construction-related damage prevention.
- $0.35 million for a Right-of-Way study to develop model pipeline setback guidelines for communities.
- $0.35 million for expanded risk analysis of gathering systems.
- $0.30 million for administrative support for Regional staff.

COMMON GROUND

Mr. Rogers. Provide a table showing amounts for Common Ground in 2001, 2002 and requested in 2003.

[The information follows:]

FY 2001 Actual	FY 2002 Enacted	FY 2003 Estimate
$148,240	$500,000	$500,000

PIPELINE SAFETY PROGRAM

Mr. Rogers. Please list the eligible state jurisdictions participating in the federal gas pipeline safety program for fiscal year 2001 and show the state costs, the federal contribution, and the percentage of federal contribution to total costs.

[The information follows:]
Attached are the allocations for fiscal year 2001.

2001 Natural Gas Pipeline Safety Grant Allocation

STATE	REQUEST	STATE POINTS	ALLOCATION	%OF FUNDING
ALABAMA	429,320	100.0	413,239	48.1%
ARIZONA	492,465	100.0	474,019	48.1%
ARKANSAS	224,847	100.0	216,425	48.1%
CALIFORNIA	1,599,516	97.3	1,498,034	46.8%
COLORADO	224,427	100.0	216,021	48.1%
CONNECTICUT	320,000	100.0	308,014	48.1%
DELAWARE	29,433	94.6	26,801	45.5%
FLORIDA	50,000	99.1	47,694	47.7%
GEORGIA	303,676	100.0	292,301	48.1%
IDAHO	89,000	90.0	77,100	43.3%
ILLINOIS	338,062	98.9	321,820	47.6%
INDIANA	198,350	98.9	188,820	47.6%
IOWA	220,450	99.5	211,132	47.9%
KANSAS	329,037	98.9	313,229	47.6%
KENTUCKY	249,620	100.0	240,270	48.1%
LOUISIANA	388,065	100.0	373,529	48.1%
MAINE	67,997	91.2	59,690	43.9%
MARYLAND	169,931	98.9	161,767	47.6%
MASSACHUSETTS	393,830	95.3	361,262	45.9%
MICHIGAN	317,250	98.9	302,008	47.6%
MINNESOTA	791,631	98.9	753,598	47.6%
MISSISSIPPI	138,250	96.2	128,015	46.3%
MISSOURI	359,623	90.0	311,700	43.3%
MONTANA	21,638	95.5	19,890	46.0%
NEBRASKA	100,166	94.2	90,822	45.3%
NEVADA	185,301	100.0	178,360	48.1%

NEW HAMPSHIRE	167,697	98.2	158,510	47.3%
NEW JERSEY	359,889	98.9	342,598	47.6%
NEW MEXICO	215,300	90.6	187,755	43.6%
NEW YORK	1,254,750	96.8	1,169,103	46.6%
NORTH CAROLINA	178,200	99.1	169,982	47.7%
NORTH DAKOTA	41,615	99.1	39,696	47.7%
OHIO	482,716	97.7	453,949	47.0%
OKLAHOMA	421,310	98.2	398,230	47.3%
OREGON	195,786	96.4	181,668	46.4%
PENNSYLVANIA	400,249	92.6	356,748	44.6%
PUERTO RICO	60,750	95.0	55,551	45.7%
RHODE ISLAND	61,430	85.9	50,792	41.3%
SOUTH DAKOTA	19,045	89.7	16,443	43.2%
TENNESSEE	318,450	98.2	301,005	47.3%
TEXAS	1,321,724	99.1	1,260,767	47.7%
UTAH	215,050	100.0	206,995	48.1%
VERMONT	55,743	98.9	53,064	47.6%
VIRGINIA	316,130	98.2	298,811	47.3%
WASHINGTON, DC	116,648	89.8	100,826	43.2%
WASHINGTON	598,946	92.2	487,170	44.4%
WEST VIRGINIA	309,344	95.5	284,358	46.0%
WISCONSIN	198,450	96.8	184,904	46.6%
WYOMING	89,925	95.5	82,662	46.0%
TOTALS	15,381,214		14,427,145	47%

Note: the 'request' represents 50% of the states estimated budget. The '% of fund' is the percentage of the budget represented by the allocation.

2001 Hazardous Liquid Pipeline Safety Grant Allocation

STATE	REQUEST	STATE POINTS	ALLOCATION	%OF FUNDING
ALABAMA	25,951	100.0	24,973	48.1%
ARIZONA	53,546	100.0	51,540	48.1%
CALIFORNIA	892,539	100.0	859,107	48.1%
KENTUCKY	4,200	92.4	3,735	44.5%
LOUISIANA	90,236	92.8	80,602	44.7%
MINNESOTA	164,581	100.0	158,416	48.1%
MISSISSIPPI	6,863	96.8	6,394	46.6%
NEW MEXICO	18,650	92.7	16,641	44.6%

NEW YORK	53,830	96.8	50,156	46.6%
OKLAHOMA	57,681	98.2	54,521	47.3%
TEXAS	233,245	99.1	222,487	47.7%
VIRGINIA	66,730	100.0	64,230	48.1%
WASHINGTON	364,454	95.9	336,419	46.2%
WEST VIRGINIA	47,460	95.5	43,626	46.0%
TOTALS	2,079,963		1,972,855	47%

Note: the 'request' represents 50% of the states estimated budget. The '% of fund' is the percentage of the budget represented by the allocation.

PIPELINE INSPECTORS BY REGION

Mr. Rogers. Please provide a table, similar to the one provided on page 414 of last year's hearing record, showing where your pipeline safety inspectors are located (by region).

[The information follows:]

Number of Inspectors by Location	
Region	# of Inspectors*
Eastern	10
Southern	7
Central	14
Southwest	9
Western	14

* These numbers do not include headquarters technical engineering staff that assists the five regional directors with field safety evaluations.

PIPELINE SAFETY INSPECTIONS

Mr. Rogers. Please highlight the percent of work and oversight that OPS does for natural gas and liquid petroleum pipelines. How has this changed over the past 5 years? In your answer, update the table on page 414 of last year's hearing record.

[The information follows:]
The following table represents the percentages of field inspector time allocated between liquid and gas inspections over the last five years.

Year	% Gas Program	% Liquid Program
1995	75	25
1996	65	35
1997	55	45
1998	55	45
1999	53	47
2000	64	36
2001	44	56

PIPELINE SAFETY ACCIDENT INVESTIGATIONS

Mr. Rogers. How many accident investigations has the Office of Pipeline Safety conducted during the past 5 years? Please update the table on page 415 of last year's hearing record.

[The information follows:]

Accident Investigations Performed by the Office of Pipeline Safety						
Year of Accident	1996	1997	1998	1999	2000	2001
# of Investigations	64	51	48	36	43	32

These numbers reflect the initial onsite investigation only and do not represent the numerous on-site visits required by major investigations.

PIPELINE INCIDENTS, DEATHS, INJURIES AND PROPERTY DAMAGE

Mr. Rogers. Please provide data for natural gas pipelines and for hazardous liquid pipelines on the number of incidents and the number of deaths, injuries and property damage caused by those incidents in each of the years 1987-2001, and for the first quarter of 2002.

[The information follows:]

HAZARDOUS LIQUID PIPELINES

YEAR	CAUSE	NUMBER	FATAL	INJURIES	DAMAGES
1987	CORROSION	70	0	0	$5,540,581
	FAILED PIPE	15	0	0	$942,829
	FAILED WELD	6	0	3	$348,100
	INCORRECT OPERATION BY OPERATOR PERSONNEL	10	0	2	$581,870
	MALFUNCTION OF CONTROL OR RELIEF EQUIPMENT	8	0	1	$201,526
	OTHER	65	0	9	$2,315,315
	OUTSIDE FORCE DAMAGE	63	3	5	$3,210,213
TOTALS		237	3	20	$13,140,434
1988	CORROSION	55	1	0	$3,527,621
	FAILED PIPE	11	0	0	$23,498,000
	FAILED WELD	6	0	0	$230,403
	INCORRECT OPERATION BY OPERATOR PERSONNEL	13	0	3	$224,950
	MALFUNCTION OF CONTROL OR RELIEF EQUIPMENT	7	0	0	$101,000
	OTHER	46	0	8	$835,932
	OUTSIDE FORCE DAMAGE	55	1	8	$3,997,006
TOTALS		193	2	19	$32,414,912
1989	CORROSION	34	0	0	$572,095
	FAILED PIPE	13	0	0	$2,161,700
	FAILED WELD	8	0	0	$458,000
	INCORRECT OPERATION BY OPERATOR PERSONNEL	12	0	3	$208,190
	MALFUNCTION OF CONTROL OR RELIEF EQUIPMENT	9	0	0	$526,020
	OTHER	35	1	3	$2,201,682
	OUTSIDE FORCE DAMAGE	52	2	32	$2,685,917
TOTALS		163	3	38	$8,813,604
1990	CORROSION	51	0	0	$3,149,143
	FAILED PIPE	14	0	0	$4,266,980
	FAILED WELD	5	0	0	$412,100
	INCORRECT OPERATION BY OPERATOR PERSONNEL	10	0	0	$231,600
	MALFUNCTION OF CONTROL OR RELIEF EQUIPMENT	11	0	0	$256,690
	OTHER	48	3	6	$3,427,603
	OUTSIDE FORCE DAMAGE	41	0	1	$3,976,306
TOTALS		180	3	7	$15,720,422

YEAR	CAUSE	NUMBER	FATAL	INJURIES	DAMAGES
1991	CORROSION	66	0	0	$2,069,259
	FAILED PIPE	10	0	0	$1,927,433
	FAILED WELD	15	0	0	$8,247,500
	INCORRECT OPERATION BY OPERATOR PERSONNEL	13	0	5	$132,973
	MALFUNCTION OF CONTROL OR RELIEF EQUIPMENT	18	0	0	$325,049
	OTHER	40	0	3	$16,090,055
	OUTSIDE FORCE DAMAGE	54	0	1	$8,996,675
TOTALS		216	0	9	$37,788,944
1992	CORROSION	43	0	0	$17,653,778
	FAILED PIPE	11	0	0	$1,491,200
	FAILED WELD	15	0	0	$2,926,408
	INCORRECT OPERATION BY OPERATOR PERSONNEL	15	0	2	$1,209,766
	MALFUNCTION OF CONTROL OR RELIEF EQUIPMENT	11	0	0	$1,810,750
	OTHER	62	5	28	$3,758,603
	OUTSIDE FORCE DAMAGE	55	0	8	$9,800,557
TOTALS		212	5	38	$38,651,062
1993	CORROSION	55	0	0	$3,120,248
	FAILED PIPE	10	0	0	$1,923,000
	FAILED WELD	7	0	0	$3,252,054
	INCORRECT OPERATION BY OPERATOR PERSONNEL	14	0	4	$731,445
	MALFUNCTION OF CONTROL OR RELIEF EQUIPMENT	17	0	0	$580,200
	OTHER	67	0	5	$4,741,055
	OUTSIDE FORCE DAMAGE	59	0	1	$14,525,649
TOTALS		229	0	10	$28,873,651
1994	CORROSION	49	0	0	$2,115,043
	FAILED PIPE	11	0	0	$2,154,000
	FAILED WELD	21	0	0	$4,320,680
	INCORRECT OPERATION BY OPERATOR PERSONNEL	9	0	0	$65,600
	MALFUNCTION OF CONTROL OR RELIEF EQUIPMENT	22	0	1	$1,159,517
	OTHER	77	1	4	$11,095,251
	OUTSIDE FORCE DAMAGE	56	0	2*	$35,593,513
TOTALS		245	1	7	$56,503,604
1995	CORROSION	36	0	0	$2,401,322
	FAILED PIPE	14	0	2	$3,773,100
	FAILED WELD	9	0	0	$349,823
	INCORRECT OPERATION BY OPERATOR PERSONNEL	26	0	2	$888,800
	MALFUNCTION OF CONTROL OR RELIEF EQUIPMENT	5	0	0	$513,005
	OTHER	45	3	3	$2,293,266
	OUTSIDE FORCE DAMAGE	53	0	4	$22,299,373
TOTALS		188	3	11	$32,518,689
1996	CORROSION	60	0	0	$14,806,271
	FAILED PIPE	10	0	0	$2,136,324
	FAILED WELD	9	0	0	$1,603,317
	INCORRECT OPERATION BY OPERATOR PERSONNEL	11	0	0	$2,750,000
	MALFUNCTION OF CONTROL OR RELIEF EQUIPMENT	6	0	0	$224,627
	OTHER	49	2	3	$20,732,558

	OUTSIDE FORCE DAMAGE	48	3	10	$7,409,447
TOTALS		193	5	13	$49,662,544
YEAR	**CAUSE**	**NUMBER**	**FATAL**	**INJURIES**	**DAMAGES**
1997	CORROSION	50	0	0	$15,042,180
	FAILED PIPE	11	0	0	$2,278,100
	FAILED WELD	3	0	0	$227,494
	INCORRECT OPERATION BY OPERATOR PERSONNEL	11	0	0	$1,310,450
	MALFUNCTION OF CONTROL OR RELIEF EQUIPMENT	7	0	0	$52,219
	OTHER	49	0	1	$8,685,130
	OUTSIDE FORCE DAMAGE	40	0	4	$14,980,076
TOTALS		171	0	5	$42,575,649
1998	CORROSION	40	0	0	$18,031,931
	FAILED PIPE	7	0	0	$5,011,276
	FAILED WELD	6	0	0	$1,670,100
	INCORRECT OPERATION BY OPERATOR PERSONNEL	7	1	0	$145,237
	MALFUNCTION OF CONTROL OR RELIEF EQUIPMENT	9	0	0	$73,000
	OTHER	42	0	1	$5,359,562
	OUTSIDE FORCE DAMAGE	42	1	5	$29,055,554
TOTALS		153	2	6	$59,823,660
1999	CORROSION	36	0	2	$3,806,437
	FAILED PIPE	3	0	0	$5,165,000
	FAILED WELD	14	0	0	$3,066,000
	INCORRECT OPERATION BY OPERATOR PERSONNEL	16	0	4	$3,096,410
	MALFUNCTION OF CONTROL OR RELIEF EQUIPMENT	7	0	0	$112,500
	OTHER	63	3	13	$16,437,840
	OUTSIDE FORCE DAMAGE	29	1	0	$11,293,100
TOTALS		168	4	20	$42,977,287
2000	CORROSION	33	0	0	$40,634,020
	FAILED PIPE	8	0	0	$33,295,052
	FAILED WELD	10	0	0	$58,377,000
	INCORRECT OPERATION BY OPERATOR PERSONNEL	9	0	0	$1,969,500
	MALFUNCTION OF CONTROL OR RELIEF EQUIPMENT	5	0	0	$178,317
	OTHER	47	0	1	$19,444,965
	OUTSIDE FORCE DAMAGE	35	1	3	$24,204,891
TOTALS		147	1	4	$178,103,745
2001	CORROSION	38	0	0	$6,407,300
	FAILED PIPE	3	0	0	$150,000
	FAILED WELD	4	0	0	$715,000
	INCORRECT OPERATION BY OPERATOR PERSONNEL	8	0	0	$601,500
	MALFUNCTION OF CONTROL OR RELIEF EQUIPMENT	3	0	0	$210,000
	OTHER	45	0	8	$10,596,101
	OUTSIDE FORCE DAMAGE	28	0	2	$6,616,850
TOTALS		129	0	10	$25,296,751
2002	**First Quarter:**				
	CORROSION	6	0	0	$791,495
	FAILED PIPE	1	0	0	$6,802

FAILED WELD	2	0	0	$76,250
INCORRECT OPERATION BY OPERATOR PERSONNEL	1	0	0	$77,000
MALFUNCTION OF CONTROL OR RELIEF EQUIPMENT	2	0	0	$10,062
OTHER	5	0	0	$2,173,310
OUTSIDE FORCE DAMAGE	4	0	0	$325,432
TOTAL	**21**	**0**	**0**	**$3,460,351**
Grand Total	**2847**	**32**	**217***	**$751,630,907**

*Does not include 1,851 injuries that required medical treatment reported for the October 1994 accidents.

NATURAL GAS TRANSMISSION PIPELINES

YEAR	CAUSE	NUMBER	FATAL	INJURIES	DAMAGES
1987	CONSTRUCTION/MATERIAL DEFECT	5	0	0	$176,000
	CORROSION	22	0	2	$1,100,658
	DAMAGE BY OUTSIDE FORCE	26	0	2	$1,622,808
	OTHER	17	0	11	$1,821,000
1987 Total		70	0	15	$4,720,466
1988	CONSTRUCTION/MATERIAL DEFECT	9	0	0	$651,000
	CORROSION	19	0	0	$1,140,710
	DAMAGE BY OUTSIDE FORCE	39	1	2	$5,860,868
	OTHER	22	1	9	$1,663,500
1988 Total		89	2	11	$9,316,078
1989	CONSTRUCTION/MATERIAL DEFECT	11	1	0	$933,354
	CORROSION	31	0	0	$1,856,558
	DAMAGE BY OUTSIDE FORCE	39	20	20	$7,578,811
	OTHER	22	1	8	$10,090,216
1989 Total		103	22	28	$20,458,939
1990	CONSTRUCTION/MATERIAL DEFECT	22	0	3	$1,693,048
	CORROSION	16	0	1	$1,574,500
	DAMAGE BY OUTSIDE FORCE	39	0	4	$7,386,138
	OTHER	12	0	9	$648,630
1990 Total		89	0	17	$11,302,316
1991	CONSTRUCTION/MATERIAL DEFECT	4	0	0	$6,125,500
	CORROSION	16	0	0	$1,845,224
	DAMAGE BY OUTSIDE FORCE	41	0	6	$3,060,014
	OTHER	10	0	6	$900,500
1991 Total		71	0	12	$11,931,238
1992	CONSTRUCTION/MATERIAL DEFECT	9	0	2	$5,506,100
	CORROSION	12	0	0	$1,847,208
	DAMAGE BY OUTSIDE FORCE	32	2	4	$13,885,717
	OTHER	21	1	9	$3,339,140
1992 Total		74	3	15	$24,578,165
1993	CONSTRUCTION/MATERIAL DEFECT	15	0	1	$6,704,834
	CORROSION	15	0	1	$3,057,876
	DAMAGE BY OUTSIDE FORCE	36	0	2	$9,335,558
	OTHER	29	1	13	$3,937,000
1993 Total		95	1	17	$23,035,268
1994	CONSTRUCTION/MATERIAL DEFECT	9	0	2	$342,647
	CORROSION	33	0	1	$4,661,647

	DAMAGE BY OUTSIDE FORCE	23	0	16	$32,127,680
	OTHER	16	0	3	$8,038,319
1994 Total		81	0	22	$45,170,293
1995	CONSTRUCTION/MATERIAL DEFECT	13	0	2	$2,498,000
	CORROSION	9	0	1	$2,039,500
	DAMAGE BY OUTSIDE FORCE	27	0	2	$4,435,250
	OTHER	15	2	5	$985,000
1995 Total		64	2	10	$9,957,750
1996	CONSTRUCTION/MATERIAL DEFECT	8	0	0	$1,076,923
	CORROSION	15	0	1	$2,085,400
	DAMAGE BY OUTSIDE FORCE	38	1	1	$4,652,387
	OTHER	16	0	3	$5,263,764
1996 Total		77	1	5	$13,078,474
YEAR	**CAUSE**	**NUMBER**	**FATAL**	**INJURIES**	**DAMAGES**
1997	CONSTRUCTION/MATERIAL DEFECT	12	0	0	$1,275,397
	CORROSION	21	0	0	$2,175,255
	DAMAGE BY OUTSIDE FORCE	28	1	4	$4,203,786
	OTHER	12	0	1	$4,423,679
1997 Total		73	1	5	$12,078,117
1998	CONSTRUCTION/MATERIAL DEFECT	19	0	4	$2,984,361
	CORROSION	22	0	0	$4,548,536
	DAMAGE BY OUTSIDE FORCE	37	1	3	$18,673,077
	OTHER	21	0	4	$3,543,336
1998 Total		99	1	11	$29,749,310
1999	CONSTRUCTION/MATERIAL DEFECT	8	0	0	$6,654,800
	CORROSION	14	0	0	$3,817,000
	DAMAGE BY OUTSIDE FORCE	18	1	2	$5,684,100
	OTHER	14	1	6	$1,540,037
1999 Total		54	2	8	$17,695,937
2000	CONSTRUCTION/MATERIAL DEFECT	7	0	0	$591,043
	CORROSION	31	12	2	$6,840,586
	DAMAGE BY OUTSIDE FORCE	20	3	7	$3,164,161
	OTHER	22	0	9	$7,272,471
2000 Total		80	15	18	$17,868,261
2001	CONSTRUCTION/MATERIAL DEFECT	12	0	0	$1,639,070
	CORROSION	15	0	0	$4,962,550
	DAMAGE BY OUTSIDE FORCE	35	0	0	$14,289,788
	OTHER	22	2	3	$1,951,335
2001 Total		84	2	3	$22,842,743
2002	**First Quarter:**				
	CONSTRUCTION/MATERIAL DEFECT	3	0	0	$645,000
	CORROSION	4	0	0	$2,318,983
	DAMAGE BY OUTSIDE FORCE	4	0	0	$362,262
	OTHER	2	0	0	$5,344,600
2002 Total		13	0	0	$8,670,845
	Grand Total	**1216**	**52**	**197**	**$282,454,200**

NATURAL GAS DISTRIBUTION PIPELINES

YEAR	CAUSE	NUMBER	FATAL	INJURIES	DAMAGES
1987	ACCIDENTALLY CAUSED BY OPERATOR	3	0	2	$20,000
	CONSTRUCTION/OPERATING ERROR	11	0	7	$1,463,000
	CORROSION	9	0	9	$226,000
	DAMAGE BY OUTSIDE FORCES	77	6	55	$5,981,905
	OTHER	63	5	42	$4,045,220
TOTALS		163	11	115	$11,736,125
1988	CONSTRUCTION/OPERATING ERROR	15	0	8	$434,000
	OTHER	68	15	62	$5,645,785
	DAMAGE BY OUTSIDE FORCES	107	7	35	$5,396,651
	ACCIDENTALLY CAUSED BY OPERATOR	4	0	3	$5,000
	CORROSION	7	1	6	$650,000
TOTALS		201	23	114	$12,131,436
1989	ACCIDENTALLY CAUSED BY OPERATOR	9	0	11	$420,000
	CONSTRUCTION/OPERATING ERROR	9	1	4	$227,000
	CORROSION	6	3	2	$278,500
	DAMAGE BY OUTSIDE FORCES	105	8	38	$4,451,316
	OTHER	48	8	36	$3,299,000
TOTALS		177	20	91	$8,675,816
1990	CORROSION	5	1	5	$60,000
	DAMAGE BY OUTSIDE FORCES	72	4	30	$4,665,426
	CONSTRUCTION/OPERATING ERROR	8	0	8	$75,500
	ACCIDENTALLY CAUSED BY OPERATOR	5	1	3	$349,000
	OTHER	19	0	6	$2,444,114
TOTALS		109	6	52	$7,594,040
1991	ACCIDENTALLY CAUSED BY OPERATOR	6	1	7	$25,000
	CONSTRUCTION/OPERATING ERROR	11	2	7	$214,193
	CORROSION	6	1	5	$275,000
	DAMAGE BY OUTSIDE FORCES	107	8	43	$6,266,555
	OTHER	32	2	15	$985,000
TOTALS		**162**	**14**	**77**	**$7,765,748**
1992	OTHER	30	2	15	$2,908,000
	ACCIDENTALLY CAUSED BY OPERATOR	3	0	5	$3,300
	CONSTRUCTION/OPERATING ERROR	10	0	12	$118,000
	CORROSION	4	0	2	$320,000
	DAMAGE BY OUTSIDE FORCES	56	5	31	$3,428,200
TOTALS		103	7	65	$6,777,500
1993	CONSTRUCTION/OPERATING ERROR	8	0	6	$701,000
	CORROSION	7	2	10	$195,100
	DAMAGE BY OUTSIDE FORCES	73	11	35	$11,490,555
	OTHER	24	3	24	$2,843,000
	ACCIDENTALLY CAUSED BY OPERATOR	9	0	9	$117,000
TOTALS		121	16	84	$15,346,655
1994	ACCIDENTALLY CAUSED BY OPERATOR	10	0	7	$130,000
	CONSTRUCTION/OPERATING ERROR	13	0	10	$139,000
	CORROSION	5	0	2	$3,300,000
	DAMAGE BY OUTSIDE FORCES	79	11	57	$10,931,166
	OTHER	34	10	15	$38,760,000
TOTALS		141	21	91	$53,260,166

YEAR	CAUSE	NUMBER	FATAL	INJURIES	DAMAGES
1995	ACCIDENTALLY CAUSED BY OPERATOR	6	1	8	$90,000
	OTHER	17	8	5	$845,500
	DAMAGE BY OUTSIDE FORCES	66	6	24	$8,957,046
	CONSTRUCTION/OPERATING ERROR	5	0	4	$1,027,127
	CORROSION	3	1	2	$31,000
TOTALS		97	16	43	$10,950,673
1996	ACCIDENTALLY CAUSED BY OPERATOR	6	0	6	$930,000
	CONSTRUCTION/OPERATING ERROR	6	2	3	$400,000
	CORROSION	2	0	2	$120,000
	DAMAGE BY OUTSIDE FORCES	64	7	37	$6,182,575
	OTHER	32	38	61	$8,620,267
TOTALS		110	47	109	$16,252,842
1997	OTHER	34	2	27	$4,318,000
	DAMAGE BY OUTSIDE FORCES	57	5	18	$7,663,613
	ACCIDENTALLY CAUSED BY OPERATOR	4	0	3	$50,000
	CORROSION	3	1	4	$155,000
	CONSTRUCTION/OPERATING ERROR	4	1	15	$306,550
TOTALS		102	9	67	$12,493,163
1998	ACCIDENTALLY CAUSED BY OPERATOR	7	0	7	$0
	CONSTRUCTION/OPERATING ERROR	5	1	4	$100,500
	CORROSION	6	1	3	$473,000
	DAMAGE BY OUTSIDE FORCES	89	11	33	$14,774,895
	OTHER	30	3	17	$3,326,723
TOTALS		137	17	65	$19,055,118
1999	CONSTRUCTION/OPERATING ERROR	8	0	7	$870,000
	OTHER	26	0	19	$3,594,500
	CORROSION	7	1	5	$844,000
	ACCIDENTALLY CAUSED BY OPERATOR	6	0	8	$78,000
	DAMAGE BY OUTSIDE FORCES	72	18	46	$20,527,158
TOTALS		119	19	85	$25,913,658
2000	OTHER	44	15	22	$10,183,022
	ACCIDENTALLY CAUSED BY OPERATOR	7	0	6	$211,608
	CONSTRUCTION/OPERATING ERROR	10	0	6	$1,318,000
	CORROSION	5	0	0	$50,000
	DAMAGE BY OUTSIDE FORCES	82	4	17	$10,826,204
	NO DATA	6	3	3	$555,000
TOTALS		154	22	59	$23,398,834
2001	OTHER	27	2	5	$2,136,250
	ACCIDENTALLY CAUSED BY OPERATOR	6	0	4	$ 112,865
	CONSTRUCTION/OPERATING ERROR	4	0	2	$186,000
	CORROSION	5	0	4	$340,000
	DAMAGE BY OUTSIDE FORCES	78	3	28	$11,050,267
	NO DATA	1	0	0	$50,000
TOTALS		121	5	43	$13,875,382
2002	**First Quarter:**				
	OTHER	3	0	1	$219,000
	DAMAGE BY OUTSIDE FORCES	13	0	2	$2,403,022
TOTALS		16	0	3	$2,622,022
	Grand Total	**2033**	**253**	**1163**	**$247,849,178**

PIPELINE THIRD PARTY DAMAGE

Mr. Rogers. What percentage of natural gas and liquid pipeline releases and accidents can be attributed to third party damages? Please update the table on page 426 of last year's hearing record.

[The information follows:]

Natural Gas - Third Party Damage			
Year	Total Incidents	3rd-Party Incidents	Percentage
1995	161	62	38.51
1996	187	76	40.64
1997	175	58	33.14
1998	236	86	36.44
1999	173	66	38.15
2000	234	83	35.47
2001	205	85	41.46
Total	1371	516	37.64

Liquid - Third Party Damage			
Year	Total Incidents	3rd-Party Incidents	Percentage
1995	188	32	17.02
1996	194	34	17.53
1997	171	35	20.47
1998	153	21	13.73
1999	168	27	16.07
2000	147	33	22.45
2001	129	28	21.71
Total	1150	210	18.26

PIPELINE SAFETY INSPECTIONS HISTORY

Mr. Rogers. Please update the table starting on page 427 of last year's hearing record, that provides data, by region, on the number of pipeline safety inspections conducted on a yearly basis since fiscal year 1990 and the number of inspection days.

[The information follows:]

RSPA PIPELINE SAFETY							
Region		EA	SO	CE	SW	WE	Total
1990	# Inspections	13	47	53	74	102	289
1991	# Inspections	53	73	59	51	108	344
1992	# Inspections	78	100	226	114	116	634
1993	# Inspections	62	88	243	184	149	726
1994	# Inspections	58	68	238	197	114	675
1995	# Inspections	117	102	273	181	172	845
1996	# Inspections	181	140	236	242	217	1016
1997	# Inspections	91	177	211	339	216	1034
1998	# Inspections	121	152	224	258	210	965
1999	# Inspections	116	135	116	208	186	761
2000	# Inspections	111	117	131	143	148	650
2001	#Inspections	95	134	189	127	247	792

Actual Days Spent Monitoring Pipelines							
Region		EA	SO	CE	SW	WE	Total
1997	Inspection Days	272.0	457.0	744.0	875.5	652.0	3000.5
1998	Inspection Days	479.0	451.0	795.5	618.5	579.5	2923.5
1999	Inspection Days	608.5	421.5	794.0	694.5	771.5	3290.0

2000	Inspection Days	402.5	336.0	718.5	470.5	798.0	2730.0
2001	Inspection Days	316	329	788	571	832	2836

EA=Eastern Region; SO=Southern Region; CE=Central Region; SW=Southwest Region; WE=Western Region

PIPELINE SAFETY WORKLOAD MEASURES

Mr. Rogers. Please update the workload measures for the Office of Pipeline Safety on pages 428 through 430 of last year's hearing record.

[The information follows:]
OPS evaluated the amount of its average civil penalty per case and found that the average per case increased 10 fold from $17,000 over the past 10 years to $170,000 in the past 2 years.

Enforcement					
	2003*	2002*	2001	2000	1999
Cases Opened	156	156	113	129	91
Inspections**	875	800	792	650	761
Accident Investigations	35	35	32	43	36

*Estimated.
**Includes all types of inspections.

Civil Penalties (in millions)					
	2003*	2002*	2001	2000	1999
Proposed	$2.00	$2.00	$4.100	$4.379	$0.110
Collected	$2.00	$2.00	$0.506	$0.144	$0.125

*Estimated.

Training					
	2003	2002*	2001	2000	1999
Classes	32	32	21	22	18
Seminars	44	42	38	33	22
Students	4,973	4,933	4,419	3,410	3,272

*Estimated.

Outreach/NARUC & NAPSR Conferences					
	2003*	2002*	2001	2000	1999
Conferences	11	11	11	9	9
Participants	305	305	305	215	215

*Estimated.

	2000	1999	1998	1997	1996
# of Operators	10,864	10,968	10,592	10,641	12,088
# of Operators Inspected	5,439	5,401	4,640	5,114	5,963
# of Inspection Units	14,110	13,961	13,398	13,415	14,968
# of Inspection Units Inspected	7,628	7,735	7,035	7,296	8,107
# of Inspectors	308	294	294	283	294
Person Days Spent on Inspections	29,416	28,695	28,720	28,018	28,184

# of Non-compliance Found	15,393	15,014	13,609	17,122	14,365
Enforcement Actions Initiated	2,855	2,789	2,524	2,799	3,074

State Compliance Activities -- Hazardous Liquid Program					
	2000	1999	1998	1997	1996
# of Operators	424	432	425	403	405
# of Operators Inspected	266	316	260	283	272
# of Inspection Units	641	602	580	552	538
# of Inspection Units Inspected	387	422	343	370	339
# of Inspectors*	86	75	72	75	72
Person Days Spent on Inspections	2,057	1949	1,917	2,153	2010
# of Non-compliance Found	455	693	498	891	985
Enforcement Actions Initiated	105	131	131	142	115

*Some inspectors may be counted under both gas/liquid programs.

Regulatory Development					
	2003*	2002*	2001	2000	1999
ANPRM	1	1	0	0	1
NPRM	4	5	5	3	4
FR	5	6	2	5	6
State Waivers	12	6	12	35	37
Federal Waivers	6	6	4	6	4
Interpretations	15	15	22	18	35
Alert Notices/Advisory Bulletins	4	4	2	2	6
NTSB Recommendations Closed	12	30	6	1	16

Estimated.

ACTIVITIES ASSOCIATED WITH ACCIDENT DATA FORM REVISIONS

Mr. Rogers. In the past year, what has RSPA done to (1) revise and clarify the forms and instructions used by pipeline operators to report accidents and (2) validate accident information reported by pipeline operators? What has been your experience with the revised forms, and how accurate is the accident information being reported by pipeline operators?

[The information follows:]

1) In the past year, RSPA revised and clarified forms and instructions for hazardous liquid accident reporting and natural gas transmission incident reporting:

- RSPA revised natural gas transmission pipeline incident reporting and instructions [Docket No. RSPA-98-4957; Notice 21 (8/02/2000); Docket No. RSPA-98-4957-50 (5/08/2001)] OMB approved data collection and RSPA began revised collection of natural gas transmission incident information 1/01/2002.

- RSPA revised hazardous liquid accident reporting and instructions [NPRM- Docket No. RSPA-2001-8663-1 (05/20/2001); Final Rule-Docket No. RSPA-2001-8663-19 (01/08/2002)]. The effective date for reporting was thirty days subsequent to final rule, or 02/07/2002.
- Natural gas distribution pipeline incident and annual report revisions will be performed in calendar year 2002 based on lessons learned from natural gas transmission and hazardous liquid pipeline accident information improvements. RSPA anticipates revising the information collection by 01/01/2003.

2) RSPA took additional steps to validate accident information reported by pipeline operators through a variety of measures. The steps include:

- New electronic reporting for improved accuracy and consistency.
- New "Initial", "Supplemental", "Final" checkbox to indicate when reporting is complete.
- New automated follow-up on biannual basis until "Final" checkbox is checked.
- New Region staff review in Calendar year 2002 (hiring is underway and training is required; we expect Regional review to gear up formally the second half of CY 2002).

Our experience with the revised forms:
Reports are required within 30 days of an accident. For this calendar year, only two months of information have been collected on the improved accident forms. Early indications are that with the improved cause categories, RSPA has reduced the "OTHER" category frequency from about 25% in the past to about 10% on the new forms. Additionally, about 78% of the new reports received indicate that the report is not final so we would expect the 10% rate for "OTHER" to be even lower after further updates. Our Regional review has not commenced yet, as hiring is still underway and training of new staff is required to get this initiative underway. Once in place, Regional review of the accident information should further help reduce the "OTHER" cause category. Other improvements include better-cost information, better information on accident consequences, with data on spills down to 5 gallons and overall more data with the requirement for reporting decreased from 50 barrels to 5 gallons.

INCIDENT SUMMARIES AND STATISTICS

Mr. Rogers. Please update the tables on page 432 and 433 of last year's hearing record depicting information on hazardous liquid transmission lines, natural gas and transmission, and natural gas distribution lines.

[The information follows:]

Hazardous Liquid Pipeline Accident Statistics Yearly Summaries (1996-2001)							
Year	No. of Accidents	Fatalities	Injuries	Property Damage	Gross Loss	Recovered	Net Loss
1996	194	5	13	$81,353,269	160,316	59,363	100,953
1997	171	0	5	$42,810,659	195,549	69,849	125,700
1998	153	2	6	$62,864,796	149,297	88,506	60,791
1999	168	4	20	$87,108,560	167,245	62,755	104,490
2000	147	1	4	$178,103,745	108,818	51,761	57,057
2001	129	0	10	$25,296,751	97,342	20,882	76,460

Natural Gas Transmission Pipeline Incident Yearly Summaries (1996-2001)				
Year	No. of Incidents	Fatalities	Injuries	Property Damage
1996	77	1	5	$13,078,474
1997	73	1	5	$12,078,117
1998	99	1	11	$29,749,310
1999	54	2	8	$17,695,937
2000	80	15	18	$17,868,261
2001	84	2	3	$22,842,743

Natural Gas Distribution Pipeline Incident Yearly Summaries (1996-2001)				
Year	No. of Incidents	Fatalities	Injuries	Property Damage
1996	110	47	109	$16,252,842
1997	102	9	67	$12,493,163
1998	137	17	65	$19,055,118
1999	119	19	85	$25,913,658
2000	154	22	59	$23,398,834
2001	121	5	43	$13,875,382

USER FEE – PERCENT PAID BY LIQUID PETROLEUM PIPELINES

Mr. Rogers. What percentage of the total user fees did liquid petroleum pipelines pay in 2002? What is expected in 2003?

[The information follows:]
In fiscal year 2002, the allocation of user fees assessed to liquid petroleum operators was 50 percent of the total costs for operations, program, and research and development activities. In addition, liquid pipeline operators were assessed 13 percent of user fees covering the state grant costs associated with the pipeline program. No significant change is expected in fiscal year 2003.

USER FEES, PER MILE RATE AND TOTAL COLLECTED

Mr. Rogers. Please prepare a comparative table displaying the per mile user fee assessed to gas transmission and liquid pipeline operators, and the total collected in user fees from each industry in fiscal years 1996 through 2001, and anticipated for fiscal year 2002. See page 434 of last year's hearing record.

[The information follows:]
These tables show the per mile rate and the total collected for fiscal years 1996 through 2002 from the gas and liquid industry. We are still collecting fees for FY 2002, so the amount shown is what we assessed to gas and hazardous liquid operators.

Gas	Per Mile Rate	Total Collected
FY 1996	$ 77.49	$19,340,574
FY 1997	$ 67.46	$16,392,537
FY 1998	$ 67.98	$15,745,762
FY 1999	$ 70.47	$15,897,275
FY 2000	$ 68.23	$17,458,301
FY 2001	$ 84.57	$20,365,444
FY 2002	$109.15	$32,941,226*

*Anticipated

Liquid	Per Mile Rate	Total Collected
FY 1996	$ 49.67	$ 7,683,000
FY 1997	$ 61.27	$ 8,869,716
FY 1998	$ 59.59	$ 7,472,139
FY 1999	$ 57.88	$ 9,102,548
FY 2000	$ 63.11	$14,284,065
FY 2001	$ 73.83	$11,279,950
FY 2002	$121.99	$19,584,226*

*Anticipated

OIL POLLUTION ACTION

Mr. Rogers. Please allocate and describe all OPS actual expenses that could be associated with the Oil Pollution Act requirements in fiscal year 2002 and anticipated in fiscal year 2003. How does this compare in each fiscal year with the amount derived from the Oil Spill Liability Trust Fund?

[The information follows:]
For FY 2002, the enacted level that was derived from the Oil Spill Liability Trust Fund (OSLTF) was $7,864,000. For FY 2003 we are requesting $7,472,000. For FY 2003, we estimate that $17,724,000 could be funded by the OSLTF because of the activities, including personnel costs, that directly relate to RSPA efforts to prevent and mitigate the effects of oil spills into water and environmentally sensitive areas. The $17,724,000 is calculated as follows:

PC&B and Administrative ($1,056,000):

- OPS HQ and Region staff and administrative costs to address environmental policy, regulatory development, spill response plan review and exercise, pipeline inspection and spill response technical monitoring; special task force/studies of oil pipeline company integrity management programs.
- Over 360 hazardous liquid inspections, includes accident investigations and pipeline construction.
- Area exercises and 20 table top drills.

Information and Analysis ($700,000):

- Over half the incident reporting, data collection, analysis and trending labor.
- Identifying accident cause and consequence, evaluating and acting on environmental impacts, particularly related to protecting drinking water sources.

Pipeline Integrity Management (includes Risk Assessment and Technical Studies) ($4,000,000):

- Systematically identify hazardous liquid risks, and compare relative likelihood and consequences.
- Increase public awareness about potential risks from liquid pipelines.
- Review 66 large liquid operators' integrity management plans.
- Review the adequacy of the liquid operators' plans for the identification of High Consequence Areas (HCA), operator time lines for mandatory testing, operators' selections of appropriate test methods, risk factors considered, processes for integrating information, test results, and adequacy of leak detection systems, valve placement, and other prevention and mitigation measures.

Compliance ($150,000):

- Technical field engineering support for monitoring major spills and remediation.
- Dedicated personnel for integrating public and private sector incident coordination and decision support for protective actions.

Training & Information Dissemination ($400,000):

- Computer-based training (CBT) to update safety evaluations of hazardous liquid pipeline systems.

- Classes and seminars specifically given to address hazardous liquid risk and system integrity concerns.

Emergency Notification ($3,000):
- The National Response Center (NRC) provides immediate notification of hazardous liquid pipeline spills.

Community Assistance and Technical Services ($1,707,000):
- Investigate, encourage, and inform communities on damage prevention efforts on hazardous liquid pipelines.

Implementation of the specific Oil Pollution Act provisions, ($2,443,000):
- Review and approve pipeline operator spill response plans.
- Contract support for 3 area exercises and 20 table top drills.
- Obtain data on environmental sensitive area, includes drinking water and other ecological resource areas.

Mapping and Information Systems ($400,000):
- Collecting and digitizing more accurate liquid pipeline location information as it becomes available. To be used in conjunction with data on population, drinking water intakes, terrain. Needed to set priorities for prevention and response actions.

Damage Prevention and Leak Detection ($3,978,000):
- Research to detect encroachment on pipeline right-of-way or mechanical damage to reduce accidents from third-party damage to hazardous liquid pipelines.
- Investigate new technologies to prevent damage to pipelines, detect pipeline defects and quickly and accurately locate hazardous liquid pipelines leaks (specifically, small leaks that occur near water).
- Develop best practices standards for leak detection technologies.

Pipeline Safety Grants ($2,887,000):
- State program which provides oversight of intrastate hazardous pipelines operations and maintenance, construction, repairs.
- 50 percent of one-call grants to States for programs to increase training, education and compliance activities.

- 50 percent of damage prevention grants to reduce impacts on the environment from disruptions caused by excavation activities around hazardous liquid pipelines.
- State activities to promote the best practices on interstate hazardous liquid pipelines.

PIPELINE SAFETY CIVIL PENALTIES AND FINES

Mr. Rogers. Please update the table on civil penalty actions assessed and collected as shown on page 438 of last year's hearing record.

[The information follows:]
The updated table on civil penalty actions is attached. Please note that penalty actions assessed and collected generally reflect enforcement actions initiated in prior years rather than the current year.

RSPA Pipeline Civil Penalty Actions				
Year	Number of Proposed Civil Penalties	Amount Proposed ($)	Number of Collected Civil Penalties	($)Amount Collected
1977	7	16,400	1	700
1978	23	70,200	6	8,500
1979	20	46,450	21	26,800
1980	29	60,500	35	55,300
1981	6	14,750	4	7,250
1982	2	16,000	2	3,000
1983	3	21,000	5	19,500
1984	1	2,750	5	6,000
1985	8	12,000	11	56,500
1986	7	393,000	6	113,000
1987	20	641,500	9	391,000
1988	53	775,650	21	79,950

1989	45	512,950	30	102,300
1990	46	431,440	24	305,000
1991	58	1,310,300	36	218,300
1992	69	1,133,100	72	802,740
1993	75	1,217,300	69	748,150
1994	69	1,145,250	45	600,540
1995	33	733,075	23	264,835
1996	34	531,900	10	46,750
1997	57	818,621	27	228,171
1998	44	465,475	26	316,846
1999	6	110,000	10	125,000
2000	24	4,379,000	13	143,707
2001	25	4,099,700	10	506,000
2002 as of 4/29/02	16	639,000	3	70,000

RSPA Pipeline Civil Penalty Actions Proposed and Collected		
Year	Average Amount ($) Preliminarily Assessed	Average Amount Collected ($)
1977	2,342	700
1978	3,052	1,416
1979	2,322	1,276
1980	2,086	1,580
1981	2,458	1,812
1982	8,000	1,500
1983	7,000	3,900
1984	2,750	1,200
1985	1,500	5,136

1986	56,142	18,883
1987	32,075	43,444
1988	14,363	3,807
1989	11,399	3,410
1990	9,379	12,708
1991	22,591	6,064
1992	16,422	11,149
1993	16,231	10,843
1994	16,598	13,343
1995	22,214	11,515
1996	15,644	4,675
1997	14,362	8,451
1998	10,579	12,186
1999	18,333	12,500
2000	182,458	11,054
2001	163,988	50,600
2002 as of 4/29/02	39,938	23,333

RSPA Pipeline Enforcement Actions			
Year	No. of Enforcement Actions	No. of Warning Letters and Letters of Concern	Percent of Warning Letters and Letters of Concern
1986	120	99	82.5
1987	99	60	60.6
1988	80	15	18.8
1989	88	27	30.7
1990	94	31	32.9

1991	114	23	20.1
1992	150	56	37.3
1993	178	49	27.5
1994	168	42	25.0
1995	132	63	47.7
1996	185	104	56.2
1997	179	110	62.5
1998	218	149	68.3
1999	91	66	73
2000	128	62	48
2001	113	45	40
2002 as of 4/29/02	57	13	23

RSPA Pipeline Enforcement Actions-Civil Penalties		
Year	Number of Proposed Civil Penalties	Amount
1986	7	393,000
1987	20	641,000
1988	53	775,650
1989	45	512,950
1990	46	431,440
1991	58	1,310,300
1992	69	1,133,100
1993	75	1,217,300
1994	69	1,145,250
1995	33	733,075
1996	34	531,900

1997	14	359,650
1998	8	93,500
1999	6	110,000
2000	24	4,379,000
2001	25	4,099,700
2002 as of 4/29/02	16	639,000

OPEN NTSB RECOMMENDATIONS FOR THE OFFICE OF PIPELINE SAFETY

Mr. Rogers. How many open NTSB recommendations does the Office of Pipeline Safety have? Please highlight what these recommendations are and the status of resolution, similar to what was provided on page 443 of last year's hearing record.

[The information follows:]
As of April 19, 2002, there are 42 "Open" NTSB pipeline safety recommendations to RSPA. NTSB now rates 85 % of RSPA responses as acceptable, which is an improvement from last year's 75 %. RSPA's responses to these recommendations are rated by NTSB as follows:

OPEN Acceptable Action: 0
OPEN Acceptable Response: 34
Total OPEN Acceptable: 34 (85%)

OPEN Unacceptable Action: 1
OPEN Unacceptable Response: 5
Total OPEN Unacceptable: 6 (15%)

Pending NTSB Ratings: 2
Total OPEN Recommendations: 42

OPEN Recommendations (by general topic):

Outside Force/Damage Prevention: 23
Integrity Management: 15

Other*: 4

(* For example: data improvement; state programs, human fatigue)

Mr. Rogers. How many of these open recommendations have been added by the NTSB in the past fiscal year? What are they?

[The information follows:]
In fiscal year 2001, the NTSB issued four new pipeline safety recommendations. It has not issued any new recommendations in fiscal year 2002. The new recommendations are:

P-00-20 Inform natural gas pipeline operators of the circumstances of the January 22, 1999, accident in Bridgeport, AL. Further, advise operators to review their emergency plans and procedures for responding to gas pipeline emergencies and modify them as necessary. The review should determine whether the procedures prompt the appropriate actions for gas leaks caused by excavation damage near buildings and whether the procedures adequately address the possibility of multiple leaks and the underground migration of gas into nearby buildings.

P-00-21 Evaluate, during annual inspections of utilities, the adequacy of operator emergency plans and written procedures for responding to gas pipeline emergencies, paying particular attention to procedures that address the possible migration of gas from excavation sites into nearby buildings. If warranted, require that operators modify the procedures.

P-01-1 Require gas utility operators to maintain a specified minimum separation distance, sufficient to protect against both thermal and mechanical damage, between plastic gas service lines and underground electrical facilities whenever they install a new gas service line or perform maintenance on existing lines.

P-01-2 Require that excess flow valves be installed in all new and renewed gas service lines, regardless of the customer's classification, when the operating conditions are compatible with readily available valves.

RSPA has already responded to P-00-20, 21 and asked NTSB to close them.

OUTSTANDING PIPELINE SAFETY RULEMAKINGS

Mr. Rogers. Please update the listing of all outstanding pipeline safety rulemakings, listing their docket number, title, current phase, and scheduled completion dates.

[The information follows:]
The chart below describes all outstanding pipeline safety rulemakings and those completed in FY 2001 and FY 2002.

Pipeline Safety Rulemakings

Docket No.	*Title*	*Current Phase*	*Milestone*
PS-124	Further Regulatory Review; Gas Pipeline Safety Standards	Preparing NPRM	11/02
PS-126	Passage of Instrumented Internal Inspection Devices	Preparing Final Rule on Reconsideration	12/02
RSPA-97-2717	Recommendations to Change Hazardous Liquid Pipeline Safety Standards	Preparing NPRM	07/02
RSPA-97-2762	Controlling Corrosion on Hazardous Liquid and Carbon Dioxide Pipelines	Issued Final Rule	12/01
RSPA-97-3001	Periodic Underwater Inspections	Preparing NPRM	10/02
RSPA-98-4868	Gas Gathering Line Definition	Pre-proposal	06/03
RSPA-99-6106	Periodic Updates Pipeline Safety Regulations (1999)	Preparing Final Rule	11/02
RSPA-99-6132	Producer-operated Outer Continental Shelf Gas and Haz.	Issued Final Rule	04/02

Docket No.	*Title*	*Current Phase*	*Milestone*
	Liquid Pipelines		
RSPA-99-6355	Pipeline Integrity Management in High Consequence Areas (Repair Criteria)	Issued Final Rule	01/02
RSPA-00-7408	Pipeline Integrity Management in High Consequence Areas (Hazardous Liquid Operators with less than 500 Miles)	Issued Final Rule	01/02
RSPA-00-7666A	High Consequence Areas for Gas Transmission Operators	Issued NPRM	01/02
RSPA-00-7666B	Pipeline Integrity Management in High Consequence Areas (Gas Transmission)	Preparing NPRM	09/02
RSPA-00-8417	Drug and Alcohol Testing for Pipeline Facility Employees	Issued Final Rule	09/01
RSPA-01-8663	Hazardous Liquid Pipeline Accident Reporting Revisions	Issued Final Rule	01/02
RSPA-01-8663	Hazardous Liquid Pipeline Accident Reporting Revisions	Issued Final Rule	01/02
RSPA-01-9832	Hazardous Liquid Pipeline Operator Annual Reports	Preparing NPRM	05/02
###	###	###	###

THREE MOST SIGNIFICANT REGULATIONS OF 2003

Mr. Rogers. Please identify the three most significant pipeline regulations that RSPA plans to finalize during fiscal year 2003 and indicate

why they are important. Are these new regulations or ones you have been working on for a few years?

[The information follows:]
The three most significant regulations that will be finalized during FY 2003 are already under development:

(1) Docket No. RSPA-00-7666: Pipeline Integrity Management in High Consequence Areas (Gas Transmission Operators).
This action is designed to provide added integrity assurance in areas where the consequences of a potential gas transmission pipeline rupture are the greatest. In January 2002, RSPA issued a proposed definition for these high consequence areas (HCA). By mid-2002 we will issue a proposed integrity management program (IMP) requirement. The general approach will mirror the IMP program previously instituted for hazardous liquid pipelines. It will likely require assessment of the condition of a pipeline using ILI or hydrotesting procedures, and will allow for "direct assessment" technologies to be used to assess selected pipelines where use of ILI or hydrotesting is not possible. A final rule will be issued in fiscal year 2003.

(2) RSPA-01-9832: Hazardous Liquid Pipeline Operator Annual Reports.
This action will amend the pipeline safety regulations to require hazardous liquid pipeline operators to annually submit a proposed Hazardous Liquid Pipeline Operator Annual Report. The information on the proposed hazardous liquid operator annual report form is needed to normalize hazardous liquid accident information for identifying safety trends in the accident data collection. In 2001, RSPA made similar changes to the Gas Transmission Pipeline Annual Report and improved the hazardous liquid accident form by expanding failure cause categories and collecting more detailed information about the impact of failed pipelines. The proposed hazardous liquid operator annual report will address the concerns of RSPA, the National Transportation Safety Board (NTSB), Congress, and others, increasing the overall usefulness of the data and making analysis more efficient and meaningful. An NPRM will be issued by April 2002 and a final rule in late 2002.

(3) Docket No. RSPA-97-3001: Periodic Underwater Inspections.
This action will require operators of natural gas and hazardous liquid pipelines to conduct periodic underwater inspections of offshore pipelines and those in navigable waterways. This action would also define what

constitutes an exposed underwater pipeline and what constitutes a hazard to navigation or public safety. This could include requirements for the reburial of exposed pipelines. An NPRM will be issued by October 2002 and a final rule in mid-2003.

PIPELINE VULNERABILITY STUDY

Mr. Rogers. In 1999 RSPA completed the Pipeline Vulnerability Study, as part of a comprehensive Transportation System Vulnerability Assessment. The study indicated that electronic attacks on control systems pose the greatest threat to the pipeline infrastructure in terms of consequences. Physical attacks would have limited localized impact because gas and hazardous liquid supplies could be rerouted through unaffected pipelines. RSPA makes three recommendations in the study: 1. An assessment of the pipeline network on a national scale should be performed to evaluate vulnerabilities, including quantifying the potential magnitude of disruptive effects to oil and gas delivery by major suppliers and the downstream effects to industry and the public. 2. DOE and DOT should establish information sharing with the pipeline industry and first responders to update their plans to include response to technological disasters. 3. Federal agencies and industry should consider restrictions on release of pipeline system data because the information would allow terrorists to target key pipeline assets. How have your programs, policies, or procedures changed based on this study?

[The information follows:]
RSPA is working with the DOT Office of Intelligence and Security to update the supervisory control and data acquisition (SCADA) system vulnerability study to incorporate the ways in which computer technology has changed since the original report's publication, and to reflect RSPA's new emphasis on pipeline security.

A final draft of the revised SCADA security report is currently under review. RSPA is working closely with the Department of Commerce's Critical Infrastructure Assurance Office (CIAO) and DOE, which has the lead responsibility for cyber security issues in the energy sector.

RSPA is implementing the SCADA report's findings as follows: 1. RSPA is working with DOE to assess pipeline system vulnerabilities and identify ways to improve protections for pipeline facilities, and developing plans to

improve response and recovery preparedness, 2. RSPA has developed, in coordination with the Department of Energy and the Federal Bureau of Investigation, a streamlined communications process that is now part of our daily operations for distribution of security information and threat warnings; and 3. to reduce the opportunity for misuse of the National Pipeline Mapping System, we limited accessibility to the website by installing a password protection system.

PIPELINE SECURITY

Mr. Rogers. In the pipeline arena, what security actions have you taken in response to September 11th and what agencies are you coordinating with?

[The information follows:]
Through the OPS, RSPA oversees the safety and security of the nation's 2.1 million miles of pipelines. September 11th provided us a unique understanding of the state of security preparedness within the pipeline industry.

On September 11th, we made over 1,000 telephone calls to pipeline operators to assess the security at pipeline facilities. We developed, in coordination with the Department of Energy and the Federal Bureau of Investigation, a streamlined communications process that is now part of our daily operations for distribution of security information and threat warnings. Through a Pipeline Direct Action Group, we reached out to industry, states and interest groups to identify security concerns, issues and solutions. We are coordinating our efforts with industry, states and other federal agencies. We called on pipeline operators to work with us in developing consensus standards for the physical security of pipelines. We also asked operators to develop security, response and recovery plans. We are working with industry and states to define what facilities are most critical and most in need of protection. We are assisting States by providing information on operator's vulnerabilities, soliciting State input in consensus standards on protection measures, involving them in discussions of response and recovery issues and including them in security exercises. We had conference calls with all 50 States on security issues every few weeks to identify states' needs in this area and to coordinate planning. We are starting to work with state pipeline safety agencies to develop a process for verifying that operators have implemented adequate plans.

We secured our own information systems, such as the National Pipeline Mapping System, a Web-based system, that is now password-protected to reduce the opportunity for misuse. We proposed a pipeline alert system and security practices tiered to the Office of Homeland Security's threat condition levels. RSPA issued a broad agency announcement soliciting proposals for security-related research projects for all modes of transportation including pipelines. We are also working closely with the new Transportation Security Administration.

RSP AUTHORIZED STAFFING

Mr. Rogers. Please provide a table showing staffing authorized each fiscal year 1996-2002 and requested for 2003 for OHMS and RSP. Provide information on what the increase was for (inspectors, engineers, etc.).

[The information follows]:

RSP Authorized Positions

Fiscal Year	Office of Hazardous Materials Safety (OHMS)	Rest of Research & Special Programs (RSP)	Totals
1996	111	65	176
1997*	129	68	197
1998	129	68	197
1999	129	68	197
2000	129	66	195
2001**	129	71	200
2002	135	71	206
2003***	137	86	223

*The increase in 1997 OHMS was for 15 hazardous materials inspector positions, and 3 program support positions for the inspectors.
** The increase in 2001 for the rest of RSP was for 2 Emergency Transportation Specialists and 3 Contract Specialists.
***The increase in 2003 for the rest of RSP were for 1 Security Officer, 1 Network Administrator, 2 Computer Systems Analysts, 1 Program Analyst, 1 Web Master, 1 Telecommunications Specialist, 1 Human Resources Specialist, 2 Administrative Support Specialists, and 4 Accountants.
*** The increase in 2003 OHMS was for 2 General Engineers.

RSP CURRENT ON-BOARD STAFF

Mr. Rogers. Please provide a table that shows the current on-board staff (full-time permanent positions and full-time equivalents) for the Office of Hazardous Materials Safety and for RSP. Please break out this data by headquarters and regional staff.

[The information follows]:

As of April 17, 2002

	Full-time Permanent positions		Full-time Equivalents	
	HQ	REGIONS	HQ	REGIONS
Office of Hazardous Materials Safety	90	34	90	34
All Other RSP	71	0	71	0

VACANCIES IN THE OFFICE OF HAZARDOUS MATERIALS SAFETY

Mr. Rogers. Does the Office of Hazardous Materials Safety have any vacancies currently? How many?

[The information follows:]
The Office of Hazardous Materials Safety has a full-time permanent authority of 135 positions. We currently have 124 FTE on board and are actively recruiting to fill the remaining 11 new and attrition vacancies.

Mr. Rogers. If so, please provide information on what positions are unfilled, and where these positions are located. What is the plan to fill these positions?

[The information follows:]
The positions that are unfilled are:

OFFICE & LOCATION	POSITION TITLE	PLAN TO ADDRESS POSITIONS
Hazardous Materials Technology - Washington, DC	Supervisory General Engineer	Panel convened to rate candidates
	General Engineer	Job announcement in process of being posted
	Interdisciplinary Position	Applications being reviewed - selection pending
Hazardous Materials Exemptions & Approvals - Washington, DC	Transportation Specialist (Regulations)	Job announcement in process of being posted
Hazardous Materials Enforcement – Washington, DC	Transportation Specialist (Enforcement)	Job announcement being prepared
Western Region - Ontario, CA	Transportation Specialist (Enforcement)	Panel convened to rate candidates
Hazardous Materials Initiatives & Training - Washington, DC	Training & Information Specialist	Panel convened to rate candidates
Hazardous Materials Policy & Analysis - Washington, DC	Operations Research Analyst (2 positions)	Applications being reviewed - selection pending
	Economist	Applications being reviewed - selection pending
	Information Technology Specialist	Applications being reviewed - selection pending

VACANCIES IN THE REST OF RSP

Mr. Rogers. Does the rest of RSP have any vacancies currently?

[The information follows]:
Currently RSP has zero vacancies.

Mr. Rogers. If so, please provide information on what positions are unfilled and where these positions are located. What is the plan to fill these positions?

[The information follows:]
RSPA has zero vacancies.

PERSONNEL INCREASE IN FISCAL YEAR 2002

Mr. Rogers. Please provide a table showing information on any new positions provided in the fiscal year 2002 appropriations bill. Include information on titles, duties they perform, where they are located (in the field or in headquarters), and whether they are currently filled?

[The information follows:]
RSPA reallocated two new positions, of the six authorized in FY 2002 as part of the Strategic Hazardous Materials Incident Reduction (SHMIR) initiative, to exemptions processing. Due to the events of September 11, RSPA received increased exemption applications in FY 2001, many of which addressed security issues. Exemption applications involve new technology requiring in-depth technical evaluations by RSPA staff. The volume of applications continues to increase because new technologies constantly result in new and often better products, materials, and packagings. RSPA requested two new positions in FY 2003 to complete staffing of the SHMIR initiative.

The six new staff members provided in the FY 2002 appropriations bill are listed in the table below:

OFFICE & LOCATION	POSITION TITLE	STATUS
Hazardous Materials Standards	Transportation Specialist (Regulations)	Filled
Hazardous Materials Technology	General Engineer	Filled
Hazardous Materials Exemptions & Approvals	Transportation Specialist (Regulations) Transportation Specialist (Regulations)	Job announcement in process of being posted Filled
Hazardous Materials Initiatives & Training	Training & Information Specialist	Panel convened to rate candidates
Hazardous Materials Planning & Analysis - Washington, DC	Economist	Applications being reviewed - selection pending

HAZARDOUS MATERIALS CURRENT ON-BOARD STAFF BY POSITION

Mr. Rogers. Please provide the Committee with the current on-board staff count by position for each of the five regional hazardous materials safety regional offices. Do you have any enforcement positions in headquarters? If so, please include these inspectors on the table as well.

[The information follows:]
Each hazardous materials (hazmat) regional office has six enforcement positions (one supervisor and five inspectors) and one safety assistant position assigned to it. The following table represents the on-board staff count of the five regional offices and the inspector positions in headquarters as of April 22, 2002.

STAFF POSITIONS FILLED - HEADQUARTERS & REGIONAL OFFICES					
Headquarters	**Eastern**	**Central**	**Western**	**Southwest**	**Southern**
4 Inspectors	6 Inspectors 1 Safety Assistant	6 Inspectors 1 Safety Assistant	5Inspectors 1 Safety Assistant	6 Inspectors 1 Safety Assistant	6 Inspectors 1 Safety Assistant

EMPLOYEES BY ORGANIZATIONAL UNIT

Mr. Rogers. Please provide a table that lists positions and full-time equivalent employees by major organizational unit for fiscal year 2000 through 2002, and requested for fiscal year 2003, similar to that on page 496 of last year's hearing record.

[The information follows]:

	FY 2000 ACTUAL		FY 2001 ACTUAL		FY 2002 ENACTED		FY 2003 REQUEST	
	FTP	FTE	FTP	FTE	FTP	FTE	FTP	FTE
DIRECT FUNDING:								
Research and Special Programs	195	189	200	197	206	200	223	215

Pipeline Safety	105	97	109	96	135	122	150	143
Reimbursable Funding:								
Volpe Center	515	526	515	528	515	550	515	550
Transportation. Safety Inst	42	44	44	44	47	47	49	48
Other - Honor Atty, UTC	11	7	11	11	11	11	11	11
TOTAL RSPA	868	863	879	876	914	930	948	967

FTP = FULL TIME PERMANENT
FTE = FULL TIME EQUIVALENT (WORK YEARS)

RSP POLITICAL APPOINTEES, GRADE LEVEL AND SALARY

Mr. Rogers. Please list the number of political appointees, grade level, and current salary and compare this over the past five years.

[The information follows]:

1998			
Title	**Grade**	**Salary**	**Total**
Administrator	0	0	0
Deputy Administrator	ES-3	$108,600	1
Special Assistant to the Administrator	GS-14	$ 61,656	1
Special Assistant to the Administrator	GS-15	$ 94,287	1
Director for Program and Policy Support Division Incumbent Resigned 12/11/98	ES-1	$ 99,200	1

1999*			
Title	**Grade**	**Salary**	**Total**
Administrator 8/98	EX-3	$125,900	1
Deputy Administrator Incumbent #1 5/96 - 8/98 Incumbent #2 8/98 - 9/99 Promoted 9/99	 ES-3 ES-1 ES-3	 $116,495 $110,351 $120,814	1
Director for Program and Policy Support Division	ES-1	$110,351	1
Special Assistant to the Administrator	GS-14	$ 73,141	1

*Salary includes locality pay

2000*			
Title	**Grade**	**Salary**	**Total**
Administrator	EX-3	$130,200	1
Deputy Administrator	ES-3	$121,264	1
Associate Administrator for Program and Policy Support Division	ES-1	$115,811	1

Senior Advisor Incumbent Formerly Special Assistant to the Administrator	GS-15 GS-14	$ 84,638 $ 76,750	1
Senior Advisor	GS-15	$90,280	1

*Salary includes locality pay

2001*			
Title	**Grade**	**Salary**	**Total**
Administrator	EX-3	$130,200	1
Deputy Administrator	ES-2	$125,883	1
Associate Administrator for Program and Policy Support Division	ES-1	$120,261	1
Senior Advisor	GS-15	$87,864	1
Senior Advisor	GS-15	$93,722	1
Special Assistant	GS-11	$45,830	1

*Salary includes locality pay

2002*			
Title	**Grade**	**Salary**	**Total**
Administrator	EX-3	$133,700	1
Deputy Administrator	0	0	0

Associate Administrator for Program and Policy Support Division Incumbent Appointed under an Provisional Appt. NTE 2/15/02 Incumbent Converted to SES Noncareer Appt. 2/16/02	 ES-1 ES-1	 $120,261 $125,972	1
Special Assistant Incumbent Appointed under an Provisional Appt. NTE 6/20/01 Incumbent Converted to Excepted Appt. 10/7/01	 GS-12 GS-13	 $53,156 $66,229	1
Director of Public Affairs	GS-15	$113,543	1

*Salary includes locality pay

NEW POSITIONS REQUESTED FOR RSP FOR 2003

Mr. Rogers. Please provide a table showing any new positions you are requesting in the OHMS and the rest of RSP and the positions they will hold (inspectors, budget analysts, engineers, etc.).

[The information follows:]
For OHMS:
2 General Engineers

For RSP Program Support:

1 Security Officer
1 Network Administrator
2 Computer Systems Analysts
1 Program Analyst
1 Web Master
1 Telecommunications Specialist
1 Human Resources Specialist
2 Administrative Support Specialists
4 Accountants

For OET:

1 Emergency Transportation Officer

NEW POSITIONS FOR TRANSPORTATION SAFETY INSTITUTE FOR 2003

Mr. Rogers. Are you requesting additional FTE for the Transportation Safety Institute? If so, how many?

[The Information follows:]
Yes. RSPA's Office of Pipeline Safety is expanding its pipeline inspection force and implementing new integrity pipeline safety rules. This will require two additional specialists at TSI to both develop and conduct the needed training for not just these inspectors, but also for state and industry personnel responsible for pipeline safety and the new integrity rules. It is anticipated that approximately 70 courses and seminars will be planned and delivered, an increase of 45 over the base program to support new inspectors; and an increase of 5 courses and seminars in fiscal year 2003. There is an equitable ratio of 7 classes and seminars to 1 FTE. The Pipeline Safety Division currently has 6 Specialists. In addition to the new courses and seminars planned, significant time will be expended for web-based training and the development of the advanced regulations course for senior inspectors.

TRAVEL PER FTE

Mr. Rogers. Please provide a chart showing the fiscal year 2002 budgeted amounts for travel per FTE staff year, by RSP office and organizational unit.

[The information follows:]

Program Office	Travel FY 2002	FTE	Travel Per FTE
Hazardous Materials	680,000	132	5,200
Emergency Transportation	49,000	9	5,400
Research & Training	9,000	9	1,000
Program Support	50,000	50	1,000

RSPA TRAINING EXPENSES

Mr. Rogers. Please provide a breakdown of training expenses (e.g., in-house, external, interagency) for fiscal years 2000 and 2001, and estimated for fiscal year 2002 and 2003.

[The information follows]:

TRAINING EXPENSES				
	FY 2000 ACTUAL	FY 2001 ACTUAL	FY 2002 ESTIMATE	FY 2003 ESTIMATE
In-house	$31,500	$29,916	$92,947	$108,480
External	$59,619	$60,733	$64,577	$ 76,840
Interagency	$15,983	$96,549	$35,448	$ 40,680
Total	$109,102.00	$189,199.00	$194,974.00	$228,003.00

RSPA REPROGRAMMINGS

Mr. Rogers. At any time during the past two years, has RSPA reprogrammed or transferred its funds among different object classes or

among its different accounts? Please identify the amount and nature of these transfers or reprogramming.

[The information follows]

FY 2000 RSP FUNDING TRANSFERS

FROM	TO	AMOUNT	COMMENT
PC&B	Travel	$33,000	To cover additional costs for the rental of Government Vehicles
PC&B	WCF, Communication & Miscellaneous	$61,000	To cover costs for the Delphi system
PC&B	Miscellaneous Administrative Acct.	$168,000	To cover expenses for HQ move
Research & Analysis	Miscellaneous Administrative Acct.	$61,000	To cover expenses for HQ move
Equipment	Miscellaneous Administrative Acct.	$25,000	To cover special administrative costs for HAZMAT recruitments
PC&B	Miscellaneous Administrative Acct.	$119,000	To cover administrative support service costs
PC&B	Communications	$80,000	To cover AT&T to MCI transition costs

FY 2001 RSP FUNDING TRANSFERS

FROM	TO	AMOUNT	COMMENT
PC&B	WCF, Administrative Support	$100,000	To cover support services for RSPA Business Modernization
PC&B	Miscellaneous	$500,000	To cover support services for RSPA Business Modernization

PC&B	WCF, Miscellaneous Administrative Acct.	$289,400	To cover additional renovation cost
PC&B	Training	$19,400	To cover additional training cost
PC&B	Building Maintenance	$250,000	To cover additional renovation cost
PC&B	Miscellaneous Administrative Acct.	$334,200	To cover additional administrative support service cost

RSPA UNOBLIGATED AND CARRY OVER BALANCE

Mr. Rogers. Please provide a breakdown on any unobligated balances carried forward into fiscal year 2002 by type or source of balance.

[The information follows: in thousands]

Source	R & D	Grants	Trust Fund	Total
Hazmat	477			477
Emergency Transportation	109			109
Innovation, Research and Technology	58			58
Emergency Preparedness Grants		19,700		19,700
Pipeline Safety (Trust & General)	1,520	5,127	644	7,291
Total	2,164	24,827	644	27,636

TRANSPORTATION INFRASTRUCTURE ASSURANCE (TIA) R&D

Mr. Rogers. Please provide a table depicting each modal administration contribution to RSPA's transportation infrastructure assurance research and development program in 2001, 2002 and what is requested in 2003.

[The information follows:]

No contributions from other Administrations were received for RSPA's transportation infrastructure assurance research and development program in

2001 and 2002, and none was requested for 2003.

Mr. Rogers. Do these modes actually provide funding to RSPA for transportation infrastructure assurance research?

[The information follows:]
No funding was received by RSPA from other modes for transportation infrastructure assurance research.

Mr. Rogers. Last year you identified other modes that had either had or had requested funding for transportation infrastructure assurance research. Since 2001, exactly how have you been and are you coordinating with these modes?

[The information follows:]
RSPA has coordinated and continues to coordinate its transportation infrastructure assurance research through the DOT Research and Technology Coordinating Committee, chaired by RSPA's Associate Administrator for Innovation, Research and Education. RSPA also coordinates closely with DOT's Office of Intelligence and Security.

Mr. Rogers. Is Volpe doing the TIA work? If not, what group within RSPA is doing TIA work and how many people does it include?

[The information follows:]
The Volpe Center is performing the TIA work under a project agreement with RSPA's Office of Innovation, Research and Education.

Mr. Rogers. Last year, Mr. Brigham stated the following regarding the transportation infrastructure assurance research: "We are focused on a narrow question. We are not focused on the infrastructure of the federal government or our infrastructure as an agency. We are trying to look at the vulnerability of the transportation system." RSPA supplied additional information for the record (pages 377 and 452) regarding FY 01 activities. Did you complete these activities?

[The information follows:]
TIA projects initiated in FY 2001 are currently ongoing and according to plan, will be completed in 2002. The status of these projects is as follows:

1) Critical Transportation Interdependencies – This activity is assessing the vulnerabilities of critical elements of the transportation infrastructure arising through their interdependencies with other critical infrastructures, including those of energy and telecommunications. Interim results are under review. The assessment, including an analysis of short- and long-term impacts of failures in other critical infrastructures on transportation operations, will be completed in 2002.

2) Electronic Commerce In Transportation – This activity is examining the risks incurred in the transportation system from the expanding dependence on information systems, particularly those that support the worldwide shipment of goods. Background analyses have been completed. Through a contract with RSPA, the Transportation Research Board (TRB) of the National Research Council (NRC) will assemble a group of transportation and information system experts to specify and assess the scope of the emerging vulnerabilities. The NRC assessment will be completed in 2002.

3) Weapons of Mass Destruction (WMD) Response Team Requirements – This activity is defining WMD response team transportation requirements associated with different WMD incident types, and will conclude with recommended coordination steps and strategies for civilian and military transportation providers that will better match WMD response team needs. Through coordination with FEMA and the response teams' agencies, the requirements have been established. The project will be completed in 2002 with the formulation of recommended steps and strategies.

Mr. Rogers. What activities do you plan for fiscal year 2002? Please provide the answer in a similar format to your answer on page 452 of last year's hearing record.

[The information follows:]
The FY 2002 Transportation Infrastructure Assurance R&D budget request was $1,000,000. The request was funded at $1,000,000 to research and assess possible countermeasures to threats to the security of transportation's physical and information infrastructure. RSPA had identified three priority areas: (1) chemical and biological agent detection, (2) intermodal terminal security, and (3) human factors analysis. However, the events of September

11, 2001 caused refocusing of TIA priorities and, as a result, the following three high-priority projects were initiated in FY 2002:

1) Response to WMD Threats ($200,000) – This project will assess the transportation-related impacts of biological or chemical incidents, considering timing of incident recognition, emergency response team support, containment strategies such as quarantine or evacuation, and transportation system operations in response to a WMD incident.

2) Evaluation of Backup Radio-navigation Systems for the Global Positioning System ($400,000) – This activity responds to a RSPA/Volpe Center 2001 report, "Vulnerabilities of the GPS Radio-navigation System," which concluded that this critical information infrastructure is highly vulnerable to both intentional (e.g., terrorist), and non-intentional interference. Chief amongst the widely accepted recommendations was the necessity of a backup system for current and future transportation-related GPS navigation and communication applications. This project, in full coordination with all DOT modal administrations, will assess the practicability, costs and benefits of alternative backup systems as identified by the DOT Radio-navigation Task Force. The results will help form a basis for the necessary radio-navigation system planning and budget decisions.

3) Security Assurance for Hazardous Material Transport ($400,000) – This activity is concerned with the transportation of hazardous materials by marine, surface and air modes through intermodal connection points that present an attractive target for terrorist activities. This project, to be carried out in conjunction with RSPA's Office of Hazardous Materials, will provide and exercise a framework for evaluating the tradeoffs between different levels of security for hazardous material shipment and associated economic, institutional, proprietary and transportation reliability factors.

Mr. Rogers. What activities do you plan for fiscal year 2003? Please provide the answer in a similar format to your answer on page 452 of last year's hearing record.

[The information follows:]
The FY 2003 Transportation Infrastructure Assurance R&D budget request is $1,074,000 to continue research and analysis on countermeasures to threats to the security of transportation's physical and information systems

and to related critical infrastructure. RSPA has identified two priority projects:

1) Response to WMD Threats ($804,000) – This project will leverage the large-scale research, development and demonstration initiatives at other agencies, industry and universities on all aspects of biochemical, radiological, and explosive threats, including advanced technologies for detection of biological and chemical agents and cargo container monitoring. An example of particular interest in this research will be the application of Unmanned Aerial Vehicle (UAV) technology for deploying sensors to monitor pipelines and other critical infrastructure. The DOT/NASA program on Remote Sensing Transportation Applications, led by RSPA, will also be studied for possible uses in this area. RSPA, with Volpe Center technical support, will also fulfill its cross-modal mission by leveraging findings from the more than 80 FAA and DOT "Go-Teams" and "Rapid Response Teams" that identified priority security needs. A focus of the activity will be on the institutional and economic issues associated with deploying these technologies in the transportation system. Results of this project will include an initial compilation of best practices for detection of and response to different WMD threats in the various elements of the transportation and logistics systems.

2) Mitigation of Vulnerabilities in Pipeline Control Systems ($270,000) – This project responds to a growing vulnerability to cyber attacks on Supervisory Control and Data Acquisition (SCADA) systems that control the operation of oil and gas pipelines. A May 1998 RSPA report, "Surface Transportation Vulnerability Assessment," (updated and issued in October 2001), concluded that a cyber attack on SCADA systems was moderately probable and that the impact would be moderately serious. A March 2002 reassessment of this vulnerability found that advances in technology have increased SCADA system automated capabilities but, at the same time, have significantly increased their potential exposure to cyber attacks. This activity will initiate an assessment of the pipeline network on a national scale to quantify the potential impacts on the population and the industry of such cyber attacks. This assessment will help form the basis for decisions on the level of vulnerability mitigation actions that need to be taken.

Mr. Rogers. When will you complete this vulnerability study?

[The information follows:]
The Critical Transportation Interdependencies and Electronic Commerce in Transportation vulnerability studies will be completed in 2002.

Mr. Rogers. What are the results to date regarding the TIA research?

[The information follows:]
RSPA prepared a comprehensive overview of surface transportation vulnerabilities in 1998, which was updated and issued in 2001. Following on issues identified in this report, RSPA has:

- completed preliminary research on vulnerabilities associated with transportation system dependencies on other critical infrastructures;
- completed preliminary research on transportation vulnerabilities associated with the growing use of e-commerce and information systems;
- continued to assess transportation-related impacts of biological or chemical incidents and transportation-related requirements for response teams; and
- identified vulnerabilities associated with the Global Positioning System (GPS) Radio-navigation System.

HAZARDOUS MATERIALS SECURITY

Mr. Rogers. What specific actions, program, or policy changes have you taken in response to the September 11 terrorist attacks? What agencies are you coordinating with?

[The information follows:]
Soon after the terrorist attacks against the World Trade Center and the Pentagon on September 11th and the subsequent bio-terrorism threats involving anthrax in the mail, we took a number of steps to assist Federal, State, and local authorities to respond to the emergencies. Almost immediately, we issued emergency exemptions to New York City, Arlington County, and the States of New York and Virginia. The exemptions provided relief from certain regulatory requirements to facilitate clean-up and disposal of hazardous materials, including hazardous waste, at the World Trade Center and Pentagon sites. In addition, we issued an emergency exemption to the Federal Emergency Management Agency (FEMA). The FEMA exemption provided relief from certain regulatory requirements to allow the

transportation of various types of hazardous materials to support recovery and relief efforts to, from, and within the disaster areas of New York City and Virginia.

We also worked closely with Federal, State, and local authorities, including the Centers for Disease Control and Prevention (CDC), the U.S. Postal Service (USPS), and the Environmental Protection Agency, to respond to the anthrax emergencies in Florida, New York, New Jersey, and Washington, DC. With CDC, we provided advice and assistance to USPS on appropriate procedures for transporting anthrax-contaminated mail. We also developed written guidance on how to transport anthrax-contaminated material for decontamination and disposal. In addition, we issued several emergency exemptions to facilitate clean-up and disposal of anthrax-contaminated material at sites in Florida, New York, New Jersey, and Washington, DC. These exemptions required development of a new packaging protocol for shipment of anthrax-contaminated objects such as mail, office equipment, carpeting, and furniture.

Since September 11th, we have issued three security alerts, asking shippers and transporters to review and strengthen security measures, particularly for high-hazard materials.

To assist hazardous materials shippers and transporters in evaluating risks and implementing measures to reduce those risks, we designed a security template for the Risk Management Self-Evaluation Framework (RMSEF). RMSEF is a tool we developed through a public process to assist regulators, shippers, carriers, and emergency response personnel to examine their operations, and consider how they assess and manage risk. The security template illustrates how risk management methodology can be used to identify points in the transportation process where security procedures should be enhanced within the context of an overall risk management strategy. The RMSEF security template is posted on our website. We are also developing a Hazardous Materials Transportation Security Awareness Training Module directed at law enforcement, industry, and the hazmat community. The training module will be web-based, posted on the HMS website, and presented at multimodal seminars. We are also stepping up our outreach efforts at the local level. Each of our Hazardous Materials Safety Assistance Team members is devoting approximately 50 percent of his or her time to security issues. Team members work with State and local government officials and the regulated industry on the need to enhance the

security of hazardous materials in transportation. Team members are located in five regional offices throughout the United States.

In addition, as part of a comprehensive review of the hazardous materials safety program, we created a Hazardous Materials Direct Action Group (Hazmat DAG). The Hazmat DAG met with representatives of the hazardous materials industry, emergency response community, and State governments to discuss transportation security issues in the wake of the September 11th attacks and continuing terrorist threats. Participants addressed recently implemented security measures; identified gaps in current security arrangements; discussed specific areas of concern and worst-case scenarios; recommended government actions to augment industry security programs; and suggested policy, legislative, and regulatory changes that could enhance the overall security of hazardous materials during transportation. We also created an internal DOT Intermodal Hazardous Materials Transportation Security Task Force, which assessed attack or sabotage vulnerabilities, evaluated existing security measures, and identified potential ways to reduce vulnerabilities. The work of the Hazmat DAG and the Intermodal Task Force provide a sound basis for moving forward to enhance hazardous materials transportation security.

On February 14, 2002, we published a notice in the *Federal Register* advising hazardous materials shippers and carriers of voluntary measures that could be taken to enhance the security of hazardous materials shipments during transportation. The notice was based largely on what we learned through the Hazmat DAG and the Security Task Force. The notice addresses personnel, facility, and en route security issues, and includes contact points for obtaining additional, more detailed information. These possible actions are not government regulations or mandates. However, we strongly suggest that shippers and carriers consider implementation of security measures that are appropriate to their industry and operations.

We are currently reviewing the Hazardous Materials Regulations (49 CFR Parts 171-180) in light of the information provided by the Hazmat DAG and the Intermodal Security Task Force to determine if new or revised regulations are necessary to assure the security of hazardous materials in transportation. For the future, whatever we do must be coordinated through the new Transportation Security Administration. We will also work with the DOT operating administrations to evaluate current requirements and identify

possible issues for rulemaking action. We will brief the Office of Homeland Security and we coordinate with other agencies as appropriate.

On May 2, 2002, a notice of proposed rulemaking (NPRM) was published in the Federal Register, which proposes new requirements to enhance the security of hazardous materials transported in commerce. The NPRM proposes to: require motor carriers registered with RSPA to carry a copy of their registration certificates on each motor vehicle used to transport hazardous materials, to prove that the carrier is a legitimate hazardous materials transporter; require each shipping paper to include the name and address of the shipment consignor and consignee and the registration number of the person offering the shipment for transportation; require shippers and carriers subject to the requirement to register with RSPA or who offer or transport infectious substances listed as select agents by the Centers for Disease Control and Prevention to develop and implement security plans to prevent unauthorized persons from taking control of or attacking hazardous materials shipments; and require hazmat employers to provide security training to their hazmat employees.

RESEARCH AND DEVELOPMENT PLANNING AND MANAGEMENT

Mr. Rogers. Please update the table on page 449 of last year's hearing recording showing a break down of appropriated funds used for research and development planning and management.

[The information follows:]
RSPA's fiscal year 2001 and 2002 appropriated funds for research and development planning and management activities were used as follows:

ACTIVITY	FY 2001	FY 2002
Strategic Planning	$1,340,000	$290,000
Research and Technology Coordination and Facilitation	$795,000	$230,000
Intermodal and Multimodal Research and Education	$100,000	$40,000
TOTAL	$2,235,000	$560,000

Mr. Rogers. How much of these funds went to the Volpe Center and its contractors?

[The information follows:]

About two-thirds of RSPA's fiscal year 2001 and 2002 appropriated funds for research and development planning and management activities were awarded to RSPA's Volpe Center and its contractors as follows:

ACTIVITY	FY 2001	FY 2002
Strategic Planning	$1,190,000	$290,000
Research and Technology Coordination and Facilitation	$315,000	$40,000
Intermodal and Multimodal Research and Education	$50,000	$40,000
TOTAL	$1,555,000	$370,000

Mr. Rogers. Please specify how much RSPA plans to use for R&D planning and management funds in fiscal year 2002 and 2003, including Volpe contracts.

[The information follows:]

RSPA plans to fund R&D planning and management activities, including RSPA/Volpe contracts, in fiscal year 2002 and 2003 as follows:

ACTIVITY	FY 2002	FY 2003
Strategic Planning	$200,000	$200,000
Transportation Science and Technology Information Networks	$170,000	$170,000
Public-Private Partnerships	$150,000	$150,000
Education and Training	$40,000	$40,000
TOTAL	$560,000	$560,000

Mr. Rogers. What are RSPA's top three priorities for research and technology development in fiscal year 2003 and how much are these priorities expected to cost? Please specify by category.

[The information follows:]

RSPA's priorities for research and technology development in fiscal year 2003 and their estimated funding levels are shown as follows. Funding levels support Department-wide functions and programs and are based on the Department's fiscal year 2003 budget request.

R&D Priorities	FY 2003 Request
Build the transportation workforce of the future and support the Department's multi-modal research agenda through: increasing transportation-related degree opportunities; enabling university-based transportation research; and transferring research and technology results to the broader transportation community. This is accomplished through RSPA's University Transportation Center program (reimbursable from FHWA and FTA).	$ 32,500,000
Conduct research and analysis on risks, vulnerabilities and countermeasures to security threats to transportation's physical and information systems and to related critical infrastructure (e.g., energy and telecommunications infrastructures). This is accomplished through our Transportation Infrastructure Assurance Research and Development.	$ 1,074,000
Reduce redundancy in the Department's modal research and development programs by improving the overall effectiveness and efficiency of the Department's R&D strategic planning process, tying R&D to the Department's Strategic Plan and Performance Plan. This is accomplished through RSPA's Research and Development Planning and Management program.	$ 560,000

HUMAN-CENTERED RESEARCH – FATIGUE MANAGEMENT

Mr. Rogers. Congress did not provide RSPA's $300,000 request for fatigue management in 2002. RSPA did not request funding for fatigue

management in 2003. Does RSPA have involvement in this area anymore? If so, please describe.

[The information follows:]
RSPA continues to serve as multimodal integrator for DOT's Human-Centered Research activities. RSPA supports the DOT Human Factors Coordinating Committee (HFCC) administratively and with technical expertise through RSPA's Office of Innovation, Research and Education. The HFCC was established by DOT in the late 1980s to foster research that addresses problems broader than the domain of individual modes. Through funding from other modal administrations, RSPA's Volpe Center staff provides technical expertise on human factors research projects.

RSPA received $300,000 in FY 2001 for the Human-Centered Systems Research Program, all of which was dedicated to implementing the program plan for multimodal operator fatigue management (OFM). RSPA is managing the three competitively selected OFM projects to completion, and disseminating the research results.

RSPA Volpe Center is developing a plan to fully understand the work and rest schedules of pipeline operators and tailoring organizational fatigue management tools for the pipeline industry. In addition, the Volpe Center continues to support the HFCC OFM Program.

REGISTRATION FEE COLLECTIONS

Mr. Rogers. Please display the total registration fees collected for each of the last five fiscal years, broken out by use (emergency response activities and administrative costs).

[The information follows:]

EMERGENCY PREPAREDNESS FUNDS RECEIPTS
(dollars shown in millions)

Fiscal Year	For Admin. Costs	For Emergency Response Grants	Total Fees Received
1997	$1.526	$7.148	$8.674
1998	$1.649	$7.751	$9.400
1999	$1.582	$7.371	$8.953

2000	$1.356	$24.872	$26.228
2001	$3.246	$18.301	$22.074

For years beginning with 2000, includes fees paid in advance for subsequent years.

EMERGENCY PREPAREDNESS FUND RECEIPTS

Mr. Rogers. Please provide a table showing the registration receipts and the grant program receipts for fiscal years 1996-2001 and projected for 2002 and 2003, similar to page 480 of last year's hearing.

[The information follows:]

Emergency Preparedness Funds Receipts
(dollars shown in millions)

Fiscal Year	Processing Fee Receipts	Grant Program Receipts	Total Registration Program Receipts
1996	$1.419	$ 6.724	$ 8.143
1997	$1.526	$ 7.148	$ 8.674
1998	$1.649	$ 7.751	$ 9.400
1999	$1.582	$ 7.371	$ 8.953
2000	$1.356	$24.872	$26.228
2001	$3.246	$21.067	$22.074
2002 (est.)	$1.200	$14.300	$23.100
2003 (est.)	$1.200	$14.300	$23.100

COORDINATION WITH DOE'S TRANSPORTATION EMERGENCY PREPAREDNESS GRANT PROGRAM

Mr. Rogers. How does RSPA's Hazardous Materials Emergency Preparedness Grants program complement DOE's Transportation Emergency Preparedness Grants (TEPP) program?

[The information follows:]

DOE's TEPP program provides support to DOE and other Federal, State, local and tribal authorities to prepare responses to only those transportation incidents involving DOE shipments of radioactive materials. DOE develops

planning and training materials, but does not offer funding to other governmental agencies.

DOT'S HMEP grant program provides funding to States, Territories and Indian tribes, who then dispense it to local and regional authorities for planning and first responder training to prepare for incidents involving hazardous materials, including radioactive materials. Funds are allocated among States based on a formula that takes into account population size, the number of highway miles and the number of chemical facilities. The HMEP grants program also provides the national hazmat training curriculum program which includes curriculum guidelines and a list of assessed courses.

TRANSURANIC WASTE REPOSITORY IN CARLSBAD, NEW MEXICO

Mr. Rogers. DOE consolidated its storage of transuranic waste at a permanent repository near Carlsbad, New Mexico. What effect has this had on your Hazardous Materials Emergency Preparedness Grants program? Are there any issues with this repository that the committee needs to be aware of?

[The information follows:]
Many states have been and will be affected by the transportation of transuranic waste to New Mexico, including the states-of-origin of the waste, and the states that are traveled through to get from the point of origin to the Carlsbad facility. Expenditure of HMEP grant funds is determined by each state's grantee, appointed by the governor. Risks that can be addressed through planning and training could impact the types of training offered in any state, at their discretion.

EP GRANT AWARDS TO STATES, TERRITORIES AND INDIAN TRIBES

Mr. Rogers. How many awards were granted to states, territories, and Indian tribes in 2001. Please specify by category.

[The information follows:]
Awards were made to 50 states, the District of Columbia, 3 territories, and 10 Native American tribes in 2001.

PERCENTAGE OF EP GRANT FUNDING TO STATES, TERRITORIES, AND INDIAN TRIBES

Mr. Rogers. How much of the total funding was granted to states, territories, and Indian tribes for emergency preparedness training?

[The information follows:]
In FY 2001, approximately $7.8 million (61% of the $12.8 million in planning and training funds awarded) in grants were awarded to states, territories and Native American tribes for emergency preparedness training.

AMOUNTS STATES, TERRITORIES, TRIBES AND OTHERS RECEIVED IN EP GRANTS

Mr. Rogers. Please provide a table showing the states, territories, tribes and any others that received emergency planning and training grants in fiscal years 1998 through 2001 and the amounts they received.

[The information follows:]

State	FY 1998	FY 1999	FY 2000	FY 2001
ALABAMA	$117,942	$158,656	$234,957	$236,183
ALASKA	$41,180	$55,396	$81,870	$82,560
ARIZONA	$81,763	$109,987	$163,390	$183,283
ARKANSAS	$72,907	$98,074	$145,952	$158,959
CALIFORNIA	$485,207	$652,701	$968,081	$964,316
COLORADO	$83,356	$112,131	$166,906	$181,716
CONN.	$75,144	$101,084	$150,041	$145,112
DELAWARE	$44,913	$60,418	$89,190	$91,223
DC	$37,448	$50,374	$74,421	$73,484
FLORIDA	$216,353	$291,039	$432,317	$453,407
GEORGIA	$142,701	$191,961	$285,628	$300,494
HAWAII	$44,789	$60,250	$89,045	$88,920
IDAHO	$58,847	$79,161	$117,496	$113,259
ILLINOIS	$316,505	$425,763	$627,683	$612,982
INDIANA	$152,033	$204,516	$302,308	$302,514
IOWA	$104,755	$140,917	$208,943	$204,938
KANSAS	$117,072	$157,486	$233,105	$230,885
KENTUCKY	$90,198	$121,334	$180,362	$182,148
LOUISIANA	$103,884	$139,745	$207,412	$204,058
MAINE	$53,871	$72,468	$107,180	$107,242
MARYLAND	$94,179	$126,690	$187,905	$186,902

MASS.	$108,362	$145,769	$216,762	$214,283
MICHIGAN	$169,076	$227,442	$338,439	$331,393
MINNESOTA	$129,639	$174,391	$258,659	$262,068
MISSISSIPPI	$88,831	$119,496	$176,963	$177,883
MISSOURI	$134,987	$181,584	$269,925	$266,548
MONTANA	$58,847	$79,161	$117,561	$118,746
NEBRASKA	$92,313	$124,179	$183,468	$183,399
NEVADA	$58,723	$78,995	$117,030	$123,594
NH	$52,252	$70,290	$103,807	$106,013
NEW JERSEY	$155,142	$208,697	$311,035	$289,579
NEW MEXICO	$73,776	$99,244	$146,658	$150,123
NEW YORK	$252,183	$339,237	$505,572	$470,968
N. CAROLINA	$151,533	$203,843	$302,243	$316,260
N. DAKOTA	$77,385	$104,099	$153,727	$137,298
OHIO	$264,376	$355,639	$525,378	$510,751
OKLAHOMA	$94,553	$127,193	$189,247	$188,028
OREGON	$91,941	$123,679	$183,750	$175,178
PENN	$210,132	$282,670	$420,164	$404,762
RI	$46,281	$62,257	$92,064	$92,480
SC	$91,692	$123,344	$183,137	$190,616
S. DAKOTA	61708	$83,010	$123,089	$126,980
TENNESSEE	$123,044	$165,519	$245,487	$249,996
TEXAS	$321,605	$432,624	$644,428	$668,460
UTAH	$70,169	$94,392	$139,661	$145,957
VERMONT	$41,927	$56,401	$83,387	$84,172
VIRGINIA	$121,177	$163,008	$241,893	$243,051
WASHINGTON	$99,033	$133,219	$198,471	$206,220
W/ VIRGINIA	$71,786	$96,567	$142,641	$140,570
WISCONSIN	$129,761	$174,554	$259,057	$260,053
WYOMING	$49,890	$67,112	$99,313	$94,237
TOTAL	$6,027,171	$8,107,766	$12,027,208	$12,034,251

TERRITORIES	FY 1998	FY 1999	FY 2000	FY 2001
AMERICAN SAMOA	$32,844	$44,182	$65,120	$66,207
GUAM		$45,186	$66,635	$67,353
N MARIANA ISLANDS	$32,844	$44,181	$65,119	$65,973
PUERTO RICO	$68,675	$92,381	$137,209	$126,417
VIRGIN ISLANDS	$33,218	$44,686	$65,880	$66,984
TOTAL	$134,737	$270,616	$399,963	$392,934

NATIVE AMERICAN TRIBES	FY 1998	FY 1999	FY 2000	FY 2001
29 PALMS BAND OF MISSION INDIANS	$14,019			

CAMPO BAND OF MISSION INDIANS	$14,019		$14,000	
CHEROKEE NATION	$9,480	$9,480		
CHICKASAW NATION	$6,600			
CHOCTAW NATION	$14,019			
ELY SHOSHONE TRIBE		$16,975		
FALLON PAIUTE SHOSHONE	$11,195		$18,923	$21,500
GRAND PORTAGE RES.				
INTERTRIBAL COUNCIL OF AZ			$147,665	$160,000
KAW TRIBE			$18,923	
MANDAN, HIDATSA & ARIKARA				
MENOMINEE TRIBE	$11,000	$12,000	$14,683	$24,953
MISSISSIPPI BAND OF CHOCTAW	$11,195	$11,195	$16,150	
MODOC TRIBE	$14,019			
MORONGO BAND OF MISSION INDIANS				
PRAIRIE ISLAND INDIAN COMMUNITY		$18,923	18923	$35,235
PUEBLO OF ACOMA	$14,019		$18,923	$26,455
PUEBLO OF LAGUNA				$35,235
PYRAMID LAKE PAIUTE TRIBE		$39,498	$18,923	$35,235
RENO SPARKS INDIAN COLONY	$14,019		$18,923	
SALISH & KOOTENAI TRIBES	$11,195	$20,000	$10,000	$10,000
SHINGLE SPRINGS RANCHERIA		$5,375		
ST. REGIS MOHAWK TRIBE	$14,019	$18,926	$18,923	$24,200
TANA CROSS TRIBE			$18,923	
WINNEBAGO TRIBE			$18,923	
TOTAL	$158,798	$152,372	$372,805	$372,813
OTHER GRANTS	FY 1998	FY 1999	FY 2000	FY 2001
INTERNATIONAL ASSOC.OF FIRE FIGHTERS	$250,000	$250,000	$250,000	$250,000
GRAND TOTAL	$6,570,706	$8,780,754	$13,049,976	$13,049,998

EP ADMINISTRATION COST REIMBURSEMENT

Mr. Rogers. How much of the total 2001 funding was used to reimburse RSPA for the administrative costs of the emergency preparedness grant program?

[The information follows:]
In FY 2001, $243,000 was used to offset administrative costs incurred for the HMEP.

HISTORY OF EP ADMINISTRATION COSTS

Mr. Rogers. Please provide a table showing your administrative costs for the emergency preparedness grant program for the past five years.

[The information follows:]

Administrative Costs for the Emergency Preparedness Grants Program (dollars in thousands)				
FY 1997	FY 1998	FY 1999	FY 2000	FY 2001
$300	$274	$254	$230	$243

HAZARDOUS MATERIALS USER FEE INCREASE

Mr. Rogers. Like past years, your fiscal year 2003 budget request shows that RSPA plans to increase the Hazardous Material user fee. How will these fees be assessed? When will the rulemaking need to be finalized for that these fees can be collected in the fourth quarter?

[The information follows:]
If authorized by Congress, we expect to use the same administrative mechanisms that are now in place for collecting fees for Emergency Preparedness (EP) Grants. The existing surplus (plus future receipts) would be sufficient to fund (1) $6 million of the program in FY 2003, and (2) the entire program in FY 2004 -- as proposed in the current FY 2003 budget submission to Congress -- while continuing to obligate $14.3 million in EP Grants each year. Beginning in FY 2005, it would be necessary to increase registration fees to continue to fully fund the hazardous materials safety program from user fees.

Any changes to the fee schedule would become effective July 1 of the hazmat registration year. We would need to publish a final rule no later than May 1 of that year.

Mr. Rogers. The 2002 budget proposed to eventually fund the hazardous material program solely from user fees. Is this part of the 2003 proposal?

[The information follows:]

Yes. Consistent with Administration policy, we are proposing in our FY 2003 budget request to charge the hazardous materials industry for the costs associated with assuring the safe transportation of hazardous materials. This would ensure that the industry benefiting from the program that facilitates its operations would pay the cost of receiving those benefits.

HAZARDOUS MATERIAL USER FEE INCREASE AND DIRECT LINK

Mr. Rogers. OMB directives require that proposed user fees involve a direct link between the fee and the service provided. Do OMB and RSPA interpret "benefit" and "direct link" as one-in-the-same?

[The information follows:]
Any question concerning OMB's interpretation on whether their directives require proposed user fees to have a direct link between the fee and the service provided would need to be presented to them. However, it is RSPA's position that OMB Circular A-11 and other applicable OMB guidance allows user fees to be charged on a class of persons directly benefiting from, or subject to regulation by, a government program. RSPA believes the hazardous materials industry clearly benefits from our hazardous materials program, and those benefits result in significant cost savings to them. Equally clearly, the hazardous materials industry is subject to federal government regulation.

Mr. Rogers. Please describe the direct link associated with this fee increase.

[The information follows:]
Services provided by OHMS help ensure the safety of commercial activities that are beneficial to shippers and transporters of hazardous materials. Public confidence in these safety services facilitates transport activity that exceeds 800,000 shipments per day, and the fees would be linked to the costs of providing those services.

NTSB OPEN RECOMMENDATIONS FOR OHM

Mr. Rogers. How many open NTSB recommendations does the Office of Hazardous Materials have? How many are categorized as open-unacceptable response. Please highlight what these recommendations are

and the status of resolution.

[The information follows:]
The Office of Hazardous Safety has 24 open NTSB recommendations; 8 are categorized as unacceptable response. The status of responses to NTSB recommendations are as follows:

NTSB: Cargo Tanks						
NTSB Recommendations	**NTSB Ref.**	Initial **Date**	NTSB **Status**	**Remaining Actions**	**RSPA Status**	**Compl. Date**
Require controls for internal shut-off valves for the discharge system to be installed at remote locations on all newly constructed and currently authorized DOT specification cargo tanks that are used for the transportation of any HM.	H-90-91 (HM-213)	09/12/90	Open Unacceptable Response	NPRM published 12/4/01. Comment period closed 4/2/02. Letter to NTSB 3/4/02 requesting reclassification to Open Acceptable Action. No response yet from NTSB.	Open	
Provide cargo tank manufacturers specific written guidance about (a) the factors and assumptions that must be considered when calculating the loads on cargo tank rollover protection devices in determining compliance with existing DOT performance standards; and (b) acceptable means to shield and	H-92-1	03/30/92	Open Acceptable Response	RSPA in cooperation with FMCSA is working with TTMA to address the requirements of this recommendation. NTSB has requested an update.	Open	

NTSB: Cargo Tanks						
NTSB Recommendations	**NTSB Ref.**	Initial **Date**	NTSB **Status**	**Remaining Actions**	**RSPA Status**	**Compl. Date**
protect the top-mounted closure fittings on all bulk liquid cargo tanks.						
Assist FMCSA to evaluate design of the rollover protection devices installed on all cargo tanks manufactured by the Acro Trailer Company and by New Progress, Inc., to determine if the cargo tanks comply with existing DOT standards.	H-92-2	03/20/92	Open Acceptable Response	FMCSA has drafted a response to their exact recommendation and will provide RSPA input after sign-off. NTSB has requested an update.	Open	
Assist FMCSA to improve performance of the rollover protection devices on bulk liquid cargo tanks by: promulgating performance standards devices that are based on the engineering modeling and analysis conducted in response to Safety Recommendation H-92-3.	H-92-4 (HM-213A)	03/20/92	Open Unacceptable Response	A study was prepared by the University of Michigan Transportation Research Institute outlining the results of a study to investigate and analyze the forces of energy involved in rollover crashes. RSPA, in cooperation with FMCSA published an ANPRM in the Federal Register 11/16/99 to solicit comments on the validity of the study and solicit ideas about formulating performance-based rollover protection regulations. Comment period closed 5/15/00. Awaiting completion of research effort by FMCSA. NTSB has requested an update.	Open	

NTSB: Cargo Tanks						
NTSB Recommendations	**NTSB Ref.**	**Initial Date**	**NTSB Status**	**Remaining Actions**	**RSPA Status**	**Compl. Date**
Assist FMCSA to improve performance of the rollover protection devices on bulk liquid cargo tanks by: Phasing out the use of all cargo tanks that fail to meet new performance standards promulgated in response to Safety Recommendation H-92-4.	H-92-5 (HM-213A)	09/20/92	Open Unacceptable Response	A study was prepared by the University of Michigan Transportation Research Institute outlining the results of a study to investigate and analyze the forces of energy involved in rollover crashes. RSPA, in cooperation with FMCSA published an ANPRM in the *Federal Register* 11/16/99 to solicit comments on the validity of the study and solicit ideas about formulating performance-based roller protection regulations. Comment period closed 5/15/00. Awaiting completion of research by FMCSA. NTSB has requested an update.	Open	
Require remote control mechanisms for internal shutoff valves are marked for emergency use on all cargo tanks authorized for the transportation of HM.	H-93-34 (HM-213)	10/04/93	Open Acceptable Response	NPRM published 12/4/01. Comment period closed 4/4/02.	Open	
Revise inspection/testing requirements for all cargo tanks constructed of mild and high-strength, low-alloy steel that	H-95-14 (HM-213)	08/01/95	Open Acceptable Response	NPRM published 12/4/01. Comment period closed 4/4/02.	Open	

NTSB: Cargo Tanks						
NTSB Recommendations	**NTSB Ref.**	**Initial Date**	**NTSB Status**	**Remaining Actions**	**RSPA Status**	**Compl. Date**
are used to transport hm to require at least once each year, or immediately when visual inspections indicate corrosion, measurement of the thickness of appurtenances (including ring stiffeners) that form air cavities adjacent to external cargo tank sheet material when the cargo tank sheet material cannot be visually inspected.						
In cooperation with the FMCSA, study methods and develop standards to improve the crash-worthiness of front heads on cargo tanks used to transport liquefied flammable gases and potentially lethal nonflammable compressed gases.	H-95-37	11/27/95	Open Acceptable Response	RSPA, in cooperation with FMCSA, funded a feasibility study to address methods of improving crash worthiness of front heads on MC-331 cargo tanks. Manufacturing costs, producibility and marketability are now being evaluated.	Open	
To prohibit the carrying of hazardous materials in external piping of	H-98-27 (HM-213B)	05/18/98	Open Acceptable Response	RSPA conducted a cost/benefit analysis and drafted an NPRM. NPRM to OMB 12/4/00. Withdrawn from OMB	Open	

NTSB: Cargo Tanks						
NTSB Recommendations	**NTSB Ref.**	**Initial Date**	**NTSB Status**	**Remaining Actions**	**RSPA Status**	**Compl. Date**
cargo tanks, such as loading lines, that may be vulnerable to failure in an accident.				1/22/01. Resubmitted to OMB 4/26/01. Returned to OMB for reconsideration 8/10/01.		
Promulgate regulations requiring motor carriers that transport hazardous materials in cargo tank to develop and maintain specific written cargo loading and unloading procedures for their drivers.	H-99-57 (HM-223)	10/01/99	Open Acceptable Response	ANPRM published 7/29/96. Supplemental ANPRM published 4/24/99. NPRM published 6/14/01. Comment period extension published 11/27/01. Comment period closed 2/1/02. Analyzing comments and developing issue positions.	Open	
Within 1 year of the issuance of this safety recommendation, complete a rulemaking on Docket HM-223, "Applicability of the Hazardous Materials Regulations to Loading, Unloading and Storage," to establish for all modes of transportation, safety requirements for loading and unloading hazardous materials.	I-00-6 (HM-223)	06/20/00	Open Unacceptable Response	ANPRM published 7/29/96. Supplemental ANPRM published 4/24/99. NPRM published 6/14/01. Comment period extension published 11/27/01. Comment period closed 2/1/02. Analyzing comments and developing issue positions.	Open	

NTSB: Cylinders

NTSB Recommendations	NTSB Ref.	Initial Date	NTSB Status	Remaining Actions	RSPA Status	Compl. Date
Require attachments to all U.S. DOT authorized HM packagings be designed to minimize the risk of puncturing other HM packagings during an accident situation.	I-92-1 (HM-220D)	10/28/92	Open Unacceptable Response	Final rule is being prepared.	Open	

NTSB: Information Notification

NTSB Recommendations	NTSB Ref.	Initial Date	NTSB Status	Remaining Actions	RSPA Status	Compl. Date
Require, within 2 years, that air carriers transporting hazardous materials have the means, 24 hours per day, to quickly retrieve and provide consolidated specific information about the identity (including proper shipping name), hazard class, quantity, number of packages, and location of all hazardous materials on an airplane in a timely manner to emergency responders.	A-98-80 (HM-206C)	08/12/98	Open Unacceptable Response	NPRM published 2/13/02. Comment period closed 4/26/02.	Open	

NTSB: Lithium Batteries

NTSB Recommendations	NTSB Ref.	Initial Date	NTSB Status	Remaining Actions	RSPA Status	Compl. Date
In cooperation with FAA, evaluate the fire hazards posed by lithium batteries in	A-99-80 (HM-224C)	11/16/99	Open Acceptable Response	Advisory Notice published 09/07/00. NPRM published 4/2/02. Comment period closes	Open	

NTSB: Lithium Batteries						
NTSB Recommendations	**NTSB Ref.**	**Initial Date**	**NTSB Status**	**Remaining Actions**	**RSPA Status**	**Compl. Date**
an air transportation environment and require that appropriate safety measures be taken to protect aircraft and occupants. The evaluation should consider the testing requirements for lithium batteries in the UN's *Transport of Dangerous Goods Manual of Tests and Criteria*, the involvement of packages containing large quantities of tightly packed batteries in a cargo compartment fire, and the possible exposure of batteries to rough handling in an air transportation environment, including being crushed or abraded open.				6/14/02. "Draft" letter under review.		
Require that packages containing lithium batteries be identified as hazardous materials, including appropriate marking and labeling of the packages and proper identification in shipping documents, when transported on aircraft.	A-99-82 (HM-224C)	11/16/99	Open Acceptable Response	Advisory Notice published 09/07/00. NPRM published 4/2/02. Comment period closes 6/14/02. "Draft" letter under review.	Open	
Pending completion of RSPA and FAA's evaluation of the fire hazards posed by	A-99-83 (HM-224C)	11/16/99	Open Unacceptable Action	Advisory Notice published 09/07/00. NPRM published 4/2/02. Comment period closes	Open	

NTSB: Lithium Batteries						
NTSB Recommendations	**NTSB Ref.**	**Initial Date**	**NTSB Status**	**Remaining Actions**	**RSPA Status**	**Compl. Date**
lithium batteries in an air transportation environment, notify the International Civil Aviation Organization's Dangerous Goods Panel about the circumstances of the fire in the Northwest Airlines cargo facility at the Los Angeles International Airport on April 28, 1999. Also, initiate action through the Dangerous Goods Panel to revise the *Technical Instruction for the Safety Transportation of Dangerous Goods by Air* to prohibit the transportation of lithium batteries on passenger-carrying aircraft.				6/14/02. "Draft" letter under review.		
Initiate action through the Dangerous Goods Panel to revise the *Technical Instructions for the Safe Transportation of Dangerous Goods by Air* to require that packages containing lithium batteries be identified as hazardous materials when transported on aircraft.	A-99-84 (HM-224C)	11/16/99	Open Acceptable Response	Advisory Notice published 09/07/00. NPRM published 4/2/02. Comment period closes 6/14/02. "Draft" letter under review.	Open	

NTSB: Portable Tanks

NTSB Recommendations	NTSB Ref.	Initial Date	NTSB Status	Remaining Actions	RSPA Status	Compl. Date
Revise requirements for pressure-relief venting on u.s. Dot specification 57 portable tanks used to transport dicumyl peroxide and other products with similar rapid decomposition characteristics to ensure the pressure relief systems prevent over rupture of tanks from a rapid product decomposition reaction.	I-92-2 (HM-215D)	10/28/92	Open Unacceptable Response	Comprehensive final rule published 5/29/01 Corrections document published 4/3/02. RSPA letter dated 3/14/02 sent to NTSB requesting classification as " Closed Acceptable Action."	To be closed	

NTSB: Rail Tank Cars

NTSB Recommendations	NTSB Ref.	Initial Date	NTSB Status	Remaining Actions	RSPA Status	Compl. Date
Assist and cooperate with FRA in amending 49 CFR Part 179 to require that closure fittings on HM rail tanks be designed to maintain their integrity in accidents that are typically survivable by rail tank.	R-89 53 (R-89-48)	07/14/89	Open Acceptable Response	Based on industry's response to the FRA/TC White Paper on 286,000 GRL tank cars and other Tank Car Committee Actions on top fitting protection, FRA is processing a request for closure on this recommendation. A copy of their response will be provided to RSPA for closure.	Open	

NTSB: Reporting Requirements

NTSB Recommendations	NTSB Ref.	Initial Date	NTSB Status	Remaining Actions	RSPA Status	Compl Date
RSPA implement, in cooperation with FMCSA, a program to collect information necessary to identify	H-92-6 (HM-229)	03/20/92	Open Unacceptable Response	NPRM published 7/3/01. Comment period closed 10/1/01. Comment review underway to develop final rule.	Open	

NTSB: Reporting Requirements						
NTSB Recommendations	**NTSB Ref.**	**Initial Date**	**NTSB Status**	**Remaining Actions**	**RSPA Status**	**Compl Date**
patterns of cargo tank equipment failures, including reporting of all accidents involving a DOT specification cargo tank.				NTSB has requested an update.		
Require that a hazardous materials incident meeting the immediate notification requirements in 49 Code of Federal Regulations 171.15 be reported within a specific time period to federal authorities.	H-99-58 (HM-229)	10/01/99	Open Acceptable Response	NPRM published 7/3/01. Comment period closed 10/1/01. Comment review underway to develop final rule.	Open	
Develop and implement policies and procedures to ensure that comprehensive reports concerning all significant failures of U.S. DOT specification tank cars, highway cargo tanks, and inter modal bulk containers containing hazardous materials are provided in writing to RSPA.	I-01-01 (HM-229)	03/12/01	Open Acceptable Response	NPRM published 7/3/01. Comment period closed 10/1/01. Comment review underway to develop final rule.	Open	
Establish procedures that require carriers reporting HM incidents under 49 CFR Part 171.16 to notify shippers whose HM shipments are involved.	R-89-52 (HM-229)	07/14/89	Open Unacceptable Response	NPRM published 7/3/01. Comment period closed 10/1/01. Comment review underway to develop final rule.	Open	
Evaluate, with the assistance of FRA, AAR, and the Railway Progress	R-01-03 (R-01-02)	03/12/01	Open Acceptable Response	RSPA and FRA are members of the task force working with AAR and the RPI to develop	Open	

NTSB: Reporting Requirements						
NTSB Recommendations	**NTSB Ref.**	**Initial Date**	**NTSB Status**	**Remaining Actions**	**RSPA Status**	**Compl Date**
Institute, the deterioration of pressure relief devices through normal service and then develop inspection criteria to ensure that the pressure relief devices remain functional between regular inspection intervals. Incorporate these inspection criteria into the U.S. DOT Hazardous Materials Regulations.				reliability-based inspection cycles for pressure relief devices.		

NEW NTSB RECOMMENDATIONS

Mr. Rogers. How many new recommendations have been added to this list in the past fiscal year? What are they?

[The information follows:]
RSPA received two recommendations from NTSB in 2001. They are:
To evaluate, with the assistance of FRA, Association of American Railroads, and the Railway Progress Institute, the deterioration of pressure relief devices through normal service and then develop inspection criteria to ensure that the pressure relief devices remain functional between regular inspection intervals. Incorporate these inspection criteria into the U.S. DOT Hazardous Materials Regulations.

To develop and implement policies and procedures to ensure that comprehensive reports concerning all significant failures of U.S. DOT specification tank cars, highway cargo tanks, and inter modal bulk containers containing hazardous materials are provided in writing to RSPA.

RULEMAKINGS

Mr. Rogers. Please identify the three most significant hazardous materials regulations that RSPA plans to finalize in fiscal year 2002 and indicate why they are important.

[The information follows:]
Our three priority rulemakings for FY 2002 are:

– HM-215E: Harmonization with United Nations Recommendations, International Civil Aviation Organization Technical Instructions, and the International Maritime Dangerous Goods Code. This rulemaking addresses a wide range of changes to the Hazardous Materials Regulations for the purpose of maintaining alignment with international standards for the transport of hazardous materials. Consistency with international standards serves to facilitate the transportation of hazardous materials; eases the regulatory compliance burden for shippers engaged in international commerce; and ensures the safety of people, property and the environment. We plan to publish an NPRM in the summer of 2002 and a final rule by the end of 2002.

– HM-223: Applicability of the Hazardous Materials Regulations to Loading, Unloading, and Storage. This rulemaking will define the applicability of the Hazardous Materials Regulations to specific functions and activities, including hazardous materials loading, unloading, and storage operations. Clarifying the applicability of the regulations will help to eliminate confusion on the part of the regulated public, thereby facilitating compliance. Clarifying the applicability of the regulations will also have the beneficial effect of reducing or eliminating confusion over the applicability of the Environmental Protection Agency's and Occupational Safety and Health Administration's regulations and will help states, local governments, and tribal governments to determine areas where they may regulate without being preempted under federal hazardous materials transportation law. We published an NPRM on June 14, 2001. Because of the complexity of the issues to be addressed, the number of comments received, and the necessity to coordinate with other federal agencies, we do not anticipate publishing a final rule until early in 2003.

– HM-232: Security Requirements for Offerors and Transporters of Hazardous Materials. As a result of the terrorist attacks of

September 11, 2001, and subsequent threats related to biological and other hazardous materials, RSPA has undertaken a broad review of government and industry hazardous materials transportation safety and security programs. In the first of what likely will be a series of rulemakings to enhance the security of hazardous materials in transportation, we published an NPRM on May 2, 2002, proposing to revise shipping documentation and training requirements and to require certain hazardous materials shippers and carriers to develop and implement security plans. We expect to publish a final rule this summer.

HAZARDOUS MATERIALS PRIORITY RULEMAKINGS

Mr. Rogers. Please update the hazardous materials priority rulemaking data beginning on page 476 of last year's hearing record.

[The information follows:]
A listing of pending rulemaking actions for calendar year 2002 follows:

RULEMAKING PROJECT	SUMMARY	CURRENT STATUS
Hazardous Materials Regulations: Miscellaneous Corrections (HM-189T)	Annual update to correct minor editorial errors and to enhance clarity of certain provisions of the HMR.	Final rule anticipated: 9/01
Hazardous Materials Communication Requirements (HM-206B)	General revisions to the hazard communication requirements; responds to a number of petitions for rulemaking.	NPRM anticipated: 7/02
Air Carrier Emergency Telephone Number Requirement (HM-206C)	Responds to an NTSB recommendation that air carriers maintain a 24-hour telephone number that is able to provide information on the specific hazardous materials and their location aboard an aircraft.	ANPRM published: 8/15/00 NPRM published: 2/13/02 Final rule anticipated: 12/02

RULEMAKING PROJECT	SUMMARY	CURRENT STATUS
Limited Extension of Requirements for Labeling Certain Shipments of PIH Materials (HM-206D)	Provides an exception from the requirements to place the new PIH Gas and PIH labels on packages intended for export shipments, that otherwise comply with the ICAO, IMO, or Canadian Regulations	Final rule published: 8/22/01
Revision of Requirements for Uniform Hazardous Waste Manifest (HM-206E)	Revisions to requirements for preparation of shipping papers for hazardous wastes consistent with revisions being proposed by EPA regarding the waste manifest	NPRM published: 8/8/01 Final rule anticipated: 2003
Temporary Reduction in Hazardous Materials Registration and Fee Assessment (HM-208D)	Proposed temporary changes in the registration and fee assessment requirements to eliminate a surplus of funds in the hazardous materials emergency preparedness grants account.	NPRM published: 12/7/00 Final rule deferred. Awaiting action on FY 2003 budget request.
Requirements for Cargo Tanks (HM-213)	Revises and updates to the requirements for the manufacture, maintenance and use of specification cargo tanks.	NPRM published: 12/04/01 Final rule anticipated: 12/02
Safety requirements for Retention of Hazardous Materials in External Product Piping (Wet Lines) on Cargo Tank Motor Vehicles. (HM-213B)	This action will evaluate the means available to eliminate risks associated with the retention of hazardous materials in product piping on cargo tank motor vehicles and responds to an NTSB recommendation.	NPRM anticipated: 12/02

RULEMAKING PROJECT	SUMMARY	CURRENT STATUS
Harmonization with UN Recommendation, ICAO Technical Instructions, and IMO Code (HM-215D)	Revises the HMR by incorporating changes based on the most recent changes to the UN Recommendations, ICAO, and IMO requirements.	Final rule published: 6/21/01 Corrections document published: 4/3/02
Harmonization with UN Recommendation, ICAO Technical Instructions, and IMO Code (HM-215E)	Revises the HMR by incorporating changes based on the most recent changes to the UN Recommendations, ICAO, and IMO requirements.	NPRM anticipated: 7/02 Final rule anticipated: 11/02
Frangible Discs on Tank Cars (HM-216A)	Propose to clarify requirements in the HMR related to inspection of frangible discs on tank cars.	NPRM anticipated: 12/02
Alternate Standards for the Loading/Unloading of IM Portable Tanks on Motor Vehicles (HM-218A)	Responds to a petition for rulemaking and a denial of a petition for reconsideration under HM-166Y, concerning the loading and unloading of IM portable tanks while attached to a motor vehicle.	NPRM published: 2/22/02 Final rule anticipated: 10/02
Consolidation of Specifications for High-Pressure Cylinders (HM-220)	Revises the requirements for reinspection, retesting, and repairing cylinders and consolidate seamless cylinder specifications.	Termination notice published: 2/13/02
Filling of Propane Cylinders (HM-220C)	Responds to petitions for rulemaking to allow propane cylinders to be filled by volume rather than by weight.	Termination notice published: 1/8/02

RULEMAKING PROJECT	SUMMARY	CURRENT STATUS
Requirements for Maintenance, Requalification, and Repair of DOT Specification Cylinders (HM-220D)	Proposes to establish revised requalification standards for cylinders and to respond to petitions for rulemaking.	Spin-off of non-controversial issues originally proposed in HM-220. Final rule anticipated: 6/02
Miscellaneous Cylinder Requirements (HM-220E)	Harmonization of cylinder requirements with UN standards	NPRM anticipated: 12/02
Applicability of the HMR to Loading, Unloading and Storage (HM-223)	Resolves regulatory jurisdictional issues regarding applicability of the HMR.	NPRM published: 6/14/01 Final rule anticipated: 6/03
Transportation of Oxygen Cylinders on Aircraft (HM-224B)	Will propose to authorize the transportation of oxygen cylinders on aircraft provided they are in an outer packaging that meets prescribed thermal and heat resistant requirements.	NPRM anticipated: 4/03
Transportation of Lithium Batteries (HM-224C)	Evaluation of hazards associated with transportation of lithium batteries aboard aircraft.	NPRM published: 4/2/02 Final rule anticipated: 12/02
Infectious Substances: International Harmonization and Bulk Packaging (HM-226)	Proposes to revise the requirements for infectious substances to harmonize the requirements with international standards and propose bulk-packaging requirements.	NPRM published: 01/22/01 Final rule anticipated: 6/02
Revision of Requirements for Carriage of Hazardous Materials by Aircraft	Comprehensive review of air carriage requirements	ANPRM published: 2/26/02 Further action TBD

RULEMAKING PROJECT	SUMMARY	CURRENT STATUS
Hazardous Materials Incident Reporting Requirements, including the HMI Form 5800.1. (HM-229)	Revisions to hazardous materials incident reporting system and form to simplify, update, and revise requirements.	NPRM published: 7/03/01 Final rule anticipated: 12/02
Adoption of the Latest IAEA and other Miscellaneous Revisions and Clarifications (HM-230)	Harmonize the requirements for the transportation of Class 7 (radioactive) materials with those issued by the IAEA.	NPRM published: 4/30/02 Final rule anticipated: 12/03
Security Requirements for Offerors and Transporters of Hazardous Materials (HM-232)	New requirements to enhance the security of hazardous materials transported in commerce.	NPRM published: 5/2/02 Final rule anticipated: 7/02

HAZARDOUS MATERIAL INCIDENTS, DEATHS, INJURIES, AND PROPERTY DAMAGE BY MODE

Mr. Rogers. Please provide data by mode on the number of hazardous materials incidents and the number of deaths, injuries, and property damage caused by these incidents from fiscal year 1988 onwards.

[The information follows:]
The attached report contains data by mode on the number of hazardous materials incidents and the number of deaths, injuries and property damage caused by these incidents for each calendar year 1991 through 2001.

DEPARTMENT OF TRANSPORTATION
T OF HAZARDOUS MATERIALS SAFETY
T INCIDENTS REPORTED TO RSPA BY CALENDAR YEAR

INCIDENTS BY MODE AND INCIDENT YEAR

MODE	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	TOTAL
AIR	299	414	622	929	813	918	1029	1382	1583	1420	1074	10483
HIGHWAY	7647	7835	11080	13995	12764	11916	11864	13040	14984	15087	15398	135610
RAILWAY	1155	1128	1120	1157	1153	1112	1103	989	1074	1054	893	11938
WATER	12	8	8	6	12	6	5	14	8	17	4	100
FREIGHT FORWARDER	0	0	0	0	0	0	0	0	0	0	0	0
OTHER	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	9113	9385	12830	16087	14742	13952	14001	15425	17649	17578	17369	158131

DEATHS BY MODE AND INCIDENT YEAR

MODE	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	TOTAL
AIR	0	0	0	0	0	110	0	0	0	0	0	110
HIGHWAY	10	16	15	11	7	8	12	13	8	14	6	120
RAILWAY	0	0	0	0	0	2	0	0	0	1	0	3
WATER	0	0	0	0	0	0	0	0	0	0	0	0
FREIGHT FORWARDER	0	0	0	0	0	0	0	0	0	0	0	0
OTHER	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	10	16	15	11	7	120	12	13	8	15	6	233

INJURIES BY MODE AND INCIDENT YEAR

MODE	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	TOTAL
AIR	31	23	50	57	33	33	24	20	12	5	13	301
HIGHWAY	333	465	511	425	296	216	152	151	217	160	92	3018
RAILWAY	75	116	66	95	71	926	45	22	35	82	29	1562
WATER	0	0	0	0	0	0	0	2	0	0	0	2
FREIGHT FORWARDER	0	0	0	0	0	0	0	0	0	0	0	0
OTHER	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	439	604	627	577	400	1175	221	195	264	247	134	4883

DAMAGES BY MODE AND INCIDENT YEAR

MODE	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	TOTAL
AIR	77090	98634	88480	177695	100582	87188	336178	266628	286082	271629	308126	2098312
HIGHWAY	29649847	23968161	19849049	25242713	22144029	29256831	24719802	28613957	32114394	49284081	61009336	345852200
RAILWAY	8469499	11857297	2650931	18673002	8485159	17385078	8355659	16363506	30606652	26520313	21017154	170384250
WATER	154395	143115	213091	92003	173511	120146	38145	1014931	60500	283183	25119	2318139
FREIGHT FORWARDER	0	0	0	0	0	0	0	0	0	0	0	0
OTHER	0	0	0	0	0	0	0	0	0	0	0	0
TOTALS	38350831	36067207	22801551	44185413	30903281	46849243	33449784	46259022	63067628	76359206	82359735	520652901

HAZARDOUS MATERIAL INSPECTIONS/INCIDENTS

Mr. Rogers. In a table, show the number of hazardous materials inspections conducted on a yearly basis since fiscal year 1994? If the number of inspections has decline from the previous fiscal year, please explain why and what RSPA is doing to assure that hazardous materials are not being transported improperly.

[The information follows:]

Year	Inspections
1994	1,183
1995	1,217
1996	1,218
1997	1,365
1998	1,716
1999	1,637
2000	1,643
2001	1,801

HAZARDOUS MATERIALS INCIDENTS

Mr. Rogers. Please update the chart showing the number of serious hazardous materials incidents from calendar year 1992 onwards. If the number of incidents is continuing to rise, please explain why and what RSPA is doing to curtail these incidents.

[The information follows:]

RSPA defines a serious hazardous materials incident as one that involves a fatality or major injury due to a hazardous material, closure of a major transportation artery or facility or evacuation of six or more persons due to the presence of a hazardous material, or a vehicle accident or derailment resulting in the release of a hazardous material.

A comparison of serious incidents to total incidents for the calendar years 1992 through 2001 follows:

Year	Number of Serious Incidents	Total Number of Reported Incidents
1992	376	9,374
1993	358	12,830
1994	427	16,087
1995	409	14,742
1996	466	13,952
1997	422	14,001
1998	432	15,399
1999	463	17,647
2000	500	17,578
2001	411	17,369

The number of serious incidents reported to RSPA remains fairly constant, averaging approximately 450 incidents per year over the past five years. RSPA's outreach and enforcement programs have been increasingly effective in achieving additional compliance with our incident reporting requirements resulting in an increased number of reports. In addition, the Hazardous Materials Regulations (HMR) was extended to intrastate shipments in October 1998. We believe that the increased awareness and the significant increase in the size of the regulated community accounts for the upward trend. RSPA is focusing on shippers and others involved in the early stages of transportation to increase awareness of the HMR and to enforce compliance when warranted.

HAZARDOUS MATERIALS PENALTIES AND TICKETS

Mr. Rogers. Please provide tables showing the amount of penalties and tickets proposed, collected, and percent collected for the past three fiscal years.

[The information follows:]

	1999*	2000*	2001*
Penalties Proposed	$2,155,634	$2,255,392	$1,944,656
Penalties Collected	$1,518,432	$1,533,512	$1,311,959
Percentage Collected	70%	68%	67%

*does not include tickets

	1999	2000	2001
Ticket Proposed Penalties	$347,124	$375,313	$482,638
Ticket Collected Penalties	$345,817	$375,165	$480,147
Percentage Collected	99.6%	99.9%	99.5%

HAZARDOUS MATERIALS TRAINING

Mr. Rogers. Please provide a complete listing of all resources in the fiscal year 2003 request related to hazardous materials training of state and local personnel and compare those levels to the corresponding funding in fiscal years 2001 and 2002.

[The information follows:]

(Dollars in millions)

	FY 2001	FY 2002	FY 2003
Training Grants to States	$7.769	$7.800	$7.800
Supplemental Training Grants	$ .250	$ .250	$ .250
Curriculum Development	$ .200	$ .200	$ .200
TOTAL	$8.219	$8.250	$8.250

DATA QUALITY IMPROVEMENT

Mr. Rogers. What is RSPA doing to resolve the issues identified in DOT's Hazardous Materials Program Evaluation? Specifically, what has RSPA done to improve the quality of hazardous materials incident data?

[The information follows:]

In response to the Hazardous Materials Program Evaluation (HMEP), RSPA is undertaking a comprehensive, strategic, multi-disciplinary risk reduction campaign. RSPA plans to use enhanced statistics and new engineering capabilities to target less obvious yet major causes of hazardous materials incidents with more extensive compliance.

To address the HMPE recommendation on data quality, RSPA implemented procedures to increase the accuracy of data input. Each incident report is

compared to the electronic record and corrections are made before accepting the record into the Hazardous Materials Information System database. RSPA increased the number of follow-up contacts with incident reporters to gather and clarify missing or ambiguous information. We are also planning to allow electronic filing of incident reports via our website, and the site will incorporate data quality checks that must be addressed by the reporter before an incident report is accepted.

RSPA is currently completing a rulemaking, HM-229, to revise the current incident reporting requirements and the hazardous materials incident report form (DOT Form F 5800.1). The changes being considered under this rulemaking will increase the accuracy and completeness of the data collected by: (1) collecting more specific information on the incident reporting form; (2) expanding reporting requirements to persons other than carriers; (3) requiring reporting of undeclared shipments of hazardous materials; and (4) requiring reporting of non-release incidents involving bulk packages.

RSPA is also continuing its analysis of the accuracy of cost information submitted on the report. This effort will give us a better understanding of cost information submitted, and lead to more accurate estimation of costs associated with hazardous materials incidents.

VALIDATION OF DATA AND HAZARDOUS MATERIALS INCIDENT INFORMATION

Mr. Rogers. How does RSPA validate incident information?

[The information follows:]
RSPA verifies the incident information with systematic data audits and periodic follow-up reviews conducted by the manager of the Hazardous Materials Information System. RSPA validates all fatality and injury information via telephonic contact with the reporting entity. RSPA also correlates the incident reports with the telephonic notifications received by the National Response Center, with the Federal Railroad Administration's Accident Report data, and with the Federal Motor Carrier Safety Administration's crash data.

PERCENTAGE OF VOLPE'S DOT WORK

Mr. Rogers. What percentage of the Volpe Center's work is done for DOT? Please specify by mode.

[The information follows:]
In FY 2001, 65.8% of the Volpe Center's work (obligations) was done for DOT.

FY 2001 Volpe Obligations
by DOT Customer by Percentage

USCG	3.1%
FHWA	5.7%
FAA	33.7%
NHTSA	5.0%
FRA	5.8%
FTA	3.1%
RSPA	2.9%
SBIR*	3.0%
OTHER DOT	3.5%
TOTAL DOT	65.8%
NON-DOT	34.2%
TOTAL	100.0%

* The Small Business Innovative Research Program (SBIR) is funded by all DOT Modes based on their extramural R&D budgets. The Volpe Center develops DOT's annual SBIR Solicitation and awards SBIR contracts.

VOLPE CENTER'S LARGEST JOBS

Mr. Rogers. Please provide a listing of the ten largest jobs by mode (in terms of cost), and an explanation of the job, how Volpe is providing significant value, and a timetable from start to completion.

[The information follows:]
The Volpe Center's ten largest projects, based on FY 2001 actual obligations, are listed and described below. Unless indicated otherwise in

the descriptive paragraphs, the projects are long-term efforts with comparable levels of activity in FY 2002.

Volpe Center FY 2001 Obligations
10 Largest Projects

Project	Customer	Obligations	Start Year	Est. Comp. Year
Region 8 Site Assessment & Remediation	EPA	20,400,505	1999	2006
Traffic Flow Management	FAA	17,707,654	1992	2003
Security for Capitol Police Projects	Capitol Police	15,215,838	1999	2004
NASA AMES & Langley Projects	NASA	8,347,063	1997	2004
Army Amphibious & Watercraft Engineering	TACOM	8,346,994	1993	2003
Telecommunications Info. MGMT Support	FAA	7,287,624	1981	On-Going
SPAS-Safety Performance Analysis System	FAA	5,581,255	1993	2005
Environmental Compliance & Employee Safety	FAA	5,070,311	1994	On-Going
ATS Information System Security (ISS) Support	FAA	4,588,238	1998	On-Going
Configuration Management Implementation	USCG	4,483,746	1998	2003

Region 8 Site Assessment & Remediation - EPA ($20,400,505)
The Volpe Center provided environmental engineering and remediation support to EPA Region 8 at Libby, MT for over two years. The effort of the Volpe Team was recognized last year by award of the Silver Medal from EPA Administrator Christie Todd Whitman. There continues to be a great deal of concern for the health of the citizens of Libby. There are over 200 deaths documented resulting from asbestos, and the Agency for Toxic Substance and Disease Registry conducted medical screenings that indicate more than 1,000 people have asbestos-related scarring in their lungs. The project is entering a new phase as the focus of the cleanup activities shifts from industrial to residential properties (it will soon be designated a Superfund site). From the standpoint of remediation, the effects of airborne contamination by asbestos fibers are not unlike those of anthrax, inasmuch as the fibers and spores resist cleanup and are easily re-aerosolized upon

disturbance. The Volpe Center conducted environmental assessments of over 100 properties and locations in Libby since the inception of the project. During these assessments the Volpe Center collected soil, dust, air, and groundwater samples from potentially impacted properties for subsequent laboratory analysis. This laboratory analysis identified potentially harmful asbestos contamination at approximately 25% of these properties. Ongoing environmental risk assessment analysis determined that continued site remediation work will be required through FY 06. The Volpe Center provided 8.1 federal labor years of technical and managerial oversight plus significant federal acquisition administration. The Center's federal staff efforts focused particularly on environmental engineering, on-site management of environmental remediation, and technical project oversight.

Traffic Management System (TMS) – FAA ($17,707,654)
The Enhanced Traffic Management System (ETMS) was developed by the Volpe Center and is a deployed FAA automation system that is the major infrastructure component of the FAA's Traffic Flow Management Infrastructure. The Traffic Flow Management Infrastructure is composed of a research and development component called the Advanced Traffic Management System (ATMS) and the operational system called ETMS. The Center provides air traffic management knowledge, systems engineering, telecommunications, software development, training, and security support for each of those elements.

ETMS is the real-time computer system used by FAA to address capacity problems to safely optimize utilization of the U.S. airspace. The ETMS Hubsite at the Volpe Center operates 24 hours per day and 7 days a week. Under ETMS the Volpe Center provide critical FAA data to airlines and other private sector users in a program called Aircraft Situation Display to Industry as mandated by Congress in 1992. It is deployed at over 80 sites including all twenty FAA Air Traffic Control Centers, over 34 Terminal Radar Control facilities, some FAA towers, air traffic control centers in Canada and Great Britain, and at the central air traffic facility in Mexico. Operational ETMS data is also provided to the U.S. military from the Volpe Center.

Under ATMS, the Volpe Center provides automation support to the Collaborative Decision-Making activity in which the FAA and participating airlines are working together to improve utilization of the National Airspace System (NAS). The Volpe Center is assisting the FAA and the airline

industry in their Spring/Summer 2002 delay reduction initiative to improve service and reduce delays to the aviation public. Current activities supporting a common situational awareness by airline dispatchers and FAA traffic managers are focused on collaborative rerouting activities, more efficient utilization of limited airport capacity during ground delay programs, and new weather products.

FAA and the Volpe Center anticipate continued funding through 2003. During that period, the Volpe Center will develop new collaborative decisions-making tools to respond to the demands being placed on the limited capacity of the U.S. airspace that will be stressed by the travel demands of the expanding national economy. The Volpe Center is also utilizing the FAA's expanded telecommunications bandwidth to share NAS status information with airline users to improve information dissemination. The Volpe Center is working with FAA to implement many computer security actions to protect the information contained within ETMS. Federal staff from the Volpe Center is also actively working with FAA staff to provide training to help them to utilize the new features contained in the latest versions of ETMS in their daily business. The Volpe Center provided 24.8 federal labor years of technical and managerial oversight plus significant federal acquisition administration. The Volpe Center's contributions also focused particularly on providing new computer technology to improve utilization of the limited capacity of the U.S. airspace to increase economic growth and trade and benefit the flying public by reducing aviation delays. The Volpe Center's federal staff developed new computer software tolls and provided access to new information sources so air traffic managers in FAA and the airlines had quicker access to more accurate information to make air traffic management decisions.

Security for Capitol Police Projects - Capitol Police ($15,215,838)

The U.S. Capitol and surrounding House and Senate office buildings house major components of the legislative branch of the U.S. government. The structures are highly visible symbols of the United States and constitute attractive targets for a wide range of potential adversaries from state sponsored terrorists to individuals with real or imagined grievances against the U.S. Government or the Congress. In response to these potential threats, the United States Capitol Police (USCP) has commissioned the Volpe Center to implement the USCP Security Enhancement Plan. As such, the Volpe Center has designed and developed systems which increase the security posture of the Capitol Complex by:

- Upgrading intelligence capabilities through technology providing real-time assessment.
- Hardening existing structures located throughout the entrances for the safety of the police officers.
- The installation of state-of-the-art intrusion detection systems for all buildings, tunnels, manholes and grates.
- Closed-circuit television systems (CCTV).
- Digital video recording and archiving systems.
- Vehicle and driver identification and inspection systems for garages.

Since the terrorist attacks on September 11, 2001, the USCP has expanded the Volpe Center support to include the design and implementation of a building access control system and improved perimeter security systems. In addition, the USCP has also asked the Volpe Center to support the design and implementation of security systems for the planned Visitor Center on the east side of the Capitol building.

The technology being implemented will significantly improve the overall security and safety to the leadership, staff, personnel, and the millions of visitors who visit the Capitol complex every year. The Volpe Center expects continued funding through 2004. The Volpe Center provided 7 federal labor years of technical and managerial oversight plus significant federal acquisition administration.

National Aeronautics and Space Administration NASA Ames & NASA Langley – NASA ($8,347,063)

The Volpe Center's work for NASA is primarily in the area of Safety and Efficiency of Air Traffic Operations. The specific activities involve:

- Development of future traffic management concepts.
- Development of tools for use by air traffic flow controllers to expedite the efficient flow of traffic.
- Development and demonstration of a new surveillance technology for initial use of traffic monitoring in the Gulf of Mexico and potentially at other CONUS locations.
- Investigations of technologies to improve the safety and efficiency of aircraft movement on the airport surface.
- Evaluation and demonstration of wake turbulence sensor technology and its application to aircraft spacing, in order to maximize the safety

and efficiency of aircraft arrivals and departures at the Nation's airports.

The Volpe Center provided 11.1 federal labor years of technical and managerial oversight plus significant federal acquisition administration. The Volpe Center's technical and managerial value added focused on the communications and navigations surveillance and air traffic flow management with emphasis on concept development.

Army Amphibious & Watercraft Engineering – TACOM ($8,346,994)

The Army Tank-automotive and Armaments Command (TACOM) is responsible for Force Projection requirements under the Army's Strategic Mobility Plan. One of the elements of the Force Projection is the Army's fleet of watercraft. These watercraft are used for performing Logistics over the Shore (LOTS) operations. The Army builds, operates and maintains various classes of lighterage vessels and modular causeway systems for performing the LOTS mission. The Volpe Center provides various engineering expertise, acquisition, and life cycle management to the Army to enhance the operational capabilities of the fleet, to improve the safety, and to reduce pollution and meet environmental requirements. Working hand in hand with TACOM civilians and the end user soldiers, the Volpe staff has clearly become an extension of the Army staff. One of the Volpe tasks has been the design and installation of clean agent fire fighting systems aboard Army watercraft to replace the Halon systems. The Volpe Center designed a system that met Coast Guard performance requirements and has been retrofitting the new system in a number of watercraft for the past 3 years. In addition to the hardware, the Volpe Center provides all the technical documentation and training. It also performs overall system safety assessments on the affected watercraft. Other support that the Volpe Center directly provides includes the design, fabrication, test, evaluation and technical documentation preparation of components for the modular causeway system (MCS). The MCS is a series of floating modules that are assembled to form offshore floating platforms along side RO-RO ships, floating causeway piers on the beach, and ferries used as lighters. The Volpe Center has been developing all the outfit hardware, training and technical documentation for the complete outfit of these systems. The Volpe Center has also taken the technical lead on the Army's source selection for a new causeway acquisition program. The Volpe Center provided 8.2 federal labor years of technical and managerial oversight plus significant federal

acquisition administration. The Volpe Center's technical and managerial value added focused particularly on ensuring that Coast Guard approved systems and EPA accepted extinguishing agents were being properly designed and installed on-board Army watercraft fire fighting systems. The Volpe Center efforts were also focused on the safe operation of deployable modular causeway systems.

Telecommunications Information Management System (TIMS) - FAA ($7,287,624)

For the FAA, the Volpe Center operates and leads the development of a sophisticated telecommunications resources management information system, TIMS. This system is replacing multiple fragmented systems with an integrated database and state-of-the-art software applications. It supports the FAA's telecommunications business functions, such as network planning, circuit engineering, circuit ordering, inventory management, performance analysis, and financial management. It provides access to telecommunications information to 2,000 FAA users at hundreds of U.S. offices. The system has evolved over several years through the gathering of diverse user requirements, phasing out of obsolete systems, and the use of the latest technology. The initial set of software applications was operational nationwide at the end of FY 98. On-going TIMS tasks include user training, improving data quality, enhancing system security, network monitoring and upgrades, and adding applications functionality to enable changes in the FAA's business processes. For example, the system is being upgraded to support the FAA's major telecommunications acquisition initiative, the FAA Telecommunications Infrastructure program. The Volpe Center provided 11.6 federal labor years of technical and managerial oversight plus significant federal acquisition administration. The Volpe Center's technical and managerial contributions focused particularly on the day-to-day operations of the TIMS system, and upgrading the system to take advantage of more efficient technology

SPAS Operation - Safety Performance Analysis System –FAA ($5,581,255)

SPAS is now in the operational phase of its life cycle (operates 24 hours per day, 7 days per week), and the Volpe Center performs all aspects of day-to-day operations and maintenance of the system. This entails the operation of the SPAS database server environment, the updating of SPAS data (which is performed on either a real time, daily, weekly, or monthly basis depending on the nature and changeability of the data), the preprocessing and periodic

computation of performance measures and information profiles, performance of data quality assurance functions, and the operation of the Help Desk which provides technical support to SPAS users. SPAS has been operational since 1997 and continued funding for the Volpe Center is anticipated through 2005. The system will be transitioned to the FAA's centralized facility for day-to-day operation and support in FY 03. Additional functionality will be added by the Center to SPAS through 2005. The Volpe Center provided 6.3 federal labor years of technical and managerial oversight plus significant federal acquisition administration. The Volpe Center's technical and managerial value added focused particularly on data quality and assurances and improving the day-to-day operations of the help desk, which provides technical support to SPAS users.

Environmental Compliance and Employee Safety Program Management Support – FAA ($5,070,311)

The Volpe Center has provided management and technical support to the FAA Environmental, Energy and Safety Division (AFZ-800). AFZ-800 is the headquarters program office responsible for the FAA's environmental compliance, environmental cleanup, energy conservation and occupational safety and health initiatives within Airways Facilities. AFZ-800 is responsible for establishing implementation policies and mandates relating to employee occupational health and safety, environmental compliance, and energy conservation.

Current Volpe Center program management support for the environmental, energy, and safety programs includes: cost/benefit analysis, risk assessment, policy development support, and strategic and operational planning. Technical support currently includes environmental assessments, remediation support, and information system development. The Volpe Center provided 3.1 federal labor years of technical and managerial oversight plus significant federal acquisition administration. The Volpe Center's technical and managerial value added focused particularly on fire life safety studies and environmental engineering and remediation oversight.

ATS INFORMATION SYSTEM SECURITY PROGRAM SUPPORT– FAA ($4,588,238)

The Volpe Center is supporting the FAA's Air Traffic Services Information System Security Program Management Office (ISSPO) to ensure that FAA information systems and networks are protected from potentially harmful security threats. In FY 2001, the Volpe Center completed risk assessments

for 19 major FAA systems, and helped the FAA to develop Security Certification and Authorization Packages (SCAPs) for four others.
In FY 2002, the Volpe Center will continue to support the ISSPO in several areas, including:

- Risk Assessments and SCAPs for major FAA systems.
- Compliance reviews to ensure that countermeasures identified in the SCAPs have been implemented.
- Development of information security procedures and guidance to field organizations.
- Conferences, training, and tools to increase awareness and capabilities in information security.

The Volpe Center provided 4.1 federal labor years of technical and managerial oversight plus significant federal acquisition administration. The Center's staff focused particularly on 19 risk assessments of major FAA systems.

Configuration Management Implementation – USCG ($4,483,746)
The Coast Guard requires enhanced cutter fleet logistics support to meet mission-needs within operational constraints. The Volpe Center is supporting Coast Guard efforts to develop a configuration-based maintenance and supply information system that: 1) relies on digital technology (not paper) to support maintenance and supply functions; and 2) supports both on-board logistics and shore-based fleet logistics needs of Cutters. The ability to effectively manage and maintain equipment and spare part inventories largely depends upon the availability of adequate maintenance and logistics information. The Configuration Management Plus (CMplus) application is the CG's unit-level, configuration based, logistics information tool. It serves as one of the steps toward a more efficient and effective logistics support system by providing maintenance and logistics information. The Volpe Center provided 4.1 federal labor years of technical and managerial oversight plus significant federal acquisition administration. The Volpe Center's technical and managerial value added focused particularly on upgrades to CMplus application of the unit-level, configuration based, and logistics information tool.

VOLPE CENTER OBLIGATIONAL AUTHORITY BY SOURCE

Mr. Rogers. Please provide a chart that identifies the source, by sponsor, of the amounts of new obligational authority received by the Volpe Center from each DOT mode in fiscal year 1997 through 2001 and to date for fiscal year 2002.

[The information follows:]

Volpe Center New Obligation Authority by DOT Mode
(In Thousands of Dollars)

	1997	1998	1999	2000	2001	2002 03/31/02
USCG	$6,513	$6,338	$6,701	$6,157	$4,858	$128
FHWA	10,562	8,267	12,584	15,271	7,203	2,774
FAA	88,413	73,509	64,739	67,554	80,438	35,505
NHTSA	6,644	7,880	9,305	10,224	14,047	2,436
FRA	8,389	9,559	10,430	14,659	13,940	7,949
FTA	5,675	8,592	5,438	6,370	5,933	400
FMCSA	0	0	0	0	17,232	5,115
RSPA	7,020	4,542	6,265	5,543	6,134	3,918
SBIR*	9,264	7,346	5,387	3,333	8,425	1,820
OTHER DOT	2,680	4,157	2,547	2,504	3,066	588
TOTAL DOT	$145,160	$130,190	$123,396	$131,615	$161,276	$60,633

*The Small Business Innovation Research Program is funded by all DOT Modes

VOLPE'S NON-DOT CONTRACTS

Mr. Rogers. For work that is being done outside of DOT, please provide a listing of whom Volpe Center is doing the work for and the objectives.

[The information follows:]
This work generally involves application of the Volpe Center's experience and knowledge in DOT projects to the missions of non-DOT agencies. The major customers of those efforts are:

Volpe Center FY01 Obligations Outside of DOT

Customer	FY2001 (000K) Obligations
U.S. Army	$ 11,424
U.S. Air Force	3,298
U.S. Interservice	954
U.S. Transportation Command	473
Other	489
Total Major DOD Customers	16,638
Other Major Non-DOT Customers	
Environmental Protection Agency	22,167
Capitol Police	15,212
NASA	8,346
Department of Energy	3,834
Department of State	2,839
Non-Federal Customers	2,245
U.S. Postal Service	1,923
Other	667
Total Other Major Non-DOT Customers	$57,233

U.S. Army ($11.4M)

Volpe Center support to the U.S. Army is comprised almost totally of two projects: The Army Amphibious & Watercraft Engineering - TACOM ($8.3M) described in response to question 112. The U. S. Army, Tank-automotive and Armaments Command (TACOM) is responsible for the management of the Rail Fleet Modernization Program which is part of the "Force Projection" mission to meet the U. S. Army's Strategic Mobility Plan (ASMP) requirements. Through an Interagency Agreement of January 1998, revised in February 2001, with TACOM, program requirements were established through the year 2005. Under this Rail Fleet Modernization Program the Volpe Center's value added provides design engineering, reengineering, installation, fielding, training, contract acquisition and market surveys of all candidate rail cars, locomotives and other existing rail equipment in the commercial sector that would be suitable for incorporation into the U.S. Army rail equipment fleet for safe transport of Class 1 cargo (explosives), as well as the heavy military cargo. Where economic analysis proves that new equipment is the "best buy", then new equipment is also fielded by the Volpe Center. Engineering assessments, specifications for the

conversions, or new equipment, acquisition processing, test, inspection, acceptance and fielding of the equipment are provided by the Volpe Center as a turnkey effort to the U. S. Army. In addition, the Volpe Center provides support analysis to TACOM relative to rail facilities, equipment maintenance, operational requirements and inventory control. The Volpe Center has provided railway engineering and related technical support to the former U. S. Army Aviation Troop Command in previous years and since 1998 to TACOM. The current program is planned to continue through the year 2005 per the revised agreement.

U.S. Air Force ($3.3M)
The Volpe Center is supporting the Air Mobility Command, in integrating military air safety systems with the civil system of FAA, and in supporting incorporation of aviation industry standards, systems, and industry best practices into USAF operations.

U.S. Interservice ($1.0M)
The Volpe Center is supporting the Defense Threat Reduction Agency's (DTRA) Cooperative Threat Reduction Program in the former Soviet Union, for the elimination of weapons of mass destruction as defined by the Strategic Arms Reduction Treaties. Primary participation by the Volpe Center involves railroad engineering, cost analysis, and technical evaluations for DTRA to assure safe cost effective transportation of these weapons systems.

The Volpe Center supports the Defense Supply Center Philadelphia (DSCP) by capturing shipment data in electronic form from medical vendors and displaying that data on a web site where queries and reports can be run. The Volpe Center has supported DSCP in developing software to compute the costs of shipments and provide the information in EDI format to the DOD automated payment system PowerTrack.

The Volpe Center supports the DOD Combating Terrorism Technology Support Office research and development program for combating terrorism against U.S. interests worldwide. The Volpe Center provides its expertise and capabilities in program management and the evaluation, assessment, and analysis of security requirements and the design, development, and deployment of counter-terrorism systems.

U.S. Transportation Command (TRANSCOM) ($.5M)

Support for the U.S. Transportation Command involves bridging between the commercial civil and military transportation sectors of national security operations. The Volpe Center's most visible current activity involves the Voluntary Intermodel Sealift Agreement Program, which has become the basis for a new strategic partnership between TRANSCOM and DOT's Maritime Administration.

Environmental Protection Agency ($22.2M)
The major project for the EPA is Region 8 Site Assessment and is described in response to question 112.

U.S. Capitol Police ($15.2M)
The U.S. Capitol project is described in response to question 2.

National Aeronautics and Space Administration (NASA) ($8.3M)
The National Aeronautics and Space Administration projects is described in response to question 112.

Department of Energy (DOE) ($3.8M)
The Volpe Center supports DOE in a variety of ways including: development of effective management plans and response guidelines for dealing with hazardous incidents; providing software expertise and software to support the Aviation Safety Program; providing a wide range of technical and administrative assistance in implementing DOE's environment, safety, and health responsibilities; assisting in the development of policies, plans, procedures, and papers which will serve as guidance for the safe transport, packing, storage, and monitoring of both nuclear and non-nuclear weapons and weapons-grade material domestically and internationally; supporting oversight responsibilities in conducting aviation safety assessments of the Department's aviation programs; and providing engineering and technical review, consultation and support for DOE's environmental management organizations in order to ensure the safe disposition of excess materials and facilities.

U.S. Department of State ($2.8M)
The Volpe Center is supporting the Department of State (DOS), Bureau of Diplomatic Security, Office of Domestic Operations to enhance security at DOS facilities in the United States. The Volpe Center is assisting DOS to design and implement a new access control system at DOS headquarters and other facilities. As part of this effort all DOS employees will be issued new identification cards, which will use smart card technology based on the

specification for multi-purpose smart cards developed by the General Services Administration.

U.S. Postal Service ($1.9M)
The Volpe Center is supporting the Aviation Mail Security Group helping to address the awareness, acceptance, handling, tendering, and routing issues associated with hazardous materials. The Volpe Center is providing technical support and program assistance in planning, development, and implementation of policies and training supporting HAZMAT in the mail issues. Through increased awareness and operational readiness the USPA will be in a better position to improve employee safety, safety of transportation infrastructure, and ultimately the safety of the traveling public.

VOLPE CENTER'S UNOBLIGATED BALANCE 1999, 2000, 2001

Mr. Rogers. What was the unobligated balance for the Volpe Center for fiscal year 2001? Please compare this to the end of fiscal year 1999 and 2000.

[The information follows:]

Unobligated Balance at Fiscal Year End	
(In Millions of Dollars)	
FY 1999	$138
FY 2000	$154
FY 2001	$158

Mr. Rogers. How much of this unobligated balance is due to work in progress from prior years?

[The information follows:]
Of the $158 million in FY 2001, $32 million is from FY 2000 and prior years.

NUMBER OF VOLPE CENTER BACKLOG PROEJCTS

Mr. Rogers. Are there any backlogged projects at the Volpe Center? If so, please provide a list of these projects.

[The information follows:]

No, all projects at the Center started promptly, and all inactive projects in FY 2001 have been closed out.

ANTICIPATED VOLPE CONTRACTS WITH RSPA

Mr. Rogers. Does RSPA plan to enter into any contracts with Volpe in 2002 and 2003? If so, what will these contracts be for and what are the estimated cost?

[The information follows:]
The following is a listing of anticipated Projects Plan Agreements between RSPA and the Volpe Center for FY 2002 and FY 2003, as of April 22, 2002.

PROJECT	(Millions)	
	FY 2002	FY 2003
Research & Development Planning	$2.2	$2.4
Transportation Infrastructure Assurance		
Research and Development	1.0	1.0
Climate Change and Environmental		
Forecasting	.7	.4
OPS Information System Development	.6	.9
HazMat Information System Enhancements	.5	1.0
HazMat Registration Information System	.4	.8
HazMat Information System	.1	.3
Total	$5.5	$6.8

VOLPE'S FTE'S

Mr. Rogers. Please provide a chart that shows full-time equivalent staff years at Volpe Center broken down by federal, on-site contractor, and off-site contract staff years fiscal year 1992 through 2001, and estimated for 2002 and 2003.

[The information follows:]

VOLPE CENTER LABOR

VOLPE CENTER FULL-TIME EQUIVALENT STAFF

FY 1992 - FY 2003

	92	93	94	95	96	97	98	99	00	01	02[1]	03[1]
Federal	599	597	564	547	534	538	534	527	529	528	550	550
Contractor:												
On-Site	592	613	629	620	574	563	525	470	482	443	450	450
Off-Site	767	785	652	606	543	545	506	436	440	456	460	460

[1]Estimated

VOLPE CENTER WORKLOAD BY SPONSOR

Mr. Rogers. Please provide a chart that shows Volpe Center workload by sponsor for each fiscal year 1992 through 2001, and estimated for 2002 and 2003.

[The information follows:]

Volpe Center Work Load by Sponsor
FY 1992 - FY 2003
(Obligation in millions of dollars)

	FY92	FY93	FY94	FY95	FY96	FY97	FY98	FY99	FY00	FY01	FY02[1]	FY03[1]
DOT	$136	$152	$144	$145	$137	$139	$142	$132	$121	$150	$148	$151
DOD	70	56	51	24	22	24	19	18	38	16	19	19
OTHER	7	15	22	29	31	41	35	33	40	57	68	68
TOTAL	$213	$223	$217	$198	$190	$204	$196	$183	$199	$222	$235	$238

[1]Estimated

Major Sponsors with DOT
FY 1992 - FY 2003
(Obligation in millions of dollars)

	FY92	FY93	FY94	FY95	FY96	FY97	FY98	FY99	FY00	FY01	FY02[1]	FY03[1]
FAA	$89	$85	$83	$89	$86	$84	$81	$72	$64	$73	$75	$78
USCG	12	21	15	10	6	7	6	6	5	7	8	8
FRA	8	10	12	9	9	9	10	11	11	13	13	13
SBIR	5	6	9	10	8	8	8	6	5	7	5	5
FHWA	5	9	8	8	8	8	9	11	13	12	12	12
FMCSA	0	0	0	0	0	0	0	0	0	5	6	6
NHTSA	6	6	4	5	8	8	8	7	9	11	10	11
FTA	6	8	6	6	5	5	8	8	5	7	8	8
RSPA	3	5	4	4	4	7	7	5	6	6	6	6

OTHER	2	2	3	4	3	3	5	6	3	1	5	4
TOTAL	$136	$152	$144	$145	$137	$139	$142	$132	$121	$142	$148	$151

'Estimated

CRISIS MANAGEMENT CENTER ACTIVATION

Mr. Rogers. When the Crisis Management Center is activated, specifically what actions are taken?

[The information follows:]
When activated, the Crisis Management Center (CMC) is staffed by trained Emergency Transportation Specialists who collect, analyze and disseminate critical crisis related information affecting the status of the transportation infrastructure. The level of participation in the center is determined by the nature and severity of the crisis. Representation from the DOT Operating Administrations is mandatory. The CMC serves as the primary point of contact with the Office of Homeland Security, Federal Emergency Management Agency, and other signatories of the Federal Response Plan (e.g. Federal Highways, Federal Aviation Administration).

Mr. Rogers. How many times last year (calendar year 2001) was the DOT Crisis Management Center activated? For what reasons?

[The information follows:]
The terrorist events of September 11, 2001, added additional responsibilities to the DOT CMC. Prior to 9/11, the CMC was activated 12-times for major disasters and special events. After 9/11, the CMC has been continuously activated.

Prior to September 11, the CMC was activated for the Presidential Inaugural, for flooding resulting from heavy rainfall at numerous places across the U.S. (e.g., TX and LA). In addition, we closely monitored the numerous wildfires that occurred primarily in the West and the California Energy Crisis. The Center was used daily by the OET staff to monitor and report on smaller ongoing disasters across the U.S. that impacted the transportation system, such as major highway accidents or major train derailments.

Mr. Rogers. How many times has the Center been activated in 2002 to date? For what reasons?

[The information follows:]
The CMC has been continuously activated since January 1, 2002, with varying numbers of personnel depending upon the threat levels and incidents involving the transportation infrastructure, to monitor the status of the entire transportation infrastructure and disseminate overview reports as a result of the 9/11 terrorist attacks. Additionally, the CMC will participate in major Federal exercises and will surge to full capacity in the event of another terrorist attack, national security disaster or catastrophic natural disaster.

EMERGENCY TRANSPORTATION APPROPRIATIONS AND OBLIGATIONS

Mr. Rogers. Please provide a table indicating the amount appropriated and the amount actually spent for the different major categories and subcomponents of the Emergency Transportation budget for each of the last three years. Please explain any deviation or reallocation funds.

[The information follows:]
The table below shows the amounts appropriated and amounts actually obligated for each of the last three years.

FY 2000	
Contract Program:	Appropriated/Obligated
-Crisis Response Management	$280,000/$494,200*
*Includes unobligated balance from Y2K FY 1999 supplemental.	
R&D:	
-Response Management Support	$235,000/$144,135*
*Includes unobligated balance from FY 1999. The obligations are below the norm because of time spent on Y2K follow-up.	

FY 2001	
Contract Program:	Appropriated/Obligated
-Crisis Response Management	$574,000/$566,000
R&D:	
-Response Management Support	$235,000/$266,611*

*The obligations are below the norm because of time spent on responding to the September 11 terrorist event.

FY 2002	
Contract Program:	Appropriated/Est. Obligations
-Crisis Response Management	$3,074,000/$3,074,000
R&D:	
-Response Management Support	$235,000/$250,000*
*The obligations are running a bit below the norm because of staff attention being given to the continuous activation of the CMC and related national security concerns.	

Mr. Rogers. Please provide a chart that identifies the source, by sponsor, of the amounts of new obligational authority received by the Transportation Safety Institute from each DOT mode in fiscal year 1997 through 2001 and to date for fiscal year 2002.

[The information follows:]

($ in Thousands)

TSI Sponsor	Activity	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02
FAA, Aircraft Accident Investigation	Safety Training	797	802	762	660	691	708
Aviation Sys. Standards	Flight Inspection & Procedure Dev				2	641	146
Aviation Sys. Standards	University Consortium-IAPA					136	44*
Aviation Flt Standards	TRAINAIR						166*
Regulatory Support	Compliance Trng				390	373	273
Airways Facilities	Haz. Mat & Aviation Safety Trng	8					

TSI Sponsor	Activity	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02
FAA (Various Org)	Trans. Of Haz. Materials		26	8	114	39	9
Aviation Security	OJT Comm. For OJT Trainers		10				
TOTAL FAA		**805**	**838**	**770**	**1166**	**1880**	**1346**
FRA	Drug/Alcohol Supervisory Trng.	81	17				
	Trans. Of Hazardous Materials	24			18		
	Instructor Development	23	10				
TOTAL FRA		**128**	**27**		**18**		
COAST GUARD	Budget Model Devel. & Trng.	39	13	9	14		
	Safety & Environ. Health (G-WKS)	153	135				
	MLCLANT, HazWaste Mgmt	146	175	177			
	Pres. Initiative on Comm. Forums				10		
	HazMat Train-the-Trainer & HazMat	53	53		26		
	Database Conversion & Trng.	11	5	9			
	CITAT - Container Inspection	47	66	66	45	45	45

TSI Sponsor	Activity	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02
	HazMat Awareness & Safety						8
TOTAL CG		**449**	**447**	**261**	**95**	**45**	**53**
OST	Coord./Notice of Proposed Rulemaking					3	
	Public Sessions				50		
	Presentation Development	1	5				
TOTAL OST		**1**	**5**		**50**	**3**	
RSPA	Off. Of Haz. Mat. Initiatives & Trng. (OHMIT)	350	350	350	350	350	370*
OHMIT	Trans. Of Maz. Materials for FAA	50					
Enforcement	Trans. Of Hazardous Materials	3					
Standards Div.	Trans. Of Hazardous Materials		2				

TSI Sponsor	Activity	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02
OPS	Pipeline Safety Trng.	1300	1231	1241	1171	1416	2450
TOTAL RSPA		**1703**	**1583**	**1591**	**1521**	**1766**	**2820**
FHWA, Howard Academy	Motor Carrier Safety Trng.	506				19	

TSI Sponsor	Activity	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02
Space Rental	Space Utilization at N. C.	105	107	20			
SCOPE	SCOPE Trng.	1	2				
Office of Motor Carriers	Effective Presentations	12					
	Trans. Of Hazardous Materials	60	60	37	26		
TOTAL FHWA		**321**	**255**	**57**	**26**	**19**	
NHTSA							
State & Com. Svc. (SCS)	Highway Traffic Safety Trng.	506					
Traffic Safety (TSP)	Highway Traffic Safety Trng.	91					
SCS & TSP	Highway Traffic Safety Trng.	623	1898	3361	1834	4053	2200*
Natl. Center for Stats	Natl. Accident Sampling Sys. Trng.	321	325	218	324	529	347*

TSI Sponsor	Activity	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02
Off. Of Human Centered Research	CIREN			8	15	10	20
TOTAL NHTSA		**1541**	**2223**	**3587**	**2173**	**4592**	**2567**

TSI Sponsor	Activity	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02
FTA	Mass Transit Safety Trng.	649	1000	1000	1451	1300	1400*
TSA	Airport Security Screener Trng						967
TOTAL DOT FUNDS		5597	6378	7266	6500	9605	9153

*FUNDING DOCUMENTS SENT FOR SIGNATURE

Mr. Rogers. What percentage of the TSI work is done for DOT? Please specify by mode and type of work done.

[The information follows:]
Approximately 94% of TSI work is done for DOT at this time as reflected in the chart below.

TSI Sponsor	For type of activity, please refer to Item 125.	%
FAA		14%
COAST GUARD		1%
RSPA		29%
NHTSA		26%
FTA	Mass Transit Safety Trng.	14%
TSA	Airport Security Screener Trng	10%
TOTAL DOT PERCENTAGE		94%

SURFACE TRANSPORTATION BOARD
PREPARED STATEMENT OF LINDA J. MORGAN, CHAIRMAN

Chairman Rogers and Members of the Subcommittee, I am Linda J. Morgan, Chairman of the Surface Transportation Board (Board). It is my pleasure to submit the budget request for the Board for fiscal year (FY) 2003.

Background on the Board

As you know, on January 1, 1996, the Board was established pursuant to P.L. 104-88, the ICC Termination Act of 1995 (ICCTA). Consistent with the trend toward less economic regulation of the surface transportation industry, the ICCTA eliminated the ICC and, with it, several regulatory functions that it had administered. The ICCTA transferred to the Board core rail functions and certain non-rail adjudicative functions previously performed by the ICC. Motor carrier licensing and certain other motor functions were transferred to the Department of Transportation (DOT) and are administered by the Federal Motor Carrier Safety Administration.

The Board is a three-member, bipartisan, decisionally independent, adjudicatory body organizationally housed within DOT. The rail oversight of the Board encompasses maximum rate reasonableness, car service and interchange, mergers and line acquisitions, and line constructions and abandonments. The important rail reforms of the Staggers Rail Act of 1980 are continued under the ICCTA. The jurisdiction of the Board also includes certain oversight of the intercity bus industry and pipeline carriers; and rate regulation involving non-contiguous domestic water transportation, household goods carriers, and collectively determined motor rates. The ICCTA empowers the Board, through its exemption authority, to promote deregulation administratively.

The Board's FY 2003 Budget Request

The Board's FY 2003 budget request totals $20,651,300 and 145 FTEs, essentially adjusting the FY 2002 level for inflation and pay

raises.[1] This request reflects the relatively constant workload that is expected and the statutory and regulatory deadlines associated with the resolution of the cases filed. The workload of the Board at any given time remains relatively constant because, even as cases are resolved, new cases are filed.

The President's FY 2003 Budget corrects a long-standing understatement of the true cost of literally thousands of government programs. For some time, the costs of the Federal Employee retirement system (FERS) and a portion of the old Civil Service retirement system (CSRS) costs have been allocated to the affected salary and expense accounts, and the remainder (a portion of CSRS, other small retirement systems, and all civilian retiree health benefits) has been charged to central accounts. The Administration will propose legislation to allocate the full cost of accruing benefits to the affected salary and expense accounts, so that budget choices for program managers and budget decision makers are not distorted by inaccurate cost information. The Board's cost allocation affected by this proposed legislation is $1,192,200, which is included in the requested resources.

The Board is confronted with three challenges related to the resources necessary to adjudicate its constant workload and meet statutory and regulatory deadlines. First, the Board must have a way of ensuring that it can hire new employees in sufficient time to be prepared to replace the 51 percent of experienced employees who will be eligible to retire in the next 3 years. While some of these employees may wish to continue to work after their retirement eligibility date, many will not. Second, the Board must have the necessary resources to accommodate any legislative changes that Congress might approve. And lastly, the funding source for the Board must remain stable to carry out its mandate.

Overall Goals of the Board

In the performance of its functions, the objective of the Board is to ensure that, where regulatory oversight is necessary, it is exercised efficiently and effectively, integrating market forces, where possible, into the overall regulatory model. In particular, the Board seeks to resolve

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[1] Attached (Attachment #1) is a table that presents in more detail the specifics of the Board's FY 2003 budget request.

matters brought before it fairly and expeditiously. Through use of its regulatory exemption authority, streamlining of its decisional process and the regulations applicable thereto, and consistent application of legal and equitable principles, the Board seeks to facilitate commerce by providing an effective forum for efficient dispute resolution and facilitation of appropriate business transactions. The Board continues to strive to develop, through rulemakings and case disposition, new and better ways to analyze unique and complex problems, to reach fully justified decisions more quickly, and to reduce the costs associated with regulatory oversight.

To be more responsive to the surface transportation community by fostering governmental efficiency, innovation in dispute resolution, private-sector solutions to problems, and competition in the provision of transportation services, the Board will:

- Continue to strive for a more streamlined process for the expeditious handling of rail rate reasonableness and other complaint cases, in an effort to provide additional regulatory predictability to shippers and carriers;

- Continue to reduce processing time for all cases before the Board and to ensure that appropriate market-based transactions in the public interest are facilitated;

- Continue to develop new opportunities for the various sectors of the transportation community to work cooperatively with the Board and with one another to find creative solutions to persistent industry and/or regulatory problems involving carriers, shippers, employees, and local communities; and

- Continue to work to ensure the provision of rail service that is responsive to the needs of customers.

FY 2001 Accomplishments of the Board

During FY 2001, the Board's workload included 871 decisions and court-related work, involving adjudications and rulemakings, dealing with rail and non-rail transportation issues. This work pertained to rail carrier consolidations, review of rail labor arbitral decisions, rail rates and service,

rail line sales, rail line constructions, terms and conditions for continued rail service, and abandonments. It also related to intercity bus merger and pooling matters, motor carrier collective ratemaking oversight, and other non-rail matters such as water carrier cases and pipeline rate cases.

With respect to rulemaking activity, the Board issued decisions exempting various activities from regulation where regulation is not necessary, engaged in other rulemaking-related activities intended to improve existing processes, and completed a comprehensive reexamination of its major rail merger policies and rules. On June 11, 2001, the Board issued a decision in STB Ex Parte No. 582 (Sub-No. 1), *Major Rail Consolidations Procedures*, which substantially increases the burden on major rail merger and consolidation applicants to demonstrate that a proposed transaction would be in the public interest. Under the rules, the Board will look for new merger applications to provide competitive enhancements, demonstrate benefit claims, include service assurance plans, consider the "downstream" effects on the rail industry structure, and evaluate transnational issues. In response to a court remand, the Board issued another decision further clarifying the rationale behind its revision of market dominance guidelines in STB Ex Parte No. 627, *Market Dominance Determinations--Product and Geographic Competition*, in which the Board eliminated product and geographic competition as considerations in determining market dominance in rail rate cases, so as to expedite rail rate cases and further level the playing field between railroads and shippers regarding rate disputes. In addition, to help the Board process the growing number of rail rate complaints more efficiently, a decision standardizing the format for submitting written presentations, workpapers, and electronic spreadsheets was issued in STB Ex Parte No. 347 (Sub-No. 3), *General Provisions for Presenting Evidence in Stand-Alone Rate Cases*.

Regarding specific cases, the Board made significant progress in resolving pending rail and pipeline rate complaints, including STB Docket No. 42051, *Wisconsin Power and Light v.* Union Pacific Railroad Company; a clarification of STB Docket No. 41191, *West Texas Utilities Company v. Burlington Northern Railway Company*; and STB Docket No. 42054, *PPL Montana LLC v. Burlington Northern and Santa Fe Railway Company*. The Board successfully defended in the U.S. Court of Appeals for the D.C. Circuit its rate reasonableness decision in the *Koch Pipeline* case, which is the first application of the constrained market pricing revenue adequacy test. During FY 2001, four new maximum coal rate cases were

filed with the Board, including STB Docket No. 42056, *Texas Municipal Power Agency v. Burlington Northern and Santa Fe Railway Company*; STB Docket No. 42057, *Public Service Company of Colorado d/b/a/ Xcel Energy v. Burlington Northern and Santa Fe Railway Company*; STB Docket No. 42058, *Arizona Electric Power Cooperative v. Burlington Northern and Santa Fe Railway Company and Union Pacific Railroad Company*; and STB Docket No. 42059, *Northern States Power Company Minnesota d/b/a Xcel Energy v. Union Pacific Railroad Company.*

With respect to specific rail restructuring activities, in FY 2001, the Board approved the application for control of the WC by the CN. In addition, the Board continued its 5-year general oversight of the UP/SP merger, the acquisition of IC by CN, and the Conrail acquisition, including the Buffalo rate study proceeding, which involves a 3-year study to examine linehaul and switching rates for rail movements into and out of the Buffalo area. The Board also issued various follow-up decisions relating to the conditions imposed in the UP/SP merger and Conrail acquisition proceedings. The decision by the Board approving the Conrail acquisition case, appealed by various shippers and shipper organizations claiming that the Board's conditions did not afford them enough protection, was affirmed by the U.S. Court of Appeals for the Second Circuit.

Regarding other rail matters, the Board continued to handle labor arbitration appeals connected with previously approved major rail mergers, issued 420 rail abandonment decisions, 33 rail line construction decisions, and 165 short-line and noncarrier acquisition decisions. The Board has an unprecedented number of railroad line construction proposals currently under review. These 11 proposals vary in size and scope, ranging from 2 miles to 300 miles of new rail line. Most significantly, during FY 2001 the Board did substantial work on the transportation and environmental issues associated with the construction and operation of a 281-mile segment of the Dakota, Minnesota & Eastern Railroad (DM&E) in Wyoming (STB Finance Docket No. 33407, *Dakota, Minnesota, & Eastern Railroad Corporation Construction into the Powder River Basin*). In STB Finance Docket No. 33824, *Great Salt Lake and Southern Railroad, LLC--Construction and Operation--in Tooele County, UT*, the Board issued a decision early in FY 2001 allowing the applicant to construct and operate a 32-mile rail line connected with the interim storage of spent nuclear fuel, subject to consideration of the anticipated environmental impacts of the proposal. In STB Finance Docket No. 33862, *Public Service Company of*

Colorado-Construction Exemption-Pueblo County, CO, the Board granted final approval in FY 2001 for a proposal by the Public Service Company of Colorado (PSCO) to construct a line to connect its Comanche Power Station with a line of the UP to permit service by UP in addition to the existing service available from The Burlington Northern and Santa Fe Railway Company (BNSF). Subsequently in FY 2001, in a related proceeding, the Board granted PSCO's request to cross BNSF's line to reach UP's line.

Additionally, as part of its continuing emphasis on ensuring that rail service is responsive to the needs of its customers, the Board has initiated and continued a number of actions to foster resolution of service problems. During FY 2001, the Board continued its focus on private-sector resolution by initiating a more formalized Rail Consumer Assistance Program, with a special toll-free telephone number and a specific website connection, to assist rail customers and others with issues involving railroads. Board staff expeditiously handled and brought to a successful conclusion on an informal basis 110 rail consumer inquiries and complaints concerning matters related to rates and other charges, car supply and other service issues, claims for damages and service-related problems, employee concerns, and community issues. The Board also has continued to act in cases before it to assist the parties to devise private-sector solutions to their disputes.

Non-rail decisions included 6 motor carrier undercharge decisions, with the last undercharge case being resolved during the first half of FY 2001. The Board also issued 13 decisions dealing with intercity bus merger cases and pooling agreements, and did significant work on resolving substantial issues with respect to motor carrier rate bureaus. And the Board expended time on water carrier cases involving rates in the non-contiguous domestic water trade, including STB Docket WCC-101, *Government of the Territory of Guam v. Sea-Land Service, Inc., American President Lines, Ltd., and Matson Navigation Company, Inc.*; and STB Docket No. WCC-104, *Trailer Bridge, Inc. v. Sea Star Lines, LLC.*[2]

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[2] Certain of these numbers cited above are subsets of the decisions included in the workload summary table that follows.

FY 2002 and 2003 Activities of the Board

Attached is a table (Attachment #2) that shows workload trends and accomplishments, which form the basis for the Board's request to essentially maintain the current level of funding in FY 2003. As the table indicates, the Board believes that the number of decisions issued and court-related work are the best measures of workload and performance. In accordance with the Board's continued commitment to resolving matters before it expeditiously, it anticipates a relatively constant workload and output through FY 2003.

With respect to rail carrier consolidations, while we do not anticipate any major rail mergers in the near future, the workload in this category is expected to increase in FY 2002 and remain stable through FY 2003 because this workload category includes a broad array of control transactions among larger railroads and smaller railroads. In December 2001, the Board issued its final annual 5-year general oversight decision for the UP/SP merger and, with the issuance of its second annual general oversight decision for the acquisition of IC by CN, ended further general oversight of this merger. However, the Board will continue to monitor the Conrail acquisition, pursuant to the five-year general oversight conditions that the Board imposed as part of its approval of this merger, and will continue to handle proceedings dealing with the interpretation of other conditions imposed as part of the Board's approval of that or any other merger. And the Board will continue to handle other rail consolidations involving smaller railroads.

Concerning other rail restructuring matters, rail abandonment decisions are expected to remain stable through FY 2003, as the increased complexity of abandonment filings continues to require more than one decision in certain cases, and the Board continues to be called upon to resolve a significant number of "post abandonment" disputes. The Board projects that line construction decisions involving the 11 pending rail line construction proposals and additional applications that are anticipated, all of which can implicate significant environmental review issues, will increase slightly through FY 2003. In this regard, the Board just issued a final decision authorizing, subject to numerous environmental conditions, the construction and operation of a 281-mile segment of the DM&E. This project, if pursued, will allow DM&E to extend its existing system westward to access coal mines in the Powder River Basin. Other line

transaction activity is expected to increase somewhat in FY 2002 and 2003 as more carriers continue to sell unprofitable or marginally profitable lines as an alternative to service abandonment, particularly in light of the recent economic downturn. In the past few years, the Board has seen a number of line acquisitions by both small carriers and noncarriers as the rail carriers restructure their rail systems.

As to rail rates and services, the workload is expected to increase in FY 2002 and remain stable through FY 2003, particularly given the continuing expiration of long-term coal transportation contracts and the application of the contract exception to the Board's bottleneck decision. The Board will continue to resolve a number of pending rate complaints, and work on three new rail rate cases filed in the first quarter of FY 2002 -- STB Docket No. 42069, *Duke Energy Corporation v. Norfolk Southern Railway Company*; STB Docket No. 42070, *Duke Energy Corporation v. CSX Transportation, Inc.*; and STB Docket No. 42071, *Otter Tail Power Company v. Burlington Northern and Santa Fe Railway Company*. These new proceedings will require significant staff attention given the complex nature of the cases and the tight statutory timeframes for completion. And the Board will continue to handle rail cases involving questions of whether certain rail activity cannot be regulated at the state or local level because such regulation is preempted.

Regarding non-rail matters, the intercity bus merger workload is projected to increase in FY 2003, and noncontiguous domestic water trade rate case activity is expected to increase through FY 2003. The Board expects to do additional work on cases involving motor carrier ratemaking antitrust immunity into FY 2002 and 2003.

Summary

The Board's budget request would ensure the resources needed for the Board to continue to implement its responsibilities expeditiously and effectively as Congress intends. I would be happy to answer any other questions that the Committee may have about the Board's FY 2003 budget request.

Attachment #1

SALARIES AND EXPENSES
(Dollars in thousands)

	FY 2001 Actual	FY 2002 Estimated	FY 2003 Request	Difference from Estimated
Permanent Positions	143	143	145	2
Full-time Equivalents	143	143	145	2
Personnel Compensation and Benefits	$13,702.0	$15,006.0	$15,846.1	$840.1
Travel	32.0	58.0	58.0	0.0
Other Costs	4,164.0	3,384.0	3,555.0	171.0
TOTAL BUDGET RESOURCES	$17,898.0	$18,448.0	$19,459.1	$1,011.1
CSRS/FEHB Accruals	1,088.0	1,145.2	1,192.2	
COMPARABLE TOTAL with accruals	$18,986.0	$19,593.2	$20,651.3	

Changes in Resources:

For personnel compensation and benefits, $15,846,100 is requested to support the Board's permanent positions. Included in this request is $144,400 to fund the annual cost of the January 2002 pay raise and $444,900 for the January 2003 pay raise. The request also includes $100,000 for lump-sum leave payments to retiring employees.

A travel budget of $58,000 is requested primarily for on-site visits to railroads to finalize audits and review public accountants' workpapers, physically inspect proposed rail abandonment and construction sites and verify environmental data provided by parties to proceedings, conduct operational reviews, meet with shippers regarding rail service issues and compliance, defend the Board's decisions in courts across the country, and generally provide presentations, upon request, on issues within the Board's jurisdiction.

Funding to cover other costs is requested at $3,555,000. Included in this number are rental payments to the General Services Administration (GSA) and payments for employee training, telephone service, postage, information technology systems support and equipment, miscellaneous services and supplies, and reimbursable services acquired from other Federal agencies.

The President's FY 2003 Budget corrects a long-standing understatement of the true cost of literally thousands of government programs. For some time, the costs of the Federal Employee retirement system (FERS) and a portion of the old Civil Service retirement system (CSRS) costs have been allocated to the affected salary and expense accounts, and the remainder (a portion of CSRS, other small retirement systems, and all civilian retiree health benefits) has been charged to central accounts.

The Administration will propose legislation to allocate amounts associated with the accruing charge for the costs of retiree Civil Service retirement system annuity benefits and health care benefits for all retired civilian employees from central accounts to affected program accounts, starting in FY 2003. The amounts associated with the proposal are shown on a comparable basis for program accounts in FY 2001 and 2002. Agencies also, for the first time, will be charged for the accruing cost of retiree health care benefits for all civilian employees. These also are shown on a comparable basis for FY 2001 and 2002.

Attachment #2

FY 2003 Congressional Budget Justification
Workload Summary[3]

Workload Category	Actual FY 2001 Board Decisions and Court-related Work	Estimated[4] FY 2002 Board Decisions and Court-related Work	Estimated[4] FY 2003 Board Decisions and Court-related Work
Rail Carrier Control Cases	97	138	138
Rail Rates and Service	52	80	80
Rail Abandonments and Constructions	453	455	460
Other Line Transactions	165	180	180
Other Rail Activities	61	112	112
Motor Carrier Undercharges	6	0[5]	0[5]
Non-Rail Activities	37	80	78
Total	**871**	**1,045[6]**	**1,048[6]**

[3] At this time, the Board believes that the number of Board decisions and court-related work is the best measure of workload at the Board. Certain activities performed at the Board that provide direct and indirect support for rulemakings and decisions in specific cases are not reflected in these workload numbers. Such activities not reflected include: enforcement actions; rail audits and rail carrier reporting oversight; administration of the rail waybill sample and development of the Uniform Rail Costing System; and case-related correspondence and informal public assistance.

[4] Estimated workloads for FY 2002 and 2003 are based on historical information regarding actual filings and best estimates of probable future filings by parties. Because the Board is principally an adjudicatory body, it does not directly control the level or timing of actual case filings.

[5] These numbers reflect the fact that the motor carrier undercharge docket was closed out in FY 2001.

[6] These numbers assume that the increased workload will continue to be handled at essentially the existing staff level.

QUESTIONS FOR THE RECORD FROM CHAIRMAN ROGERS

FY 2003 BUDGET REQUEST

COMPARISON OF BOARD'S BUDGET REQUESTS

Mr. Rogers. Please provide a table showing the Board's original fiscal year 2003 budget request, by office, and compare it to the OMB passback.

[The information follows.]

The Board's original budget request was $19,450,000, and the OMB passback and President's budget request for fiscal year (FY) 2003 are both $20,651,300. The difference of $1,201,300 is associated with the Administration's proposal to allocate the costs of the old Civil Service retirement system and all civilian retiree health benefits to the affected salaries and expenses accounts. A side-by-side comparison table indicating the adjustments between the two requests follows.

TITLE	BOARD'S FISCAL 2003 BUDGET REQUEST	PRESIDENT'S FISCAL 2003 BUDGET REQUEST
PERSONNEL COMPENSATION	$13,304,000	$13,326,000
PERSONNEL BENEFITS	$2,511,000	$3,700,300
TRANSPORTATION OF PERSONNEL	$58,000	$58,000
TRANSPORTATION OF THINGS	$20,000	$20,000
RENT	$1,610,000	$1,630,000
COMMUNICATIONS & UTILITIES	$202,000	$202,000
PRINTING	$40,000	$40,000
CONTRACTUAL SERVICES	$1,218,000	$1,210,000
SUPPLIES	$301,000	$279,000
EQUIPMENT	$186,000	$186,000
TOTAL REQUEST	$19,450,000	$20,651,300
APPROPRIATION	$18,450,000	$19,651,300
OFFSETTING COLLECTIONS	$1,000,000	$1,000,000

The Board's budget request was modified in January 2002 to accommodate small increases in personnel compensation, benefits, and rental payments to the General Services Administration, and a reestimation of the Board's contractual services and supply costs to offset the required increases.

FY 2002 USER FEE COLLECTIONS

Mr. Rogers. Does it look like the Board will be able to collect the amount of offsetting collections proposed by Congress in 2002? How much have you collected to date?

[The information follows.]

Based on the user fee collections for the first 6 months of FY 2002, the Board projects that it should collect an estimated $950,000 by September 30, 2002. The Board has collected $802,352 in user fees from October 1, 2001, to March 31, 2002. That collection includes a number of one-time large fee amounts from 3 rail line construction projects and 3 rail rate complaints.

Mr. Rogers. How much was collected at this point last year? Please provide a table comparing 2002 to 2001 fee collections by month.

[The information follows.]

The Board has collected $802,352, as of March 31, 2002. The amount collected for that same period of time last year was $597,820. The breakdown is as follows:

MONTHLY USER FEE COMPARISON: YEAR TO DATE		
Months	2002 Fiscal Year	2001 Fiscal Year
October	$252,666	$122,407
November	$85,110	$24,758
December	$83,187	$82,781
January	$185,015	$161,107
February	$98,733	$141,998
March	$97,641	$64,769
Total	$802,352	$597,820

TOP USER FEE GENERATORS

Mr. Rogers. Please provide the top five generators of fees, the amounts they have generated, and the amount as a percentage of the total fees collected, in two tables, one for fiscal year 2001 and one for fiscal year 2002 to date.

[The information follows.]

The following table compares the five large user fee amounts collected during the period from October 1, 2000, to March 31, 2002, and the percentage of the total collection for FY 2001 to date.

FY 2001 COMPARISON OF LARGE-DOLLAR FEES COLLECTED		
Description	Amount Collected	Percentage of Total Fees Collected
4 Complaints Alleging Unlawful Rates under Coal Rate Guidelines	$164,000	18.2%
3 Petitions for Exemption for Rail Line Construction	$149,600	16.6%
2 Applications to Abandon All or Portion of Rail Line	$30,600	3.4%
2 Petitions for Exemption for Extension, Acquisition, or Operation of Rail Lines	$17,400	1.9%
1 Petition to Set Terms and Conditions for Sale of or Subsidy for Rail Line Proposed to be Abandoned	$15,600	1.7%

FY 2002 COMPARISON OF LARGE-DOLLAR FEES COLLECTED		
Description	Amount Collected	Percentage of Total Fees Collected
3 Complaints Alleging Unlawful Rates under Coal Rate Guidelines	$172,500	21.5%
2 Petitions for Exemption for Rail Line Construction	$103,000	12.8%
1 Application Involving Rail Line Construction	$51,500	6.4%
3 Applications for Authority to Abandon All or Portion of Rail Line	$45,900	5.7%
2 Petitions to Set Terms and Conditions for Sale of or Subsidy for Rail Line Proposed to be Abandoned	$31,200	3.9%

USER FEE COLLECTIONS

Mr. Rogers. What does the Board collect, on average per month, in user fees?

[The information follows.]

If we exclude one-time user fee collections for large-dollar amount filings like rail line construction applications, with a current fee of $55,000, and rail coal rate complaints, with a current fee of $61,400, the Board currently is averaging $79,000 in nominal filings per month for FY 2002.

COMPARISON OF RECENT USER FEE SCHEDULE UPDATES

Mr. Rogers. Please detail in tabular form the 2002 user fee schedule, including all fee items or sub-items, and show any increases in the user fees from the prior two fiscal years.

[The information follows.]

The following table lists the Board's user fee schedule pursuant to Ex Parte No. 542, Regulations Governing Fees For Services Performed In Connection With Licensing And Related Services, for FY 2000, 2001, and 2002. The fee increase column reflects the net change between the FY 2000 and 2002 fees. The FY 2002 fee schedule is currently in effect.

COMPARISON OF USER FEES FOR EX PARTE NO. 542 (SUB-NO. 8) - YEAR 2002 WITH THOSE OF EX PARTE NO. 542 (SUB-NOS. 7 & 5) - YEARS 2001 and 2000

(All Fees Are Reflected Whether Increased or Not)

Fee Item	Description	2000 Fee (Sub-No. 5)	2001 Fee (Sub-No. 7)	2002 Fee (Sub-No. 8)	Diff. (col 5 - 3)
1	2	3	4	5	6
1	Pooling/Division Traf. Non-Rail	$2,900	$3,000	$3,200	$300
2	Appl. Purch., Lease of MC Passen.	$1,400	$1,400	$1,500	$100
3	Appl. N-Rail Rate Assoc. Agree	$18,300	$19,100	$20,400	$2,100
4i	Appl. Amend. Agree. - Significant	$3,100	$3,200	$3,400	$300
4ii	Appl. Amend Agree. - Minor	$70	$70	$70	NC
5	Temp. Author. of MC Passenger	$300	$300	$350	$50
6	Notice of Exempt.-MC Pass. Corp.	$1,100	$1,200	$1,300	$200
11i	Appl.-Extension, Acquis. or Opr.	$4,800	$5,000	$5,300	$500
11ii	NOE - Extension, Acquis. or Opr.	$1,200	$1,300	$1,300	$100
11iii	PFE - Extension, Acquis. or Opr.	$8,300	$8,700	$9,300	$1,000
12i	Appl. Construct New Rail Line	$49,300	$51,500	$55,000	$5,700
12ii	NOE - Construct New Rail Line	$1,200	$1,300	$1,300	$100
12iii	PFE - Construct New Rail Line	$49,300	$51,500	$55,000	$5,700
13	Feeder Line Development Appl.	$2,600	$2,600	$2,600	NC
14i	Appl. CL II or III Acquire Rail Ln.	$4,100	$4,300	$4,600	$500
14ii	NOE - CL II or III Acquire Rail Ln	$1,200	$1,300	$1,300	$100
14iii	PFE - CL II or III Acquire Rail Ln.	$4,400	$4,600	$4,900	$500
15	Notice of Modified Certificate	$1,100	$1,200	$1,200	$100
21i	Appl. to Abandon or Discontinue	$14,600	$15,300	$16,300	$1,700
21ii	NOE - Abandon or Discontinue	$2,500	$2,600	$2,700	$200
21iii	PFE - Abandon or Discontinue	$4,200	$4,400	$4,700	$500
22	Appl. Abandon Line of CR	$300	$300	$350	$50
23	Abandonment Filed Bankrupt RR	$1,200	$1,300	$1,400	$200
24	Waiver Request - Abandon Appl.	$1,200	$1,200	$1,300	$100

Fee Item	Description	2000 Fee (Sub-No. 5)	2001 Fee (Sub-No. 7)	2002 Fee (Sub-No. 8)	Diff. (col 5 - 3)
1	2	3	4	5	6
25	Offer Financial Assistance OFA	$1,000	$1,000	$1,100	$100
26	OFA - Set Terms and Conditions	$14,900	$15,600	$16,700	$1,800
27	Request for Trail Use Condition	$150	$150	$150	NC
36	Appl. Use of Terminal Facilities	$12,500	$13,100	$14,000	$1,500
37	Appl. Pooling/Division Traf. - Rail	$6,800	$7,100	$7,500	$700
38i	Appl. Consolidation/Merger - Maj	$986,300	$1,030,000	$1,099,800	$113,500
38ii	Appl. Consolidation/Merger-Signif.	$197,200	$206,000	$219,900	$22,700
38iii	Appl. Consolidation/Merger - Min	$5,300	$5,500	$5,800	$500
38iv	NOE - Consolidation/Merger	$1,100	$1,200	$1,300	$200
38v	Consolidation/Merger - Responsive	$5,300	$5,500	$5,800	$500
38vi	PFE - Consolidation/Merger	$6,200	$6,500	$6,900	$700
39i	Appl. Non-Carrier Acquire - Major	$986,300	$1,030,000	$1,099,800	$113,500
39ii	Appl. Non-Carrier Acquire - Signif.	$197,200	$206,000	$219,900	$22,700
39iii	Appl Non-Carrier Acquire - Minor	$5,300	$5,500	$5,800	$500
39iv	NOE - Non-Carrier Acquire	$950	$950	$1,000	$50
39v	Non-Carrier Acquire - Responsive	$5,300	$5,500	$5,800	$500
39vi	PFE - Non-Carrier Acquire	$6,200	$6,500	$6,900	$700
40i	Appl. Trackage Rights - Major	$986,300	$1,030,000	$1,099,800	$113,500
40ii	Appl. Trackage Rights - Significant	$197,200	$206,000	$219,900	$22,700
40iii	Appl. Trackage Rights - Minor	$5,300	$5,500	$5,800	$500
40iv	NOE - Trackage Rights	$850	$850	$900	$50
40v	Trackage Rights-Responsive Appl.	$5,300	$5,500	$5,800	$500
40vi	PFE - Trackage Rights	$6,200	$6,500	$6,900	$500
41i	Appl. Purchase, Lease, Oper.-Maj	$986,300	$1,030,000	$1,099,800	$113,500
41ii	Appl. Purchase, Lease, Oper.- Signi	$197,200	$206,000	$219,900	$22,700
41iii	Appl. Purchase, Lease, Oper. - Min	$5,300	$5,500	$5,800	$500
41iv	NOE - Purchase, Lease, Operate	$1,000	$1,000	$1,000	NC
41v	Purchase, Lease, Oper.-Responsive	$5,300	$5,500	$5,800	$500

Fee Item	Description	2000 Fee (Sub-No. 5)	2001 Fee (Sub-No. 7)	2002 Fee (Sub-No. 8)	Diff. (col 5 - 3)
1	2	3	4	5	6
41vi	PFE - Purchase, Lease, Operate	$4,400	$4,600	$4.900	$500
42	Notice of Joint Project Relocation	$1,600	$1,700	$1,800	$200
43	Appl. Approval Rate Assoc. Agree	$46,100	$48,200	$51.400	$5,300
44i	Amend to Rate Assoc. Agree-Signf	$8,600	$8,900	$9,500	$900
44ii	Amend to Rate Assoc. Agree-Min	$70	$70	$70	NC
45	Appl. Author. Officer/Director	$500	$500	$550	$50
46	PFE-Filed Rail-Not Otherwise Cov	$5,300	$5,500	$5,900	$600
47	Amtrak Conveyance Proceeding	$150	$150	$150	NC
48	Amtrak Compensation Proceeding	$150	$150	$150	NC
56i	Formal Complaint-Coal Rate Guide	$55,000	$57,500	$61,400	$6,400
56ii	Formal Complaint - All Others	$5,400	$5,700	$6,000	$600
56iii	Competitive Access Complaint	$150	$150	$150	NC
57	Request for an Investigation	$5,800	$6,100	$6,500	$700
58i	Petition Declaratory-Exist Rate	$1,000	$1,000	$1,000	NC
58ii	Petition Declaratory-All Other Petit	$1,400	$1,400	$1,400	NC
59	Appl. Shipper Antitrust Immunity	$4,700	$4,900	$5,200	$500
60	Labor Arbitration Proceedings	$150	$150	$150	NC
61	Appeals and Pet. Revoke Exempt.	$150	$150	$150	NC
62	Motor Carrier Undercharge Cases	$150	$150	$150	NC
76	Released Value Rates for MC&HG	$800	$850	$900	$100
77	Short Notice of Tariff Publishing	$80	$90	$90	$10
78i	Filing of Tariffs, Incl. Supplements	$16	$17	$18	$2
78ii	Tariffs Transmitted by Fax	$1	$1	$1	NC
79i	Spec. DocketRR&Water<$25,000	$50	$50	$50	NC
79ii	Spec. DocketRR&Water>$25,000	$100	$100	$100	NC
80	Informal Complaint RR Rate Appl.	$400	$400	$450	$50
81i	Tariff Reconciliation MC-<$25,000	$50	$50	$50	NC
81ii	Tariff Reconciliation MC->$25,000	$100	$100	$100	NC

Fee Item	Description	2000 Fee (Sub-No. 5)	2001 Fee (Sub-No. 7)	2002 Fee (Sub-No. 8)	Diff. (col 5 - 3)
1	2	3	4	5	6
82	Request Reasonableness MC Rates	$150	$150	$150	NC
83	Documents for Recordation	$27	$28	$30	$3
84	Informal Opinions Rate Appl.	$150	$150	$150	NC
85	Railroad Accounting Interpretation	$750	$750	$800	$50
86	Operational Interpretation	$950	$1,000	$1,100	$150
87i	Arbitration Certain Disputes-Comp	$75	$75	$75	NC
87ii	Answer Per Defendant	$75	$75	$75	NC
87iii	Third Party Complaint	$75	$75	$75	NC
87iv	Third Party Answer Per Defendnt	$75	$75	$75	NC
87v	Appeals of Arbitration Decision	$150	$150	$150	NC
96	Messenger Delivery - Railroad DC	$21	$22	$23	$2
97	Request Service/Pleadings List	$16	$16	$18	$2
98i	Carload Waybill Request-No FR	$200	$200	$200	NC
98ii	Carload Waybill Samp.-FR Requir	$450	$450	$450	NC
99i	Application STB Practition Exam	$100	$100	$100	NC
99ii	Practitioners Exam Package	$25	$25	$25	NC
100i	URCS-Phase III Initial PC Vers.	$50	$50	$50	NC
100ii	URCS-Updated-Requestor Disk	$10	$10	$10	NC
100iii	URCS-Updated-STB Disk	$20	$20	$20	NC
100iv	Public Request Source Codes -PIII	$500	$500	$500	NC
100v	URCS-Phase II Initial PC Vers.	$400	$400	$400	NC
100vi	URCS-Updated-Phase II	$50	$50	$50	NC
100vii	Public Request Source Codes -PII	$1,500	$1,500	$1,500	NC
101i	Carload Waybill-R-CD-First Yr	$450	$450	$450	NC
101ii	Carload Waybill-R-CD-Add Yr	$150	$150	$150	NC
101iii	Waybill-STB or St.-R-CD-Fir Yr	$650	$650	$650	NC
101iv	Waybill-STB or St.-R-CD-2nd S	$450	$450	$450	NC
101v	Waybill-STB or St.-R-CD-2nd D	$500	$500	$500	NC

Fee Item	Description	2000 Fee (Sub-No. 5)	2001 Fee (Sub-No. 7)	2002 Fee (Sub-No. 8)	Diff. (col 5 - 3)
1	2	3	4	5	6
101vi	User Guide- Carload Waybill	$50	$50	$50	NC
102	Certificate of the Secretary	$11	$11	$12	$1
103	Exam Tariffs for Certification	$28	$29	$30	$2
104	Checking Records for Authenticity	$19	$20	$21	$2
105	Electrostatic Copies Tariffs, Reco.	$0.90	$0.90	$1.00	$0.10
106	Pro Staff Time for ADP Data Req.	$49	$51	$53	$4

Total of 114 fee or sub-fee items.

USER FEE COST ACCOUNTING SYSTEM

Mr. Rogers. For several years, you stated in your hearing answers that the Board believed that a cost accounting system was not practical or appropriate for the Board at that time because the costs outweigh the benefits. Is this still the case?

[The information follows:]

The Department of Transportation (DOT) Inspector General's (IG) report, issued in November 1998, recommended that the Board: "Implement a cost-effective system for identifying fee-related services and tracking associated costs. Such an approach may take the form of a full cost accounting system or expansion of existing time and motion studies." The Board does not plan to implement such an accounting system. In a written response to the IG's original audit, Board Chairman Morgan noted that implementation of a cost accounting system was neither practical nor appropriate. The cost to develop such a system would be too high as compared to the benefit derived from the data accumulated and the relatively low-dollar volume of the total collections. And because the existing time and motion (T&M) studies, when appropriately updated, serve as an acceptable means for tracking fee-related services and costs, the Board has chosen to continue with this method.

USER FEE UPDATING

Mr. Rogers. On February 18, 1999, the Board, in response to the IG's recommendation, established a revolving 5-year T&M study program to update 20% of its fees once a year, with 100% updated after 5 years. In the past you mentioned that there has not been sufficient filings for the fee and sub-fee item categories being studied to update the fees. Please list the fees that have been updated in compliance with your policy. What percentage of the total does this represent?

[The information follows.]

Since early 2000, the Board has been conducting a T&M study of the fee or sub-fee items designated for the first two years of its study program. However, our policy, as presented to the IG's staff during its investigation, is not to revise any fee or sub-fee item until there are at least five observations (filed cases) in that category. This policy is designed to avoid basing a fee on a unique or unusual case. To date, the Board has not updated any of the fee or sub-fee items from the first two years of the 5-year program because it has not received a sufficient number of filings in any category to justify doing so.

USER FEE NPR

Mr. Rogers. In the 2001 record, you stated that you anticipated issuing an NPR that would seek to establish a user fees for 20 activities. Please update the committee on the status of this effort.

[The information follows.]

A Notice of Proposed Rulemaking proposing to add new fee items to our user fee program should be issued within the next few months.

FEE WAIVER REQUESTS

Mr. Rogers. Have user fees created problems regarding access to the Board's services? Please provide a chart showing the number of fee waiver requests by fee and the number of fee waivers granted by fee.

[The information follows.]

We have no specific evidence that certain cases have not been filed because of the fee, although there are those who argue that user fees in general have a chilling effect. The following chart shows the number of fee waiver requests by fee item and the number of fee waivers granted by fee item.

FEE WAIVER ACTIVITY

JANUARY 1, 2000 - DECEMBER 31, 2001

YEAR	TOTAL NUMBER OF FEE WAIVER REQUESTS	NUMBER GRANTED	TYPES
2000	4	3	Rate Complaint Acquisition Exemption Construction Exemption Trackage Rights Exemption
2001	10	8	4 Exemption Abandonments 2 Acquisition Exemptions Construction Exemption Adverse Abandonment

STAFFING LEVELS

Mr. Rogers. Please provide a table showing FTEs the Board requested, the number authorized by Congress for the past from 1999 to 2003 (by year).

[The information follows.]

Attached is a table showing the Board's FTE request and Congress' authorization.

Fiscal Year	FTEs Requested	FTEs Authorized
1999	135	135
2000	140	140
2001	143	143
2002	143	143
2003	145	

Mr. Rogers. Why does the Board want to increase its staff during the fiscal year 2003?

[The information follows.]

The Board is concerned that a large number of current Board employees are already eligible to retire under current regulations and that an even larger number of employees will become retirement-eligible within the next 2-3 years. The requested authorization for 145 FTEs will provide the Board with the discretion to hire staff to replace tenured, retirement-eligible staff prior to their anticipated retirement date. This is to ensure the required transition from current staff, who are becoming retirement-eligible, to new staff, who can gain working knowledge and analytical and legal expertise necessary to process the Board's workload and prepare decisions for the Board. Currently, for example, the Board is in the process of recruiting a Director of Human Resources, to replace an individual who will be retiring within the next 4 months; Transportation Attorneys to supplement and replace staff who have recently retired and those who may be retiring within the next year; and a Computer Specialist to supplement current staff in response to the increasing computer system and website needs.

RETIREMENT ELIGIBILITY

Mr. Wolf. How many current staff are eligible for retirement? Of this number, what percent will be retiring within the next two years? What percentage will be eligible in the next five years? What percentage will be eligible in the next ten years?

[The information follows.]

Between now and September 30, 2002, 24 percent of the Board's employees are eligible for voluntary retirement. The following table reflects the retirement eligibility of Board employees for the next 10 years.

Retirement Eligible by Fiscal Year	Number of Employees Eligible	Percent Eligible to Retire
09/30/2002	33	24%
09/30/2003	46	34%
09/30/2004	58	43%
09/30/2005	69	51%
09/30/2006	73	54%
09/30/2007	82	61%
09/30/2008	86	64%
09/30/2009	92	68%
09/30/2010	97	72%
09/30/2011	98	73%
09/30/2012	100	74%

Mr. Rogers. Please provide a chart that shows the numbers of retirement eligible employees over the next five years (by year) by function. Please include the median and average grade (one for clerical staff and one for professional staff).

[The information follows.]

The following table illustrates the number of retirement-eligible employees who can retire over the next 5 years. While approximately one-third of the Board's staff are attorneys involved in case processing, there are other professional staff disciplines that are needed for case processing. Other professional staff involved in case processing include engineers, environmental protection specialists, financial analysts, industry economists, paralegal specialists, and transportation industry analysts, as well as support staff.

Employee Category	09/30/2002	09/30/2003	09/30/2004	09/30/2005	09/30/2006
Attorneys					
Number Eligible	5	11	16	18	19
Average Grade	14.8	14.8	14.9	14.9	14.9
Median Grade	15	15	15	15	15
Clerical Staff					
Number Eligible	4	4	4	5	5
Average Grade	6.3	6.3	6.3	6.0	6.0
Median Grade	7	7	7	5	5
Other Professional Staff					
Number Eligible	24	31	38	46	49
Average Grade	12.8	12.9	12.9	13.0	13.0
Median Grade	13	14	14	14	14
TOTAL	**33**	**46**	**58**	**69**	**73**

ADDITIONAL STAFFING

Mr. Rogers. You've requested no additional money for these FTEs this year. Will you be required to ask for additional resources in the next two years for these additional FTEs?

[The information follows.]

The Board has been able to fund additional FTEs with the lapsed salary savings that have occurred when tenured, retirement-eligible staff retire. In most cases, senior-level professionals, who are retiring, are at higher grade and salary levels than the entry-level or mid-level professional staff who are being recruited, thereby providing the resources needed for these additional FTEs. Currently, the Board anticipates that the only additional funds required will be for the enacted annual pay raises for the Board's FTEs in the next 2 years.

Mr. Rogers. Please describe the functions and target grades for these new FTEs.

[The information follows.]

The Board is currently recruiting for new entry-level, mid-level, and senior-level professional staff to replace scheduled employee retirements within the next few years. One of the current recruiting actions is for a Director of Human Resources, with a target grade of GS-15, who would replace the current Director, who is retiring in 4 months, and manages the human resource activities of staffing, position classification, employee relations, and employee development and training. Another recruiting action is for a Computer Specialist, with target grade of GS-14, who would be involved in monitoring the Board's LAN system, troubleshooting on system problems, and developing website applications for additional Board information. The Transportation Attorneys positions, with a target grade of GS-15, would provide litigation support on the various issues related to rail abandonment and construction filings; carrier consolidations; and rate complaints.

REPLACEMENT EMPLOYEES FOR RETIREES

Mr. Rogers. You stated last year that you wished to have higher FTE authority to allow the Board to hire and train replacement employees prior to retirements. Two years ago, you provided figures to indicate that by 9/30/2002, 47 employees will be eligible to retire. You also mentioned that the Board may have to reevaluate its replacement process to reflect the increase in increasing retirements. Have you done so? What is the current replacement process?

[The information follows.]

The Board has modified its approach somewhat. A few years ago, our emphasis was on hiring entry-level professionals. Now, the replacement process represents a balance between entry level and experienced hires. The Board has achieved good results thus far without the need for additional resources because the majority of those eligible to retire have chosen not to do so. Two years ago, we projected that there would be 47 employees eligible to retire by 09/30/2002. That date is approaching, and in fact only 14 retirement eligibles have actually retired. If this trend prevails or lessens over the next several years, finding replacements will not be a problem. Conversely, a drastic increase in this rate will present us with challenges, similar to the rest of the Federal Government.

MANAGERIAL AND SUPERVISORY POSITIONS

Mr. Rogers. Please update the managerial and staff listing shown on pages 840-842 of last year's hearing record.

[The information follows.]

The information is updated to reflect the managers and supervisors of staff under the present organization as of April 15, 2002.

NAME	PAY PLAN	SUPERVISORY CODE	GRADE	POSITION TITLE
CHAIRMAN AND BOARD MEMBERS' OFFICES				
MORGAN, LINDA J.	EX	M	03	CHAIRMAN
BURKES, WAYNE O.	EX	M	'04	BOARD MEMBER

(vacant)	EX	M	04	BOARD MEMBER

OFFICE OF THE GENERAL COUNSEL

HANSON, ELLEN D.	ES	M	06	GENERAL COUNSEL
KEATS, CRAIG M.	ES	M	06	DEPUTY GENERAL COUNSEL

OFFICE OF PROCEEDINGS

KONSCHNIK, DAVID M.	ES	M	06	DIRECTOR
FARR, JULIA MAE-SHEN	GM	M	15	ASST. TO THE DIRECTOR
RENNINGER, CHARLES L.	GS	S	14	BRANCH CHIEF
GORDON, BERYL H.	GM	M	15	DEPUTY DIRECTOR
ARMSTRONG, RICHARD III	GM	S	15	SUPERVISORY ATTORNEY-ADVISOR
BARRY, THOMAS J.	GM	S	15	SUPERVISORY ATTORNEY-ADVISOR
DETTMAR, JOSEPH H.	ES	M	06	DEPUTY DIRECTOR
DAVIS, ERIC S.	GS	S	15	SUPERVISORY ATTORNEY-ADVISOR
LERNER, MARC A.	GM	S	15	SUPERVISORY ATTORNEY-ADVISOR
SADDLER, BARBARA G.	GS	S	13	SUPERVISORY PARALEGAL SPECIALIST

OFFICE OF ECONOMICS, ENVIRONMENTAL ANALYSIS, AND ADMINISTRATION

GARDNER, LELAND	ES	M	06	DIRECTOR

MOSKO, MICHAEL JR.	GS	S	15	SUPERVISORY TRANSPORTATION INDUSTRY ANALYST
PHILLIPS, KENT	GS	S	15	SUPERVISORY FINANCIAL ANALYST
AGUIAR, PAUL A.	GM	S	15	SUPERVISORY AUDITOR
RUTSON, VICTORIA J.	GS	S	15	SUPERVISORY ATTORNEY-ADVISOR
DEWLAND, ELIZABETH W.	GS	M	15	CHIEF, SYSTEMS SERVICES
HIRST, DONALD B.	GS	S	15	CHIEF, FACILITIES MANAGEMENT
JACOBIK, ANTHONY JR.	GM	M	15	FINANCIAL MANAGER
JACOBS, FRANKLIN P.	GS	M	15	DIRECTOR OF HUMAN RESOURCES

OFFICE OF COMPLIANCE AND ENFORCEMENT

CLEMENS, MELVIN F.	GM	M	15	DIRECTOR
HERZIG, LAWRENCE R.	GM	S	15	SUPERVISORY TRANSPORTATION INDUSTRY ANALYST

OFFICE OF CONGRESSIONAL AND PUBLIC SERVICES

KING, DAN G.	ES	M	05	DIRECTOR

BOARD MEMBERS AND TERMS

Mr. Rogers. Please provide the names of the three Board members, the length of their terms, and when these terms expire. If there are vacancies on the Board, when do you anticipate these vacancies will be filled?

[The information follows.]

The ICC Termination Act of 1995 (ICCTA) provided that the term for each Member of the Board shall be 5 years and shall begin when the term of the predecessor of that Member ends. Also under the ICCTA, a Board Member can only be reappointed for one additional term and, if not reappointed, cannot serve more than one year past the expiration of his or her term.

Board Members and Expiration of Terms:

Wayne O. Burkes, December 31, 2002.
Linda J. Morgan, December 31, 2003.
Vacancy, December 31, 2005.

The third Board member position has been vacant since January 1, 2002, upon the termination of former Board member Clyburn's appointment and one-year holdover period. The Administration has not yet submitted a nomination to the Senate.

STAFFING BY FUNCTION

Mr. Rogers. Please provide a table showing the number of personnel on-board at the Board, by function (e.g., rail regulation, motor carrier regulation).

[The information follows.]

Board personnel handle a diversity of case assignments at any given period of time. Therefore, FTEs, which represent the amount of time spent on a functional category, are the best indicators of the workload of the Board. The following table reflects the FY 2003 FTEs by regulatory function.

	FUNCTION		FY 2003 FTEs
RAIL	1	Carrier Consolidations	26.3
	2	Review of Labor Arbitral Decision	6.1
	3	Rates & Services	39.7
	4	Construction	12.0
	5	Abandonments	24.2
	6	Other Line Transactions	12.1
	7	Collective Actions	0.3
	8	Lien Recordation	2.0
	9	Data Collection & Oversight	7.2
	10	Passenger Rail	1.4
	11	Exempt Rulemaking	1.1
	12	Other - Rail	4.1
		TOTAL RAIL	**136.5**
MOTOR	13	Rate Reasonableness	1.8
	14	Collective Actions	0.8
	15	Undercharges	0.0
	16	Bus Regulation	1.2
	17	Other - Motor	2.0
		TOTAL MOTOR	**5.8**
WATER	18	Water	1.8
PIPELINE	19	Pipeline	0.8
OTHER	20	Other	0.1
		TOTAL	**145.0**

CLASS I RAILROAD MERGERS

Mr. Rogers. Please summarize the Board's process for a Class I railroad merger?

[The information follows:]

Prospective applicants must file a notice of intent with the Board indicating that they are intending to file a control application. At the same time, the prospective applicants must also file a proposed procedural schedule with the Board, which the Board publishes in the *Federal Register* to solicit public comments. These comments are considered by the Board in its adoption of a procedural schedule. Once an application is filed, if the application filing is complete, a final procedural schedule will be published in the *Federal Register* as part of the Board's notice of acceptance of the application within 30 days of the filing of the application.

Under the law [49 U.S.C. 11325(b)(3)], the Board must conclude the evidentiary proceeding by no later than the end of 1 year after the date of publication of the notice of acceptance, and must issue a final decision by no later than the 90th day after the date on which it concludes the evidentiary proceeding. Therefore, the law requires that the Board issue a final decision by no later than 16 months after the filing of an application. Any procedural schedule adopted, however, could provide for a shorter timetable.

Mr. Rogers. Please list all major Class I Railroads.

[The information follows:]

There are currently eight U.S. Class I railroads: (1) Grand Trunk Western Railroad Incorporated; (2) Norfolk Southern Railway Company; (3) Illinois Central Railroad Company; (4) CSX Transportation, Inc.; (5) The Burlington Northern and Santa Fe Railway Company; (6) The Kansas City Southern Railway Company; (7) Soo Line Railroad Company dba Canadian Pacific Railway; and (8) Union Pacific Railroad Company.

Mr. Rogers. Please list all major Class I railroad mergers that have been filed or you expect to be filed in the coming fiscal year.

[The information follows:]

There are no pending major Class I railroad merger applications, and the Board has received no notice of any such merger applications expected to be filed.

Mr. Rogers. Do you expect further large mergers to occur in the near future? If so, does the board have sufficient resources and personnel to handle a surge in this complex and lengthy work?

[The information follows:]

On June 11, 2001, the Board issued new rules governing proposals for major rail consolidations. These new rules substantially increase the burden on applicants to show that a proposed transaction would be in the public interest by clearly demonstrating that public benefits outweigh any negative effects. Where past merger benefits were primarily based on efficiencies gained through the rationalization of unneeded infrastructure and the refinement of operations, the physical plants of today's carriers are by and large fully rationalized. Therefore, future mergers will be approved only when there are substantial and demonstrable gains in public benefits of a different sort -- improved service and safety, enhanced competition, and greater economic efficiency -- to clearly outweigh any anticompetitive effects, potential service disruptions, or other merger-related harms.

No major mergers have been proposed since the adoption of the new final rules. In the past, the Board has had to consider only one Class I railroad merger at a time. Review of, or related requisite work with respect to, multiple Class I railroad mergers, in addition to the Board's other work, would likely push the Board's staff resources to the limit. The Board, nonetheless, is confident that, with its conscientious and hard-working staff, it will be able to get the job done.

STATE OF THE RAILROAD INDUSTRY

Mr. Rogers. Please summarize the state of the industry.
[The information follows:]

Despite weakness in the national economy (and the significant disruptions brought about in the aftermath of the events of September 11), the railroad industry has become more stable over the past 12 months. The service problems associated with the most recent round of rail consolidation have been overcome. Customer satisfaction in rail transportation is up, and rail carriers are busy taking advantage of their new marketing and operational opportunities. Rather than pursuing new mergers, carriers are exploring interline service partnerships, joint-marketing agreements, and other cooperative ventures. Many challenges remain, however, including the continuing inability of the industry to earn its cost of capital.

NATIONAL SECURITY

Mr. Rogers. In the past, the Department of Defense expressed concerns over the national security implications of foreign ownership of a major U.S. rail carrier. These concerns were associated with the anticipated merger of Canadian National/Burlington Northern Santa Fe. How are you currently addressing national security issues and how do you plan to better address these in the future?
[The information follows:]

The concerns of the Department of Defense (DOD) were expressed in the context of the Board's proceeding to review and revise its rules governing Major Rail Consolidation Procedures (STB Ex Parte No. 582 (Sub-No. 1), served June 11, 2001). While the Board has no direct responsibility for national security issues, we did address in our revised merger rules those areas of concern expressed by DOD, and required future merger applicants "to discuss and assess national defense ramifications of their proposed merger." Also, regarding foreign ownership of a major U.S. rail carrier, such ownership would not change or limit the statutory obligations of the carrier or the jurisdiction of the Board over its operations, including the maintenance of its facilities and the continuity of its services. And regarding preference or priority to be afforded DOD shipments, the

present statute (49 U.S.C. 11124) requires railroads to give preference to military traffic upon Presidential demand or notice during war or threat of war, and empowers the Board to direct such priority handling. Of course, any concerns that DOD might raise in the context of a specific proceeding would be carefully evaluated and given the utmost consideration.

RAIL INDUSTRY ISSUES

Mr. Rogers. In the 2001 record, you mention continuing service problems in connection with the acquisition of Conrail by CSX and Norfolk Southern. Have service levels been improved? Are the service levels where they should be?

[The information follows:]

Since our submission in the 2001 record, the service levels provided by CSX and Norfolk Southern have significantly improved. This improvement is clearly evidenced by the operational metrics filed with the Board's Office of Compliance and Enforcement, and by the absence of customer complaints. Nevertheless, the Board and the carriers continue to focus on even better service.

Mr. Rogers. Are there any areas of problems within the Railroad industry that the Subcommittee should be aware of?

[The information follows:]

Freight rail service in the United States has significantly improved, and there are those who would say that the operational performance of the railroad industry has never been better. Communication among the rail carriers is much improved, and customer relations have been greatly enhanced. Through inter-carrier alliances, more streamlined operations, and more efficient use of rail capacity and infrastructure, many innovative offerings have been introduced by the railroads to enhance service to rail customers. When circumstances occur that can adversely affect service levels, such as weather conditions or derailments, or periodic fluctuations in traffic levels and demand, the industry as a whole is now better able to effect a timely recovery and maintain adequate service levels.

BUFFALO RATE STUDY

Mr. Rogers. Summarize the results of the Buffalo rate study the Board undertook.

[The information follows:]

In the December 17, 2001 decision completing the second annual round of our 3-year Buffalo Rate Study proceeding, we found that CSX and Norfolk Southern (NS) rates for rail movements into and out of the Buffalo area had not changed significantly over the prior year. We also found that these rates were, overall, and with no adjustment for inflation, generally somewhat lower than the rates in effect for comparable movements prior to the June 1, 1999 division of Conrail's assets by CSX and NS. Thus, we concluded that the CSX/NS/Conrail transaction has not at this time resulted in higher rates for Buffalo-area shippers.

RATES AND SERVICE

Mr. Rogers. Are any particular geographic areas having difficulty, either with the amount of service or pricing?

[The information follows:]

As we have noted, service by the nation's railroads is much improved, and our evidence does not indicate any particular sectors with persistent service problems. On occasion, however, individual issues do arise between a particular customer and a particular carrier, and the Board by bringing the parties together has been successful in resolving those on an informal basis.

With respect to rates, there is an ongoing dispute between certain North Dakota grain shippers and the Burlington Northern Santa Fe railroad, but no formal complaint has been filed with the Board. And the Board does have several coal rate complaint cases pending before it.

In an effort to better assess rail issues nationally, and to provide the shipping public, smaller railroads, employees, and affected communities with access to prompt assistance on specific rail-related problems, in November 2000, the Board instituted its Rail Consumer Assistance Program, which provides the public with toll-free access to the Board's informal dispute resolution services. Nearly 150 individual matters have been

brought to the Board on an informal basis since the inception of the program, and all have been handled to conclusion with the involved railroad.

BOARD REAUTHORIZATION STATUS

Mr. Rogers. Please update the Committee on the status of the STB's reauthorization. Has this Administration proposed legislation? If so, please include a copy for the record.

[The information follows.]

The STB has not been reauthorized. This Administration has not proposed any reauthorization legislation.

Mr. Rogers. Has the Board submitted a separate reauthorization proposal to Congress for its review? If so, please highlight the differences between your request and the Administration's request.

[The information follows.]

The Board has not submitted a reauthorization proposal to Congress.

Mr. Rogers. Please summarize recently introduced bills similar to page 1077 of the 2001 record.

[The information follows.]

In the Senate

S. 526 Introduced by Mr. Dorgan. A bill to amend title 49, United States Code, to provide that rail agreements and transactions subject to approval by the Surface Transportation Board are no longer exempt from the application of the antitrust laws, and for other purposes.

S. 1103 Introduced by Mr. Rockefeller. A bill to amend title 49, United States Code, to enhance competition among and between rail carriers in order to ensure efficient rail service and reasonable rail rates in any case in which there is an absence of effective competition, and for other purposes.

In the House

H.R. 141 Introduced by Mr. Oberstar. To authorize appropriations for the Surface Transportation Board, to enhance railroad competition, to protect collective bargaining agreements, and for other purposes.

H.R. 999 Introduced by Mr. Pomeroy. To strengthen the standards by which the Surface Transportation Board reviews railroad mergers, and to apply the Federal antitrust laws to rail carriers and railroad transportation.

H.R. 2654 Introduced by Mr. Clement. To designate the Surface Transportation Board as a forum to improve passenger rail and other fixed guideway passenger transportation by allowing improved access to freight track and right-of-way for fixed guideway transportation in consideration for just and reasonable compensation to freight railroads.

Mr. Rogers. Where are the House and Senate authorizing committees in considering your reauthorization?

[The information follows.]

This calendar year there have been no committee hearings related to the Board nor any actions taken related to its reauthorization. Last year, hearings were held in the respective House and Senate authorizing committees on the Board and its activities, and specifically its rail merger rules and rail infrastructure issues.

RAIL CASES UNDER CONSIDERATION

Mr. Rogers. What major rail acquisition proposals is the Board considering?

[The information follows:]

There are no applications for any proposed major rail acquisitions pending before the Board. The Board continues its oversight of the previously approved CSX/Norfolk Southern/Conrail transaction and

continues to address issues that arise in connection with other previously approved transactions even though the formal oversight for those transactions (i.e., the Union Pacific/Southern Pacific merger and the Canadian National/Illinois Central merger) has been terminated.

Mr. Rogers. How many rail abandonments is the Board currently working on?

[The information follows:]

As of April 12, 2002, 24 rail abandonment proceedings were pending before the Board. Of these, 14 involved notices of proposed abandonments and/or discontinuances of service covered by a class exemption, 6 involved individual petitions for exemption in cases not covered by a class exemption, and 4 involved formal applications.

Mr. Rogers. Please update the table on page 1080 of the 2001 hearing record regarding rail abandonments.

[The information follows:]

	FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001	
	cases	miles	cases	miles	cases	miles	cases	miles	cases	miles	cases	miles	cases	miles
1. ABANDONMENTS														
Applications Filed	12	518	15	688	5	306	9	501	5	205	4	205	8	23
Applications Granted	13	605	16	677	4	241	5	110	5	568	4	198	1	49
Exemption Petition Filed	48	923	38	732	54	713	40	531	32	348	19	594	35	460
Exemption Petitions Granted	41	757	36	783	42	636	49	466	29	295	17	364	27	579
Exemption Notices Filed	94	662	89	891	48	372	47	338	35	481	35	450	47	262
Exemption Notices Granted	87	632	83	785	41	306	51	396	32	380	30	330	46	368
TOTAL FILED	154	2,103	142	2,211	107	1,391	96	1,370	72	1,034	58	1,249	90	745
TOTAL GRANTED	141	1,994	135	2,245	87	1,183	105	972	66	1,243	51	892	74	996
2. TRAIL REQUESTS														
TOTAL FILED	34	597	49	1,118	60	919	59	1,081	50	1,221	29	600	45	868
TOTAL GRANTED	30	569	39	788	36	430	42	746	30	574	17	442	32	445

FILED RAIL RATE COMPLAINTS

Mr. Rogers. The Board is not able to initiate a review of rail rates, but may only review a rate on complaint. Have any complaints been filed with the Board since it filed its Questions for the Record for fiscal year 2001? If so, how many and what is the concern?

[The information follows:]

The following 9 new rail rate complaints have been filed since answers to Questions for the Record for fiscal year 2001 were submitted:

1. PPL Montana, LLC v. The Burlington Northern and Santa Fe Railway Company, STB Docket No. 42054. On July 7, 2000, PPL Montana filed a complaint alleging that the Burlington Northern and Santa Fe (BNSF) rate on trainloads of coal from 17 mines in the Powder River Basin to the Corette power plant at Billings, MT are unreasonably high.

2. Texas Municipal Power Agency v. The Burlington Northern and Santa Fe Railway Company, STB Docket No. 42056. In a complaint filed October 3, 2000, the utility alleges that BNSF's rates on unit-train movements of coal from the Powder River Basin to the power plant near Carlos, TX are unreasonably high.

3. Public Service Company of Colorado d/b/a Xcel Energy v. The Burlington Northern and Santa Fe Railway Company, STB Docket No. 42057. In a complaint filed December 20, 2000, the utility alleges that BNSF's rates on unit-train movements of coal from the Powder River Basin to Xcel's power plant near Brush, CO are unreasonably high.

4. Arizona Electric Power Cooperative, Inc. v. The Burlington Northern and Santa Fe Railway Company and Union Pacific Railroad Company, STB Docket No. 42058. In a complaint filed December 29, 2000 and amended March 9, 2001, the utility alleges that the BNSF/Union Pacific (UP) joint-line rates on trainload movements of coal from mines in New Mexico

and the Powder River Basin, and the UP single-line rate from mines in Colorado to the power plant at Cochise, AZ are unreasonably high.

5. Northern States Power Company Minnesota d/b/a/ Xcel Energy v. Union Pacific Railroad Company, STB Docket No. 42059. In a complaint filed January 26, 2001, the utility has challenged both UP's single-line rates on unit-train movements of coal from the Powder River Basin to the power plants at Burnsville and Bayport, MN and BNSF's bottleneck segment rate from the interchange point at St. Paul, MN to the Bayport plant.

6. Duke Energy Corporation v. Norfolk Southern Railway Company, STB Docket No. 42069. On December 19, 2001, Duke Energy filed a complaint alleging that the Norfolk Southern (NS) rates on unit-trains of coal from Virginia, West Virginia and Kentucky mines to 4 North Carolina power plants are unreasonably high.

7. Duke Energy Corporation v. CSX Transportation, Inc., STB Docket No. 42070. On December 19, 2001, Duke Energy filed a complaint alleging that CSX rates on unit-trains of coal from Virginia, West Virginia and Kentucky mines to 2 North Carolina and a South Carolina power plant are unreasonably high.

8. Otter Tail Power Company v. The Burlington Northern and Santa Fe Railway Company, STB Docket No. 42071. Otter Tail Power filed a complaint on January 2, 2002, alleging that BNSF's rates on unit-train movements of coal from the Powder River Basin to the Big Stone power plant at Milbank, SD are unreasonably high.

9. Carolina Power and Light Company v. Norfolk Southern Railway Company, STB Docket No. 42072. On February 1, 2002, the utility filed a complaint alleging that NS's rates on unit-trains of coal from Virginia, West Virginia and Kentucky

mines to the Roxboro and Mayo power plants are unreasonably high.

In addition to these rail rate complaints, the following motor carrier rate case has been filed:

New Windows Furnishings, Inc. and Newell Rubbermaid, Inc. v. United Parcel Service, Inc., STB Docket 42073. On March 28, 2002, the shipper filed a petition for declaratory order asking the Board to resolve a billing dispute with United Parcel Service (UPS).

EXPIRING COAL CONTRACTS AND BOARD'S WORKLOAD

Mr. Rogers. Briefly explain why any increase in expiring coal contracts would lead to an increase [in] the Board's workload in the area of rail rates and service.

[The information follows:]

The service and rate levels provided by a rail carrier pursuant to rail transportation contracts are not subject to the Board's jurisdiction. 49 U.S.C. 10709(c)(1). If, upon expiration of a contract, the shipper and railroad do not enter into a new contractual arrangement, the transportation service is then provided by the rail carrier under common carriage terms and conditions established unilaterally by the railroad. In situations where the carrier and shipper have not been able to agree on new contract terms, the probability is high that the shipper will not be satisfied with the new (common carriage) rate and service terms and will file a rate complaint with the Board.

RAIL LINE CONSTRUCTION

Mr. Rogers. Your budget states that you expect an increase in rail line construction proposals. What is the reason for this?

[The information follows:]

Consistent with an evolving trend in recent years, there is an unprecedented number of rail line constructions (10 in all) under review at

the Board. Communications from the railroads, contractors, and others, including pre-planning meetings and telephone calls concerning possible line construction projects, indicate that this trend will continue. We attribute this trend to the fact that the rail network has been rationalized in connection with the most recent round of consolidations. In that context, excess capacity has been eliminated, and now the marketplace is dictating where new facilities are appropriate.

STAFF TO HANDLE RAIL LINE CONSTRUCTION PROPOSALS

Mr. Rogers. Do you have a sufficient number of staff to handle the increase in rail line construction proposals anticipated?

[The information follows:]

The Section of Environmental Analysis (SEA) has sufficient staff to meet the current and expected workload for rail line constructions. During the past fiscal year, SEA was operating with one staff person on extended sick leave who subsequently took disability retirement. This fiscal year SEA is operating with a full complement of staff.

INTERCITY BUS MERGERS

Mr. Rogers. Your budget states that you expect workload on intercity bus mergers to increase. What is the reason for this?

[The information follows:]

Our expected workload projections are based upon several factors, including the number of actual filings that we receive, and decisions issued by the Board with respect to those filings, during the year in which we are making our projections for future budget purposes. We project that number out to the year in question and attempt to discern a workload trend from past experience. Our projections in this budget proposal are not based on information or expectations regarding any particular intercity bus merger transactions, and it is possible that the number of new filings (and hence the related workload) will be greater than or less than our best estimates at this time.

CASELOAD

Mr. Rogers. Does the Board have a constant number of cases pending or has the workload increased?

[The information follows:]

The Board has approximately 10 fewer cases pending now than it did a year ago, with motor carrier cases accounting for approximately 70 percent of the reduction and rail cases accounting for approximately 30 percent of the reduction. Thus, the number of pending rail cases is fairly constant.

Mr. Rogers. What is the Board's current caseload? Please provide this information in a table similar to that on page 1086 of the 2001 hearing record.

[The information follows:]

As of April 12, 2002, there were 144 pending proceedings, including pending court actions,[7] as follows:

RAIL AND PIPELINE PROCEEDINGS

Abandonments	27
Ex Parte	4
(Includes rule changes, expansion of exemptions, etc.)	
Finance Dockets	60
(Labor arbitration appeals, other labor matters, consolidations, sales, trackage rights, constructions, control, feeder lines)	
Formal Docket	20
(Rate complaints, declaratory orders)	
Other	1
Total Rail:	112

[7] Some pending court proceedings involve multiple petitions for court review.

MOTOR AND WATER PROCEEDINGS

Rate Bureau	24
Finance Docket (Passengers and Freight)	0
Other Rates	2
Ex Parte	0
Complaint (Water)	3
Other	0
Total Motor and Water	29

OTHER PROCEEDINGS

Other (Non-mode specific rulemakings)	3
Total Other	3

Mr. Rogers. On average, how long does it take for the Board to resolve a case?

[The information follows:]

The time it takes to resolve a case before the Board has depended very much on the type of case, the time needed to develop the record (including time for discovery where parties to a dispute need or wish to pursue discovery), and the time needed to render a decision (or, as in some cases, a series of decisions). The Board does its best to respond to emergency needs or requests for expeditious action, and many of these types of cases, as well as many non-complex cases, are resolved in days or weeks.

More complex cases, involving, for example, challenges to railroad rates or proposed railroad mergers, take many months. In particular, railroad merger proceedings, until passage of the ICCTA, had a statutory limit of 31 months from the time an application was filed until the final decision was issued. The ICCTA reduced the statutory limit for major mergers to 16 months. The Board decided the merger application of the Union Pacific and Southern Pacific, which was filed in Finance Docket No. 32760 about a month before the ICCTA was enacted, in less than

9 months. The final written decisions in the CSX/Norfolk Southern/Conrail control transaction and in the Canadian National/Illinois Central control transaction were issued 13 months and 10½ months, respectively, after the applications were filed.

With particular respect to how the Board has handled its workload, during calendar year 2001 and the first 2 months of 2002, the Board received 425 new cases and issued 949 decisions on a variety of procedural and substantive matters. Also, the number of new cases received in calendar year 2001 exceeded the number received in calendar year 2000 and the Board issued approximately 45 more decisions in calendar year 2001 than it did in calendar year 2000. While issuance of a decision does not always close out a case, a substantial number of cases are both opened and closed each year. Good progress by the Board on working its way through its overall workload is reflected by the fact that the number of pending cases decreased by approximately 350 between the beginning of calendar year 1996 and the end of February 2002.

The Board has little control over the number of new cases filed with it. While the Board continues to have a full docket of railroad cases, the Board is determined to resolve all cases as expeditiously as possible, meeting statutory deadlines as appropriate, and its record of resolving matters in a timely manner since its establishment on January 1, 1996, reflects that commitment.

RATE REGULATION

Mr. Rogers. The ICC Termination Act transferred 17 rail rate regulation cases to the Board. Are any of these cases still outstanding? If so, identify only those left to be settled and indicate their current status.

[The information follows:]

Of the 17 cases, only 1 case remains, *United States Department of Energy v. The Baltimore & Ohio R.R.*, Docket No. 38302, *et al.* Petitions to reopen a prior decision in the proceeding are pending. The parties have been reporting to the Board on the status of settlement negotiations and recently reported that an agreement in principle had been reached between the Union Pacific Railroad Company and government parties (subject to final approvals). As of February 28, 2002, they expected to present a final agreement to the Board during the second quarter of 2002.

RAILROAD REVENUE ADEQUACY DATA

Mr. Rogers. Please provide a table for class I railroads that determines how many are "revenue adequate". This table should update the one found on page 1092 of the 2001 hearing record.

[The information follows:]

The following table shows those railroads found to be revenue adequate for the years 1992 through 2000.

Class I Railroads Found To Be Revenue Adequate 1992 through 2000

Year	Number of Revenue Adequate Railroads	Names of Revenue Adequate Railroads
1992	2	Illinois Central, Norfolk-Southern
1993	2	Illinois Central, Kansas City Southern
1994	1	Illinois Central
1995	3	Illinois Central, Norfolk-Southern, Union Pacific
1996	3	Illinois Central, Norfolk-Southern, Soo Line
1997	3	Illinois Central, Norfolk-Southern, Soo Line
1998	1	Illinois Central
1999	1	Grand Trunk Western
2000	0	

Revenue adequacy findings for 2001 will be available during the summer of 2002.

RAILROAD RATES OF RETURN ON INVESTMENT

Mr. Rogers. Please update the class I revenue adequacy data on page 1093 of the 2001 hearing record.

[The information follows:]

The following chart shows the revenue adequacy determinations for Class I railroads for each year from 1997 through 2000.

Class I Railroad Rates of Return on Investment - 1997 through 2000
(In Percent)

Railroad	**1997**	**1998**	**1999**	**2000**
Burlington Northern-Santa Fe	8.4	9.7	9.5	8.8
Conrail [1]	1.9	6.9	---	---
CSX	9.8	8.1	3.8	3.6
Grand Trunk Western	5.2	3.0	25.4A	5.9
Illinois Central [2]	15.8A	13.6A	10.0	---
Kansas City Southern	3.6	9.1	6.4	6.3
Norfolk-Southern	13.1A	10.5	5.2	5.5
Soo Line	12.3A	4.9	2.5	5.6
Union Pacific	5.2	2.9	6.8	6.9
COST OF CAPITAL	**11.8**	**10.7**	**10.8**	**11.0**
"A" Signifies that the carrier was revenue adequate for the particular year.				

[1] Conrail merged into CSX and Norfolk Southern After 1998.
[2] Illinois Central included with Grand Trunk Western for 2000.

RAILROAD CLASS I EARNINGS

Mr. Rogers. Please update the class I earnings data beginning on page 1094 of the 2001 hearing record.

[The information follows:]

Attached is the railroad earnings report for the fourth quarters and years ending December 31, 2000 and 2001.

SURFACE TRANSPORTATION BOARD
OFFICE OF ECONOMICS, ENVIRONMENTAL ANALYSIS, AND ADMINISTRATION
WASHINGTON, DC 20423

CLASS I FREIGHT RAILROADS - SELECTED EARNINGS DATA

(000 OMITTED)

		QUARTER ENDED DECEMBER 31			
Railroad	Year	Railway Operating Revenues	Net Railway Operating Income (1)	Net Income	Revenue Ton-Miles Of Freight
TOTAL ALL CLASS I FREIGHT RR'S	2001	8,527,759	1,049,149	704,596	371,342,540
	2000	8,534,191	862,338	576,282	361,312,736
Burlington Northern - Santa Fe	2001	2,299,012	244,946	209,428	127,972,098
	2000	2,338,023	349,890	317,535	123,790,840
CSX Transportation	2001	1,498,788	98,085	30,560	50,459,000
	2000	1,511,858	103,868	29,850	50,454,800
CNW/Grand Trunk Western	2001	79,433	13,728	12,055	3,003,965
	2000	95,899	15,920	19,361	2,767,241
CNW/Illinois Central	2001	162,444	30,585	11,691	6,016,184
	2000	163,801	4,788	(5,848)	5,828,923
Kansas City Southern	2001	143,213	18,569	12,413	5,149,472
	2000	121,439	12,579	5,458	4,340,739
Norfolk Southern	2001	1,529,673	237,356	101,999	44,637,886
	2000	1,523,871	126,927	19,650	47,984,501
Soo Line	2001	141,062	24,421	25,842	5,698,935
	2000	147,288	20,033	16,301	5,834,692
Union Pacific	2001	2,674,134	381,459	300,608	128,405,000
	2000	2,632,012	228,333	173,775	120,311,000

SURFACE TRANSPORTATION BOARD
OFFICE OF ECONOMICS, ENVIRONMENTAL ANALYSIS, AND ADMINISTRATION
WASHINGTON, DC 20423

CLASS I FREIGHT RAILROADS - SELECTED EARNINGS DATA

(000 OMITTED)

Railroad	Year	12 MONTHS ENDED DECEMBER 31 Railway Operating Revenues	Net Railway Operating Income (1)	Net Income	Revenue Ton-Miles Of Freight	Return On Net Investment (%) (2)
TOTAL ALL CLASS I FREIGHT RR'S	2001	34,175,850	4,139,094	2,768,257	1,474,080,048	6.74%
	2000	34,104,013	3,929,410	2,624,060	1,461,114,923	6.44%
Burlington Northern - Santa Fe	2001	9,201,022	1,172,506	980,340	501,828,953	7.34%
	2000	9,201,906	1,397,251	1,241,970	491,958,881	8.95%
CSX Transportation	2001	6,082,282	456,407	203,133	206,643,000	4.18%
	2000	6,075,016	360,220	97,466	208,352,300	3.43%
CNW/Grand Trunk Western	2001	359,223	67,299	66,343	11,891,337	15.64%
	2000	371,371	54,352	51,967	11,130,099	16.29%
CNW/Illinois Central	2001	650,237	90,667	32,296	25,372,485	7.50%
	2000	682,341	85,700	61,757	25,431,500	7.50%
Kansas City Southern	2001	537,720	59,889	39,732	19,659,842	6.68%
	2000	521,980	68,025	28,270	19,958,445	7.63%
Norfolk Southern	2001	6,169,824	840,346	337,895	182,207,021	7.61%
	2000	6,159,055	585,562	180,268	196,859,481	5.01%
Soo Line	2001	561,647	54,659	50,822	22,754,410	6.18%
	2000	553,807	59,648	36,522	21,972,217	5.79%
Union Pacific	2001	10,613,895	1,397,321	1,057,696	503,723,000	6 95%
	2000	10,538,537	1,318,652	925,840	485,452,000	6.66%

SURFACE TRANSPORTATION BOARD
OFFICE OF ECONOMICS, ENVIRONMENTAL ANALYSIS, AND ADMINISTRATION
WASHINGTON, DC 20423
CLASS I FREIGHT RAILROADS - SELECTED EARNINGS DATA

SOURCES OF DATA:

Railway Operating Revenues, Net Railway Operating Income, and Net Income are from the "Quarterly Report of Revenues, Expenses, and Income - Railroads" (Form RE&I).

Revenue Ton Miles of Freight are from the "Quarterly Condensed Balance Sheet - Railroads (Form CBS).

NOTES:

(1) Net Railway Operating Income is the difference between railway operating revenues and the total of railway operating expenses, railway tax accruals, and net equipment and joint facility rents.

(2) Return on Net Investment (ROI) is the ratio of net railway operating income to net investment in railway property used in transportation services at end of previous calendar year. The latter includes an allowance for working capital. Accumulated deferred income tax reserves are subtracted from the net investment base.

Since net investment figures are only available on an end-of-year basis from the Annual Report Form R-1's, filed on March 31 of each year, the net investment bases used to compute returns on net investment in this report are the most recent year-end figures available (data as of the end of 1999 and 2000).

ROI's, as computed by the Board for its annual determination of the revenue adequacy of each class I railroad, will differ from the ROI's computed for this report. ROI's for the revenue adequacy determination are based upon the average of the beginning and end-of-year net investment bases, while ROI's for this report are based on end-of-year data only. Also, ROI's for revenue adequacy determinations are computed using data reported by the class I railroads in Annual Report Form R-1, Schedule 250, "Consolidated Information for Revenue Adequacy Determination." The data contained in Schedule 250 differ somewhat from the data in the form RE&I and are therefore not compatible.

BOARD'S CURRENT RULEMAKINGS

Mr. Rogers. Please identify all rulemakings that the Board is currently involved in and when they will be completed.

[The information follows:]

The following rulemakings are pending or may be instituted in the near future:

1. STB Ex Parte No. 558, *Railroad Cost of Capital.* Annually, the Board conducts a rulemaking proceeding to estimate the rail industry's cost of raising funds in the equity and debt markets. The cost of capital figure is used in a variety of Board proceedings, including rail rate complaint cases. A final decision in this annual proceeding is generally issued mid-year.

2. STB Ex Parte No. 290 (Sub-No. 4), *Railroad Cost Recovery Procedures—Productivity Adjustment.* Annually, the Board conducts a rulemaking to determine changes in railroad productivity. The results of this rulemaking are used to adjust the railroad cost adjustment factor (RCAF) used by shippers and railroads to adjust contract rates. A final decision in this annual proceeding is generally issued at the beginning of the calendar year.

3. STB Ex Parte No. 586, *Arbitration—Various Matters Related to its Use as an Effective Means of Resolving Disputes That Are Subject to the Board's Jurisdiction* (STB served Sept. 20, 2001). The Board published a Notice of Proposed Rulemaking in the *Federal Register* on Sept. 24, 2001, proposing that a party filing a formal complaint with the Board must include a statement that the complainant has considered arbitration but either decided against it or could not obtain the agreement of the other involved parties to the dispute. The decision also sought comment on the wisdom of legislation providing for arbitration for smaller rail rate cases, and on names of individuals interested in serving as arbitrators. Final disposition of the rulemaking is expected within a few months.

4. Ex Parte No. 589, *Calculation of Variable Costs in Rate Complaint Proceedings Involving Non-Class I Railroads.* The Board is currently considering whether to institute a rulemaking proceeding to settle how it will estimate the variable costs of non-Class I railroads in future rate complaint proceedings. If instituted, it is expected that this rulemaking would be completed within one year.

5. STB Ex Parte No. 542 (Sub-No. 4), *Regulations Governing Fees for Services Performed in Connection with Licensing and Related Services.* The Board is considering whether to institute a rulemaking proposing to establish fees for services provided by the Board for which a fee is currently not assessed. A Notice of Proposed Rulemaking is expected to be issued within a few months.

BOARD'S TOP PRIORITIES

Mr. Rogers. What are the Board's top three priorities in terms of ongoing rulemakings?

[The information follows:]

The Board will focus on resolving pending rulemakings. It also will handle as expeditiously as possible requests for rulemakings or future rulemakings of a recurring or non-recurring nature initiated by the Board on its own. And it will continue to pursue rulemakings needed to streamline existing regulations.

RAILROAD SHIPPER TRANSPORTATION ADVISORY COUNCIL

Mr. Rogers. The ICC Termination Act required the Board to establish a 15-member Railroad-Shipper Transportation Advisory Council. Please identify when this Council was formed, who is on the Council, and its purpose.

[The information follows.]

The Railroad Shipper Transportation Advisory Council (RSTAC or Council) was established as a result of the ICC Termination Act of 1995 (Public Law 104-88, 109 Stat. 803) (ICCTA). RSTAC was formed on April 19, 1996. The Surface Transportation Board members and the Secretary of DOT serve on the Council in an *Ex Officio* capacity.

Numerous members of the Council have resigned, and the Chairman is required to appoint new members to replace them. Because of other pressing Board business, these appointments have not yet been made, but the Chairman intends to make these appointments in the near future and will report to the Committee at that time.

The RSTAC was established to serve as a private-sector forum to resolve business conflicts. Consequently, the Council's purpose is to advise Congress, the U.S. Department of Transportation and the Surface Transportation Board on small rail shipper and small railroad concerns about rail car supply, transportation rates, competitive issues, and procedures for complaints.

COUNCIL'S POLICY RECOMMENDATIONS

Mr. Rogers. The Council is charged with issuing rail transportation policy recommendations, either regulatory or legislative, to the Secretary of Transportation and various Congressional Committees within 90 days after the end of the fiscal year. Please identify what recommendations the Railroad Shipper Transportation Advisory Council made following the end of fiscal year 2001 and 2002 and the background behind each recommendation.

[The information follows.]

In its capacity, the Council has met, issued reports, and offered recommendations to Congress regarding matters such as railroad infrastructure funding and rate, access and competition issues. As it might not be appropriate for the Board to characterize in detail the Council's recommendations on these controversial issues, the Subcommittee may itself wish to review the relevant documents, which can be found on the Board's website.

WORKING WITHIN DOT

Mr. Rogers. Has the Board had any problems working as an independent regulatory body within the Department of Transportation? How have these problems been resolved?

[The information follows.]

The Board and DOT have worked together cooperatively to ease any logistical challenges associated with a decisionally independent body organizationally housed within DOT. The Board's decisional independence is explicitly expressed in the ICCTA. However, the Office of the Secretary is apprised of rulemakings and adjudications as they are served or published. DOT may appear before the Board as a party in the Board's proceedings, just as DOT appeared before the ICC as a party. Any role or input that DOT might wish to have in a Board proceeding, as with any other party, is through a filing of public record.

AVAILABILITY OF DATA

Mr. Rogers. What access does the public have to agency decisions?
[The information follows:]

Every decision issued by the Board in a proceeding is part of the public record. The record, including any Board notices or decisions, is available on microfilm for viewing by the public during business hours at the Board's offices. Also, the public can view and photocopy yet-to-be microfilmed agency decisions, and can view and obtain copies of microfilmed agency decisions. In addition, since November 1, 1996, all decisions and notices issued by the Board are available at no charge on the Board's website, www.stb.dot.gov, 24 hours a day. Paper copies of any decision issued by the Board within the past year may be purchased from Dā-2-Dā Legal Copy Service.

Mr. Rogers. What access does the public have to pleadings made to the agency?
[The information follows:]

Pleadings that are part of a public record in a proceeding before the Board are available on microfilm for viewing by the public during business hours at the Board's offices. Also, the public can view and photocopy yet-to-be microfilmed pleadings, and can view and obtain copies of microfilmed pleadings. In addition, since February 6, 2002, pleadings filed with the Board are available for viewing, downloading and printing at no charge on the Board's website, www.stb.dot.gov, 24 hours a day. (Prior to that date, pleadings in cases of broad significance were made available on the Board's website.) Paper copies of recent pleadings can be viewed and photocopied at the on-site offices of the Board's contractor, Dā-2-Dā Legal Copy Service, during business hours. Persons also can request that the Board or its contractor mail or fax copies of specified pleadings.

Mr. Rogers. Does the Surface Transportation Board charge the public for agency decisions or pleadings?

[The information follows:]

The Board does not assess a charge for agency decisions served on persons who are on a service list for a particular case, and no charge is assessed to persons who acquire copies of decisions and pleadings from the Board's website. The Board also does not assess a charge for copies of microfilmed documents unless it takes at least 15 minutes to process the microfilm copy, in which case the agency proportionally assesses a $21 per hour service charge.

Otherwise, the Board does charge the public for copies of its decisions and pleadings. Persons are charged $.20 per page to use the Board's photocopiers and those of its on-site contractor, Dā-2-Dā Legal Copy Service. If the Board photocopies documents, a charge of one dollar per page, with a $5 minimum, is assessed, plus a $21 per hour service charge that is proportionally assessed if document processing takes at least 15 minutes. If the Board provides copies of microfilmed documents, it does not charge for the copies themselves but does charge the $21 per hour service charge as described above. If the Board's contractor provides paper copies of documents based on standing orders, it charges $.22 cents per page, plus postage, handling and $22 per hour for research, with an $11 minimum; for individual orders, it charges $.26 per page ($.28 per page for rush orders), plus postage, handling and $22 per hour for research, with an $11 minimum. The contractor also charges $5 for the first page, and $1.50 for each additional page, for faxing copies of documents.

TRAVEL

Mr. Rogers. Please list by Board member all out-of-town travel during fiscal year 2001 and 2002, to date. Include a brief description of the purpose of the trip, indicate which trips were for training sessions, and list the cost of each trip.

[The information follows:]

Destination	Duration	Purpose	Cost
Chairman Morgan (FY 2001)			
Cincinnati, OH	10/5/00	Speech to East-West States Legislative Conference	$552.00
Atlanta, GA Jacksonville, FL	10/10-11/00	Visits to Customer Service centers	$648.50
Chicago, IL	10/17-18/00	Speech at Western Railway Club dinner	$143.00
St. Louis, MO Omaha, NE	10/26-27/00	Visits to Customer Service centers	$683.93
Ft. Lauderdale, FL	11/5-6/00	Speech to railroad financial Group	$490.00
St. Louis, MO	11/28/00	Speech at USDA grain Summit meeting	$591.00
Forth Worth, TX	1/10-11/00	Meeting with BNSF Railroad management	$607.60
Orlando, FL	1/18/01	Speech to National Mining Association	$469.50
Chicago, IL	4/18/01	Speech at Press Conference On "4 Cities/CSX Agreement"	$131.00
Norfolk, VA	5/23-24/01	Meeting with NS officials	$121.65
Orlando, FL	6/20/01	Attendance at meeting of Southern Motor Carrier Conference	$307.00
Jacksonville, FL	6/25-26/01	Speech to CSX officials	$578.27

Chicago, IL Kansas City, KS	8/27-28/01	Meeting with Chicago officials speech to grain elevator group	$513.00
Chicago, Il	9/5/01	Meeting with Mayor of Chicago	$202.50

Vice Chairman Clyburn (FY 2001)

Forth Worth, TX	10/30-31/00	Speech at Short Line Conference, Tour of BNSF Network Operations Center - Non-Federal source payment	$611.60
Columbia, SC Greenville, SC Spartanburg, SC	12/13-18/00	Meeting with Governor of SC, tour of Port of Charleston, visit/meet BMW plant officials	$827.49
Houston, TX	1/21-23/01	Speech at Chemical Week's Transportation & Distribution Conference, Meet with Port of Houston officials	$941.11
Palm Springs, CA	2/4-7/01	Speech at NMFTA winter Meeting Non-Federal source payment	$1,671.48
Savannah, GA	2/22-24/01	Speech at Georgia Feed & Grain Winter Conference	$652.20
Beaverton, OR Longview, OR	2/28-3/2/01	Speech at the conference of Pacific Northwest Assn. of Rail Shippers, Toured Columbia & Cowlitz Railroad Facility	$483.26
Savannah, GA	03/27/01	Speech at the meeting of US Clay Producers' Traffic Assn.	$305.00

San Francisco, CA	4/20-24/01	Speech at the meeting of North American Rails Shippers Assn.	$822.66
New Orleans, LA	5/14-15/01	Speech at Industrial Miners Conference, meeting with Mayor of New Orleans	$751.08
Whistler, BC	6/24-26/01	Speech at Pulp & Paper Transportation League annual meeting Non-Federal source payment	$200.48
Chicago, Il	7/17/01	Speech at Midwest Assn. of Rail Shippers meeting	$171.90
Denmark, SC	8/2-3/01	Speech at Summer Transportation Institute, Denmark Technical College (Official travel, no Federal funds reimbursed)	$000.00
New York, NY	8/16/01	Briefing and tour of Port Authority of NY&NJ, educational ride on New Acela train Non-Federal source payment	$000.00

Commissioner Burkes (FY 2001)

Dallas, TX	10/3-5/00	Meeting with American ChemistryCouncil	$452.70
Tucson, AZ	10/13-22/00	Speech and participation at North America Fertilizer Transportation Conference Non-Federal source payment	$782.44
Ashville, NC	11/1-8/00	Speech and participation at the Railway Tie Assn. Convention Non-Federal source payment	$624.01

San Diego, CA	1/12-15/01	Attended NRC Management Conference Of American Shortline & Regional Railroad Assn. Non-Federal source payment	$1,248.36
Houston, TX	1/20-25/01	Speech at Transportation & Distribution Conference by Chemical Week Non-Federal source payment	$853.33
Palm Springs, CA	2/3-7/01	Speech at NMFTA winter Meeting Non-Federal source payment	$1,349.77
Chicago, IL	3/13/01	Speech at the Portland Cement Assn Logistics Comm Meeting Non-Federal source payment	$144.00
Jackson, MS	7/9-11/01	Meeting with US DOT Research & Special Programs Administration about relocation of CSX rail lines in Louisiana and Mississippi	$292.00
West Point, NY	7/13-15/01	Attended the Cooperstown conference	$602.00
San Diego, CA	8/2-8/01	Speech at NMFTA summer Meeting Non-Federal source payment	$472.29

Chairman Morgan (FY 2002)

Atlanta, GA	10/30/01	Remarks at NS intramodal Facility dedication	$220.50
Charlotte, NC	11/13/01	Speech to National Industrial Transportation League	$746.00

Philadelphia, PA	2/5/02	Attendance at Hollidaysburg Case court argument	$190.00
Jacksonville. FL	2/11-12/02	Meeting with CSX officials	$466.27
Baltimore, MD New York, NY	2/27/02	Participation in opening of B&O Railroad Museum; speech at Transportation & Logistics Conference	$265.00

Commissioner Burkes (FY 2002)

Jacksonville, MS Montgomery, AL Peach Tree City, GA Austell, GA	10/19-30/01	Participated in MS Railroad Assn. meeting, meeting with NS officials and attend the new Austell Intermodal terminal dedication	$735.77
Miami, FL New Orleans, LA	1/10-15/02	Speech at National Railroad Construction & Maintenance Assn. Conference, speech at Transportation & Distribution Conference Non-Federal source payment	$746.24
Ft. Lauderdale, FL	1/29-2/02	Speech at NMFTA Winter Meeting Non-Federal source payment	$156.75

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