

**SURFACE TRANSPORTATION REAUTHORIZATION:
EXAMINING THE SAFETY AND EFFECTIVENESS
OF OUR TRANSPORTATION SYSTEMS**

HEARING

BEFORE THE

SUBCOMMITTEE ON SURFACE TRANSPORTATION
AND MERCHANT MARINE INFRASTRUCTURE,
SAFETY, AND SECURITY

OF THE

COMMITTEE ON COMMERCE,
SCIENCE, AND TRANSPORTATION
UNITED STATES SENATE

ONE HUNDRED THIRTEENTH CONGRESS

SECOND SESSION

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JUNE 3, 2014
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Printed for the use of the Committee on Commerce, Science, and Transportation



U.S. GOVERNMENT PRINTING OFFICE

91-647 PDF

WASHINGTON : 2014

For sale by the Superintendent of Documents, U.S. Government Printing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512-1800; DC area (202) 512-1800
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SECOND SESSION

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**SURFACE TRANSPORTATION
REAUTHORIZATION: EXAMINING THE
SAFETY AND EFFECTIVENESS OF
OUR TRANSPORTATION SYSTEMS**

TUESDAY, JUNE 3, 2014

U.S. SENATE,
SUBCOMMITTEE ON SURFACE TRANSPORTATION AND
MERCHANT MARINE INFRASTRUCTURE, SAFETY, AND SECURITY,
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,
Washington, DC.

The Subcommittee met, pursuant to notice, at 9:35 a.m., in room SR-253, Russell Senate Office Building, Hon. Richard Blumenthal, Chairman of the Subcommittee, presiding.

**OPENING STATEMENT OF HON. RICHARD BLUMENTHAL,
U.S. SENATOR FROM CONNECTICUT**

Senator BLUMENTHAL. Good morning. Welcome, everyone. We were—we're just waiting for Senator Blunt, and I'm going to begin with an opening statement, and, when he gets here, he can make his. And I welcome Senator Klobuchar, and thank her for her leadership on these issues.

We are here at a moment of tremendous promise and peril for our Nation's transportation system. Literally, the funding for that system expires at the end of September, and there's a need to reauthorize the Nation's surface transportation law, known as MAP-21, which expires at the end of September. Even before then, the Highway Trust Fund will go broke in July, just next month. And, fortunately, the appropriate Senate committees are moving ahead with those funding proposals. But, the transit funding must include rail and must include safety. And that brings us, today, to these issues and to hearing from the representatives of some of our most important Federal oversight agencies when it comes to safety and reliability.

We're here at a moment of enormous peril and promise. Promise, because we have an opportunity to invest in the future of our transportation system, grow the economy, expand job creation, and achieve a larger vision for our Nation's transportation system. But, at the same time, there's tremendous peril in the decaying and crumbling infrastructure that faces us, literally, every day on our roads, bridges, railroads, and other public facilities.

So, we're here to examine how well the agencies are doing, as well as our transportation systems. We need to look at what our agencies are doing in their watchdog and oversight roles, as well

as what our public transportation systems are doing to protect safety and reliability.

For the Pipeline and Hazardous Materials Safety Administration, protecting safety and reliability means ensuring that transportation of many products and materials is done in a way that assures protection of the people who live in their environs, as well as the workers who operate them.

For the Federal Railroad Administration, our hearing today means ensuring the safe movement of people and freight on our Nation's massive railroad system. The ability to properly ensure this mission requires resources as well as rules.

And that's really true of all of your agencies. Resources and rules, and effective enforcement of those rules, is a prerequisite to safety and reliability. There are indications that some of these agencies have, very simply, been absent from what they should be doing, not on the job. I want to make sure that we are as rigorous and vigilant as need be to protect people who use our railroads as well as other transportation systems.

There are red flags. For example, there have been red flags, with Metro-North, which is a railroad much in need of attention as well as investment. And I want to make sure that both Metro-North and the FRA have learned from the incidents that have occurred there.

And, of course, the agencies include the Federal Motor Carrier Safety Administration, which is essential to assuring the safe commercial driving workforce that drives our economy, as well as the individuals who ride it.

So, this hearing is about resources and rules. Our job is to assure that there are sufficient resources as well as rules, but really the rules have meaning only if they're enforced and only if scrutiny and oversight works to protect people who rely on those rules. And part of our job, in addition to making the rules and the laws—the rules of the road and the laws that govern those rules—is to assure that they are realistic and practical, but also that they're properly funded.

And I want to hear from all of you, and I look forward to hearing from our colleagues on these issues, and turn now to the Ranking Member, Senator Blunt.

**STATEMENT OF HON. ROY BLUNT,
U.S. SENATOR FROM MISSOURI**

Senator BLUNT. Well, thank you, Chairman.

I want to say, Chairman, that as—in the brief time you've been Chairman of this committee, you've really brought focus on a number of issues. We've had a number of hearings, including the one we're going to have today, that I think are very important, and your leadership here has made a difference.

You know, the Commerce Committee does work on all modes of transportation, not just highways—railroads, waterways, even pipelines. And, you know, from a State like mine, this is critical work. If you look at a railroad map of America, or a highway map of America, or a river map of America, as I told the General Assembly in Missouri the other day, and begin to focus on where all three of those things come together, we're right in the middle of that. All

these things matter dramatically to our future, to our economic future, and our ability to compete.

Obviously, there's a lot of discussion going on about the highway bill, for a couple of reasons. One is, the one we are currently under expires in September, and another one is that that funds run dry even before that. What our committee can do, and what this subcommittee can do, to get ready for our part of that bill is important, the things we can do to draw attention to sustainable funding and to additional and innovative funding sources, I think, can make a difference here.

We're now examining how we maintain this system. I'm going to be interested today to hear from the Federal Railroad Administration and the Pipeline and Hazardous Materials Safety Administration on how things are going in the crude-by-rail discussion. Obviously, there has been a lot of testing data shared recently involving Bakken crude and how we're reacting to that. I'll also be interested to hear how this is being utilized as we line up the collection that PHMSA is doing and how we're going to be ready for that.

Also, ongoing concerns regarding regulations and enforcement programs with the Federal Motor Carrier Safety Administration are topics that I hope we hear discussed today. And I'll have some questions on that.

I've heard, from motor carriers of all sizes, that the agency really isn't adequately considering the impact of its rules and programs. I asked the Secretary, at a hearing we had not too long ago, for a response on a couple of specific questions that I haven't gotten yet. And hopefully, we'll get those covered today.

I, finally, look forward to hearing from the Office of Research and Technology on how research funding might be accessible to local communities who are trying to come up with innovative and locally driven solutions to their transportation problems.

I'll close by stressing the need to focus on our long-term transportation planning, which includes a stable funding source, something that every member of the Senate and the Congress should be interested in. Great opportunities are out there, with the expansion of the Panama Canal, with how we collect all of our transportation modes together, how we connect them together in the best possible way.

And I'm pleased we're having this hearing today. And again, thanks for your leadership, Chairman.

Senator BLUMENTHAL. Thank you, Senator Blunt. And thank you for your leadership and for your being here today.

I'm not going to provide lengthy backgrounds as to each of your credentials. In the interest of time, I think we'll just turn to the testimony. But, we're very pleased to have, today, individuals who not only lead significant agencies, but also have extraordinary backgrounds and expertise in the areas of transportation. So, we thank you for your public service as well as for your being here today.

Perhaps we can begin with Joseph Szabo, who is the Administrator of the Federal Railroad Administration.

**STATEMENT OF HON. JOSEPH C. SZABO, ADMINISTRATOR,
FEDERAL RAILROAD ADMINISTRATION, U.S. DEPARTMENT
OF TRANSPORTATION**

Mr. SZABO. Well, thank you, Mr. Chairman, and to Ranking Member Blunt and members of the Subcommittee. I appreciate this opportunity to testify today.

By 2050, our surface transportation system must be ready to move an additional 100 million more people, which equals the combined population of our four most populous States: California, Texas, New York, and Florida. Our freight system, meanwhile, will have to annually move an additional 4 billion tons of freight, the weight, roughly, of 10,000 Empire State buildings. So, imagine if we fail to move all these people and all that freight safely, reliably, and efficiently. Imagine the negative impact that that could have on business growth, on commute times, and on quality of life.

If we return to a decades-long pattern of under-investing in our rail system, there will be negative consequences. Just look at the cost of highway and airport congestion, more than \$140 billion in 2012. And this was driven by current demand, not future.

We have an opportunity, through the GROW AMERICA Act, to chart a more sustainable course. We have an opportunity, as the title implies, to grow our rail network and grow America's transportation capacity to meet future challenges. And the GROW AMERICA Act will enable us to do this while driving continuous improvement in safety.

Since Fiscal Year 2004, our rail safety program has reduced train accidents by nearly 50 percent, to record low numbers. But, we also know from our data that our most vulnerable safety area is human error. Today, it accounts for nearly 40 percent of train accidents.

And GROW AMERICA, in several ways, supports our efforts to drive continuous safety improvement. For one, the \$19 billion it would invest in rail safety and rail development programs includes \$2.3 billion to support commuter rail lines in their efforts to install positive train control, the technology that is designed to reduce human-error accidents. And it would provide us the tools to manage the implementation process effectively, including the authority for provisional certifications. GROW AMERICA would also give us the authority to establish new hours of service regulations based on sound fatigue science, a key step towards reducing accidents caused by fatigue. And it calls for a national—nationwide rollout of confidential close-call reporting systems, allowing us to gather data before an accident occurs and develop risk mitigation strategies well in advance.

But, sustained Federal investment in rail network enhancements and in research and development has to also be a part of the mix. On the rail development side, our bill would fund needed repairs, improve existing services, and build new corridors. It would invest in the rail passenger connections that a record number of Amtrak riders deserve. And it would invest in short-line rail infrastructure, safety upgrades to bridges, tracks, and signal systems. And it would invest in grade crossing improvements and the sealing off of corridors, improving network efficiency, reducing the negative impacts of rail operations on communities, and enhancing the safe transportation of hazardous materials.

But, our proposal really does even more than that. It provides rail, for the first time ever, with predictable, dedicated funding to put it on par with other surface transportation modes. If you go back to 2009 and 2010, when Federal funding for our Passenger Rail Program was made available—those years, we received applications requesting seven times the available funding. GROW AMERICA will keep us moving forward, and not just for 1 or 2 years, but over the long term.

And so, we look forward to working with all of you to reverse this pattern of Federal under-investment in our rail system, to working together to foster public-private partnerships, to incentivize State and local planning, and to tackle the backlog of good rail projects, all across the country, in need of a Federal funding partner.

I look forward to your questions.

[The prepared statement of Mr. Szabo follows:]

PREPARED STATEMENT OF HON. JOSEPH C. SZABO, ADMINISTRATOR, FEDERAL RAILROAD ADMINISTRATION, U.S. DEPARTMENT OF TRANSPORTATION

Mr. Chairman, Ranking Member, and Members of the Subcommittee, thank you for the opportunity to appear before you today to discuss the Administration's ideas for the next phase of rail policy and investment programs.

The Federal Railroad Administration's (FRA) mission is to enable the safe, reliable, and efficient movement of people and goods for a strong America, now and in the future. The Administration's groundbreaking legislative proposal, the GROW AMERICA Act, sets policies in place that will enhance safety, maintain current rail services and infrastructure, and expand and improve the rail network to accommodate growing passenger and freight demand—all while providing new national and regional system planning and development.

The GROW AMERICA Act creates a new rail account within the transportation trust fund to provide predictable, dedicated funding for rail and forges new partnerships and better planning through Regional Rail Development Authorities. This critical shift will give States and localities the certainty they have long required to effectively plan and execute projects that will improve transportation infrastructure, allow regions and States to achieve their long-term visions for rail transportation, and to support economic growth. GROW AMERICA authorizes \$19 billion over four years to improve rail safety and invest in a National High-Performance Rail System. This funding is allocated to two new programs aimed at promoting market-based investments to enhance and grow rail:

- *Current Passenger Rail Service Program*—Over four years, the Act will provide \$9.5 billion to meet current passenger rail service needs, which includes:
 - \$2.6 billion to bring Northeast Corridor infrastructure and equipment into a state of good repair, thus enabling future growth and service improvements;
 - \$600 million to replace obsolete equipment on State-supported corridors and to facilitate efficient transition to financial control for these corridors to States;
 - \$3.1 billion to continue operations of the Nation's important long-distance routes, which provide a vital transportation alternative to both urban and rural communities;
 - \$1.8 billion improve efficiency of the Nation's "backbone" rail facilities, make payments on Amtrak's legacy debt, and implement Positive Train Control (PTC) on Amtrak routes; and
 - \$1.4 billion to bring stations into compliance with the Americans with Disabilities Act (ADA).
- *Rail Service Improvement Program*—The Act provides an additional \$9.5 billion to address future rail service improvements, which includes:
 - \$6.4 billion to develop high-performance passenger rail networks through construction of new corridors, substantial improvements to existing corridors, and mitigation of passenger train congestion at critical chokepoints;
 - \$2.4 billion to assist commuter rail lines in implementing PTC systems;

- \$500 million to help mitigate the negative impacts of rail in local communities through rail line relocation, grade crossing enhancements, and investments in short line railroad infrastructure; and
- \$300 million to develop comprehensive plans that will guide future investments in the Nation's rail system and to develop the workforce and technology necessary for advancing America's rail industry.

Before I dive into the details of the GROW AMERICA Act, it is important to quickly look back on the building blocks of the Rail Title for this legislative proposal—the Passenger Rail Investment and Improvement Act of 2008 (PRIIA) and the Rail Safety Improvement Act of 2008 (RSIA)—and the reasons why it is critical we continue to invest in rail and develop policies to improve rail safety, efficiency, and reliability.

Building on PRIIA and RSIA

PRIIA and RSIA were bipartisan, seminal pieces of legislation that broke new ground on rail safety. This Committee did important work in a collaborative and forward-thinking way that has had far-reaching effects in the rail industry. The rail industry has changed dramatically since these two landmark acts were passed in 2008. Preliminary data indicates that Fiscal Year 2013 was the safest for the rail industry on record. It also saw record ridership, reliability, and financial performance for Amtrak across its network. The freight rail industry has never been stronger. Historic levels of public and private investment have been made in passenger rail equipment, corridor upgrades, freight capacity, and safety improvements. Dozens of planning studies, environmental reviews, and engineering analyses are underway, creating a strong pipeline for future projects.

FRA is proud of its accomplishments in implementing RSIA and PRIIA, particularly in light of the laws' sweeping provisions and FRA's simultaneous need to implement the American Recovery and Reinvestment Act of 2009 (Recovery Act). The \$10 billion provided under the Recovery Act and subsequent Fiscal Year (FY) 2010 appropriation far exceeded the \$3.4 billion authorization envisioned under PRIIA. In addition to this funding authorization, PRIIA served as the impetus for several other key passenger rail initiatives underway, including improving stakeholder collaboration and the methods for appropriately allocating costs on the Northeast Corridor and State-supported routes, developing standards for the next-generation of passenger locomotives and rail cars, furthering cooperative research programs for passenger and freight rail, and providing States with consistent guidance for planning their future passenger and freight rail services.

Today, FRA is a very different agency than when PRIIA was passed, managing an approximately \$20 billion investment portfolio of grants and loans. These investments make up more than 200 active projects improving the rail network across the country:

- California—Over \$3.8 billion to construct the first segment of the California high-speed rail network.
- Illinois—Over \$1.3 billion in improvements to track, signal systems, stations, and rolling stock to reduce trip times and increase performance, passenger comfort, and safety on the Chicago to St. Louis service.
- New Jersey/New York—Over \$775 million in improvements to the Northeast Corridor in New Jersey and New York, including: upgrades or replacement of catenary, power, track, and signal systems between Trenton and New York; construction of a conflict-free, grade-separated route through the heavily-congested Harold Interlocking railroad junction in Queens, New York; and developing the new Moynihan Station transportation facility to increase capacity and relieve congestion at Penn Station.
- Washington—Over \$750 million to increase frequencies, reduce travel time, and improve performance on the Pacific Northwest Rail Corridor.
- Connecticut—Over \$190 million to increase capacity and improve performance on the New Haven—Hartford—Springfield line.
- Missouri—Over \$22 million to construct a second railroad bridge over the Osage River (the existing bridge is single tracked), which will eliminate a significant passenger and freight bottleneck on the route between St. Louis and Jefferson City.

This portfolio of investments is having a substantial impact on the Nation's rail system: 6,000 corridor miles are being improved, 30 stations are being upgraded, and hundreds of new passenger cars and locomotives are being procured. These projects will improve the customer experience by reducing trip times, improving reli-

ability, adding additional frequencies, and making stations and equipment more comfortable and accessible. Collectively, these projects represent the foundational elements to fulfill the long-term vision for sustainable rail improvements envisioned by the States and Amtrak. Yet these projects only represent a small portion of the investments needed for a 21st century passenger and freight rail network that will meet growing market demand.

Good Federal policymaking contributed greatly to these recent accomplishments, and FRA is proud of the job we have done implementing the policies laid out by Congress. However, these achievements do not mean we can declare victory—much more needs to be done if we are to meet the transportation challenges facing our country in the 21st century, which include:

- *Population growth*—By 2050, the U.S. Census Bureau projects that an additional 100 million people will reside in the United States. The vast majority of this growth will be concentrated in a small number of “megaregions.” The U.S. DOT and Department of Commerce have found that 40 tons of freight is moved through the U.S. for each resident. Thus, this population increase will mean an extra 4 billion tons of freight moved each year, an increase of 35 percent over 2010 levels.¹
- *Congestion and Mobility*—Highway and aviation congestion continues to rise, with an estimated economic impact growing from \$24 billion in 1982 to \$121 billion in 2011 in lost time, productivity, and fuel.² In many places with the worst congestion, expanding airports and highways is difficult, as land is limited and environmental/community impacts are significant.
- *Energy consumption*—In 2010, the United States used more than 13 million barrels of oil every day for transportation. U.S. citizens consume nearly twice the oil per capita as citizens of Organization for Economic Cooperation and Development (OECD) member nations, and approximately 55 percent of this oil is imported.³
- *Energy costs*—The inflation-adjusted cost of oil increased 129 percent from 1990 to 2010. As a result, Americans spent \$630 million more *per day* on oil for transportation than they did 20 years earlier—an average annual increase of nearly \$750 for every American. The Energy Information Administration expects crude oil prices to rise an additional 50 percent between 2011 and 2035.⁴
- *Environmental protection*—The 2012 *Inventory of U.S. Greenhouse Gas Emissions and Sinks* found that the U.S. emitted 10.5 percent more greenhouse gases in 2010 than it did in 1990.⁵ Thirty-two percent of all greenhouse gas emissions are now from the transportation sector.

In addition to helping address these transportation challenges, it is clear that the American people want rail as a viable transportation choice:

- *Ridership*—Demand for passenger rail is surging across the United States. Ridership levels have set new records in ten of the past eleven years. In FY 2013, Amtrak carried a record 31.6 million passengers, including 15.4 million passengers on its State-supported routes (another record). These ridership levels are being achieved even before the substantial service improvements funded in recent years begin to come online. Once new trains are added and trip times and delays are reduced, the system will attract even higher levels of ridership.
- *Changing Travel Habits*—Reports show that since 2005, Americans have been driving fewer miles each year. In 2011, the average American drove six percent fewer miles than they did in 2004. What’s even more significant is that studies show the trend away from driving is being led by youth. Between 2001 and 2009, Americans ages 16 to 34 decreased their average number of vehicle-miles traveled by 23 percent and increased their passenger miles traveled on trains and buses by 40 percent. Factors causing these changes may include new communication technology, shifts in driving laws, and higher fuel prices. And while the Great Recession had some role in influencing habits, research indicates that

¹U.S. Department of Transportation, U.S. Department of Commerce, Commodity Flow Survey.

²Texas Transportation Institute, 2012 Urban Mobility Report, December 2012.

³U.S. Central Intelligence Agency, World Factbook: United States, August 1, 2012.

⁴U.S. Energy Information Administration, AEO2012 Early Release Overview, January 23, 2012.

⁵U.S. Environmental Protection Agency, Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2010, April 2012.

travelers will continue to look for transportation alternatives even as the economy recovers.⁶

- *Funding Demand*—Nearly every region in the U.S. has demonstrated demand for investments in passenger rail services. Between August 2009 and April 2011, FRA evaluated nearly 500 High-Speed Intercity Passenger Rail Program applications submitted by 39 States, the District of Columbia, and Amtrak, requesting more than \$75 billion for rail projects. In the absence of recent HSIPR appropriations, prospective applicants have also turned to the Transportation Investment Generating Economic Recovery (TIGER) program, which has awarded more than \$800 million for rail projects through the first five rounds of funding.
- *Proven Public Benefits*—Strengthening passenger rail services can help balance the Nation’s transportation network, as demonstrated on the Northeast Corridor (NEC). Since the introduction of the Acela service 10 years ago, Amtrak has almost tripled its air/rail market share on the NEC, carrying 75 percent of travelers between New York and Washington.⁷ These changing travel patterns can free airport capacity for more cost-efficient long-distance flights.

The rail industry is growing and safety is improving. The GROW AMERICA Act includes policies and predictable, dedicated funding that will encourage economic growth, improve safety, mitigate negative impacts on communities, and build the rail network America deserves. The GROW AMERICA Act sets five key priorities for rail, which I will discuss in detail:

1. Enhancing America’s world-class rail safety.
2. Modernizing our rail infrastructure.
3. Meeting the growing market demand.
4. Promoting innovation.
5. Ensuring transparency and accountability.

Priority 1: Enhancing World Class Safety

FRA’s top priority is safety, and FY 2012 was the safest year on record, with preliminary data from FY 2013 indicating it will be even better than FY 2012’s record. Since FY 2004:

- Total train accidents have declined by nearly 47 percent.
- Total derailments have declined by 46 percent.
- Total highway-rail grade crossing accidents have declined by 35 percent.

These safety improvements resulted in 15-percent fewer fatalities overall (895 fatalities to 759 fatalities—96 percent of which are trespassing or grade crossing related), 59-percent fewer employee fatalities (22 fatalities to 9 fatalities), and 7-percent fewer total injuries (9,367 injuries to 8,675 injuries) over 10 years.

The table below also illustrates a decade of safety improvement.

	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Total Accidents/ Incidents	19.039	18.093	17.525	17.298	16.908	16.874	16.697	16.072	15.194	15.028
Human Factor Caused Train Accidents	1.721	1.648	1.380	1.297	1.230	1.041	0.949	0.995	0.921	0.900
Track-Caused Train Accidents	1.314	1.398	1.318	1.258	1.094	1.039	0.974	0.955	0.851	0.744
Equipment-Caused Train Accidents	0.548	0.499	0.433	0.418	0.435	0.368	0.370	0.342	0.291	0.276
Total Signal/Misc.- Caused Train Accidents	0.692	0.707	0.641	0.506	0.497	0.483	0.494	0.467	0.427	0.432
Rate per million train miles	4.024	3.8	3.797	3.523	3.24	2.986	2.9	2.881	2.773	2.697

⁶U.S. Public Interest Research Group and Frontier Group, *Transportation and the New Generation: Why Young People Are Driving Less and What It Means for Transportation Policy*. April 5, 2012

⁷Amtrak, “State-Supported Corridor Trains, FY2011–12,” April 2012.

	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Non-Accident Hazmat Releases	1.387	1.398	1.147	1.221	1.227	1.149	1.063	1.079	0.933	0.933

* Accident/Incident, Train Accident, and Highway-Rail Incident Numbers Normalized by Million Train-Miles for Fiscal Year, Non-Accident Hazmat Releases Normalized by 200 Million Hazmat Ton-Miles for Fiscal Year.

These improvements are impressive in their own right, but especially if you consider the regulatory workload that FRA received from RSIA *and* passenger and freight rail's growth during this same time. RSIA mandated that FRA, as the Secretary's designee, complete an unprecedented 42 tasks, including final rules, guidance documents, model State laws, studies, and reports as well three types of annual reports and hundreds of periodic accident reporting audits.

Thirty-one of the 42 tasks are complete, and the rest are in the pipeline progressing towards completion. Appendix 1 lists the rulemakings, non-periodic reports and studies, guidance, and model State laws that FRA has completed as of the time of this writing. FRA's regulatory program improves safety by developing rules based on facts, incident and accident causation analysis, comparison of alternative mitigation measures, and cost-beneficial solutions. FRA rulemaking considers current and future industry capabilities, compliance burden and cost, and other economic and social realities. Within this context, FRA will continue to attempt to meet statutory milestones with its available resources.

The GROW AMERICA Act charts the course for continuous safety improvement throughout the industry. The proposal contains \$2.3 billion over four years to help commuter rail lines deploy and implement RSIA-mandated PTC systems, a type of technology designed to prevent: (1) over-speed derailments, (2) train-to-train collisions, (3) incursions into established roadway work zones, and (4) movement of a train through an improperly aligned switch. The proposal also enables FRA to grant merit-based extension of the PTC implementation deadline and to authorize provisional certification of PTC systems on individual railroads. The proposal also allows alternative methods of improving rail safety in lieu of PTC, where the alternatives provide an appropriate level of risk mitigation with respect to the functions of a PTC system. This permits FRA to focus the burden of PTC system implementation on the most dangerous mainlines and allow a more appropriately-tailored reduction of risk on mainlines covered by the current statutory mandate to implement PTC systems. Additionally, the proposal promotes uniform operating rules for the industry by authorizing the Secretary to require harmonization of railroad operating rules in certain small geographic areas with joint operations governed by two or more host railroads. The proposal also addresses the persistent challenge of fatigue by enabling FRA to replace current inadequate statutory requirements on hours of service with regulations grounded with scientific evidence.

Improving the Safety of Hazardous Materials Transported by Rail

The GROW AMERICA Act will improve the safety of hazardous materials transported by rail. There are three key components to that success: PTC implementation, rail development and investment, and research and development.

1. *PTC*

- a. Advances PTC implementation as quickly and safely as possible
 - i. More detail is provided in the following section.

2. *Rail Development*

- a. *Investments in safety*—Contains grant programs for rail safety improvements, and to mitigate negative impacts of increased freight traffic on communities through projects such as:
 - i. Rail line relocation projects
 - ii. Grade crossing improvements (which reduce risk for train/vehicle collisions)
 - iii. Sealed corridors—overpasses/underpasses (The safest grade crossing is one that doesn't exist.)
- b. *Short Lines*—Invests in short line infrastructure through projects such as:
 - i. Bridge upgrades
 - ii. Track integrity (286,000-pound loads)
 - iii. Signal upgrades
- c. *Improves RRIF*—(1) authorizes appropriations to pay for the Credit Risk Premium
 - i. PTC is an eligible expense for RRIF.

3. *Research and Development (R&D)*

- a. *Next Generation of Rail Safety Technology*—Advances the next generation of rail safety through imperative investments in R&D, including *automatic track inspection technology*
- b. *Improves Transportation Technology Center (TTC)*—The planning section includes improvements to TTC, including help to train first responders and conduct imperative R&D projects to improve rail safety.

Current Status of PTC Implementation

A critical element of RSIA is the mandate to implement PTC systems, which would mitigate or prevent many types of future train accidents caused by human factors. Past train accidents caused by human factors that would have been prevented by PTC include: (1) the over-speed derailment of a commuter train in 2013 at Spuyten Duyvil Station, Bronx, New York; (2) the head-on collision of a commuter train with a freight train in 2008 at Chatsworth, California; and (3) the collision of a freight train with standing on-track equipment, due to a misaligned switch, and the resulting chlorine release in 2005 at Graniteville, South Carolina. These three PTC-preventable accidents killed 38 people and injured many more. Under the RSIA mandate, briefly stated, each Class I railroad must install a PTC system governing train operations on its mainline routes carrying toxic by inhalation material, and each railroad providing regularly scheduled intercity passenger or commuter service must install a PTC system on its mainlines.

FRA strongly believes in the deployment of PTC by each individual railroad at the earliest practical date consistent with schedule delays arising from resolution of the individual railroad's unique technical and programmatic issues, in order to gain the safety benefits that PTC can offer. However, the current, statutorily mandated deadline of December 31, 2015, for completion of PTC installation will not be reached by many railroads subject to the mandate for a number of reasons. In addition to the technical and programmatic challenges outlined in FRA's August 2012 Report to Congress "Positive Train Control: Implementation Status, Issues, and Impacts," another issue has arisen regarding PTC communications towers deployment, a matter under the jurisdiction of the Federal Communications Commission (FCC). Deployment of PTC before these issues have been fully addressed could both adversely affect safety and have a negative impact on system efficiency. Given the dependence of the Nation on rail to move goods and services (40 percent by ton-miles of all U.S. freight moves are by rail), either of the preceding prospects is unacceptable. DOT's surface transportation bill would grant FRA the tools needed to advance implementation in timely manner.

We will continue to act as a technical resource to the FCC as that commission weighs and evaluates the complex, and often conflicting demands, of the railroads, as well as other licensed stakeholders, entities seeking licenses, the general public, communication system manufacturers, and local, State, and Tribal Governments. While FRA can act as a technical resource for the FCC on PTC technologies, ultimately, the programmatic and policy decisions associated with spectrum allocation and communications tower construction are solely in the purview of the FCC.

It is important to note that there is only a limited number of qualified technical staff available to the railroads, system suppliers, and FRA to support the design, manufacture, deployment, and certification of PTC systems. FRA has little or no ability to control the procurement of engineering services and equipment or its price. This is driven by the marketplace; for those items that are in short supply, the lack of supply has driven up prices. This, in turn, results in higher implementation costs to the railroads.

To support test oversight and certification, which is the only element over which FRA can exercise control, FRA has created a dedicated PTC staff, the PTC Branch. Even with that staff in place, FRA nonetheless depends heavily on the vendors and railroads in the certification process. As a matter of practicality, the proactive participation and good faith efforts of the vendors and railroads to ensure system safety through the entire design, implementation, and operation of the system are necessary not only for timely certification of a system, but also to ensure that the level of safety oversight is adequate relative to the system complexity. FRA staffing needs are therefore heavily dependent on the technology deployed, the capabilities of individual inspectors, as well as the level of effort and degree of objective safety oversight being expended by the vendors and railroads. The PTC Branch consists of eight regional specialists (one per region), two senior specialists, and a supervisor dedicated to PTC system certification and safety oversight. This group is augmented by a senior scientist and senior electronics engineer, two senior signal engineers, and contract engineering support as required.

Commuter rail operation implementation efforts are further complicated by their financial positions. Commuter railroads are generally cash-strapped and unable to attain certain necessities for implementation, such as communications spectrum. For example, system procurement and deployment costs just for Southern California Regional Rail Authority (Metrolink), operating in the Los Angeles basin, are exceeding \$210 million. These costs are representative of the more than 30 intercity passenger and commuter railroads required to implement PTC.

The GROW AMERICA Act addresses critical PTC funding issues by establishing predictable and dedicated Federal funding for rail programs, similar to other modes of transportation. Congress has for decades funded highway infrastructure and safety, transit, and aviation programs through multi-year authorizations that provide guaranteed funding; this enables States, local governments, and other stakeholders to plan and make large-scale infrastructure investments on a year-to-year basis.

The GROW AMERICA Act advances PTC implementation as quickly and safely as possible by:

- *Authorizing \$2.4 billion over the four-year life of the bill to implement PTC on passenger railroads*, which will also benefit freight transportation on shared corridors.
- *Requiring establishment of revised implementation schedules for PTC systems* that reflect the technical and programmatic issues facing individual railroads, a mechanism for making railroads accountable for implementation.
- *Allowing provisional operation of PTC systems in full revenue service* prior to full PTC system certification.
- *Allowing alternative methods of protection in lieu of PTC systems* where the alternative methods will not decrease safety and will provide appropriate risk mitigation against PTC-preventable accidents.
- *Advancing coordination between DOT and FCC to assess spectrum needs and availability* for implementing PTC systems.

FRA will prioritize funding provided under GROW AMERICA based on levels of risk to the traveling public so commuter railroads that have the greatest risk exposure will be able to install and obtain PTC system protection first.

FRA, in selecting the recipients of grants for eligible projects, will consider the following factors:

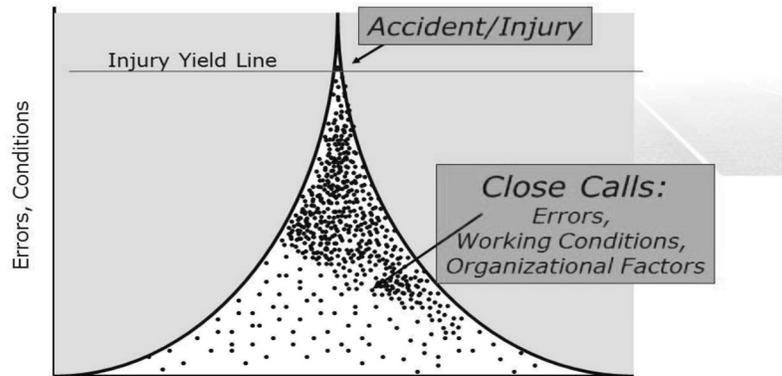
- *The scope of PTC system components necessary* including the number of locomotives owned by the eligible recipient, the number of wayside miles owned by the eligible recipient, the number of PTC systems with which the eligible recipient's PTC system must be interoperable; the scale of the communications infrastructure the eligible recipient requires to support PTC system operations; and the number of modifications to dispatching and back office systems required to support PTC system operations.
- *The extent to which the applicant has demonstrated a clear need* for Federal financial assistance.
- *The overall completeness and quality of the application*, including the comprehensiveness of its supporting documentation.
- *The extent of prior PTC implementation activities.*

Nationwide Rollout of C³RS

FRA is implementing a voluntary, Confidential Close Call Reporting System program (C³RS) for railroads and their employees to report close calls without receiving disciplinary action. The GROW AMERICA Act proposes expanding the C³RS from a limited pilot project to a nation-wide rollout. Data from C³RS pilot sites show promising results. Rigorous evaluation of one of the most mature pilot sites demonstrated that C³RS contributed to a 70-percent reduction in certain accidents. These results demonstrate the potential this program has to significantly improve safety. Reductions in accidents come from a proactive culture of safety that uses real data far beyond that which can be pulled from accident investigations on a reactive basis. Effective safety oversight is helped by having accurate data. The magnitude of the information provided from proactive programs like C³RS in comparison to traditional data from accidents and injuries is illustrated below:



C³RS Identifies Precursors to Accidents



Priority 2: Modernizing Rail Infrastructure

Past generations of Americans invested heavily to build the infrastructure we rely on today. For example, most segments of the Northeast Corridor were initially built over a century ago. Maintaining and modernizing these assets will reduce long-term costs and result in safer, more reliable, and more efficient rail transportation. The GROW AMERICA Act will build upon previous investments made under the HSIPR Program, the Department's TIGER Program, and other Federal and State funding to modernize America's rail infrastructure. Approximately 40 percent of the funding authorized for rail under the GROW AMERICA Act is dedicated for one-time investments to address the substantial backlog of deferred infrastructure projects across our rail system. A few of these key rail infrastructure priorities include:

- *ADA Compliance*—The GROW AMERICA Act authorizes \$1.4 billion to bring all Amtrak-served rail stations into compliance with the ADA. The Obama Administration is strongly committed to rectifying this issue—it is imperative that the Nation's rail system be accessible and comfortable for all Americans.
- *Infrastructure Backlog*—The GROW AMERICA Act authorizes funding to significantly reduce the backlog of state of good repair needs on the Northeast Corridor. Addressing this backlog is critical to maintaining and improving current passenger rail services.
- *Obsolete Equipment*—The GROW AMERICA Act authorizes funding to replace aging and obsolete equipment on the Northeast Corridor, State-supported routes, and long distance services. Many of the rail cars and locomotives in service across the country are operating at or past their useful lives, leading to higher maintenance costs and reduced performance levels. FRA and Amtrak have started to replace this aging equipment through HSIPR grants and RRIF loans, however, a significant need still remains. New rolling stock will not only lower operating and maintenance costs, but also result in better reliability, improved passenger comfort and amenities, and ultimately better position rail services for long-term economic success.
- *Platforms* – The GROW AMERICA Act would standardize passenger equipment and platform heights to increase interoperability of services and equipment, as well as better provide for safe boarding and alighting.

Priority 3: Meeting Growing Market Demand

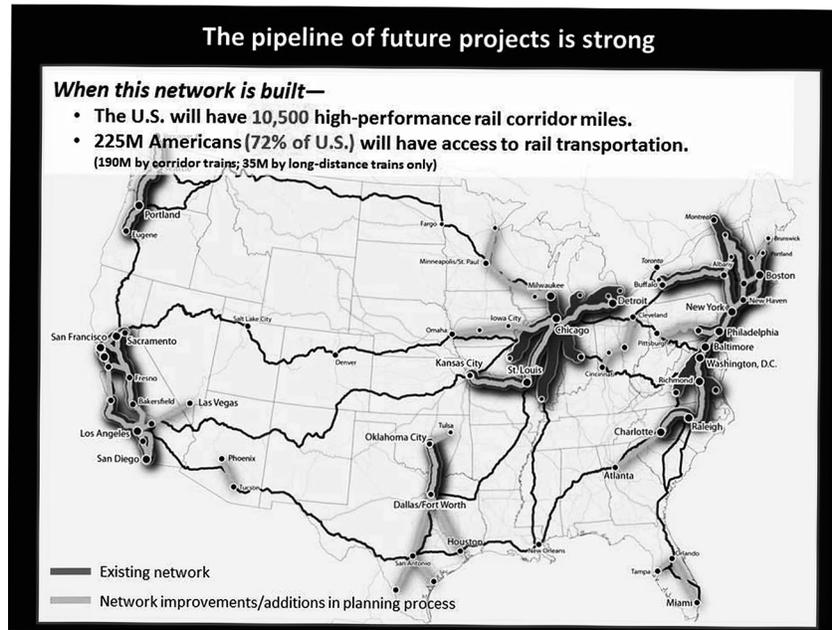
Since 2009, FRA and its State and private partners have invested nearly \$60 million in planning studies to establish a pipeline of future rail projects. These studies and independent planning efforts led by the States have resulted in a pipeline of more than \$20 billion worth of projects that are already underway or ready for con-

struction. The GROW AMERICA Act authorizes the funding required to make market-based investments to turn these studies into improved and new services.

The Nation requires seamless, intermodal transportation networks in order to move people and goods efficiently and effectively—and achieving that goal requires improved transportation-related coordination among Federal, State, and local entities. To achieve these goals, the GROW AMERICA Act will authorize DOT to establish Regional Rail Development Authorities (RRDAs) in consultation with state governors. RRDAs will have the power to plan for and undertake regional corridor development activities and be an eligible recipient of certain grants.

The Railroad Rehabilitation and Improvement Financing (RRIF) loan program makes additional financing available to stakeholders to: acquire, improve, and rehabilitate intermodal or rail equipment and facilities; refinance outstanding debt; and develop or establish new intermodal or railroad facilities. In an effort to make RRIF more accessible to short line railroads, the GROW AMERICA Act enhances the program by authorizing grants under the Local Rail Facilities and Safety program to fund credit risk premiums (CRP) for capital short line railroad improvements. The Act also authorizes appropriations to pay for the CRP, and caps maximum RRIF share at 80 percent of total project costs for projects greater than \$100 million that received a subsidized CRP.

Meeting market demand also means meeting communities' needs as they see increased rail traffic. The GROW AMERICA Act authorizes a grant program under the Rail Service Improvement Program that would competitively award grants for projects that mitigate the negative impacts of increased rail traffic on communities through: (1) the relocation of rail lines from busy or populated downtown areas; (2) grade crossing improvements that could lead to quiet zones; and (3) grade separations that protect trains and vehicular traffic while preventing trespassing deaths.



Priority 4: Promoting Innovation

FRA has consistently made gains in safety using advanced research and development. For example, in 2013, the Track Safety Standards for high-speed rail were substantially updated by adding innovations for combinations of track geometry irregularities and high cant deficiency operation. The procedures for qualifying track and equipment were changed extensively. FRA may also at some future date revise track safety standards for conventional speed operations of both freight and passenger equipment through similar use of computer modeling of track and equipment performance, service operation and test data, and other research.

Building on previous successes in safety risk reduction and improved safety culture, the GROW AMERICA Act authorizes additional funding for research and development to improve safety and develop new technologies. FRA plans to continue its innovative research into railroad employee fatigue, distraction and situational awareness. The outcomes will be used to improve hours of service regulations, reduce stop signal violations, and ensure new technology does not have a negative effect on safe operations.

FRA plans to investigate the technical challenges related to shared corridors for passenger and railroad freight operations. Areas that will be researched include evaluation of deterioration rates of special track work and other track structure components due to various types of impact and dynamic loads on shared corridors, accounting for axle load, train speed, and tonnage.

FRA, in coordination with PHMSA, plans to improve the safety of hazardous materials transportation. New approaches to be pursued include developing acceptance criteria for damage of thermal protection systems, assessing the effects of in-train forces and fatigue life of tank cars of single commodity trains, studying the effects of repair procedures on the reliability and fatigue life of tank cars, and developing a risk-based approach to evaluating defective conditions of tank cars. FRA is uniquely equipped with a test center in Pueblo, Colorado to conduct this research in conjunction with PHMSA.

These are just a few examples of research in the pipeline for FRA. There are many more examples, including the next generation of automated track inspection technology, which would be funded through the GROW AMERICA Act.

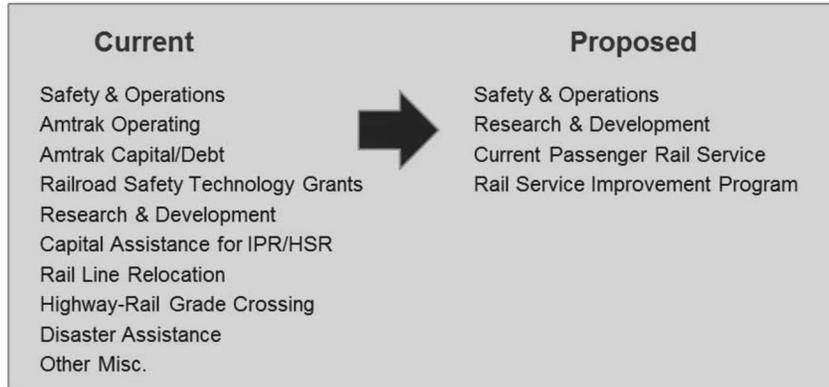
The GROW AMERICA Act will also expand research programs at universities, including rail-based University Transportation Centers (UTCs). Dedicated rail research at UTCs will serve two purposes that provide benefits by: (1) conducting basic research that FRA can apply to improve railroad safety and performance; and (2) producing qualified professionals who can lead implementation of high-performance rail.

The GROW AMERICA Act also authorizes funding for the National Cooperative Rail Research Program. This program, established under section 306 of PRIIA and managed by the National Academy of Sciences, provides a rail research program similar to those for aviation, highways, and transit. FRA launched the program in 2012 to develop the intellectual infrastructure needed to advance effective rail policy, and a number of research proposals are currently underway, including research on the topics of building and retaining workforce, alternative financing, modal energy consumption, and developing multi-state institutions to implement rail programs.

The GROW AMERICA Act will strengthen the “Buy America” requirements in current law by ensuring uniform applicability to all of FRA’s financial assistance programs. In the little more than five years in which the HSIPR Program has been in existence, Buy America has already had a measurable effect on the domestic rail manufacturing and supply industries. The highest profile example is the new Nippon Sharyo manufacturing plant in Rochelle, IL, which opened in 2012 and will produce the next generation of American-built railcars for corridor services in California and the Midwest. However, there are dozens more domestic manufacturers and suppliers at work as we speak thanks to the HSIPR Program and our Buy America requirements.

Priority 5: Ensuring Transparency and Accountability

The GROW AMERICA Act aligns funding for current passenger rail service programs by lines of business, and it streamlines FRA’s financial programs into four coordinated accounts:



The Act also requires standards for national and regional rail planning, which is necessary to provide a long-range blueprint for proceeding with passenger and freight rail investments in a market-based, cost-effective manner. These reforms provide American taxpayers with the transparency and accountability they require and deserve.

Over many years, existing capital and operating programs have focused on maintaining the legacy rail system on an annual basis. The GROW AMERICA Act will establish the Current Passenger Rail Service grant program to provide a longer-term view toward ensuring existing passenger rail assets and services are maintained in good, working condition. The grants will be oriented around Amtrak's main business lines: the Northeast Corridor, State Corridors, Long-Distance Routes, and National Assets.

In addition to restructuring Amtrak funding around lines of business, the GROW AMERICA Act requires Amtrak to engage in annual five-year operating and capital planning to focus on the long-term needs of its business lines. These plans will be developed with close FRA coordination, and will directly inform annual budget requests. Capital asset plans will describe investment priorities and implementation strategies and identify specific projects to address the backlog of state-of-good-repair needs, recapitalization/ongoing maintenance needs, upgrades to support service enhancements, and business initiatives with a defined return on investment.

The GROW AMERICA Act supports this mission with predictable, dedicated funding that enhances safety and modernize our rail infrastructure to meet growing market demand, while promoting innovation and ensuring transparency and accountability. The Act will invest \$19 billion over four years to improve rail safety and invest in a National High-Performance Rail System, as States and local communities need the certainty of sustained funding to make the transportation investments necessary to improve our infrastructure and support our economic growth. The Act also builds on current investments to vastly improve the system in areas ranging from PTC implementation to enhancing flexibility in financing programs that will better enable the rehabilitation of aging infrastructure.

Conclusion

Thank you for the opportunity to appear before you to participate in a dialogue on the future of rail in America. The GROW AMERICA Act charts a bold new course for transportation infrastructure investment in the United States. We look forward to working with Congress to put people back to work building a balanced transportation system that is safe, reliable, efficient, and able to meet the growing demand and changing travel habits of America's population. I will be happy to respond to your questions.

APPENDIX 1

Completed FRA Rulemakings that Were Mandated, Explicitly or Implicitly, by RSIA⁸

1. To specify the essential functionalities of mandated PTC systems, define related statutory terms, and identify additional lines for implementation. (*Sec. 104*).⁹
2. To establish substantive hours of service requirements for passenger train employees. (*Sec. 108(d)*).
3. To update existing hours of service recordkeeping regulations. (*Sec. 108(f)*).
4. To require State-specific action plans from certain States to improve safety at highway-rail grade crossings. (*Sec. 202*).
5. To require toll-free telephone emergency notification numbers for reporting problems at public and private highway-rail grade crossings. (*Sec. 205*).
6. Increase the ordinary maximum and aggravated maximum civil penalties per violation for rail safety violations to \$25,000 and \$100,000, respectively. (*Sec. 302*).
7. On prohibition of individuals from performing safety-sensitive functions in the railroad industry for a violation of hazardous materials transportation law. (*Sec. 305*).
8. On procedures for emergency waivers. (*Sec. 308*).
9. To require the certification of conductors. (*Sec. 402*).
10. On the results of FRA's study of track inspection intervals and other track issues. (*Sec. 403(c)*).
11. On concrete ties. (*Sec. 403(d)*).
12. To require certain railroads to develop and submit for FRA approval their plans for providing appropriate support services to employees affected by a "critical incident" as defined by FRA. (*Sec. 410(a)*).
13. To require owners of railroad bridges to implement programs for inspection, maintenance, and management of those structures. (*Sec. 417*).
14. On camp cars used as railroad employee sleeping quarters. (*Sec. 420*).
15. Amending regulations of the Office of the Secretary of Transportation to provide that the Secretary delegates to the Administrator of FRA the responsibility to carry out the Secretary's responsibilities under RSIA.

Completed RSIA-Mandated Guidance and Model State Laws¹⁰

1. Guidance on pedestrian safety at or near rail passenger stations. (*Sec. 201*).
2. Guidance for the administration of the authority to buy items of nominal value and distribute them to the public as part of a crossing safety or railroad trespass prevention program. (*Sec. 208(c)*).
3. Model State law on highway users' sight distances at passively signed highway-rail grade crossings. (*Sec. 203*).
4. Model State law on motorists' violations of grade crossing warning devices. (*Sec. 208(a)*).

Completed RSIA-Mandated Non-periodic Reports or Studies

1. Report to Congress on DOT's long-term (minimum 5-year) strategy for improving rail safety, including annual plans and schedules for achieving specified statutory goals, to be submitted with the President's annual budget. (*Sec. 102*).
2. Report to Congress on the progress of railroads' implementation of PTC. (*Sec. 104*).
3. Conduct study to evaluate whether it is in the public interest to withhold from discovery or admission, in certain judicial proceedings for damages, the reports and data compiled to implement, etc., a required risk reduction program. (*Sec. 109*).
4. Evaluate and review current local, State, and Federal laws regarding trespassing on railroad property, vandalism affecting railroad safety, and violations of highway-rail grade crossing warning devices. (*Sec. 208(a)*).
5. Report to Congress on the results of DOT research about track inspection intervals, etc. (*Sec. 403(a)-(b)*).

⁸In addition, FRA commenced a rulemaking to define "critical incident" for purposes of the mandated rulemaking on critical incident stress plans as specifically required by Sec. 410(c).

⁹In addition, FRA has issued two final rules on PTC, and another final rule on PTC is in clearance in the Executive Branch.

¹⁰In addition, FRA has published three guidance documents on the hours of service laws as amended by RSIA in the *Federal Register*.

6. Conduct study of methods to improve or correct passenger station platform gaps *(Sec. 404)*.
7. Report to Congress detailing the results of DOT research about use of personal electronic devices in the locomotive cab by safety-related railroad employees. *(Sec. 405)*.
8. Report to Congress on DOT research about the effects of repealing a provision exempting Consolidated Rail Corporation, etc., from certain labor-related laws (45 U.S.C. § 797j). *(Sec. 408)*.
9. Report to Congress on the results of DOT research about exposure of railroad employees and others to radiation. *(Sec. 411)*.
10. Report to Congress on DOT study on the expected safety effects of reducing inspection frequency of diesel-electric locomotives in limited service by railroad museums. *(Sec. 415)*.
11. Report to Congress on model plans and recommendations, to be developed through a task force to be established by DOT, to help railroads respond to passenger rail accidents. *(Sec. 503)*.

APPENDIX 2

FRA's Completed PRIIA Requirements

1. Establish a grant process for Amtrak and submit a letter to Congress. *(Sec. 206)*.
2. Establish metrics and standards for performance and service quality of intercity passenger train operations. *(Sec. 207)*.
3. Report quarterly on performance and service quality of intercity passenger train operations. *(Sec. 207)*.
4. Review and approve Amtrak's Northeast Corridor State of Good Repair Plan. *(Sec. 211)*.
5. Establish a Northeast Corridor Infrastructure and Operations Advisory Commission. *(Sec. 212)*.
6. Establish a Northeast Corridor Safety Committee. *(Sec. 212)*.
7. Complete a rulemaking to develop a pilot program for alternate passenger rail service *(Sec. 214)*.
8. Establish a grant program and make grants to implement or improve intercity passenger rail service. *(Sec. 301)*.
9. Make grants to reduce congestion or for facilitation of ridership growth. *(Sec. 302)*.
10. Establish requirements for State rail plan development and review. *(Sec. 303)*.
11. Establish and carry out a rail cooperative research program. *(Sec. 306)*.
12. Complete a preliminary National Rail Plan. *(Sec. 307)*.
13. Establish procedures for preclearance of passengers traveling from the U.S. to Canada. *(Sec. 406)*.
14. Report to Congress on the results of a study and actions to streamline compliance with historic preservation requirements. *(Sec. 407)*.
15. Establish a grant program and make grants for high-speed rail corridor development. *(Sec. 501)*.
16. Issue a request for proposals for projects on designated high-speed rail corridors. *(Sec. 502)*.
17. Evaluate high-speed rail corridor proposals. *(Sec. 502)*.

Senator BLUMENTHAL. Thank you very much, Administrator Szabo.

And now to Administrator Ferro. Thank you for being here.

**STATEMENT OF HON. ANNE S. FERRO, ADMINISTRATOR,
FEDERAL MOTOR CARRIER SAFETY ADMINISTRATION,
U.S. DEPARTMENT OF TRANSPORTATION**

Ms. FERRO. Thank you. Mr. Chairman, Ranking Member Blunt, and members of the Subcommittee, thank you for inviting me to testify today on the Federal Motor Carrier Safety Administration's progress in implementing both our MAP-21 requirements as well as the opportunity to lay out the safety provisions in the GROW AMERICA Act.

Safety is FMCSA's top priority. And yet, since 2009, with the advent of our continued economic recovery, which is very, very good, the downside is, there has been an 18 percent increase in crashes involving commercial motor vehicles and in the number of people killed in those crashes. We can do better than that. And working together with Congress, enforcement, advocates, and our industry partners, using research, public dialogue, and sensible policies, we can raise the safety bar for truck and bus operations.

MAP-21 has been part of the strategy, and FMCSA is pressing forward to meet all of the requirements. To date, we've completed more than half of the rulemakings required under MAP-21. For example, at the outset, we implemented agricultural exemptions and new financial security requirements for brokers and freight forwarders, as required under the law. And we are well on our way to establish the first national drug and alcohol clearinghouse, which will, in fact, help employers determine whether a driver is complying with Federal drug and alcohol regulations, including mandatory testing. The notice of proposed rulemaking and the 90-day comment period closed, just last month.

In March, we issued a supplemental notice to create an electronic logging device requirement across the industry. This proposal will improve hours of service compliance; and hence, the uniform use of those logs will actually improve and mitigate the impacts of fatigue-related driving and fatigue-related crashes. In fact, the analysis of this proposal shows that it will help prevent approximately 20 deaths, over 400 injuries each year, and have an annual safety benefit of almost \$400 million. Comments on that proposal are still able to be made, up through the end of this month.

MAP-21 is helping us reach our safety goal of getting to one level of safety for all passengers, regardless of what type of bus company they choose. FMCSA is training all of our special agents with new, enhanced investigation tactics to uncover safety deficiencies and remove dangerous buses and operators from the road. Some companies take full advantage of the opportunity we give them to get better, to use the information we've provided, use the audits to fix their problems. But, for those that don't, we will put them, and we have put them, out of business. In fact, last year we shut down over 100 unsafe bus operations.

Looking at the long term, President Obama has laid out a vision in the GROW AMERICA Act that enhances our safety work. GROW AMERICA focuses on three key areas to improve commercial motor vehicle safety. On motorcoach safety, GROW AMERICA will expand our opportunities to inspect motorcoaches at additional sites, and it'll give FMCSA jurisdiction over passenger ticket brokers, folks who really do defraud customers as to what kind of company they're about to use. It takes strong steps to improve our effectiveness under GROW AMERICA by allowing criminal prosecution of companies that deliberately violate Federal out-of-service requirements.

Another provision calls for requiring companies to pay drivers for uncompensated time. It's not news to know that when drivers are held up at the loading dock, waiting for shipments to be loaded or unloaded, they are often—more often than not—unpaid, uncompensated. And hence, they face pressure to make up that lost uncom-

pensated time by pushing both their physical limits as well as the legal driving limits. This proposal will ease the economic stress on long-distance drivers by ensuring that they receive fair compensation for the hours they work.

And finally, GROW AMERICA streamlines and consolidates our Safety Grants Program; hence, improving and providing better efficiencies both for the agency, but, more importantly, for our State enforcement and licensing partners.

Mr. Chairman, thank you for the opportunity to share a bit about what FMCSA is focused on and the opportunity to answer questions today. I look forward to your questions.

[The prepared statement of Ms. Ferro follows:]

PREPARED STATEMENT OF HON. ANNE S. FERRO, ADMINISTRATOR, FEDERAL MOTOR CARRIER SAFETY ADMINISTRATION, U.S. DEPARTMENT OF TRANSPORTATION

Mr. Chairman, Ranking Member Blunt, and Members of the Subcommittee, thank you for inviting me to testify today on the Federal Motor Carrier Safety Administration's (FMCSA) progress in implementing the Moving Ahead for Progress in the 21st Century Act (MAP-21) and the Department of Transportation's (DOT) reauthorization proposal—the Generating Renewal, Opportunity, and Work with Accelerated Mobility, Efficiency, and Rebuilding of Infrastructure and Communities throughout America Act (GROW AMERICA).

Since FMCSA's establishment in 2000, the number of lives lost in large truck-and-bus-related crashes has decreased 26 percent, from 5,620 in 2000 to 4,183 in 2012. While this represents significant progress, more must be done. We are committed to reducing the number of crashes, injuries and fatalities involving commercial motor vehicles (CMV).

MAP-21

Overall, FMCSA is working hard to implement many of the commercial motor vehicle safety provisions of MAP-21. To date, the Agency has implemented twenty provisions of MAP-21 and has issued three Notices of Proposed Rulemaking (NPRM); including proposals to mandate Electronic Logging Devices and to establish a Drug and Alcohol Clearinghouse. MAP-21 gave the Agency important tools to improve CMV safety and remove unsafe operators from the Nation's highways. The Agency's plan aligns with three core principles: *raise the bar to enter the motor carrier industry; require high safety standards to remain in the industry; and remove high-risk carriers, drivers, and service providers from operation.* MAP-21 supports these core principles and our Agency's important safety initiatives.

Electronic Logging Devices

MAP-21 included a provision mandating the use of electronic logging devices (ELD) for any driver required to keep a record of duty status (RODS) under the HOS regulations. The Agency published a supplemental notice of proposed rulemaking (SNPRM) on March 18 that would establish: (1) minimum performance standards for ELDs; (2) mandatory requirements for use of the devices by drivers required to prepare RODS; (3) requirements concerning HOS supporting documents; and (4) measures to ensure that the mandatory use of ELDs will not result in harassment of drivers by motor carriers or enforcement officials. The ELD requirements will improve HOS compliance by reducing the likelihood of falsification of drivers' duty status records, thereby decreasing the risk of fatigue-related crashes attributable to HOS non-compliance. The public comment period runs through June 26.

Drug and Alcohol Clearinghouse

MAP-21 provided explicit authority for the Secretary to create an electronic repository for positive alcohol and controlled substances test results. In response, on February 20, FMCSA published a NPRM to establish the Commercial Driver's License Drug and Alcohol Clearinghouse for all CDL holders. The proposed rule would require employers of CDL drivers and service agents to report positive test results and refusals to test to the Clearinghouse and thus will improve both driver and employer compliance with DOT's alcohol and controlled substance testing program. Employers would be required to check the Clearinghouse to make sure current and prospective employees do not have drug and alcohol violations that would prohibit them from performing safety sensitive functions, such as driving CMVs. We solicited

comments on this rule through May 21. Ultimately, the Clearinghouse will improve roadway safety by making it easier to determine whether a truck or bus driver is prohibited from operating a CMV for failing to comply with Federal drug and alcohol regulations, including mandatory testing.

Coercion

On May 13, FMCSA published NPRM to adopt regulations that prohibit motor carriers, shippers, receivers, or transportation intermediaries from coercing drivers to operate CMVs in violation of certain provisions of the FMCSRs—including drivers' hours of service limits and the CDL regulations and associated drug and alcohol testing rules—or the Hazardous Materials Regulations (HMRs). In addition, the NPRM would prohibit anyone who operates a CMV in interstate commerce from coercing a driver to violate the commercial regulations. This NPRM includes procedures for drivers to report incidents of coercion to FMCSA and rules of practice the Agency would follow in response to allegations of coercion and describes penalties that may be imposed on entities found to have coerced drivers. This proposed rulemaking is authorized by section 32911 of MAP-21, amending the Motor Carrier Safety Act of 1984.

Compliance, Safety, Accountability

The Compliance, Safety, Accountability program, or CSA, is FMCSA's compliance model to improve CMV safety and reduce large truck and bus crashes, injuries, and fatalities on our Nation's highways. MAP-21 included statutory revisions and additional authorities needed to improve the CSA model. For example, MAP-21 provided the Agency with flexibility to allow an investigator to display credentials in writing rather than in person. This clarifies FMCSA's authority to conduct off-site enforcement interventions—to formally demand that a motor carrier provide records without having to travel to the motor carrier's business location. This has been vital to expanding FMCSA's and our State partners' enforcement efforts to include off-site reviews and investigations, increasing our ability to provide effective safety oversight on a larger portion of the industry than before.

Household Goods Provisions

With regard to household goods transportation, MAP-21 authorized FMCSA to assign all or a portion of the penalties it receives from noncompliant moving companies to the aggrieved shipper. The Agency formed a working group to examine how to implement this new authority. A second provision granted the Agency authority to order moving companies to return household goods held hostage. FMCSA is aggressively using this new authority to protect consumers and ensure compliance with the Agency's regulations. Recent enforcement efforts resulted in significant civil penalties against moving companies involved in fraudulent activities, and also resulted in revocation of the operating authority registration of some of carriers due to their egregious violations.

Minimum Training Requirements for Entry-Level CMV Operators

MAP-21 directed the Agency to issue final regulations to require training for entry level CDL applicants. The Agency's rulemaking must address knowledge and skills for safe operation and other issues. Last year, the Agency held public listening sessions on this issue. These sessions provided the Agency with substantial information about training for entry level CDL applicants. The Agency will soon engage the services of a convener to assess the feasibility of conducting a negotiated rulemaking to implement this important MAP-21 provision.

Miscellaneous Rule Text Changes in Provisions of MAP-21

The Agency addressed numerous MAP-21 provisions in an omnibus final rule on October 1, 2013. This largely ministerial rulemaking action ensured that the regulations were aligned with the new statutory requirements. Most notable among the changes were the new financial security requirements for brokers and freight forwarders. As required by MAP-21, FMCSA amended its regulations to require a \$75,000 surety bond or trust fund for brokers and extended the surety bond or trust fund requirement to freight forwarders for the first time.

National Registry of Certified Medical Examiners

In April 2012, FMCSA issued a final rule as required by a previous statutory amendment, reaffirmed and modified in MAP-21, to establish a National Registry of Certified Medical Examiners (National Registry). The National Registry requires all Medical Examiners (ME) who conduct physical examinations for interstate CMV drivers to: complete training on FMCSA's physical qualification standards; pass a certification test; and demonstrate competence through periodic training and test-

ing. It requires motor carriers and drivers to use only those MEs listed on the National Registry. On May 21, all CMV drivers whose medical certification has expired must use MEs on the National Registry for their exams. To date, there are more than 25,000 MEs on the National Registry with more in the pipeline. I emphasize that drivers' medical certificates remain valid until their expiration date, which may be up to 2 years following the date of the medical exam. We commend the healthcare community for working with the Agency to stand up this program, which we believe will significantly improve highway safety.

Passenger Carrier Safety

FMCSA continues use of its MAP-21 authorities to strengthen the safety of passengers throughout our Nation who ride buses. In 2013, as part of an overall motorcoach safety initiative, we dispatched more than 50 specially trained investigators to conduct in-depth reviews of the safety management practices of the 250 most at-risk motorcoach companies during "Operation Quick Strike." As a result, we removed 52 unsafe bus companies and 340 vehicles from the road. During the second phase of the initiative FMCSA investigators visited more than 1,300 carriers with minimal inspection history or data with the Agency. As a result, we identified more than 240 for follow-up investigations. Now we train all investigators to use the enhanced investigative techniques employed during Operation Quick Strike, and we have conducted evaluations and gap analyses with an eye toward how best to maintain an intensified level of oversight on the passenger carrier industry.

Registration Requirements

MAP-21 strengthened the registration requirements for motor carrier operating authority registration and included new authority for safety registration, including a mandatory USDOT number for anyone operating a CMV in interstate commerce. These new authorities have helped, and will help, the Agency to continue its crack down on carriers that commit safety violations and then change their company identity, or "reincarnate." This growing and disturbing practice poses a real enforcement challenge to FMCSA's investigators and commercial law enforcement officers nationwide. Under MAP-21 FMCSA can withhold, suspend, amend or revoke a motor carrier's registration if the carrier fails to disclose its adverse safety history or if a motor carrier, employer, owner or operator does not disclose a relationship involving common ownership, management, control, or familial relationship to any other motor carrier, employer, or owner operator.

Additionally, MAP-21 directed the Agency to establish a written proficiency exam for new operating authority registration applicants to test their knowledge of the safety regulations, applicable commercial regulations, and regulations relating to accessibility for disabled persons. This test will help ensure that companies understand these regulations before beginning operations. This year, we conducted listening sessions across the country to gather input on this issue.

Agricultural Exemptions

MAP-21 included two provisions applicable to operating CMVs for agricultural purposes. The first exempts CMV drivers from the Federal hours of service (HOS) rules when transporting agricultural commodities and farm supplies within a 150 air-mile radius from the source of the commodities or the distribution point of the supplies. The second exempts the operation of "covered farm vehicles" by farm and ranch operators, their employees, and certain other specified individuals from most of the Federal Motor Carrier Safety Regulations (FMCSRs), including those pertaining to commercial driver's licenses (CDL) and driver physical qualifications (medical) requirements. These self-executing statutory provisions took effect on October 1, 2012. The Agency published a Federal Register notice on October 1, 2012, to ensure motor carriers and enforcement officials were aware of the two statutory exemptions included in MAP-21. The Agency requested that States immediately take action to put into place policies and procedures to provide the regulatory relief provided by MAP-21, and to follow up with the appropriate amendments to their laws and regulations to reflect the statutory exemptions in MAP-21. In March 2013, FMCSA published a final rule to conform the FMCSRs to the statutory provisions in MAP-21. States have until March 14, 2016, to adopt compatible regulations to maintain eligibility for Motor Carrier Safety Assistance Program grants.

The GROW AMERICA Act

The GROW AMERICA Act will support millions of American jobs repairing and modernizing our roads, bridges, railways, and transit systems. It will ensure that American businesses can compete in the global economy and increase access to opportunities for all Americans. The Act builds upon the gains achieved in MAP-21 for commercial motor vehicle safety and will further empower State and local com-

munities through more streamlined and efficient grant programs, will build on FMCSA's unprecedented motorcoach safety achievements, and will ease economic stress on long-distance truck and bus drivers by ensuring they receive fair compensation for the hours they work.

Improvements to the Motor Carrier Safety Grants

GROW AMERICA will streamline and consolidate five FMCSA safety grant programs into a single formula program—a change that will dramatically increase administrative efficiencies for FMCSA and its State partners. The grant programs affected would be the Motor Carrier Safety Assistance Program (MCSAP) Basic and Incentive; New Entrant; Border Enforcement; Performance and Registration Information Systems Management Program (PRISM); and Safety Data Improvement. The restructuring would allow the use of MCSAP funds to enforce household goods regulations. State participation in PRISM, Safety Data Improvement and New Entrant would become mandatory. Additionally, the proposal would restructure the Commercial Vehicle Information Systems and Networks (CVISN) program allowing greater flexibility for advanced technology solutions, and it would eliminate core and expanded funding caps.

Motorcoach Safety

FMCSA is committed to raising the bar for safety in this highly competitive and rapidly changing industry by employing more effective investigation methods and strengthening the Agency's oversight authorities. Last year, FMCSA shut down more than 100 unsafe bus companies that put passengers at risk, and we significantly increased public education and awareness on safe motorcoach travel.

GROW AMERICA would expand the locations where States may require motorcoach inspections to include en route locations where food, shelter and sanitation for passengers can be provided. The proposal also grants FMCSA jurisdiction over passenger carrier brokers, requiring them to register with the Agency. This proposal would help prevent unsafe bus companies from reorganizing as unregulated brokers and ensure transportation through authorized carriers only. The GROW AMERICA Act will also prevent unscrupulous motor carriers from skirting FMCSA enforcement actions by clarifying authority for criminal prosecutions of persons who knowingly and willfully violate imminent hazard out-of-service orders, which are issued to prevent the death or serious physical harm to the public.

Driver Compensation

Many over-the-road truck and bus drivers are compensated by the mile or on a fixed-rate-per-load basis. As a result, drivers often are not paid for extended periods of time spent waiting at shipper or receiver facilities for shipments to be loaded or unloaded. Similarly, over-the-road motorcoach drivers are often compensated in a manner other than an hourly wage. This pay structure may create pressures to exceed HOS limits, risk driver fatigue, and jeopardize highway safety. The proposal provides the Secretary of Transportation authority to adopt rules to require motor carriers to compensate drivers for detention time and other non-driving work periods at a rate that is at least equal to the Federal minimum wage. The proposal would not amend the Fair Labor Standards Act (FLSA); this pay would be in addition to that required under FLSA.

Conclusion

Thank you, Mr. Chairman and Ranking Member Blunt, for the opportunity to discuss the Federal motor carrier safety programs. We look forward to working with you to improve safety, reduce crashes, and save lives on our Nation's highways.

Senator BLUMENTHAL. Thank you very much.

And now, Administrator Quarterman, thank you for being here.

**STATEMENT OF HON. CYNTHIA L. QUARTERMAN,
ADMINISTRATOR, PIPELINE AND HAZARDOUS
MATERIALS SAFETY ADMINISTRATION,
U.S. DEPARTMENT OF TRANSPORTATION**

Ms. QUARTERMAN. Good morning. Chairman Blumenthal, Ranking Member Blunt, and members of the Subcommittee, thank you for inviting me here today to testify on the Pipeline and Hazardous Materials Safety Administration's progress in implementing the hazardous materials safety provisions of MAP-21. I'm also de-

lighted to discuss the ways the GROW AMERICA Act will further improve upon the efforts of PHMSA and the Department to enhance the safety of our Nation's hazardous materials transportation system. Safety is the top priority of Secretary Foxx, the Department of Transportation, PHMSA, and its sister modes. All of us at DOT appreciate your dedication and leadership in advancing hazardous materials transportation safety.

For a relatively small agency with limited resources, the staff at PHMSA works diligently to protect the American public and the environment from hazardous materials transportation incidents and have made great strides in implementing the provisions of MAP-21.

Since MAP-21's enactment in 2012, PHMSA has met, or will meet, more than 90 percent of the established time lines for the 32 separate provisions assigned to the agency.

This is significant, given that—the many challenges and emerging issues that PHMSA has faced over the same time period, including efforts to enhance the safe transportation of crude by rail and continuing to consistently reduce the number of hazardous materials incidents over the past 25 years.

A significant contributor to PHMSA's success has been the strategy and action plan we developed and implemented to take advantage of the additional resources MAP-21 provided to bolster compliance with hazardous materials regulations.

As the transportation sector continues to evolve and become more interconnected with the international community, PHMSA has attempted to adopt smarter strategies to adapt to those changes. As a part of our enforcement strategy, and through the authority of MAP-21, PHMSA raised its maximum civil penalty amount for violations resulting in death, injury, or illness. We believe that clear and appropriate civil penalties can improve transportation safety by acting as a deterrent for noncompliance. That's why the GROW AMERICA Act submitted to Congress by Secretary Foxx proposes to further increase the maximum amount PHMSA can assess for violators of hazardous materials regulations. The increased civil penalty authority will allow us to address situations where a higher penalty is warranted, including those events resulting in death, injury, or illness.

In addition, the GROW AMERICA Act will further build on MAP-21's successes and support the Department's safety initiatives by improving PHMSA's ability to oversee the safe transportation of hazardous materials. GROW AMERICA will give PHMSA the authority to issue orders to industry to cease activities, without prior notice, in response to emergency situations. Similar authority is already held by FRA and FMCSA, and GROW AMERICA will increase DOT's ability to stop unsafe conditions or practices that may threaten life, personal injury, or harm to property or the environment. GROW AMERICA will also enhance communities and improve safety by expanding hazardous registration requirements and improve the effectiveness of PHMSA's Hazardous Materials Emergency Preparedness Grants Program.

These are just a few of the many ways MAP-21 and the GROW AMERICA Act can, and will, provide further safeguards against hazardous materials transportation risks for American commu-

nities. As I've stated earlier, PHMSA is committed to improving transportation safety, and I believe our approach is working. Our safety mission is guided by our vision that no harm results from hazardous materials transportation. And I truly believe our efforts will continue to prevent and mitigate accidents and move us closer to our goal of zero deaths and injuries.

Thank you again for the opportunity to speak today. We look forward to continuing to work with this committee and Congress to protect people, property, and the environment from hazardous materials transportation risks. And I would be happy to answer any questions you may have.

[The prepared statement of Ms. Quarterman follows:]

PREPARED STATEMENT OF HON. CYNTHIA L. QUARTERMAN, ADMINISTRATOR, PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION, U.S. DEPARTMENT OF TRANSPORTATION

Introduction

Chairman Blumenthal, Ranking Member Blunt, and members of the subcommittee, thank you for inviting me to testify today on the Pipeline and Hazardous Materials Safety Administration's (PHMSA) progress in implementing the Hazardous Materials Transportation Safety provisions of the Moving Ahead for Progress in the 21st Century Act (MAP-21) and the Generating Renewal, Opportunity, and Work with Accelerated Mobility, Efficiency, and Rebuilding of Infrastructure and Communities throughout America (GROW AMERICA) Act, which would provide important tools to further improve the safe transportation of hazardous materials.

Safety is PHMSA's number one priority. PHMSA works diligently to protect the American people and the environment from the risks of hazardous materials transportation. PHMSA achieves its safety mission through efforts to prevent and mitigate accidents by developing regulations, taking rigorous enforcement actions, collaborating with stakeholders, and educating emergency responders and the public. MAP-21 provides PHMSA with important new tools to improve the safety of transporting hazardous materials and the GROW AMERICA Act will build on the successes of MAP-21 and further support our agency's safety initiatives. With the positive outcomes already achieved through MAP-21 and the improvements that the GROW AMERICA Act will provide, PHMSA will be strategically positioned to meet its safety goals and improve the safety of our Nation's transportation system.

MAP-21 Overview

MAP-21 authorized or mandated numerous rulemakings, reports, and programmatic changes to enhance PHMSA's Hazardous Materials Safety Program. PHMSA finalized its strategy to implement the Act on August 31, 2012 and a supporting Action Plan on October 10, 2012. The Action Plan assigned responsible staff to 13 areas, covering 32 separate provisions. As a result, PHMSA has met or will meet established timelines for more than 90 percent of the 32 provisions. This is significant given the many challenges and emerging issues that PHMSA has faced over the same period. The MAP-21 mandates are organized below into three categories: (1) Rulemakings; (2) Studies and Reports to Congress; and (3) Other Mandates, and Programmatic Changes.

Rulemakings

Update of Published Guidelines on Civil Penalty Amounts

MAP-21 removed the minimum penalty amount for a violation, except that the minimum penalty amount of \$450 was retained for a training violation. In addition, MAP-21 raised the maximum penalty amount for a knowing violation and a violation resulting in death, serious illness or severe injury to any person, or substantial destruction of property to \$75,000 and \$175,000, respectively. PHMSA adopted these changes in an April 17, 2013 final rule.¹ PHMSA believes clear and appropriate civil penalties can improve transportation safety by acting as a deterrent for those violating the regulations. As I will discuss later, GROW AMERICA builds upon the MAP-21 enhancement to the civil penalties program.

¹See 78 Fed. Reg. 22798 <http://www.gpo.gov/fdsys/pkg/FR-2013-04-17/pdf/2013-08981.pdf>

Open Package—Resumption of Transportation

MAP-21 required PHMSA to implement regulations by October 2013 to provide procedures for an agent of the Secretary of Transportation to open packages of perishable hazardous materials and to provide notification to the responsible party that an agent has performed a safety inspection or investigation. In addition, MAP-21 stressed that inspectors be provided appropriate training and equipment to open and close a package in accordance with the Hazardous Materials Regulations (HMR). PHMSA published a final rule² in October 2013 to codify changes to Federal hazardous materials transportation law and to ensure transparency and consistency for hazardous materials inspectors across all modes of transportation.

Failure to Pay Civil Penalties

MAP-21 directed PHMSA to issue regulations by October 2014 to require a person who is delinquent in paying civil penalties for a violation of the hazardous materials transportation law or regulations to cease any activity regulated under the Federal hazardous materials transportation law until payment has been made or until an acceptable payment plan has been arranged. On September 24, 2013, PHMSA published a Notice of Proposed Rulemaking (NPRM)³ addressing the MAP-21 mandate to prohibit hazardous materials operations by persons delinquent on payment of civil penalties. The comment period for the NPRM closed on November 25, 2013. The final rule is currently under review.

Standard Operating Procedures (SOPs) for Handling Applications for Special Permits (SPs) and Objective Criteria for Evaluating SPs

MAP-21 required PHMSA to issue regulations that establish (1) SOPs to support administration of the SP and approval programs, and (2) objective criteria to support the evaluation of SP and approval applications. MAP-21 mandates a final rule by October 2014. Stakeholders have expressed an interest and feedback in resolving SP and approval processing concerns through rulemaking and suggested several alternatives. PHMSA's NPRM is currently under Departmental review.

Incorporation of SPs into the HMR

MAP-21 required an initial review and analysis of SPs that have been in continuous effect for a 10-year period to determine which ones may be converted into the HMR. MAP-21 mandates a rule by October 2015.⁴ PHMSA's NPRM is currently under review.

Continued Incorporation of SPs

MAP-21 requires an ongoing review, analysis, and incorporation of SPs that are over 10 years old. Based on this review and analysis, PHMSA must either institute a rulemaking to incorporate the SPs into the HMR or publish in the *Federal Register* its justification for why the SPs are not appropriate for incorporation into the regulations. MAP-21 mandates a rule annually, beginning October 2016. As required by MAP-21, PHMSA plans to conduct future reviews of SPs with a lifespan of greater than 10 years on an annual basis. PHMSA's ongoing review and analysis of SPs will use the same methodology and tools as the initial NPRM, outlined above. PHMSA anticipates future analysis and review will be more streamlined due to the reduced volume of SPs to be evaluated.

Studies and Reports to Congress

Hazardous Materials Emergency Preparedness Grant Report

The Hazardous Materials Grants Program (HM Grants Program) was a key focus area of MAP-21. The program is funded by registration fees collected from hazardous materials shippers and carriers who offer for transportation or transport certain hazmat in intrastate, interstate, or foreign commerce in accordance with 49 CFR Part 107, Subpart G. These fees fund training and planning grants, monitoring and technical assistance, curriculum development, and staffing costs. Registration fees also fund the publication and distribution of the Emergency Response Guidebook (ERG). The HM Grants Program is comprised of three types of grants:

²See 78 Fed. Reg. 60755 <http://www.gpo.gov/fdsys/pkg/FR-2013-10-02/pdf/2013-23894.pdf>

³See 78 Fed. Reg. 58501 <https://federalregister.gov/a/2013-22952>

⁴Although, MAP-21 limited the review and analysis to SPs with a lifespan of greater than 10 years, PHMSA decided that an initial review and analysis of all active SPs would be more beneficial, as many SPs are interrelated.

Hazardous Materials Grants Program

Grant	Summary	Value
Hazardous Materials Emergency Preparedness (HMEP) Grant	The purpose of this grant program is to increase State, Territorial, Tribal, and local effectiveness in safely and efficiently handling hazardous materials accidents and incidents, enhance implementation of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA), and encourage a comprehensive approach to emergency training and planning by incorporating the unique challenges of responses to transportation situations..	\$21.8 million
Hazardous Materials Instructor Training (HMIT) Grant	The HMIT Grant program is a competitive program by which instructors are trained to deliver hazardous materials training to hazmat employees. Funding for the program is made available to non-profit organizations that demonstrate: 1) expertise in conducting a training program for hazmat employees and 2) the ability to reach and involve, in a training program, a target population of hazmat employees..	\$4 million
Supplemental Public Sector Training (SPST) Grant	These grants serve the purpose of aiding national non-profit organizations with training instructors to conduct hazardous materials response training programs for individuals with a statutory responsibility to respond to hazardous materials accidents and incidents..	\$1 million

MAP-21 required PHMSA to submit a report to Congress by October 2013 providing a detailed accounting and description of the HMEP grant expenditures by each grant recipient, including the amount of, and purpose for each expenditure. In addition, MAP-21 imposed a biennial reporting requirement on a State, political subdivision of a State, or Indian tribe that levies a fee in connection with the transportation of hazardous materials. In order to collect and report this information to Congress, PHMSA must receive approval to collect the necessary information in accordance with the Paperwork Reduction Act (PRA) (44 U.S.C. §§ 3501-3521). Once PHMSA obtains authorization to collect the additional information, grantees will be asked to submit quarterly and final reports containing the requisite information. PHMSA published a 60-day *Federal Register* Notice on December 4, 2013.⁵ PHMSA expects to publish the 30-day *Federal Register* Notice in June of 2014 in order to begin collecting the information during Fiscal Year 2015. The information collected during Fiscal Year 2015 will be reported on in the 2016 report to Congress.

Paperless Hazardous Materials Communication Pilot Program

MAP-21 authorized PHMSA to conduct pilot projects to evaluate the feasibility and effectiveness of using paperless hazard communications systems. Upon the completion of the pilot program, a report to Congress is due by October 2014. Here, the PRA is also applicable, so PHMSA must receive approval to collect the necessary information. Once PHMSA obtains authorization to collect the additional information, it will be authorized to initiate a pilot program. PHMSA published a 60-day *Federal Register* Notice on July 19, 2013.⁶ PHMSA published the 30-day *Federal Register* Notice on November 25, 2013.⁷ In preparation for PRA approval, PHMSA hosted a roundtable discussion with law enforcement and the emergency response community on March 13, 2014.

In a matter related to the paperless hazardous materials communication initiative, PHMSA issued an SP to UPS, Inc., on December 30, 2013 authorizing the electronic transfer of shipping paper information for certain low hazard shipments within their ground operation. PHMSA has made it a priority to cut red tape and improve efficiency and moved expeditiously with this SP. Further, sharing hazardous

⁵ See 78 Fed. Reg. 72972 <http://www.gpo.gov/fdsys/pkg/FR-2013-12-04/pdf/2013-29015.pdf>

⁶ See 78 FR 43263 <http://www.gpo.gov/fdsys/pkg/FR-2013-07-19/pdf/2013-17363.pdf>

⁷ See 78 FR 70399 <http://www.federalregister.com/Browse/Document/usa/na/fr/2013/11/25/2013-28168>

materials information electronically will improve transportation efficiency without sacrificing public safety.

Improving Data Collection, Analysis, and Reporting

MAP-21 required PHMSA, in consultation with the United States Coast Guard, to conduct an assessment to improve the collection, analysis, reporting, and use of data related to accidents and incidents involving the transportation of hazardous materials. MAP-21 further required PHMSA to review methods for collecting, analyzing, and reporting accidents and incidents involving the transportation of hazardous materials. Upon completion of the assessment and review, PHMSA was required to report to Congress on its plan and timeline for improving the collection, analysis, reporting, and use of data, including revising PHMSA databases, as appropriate. PHMSA reported its findings to Congress on September 3, 2013. PHMSA continues to implement its recommendations based on the availability of resources.

Other Mandates and Programmatic Changes

Enhancing Emergency Preparedness, Response, and Training

As mentioned in the HMEP Grant Report discussion above, MAP-21 provided several provisions related to PHMSA's HM Grants Program. These changes came after PHMSA had already taken steps to enhance the program. Specifically, MAP-21 requires HMIT and SPST grants to be awarded through a competitive process. In addition, under MAP-21, PHMSA must ensure that HMEP and SPST grants are awarded to emergency responders that will have the ability to respond to effects of accidents or incidents involving the transportation of hazardous material in accordance with existing regulations or National Fire Protection Association (NFPA) standards. Further, SPST grant agreements must specifically state that training courses shall comply with Federal regulations and national consensus standards for hazardous materials response.

As a result of its initiatives and the MAP-21 provisions, PHMSA has increased its oversight of grantee training programs to ensure that responders and instructors trained under PHMSA hazardous materials grant programs will have the ability to protect nearby persons, property, and the environment from the effects of accidents or incidents involving the transportation of hazardous material in accordance with existing regulations or NFPA standards.

PHMSA is increasing its outreach to ensure that States, Native American Indian Tribes, Territories, and eligible non-profit organizations are aware of the MAP-21 program changes. This outreach will also serve to broaden the pool of applicants and ensure that stakeholders are aware that the HMIT and SPST grants are awarded competitively. PHMSA has created an online certification program that will require HMEP and SPST grantees to certify during the application process that they will use the grant funding to train to the NFPA standards.

Hazardous Material Enforcement Training

MAP-21 mandated that by April 2014, PHMSA develop uniform performance standards for training hazardous materials inspectors and investigators on: (1) how to collect, analyze, and publish findings from inspections and investigations of accidents and incidents involving the transportation of hazardous materials; and (2) how to identify noncompliance with the HMR, and take appropriate enforcement action. The legislation also provided several options for how these standards are presented, including: (1) guidelines; (2) best practices and standards; or (3) standard protocols to coordinate efforts among Federal, State, and local jurisdictions. PHMSA, in collaboration with its modal partners, developed the standards, and the agencies have implemented them. Additionally, PHMSA is evaluating the effectiveness of the standards in coordination with other modal administrations.

Hazardous Material Technical Assessment, Research and Development, and Analysis Program

MAP-21 authorized PHMSA to develop and implement a hazardous material technical assessment, research and development, and analysis program. On January 17, 2014, PHMSA hosted a research and development forum to discuss the program with regulated entities and its modal partners, and to solicit comments. The forum transcript has been posted to PHMSA's research and development website (<http://phmsa.dot.gov/initiatives/r-and-d>). The comment period for the research projects discussed at the forum closed on March 21, 2014. PHMSA is currently reviewing 11 comments received from our stakeholders. Though commenters are very supportive of our program, they do recommend changes to research activities involving liquefied petroleum gas odorization, anhydrous ammonia, and explosives. PHMSA will post the comments and responses to the research and development website.

Wetlines

MAP-21 mandated that the Government Accountability Office (GAO) to evaluate and report on the safety of transporting flammable liquids in the external product piping of cargo tank motor vehicles (wetlines) by October 2013. MAP-21 also required that PHMSA not issue a final rule regarding wetlines prior to the completion of GAO's evaluation. Per MAP-21, the GAO completed an audit on wetlines-related issues and published the final report on September 11, 2013. This final report recommended that PHMSA re-evaluate its regulatory cost-benefit analysis to address uncertainty in the assumptions and data. PHMSA is committed to working with our stakeholders to discuss safe solutions to the risks posed by wetlines.

GROW AMERICA Act Overview

On April 29, 2014, Secretary Foxx sent a transportation bill, entitled the GROW AMERICA Act, to Congress for consideration. This proposal is a \$302 billion, four-year surface transportation reauthorization that provides increased and stable funding for our Nation's highways, bridges, transit, and rail systems.

The GROW AMERICA Act will also improve PHMSA's ability to oversee the safe transportation of hazardous materials. Below is an overview of the key hazardous materials safety provisions of the GROW AMERICA Act.

PHMSA Key Provisions of the GROW AMERICA Act to Improve the Safe Transportation of Hazardous Materials

Increases Authority to Stop Unsafe Conditions

The GROW AMERICA Act will increase DOT's authority to stop unsafe conditions or practices that may cause an emergency situation involving a threat to life, personal injury, or harm to property or the environment. The Act will provide clear authority for PHMSA to issue Orders to industry in response to emergency situations without prior notice similar to the authority already available to the Federal Railroad Administration and the Federal Motor Carrier Safety Administration.

Reduces Taxpayer Burden to Administer the Special Permit and Approvals Program

The GROW AMERICA Act will authorize the Secretary to collect a reasonable fee for the administration of the special permits and approvals program. This fee will offset some of PHMSA's costs associated with the special permit and approvals process and transfer some of the costs of running the Special Permits and Approvals program from taxpayers to the program's applicants.

Improves National Emergency and Disaster Response

Hurricane Sandy is the most recent example of a common problem that impedes the transportation of hazardous materials during national emergencies: differing opinions between Federal, state, and local officials regarding the types of hazardous materials authorized to move in affected areas that can delay or prevent the delivery of critical shipments. The GROW AMERICA Act will remedy this problem by clarifying DOT's authority to facilitate the movement of essential hazardous material during a national emergency or disaster.

Establishes Hazard Abatement Authority

The GROW AMERICA Act will combat a growing problem of unscrupulous shippers abandoning hazardous materials in transit by providing DOT with the authority to hold a non-compliant shipper accountable for the remediation or disposal costs for the non-compliant shipment. This authority will build upon the improvements in hazardous materials enforcement and the civil penalties program that were implemented through MAP-21. Finally, this requirement will act as a deterrent to those who knowingly violate the hazardous materials regulations.

Expands Inspection of Non-Domestic Entities

There remain instances when a person outside the U.S. seeks to manufacture, re-qualify, or inspect DOT specification packaging or special permit cylinders or certify compliance with U.S. regulations. The GROW AMERICA Act grants broader inspection and investigation authority over non-domestic entities, extending authority to those seeking approval from PHMSA to perform these functions outside the U.S. Once approved, the applicant must allow hazmat investigators to inspect the applicant's process and procedures, while bearing the cost of the initial and subsequent inspections. This shift in procedure will place the cost of the inspection on the user, and not on U.S. taxpayers.

Enhance Communities and Improve Safety

Enhances Registration Requirements

The GROW AMERICA Act will expand the hazmat registration requirements to any entity that performs a regulated activity requiring training. This expanded registration requirement will provide more effective oversight of the hazardous materials program and provide a more accurate representation of the population composition of our stakeholders.

Improves the Effectiveness of the Hazardous Materials Emergency Preparedness Grant Program

The GROW AMERICA Act will improve the Hazardous Materials Emergency Preparedness Grant Program and build upon the improvements in MAP-21. The GROW AMERICA Act will reform the grant program by making several changes to ensure greater accountability of grantees and maximize the impact of grant funds. This proposal includes amendments to improve the effectiveness of the grant program. Some highlights include but are not limited to:

- Reorganize the criteria and institute comparable requirements for all instructor training grants to ensure that all funds are effectively used to the fullest extent possible by hazardous materials employees and emergency responders;
- Broaden grants eligibility to increase competitiveness;
- Allow states to apply for grants for “planning and emergency response” to give grantees the flexibility to direct funds between eligible planning and emergency response activities according to need. This will enable states to more fully utilize grants;
- Eliminate the pass-through requirement to allow grantees to provide funding towards training and planning activities as they deem appropriate and to allow for more time to utilize HMEP awards;
- Allow PHMSA to provide supplemental grants to grantees with a proven need for supplemental emergency response funding; and
- Increase administrative cost allowance from 2 percent to 4 percent to permit better oversight and performance of the HMEP grants program.

Increases Penalties for Violations

The GROW AMERICA Act strengthens PHMSA’s ability to ensure compliance by increasing the maximum amount that we can assess for a civil penalty, as well as provide us with the ability to address situations where a higher penalty is warranted. The Act will increase the maximum civil penalty amount from \$75,000 to \$250,000; or, for a violation that results in death, serious illness, or severe injury to any person or substantial destruction of property, from \$175,000 to \$500,000. As I previously stated, PHMSA believes clear and appropriate civil penalties can improve transportation safety by acting as a deterrent for those violating the regulations.

Conclusion

Thank you for the opportunity to discuss PHMSA’s implementation of MAP-21 and the recently submitted GROW AMERICA Act. We very much appreciate your partnership as we work together to safeguard people, property, and the environment from hazardous materials transportation risks. I truly believe that the GROW AMERICA Act is a logical and important step forward in improving hazardous materials transportation safety.

Senator BLUMENTHAL. Thank you very much.
Assistant Secretary Winfree.

STATEMENT OF HON. GREGORY D. WINFREE, ASSISTANT SECRETARY FOR RESEARCH AND TECHNOLOGY, U.S. DEPARTMENT OF TRANSPORTATION

Mr. WINFREE. Thank you, Chairman Blumenthal, for the opportunity to visit with you, Ranking Member Blunt, and members of the Committee to talk about the Department’s progress in implementing MAP-21 and the administration’s proposal to reauthorize surface transportation programs, the GROW AMERICA Act. The Office of the Assistant Secretary for Research and Technology con-

tinues to lead the Department's research coordination and commercialization efforts, driving cross-modal collaboration to meet our challenges.

Congress has long recognized the value of transportation research by funding research and data programs through the Highway Trust Fund. In my organization, three programs that you authorized under MAP-21 have continued to advance departmental goals for American transportation: the Intelligent Transportation Systems Research Program, the University Transportation Centers Program, and the Bureau of Transportation Statistics.

In ITS research, some of our team's progress has been attracting public attention, most notably through the ITS-funded connected vehicle safety pilot in Ann Arbor, Michigan, which is the largest such test program in the world and conducted—in collaboration with the University of Michigan's Transportation Research Institute. The results led to NHTSA's decision to proceed with vehicle-to-vehicle—V2V—communication technology for light-duty vehicles. This technology will improve safety and has the potential to reduce non-impaired fatalities by up to 80 percent. The Department continues to work toward connected vehicle applications for heavy-duty vehicles. And the Federal Highway Administration is preparing to issue guidance in 2015 for installing vehicle-to-infrastructure—V2I—applications for roadway safety and improved traffic operations. I note that all of the success and the standards that support it are based upon the availability of the 5.9-gigahertz dedicated short-range communications spectrum.

Our UTCs continue bringing innovation to the transportation system and developing the next generation of transportation leaders. We are extremely pleased with the nationwide consortia of universities selected under the open competition enabled by MAP-21. Covering over 120 universities, which bring expertise in multiple disciplines, UTCs enable some of the systemic interdisciplinary cross-modal research we need to address increasingly complex challenges. We are seeing exciting work in robotic bridge inspections, automated vehicles, wireless monitoring of bridge integrity, and disaster resilience, with much more to come.

BTS continues to fulfill its role as one of the Federal Government's 13 independent statistical agencies producing key information to illuminate decisionmaking. BTS places a priority on making data readily available and has improved access to data through such applications as the National Transportation Atlas Viewer and to all forms of transportation data through the National Transportation Library. BTS products include the commodity flow survey and its transborder freight data program, which are the foundations of our understanding of freight transportation. The range of BTS's airline data is widely cited. BTS led the establishment of the continually growing *SafetyData.gov* website and supports MAP-21's performance measurement goals.

The item with the largest impact on my organization took place after the passage of MAP-21. January's omnibus appropriations bill transferred the powers and authorities of the Research and Innovative Technology Administration to the Office of the Assistant Secretary for Research and Technology. This is the culmination of an initiative begun in the President's FY-13 budget request. The

elevation to the Office of the Secretary will bring more leadership insight into transportation research and development and data and statistics, and will heighten their influence on policy discussions and decisionmaking. The Trust Fund programs of the Office of the Assistant Secretary will continue their existing missions and remain key components of the newly elevated office.

In addition, the elevation returns responsibility for positioning, navigation and timing, and spectrum management to the Secretary's office, appropriate for a critical responsibility which impacts all nonmilitary users of GPS. We will continue to oversee the wide-ranging and cross-modal efforts of the Volpe National Transportation System Center and the Transportation Safety Institute.

The GROW AMERICA Act recognizes that research and data play a significant part in improving safety, transportation planning and decisionmaking, and preparing the Nation's workforce. The GROW AMERICA Act requests a few changes in research and data programs; specifically, implementing the results of the second Strategic Highway Research Program by allowing the allocation of up to 25 million per year from the highway account; establishing a national cooperative freight research program in support of departmental freight goals, including a targeted focus on hazardous materials; creating a priority multimodal research program enabling cross-agency research and innovation in three priority areas: infrastructure systems resilience and recovery, a zero-emissions transportation system, and a multimodal STEM education and workforce development program.

Thank you for this opportunity to update you on our progress, and I look forward to your questions.

[The prepared statement of Mr. Winfree follows:]

PREPARED STATEMENT OF GREGORY D. WINFREE, ASSISTANT SECRETARY FOR
RESEARCH AND TECHNOLOGY, U.S. DEPARTMENT OF TRANSPORTATION

Chairman Blumenthal, Ranking Member Blunt, and Members of the Committee, thank you for the opportunity to appear before you with my colleagues today to talk about the Department's progress in implementing the directions of the Moving Ahead for Progress in the 21st Century Act (MAP-21), and the Administration's proposal to reauthorize surface transportation programs, called the GROW AMERICA Act. I will also discuss the recent elevation of the former Research and Innovative Technology Administration (RITA) into the Office of the Secretary.

Transportation research, technology and data are critical tools for improving the safety, efficiency, mobility, capacity and state of good repair of America's transportation systems; and for reducing transportation's environmental and societal impacts. The Office of the Assistant Secretary for Research and Technology is pleased to continue to lead the Department of Transportation's research coordination efforts, driving cross-modal collaboration to meet 21st Century challenges.

Continual development and adoption of new processes and advanced technologies are reducing project delivery times, improving system operations and capacity, extending the life of transportation infrastructure, and providing actionable information to travelers and transportation planners. As Secretary Anthony Foxx noted at January's Transportation Research Board's Annual Meeting, research and data have a significant role to play in addressing America's infrastructure deficit by improving planning and adopting innovative best practices; stretching scarce resources with well-researched, data-driven innovation resulting in smarter capital projects which are built better and cost less, making more funding available for projects. A good example of this is accelerated bridge construction, reducing the time for small bridge replacement—saving funds which can then be used for other work.

Moving Ahead for Progress in the 21st Century Act (MAP-21)—Our Progress

The Congress has long recognized the value of transportation research by funding research and data programs through the Highway Trust Fund. In my organization, three programs that you authorized under MAP-21 have continued to advance our common goals for American transportation—the Intelligent Transportation Systems (ITS) Research Program; the University Transportation Centers (UTC) Program, and the data and information programs of the Bureau of Transportation Statistics (BTS). Allow me to take a few moments to describe the progress we have made.

Intelligent Transportation Systems (ITS) Research

In ITS research, some of our team’s progress has been attracting public attention—most notably through the ITS-funded Connected Vehicle Safety Pilot, the largest such test program in the world, conducted through the University of Michigan Transportation Research Institute (UMTRI) in Ann Arbor, Michigan. The Department tested safety applications with everyday drivers under both real-world and controlled test conditions. These test results led to the National Highway Traffic Safety Administration’s (NHTSA) February decision to move forward with vehicle-to-vehicle (V2V) communication technology for light duty vehicles. This technology will improve safety and has the potential to reduce non-impaired fatalities by 80 percent. It would do so by allowing vehicles to “talk” to each other and ultimately avoid many crashes altogether by exchanging basic, anonymous safety data, such as speed and position, ten times per second. This major decision was based largely on the research, technology developments, test deployments, and data collections and analyses conducted under the ITS Research Program. Research indicates that safety applications using V2V technology can address a large majority of crashes involving two or more motor vehicles. With safety data such as speed and location flowing from nearby vehicles, vehicles can identify risks and provide drivers with warnings to avoid other vehicles in common crash types such as rear-end, lane change, and intersection crashes.

But that’s certainly not all. The Department continues to work collaboratively across the Operating Administrations towards connected vehicle applications for heavy duty vehicles, and our colleagues at the Federal Highway Administration are preparing to issue guidance in 2015 for installing vehicle-to-infrastructure applications for roadway safety and improved traffic operations and maintenance, drawing on the connected vehicle data that will be made available. ITS research has enabled multimodal Integrated Corridor Management (in part through demonstration projects in Dallas and San Diego), and Next Generation-911. Additionally ITS is using connected vehicle technology research to reduce congestion, improve road weather information and real-time data capture, and reduce emissions.

In support of these advances, the ITS program continues to assess the legal and policy structures needed to make these safety, operational and environmental improvements a daily reality, with an emphasis on ensuring data privacy and on the technologies enabling security of cyber-physical systems. And, we continue to work actively with our partners in the standards developing organizations (SDOs) to ensure that the many private sector actors involved in ITS deployment—from Original Equipment Manufacturers (OEMs) to suppliers to technology firms to infrastructure and construction firms—all produce interoperable equipment and systems that can seamlessly share the data that enables safety and other applications. We continue to pursue this interoperability with our international partners as well, as transportation equipment and services are a global market. Finally, I note that all of this success, and the standards that support it, are based upon the availability of the 5.9 GHz Dedicated Short Range Communications (DSRC) spectrum. Allocated in the U.S. and internationally for transportation safety, the 5.9 GHz band was specifically selected to enable the ten-times-per-second exchange of information needed to bring to reality the safety improvements that remain the primary goal of ITS research.

University Transportation Centers (UTC) Program

Since the late 1980s, Congress has acknowledged the important contributions made to transportation research, technology transfer, education and workforce development by America’s universities. While the form and structure of the UTC Program has changed many times over the years, the work of the UTCs in developing solutions to the problems faced by the Federal and state departments of transportation, in bringing innovation to the transportation system, and in developing the next generation of transportation leaders, has enriched the Nation.

We are extremely pleased with the consortia of universities selected under the full and open competition enabled by MAP-21. Covering over 120 universities which bring expertise in multiple disciplines, both traditional (civil engineering) and not

(public health, psychology and sociology, studying safety culture), UTCs enable the systemic, interdisciplinary, cross-modal research we need to address increasingly complex challenges that cross traditional boundaries. UTCs do this while educating undergraduate and graduate students in the technical and problem-solving skills we need moving forward—a “win –win” if I’ve ever heard one. I always enjoy the opportunity to meet with the bright young students at our UTCs, to hear about what exciting new things they are developing in the laboratories and classrooms, and how their own lives are changing, even as they add to our transportation knowledge. I encourage the members of this Committee to take those opportunities as well.

In MAP–21, we were directed to expand the transparency of the UTC grant selection process; to include more external reviewers; and to select and fund the selected grants by October 1, 2013. I am pleased to report that we met all of these mandates, and in doing so selected the most vibrant group of UTCs yet. Starting from a relatively new place for us—with no designated UTCs and with a Secretariially-determined set of strategic research goals—we established robust, thematically-focused review teams so that experts in topic areas were aligned with the proposals most appropriate to their areas. While my office was ultimately responsible for the process, well-managed by the hardworking UTC program staff, the review teams drew from all DOT Operating Administrations and from numerous outside experts, organized by topic area. Together, the teams worked through the 142 applications received for the 35 UTC grants—a record response—to bring out the best fits to meet our research goals. As required by MAP–21, each applicant received copies of the written reviews used in the evaluation process, so that those not selected know how to improve their applications for the next time, and those selected know how to improve upon identified weaknesses as they execute the grants. This enhanced process worked so well that we received no complaints about the process or the fairness of the selections. In addition, we were able to recompetete two grants for which we did not receive applications the review teams thought sufficient, instead of being forced to select lower quality applications. It is our hope that this demonstrated process will be continued under the next authorization.

It is exciting to me to see the results we are already starting to garner from our MAP–21 UTCs. For example, in the aftermath of Superstorm Sandy, one of our UTCs collaborated with a private partner to use mobile Light Detection and Ranging (LiDAR) technology to assess storm damage to buildings, roadways, and utilities in the devastated coastal communities of New York and New Jersey. This work has led directly to commercial availability of equipment and techniques to quantify the disastrous effects of a major storm, and to use that data to help communities prepare for and recover from future extreme weather events.

Work in robotic bridge inspections, automated vehicles, wireless monitoring of the structural integrity of bridges, improvements in livability and environmental sustainability, and broad advances in freight movement and capacity, economic competitiveness, passenger safety, and more effective operations and maintenance—all are developments we are already starting to see, and we look forward to more innovations in the future as our UTCs partner with state DOTs, local agencies, transit agencies, rail companies, and the private sector to deliver solutions and a trained workforce for American transportation.

Bureau of Transportation Statistics (BTS)

BTS continues to fulfill its role as one of the Federal Government’s thirteen designated principal statistical agencies, producing key information to illuminate public and private decisions on a range of transportation-related topics. BTS places a priority on making data readily available, and has recently taken steps to improve access to geospatial data through the National Transportation Atlas Viewer and to all forms of transportation data through BTS’ National Transportation Library (NTL). BTS products include the Commodity Flow Survey and its Transborder Freight Data Program, which are the foundation of our understanding of freight transportation and of the Federal Highway Administration’s (FHWA) Freight Analysis Framework (FAF). BTS data on airline traffic, finance, and on-time performance are widely cited. BTS also compiles a wide range of performance data in the National Transportation Statistics and State Transportation Statistics online reports.

While MAP–21 largely continued existing BTS functions and products, there were several new requirements on which we have been making significant progress. Asked to establish a program to integrate safety data across modes, and to address gaps in safety data programs of the Department, BTS led the establishment of the continually-growing *Safety.data.gov*, and is continuing to drive the multi-Operating Administration assessment of safety data gaps. BTS has also expanded its Confidential Close Calls Reporting Program. BTS supports MAP–21’s performance measurement goals by publishing performance data through the National Transportation

Statistics and the Transportation Statistics Annual Report; and by providing performance data to the annual DOT Performance and Accountability Reports.

BTS's National Transportation Library was given a much broader mandate in MAP-21, now being required to serve as a central depository for research results and technical publications of the Department; to provide a central clearinghouse for transportation data and information of the Federal Government; to serve as coordinator and policy lead for transportation information access; and to coordinate efforts among, and cooperate with, transportation libraries, information providers, and technical assistance centers, with the goal of developing a comprehensive transportation information and knowledge network. Accomplishing this far-reaching mandate within the unchanged BTS authorized funding level has been a significant challenge, but we are making progress. The dedicated NTL staff digitized 20,000 pages of DOT historical documents in FY13, and expects to meet the same target for FY14, to make these documents accessible. NTL established the National Transportation Knowledge Network Steering Committee to receive, monitor, and implement coordinated information management projects across the community, and plans to launch a National Transportation Data Archive. NTL will serve as the public access repository for USDOT publications as the Department implements the Office of Science and Technology Policy memorandum, "Increasing Access to the Results of Federally Funded Scientific Research."

Elevation of RITA into the Office of the Secretary

However, the item with the largest impact on my organization took place after the passage of MAP-21. As you know, the Consolidated Appropriations Act of 2014, enacted this past January, transferred "the powers and duties, functions, authorities and personnel of the Research and Innovative Technology Administration. . . to the Office of the Assistant Secretary for Research and Technology in the Office of the Secretary." This is the culmination of an initiative begun in the President's FY13 Budget, which requested the elevation of RITA:

To strengthen research functions across the Department by providing a prominent, centralized focus on research and technology. . . The proposed Office of the Assistant Secretary for Research and Technology will improve coordination and collaboration between operating administrations, resulting in higher quality research outcomes.

The Department has hit the ground running in adopting the changes enacted into law, is transitioning to ensure this new office is the focal point for research across DOT, and is looking across the research investments made in all of the modes to improve the delivery of transportation research and technology programs, and of national statistical programs. I had the privilege of being confirmed by the Senate as the RITA Administrator on October 16, 2013, and was sworn in as the Assistant Secretary for Research and Technology on January 23, 2014. We continue to pursue all of the missions and programs of the former RITA as we transition to the new organizational construct.

The elevation to the Office of the Secretary will bring more leadership insight into transportation research and development, and data and statistics, and will heighten their influence on policy discussions and decision-making. Organizational change does not happen overnight, but I am already seeing how what we do is being drawn into leadership discussions as part of the Office of the Secretary, in a way we were not when we were an Operating Administration. The elevation also places a new emphasis on our research, development and technology coordination and collaboration role, and on our technology transfer functions. In addition, the elevation returns responsibility for Positioning, Navigation and Timing (PNT) to the Secretary's Office, appropriate for a critical responsibility of the Department which impacts all non-military users of the Global Positioning System (GPS). We will continue to oversee the wide-ranging and cross-modal efforts of the Volpe National Transportation Systems Center and the Transportation Safety Institute.

GROW AMERICA Act

The Generating Renewal, Opportunity, and Work with Accelerated Mobility, Efficiency, and Rebuilding of Infrastructure and Communities throughout America Act, or GROW AMERICA Act, is a \$302 billion, four-year transportation reauthorization proposal that provides increased and stable funding for our Nation's highways, bridges, transit, and rail systems, and for the research and data that support them. The GROW AMERICA Act recognizes that research and data play a significant part in improving safety, transportation planning and decision making, and preparing the Nation's workforce as we move forward into the 21st Century. Altogether, the GROW AMERICA Act commits more than \$2.6 billion over four years to advance

research and innovations, ensuring decision makers at all levels will have access to enriched data and analysis, advanced research, and cutting-edge technologies.

The Highway Trust Fund research and statistical programs of the Office of the Assistant Secretary will continue their existing missions and remain key components of the newly-elevated office. The GROW AMERICA Act would provide these programs with a small inflationary increase in funding levels to address critical priorities in delivering actionable research and statistical results to the Department and to our many external partners. However, in coordination with our modal and interagency partners, we are proposing a few changes in the research and data programs to support Administration priorities, especially the proposed freight investment program, which I would like to highlight for you.

New Programs

- *National Cooperative Freight Transportation Research Program:* The GROW AMERICA Act establishes the National Cooperative Freight Research Program in support of Departmental freight goals, including a specific, targeted focus on hazardous materials transportation. (Section 8101)
- *Prioritizing a Multimodal Research Program:* The GROW AMERICA Act creates a Priority Multimodal Research Program enabling cross-agency research and innovation along three priority areas: infrastructure systems resilience and recovery; advanced research towards a Zero Emissions Transportation System; and a multimodal STEM Education and Workforce Development program. (Section 8103)

Changes to Existing Programs

- *Advancing Intelligent Transportation Systems:* The GROW AMERICA Act will improve vehicle and passenger safety by advancing intelligent systems in vehicles and in smarter infrastructure across all modes, and by exploring new ways to utilize real-time information to aid the flow of goods along America's freight corridors.
- *Accelerating Deployment of Highway Technologies and Innovations:* The GROW AMERICA Act allows the allocation of up to \$25 million per year from the Highway Account to implement the findings and results of the second Strategic Highway Research Program (SHRP2), which promises innovations in highway safety, renewal, reliability, and capacity. (Section 2003)
- *Maximizing the Research, Technology and Workforce Results of the UTCs:* The GROW AMERICA Act enhances the effectiveness of the current University Transportation Centers (UTCs) program by enabling funds to flow into cross-disciplinary university transportation research by expanding the sources for grant matching funds to include funding from more Federal-Aid accounts and funding provided by other DOT operating administrations. (Section 8102)
- *Supporting National Goals in Freight Policy and Planning:* The GROW AMERICA Act will improve data and technology support to national freight goals by strengthening the Bureau of Transportation Statistics' (BTS) ability to require responses to freight and intermodal data surveys, and by enabling nationally consistent statistics on maritime port performance. In addition, the Act will add an Intelligent Transportation Systems (ITS) freight research, demonstration and applications focus to the ITS Research Program goals. (Sections 8104, 8105)

Reflecting Organizational Change

The GROW AMERICA Act continues the transformation of research offices, as laid out by Congress, elevating the former Research and Innovative Technology Administration (RITA) into the Office of the Assistant Secretary for Research and Technology. As is the case with other transportation programs, having multi-year certainty of our authorization and funding allows for better planning and decision-making about research and data investments.

Thank you for this opportunity to update you on our progress, and I look forward to your questions.

Senator BLUMENTHAL. Thanks, Mr. Winfree.

I'd like to begin my questioning with Mr. Szabo and really pursue a point that Ms. Quarterman raised and I emphasized earlier, which is that standards need to be sufficiently high, they need to be enforced rigorously, and that penalties have to provide a deterrent to violation of them. And Ms. Quarterman rightly emphasized

the need for increased penalties when they fail to provide a deterrent to violation-of-safety standards.

The experience of Metro-North, I think, provides a national poster railroad in culminating years of neglect and systematic and cultural failure in a series of catastrophic incidents costing lives and injuries, as well as dollars. And I think that a lot of eyes were opened by the series of reports, most significantly in the Connecticut Post, that detailed the absence of significant penalties over a period of time, 2004 to 2013, where most of the penalties were in the range of \$5,000 or \$10,000—the total, I think, was around \$220,000—for a series of defects in procedures and operations that were serious and severe. One of them, for example, applied to Robert Luden, a Metro-North worker killed on the tracks near West Haven as a result of a senseless and needless neglect of safety by Metro-North. The \$5,000 was nowhere near a measure of the kind of message and penalty that should have been imposed. More recently, a report about Kenneth McGrath, whose death in 2009 resulted in a penalty of \$2,000. These relatively minuscule penalties of \$2,000 or \$5,000 or \$10,000—I think the highest over that period of time was \$39,000—plainly, I think, provide an inadequate deterrent to violation-of-safety standards.

My question to you is, What is the reason for these small-to-minuscule penalties? What can be done to increase them? And isn't it, in a sense, a mark of inadequate scrutiny—and it may be that your authority needs to be increased—that we have this kind of pattern?

Mr. SZABO. Well, thank you for the question, Senator.

First, let me say that, you know, the series of events on Metro-North were an eye opener for all of us. As you've heard me say, you know, the goal of my agency is continuous safety improvement. It's what I expect from myself, it's what I expect from my agency, it's what I expect from the industry that we regulate. And so, even though we've been able to drive down accidents, injuries, and fatalities over the past decade to record lows, we always look for the avenues that we can take to improve, to ensure that we continue to achieve new record lows. How do we get to zero? And then, once we get there, how do we stay there?

Certainly, penalties and fines are one piece of the mix. It's one tool in our toolbox. It's one that we try to use effectively. You know, if you're a carpenter, a hammer is important—you bet—but, it's not the only tool that you use to build a house.

Certainly, coming out of the ranks, as a railworker that's been out there, and as a union rep that's written up complaints to the agency I now head, there has always been a frustration with the level of penalties. So, one of the things that I did when I got here was make it a priority to do what I could with the tools that I had to increase our level of penalties. In the 5 years I've been here, Senator, we have, in fact, assessed the highest number, the highest dollar amount, of penalties in any 5-year period in the agency's history.

Senator BLUMENTHAL. But, those penalties, in the Metro-North incidents, were extraordinarily low, were they not?

Mr. SZABO. Well, there's a penalty schedule that we have to follow. And, while certainly we can and will once again take a look at reviewing that penalty schedule, our authority is somewhat lim-

ited, I think, to get to the level of penalties that you're talking about.

Senator BLUMENTHAL. Well, that's—

Mr. SZABO. But, Senator—

Senator BLUMENTHAL.—where I think the—

Mr. SZABO. Yes.

Senator BLUMENTHAL.—important point is, whether we need to increase that authority or provide some other incentives for the agency to be more rigorous and vigorous, more aggressive, in its enforcement. Because, frankly, Mr. Szabo, a lot of riders have lost trust and confidence, not only in the railroad, but also in the enforcement authority of the FRA, and similar of Federal watchdogs that are responsible for protecting safety.

Mr. SZABO. Well, and we certainly owe the public. You know, we owe the public better. We always owe the public better. We have our work to do as an agency, and certainly Metro-North as a railroad, to regain that trust.

But, I really think that if you take a look at what has been proposed in the GROW AMERICA Act, it has the package that we need to achieve the next generation of safety. And, while penalties and enforcement are one piece of that puzzle, I would argue that it's only a piece. What we've learned through Metro-North is less about the need for more inspection, more enforcement, and, frankly, comes more down to the need to advance proactive risk-based programs that identify and mitigate risk in advance, things like confidential close calls in the system safety rule that will be final later this year that will require all passenger railroads to do an analysis and then file a risk mitigation plan with us that we review and approve. And this gets refreshed on an annual basis. So, I think there are more tools in the package that we have in Buy—or, GROW AMERICA—is the appropriate mix of tools.

Senator BLUMENTHAL. I'm going to return to this line of questioning. My time is expired for right now, but—

Mr. SZABO. Sure.

Senator BLUMENTHAL.—we'll have a second round. And I appreciate your responses to my question. I continue to believe that there has to be attention to the penalty provisions to make sure that they are commensurate with the kind of neglect and failing that we've seen at Metro-North on occasion to deter that kind of violation of basic standards that the public has a right to expect.

I'm going to turn to Senator Thune, the Ranking Member of the Commerce Committee, now.

**STATEMENT OF HON. JOHN THUNE,
U.S. SENATOR FROM SOUTH DAKOTA**

Senator THUNE. Thank you, Mr. Chairman. I want to thank you and Senator Blunt for holding this hearing. I've said many times that maintaining and improving our Nation's infrastructure is absolutely vital to our country's economic prosperity. And it's also essential that we have a reliable and a safe system of transportation in this country.

You all represent agencies that are key to that mission, and I appreciate you being here and your willingness to answer questions.

I want to direct the first question, if I might, to Administrator Szabo, and that has to do with positive train control. I was pleased to see that the GROW AMERICA Act, for the first time, formally acknowledged the need for an extension. But, my question has to do with why there wasn't a straightforward extension of the entire deadline, as opposed to trying to deal with this, as has been suggested, on a case-by-case basis, knowing full well that none of these railroads are going to be able to meet that 2015 deadline.

Mr. SZABO. Senator, we really believe that the package that we've put together under GROW AMERICA, particularly relative to positive train control, gives us the right tools and provides the right balance to most advance and ensure public safety. You know, we believe—you've got two extremes on this argument. And every time I come and testify, I hear it from the different Senators—you know, those that are saying that under no circumstances should you expand the 2015 deadline, to those that say there should be a blanket extension. We believe that, with the proposal that we have for provisional certification, that, by working with each carrier to modify their implementation plan in setting up the milestones that fit for each railroad, based on the technical and programmatic challenges that each one has individually, and then being able to provisionally certify a piece of the system, that we can best advance the benefits—achieve the benefits of as much of PTC as possible, as soon as possible. So, we really think that it's the right approach that recognizes the challenges while also having that accountability and giving the public what they deserve.

Senator THUNE. But, doesn't it make sense if you want to hold the railroads' feet to the fire: there's no deadline in what you're talking about. Many of us, my colleagues on the Committee here and others, have introduced legislation that would provide this blanket extension that I referred to, which does have a hard, firm deadline. We know that no single railroad, freight or passenger, is likely to meet the 2015 deadline, but the proposal that you're suggesting here doesn't have any particular sense of urgency attached to it, especially, if you're going to be able to waive this kind of on a case-by-case basis. So, it strikes me, at least, that it would make a lot more sense if you want to treat the railroads in sort of a fair way, you have to push that out there, knowing that they're not going to be able to meet the 2015 deadline, but still keeping that sense of urgency and their feet to the fire, if you will.

Mr. SZABO. The key, though, Senator—it's still critically important that you give us the authority that we need for provisional certification. Because, otherwise, we can't approve an implementation plan that doesn't fully meet the deadline. We can't approve partial deployment. And so, the industry needs, as well as my agency needs—the industry deserves—the opportunity for us to have the appropriate element of flexibility to work with them on the challenges that they're facing while still advancing as much of the system as possible, as quickly as possible. The technology will save lives. It would have saved lives on Metro-North. You know, so it's critical that we have the tools that we need to properly manage deployment.

Senator THUNE. Well, I think the legislation also has the provisional certification that you talked about, as well. It has some flexi-

bility, but it also has the deadline attached to it. It just seems like a better approach.

Mr. SZABO. Well, we'd certainly be willing to work with you on some technical assistance to try and strike the right balance, here.

Senator THUNE. OK.

Quickly, because I have a lot of colleagues that have questions. I want to direct this to you, Ms. Ferro. This spring, both the DOT Inspector General and the GAO reviewed the CSA program, and you reportedly concurred with the IG's six recommendations, but two GAO recommendations remain open, and the official FMCSA comments were not provided to the GAO. Does FMCSA plan to take action on those recommendations? And could you provide us an update? And, if not, explain why.

Ms. FERRO. Certainly. The Compliance Safety Accountability Program, otherwise known as CSA, is, at its heart, a program to improve our overall enforcement and focus on the highest-risk carriers with our limited resources. And the data structure, which takes advantage of over 3 million inspections managed each year to get at the performance of individual carriers, really does provide carriers, as well, an opportunity to look at their own performance and improve, before we even need to get there, if, in fact, they're showing high-risk behavior.

That being said, it is an improvement over the prior system, but it's a program that we can continue to work on. And the GAO report, as well as the Inspector General's report, identify strategies for us to improve both the adequacy of the data, the utilization to ensure we're looking at the highest risk carriers, as well as the access of the data to all—the public that takes advantage of it.

We did, in fact, reply in full to the GAO. I'm sorry you don't have a copy of that. We'll make sure you see that. They received our response last month. And there are certainly aspects of the GAO analysis that we are making full use of. The core component that we disagreed with really relates to a methodology they proposed that isolates the CSA analysis to a very small group of carriers, only the largest ones. And, while large carriers have a significant impact on crash activity across our country, smaller carriers impact about half of those fatalities and injury crashes. So, it's important we look at the full spectrum.

So, to cut to the chase, we are utilizing the recommendations from both agencies in continuing to improve the CSA program, the underlying data analysis, and accessibility to that data.

Senator THUNE. Thank you, Mr. Chairman. Thank you, Senator Blunt.

Senator BLUMENTHAL. Thanks, Senator Thune.

Senator Klobuchar.

**STATEMENT OF HON. AMY KLOBUCHAR,
U.S. SENATOR FROM MINNESOTA**

Senator KLOBUCHAR. Thank you very much, Mr. Chairman. Thank you, to you and Senator Blunt, for your good work in this area.

I just want to start off by saying we need to get MAP-21 done, and we need to move forward on these rail safety rules and everything else. I was just in southern Minnesota on Highway 14, which

has received some Federal funding in the past, but now 125 people have died in two decades on one highway that's a two lane highway in southern Minnesota, a lot of it because of freight that should be on a four lane highway. Some of it because we simply don't have enough rail in this country, and it's not safe enough. And so, in Minnesota, thanks to the good fortune of our neighbors in North Dakota, where they're producing oil and natural gas, it has put a strain on our rail system, and a lot of our ag products are having a hard time finding rail. And we need to upgrade everything we have, as far as I'm concerned, because if we're going to actually be this export economy that we want to be, we need to have a transportation system that's up to the task.

Ms. Quarterman, PHMSA recently sent its proposed rule for rail tank car standards to OMB for review. I know your agency is working diligently to finalize a rule. It's a complex task. Can you tell me when the final rule will be completed?

Ms. QUARTERMAN. I cannot tell you when the final rule will be completed. I can tell you what the process is.

The process is that it goes over to—

Senator KLOBUCHAR. No, I kind of know the process.

Ms. QUARTERMAN. OK.

Senator KLOBUCHAR. I'm just wondering—

Ms. QUARTERMAN. I can assure you, Senator, that—

Senator KLOBUCHAR.—if you have any timeline for when it will be done?

Ms. QUARTERMAN.—Senator, we're working very hard to get the rule out as soon as humanly possible. It's a first priority for Secretary Foxx and for me, so we are working as hard as we can to get the rule out as soon as possible.

Senator KLOBUCHAR. There are currently about 228,000 DOT-111 rail tank cars which are designed to carry a wide range of products, including hazardous and nonhazardous materials. Roughly 92,000 are used to move flammable liquids, yet only about 14,000 of these are built to the latest industry safety standards.

Ms. Quarterman, considering the large number of the DOT-111s in the fleet, is PHMSA considering different rules on what product is being shipped? And would such an approach enable PHMSA and the industry to better apply resources and get the quickest safety improvements?

Ms. QUARTERMAN. Well, the rule that we discussed earlier includes, not just tank cars, it's a comprehensive approach to rail safety. And included in that rule are issues related to the existing and the new tank cars. So, I can't go into the details of what's in that rule, but we are taking a comprehensive approach to deal both with prevention, mitigation, and response to crude-by-rail incidents.

Senator KLOBUCHAR. OK. As you know, we've had one in Minnesota and one in North Dakota. Last month, Canada's Transportation Safety Board announced that all older tank cars used for carrying crude must be phased out by May 2017. How is PHMSA approaching the issue of whether to phase out older tank cars? And has Canada's action increased pressure to include a phaseout requirement as part of the rulemaking?

Ms. QUARTERMAN. I can tell you that we are working very closely with Canada. We are talking to them on a weekly basis about their actions, and coordinating, to the extent we can, actions here with them, as well. We applaud their movement to remove 111 tank cars in three years' time. Secretary Foxx has already said that those cars should be removed from crude oil service, or retrofitted. Canada has the advantage of being able to say, in a public forum, that they can remove those cars from service in 3 years. Because we have a pending rulemaking under the existing—the requirements here in the United States, we cannot say anything comparable on the record until it goes through the rulemaking process.

Senator KLOBUCHAR. OK.

Mr. Szabo, this committee last passed a rail safety bill in 2008. Since then, we all know that the landscape of freight rail has changed dramatically. A transportation reauthorization bill would be an opportunity to update some of the rules and standards that govern the freight rail industry. How is the increase in freight rail traffic over the past few years changed how this committee should view rail safety? And what do you think are the issues we could address in that bill?

Mr. SZABO. Well, thank you, Senator.

I mean, I think it's, first, important to note that, by many respects, rail is, in fact, the safest means of moving both people and goods. When you compare it to the other transportation modes, under most measurements, most circumstances, we're the safest transportation mode. And again, statistically, the industry is at an all time best, part of a decades-long continuous improvement in rail safety, to record low numbers of accidents, injuries, and fatalities.

But, there is no question that the change of products being hauled, and particularly with these hazardous, flammable materials, that it's forcing us to really change the way that we view safety, you know, take a fresh look, a new look, at everything that we think that we have known about safety. Even though we have historically been very, very good, and continue to get better, particularly when it comes to these volatile products, we're going to have to be near perfect. And so, as Administrator Quarterman said, you know, it's a matter of taking a look at everything from the tank car, to understanding the product, ensuring proper classification. You know, those things that we've put into place with the industry through the voluntary agreement are the appropriate steps to be taking, using the routing protocol, using the 27 factors to, through the computer model, ensure that we're using the most safe, most secure route for moving the products, hardening the assets, additional track inspections, both by the industry as well as with my inspector resources, ensuring a higher level of health to the equipment, you know, and continuing on.

Senator KLOBUCHAR. Thank you very much.

Senator BLUMENTHAL. Thank you, Senator Klobuchar.

Senator Blunt.

Senator BLUNT. Thank you, Chairman.

Mr. Szabo, I was confused by your answer on positive train control. Do you have the authority to extend the deadline, or not?

Mr. SZABO. No, we do not. Only Congress can extend the deadline.

Senator BLUNT. Well, that's what I thought. So, you don't have any authority—there are no provisions that you have that allow you to do a provisional certification.

Mr. SZABO. Not at all, Senator. And that's why we believe it's so critical that we be granted that authority so we can manage this in a rational manner.

Senator BLUNT. And does that mean you don't want a deadline in the—

Mr. SZABO. Well, we believe that—

Senator BLUNT. The bill that Senator Thune and I are sponsoring with several other people on this committee sets a new deadline of 2018 and gives you provisional abilities to implement between now and then. What more than that do you want?

Mr. SZABO. I think the key is ensuring that we have the appropriate flexibility that we need with the provisional certifications, the ability to effectively manage the implementation plans on each railroad. I would have to take a look at how your legislation does, or does not, address that.

So, like I say, through technical assistance, we'd be happy to work with you—

Senator BLUNT. Well, since—you don't think the compliance by 2015 by the commuter lines is possible, do you?

Mr. SZABO. I don't believe there is a railroad in this country that will achieve full deployment by 2015. Partial deployment could be possible. The one exception might be Metrolink, in California. There's a fighting chance that they can reach their 2015 deadline. We'll see. But, there's certainly not another railroad in this country that can fully deploy by the 2015 deadline.

Senator BLUNT. Well, since you don't think that anybody can comply with the 2015 deadline, and I don't think that anybody can comply with the 2015 deadline, I'd like you to look at our legislation and give us some advice on how you think it could be improved. We don't want to just blow by this deadline as if it's not there. That's not—surely, that's not the right thing to do. And I'll continue to have some concerns about provisional compliance, for the freight lines particularly, that may put them at some competitive disadvantage.

Mr. SZABO. Right. And it does the opposite, Senator. I think that's a real important point. I saw your question to the Secretary. And we're concerned with that issue, too. Two things. One, I think the final rule amendments that are in executive clearance right now are going to partially address those concerns. And then the approach for provisional certification would fully address those concerns. We agree that this is about advancing safety, not putting somebody who's been out in front on deployment doing all the right things at a competitive disadvantage, where if they have hiccups during early deployment, that it ends up gumming up their capacity.

Senator BLUNT. Well, and I think, also, that early deployment can create test cases where we see what the problems are, what can be done better. I think—

Mr. SZABO. Precisely.

Senator BLUNT.—it could be a helpful thing.

Mr. SZABO. Precisely.

Senator BLUNT. OK.

Mr. SZABO. And that's what provisional certification gives us the flexibility—

Senator BLUNT. And have you had a chance—

Mr. SZABO.—to do.

Senator BLUNT.—to look at the new tower siting agreements that appear to be there between the FCC and the Tribal Councils?

Mr. SZABO. Yes. And we think it's a good first step. There's clearly more work that needs to be done, but we think there is significant movement. But, I would also note that our proposal in GROW AMERICA actually gives FRA a little more formal seat at the table in working with the FCC. So, again, we would urge the adoption of those provisions that we have. We think that it can actually help everybody work through this tower problem with the FCC.

Senator BLUNT. And of the 10,000 towers that still need to be approved, what's your estimate of how quickly the first ones may be approved by the FCC?

Mr. SZABO. I'll have to get back to you for the record on that.

[The information requested follows:]

Mr. Szabo's Response: In May 2014, the Advisory Council on Historic Preservation (ACHP) issued a Program Comment pursuant to its regulations implementing Section 106 of the National Historic Preservation Act (NHPA). The Program Comment provides an alternative method for compliance with Section 106 for certain signal antennas that the railroads need to install for Positive Train Control (PTC). The Federal Communications Commission (FCC) has also begun to issue guidance to provide the railroads and other stakeholders with clarity on the process for the implementation of the Program Comment. Throughout this process FRA has, and will continue to be, a technical resource for FCC. However, FCC is the Federal agency with oversight responsibility and authority for tower approval and is responsible for the implementation of the Program Comment. Therefore, FCC is best able to address specific details and schedules for processing applications received under the Program Comment. FRA would encourage the Senator to reach out to FCC as the agency best able to answer the Senator's question.

Mr. SZABO. But, I think certainly we continue to make sure that the FCC is aware of the sense of urgency. I believe they are. I know the industry, I think, was at least reasonably pleased with the recent movement by FCC. So, we'll keep pressing on the issue.

Senator BLUNT. Ms. Ferro, when Senator Warner was the Chairman of this committee—this subcommittee, briefly—he and I introduced legislation regarding sleep apnea. The legislation required that any action on obstructive sleep apnea be taken only through official rulemaking. That was passed unanimously by Congress, signed into law. I'm told that medical trainers are still referring doctors to past guidance, even though there's no rule that has been promulgated yet. Do you know if that's true or not?

Ms. FERRO. Well, Senator, first and foremost, we absolutely are abiding by the mandate of Congress that any change to the current medical guidance regarding obstructive sleep apnea would be done through a rulemaking.

That being said, what initiated much of the concern, I think, that resulted in that law was that we were working to clarify the information that's on the long medical form that medical examiners who administer the DOT physical for truckdrivers and busdrivers follow, and have followed for years. The same information that they have always had is still in the long form. That has not changed. And, in fact, the training that medical examiners—the curriculum

that medical examiners are required to follow, now that we have a registry of certified medical examiners in place, follows the same provisions that have always been there. So, there has been no change, I assure you.

Senator BLUNT. Let's follow up on that between your—

Ms. FERRO. We will—

Senator BLUNT.—office and my office, and maybe the Committee, and be sure what—we understand what “no change” means.

I think the legislation was not very complicated and—

Ms. FERRO. That's right.

Senator BLUNT.—very specific in what it required. And I'm not sure we're in compliance with what the law now says. So, let's be sure we are.

Ms. FERRO. We will follow up. And I will tell you, for sure, medical examiners are expected, when they examine a truck or a bus driver, to meet—and determine if they meet the physical qualifications for holding a commercial driver's license, they include a full examination of chronic conditions and conditions that could affect that driver's ability to be alert and at all times conscious behind the wheel. So, among those conditions that they have always looked at have been breathing disorders and pulmonary disorders that obstructive sleep disorder falls into. So—

Senator BLUNT. Are you in the process of promulgating new rules on that—

Ms. FERRO. We are not.

Senator BLUNT.—as the law would anticipate?

Ms. FERRO. We absolutely are not. The only—but, we will follow up and—as you directed, and meet with your staff and make sure that there's a clear sense that we are conforming both with the law that you passed last year, as well as a very visible and transparent process.

The requirements haven't changed one bit.

Senator BLUNT. Well, let's be sure we're—

Ms. FERRO. We will.

Senator BLUNT.—in compliance with the law—

Ms. FERRO. Absolutely.

Senator BLUNT.—and follow up on that.

Thank you, Chairman.

Ms. FERRO. Absolutely. Yes, sir.

Senator BLUMENTHAL. Thanks, Senator Blunt.

Senator Fischer.

**STATEMENT OF HON. DEB FISCHER,
U.S. SENATOR FROM NEBRASKA**

Senator FISCHER. Thank you, Mr. Chairman.

And thank you all for being here today.

Administrator Quarterman, as you know, the rail industry worked with a number of agencies in coming to an agreement, and it was a voluntary agreement, on the speed reduction standards that you recently came up with. Does PHMSA support that voluntary agreement?

Ms. QUARTERMAN. Senator Fischer, the Secretary put together a very, I think, aggressive plan, an action plan. The Administrators who are sitting here with me today—Administrator Szabo, Admin-

istrator Ferro, and myself—were there with the Secretary and the Deputy Secretary when we talked to both petroleum and the railroad industries about what immediate actions could they take while we do our comprehensive rulemaking process to improve safety. And one of the items that they put on the table was to restrict the speed. And it is a very important element. So, we are supportive that they have gone forward to do that with respect to certain trains.

Senator FISCHER. Part of that agreement was community relations, emergency response, but specifically to the speed reductions. In working voluntarily with agencies, I think that's a good way for industry to operate. I think it's a good way for the agencies to operate. So, my question to you again is, do you support that? Do you support the agencies coming with industry, with private industry, in trying to reach these voluntary agreements instead of a mandate from the top down always?

Ms. QUARTERMAN. I absolutely support industries coming forward. We think that compliance with regulations is not enough, in many instances, that when we're talking about moving hazardous materials across the country, in the backyards, the main streets of America, both the railroad and petroleum industries have been given a public trust, and complying with the regulations is not necessarily enough. Safety is our ultimate goal. So, absolutely, we think it is great when industries come together and agree, on a cooperative, collaborative basis, to take steps that have not yet been put into regulations.

Senator FISCHER. Do you feel that the railroads negotiated in good faith during the voluntary negotiations that took place?

Ms. QUARTERMAN. I have no reason to view anything otherwise.

Senator FISCHER. I guess I would ask Administrator Szabo the same question. Do you support a voluntary agreement with the railroads with regards to the speed reductions? We all want safety.

Mr. SZABO. Yes.

Senator FISCHER. That's the number one concern. We all want that. We want to make sure that the tank cars that are being refitted, possibly—and I know there are some railroads that are taking the lead on that, in trying to move forward to make sure that we move certain materials in the safest way that we possibly can. Do you think this voluntary agreement was a good step?

Mr. SZABO. I think it was very significant, and certainly commend the industry for coming forward with it. But, as I said earlier to Senator Klobuchar, we have to rethink everything that we know and everything that we've been doing relative to safety. And so, while I think it's an exceptionally good agreement that immediately provides significant benefits to the public on safety, it doesn't change the fact that, as we look at this entire process, from the time the product comes out of the ground until it's delivered to the refinery, that there's more work to be done.

Senator FISCHER. OK, thank you.

I would ask Administrator Ferro—with the new truck driver hours of service rules that you put in place in July 2013, do you think that they're having a substantial impact on productivity? I'm curious, and I wonder how your department is going to measure

and confirm whether any health benefits have really been realized for these.

Ms. FERRO. Absolutely. And so, the hours of service rule that was finalized in December 2011, and, as you note, went into full effect last July, was identified, with rigorous analysis, to project an impact of saving up to 19 lives per year, or at least 19 lives per year, and avoiding at least 500 crashes—injury crashes—and then significantly more crashes and overall net benefit to the Nation. There was also clearly in the analysis a recognition of the economic impact on industry, a recognition and an analysis that identified about a \$500 million economic impact—cost to industry. A small portion of that is the cost to—or some portion is a cost to our law enforcement partners across the country if they went through the retraining.

So, your question as to the point of, “Do we think that has happened yet? What do we think has happened yet?” So, yes, there has been an economic impact on industry. We certainly recognized that that would happen. We identified, through an unprecedented level of both analysis and solicited public input throughout the rule-making process, as much fact and information and data as we could muster from all parties to be sure that we were analyzing the components of the industry that that rule would affect.

The majority of the impact is on the long-haul, over-the-road, irregular-route driver. What we have seen in recent months—and I think you probably have heard from some of these individuals—is that carriers whose schedules are not necessarily an irregular route, but they are scheduled service to their customers, that still exceed a 60 hour, 7 day week are feeling the impact of the rule, as well. And I think, early on, the estimate was, overall, about a 3 percent impact on productivity for some of the sectors.

Now, with regard to the safety benefits, the way crash and injury data is reported, we don’t have the data yet to show, but we certainly do know that it is having an impact, and continue to press forward with a rule that’s in place, and will press forward as we committed, even the rulemaking, to a very robust analysis of fatigue, of measuring fatigue, of monitoring and measuring the impact of the rule itself, going forward. But, with new technologies, we have the ability to do that much better than we could before—the electronic logging devices, onboard technologies, monitoring of drivers. So, all of that will be part of our analysis, going forward, through naturalistic driving studies.

It’s very important to reflect on a history of hours of service rule-making, because, much like what Administrator Szabo described, where there are—we all agree we want to get to safety. And in the motorcarrier industry, no different. We want to drive to zero fatalities. There are different points of view as to how you get there. There’s a great deal of agreement in the middle.

In the case of the hours of service rule, one side of the argument felt we didn’t go far enough in regulating the hours, in the modest changes we made, and the other side feels as though we may have gone too far. Both sides took us to court; and the court, for the first time in 15 years of litigation over hours of service—the court actually deemed that the agency, while—and I think the court’s own language says, “We think the agency has acted reasonably, if incre-

mentally, in tailoring the restart to promote driver health and safety.” But, we now have a rule that has withstood that challenge. And so, it’s very important, in our view, that we continue the analysis. Let’s get through several years of this operation, let’s begin the data collection now, and the analysis now, so we can continue reporting.

Senator FISCHER. And, just short answer, do you have a time-frame when you’ll be able to confirm that?

Ms. FERRO. No, but I’d like to follow up with you on a clearer timeline.

Senator FISCHER. Great, thank you. Thank you——

Ms. FERRO. Yes.

Senator FISCHER.—for answering the question.

Ms. FERRO. Thank you.

Senator FISCHER. I appreciate it.

Thank you, Mr. Chairman.

Senator BLUMENTHAL. Thank you.

Senator Ayotte.

**STATEMENT OF HON. KELLY AYOTTE,
U.S. SENATOR FROM NEW HAMPSHIRE**

Senator AYOTTE. Thank you, Mr. Chairman.

Administrator Ferro, it’s my understanding that your agency is planning to move forward on an issue of increasing the minimum insurance requirements for the trucking industry. Is that true?

Ms. FERRO. We have recommended that—we’re moving forward with an ANPRM to gather data, so yes.

Senator AYOTTE. In doing that, will you commit to ensuring that you comply with the Motor Carrier Act of 1980 that says that the Secretary shall also include an estimate of the impact of the regulations upon the safety of motor vehicle transportation, the economic impact on the motor carrier industry, including, but not limited to, small and minority motorcarriers and independent owner/operators and the ability of the insurance industry to provide the designated coverage?

Ms. FERRO. Yes, you absolutely have our—my commitment and the agency’s commitment——

Senator AYOTTE. Very good.

Ms. FERRO.—in that regard.

Senator AYOTTE. And will you make that information public in your analysis——

Ms. FERRO. Yes, we will.

Senator AYOTTE.—when you announce the rule?

Ms. FERRO. Yes, we will——

Senator AYOTTE. Excellent.

Ms. FERRO.—as we do. And we’ll hope that comments—if we aren’t going far enough, we hope comments will help us get to that——

Senator AYOTTE. Thank you, I appreciate that.

Ms. FERRO. Thank you.

Senator AYOTTE. I want to follow up on the hours of service rules issue. One question—I have a couple of questions. As I understand, you’ve talked about the rigorous—in response to Senator Fischer’s question, the rigorous analysis in issuing that rule. And the Fed-

eral Motor Carrier Safety Administration, the FMCSA, recently released the results of its MAP-21 mandated study on the real world impacts of the hours of service. And that was something that was recently released, correct?

Ms. FERRO. Correct. That's correct.

Senator AYOTTE. So, I assume, when you're talking about "rigorous analysis," that's what you're referring to, in terms of part of your analysis in issuing the hours of service rule.

Ms. FERRO. It is an example of the rigor that we use. It is, in fact, in relation to two lab studies in a congressional requirement, the broader naturalistic—

Senator AYOTTE. So—

Ms. FERRO.—going forward, yes.

Senator AYOTTE.—I want to ask you a few questions about the study.

Ms. FERRO. Sure.

Senator AYOTTE. The study pointed out that drivers operating under the old rule had greater lane deviations, as I understand it. What was the difference, in centimeters, between the two groups of drivers?

Ms. FERRO. So, let's back up so I can just kind of put it in context. The study in question was a study actually mandated by Congress—

Senator AYOTTE. Right. For good—

Ms. FERRO.—in MAP-21—

Senator AYOTTE.—reason, because many—

Ms. FERRO. Yes.

Senator AYOTTE.—of us have heard deep concerns about the hours of service rule and how it is impacting the economic—economically, jobs. And so, Congress, obviously, asked you to do a—

Ms. FERRO. Yes.

Senator AYOTTE.—study as a—

Ms. FERRO. Yes.

Senator AYOTTE.—result of it.

Ms. FERRO. Yes. Fair enough. And so, it was very carefully scripted—the language was very scripted and constrained us from doing the kind of broader, I think, naturalistic analysis that we're going to be doing, going forward. So—

Senator AYOTTE. So—

Ms. FERRO. So—oh, pardon me.

Senator AYOTTE. So—I'm sorry—so, I just—

Ms. FERRO. Yes.

Senator AYOTTE.—want to make sure that I get a couple of these answers.

Ms. FERRO. Sure.

Senator AYOTTE. So, you feel that that study—so, let me just get to the heart of it, then—you felt that study was constrained. Because the study itself, as I understand it, only included an average of less than 12 days' worth of data with 106 drivers. Is that true?

Ms. FERRO. It's true that it contained close to a half a million miles, and it included, for each driver, 12 days of driving.

Senator AYOTTE. With 106 drivers, correct?

Ms. FERRO. That's correct.

Senator AYOTTE. And you think that's a large enough sample?

Ms. FERRO. The study requirements were very closely tied by statute—

Senator AYOTTE. OK, but—

Ms. FERRO.—to the way we conducted the—

Senator AYOTTE.—but do you think—

Ms. FERRO.—way we conducted the lab study.

Senator AYOTTE.—that's a large enough sample to draw conclusions? That's my question.

Ms. FERRO. Well, interestingly enough, it's the largest naturalistic driving study that has ever been done in the commercial vehicle industry, so it is statistically a very relevant study, yes.

Senator AYOTTE. Did the study show that drivers operating under the new rule were more likely to operate during daytime hours than nighttime hours?

Ms. FERRO. It reflected that drivers who are most impacted by the rule changes—specifically, the 1:00 to 5:00 a.m. sleep requirement, if they use the restart—are most impacted. So, the nighttime-schedule driver is the most impacted driver.

Senator AYOTTE. So, my question, simply, to you is that, under this rule, we are going to have more drivers driving during daytime hours. Isn't that true?

Ms. FERRO. That will be part of what we continue to analyze, going forward. We have not seen that. It is an incremental impact. And in the mix of all the commercial traffic that starts early mornings across our country, we think that impact is far outweighed by the improved driver safety.

Senator AYOTTE. Well, you would agree with me that there's a higher crash impact during the day, isn't that correct?

Ms. FERRO. Yes, it's a much higher concentration of traffic during the day.

Senator AYOTTE. So, one of the things I'm hearing from my constituents is that, because of the new hours of service rule, they actually are going to have to put more trucks on the road during the daytime hours, which are the highest crash times, because, obviously, there's more traffic during the day that you could interact with. And so, have you come up with data as to how many more trucks are going to have to be on the road, because of the new hours of service rule, during daytime hours that, again, in some ways, I think, could undermine what you're hoping to accomplish with this rule?

Ms. FERRO. The analysis in developing the rule did identify a marginal impact, but, again, outweighed by the improvements of a better-rested driver.

Senator AYOTTE. But, do you—

Ms. FERRO. But, we—

Senator AYOTTE.—do you know how many more trucks are going to have to be on the road during daytime hours? And do we have analysis of those numbers so that we can understand (a) the impacts on congestion, (b) the impacts on, potentially, I suppose, the environment, as well, the impacts on more crash potential, because we've got more drivers and congestion during the daytime hours? Do we know the answers to those questions?

Ms. FERRO. Those are all core elements of a data collection effort. The rule has been in place now, everybody's been operating on it,

for 11 months. So, again, we are gearing up for doing improved and additional analysis with new data.

Senator AYOTTE. See, here's the problem that we face.

Ms. FERRO. Yes.

Senator AYOTTE. You're gathering this data, and yet, what I'm hearing already from companies that have to operate under these rules, both large and small, that have a significant impact on our economy, is that they are going to have to drive more during the day, they're having to put more trucks on the road. So, by the time we have this data, instead of having done the analysis in advance, we can have a situation where we are not having the impact we want to have on safety, number one, which we all want to make sure people are safe and secure, and, second, we see the negative impacts on the economy, which—I'm shocked at how many businesses are coming up to me, telling me about the impact of this rule. And it's not just long-haul businesses. I was with a short-haul beer distributor this week, and the problem is, they require the long haul to get their product to them, and then they drive short-haul distances. So, I think there are many impacts to this rule. And, my concern is that we've gone forward with it without the type of analysis of how many more trucks we'll have on the road as a result of this.

Ms. FERRO. Well, again, we did significant analysis in the rule-making process, solicited as much data and information as we could possibly solicit. What has clearly transpired is that the trucking industry is hitting profitability levels that they've never seen before. I mean, this is among the strongest period that the trucking industry has ever experienced, when you look at their returns. They are healthy. It has not been an easy change for all companies. The vast majority—85 percent of the industry out there—is operating—based on the analysis we had done. There are those that have had to make adjustments, and many have made those adjustments. There are some for whom it has been harder. And I recognize that. And I started, last December, saying, "Please, let's sit down, let's walk through the logbooks, let's look at the experiences you are having, let's get the facts." I was out in Minnesota, I was down in Arkansas. We just had a meeting in Virginia recently. Again, we are very—I am committed, and the agency is committed, to gathering the kind of data, to recognizing where the impacts are so that we can build the right analysis, going forward.

Senator AYOTTE. Well, I appreciate that. I know my time is up.

In New Hampshire, we have the largest wholesale—the largest food wholesaler in the country—CNS Wholesale Grocers—and they're seeing a very significant impact, I mean, because of having to get food there on time.

Ms. FERRO. Yes.

Senator AYOTTE. And also during seasonal issues, and also weather issues, which are significant across the country and in New England. So, I would ask, also, that you take their concerns into consideration, as well.

Ms. FERRO. Absolutely. Absolutely.

Senator AYOTTE. Thank you.

Senator BLUMENTHAL. Thank you.

Senator Rubio.

**STATEMENT OF HON. MARCO RUBIO,
U.S. SENATOR FROM FLORIDA**

Senator RUBIO. Thank you, Mr. Chairman.

Thank you all for being here today.

Administrator Szabo, thank you for being here, as well. I wanted to talk to you briefly about All Aboard Florida, which I know is a project you're aware of. As it's currently proposed, the public benefits of that project would largely be concentrated in the areas like West Palm Beach, Fort Lauderdale, Miami, and Orlando, where the stops are, but it would impose some costs and impacts to all local governments along that corridor. There is this feeling along the corridor in some of the areas that don't have that concentration, that there are virtually no public benefits provided to them, but all the costs that come along with this project. We're hearing a lot of concern about that from our constituents.

In particular, I wanted to ask you a couple of points and see where FRA is with regards to this. In the midst of conducting an environmental impact statement for the project, I've heard from constituents and local officials who support this project, and I've also heard from constituents, including many in the Treasure Coast, which is just north of West Palm Beach, expressing concerns about the impacts this could have on their communities. The issues they're concerned about include safety at the gate crossings and noise pollution, among others.

I've passed these comments along to the FRA as we've gotten them, and I hope the agency has reviewed them. Can you share with us whether you are taking these concerns into consideration when you're making assessments and conducting oversight over this project?

Mr. SZABO. Yes. Senator, it's really important, and I strongly encourage you, as well as all citizens, to stay engaged in the EIS process to make sure that they get their concerns—their voices heard, and get on the record in that process. Because that process is, in fact, what is used to make sure that these concerns get addressed as the project moves forward.

So, you know, yes, we're hearing the concerns, we're making sure that everything gets forwarded to the record. Rest assured, there will be a robust process with public hearings. And for those people that have reached out to us, we'll make sure that they're aware of those public hearings. We'll make sure that they're fully publicized.

So, all of these concerns get on the record, and we ensure that there are measures to address these concerns as part of that record.

Senator RUBIO. Let me ask specifically about safety. There's already been an EIS conducted on the West Palm Beach-to-Miami segment. And FRA issued a finding of "no significant impact." In that finding, the FRA lists over 120 locations for proposed crossing upgrades. Is the FRA proposing that those crossings be upgraded, or are those upgrades that are being recommended by All Aboard Florida? Do you know?

Mr. SZABO. No, we intend to hold All Aboard Florida to the highest standard of safety. We have guidance that is out there for the grade crossing protection, approaches, and systems that we expect in any of our—in this case, it's not a high-speed rail project, it's a

regional express project, but there are standards for that. And we expect that high bar to be met.

Senator RUBIO. So, it's safe to say that the FRA is going to be monitoring these crossings to ensure that they're upgraded and to ensure that the public safety is protected? You're not just deferring to All Aboard Florida on issues like crossing upgrades.

Mr. SZABO. No, we plan to hold them accountable on that.

Senator RUBIO. OK. On the funding side of it, as you may be aware, All Aboard Florida has applied for a railroad rehabilitation and improvement financing loan. My question is about the review of this loan. Does FRA strictly look at the financial stability and proposed business plan when deciding to award the loan, or do you take local comments and concerns, like the safety and environmental ones that I've mentioned, into account, as well?

Mr. SZABO. Yes. When it comes to the loan, it really comes down to two simple questions. Are they eligible? And, in this case, the answer is yes. And then, two, can we make a finding of repayability? It's strictly a mathematical—

Senator RUBIO. It's a financial review.

Mr. SZABO. That's right.

Senator RUBIO. You don't take into account—

Mr. SZABO. That's right. When it comes to the loan, it's not about public policy, it's about, "Is it eligible? And can we make the documented finding of repayability?" So, it's a financial transaction.

But, the EIS is the process that the public needs to continue to use to make sure their voices are heard and that their concerns get addressed.

Senator RUBIO. All right. I have one last question, and it has to do with Sun Rail, a different project.

Mr. SZABO. OK. We'll go to Orlando.

Mr. SZABO. Yes, exactly. It's a new commuter rail system, for those that are not familiar with it, that just started operations last month. There was an incident in which a car stalled on the tracks and was struck by a Sun Rail train. Luckily, there was no one injured, but the collision, along with other close calls on the rail lines, has prompted calls for additional safety measures on the system. In fact, yesterday, the Florida Highway Patrol announced that it's going to be patrolling Sun Rail intersections to make sure drivers are following the law.

So, as the agency with safety jurisdiction over Sun Rail, is FRA looking at these incidents? And what role does the FRA play in recommending safety precautions or improvements?

Mr. SZABO. Are we looking at it? Absolutely. Senator, it comes back to a couple of things. First off, the three fundamental premises under Operation Lifesaver, the three E's: education, enforcement, and engineering. And we need to make sure we're advancing all of these. But, I really take you back to what we're proposing in GROW AMERICA. There are significant benefits in there relative to grade crossing safety. That continues to be our biggest challenge nationwide. While I talk about the dramatic drop in rail accidents, incidents, injuries, fatalities, across the board, the one vexing challenge we have is on grade crossing safety. And through GROW AMERICA, there would be funding available for local communities to make grade crossing enhancements. We also need, to the extent

possible, to advance what I call “sealed corridors,” eliminating grade crossings, where possible, with the strategic placement of overpasses and underpasses so we ensure the efficient flow of pedestrians, trains, vehicles. But, the safest grade crossing is one that doesn’t exist.

Senator RUBIO. OK. Just to close up, I’ll go back to All Aboard Florida for a moment. As you work through the EIS process and the public hearings and so forth, those will be announced? In essence, how can my constituents best know where and when these hearings are going to take place, and how they could best provide input?

Mr. SZABO. There’ll be significant public notice, but we’ll also make sure that your office is aware.

Senator RUBIO. Thank you.

Mr. SZABO. So, it’s not just going to be the traditional public approach. We’ll make sure that your office is aware of those hearings.

Senator RUBIO. And we’ll work with the congressional delegation in Senator Nelson’s office, as well, in making sure that we get people to turn out and, in fact, get engaged in this process. So, thank you.

Mr. SZABO. OK. Thank you.

Senator BLUMENTHAL. Thanks, Senator Rubio.

And the record should note that Senator Nelson was here earlier, and expressed to me his interest in these areas of inquiry. And he had hoped to return. I’m not sure that he’ll be able to do so.

I want to come back, Mr. Szabo, to the penalty issue.

Mr. SZABO. Yes.

Senator BLUMENTHAL. Because I think that the record here of minimal and minuscule penalties really is emblematic more than symbolic of a problem that really spans the entire area of scrutiny here, and pertains to other agencies, as well. And to come back to the Luden and McGrath incidents, wouldn’t you agree with me that the \$5,000 penalty, under those circumstances of neglect, the severity of the consequences, the seriousness of the safety violations, is atrociously inadequate as a measure of what happened here.

Mr. SZABO. Senator, I don’t know the specifics of those two cases, but I do know the process that we go through, that we’re required to go through as we assess fines, and that we do, in fact, take a look at the severity of the violation. You have to realize that the penalty is relative to the violation, not necessarily the outcome of that violation. And so, there has got to be a—

Senator BLUMENTHAL. Well, when you say “not necessarily”—

Mr. SZABO.—direct connection. Well—

Senator BLUMENTHAL. When you say “not necessarily,” it can be. And in both instances, there were deaths.

Mr. SZABO. But, it—Senator, as I understand it, in the one case, in 2009, before I was with FRA, it’s my understanding, if I’ve been briefed properly, that it was relative to radio procedures that occurred after the fatality. So, it had nothing to do with the fatality itself, but it was a failure on the part of the engineer or the conductor to say the word “emergency” three times, which is required under our radio regulations. You have to say, “Emergency, emergency, emergency” before you start speaking. And so, the fine was for his failure to say that.

But, the point I make is, we have to make sure that we have a legally sustainable position. We use the penalty schedule that's in place.

Senator BLUMENTHAL. Well, what's your explanation of the Luden incident? You were at the agency at that time.

Mr. SZABO. Yes, I—I'm not—which specific—I don't know these by—

Senator BLUMENTHAL. That's the West Haven death. A worker was struck on the West Haven line—

Mr. SZABO. Yes.

Senator BLUMENTHAL.—after the controller—

Mr. SZABO. You know, I will say this, that clearly—

Senator BLUMENTHAL.—the controller failed—

Mr. SZABO.—clearly—

Senator BLUMENTHAL.—to prevent a train from—

Mr. SZABO. Yes.

Senator BLUMENTHAL.—going on the same track where he was working.

Mr. SZABO. Clearly—

Senator BLUMENTHAL. And the railroad failed to have in place basic technology that was state-of-the-art for railroads around the country.

Mr. SZABO. Yes. Our regulation will address roadway worker prevention. In fact, that regulation, final rule, should be out this fall—we're targeting for September—that will require the appropriate protections for all roadway workers and, in fact, would address that case.

But, coming back to the penalty itself—

Senator BLUMENTHAL. In other words, you will issue a regulation that might have saved his life.

Mr. SZABO. Yes, we've already been in the works. That's been—

Senator BLUMENTHAL. And why—

Mr. SZABO.—in our pipeline.

Senator BLUMENTHAL.—why wasn't that issued earlier?

Mr. SZABO. It's part of a pipeline, Senator. We have a process that we have to go through. My agency's the first step in that process, then it goes into clearance with the offices upstairs, the offices by—of the Secretary, and then it goes over to OMB. And so, our regulatory approach is for us to continue to constantly come up with rules that feed into that pipeline, come through the pipeline. There has to be the appropriate periods of public comment and review. And so, it's a never-ending process. We're constantly feeding them through.

So, this is the—one of the rules that were required, actually, under the Rail Safety Improvement Act. It's been in the hopper, moving through the pipeline—

Senator BLUMENTHAL. How long has that regulation been in the pipeline, as you—

Mr. SZABO. I'm not sure when it actually started, but I do know this, Senator, that we actually complete some kind of regulatory document more than once a month. We complete about 15 a year that we put into and move through the process. So, it's a never-ending flow.

You know, Senator, not only did the Rail Safety Improvement Act require of us an unprecedented number of rulemakings, regulations, studies, and reports, but it also at that time promised us 200 additional employees, you know, positions that were not filled, or at least not immediately filled. They've been partially filled now. But, we work every day as effectively and efficiently as we can with the resources that we're given.

Senator BLUMENTHAL. Well, on the Rail Safety Improvement Act of 2008, the Inspector General of the Department of Transportation found, just last—a year ago, April—that 9 of the 17 mandated rules had not been issued. I understand that two have been issued since then. When are the other six rules going to be issued?

Mr. SZABO. I know that—I would have to actually take a look at what the six are, but there would be a couple of them that I believe are waiting on the training standards. Some of these have to be queued up—

Senator BLUMENTHAL. Well, can you give us dates for when those rules will be issued?

Mr. SZABO. I can provide them to you. I can give you an update right now of where my pipeline is today. The final amendments on positive train control are due to be out this month. Training standards for railroad employees, a final rule is due to be out this month. Our risk-reduction program for freight railroads, the notice of proposed rule is due to be out in April—I'm sorry, in August. Our system safety program for commuter railroads, the final rule, we're targeting for October. The roadway worker protection that I was talking about, that final rule is scheduled to be done in September. Passenger equipment safety standards for high-speed train sets, the notice of proposed rule is due to be out in November. Our fatigue management plans, the notice of proposed rule is targeted to be out in November.

Senator BLUMENTHAL. Well, I think you may have covered them—some of them, some of the six, because these outstanding rules involve risk-reduction plans, safety—

Mr. SZABO. Yes, that will be—final risk reduction will be final—

Senator BLUMENTHAL.—fatigue management—

Mr. SZABO.—in October.

Senator BLUMENTHAL.—training standards, emergency breathing apparatus—all of those six rules will be finalized in November?

Mr. SZABO. Emergency breathing apparatus will not. We have a significant challenge there with the cost-benefit ratio. Obviously, any rule that I promulgate has to go through a rigorous cost-benefit ratio, and we have to be able to prove that the benefits, you know, equal or outweigh the cost. And we've got a real challenge on finding a cost-effective way to advance emergency breathing apparatus.

Senator BLUMENTHAL. Just so we're clear here, these are rules that were authorized and required by the law approved in 2008.

Mr. SZABO. That is correct.

Senator BLUMENTHAL. So, here we are, 6 years later, and they still haven't been issued. What is the reason for that delay?

Mr. SZABO. We prioritize our rules and move them as efficiently and effectively as we can through the pipeline. So, the highest pri-

ority for us, obviously, was positive train control. That was the single most important regulation that we could get out that would have the greatest benefit to the public on safety. And the complexity of that rule, the need to go back and make amendments to it, you know, dealing with suits that happen with rules, coming up with—trying to get a cost-benefit ratio that would work. There are complexities here. And so, we prioritize all of these rules, start feeding them into the pipeline, and advance all of them as quickly as we can.

But, the number of rules that were required of us was an unprecedented level, likely unmatched by any other period of time in the agency's history.

Senator BLUMENTHAL. The NTSB currently has 56 open recommendations to you. For some of them, the NTSB has given a, quote/unquote, "unacceptable response," in fact, on 29 of the recommendations, meaning that the FRA failing to move in the right direction to implement those recommendations. I also understand this is the highest number of open unacceptable recommendations for any entity within the United States Department of Transportation. Some of these recommendations concern rules that, as you've mentioned earlier, could have prevented the Metro-North catastrophic incidents; for example, inward- and outward-facing recording and audio devices on local—

Mr. SZABO. Senator, that would not have prevented that accident. In fact—now, don't get me wrong. We believe inward/outward-facing cameras have safety benefits. That's why back in 2013, we chose to make it a part of our rulemaking program for 2014, engaged the RSAC on it. Certainly, it will help in accident investigations. So, there are safety benefits. But, sir, it would not have prevented Spuyten Duyvil. And, in fact, the requirements that we put forward in our emergency order were, in fact, the very steps that were appropriate to immediately eliminate those risks: the signal upgrades, the civil speed, you know, restrictions enforcement.

As I said, every rule that we want to promulgate, every rule we want to move, has to go through a cost-benefit ratio. And we're not allowed to take the benefits twice. So, for example, the benefits of Spuyten Duyvil, preventing that, are being captured in the positive train control rule. So, when I go to advance a rule now on inward/outward-facing cameras, I'm going to have a challenge, relative to my cost-benefit ratio, on what it would have prevented.

So, this is just one of the challenges that, you know, as agencies, we face. It's part of what we deal with, but we attempt to deal with effectively.

Senator BLUMENTHAL. Well, I am not here to debate you. My point was not that it would have, not that there was any certainty that it would have prevented Spuyten Duyvil, but that it could have. Inward- and outward-facing cameras could have provided a deterrent to that conductor nodding off.

Mr. SZABO. Yes.

Senator BLUMENTHAL. In other words, his knowing that he was on camera. There are a variety of other rules here that might have similarly prevented Spuyten Duyvil, including research that would mitigate fatigue, which is recommendation—

Mr. SZABO. And again, that's about to be completed. Our fatigue mitigation plans will be required, under the risk reduction and system safety program, so—

Senator BLUMENTHAL. Rules that would have greatly enhanced inspection practices, which might have prevented the derailment in Bridgeport, which resulted from the failure to inspect and maintain properly that track, causing the joints to fail and the derailment to occur. You observed, yourself, that there were actions that might have been taken by Metro-North, and actions that could have been required—

Mr. SZABO. Yes.

Senator BLUMENTHAL.—by FRA rules, that would have prevented these—

Mr. SZABO. We go back, Senator, after every accident, no matter how large or how small, to review what we can do differently. It's all a part of our drive for continuous safety improvement.

Our approach, we use our data to—and it goes into a computer model—to allocate our resources. It's, you know, the staffing allocation model. And so, we use our inspection data to ensure that we're strategically deploying the limited resources that we have. As you've noted before, we only have the resources to inspect about 1 percent of the Nation's rail trackage each year. And so, we have to follow our data.

And it's following that data, it's that approach, that has been so effective in driving this 95 percent drop in accidents, injuries, fatalities to record lows.

Senator BLUMENTHAL. Let me just ask you—

Mr. SZABO. That—but—

Senator BLUMENTHAL.—a more general question. Wouldn't you agree with me that these rules have to be issued more quickly?

Mr. SZABO. I wish that that was feasible, Senator. But, you know, all I can assure you is that—

Senator BLUMENTHAL. Well, what would it—

Mr. SZABO.—with the resources—

Senator BLUMENTHAL. What do you need for it to happen?

Mr. SZABO. Well, the important thing to note here is, it's a matter of growing the entire pipeline. Even if you give me more resources, which, of course, I always love, you know, to have more resources—all that allows me to do is enter the rules into the pipeline more quickly. But, there's still going to be a bottleneck having it flow through. It's a matter of resources at every step of the process.

The point I was coming back to, though, sir, is that I believe that we can, in fact, continue to improve safety every day. In 2013, we had fewer accidents than in 2012. In 2012, we had fewer accidents than in 2011. My goal is to ensure, in 2014, we have fewer than we had in 2013. And so, I was talking about our data based approach to inspection. There's no question that, when you take a look at Metro-North—and certainly, if you talk to Canada, if you take a look at Lac-Megantic, there was no data in either case that would have triggered the fact that there was an extraordinary amount of risk there.

And so, while we should not throw away what has worked so effectively for us the past decade, there's no question we have to lay

over on top of it additional steps. And so, under GROW AMERICA, I'm talking about a three-pronged approach. We continue our data based oversight and enforcement program, but we have to get to the second step, which is the progressive risk-reduction, risk-analysis programs that, one, will be required in the system safety program—that final rule will be done—what did I say?—the target is for October of this year. Over and above that, GROW AMERICA gives us the resources we need to make confidential close-calls reporting a nationwide program. And we think that that's critically important. You know, from what we've seen in the pilot projects where this has been implemented—most notably, our most mature pilot project, there was a 70 percent—70 percent—reduction in accidents and injuries. And so, we believe that this has tremendous potential to get us to the next level of safety.

And in that regard, Senator, I had told you—I had promised you—that when the Deep Dive report was done, we were going to use it as a learning tool for the entire industry and for my agency. And I called together all the commuter railroad CEOs, from across the country, to New York. Metro-North hosted us. They all responded, brought staff. There were 100 people in that room. And we went through that Deep Dive report, you know, had a lessons-learned discussion on it, and then had an open discussion on all of them, “All right, based with this new knowledge, what are you going to do? What are each one of you going to do to be more proactive and identify and mitigate these risks well in advance?” A very robust discussion.

Based on that, a meeting with all the commuter rail CEOs in about 10 days at their after-meeting and bringing in—

Senator BLUMENTHAL. I hear you—you'll make that meeting. We won't keep you that long.

Mr. SZABO. We might. But—Senator, I'll have to make that meeting—but, we're going to have a full-blown, several hour conversation on confidential close calls. And the president of the Union Pacific Railroad, who's had my most successful pilot project, at his own expense is flying to that meeting to engage with these CEOs and share his experience in why he believes it has so much value in advancing safety.

To the other piece—so, this is what we're doing with the industry to learn from that—the other piece I talked about that I have to learn, my agency has to learn. So, I brought in all of my regional administrators from across the country for that meeting in New York. Two reasons. All of them have commuter properties within their jurisdiction, so I wanted them to be a part of the conversation. But, then, we all came back here to D.C. and spent a day together taking a look at and talking about those things that we need to do differently. We're doing good work. We know we must always do better work. We're at a record low number of passenger fatalities, but that doesn't bring back the lives of those four people that perished up on Metro-North. I know I own that. Our goal is to get to zero, and stay there. And with what we're proposing in the GROW AMERICA Act, I'll have the tools to get us there.

Senator BLUMENTHAL. Mr. Szabo, I've given you the floor to provide a full answer, and I very much appreciate—

Mr. SZABO. Thank you.

Senator BLUMENTHAL.—your doing so.

And I want to make clear to you that the critical questions that I've been raising are not directed at you, personally, or even solely at your agency. They're really directed at a broken system for rule-making. What you've referred to as a "pipeline" is more like an obstacle course ridden with hurdles that are insurmountable for many of these essential rules that protect health and safety. And it is a broken system, not only for your agency and your rules, but for many other rules in the Federal Government. And so, I hope we can use your agency as an example of how the system can be improved, because we can debate whether specific rules—cameras facing in and out, alerters, automatic train control, as distinguished from positive train control—whether these basic safety measures—

Mr. SZABO. Yes.

Senator BLUMENTHAL.—could have prevented—no one can say they would have prevented—

Mr. SZABO. Senator, to—

Senator BLUMENTHAL. But, the point here is, they should have been issued long ago. The recommendations made by the NTSB should have been implemented long ago. And that may be an issue of resources or complexity of decision issues or the failings of the administrative system itself, and the Administrative Procedure Act perhaps should be reviewed. But, one way or the other, the system has to be reviewed and changed.

Mr. SZABO. Well, thank you for indulging me, Senator, because, you know, I do take this very, very personally. It's personal to me. As I said, I come out of the ranks. I've had my share of close calls. I don't know any railroader that hasn't. I've had five friends killed on duty. I've been to those funerals, I know those families. And so, when it comes to safety, this is very personal for me.

And yes, I want to achieve perfection. We're not there yet, but every year I've been here—and frankly, my last two predecessors, every year, made continued progress. And, you know, my staff knows that it's all about continuous safety improvement.

And, Senator, I can't tell you how much I believe in this team of professionals that I have—these inspectors and my staff. These are incredibly dedicated people, they work so hard, and this mission is personal for them, also. And so, we're truly on the same page with what it is we want to achieve.

Senator BLUMENTHAL. Let me ask you about the Deep Dive report.

Mr. SZABO. Yes.

Senator BLUMENTHAL. Are you satisfied with Metro-North's response so far?

Mr. SZABO. At this point, they have certainly said all of the right things. And from what I've seen, I'm seeing the right things. But, you know, it's going to take time to play out. My Deep Dive team continues to have a presence up there to monitor their compliance with what they have promised us. We continue to meet with senior leadership every 30 days. We also continue to meet with the labor folks up there just to hear what we hear from them at the ground level.

But, certainly when I talk with Joe Giuliotti and Tom Prendergast, and I'll be meeting with them personally again this week—I think they're in to see me on Thursday, I believe—the appropriate level of commitment clearly seems to be there. You know, they understand, as I said we do, the job that we have to do to regain the confidence of the riders up there. And I believe they're up to the task.

Senator BLUMENTHAL. So, fair to say they're saying the right things, but the jury's still out on whether they're doing the right things.

Mr. SZABO. They're saying the right things. We're seeing the right things in the initial steps. But, you know, it's going to take time. There's a lot of work up there, and particularly when it comes to changing safety culture. That is a drawn-out process. It doesn't happen overnight. And so, it's going to take just continued—continued reinforcement. But, I clearly believe that they're heading in the right direction.

Senator BLUMENTHAL. On the 100-day plan that they have announced and promised to fulfill—in fact, by June 11, so we're coming close to it—have you been working with them on that 100-day plan?

Mr. SZABO. Staff has been engaged. Yes, my regional administrator is up there on a regular basis. As I said, even parts of my Deep Dive team, which I brought in from across the country from other regions, have been engaged with them. So, yes, we're—they're cooperating with us, we're cooperating with them, and we're monitoring their progress.

Senator BLUMENTHAL. And do you have a view as to whether that plan will be, in fact, achieved?

Mr. SZABO. As I said, at least at this point they are clearly on track to achieve what they have set out to do, and now it becomes our job to continue to monitor that progress.

Senator BLUMENTHAL. Do you have any assessment as to why the Metro-North bridge that went down recently failed to open, or failed to close once it had opened, as to what the reasons were for that mishap?

Mr. SZABO. We will get you a fuller explanation for the record.

But, as I understand it, that bridge is well over 100 years old. You know, it really speaks to the state of the infrastructure, particularly on the Northeast Corridor, and is one of the things that our proposal under GROW AMERICA is explicitly put together to address: modernizing that infrastructure to make sure that it is more safe, more reliable, and more efficient. This asset on the Northeast Corridor, you know, is one of the prize assets that we—it's one of the best passenger rail markets in the world—in the world. But, because of decades and decades of underinvestment, it has never reaped its fullest potential. And so, that's the case in that bridge, and, you know, the concerning thing is, there are so many other bridges and tunnels on the Corridor that are of a similar age.

Senator BLUMENTHAL. And again, it's not just about the Metro-North railroad, or even—

Mr. SZABO. That's right.

Senator BLUMENTHAL.—the Northeast Corridor. Senator Coons noted for me—and, in fact, wanted me to ask you about—a bridge on I-495, which, late yesterday, encountered a similar problem. It's a bridge over the Christina River, I believe, in Delaware, which now has been shut down. It is closed indefinitely. It carries about 90,000 vehicles a day, and it will have a huge impact in creating congestion, from Florida to Maine.

Mr. SZABO. Yes.

Senator BLUMENTHAL. Especially in trucking.

Mr. SZABO. You know—is this a rail bridge or a highway bridge? This is a highway bridge, OK.

Senator BLUMENTHAL. Highway bridge.

Mr. SZABO. But, to rail bridges, Senator—to rail bridges, you know, there are a couple of elements of GROW AMERICA that really help with railroad bridges. I talked about the two pieces, the one for Amtrak to be able to bring their railroad to a state of good repair. That's a critical part. The second piece is for other corridors to be upgraded through competitive grants. And these are the kind of infrastructure improvements we're talking about.

But, the last one I want to touch on is a grant program for short-line railroads. And I think this is critical, particularly as we talk about the movement of crude oil. The Class I railroads, for the most part, can take care of themselves. They have deep pockets. But, the short lines are very capital constrained in what is a very capital intensive industry. And so, there are bridges out there, there's track structure out there, that have not been upgraded to modern standards. And so, in GROW AMERICA, we're advocating for competitive grants for short-line railroads to make critical safety upgrades to bridges, critical safety upgrades to track structure to be able to safely haul heavier loads, and critical upgrades to signaling systems for short lines. So, we're looking to address this in our proposal.

Senator BLUMENTHAL. I think one of the problems we can agree—and maybe this is an issue that pertains to all your agencies—is the resources available for enforcement. And, as you well know, Senator Schumer and I advocated, successfully, for an additional \$185 million in the last fiscal year, Fiscal Year 2014, which was to hire 45 additional critically necessary safety inspectors for your agency. Can you tell me what the status of the hiring is for those—

Mr. SZABO. Yes. We moved immediately—now, again, you don't just, you know, snap your fingers and have 45 people in place, but we have moved immediately on the first 15. Ten of them have, in fact, been hired. But, Senator, to be clear, it takes about a year—by the time you recruit, hire, go through the training that is necessary, it takes about a year to be a qualified inspector to be turned loose on your own. But, we've moved right away when there's an opportunity for more resources. We're not going to wait in—

Senator BLUMENTHAL. Do you need more?

Mr. SZABO.—moving on that. Senator, it's my job to ensure the safety of this industry with the resources you choose to give me. And, you know, so certainly—

Senator BLUMENTHAL. Well, we can—

Mr. SZABO.—I'm thankful—

Senator BLUMENTHAL.—we can only give you what you request. We can give you more, but the best indication of whether you need more is whether you request them.

Mr. SZABO. Yes. It's my job to work with the resources that I have and to strategically deploy—you know, that's why we use the staffing allocation model to make sure that we're as effectively deploying as well as we can.

Senator BLUMENTHAL. Again, I don't want to put you on the spot here, but I'd like to ask you, for the record, to provide me with an estimate, as specific as possible, of the additional resources you need for enforcement.

Mr. SZABO. OK.

Senator BLUMENTHAL. And I'd like to make the same request of all of your agencies.

Mr. SZABO. Thank you, Senator.

Senator BLUMENTHAL. Not to be critical of what you've done in the past, but simply to show what we need to do to have adequate enforcement of the rules and laws on the books. If they're on the books and they're not enforced, they're dead letter. In fact, they're worse than dead letter, because they encourage noncompliance. People who know that rules aren't going to be enforced aren't going to obey them. When the penalties aren't sufficient, there's no incentive to obey them. If they're part of the cost of doing business, the big companies that you regulate will thumb their nose at your agencies, which is to say at public health and safety. So, I'm going to ask that, for the record.

And let me just conclude with these questions, Mr. Szabo. My understanding is that the maximum penalty for the violations of orders and rules such as pertained in the Luden—Robert Luden incident—was \$25,000, and that the—in the case of egregious and aggravated cases, the maximum is \$105,000. Is that correct?

Mr. SZABO. I believe that's correct. For the record, I can confirm that for you.

Mr. SZABO. Those are established via statute. But, there are other elements that come into play as we're determining how much a particular violation—you know, what we'll be able to sustain with a fine. So, it's not for every violation that's out there, that we can instantly go and levy the maximum against them.

Senator BLUMENTHAL. Can you give me examples of when the maximum of \$25,000 or \$105,000 have been imposed?

Mr. SZABO. We'll get you that for the record. That way I can let you know what the history has been, those cases where that may have been done, and the legal basis that was in place to support that.

Senator BLUMENTHAL. How quickly can you provide that for the record?

Mr. SZABO. I'll put staff to work on it. But, again, there's a clearance—

Senator BLUMENTHAL. These are cases that have already—

Mr. SZABO. Yes.

Senator BLUMENTHAL.—occurred, they have already been closed, the penalty's been imposed. I'm asking for examples of them.

Mr. SZABO. I will put staff to work on it today, Senator, but there's a clearance process on everything that we provide.

Senator BLUMENTHAL. Why was the Luden death on those tracks in West Haven not an egregious and aggravated case?

Mr. SZABO. For the record, we'll get you, again, what we believe was the legal basis for our fine. But, Senator, again, I want to come back to something that I said earlier, that the purpose of fines is to ensure compliance, it's not necessarily to punish. And, you know, the hammer is but one tool that we have in our toolbox, and we need to make sure that we have multiple approaches to drive continuous safety improvement.

Senator BLUMENTHAL. Well, it may be only one tool, but it is one of the preeminent tools. And when you fail to use it, you are leaving yourself, essentially—

Mr. SZABO. Yes. Well, as I said, Senator—

Senator BLUMENTHAL.—weak and worse—

Mr. SZABO.—the 5 years I've been here, we have, in fact, you know, set a record for the highest dollar amount of fines levied for any 5 year period. So—

Senator BLUMENTHAL. But, the—

Mr. SZABO.—with the tools I have—

Senator BLUMENTHAL.—the Luden penalty—

Mr. SZABO.—we're doing what we can do.

Senator BLUMENTHAL.—and I'll just conclude on this point—is only one of minuscule penalties, \$5,000 and \$10,000 over that period of 10 years, that's been documented.

Mr. SZABO. Yes. You know, Senator, certainly we'd be happy to work with you on some technical assistance if you would like to take a look at legislation that addresses our penalty schedule. So—

Senator BLUMENTHAL. Well, if I were in your shoes, I would be advocating for more authority.

Mr. SZABO. We'll work with you.

Senator BLUMENTHAL. Let me ask you, talking about answers for the record—when you were last here, you promised some answers. We still haven't received them.

Mr. SZABO. I—they've been completed, both by me and my staff. I worked on those personally, staff has prepared them, and they're in the clearance process. I certainly had hoped they would have been delivered to you in advance of this, but you should have them very shortly.

Senator BLUMENTHAL. They're in the pipeline?

Mr. SZABO. That's right.

Senator BLUMENTHAL. When are we going to see them?

Mr. SZABO. I can't answer that, other than to say I believe that it's very close. And I—it wouldn't surprise me if it's this week, but I don't control that piece.

Senator BLUMENTHAL. Well—

Mr. SZABO. So—

Senator BLUMENTHAL.—I'm not going to put you—again, I'm not here to embarrass anyone, but I'd like to know who has to clear them. Whom should I contact?

Mr. SZABO. We can—for the record, I'll get you—in fact, I believe, in the Q&A that you proposed to us, we've got in there the process

that is used for clearance. It actually was relevant to at least one or two of the questions that you asked me. So, you know, you'll have that information.

Senator BLUMENTHAL. I thank you all for being here today. And I hope that we can continue this conversation.

I have additional questions for the record. I don't want to detain all of you here. I understand my colleagues may, as well, so we're going to keep the record open for a week.

And again, my thanks to you for spending the time with us and being so forthright and helpful.

The hearing is adjourned.

[Whereupon, at 11:30 a.m., the hearing was adjourned.]

A P P E N D I X

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. JOHN D. ROCKEFELLER IV
TO HON. ANNE S. FERRO

Question. The Federal Motor Carrier Safety Administration (FMCSA) uses Hours of Service regulations to help prevent fatigue-related accidents in the trucking industry. After years of working on hours of service regulations, some in Congress want to stop enforcement of important provisions.

I'm concerned this could have unintended consequences on safety. What are the real world impacts of rolling back these provisions?

Answer. Rolling back the once-a-week limit on use of the 34-hour restart that FMCSA adopted in its December 2011 final rule would allow employers to require their commercial truck drivers to work an average of more than 80 hours per week and remain behind the wheel on our Nation's highways. This would significantly increase the risk of a fatigue-related crash. No other mode of transportation allows employers to demand that safety-sensitive employees work such grueling schedules.

The current 34-hour provision that has been in effect since July 1, 2013, limits truck drivers to an average of 70 hours on duty per week. FMCSA estimates that limitation on the use of the 34-hour restart will save 19 lives per year, prevent hundreds of injuries, and improve driver health. Were the proposed legislation suspending enforcement of the rule enacted, these safety benefits would be lost.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. RICHARD BLUMENTHAL TO
HON. JOSEPH C. SZABO

Question 1. As you know, on December 10, just days after the Spuyten Duyvil derailment, the FRA issued Safety Advisory 2013-08. The advisory recommended that all railroads: (1) Review the circumstances of the December 1 Spuyten Duyvil incident; (2) Instruct employees on the importance of compliance with maximum authorized speed restrictions; (3) Remind employees that FRA regulations prohibit the operation of a locomotive or train at a speed which exceeds the maximum authorized speed by at least 10 mph; (4) Evaluate quarterly and 6-month reviews of testing data; (5) Reinforce the importance of communication between train crewmembers located in the controlling locomotive. How has the industry responded to this advisory? Are railroads nation-wide heeding your call and learning from the tragedy of Spuyten Duyvil? What actions have you seen other railroads take due to these lessons?

Answer. On April 14, I addressed an assembly of commuter rail executives from across the Nation and, with Metro-North and the Metropolitan Transit Administration, discussed Operation Deep Dive, its findings and its implications for the rest of the commuter rail industry. In that meeting, many commuter rail executives expressed their intentions to conduct internal and/or contractor-performed evaluations of their operations to identify possible safety culture degradation. For example, New Jersey Transit is conducting both an internal and contractor-performed evaluation of its operations and will brief FRA in early August on the results of both.

In addition, there was strong interest expressed by many in learning more about FRA's Confidential Close Calls Reporting program. A follow up meeting with the Commuter Rail COEs has been scheduled for June 14.

Question 2. How FRA is ensuring that Metro-North is responding to the overall recommendations in the Deep Dive Report?

Answer. As you know, after months of review, the FRA released its Operation Deep Dive Report in March 2014. I was glad to see the results of that study and stay in close contact with your office during its development. The report—as I've said since—is a searing indictment of Metro-North's leadership, its lack of safety culture, and its inattentiveness to the basics of infrastructure maintenance. The report also notes that "FRA will continue its oversight in order to ensure that the im-

mediate improvements implemented during Deep Dive are reviewed, evaluated, and modified.”

Since March, Metro-North has had an opportunity to respond, and on May 15 the railroad released a plan for addressing the many faults outlined in the Deep Dive assessment.

Question 3. What actions are you taking, specifically, “to ensure that the immediate improvements” are “reviewed, evaluated, and modified”?

Answer. FRA meets with Metro-North senior management every 30 days to review the carrier’s progress with continuous safety improvement; the fourth 30-day review meeting is scheduled for July 14. Meanwhile, FRA inspectors are on the property conducting inspections and conducting audits to validate the carrier’s progress in achieving the Operation Deep Dive directed actions, ensure regulatory compliance, and promote railroad safety. Additionally, FRA meets with labor representatives to gain their perspectives on the carrier’s progress.

In addition to oversight, FRA has provided technical assistance to Metro-North to further improve safety. One example is the technical assistance that resulted in a much improved and compliant operational testing and observation program.

Question 4. What is the nature of your day-to-day interactions with Metro-North?

Answer. FRA Region 1 inspectors have a daily presence on Metro-North property with heightened inspections conducted by FRA track and operating practices inspectors as both track infrastructure and transportation oversight were identified in the Operation Deep Dive investigation as problematic. Daily communication between FRA Region 1 and Metro-North senior management occurs. Additionally, FRA Region 1 has initiated and facilitated meetings to promote continuous safety improvement. Examples include the January 14 meeting to promote an improved internal rail flaw inspection protocol, the May 4 meeting to encourage Metro-North to adopt autonomous (unmanned) track inspection technology and improved internal rail flaw protocol, the June 9 meeting to assist Metro-North with moving forward with an autonomous track inspection program, and the June 26 meeting, which established a collaborative outreach effort between Engineering Department management and the Teamsters Union to promote safety culture among maintenance-of-way employees.

FRA is also exploring a possible research project in collaboration with Metro-North on fouled ballast conditions, which are track bed conditions identified by the Operation Deep Dive investigation.

Question 5. How much more often do you review and evaluate Metro-North’s practices in June 2014 than in May 2013?

Answer. There has been heightened oversight in response to the Metro-North accidents and employee fatalities, reaching its highest level during the 60-day Operation Deep Dive investigation, and remaining elevated during the current follow-up monitoring and validation period. Additionally, FRA conducted an extensive accident/incident reporting audit in June 2014. Inspections have measurably increased and oversight continues to be substantially higher on Metro-North’s operations when compared with previous years.

Question 6. Many of the problems outlined in the Deep Dive report are quite specific. These include recommendations that Metro-North use advanced track inspection technology, improve its employee training, improve operational testing and inspections, document testing requirements and test results, ensure blue signal protection is effective, and address fatigue—among maintenance of way employees and controllers, too. But some recommendations are written in rather less-than-concrete terminology, *e.g.*, “develop a plan”; “develop a strategy”; and “consider a change.” In turn, Metro-North has checked the box on many of these proposals, implying they’re well on their way to having been achieved. How can we know—including my many constituents, who were alarmed by the report—that Metro-North is truly making progress?

Answer. FRA inspectors are on the property monitoring Metro-North progress in completing the Operation Deep Dive directed actions. Inspections and audits validate progress as evidenced by the resulting inspection reports and audit reports. FRA will continue with its heightened oversight activities until it is satisfied Metro-North has achieved safety parity with the rest of the commuter rail industry.

Question 7. If Metro-North truly carries out the recommendations, how will it stack up against other commuter railroads? How does it compare now?

Answer. As Metro-North carries out the recommendations and directed actions, it will move to or near the top of commuter railroads. This is because of Operation Deep Dive’s focus on safety culture, FRA’s first attempt to evaluate a railroad’s safety culture, above and beyond the existing regulations. In directing Metro-North to place enhanced safety above on-time performance, to reorganize the safety department to be a force for continuous safety improvement, and to improve its training

across all operating departments, FRA has taken the unprecedented action of directing a railroad to improve its safety culture to the benefit of its customers and its employees.

Currently, Metro-North is moving in the right direction and, with FRA's continuous oversight, is expected to achieve and move beyond parity.

Question 8. I'm very concerned about FRA and its treatment of practices that led to death and injuries. For instance, in May of 2014, track worker Robert Luden was killed in West Haven in Connecticut. We've learned that his death could have been avoided by simple tools called shunt technology. We've also learned that Metro-North was fined a mere \$5,000 for the safety lapses that led to Mr. Luden's death. Yet FRA is permitted to fine up to \$25,000 in penalties and is even allowed to fine up to \$105,000 for egregious and aggravated cases. Is \$5,000 a sufficient fine in Luden's death? Will \$5,000 truly incentivize changes in workplace practices that will ensure accidents like this don't take place?

Answer. As a fifth generation railroader, I am personally affected by the death of any railroad employee performing his or her job. Over the course of my railroad career I have lost five friends to on-duty fatalities. Use of shunt technology can be problematic on third-rail electrified railroads, creating additional risks that nullify the very protection desired. FRA considered all of the available evidence concerning the accident in deciding what enforcement action to take.

In a situations involving a fatality, and depending upon the circumstances, a railroad could be subject to civil liability under the Federal Employers' Liability Act. Potential liability for civil damages, incentivizes safety compliance. FRA civil penalties do not provide monetary compensation for harm suffered by railroad workers. Rather, civil penalties are intended to promote compliance with Federal railroad safety laws and regulations. Civil penalties are also only one of the enforcement tools available to FRA. Indeed, FRA subsequently issued Emergency Order No. 29 later in 2013 to require Metro-North to make immediate, necessary changes in railroad safety practices that civil penalties alone could not. FRA will use any and all of the enforcement tools available to it to take whatever action is necessary to help ensure railroad safety.

Question 9. What changes should we make in Congress to ensure that FRA can properly penalize railroads for improper practices?

Answer. The statutory changes that FRA requires are those in rail safety provisions of the GROW AMERICA Act, which the Secretary sent to Congress on April 29. For example, FRA wants the authority (1) to require certain harmonization of railroads' operating rules in small geographic areas where two or more railroads serve as host railroads for joint operations; (2) to regulate the hours of service of freight train crews, signal employees, and dispatchers based on sound, up-to-date science; and (3) to grant merit-based extensions of the current statutory deadline for certain railroads to implement a positive train control (PTC) system and take other action related to PTC.

Question 10. What circumstances would warrant a fine of \$25,000? What circumstances would warrant a fine of \$105,000?

Answer. The railroad safety statutes and the Federal Civil Penalties Inflation Adjustment Act provide for assessing a civil penalty of up to \$25,000 for a violation of a rail safety regulation or order or of certain provisions of the rail safety statutes except that when a grossly negligent violation or a pattern of repeated violations has caused an imminent hazard of death or injury to individuals, or has caused death or injury, the amount may be not more than \$105,000. 49 U.S.C. 21301-21303; 28 U.S.C. 2461 note. Each day that the violation continues is a separate violation. The statute does not provide explicit guidance on the circumstances in which the ordinary maximum of \$25,000 or the aggravated maximum of \$105,000 should be assessed. As stated in FRA's guidance at 49 C.F.R. part 209, appendix A, "This authority to assess a penalty for a single violation above \$25,000 and up to \$105,000 is used only in very exceptional cases to penalize egregious behavior. FRA indicates in the penalty demand letter when it uses the higher penalty amount instead of the penalty amount listed in the schedule." FRA makes these determinations on a case-by-case basis; however, the statutory language on factors to be considered when compromising the amount of a penalty assessed for a rail safety violation provides a general framework for making initial assessment determinations: "(A) the nature, circumstances, extent, and gravity of the violation; (B) with respect to the violator, the degree of culpability, any history of violations, the ability to pay, and any effect on the ability to continue to do business; and (C) other matters that justice requires." See 49 U.S.C. 21301(a)(3)(A)-(C), 49 U.S.C. 21302(a)(3)(A)-(C), 49 U.S.C. 21303(a)(3)(A)-(C). FRA also has internal procedures for what should be done when

the Office of Railroad Safety makes recommendations to the Office of Chief Counsel for such ordinary maximum or aggravated maximum penalty assessments.

Question 11. Will FRA produce a list of recent fines, when imposed, and the legal basis for each fine, as you said at the hearing you'd be able to produce? Can this list go back ten years?

Answer. Yes, FRA is in the process of generating such a list. However, any analysis of a ten-year period would be confounded by capturing the period both before and after the Rail Safety Improvement Act of 2008. Additionally, FRA updated its system for managing the enforcement of railroad safety statutes and regulations in 2008; while it is technologically possible to compile a full list of fines going back to 2004, the time and expense to do so are probably not justified by the elucidative benefit of this additional information. To provide context into the scope of the undertaking, the initial list of all fines assessed since October 1, 2008—to capture violations since the passage of the Rail Safety Improvement Act of 2008—contained approximately 30,000 distinct violations and associated fines.

Question 12. NTSB has issued many safety recommendations to FRA over the past few years. Many of those have been turned into rulemakings that have led to new rules and regulations that are intended to save lives and improve reliability. Many of those recommendations, however, have sat dormant or have been rejected. NTSB currently has 56 open recommendations to FRA. And for some of them, the NTSB has given FRA an “unacceptable response” on 29 of the open recommendations—meaning that the FRA is failing to move in the right direction to implement those recommendations. I also understand that this is the highest number of “open unacceptable” recommendations for any entity within the U.S. Department of Transportation.

Some of these recommendations urge rules requiring the use of inward-and outward-facing recording and audio devices on locomotives (recommendations R-10-001 and R-10-002—both open and unacceptable); some urge FRA rules and research that would mitigate fatigue (recommendations R-12-016; R-12-018; R-12-019 and R-13-021—all open and acceptable); and one urges greatly enhanced inspection practices (recommendation R-14-012—just recently opened). While this most recent recommendation came out on May 19, 2014 others have been around for years. And had the recommendations been implemented before the spate of Metro-North incidents, lives could have been saved. While mandates issued by Congress are certainly important, how urgently are you working to implement these recommendations?

Answer. FRA recognizes the significance of each open recommendation and has focused its efforts on implementing or addressing each of them in an appropriate and timely manner. FRA maintains open communications with the NTSB to address any open recommendations. As the Federal agency charged with carrying out the railroad safety laws and prescribing regulations as necessary for railroad safety, FRA reviews and makes judgments whether or not to adopt the NTSB recommendations, in whole or in part, and how best to do so. FRA does not and cannot automatically adopt them, especially not those recommendations requiring rulemaking without considering the agency's regulatory priorities and the requirements of the rule-making process. In this regard, FRA carefully considers whether the safety issues raised in NTSB recommendations may be addressed by non-rulemaking means.

FRA continues to act diligently in completing its regulatory workload, placing a priority on those rulemakings that will most effectively advance safety. In general, FRA has to strike a balance between speed and quality. “Quality” includes adherence to demanding procedural and substantive legal requirements. As you know, all three branches of the Federal Government—Congress, the courts, and the Executive Branch—have established certain mandatory procedures and substantive requirements related to the rulemaking process (*i.e.*, the development and issuance of regulations, including FRA safety regulations). With few exceptions, before FRA is permitted to issue a final rule, there must be public notice of the proposal and an opportunity for public comment; a reasonable response to any public comments; an articulated, rational basis for the rule; and consistency of the rule with any applicable laws.

For many FRA rulemakings, other Federal agencies and offices are part of the clearance process: these draft rulemaking documents, cleared by FRA staff and by me as Administrator, go into a pipeline that extends from this agency to the Office of the Secretary of Transportation, which circulates the document to other agencies and offices within the Department, and then to the Office of Management and Budget, where the draft rule is circulated to relevant non-DOT agencies and offices.

Costs and benefits of a draft proposed rule and draft final rule must be identified, analyzed, and weighed against each other. This evaluation can be very complex, but provides critical information to decision makers, reviewers, and the public. It should

also be noted that the complex nature of the administrative review process for draft rulemaking documents means that widening one part of the pipeline (*e.g.*, by adding resources) is not enough to expedite issuance of a rule if the rest of the pipeline remains narrow; the delay simply occurs at a different stage of the process. After FRA issues a final rule, FRA's procedural rules provide for the filing of petitions for reconsideration, a vehicle through which litigation is often avoided, thus conserving administrative and judicial resources. A final rule is also subject to judicial review in the U.S. Courts of Appeals and may be set aside by the court. (By contrast, NTSB does not issue rules; it issues recommendations, and these recommendations are not subject to notice and comment, cost-benefit analysis, or judicial review.)

Regarding inward- or outward-facing cameras, it is important to note they would not have prevented the December 1st Spuyten Duyvil derailment. FRA acted appropriately with Emergency Order 29 to require those measures that had a direct relationship to the accident and would provide immediate safety benefits to Metro-North's operation. While Congress could have mandated a camera when it passed the RSIA in 2008, it chose not to, so congressionally mandated rulemakings were given priority in the rulemaking process. FRA does believe that inward-and outward-facing cameras can provide value and will assist in accident investigations. That is why in the summer of 2013, while giving priority to finishing the 42 Congressional mandates established in the RSIA, FRA was involved in various camera projects occurring in the industry. Based on what we learned, FRA placed this issue on our internal rulemaking agenda in November of 2013 for action in 2014. As planned, the Railroad Safety Advisory Committee (RSAC) has accepted the task of formulating recommendations on the appropriate design and use of locomotive-mounted cameras and will begin RSAC working group meetings on the topic this summer, with recommendations due early next year.

FRA is a data-driven agency, dedicated to achieving its safety mission for the good of the public, and subject to the highest ethical standards. FRA works tremendously hard to ensure that it prioritizes its rulemaking endeavors to address the most safety-critical issues in the timeliest fashion. Given the 42 individual mandates imposed on the agency in the RSIA, FRA has utilized its limited resources in an efficient manner in order to advance and address the safety needs of the country and industry in a timely fashion. During the five-year period from February 1, 2009, to January 31, 2014, FRA published approximately 76 major regulatory documents, including 66 advance notices of proposed rulemaking, notices of proposed rulemaking (NPRMs), and final rules; 3 emergency orders; and 7 interpretations, for an average of more than 15 major regulatory documents per year. We are also actively involved in many pending rulemakings, including one on fatigue management, which will address the issue of sleep apnea and other fatigue-related issues.

We believe our approach to handling and prioritizing rulemakings has increased the level of safety across the industry. This is evidenced by the historically low accident statistics during the last ten calendar years. During this period, total derailments decreased 48 percent, total train accidents decreased 48 percent, and total highway-rail grade crossing accidents decreased 32 percent. The year 2012 had record low numbers of train accidents, and that safety record was surpassed in 2013. But we always owe the public better. Our goal is to drive continuous safety improvement. We expect this of ourselves, and we expect it of the industry we regulate.

Question 13. As I raised in your last appearance before this committee, an April 2013 DOT IG report found that FRA was delayed on issuing rules required of it under the Rail Safety Improvement Act of 2008 (RSIA). When that report was issued, FRA had not issued 9 of 17 mandated rules. The report also found inefficiencies in FRA's rulemaking process, including failure to properly communicate and share documents with the Rail Safety Advisory Committee, also known as the RSAC.

There are still six rules to go. And at the hearing you mentioned producing a list that prioritizes the rulemakings with dates as to when the rulemakings would be finalized. Can you produce said list?

Answer. Below is a list of the remaining RSIA-mandated rulemakings, in priority order. The dates when these rulemakings will be finalized are not known and are particularly hard to predict for rulemakings that the Office of Management and Budget (OMB) has determined to be significant and therefore subject to Department of Transportation and Executive Branch review.

1. The final rule on training standards is in review in the Executive Branch.
2. The NPRM on risk reduction plans is in review in the Executive Branch.
3. The final rule on system safety plans is in review within the Department of Transportation.

4. The NPRM to extend the alcohol and drug rule to maintenance-of-way workers had been redesignated by OMB as non-significant and is now expected to be published in July.
5. The final rule on railroads' reports to the National Crossing Inventory is now expected to be published by August, if the final rule is determined by OMB to be non-significant.
6. FRA staff is currently developing the fatigue management plan NPRM. This plan would be a required part of a railroad's system safety or risk reduction plan, alluded to earlier.
7. The final rule on emergency escape breathing apparatus is delayed due to competing priorities and the need to reexamine data for an economical option to comply with the RSIA. The rule has been designated by OMB as significant.
8. The rulemaking on dark (unsignaled) territory is being held in abeyance because technology implementation plans expected in railroads' risk reduction and system safety plans will likely make the rule unnecessary for safety. (The mandate is for either a rule or guidance.)

Question 14. I understand we are waiting on the Office of Management and Budget (OMB) to release a proposed rule concerning the possible need to retrofit DOT-111 cars, which DOT submitted earlier this year. I also know that 111 cars account for nearly 70 percent of the U.S. tank car fleet, and they have been involved in a number of high-profile derailments in the past year.

This concerns many of my constituents as a CSX train derailed just north of New York City last summer. It was carrying trash—but had it been carrying crude, it could have been devastating.

Given this increase in hauling, what is your agency's plan to ensure the safe transport of this product, which poses significant danger? Does your agency have the resources necessary to address this surge in accidents? What actions are you taking in the interim before the OMB releases the proposed rule? Can you confirm that any focus on crude oil transportation—as critical as it is—will not distract your agencies—especially FRA—from other key safety priorities, like those affecting passenger and commuter rail?

Answer. In the last twelve months the Department has taken a number of steps to improve the safety of transportation of crude oil by rail. These steps include three emergency orders and enforcing compliance with existing regulations and emergency orders. The emergency orders were intended to: (1) ensure proper securement of trains carrying certain hazardous materials in specific volumes, (2) ensure the proper classification and packaging of crude oil, and (3) notification of first responders of the number of Bakken crude oil trains moving through their jurisdictions. FRA has initiated and will continue enforcement efforts to ensure industry compliance with the requirements of these emergency orders. We are also in the process of codifying securement requirements of Emergency Order No. 28.

Additionally, the Secretary issued a "Call to Action" challenging all stakeholders, including Chief Executive Officers (CEOs) of member companies of the American Petroleum Institute (API) and CEOs of the railroads, to identify prevention and mitigation strategies that could be implemented quickly to enhance the safe transportation of crude oil by rail.

In response, industry committed to a number of voluntary actions intended to mitigate the risk of transporting crude oil by rail. These measures address prevention of train accidents and mitigation of their consequences, including by improving response to such accidents. FRA will work closely with industry to monitor adherence to their commitments as well as to provide assistance where needed.

Finally, FRA is compiling incident and compliance data and overlaying this information on identified crude oil routes. This information will be assembled in the form of maps that will inform and guide coordinated multi-discipline inspection and enforcement strategies and initiatives. In addition, FRA's rail integrity rule went into effect on March 25, 2014. The rule requires railroads to submit to FRA rail internal flaw data. FRA, in turn, is developing a repository for this data. This data will provide additional information related to identified crude oil routes.

The focus on crude oil transportation will not detract from other safety priorities, especially those affecting passenger rail. FRA has actually increased overall safety resource levels and dedicated those resources to the safe transport of crude oil by rail. We have added new inspector positions and are focusing on all aspects of crude oil train movements through the rail network. We have also collaborated with PHMSA and industry to help ensure railroads and the crude oil industry implement additional safety measures for crude oil transport. We have also increased the use of our Automated Track Inspection Program (ATIP), and added manned equipment,

to cover higher risk routes such as crude oil routes. In addition to a comprehensive review of the Metro-North safety program, we are embarking on additional safety reviews of other passenger railroads as necessary. We are also encouraged by the level of interest expressed by both intercity passenger and commuter railroads in implementing risk reduction programs such as Confidential Close Call Reporting Systems, which will help ensure continuous safety improvement in an area that is already very safe. And the Passenger Rail Division has been working with new operators to ensure the safety of new passenger service.

Safety is FRA's highest priority, and we allocate our resources accordingly. As noted above, we have increased overall safety resource levels.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. RICHARD BLUMENTHAL TO
HON. ANNE S. FERRO

Question. Your agency uses hours of service (HOS) regulations to limit the number of hours a truck driver can operate. This is done to prevent fatigue-related accidents in the trucking industry. After years of working on this matter, the final rule implementing the HOS framework became effective in 2013. The new rules have garnered some criticism and some are seeking to roll them back—especially provisions related to the 34-hour re-start, even though they went through years of public comment and litigation. What impact would rolling back these rules have on safety?

Answer. The Federal Motor Carrier Safety Administration (FMCSA) has worked hard to reduce the likelihood of fatigue among drivers of commercial motor vehicles (CMVs) and to provide greater opportunity for rest through our HOS rule and other initiatives. As stated previously, rolling back the once-a-week limit on use of the 34-hour restart that FMCSA adopted in its December 2011 final rule would allow employers to require their commercial truck drivers to work an average of more than 80 hours per week and remain behind the wheel on our Nation's highways. This would significantly increase the risk of a fatigue-related crash. No other mode of transportation allows employers to demand that safety-sensitive employees work such grueling schedules.

The current 34-hour provision that has been in effect since July 1, 2013, limits truck drivers to an average of 70 hours on duty per week. FMCSA estimates that limitation on the use of the 34-hour restart will save 19 lives per year, prevent hundreds of injuries, and improve driver health. Were the legislation currently proposed by Congress suspending enforcement of the rule enacted, these safety benefits would be lost.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. RICHARD BLUMENTHAL TO
HON. CYNTHIA L. QUARTERMAN

Question 1. I understand we are waiting on the Office of Management and Budget (OMB) to release a proposed rule concerning the possible need to retrofit DOT-111 cars, which DOT submitted earlier this year. I also know that 111 cars account for nearly 70 percent of the U.S. tank car fleet, and they have been involved in a number of high-profile derailments in the past year. This concerns many of my constituents as a CSX train derailed just north of New York City last summer. It was carrying trash—but had it been carrying crude, it could have been devastating. Given this increase in hauling, what is your agency's plan to ensure the safe transport of this product, which poses significant danger?

Answer. With regard to rail safety, PHMSA and FRA have taken a comprehensive approach when developing a proposal to reduce risks posed by the bulk transport of hazardous materials by rail. Specifically, FRA and PHMSA are focusing on methods to prevent accidents and incidents from occurring, mitigate the effects of those events that do occur, and improve emergency preparedness and response. Aside from the draft proposal, the Department has taken numerous actions in the form of safety advisories, emergency orders, enforcement actions and inspections and crude testing to improve the safe transportation of crude by rail. On the prevention front, FRA and PHMSA are working together to implement necessary operational controls and rail track integrity requirements to lessen the likelihood of accidents. PHMSA has requirements in place (Hazardous Materials Regulations) to mitigate the effects of potential accidents through appropriate packaging of the materials based on classification; and effectively and accurately communicating the hazards to transportation workers and first responders.

PHMSA's plan to address the risks posed by the bulk transport of hazardous materials by rail includes both non-regulatory and regulatory, short-and long-term solutions. This plan includes clarifying and improving requirements and conducting

outreach to stakeholders such as the regulated community, industry, state and local government, and emergency response sectors. PHMSA is also collaborating and actively engaging all stakeholders with our Hazardous Materials Safety Assistance Team and our field operations staff. A list of actions taken as part of PHMSA's comprehensive approach to reducing the risks and mitigating the consequences of the bulk transport of hazardous materials by rail can be viewed at our Operation Safe Delivery website (<http://www.phmsa.dot.gov/hazmat/osd/chronology>).

Question 2. Does your agency have the resources necessary to address this surge in accidents?

Answer. PHMSA's Office of Hazardous Material Safety (OHMS) includes a staff of 175 employees at headquarters and five regional offices, including a total of 57 investigators. OHMS's operating budget is approximately \$45 million. Since October 1, 2014, PHMSA has obligated approximately \$1.4 million to support investigation and testing, regulatory initiatives, and outreach in support of this priority. For multi-modal prevention and response activities associated with the safe transportation of crude oil, the President's Budget for FY 2015 requests \$40,000,000. This appropriation would provide funds for a multi-modal initiative to support prevention and response activities associated with the safe transportation of crude oil, including enhanced inspection levels, additional safety inspectors, investigative efforts, research and data analysis, economic analysis, training and outreach, and testing in high risk areas. The funds would be available for initiatives within the Federal Railroad Administration, Pipeline and Hazardous Materials Safety Administration, and the Federal Motor Carrier Safety Administration.

Question 3. What actions are you taking in the interim before the OMB releases the proposed rule?

Answer. While the proposed rulemaking provides a comprehensive proposal to address these risks, PHMSA has continued to actively pursue other initiatives to achieve interim safety improvements. A list of all actions taken as part of comprehensive approach to preventing and mitigating the risks posed by the bulk transport of hazardous materials by rail can be viewed at the Operation Safe Delivery website (<http://www.phmsa.dot.gov/hazmat/osd/chronology>), the following highlights some efforts PHMSA, FRA, and the Department have taken in the interim, while a proposed rule is being developed and reviewed.

- June 12, 2014—PHMSA hosted a Crude Oil Emergency Response Workgroup Meeting in conjunction with the U.S. Fire Administration—National Fire Academy. The workgroup was comprised of subject matter experts from the emergency response community, rail carriers and the petroleum industry with the goal of providing technical information to better respond incidents involving crude oil.
- May 29, 2014—PHMSA convened a Lessons Learned Roundtable Forum where public safety and emergency response officials from jurisdictions where a crude oil or ethanol rail transportation incident occurred came together to share their experiences.
- May 7, 2014—USDOT issued Emergency Order requiring railroad carriers to inform first responders about crude oil being transported through their towns and communities.
- May 7, 2014—PHMSA and FRA issued a Safety Advisory requesting companies to take steps to avoid the use of DOT 111 tank cars when transporting Bakken crude oil.
- March 6, 2014—To provide further clarity for shippers and to prevent attempts to circumvent the requirements in the recent Emergency Order concerning the safe transport of crude oil by rail, the Department issued an amended version that specifies which tests are required, while also prohibiting shippers from switching to an alternate classification that involves less stringent packaging.
- February 25, 2014—USDOT issues Emergency Order requiring shippers to properly test and classify the crude oil prior to transportation.
- February 10, 2014—PHMSA met with emergency response stakeholders and industry groups to discuss training and awareness related to the transport of Bakken crude.
- January 21, 2014—Secretary Foxx issued follow-up letter to Call to Action participants summarizing industry commitments.
- January 16, 2014—Secretary Foxx met with rail company CEOs and rail and energy association leadership as part of the Department's Call to Action to discuss how to maintain safety record even as domestic crude oil production and movement has increased.

- January 2, 2014—PHMSA issued a safety alert to notify the general public, emergency responders, and shippers and carriers that the type of crude oil being transported from the Bakken region may be more flammable than traditional heavy crude.
- November 13, 2013—PHMSA and FRA issued a safety advisory reinforcing the importance of proper characterization, classification, and selection of a packing group for Class 3 materials.

Question 4. Can you confirm that any focus on crude oil transportation—as critical as it is—will not distract your agencies—especially FRA—from other key safety priorities, like those affecting passenger and commuter rail?

Answer. The focus on crude oil transportation will not detract from other safety priorities, especially those affecting passenger rail. FRA has actually increased overall safety resource levels and dedicated those resources to the safe transport of crude oil by rail. We have added new inspector positions focused on all aspects of crude oil train movements through the rail network. PHMSA and FRA have also collaborated with industry to help ensure railroads and the crude oil industry implement additional safety measures for crude oil transport. FRA has increased the use of the Automated Track Inspection Program (ATIP), involving manned equipment, to cover higher risk routes such as crude oil routes. In addition to a comprehensive review of the Metro-North safety program, FRA is embarking on additional safety reviews of other passenger railroads as necessary. We are also encouraged by the level of interest expressed by both intercity passenger and commuter railroads in implementing risk reduction programs such as Confidential Close Call Reporting Systems, which will help ensure continuous safety improvement in an area that is already very safe. The Passenger Rail Division has been working with new operators to ensure the safety of new passenger service. Safety is the Department's high-priority, and we allocate our resources accordingly.

Question 5. Considering the derailments and fiery explosions we've seen arising from the transportation of crude by rail in Canada, North Dakota and just recently, Virginia, many states and cities have raised concerns about what's moving on the rails through their communities. DOT has also called on the industry to provide more data on crude so that DOT can better understand how crude should be handled. Do you have the data you need to make appropriate assessments of the amount and volatility of crude being shipped by rail?

Answer. As part of rulemaking efforts, PHMSA has developed a regulatory impact assessment (RIA) that addresses the issue of the bulk transportation of certain flammable materials by rail. This RIA has compiled various statistical and economic data that stakeholders provided and that PHMSA developed. This data includes, but is not limited to, estimates of tank car fleet size, assessments of quantity of materials shipped, and impacts of proposed changes. In addition, based on PHMSA's and FRA's testing and sampling efforts, combined with the voluntarily submitted testing data by industry, PHMSA better understands the properties of crude oil and has used this understanding to help develop a comprehensive rulemaking. Further test data will continue to be considered in any regulatory action. PHMSA and FRA are confident that the proposal, along with public input, will account for the unique characteristics of crude oil and improve safety. We look to public comment on these proposals and the data that supported their development.

However, PHMSA believes additional data from stakeholders would be helpful. The NPRM will be accompanied by the publication of the RIA. Both of these documents seek comments from the public on the estimates and assumptions used throughout them. Further, with regard to physical testing of crude oil, PHMSA continues to evaluate current test methods and whether alternative methods will provide more meaningful results. As part of this effort, the Agency participates in the American Petroleum Institute working group charged with developing industry best practices, including those regarding testing and sampling methods for crude oil.

Question 6. The oil industry has released studies in recent weeks claiming the Bakken crude is safe to transport by rail using current technology. Do you agree?

Answer. While many of the findings of the industry studies are compelling, a number of them can only be verified through additional research. For example, do current test methods need to be improved or are there new test methods that need to be implemented to better characterize crude oil? While PHMSA evaluates these findings, the Agency is also actively involved in an American Petroleum Institute working group tasked with developing industry best practices, including those regarding testing and sampling methods for crude oil. We also continue to perform our own testing on crude oil characteristics in the Bakken and other shale plays.

PHMSA recognizes that Bakken crude has more light end materials that may present increased safety risks, when compared to other types of crude oil; particu-

larly when considering the quantity in which it is usually shipped. Bakken crude is a light crude oil and has more gas content than conventional crude oil. PHMSA's proposed rule, is intended to improve the integrity and safety of not just Bakken crude oil, but other flammable materials. PHMSA will seek public comment on all aspects of the proposal, to ensure the best available data and information is available in the decision making process.

PHMSA is confident that its proposal, in coordination with public input, will account for the unique characteristics of crude oil and improve safety, and looks forward to public comment on these proposals and the data that supported their development.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. RICHARD BLUMENTHAL TO
HON. GREGORY D. WINFREE

Question 1. The Office of the Assistant Secretary for Research and Technology (OST-R) coordinates DOT's research and development programs. The Research Office is responsible for integrating research across the transportation agencies and modes. And your office has done considerable work evaluating close call systems, something that Metro-North has been urged to adopt. What are the benefits of close call systems?

Answer. The Confidential Close Call Reporting System (C3RS) has contributed to noticeable improvements in five key elements of system-based safety management. Those are: risk identification; collaborative problem solving; root cause identification and analysis; implementation of corrective actions; and establishing a venue through which unsafe and sensitive situations can be openly addressed without fear of retribution.

The Bureau of Transportation Statistics (BTS) has collected close call reports from conductors and engineers working for three railroad companies (Union Pacific Railroad Company, Canadian Pacific Railroad (*i.e.*, its railroads that conduct operations in the United States), and New Jersey Transit Rail Operations since February 2007. So far over 3,500 close call reports have been submitted to BTS. Quantitative analysis of these sites indicated:

- 90 percent reduction in disciplinary cases;
- 31 percent reduction in de-certifications per 200,000 worker hours;
- 41 percent reduction in human factors derailments per 100,000 cars moved (reportables and non-reportables);
- 53 percent reduction in incident cost; and
- a significant reduction in derailments caused by running through switches, primarily in rail yards.

Most importantly, program evaluation analyses confirmed that a close call system leads to significant improvement in safety awareness, safety culture, and employee engagement by providing a safe, non-punitive, confidential, non-confrontational model for labor and management to jointly develop and implement safety improvements.

Question 2. How does your research and statistical tracking inform safety policy at DOT?

Answer. The Department of Transportation (DOT) takes a system-wide, multimodal approach to collecting and analyzing safety data. The Department is working to standardize data collection, evaluation and, ultimately, data-driven decisions to improve safety. Safety research comprises 42 percent of the Department's total RD&T funding, which is significantly higher than the amount expended on the next-highest goal (23 percent, Economic Competitiveness). Through this cross-modal approach, safety benefits will be seen across the transportation network.

The DOT Safety Council, which is chaired by the Deputy Secretary, is comprised of the heads of the Departmental operating administrations and senior staff. It provides a forum for serious current and emerging safety issues, both multimodal and particular to a single mode, to be brought up, discussed, and then acted upon either by the individual operating administrations or by the Safety Council itself. Safety Council initiatives include: activity on risk-informed rulemaking, near-miss reporting systems, support to the Federal Transit Administration (FTA) as it began its safety oversight program, and the development of the *safety.data.gov* web portal.

- The Safety Council is currently working on risk-informed rulemaking. It has become increasingly difficult to promulgate safety-related regulations based on the present requirement of linking them through a benefit-cost analysis to lives al-

ready lost. The Safety Council is learning from other agencies how they develop proactive regulations based on risk information.

- There is significant interest within the DOT on developing and using near-miss precursor data to understand hazards and create remedies before accidents occur that cause lives to be lost. The FAA, FRA and Bureau of Transportation Statistics have presented to the Safety Council on their systems, and aspects are being considered for implementation by other DOT organizations along with a possible DOT-wide near miss data collection system.
- When the MAP-21 surface reauthorization was signed into law, the FTA was given safety oversight authority for the first time. As a result, a series of Safety Council meetings were held with then-Administrator Peter Rogoff and his senior staff to afford them the opportunity to understand the challenges and best practices of safety regulation, including the underpinnings of the safety management systems (SMS) approach. As a result, FTA adopted the SMS approach for this new function.
- The Safety Council was charged by the White House to bring together safety data from across the Federal Government for public access and use as part of its Open Data initiative. This effort, led by the Bureau of Transportation Statistics, has successfully entered over 1,000 safety data sets from ten cabinet agencies and a number of smaller organizations into the portal, with scheduled data events occurring several times a year and thousands of downloads of the available data.

Question 3. How much of your work is dedicated to fatigue risk issues?

Answer. Operator fatigue and its safety risks and implications was one of the two initial projects undertaken by the Safety Council, the other being safety culture, which also influences operator fatigue and its mitigation. It is the largest active program for the Safety Council, expending about \$450,000 over five years. As a result of this focused effort the following six work products, led by five separate operating units, have been or will be delivered by October 1, 2014:

1. A white paper on the current need and state of human fatigue modeling, and specifications to meet anticipated new uses. These specifications are intended to be used within a contracting vehicle such as a Broad Agency Announcement for development of the next generation of these models (FRA led).
2. Sponsorship of a commercial motor vehicle workshop on obstructive sleep apnea and a subsequent report on different, potentially effective ways to communicate with operators and the public about this serious condition (FMCSA/FRA co-led).
3. Sponsorship of a day-long workshop at the 2012 Transportation Research Board annual meeting on strategies for communicating and addressing operator drowsiness. Workshop attendance was at capacity (30 participants), the majority of whom were representing private sector and labor organizations, within the United States and overseas. A report was generated synthesizing the presentations and the ensuing discussions and outcomes (FRA/FMCSA co-led).
4. A general communications toolkit that can be tailored by the individual modal organizations to message the dangers of operator fatigue to different audiences (*i.e.*, the operator, the operator's family, supervisors, executives and the public). The communications offices of the different DOT operating administrations were engaged to understand needs and general themes that may resonate with diverse audiences (FMCSA/OST-R co-led).
5. A series of specific logic models were developed for several DOT operating administrations (*i.e.*, Federal Aviation Administration, Federal Motor Carrier Safety Administration, Federal Railroad Administration) and a general model was created linking research and development activities on operator fatigue with related programs, outcomes and impacts. A gap analysis was then conducted that outlined what additional research was still required based on program needs and their anticipated outcomes (Human Factors Coordinating Committee, FRA, OST-R co-led).
6. Secretary LaHood wanted assurance that when the operating administrations entered into Hours of Service rulemaking they were all considering the same science and variables, even if ultimately the rules between operating administrations treated them differently (*i.e.*, whether or not napping was allowed). This checklist tool allows both the operating administrations and General Counsel to consider the same set of science and data when undertaking Hours of Service rulemaking (FAA led).

Question 4. What major safety issues are you seeing in your research that may not be at the forefront right now, but will be in the years to come?

Answer. The Safety Council has identified several emerging safety issues that are expected to become increasingly problematic.

The first is the integration of increasingly sophisticated automation into vehicles, both commercial and private. Safety issues include the trust people place in the automation, and ensuing complacency and skill loss; automation failure modes and operator awareness and ability to reengage in the driving task; over-reliance on the automation, especially when products are being marketed to those who might not otherwise be able to operate the vehicle; and lack of shared fate (*i.e.*, software programmer vs. human pilot).

The second area is transportation system vulnerability to cyber threats. The Safety Council has identified a number of these threats, including the jamming and spoofing of GPS signals, but addressing these threats remains a challenge.

A third area of increasing concern is related to societal demographics. People are working later into life and driving remains the most common form of transportation for older adults. Keeping commercial and private vehicles accessible by this population is becoming increasingly possible through automation, but then by default over-reliance and the other automation issues described above become even more problematic.

The other end of the age spectrum provides a fourth concern, that young adults are increasingly relying on pedestrian, bicycle, and transit modes of transportation. Ensuring the safety of all transportation users requires thought and actions (*i.e.*, messaging, enforcement, new and retrofitted infrastructure that balances the needs of all users).

Another emerging issue is the legalization of marijuana use in some states, and how that may ultimately impact transportation safety. In addition, the transportation of oil and gas on the Nation's roadways, railways and waterways is also considered both a safety and security threat and is being monitored by the Safety Council.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. JOHN THUNE TO
HON. JOSEPH C. SZABO

Question. I am pleased that the updated tank car design rule was finally transmitted to OMB, especially considering the initial petition for this update was submitted to PHMSA in 2011. Does either of you have concerns about moving forward with the tank car design rule before you have finished your work determining what, if any, unique characteristics Bakken crude has? It seems to me that an important first step in determining the adequacy of a tank car design would be to know if there are unique characteristics of the substance being put inside the tank car and what potential hazards these unique characteristics might pose.

Answer. No, PHMSA recognizes that Bakken crude has more light end materials and presents its own safety risks, when compared to other types of crude oil. Bakken crude is a light crude oil and has more gas content than conventional crude oil. However, the PHMSA's proposed rule, including the tank car design, is intended to improve the integrity and safety of not just transporting Bakken crude oil, but the transportation of other flammable materials with safety risks. Additionally, PHMSA's proposal will seek public comment to ensure the highest level of scrutiny before any changes are adopted.

Further, in developing the proposal, PHMSA used the data collected on crude oil characteristics in conjunction with physical testing of tank car integrity and predictive modeling tools to gather data on tank car performance in an accident scenario to develop its proposals. PHMSA is confident that its proposal, in coordination with public input, will account for the unique characteristics of crude oil and improve safety and looks forward to public comment on these proposals and the data that supported their development.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. JOHN THUNE TO
HON. ANNE S. FERRO

Compliance, Safety, Accountability (CSA) Program Questions

Question 1. It is my understanding that CSA was originally created as a way to assist FMCSA and its State partners in targeting limited enforcement resources on those motor carriers with the highest safety risk. This is a goal I support. However, I now understand the FMCSA is currently working on a way to formally incorporate

CSA into the system the agency uses to determine driver fitness, even though there are many outstanding questions about the reliability of the CSA system for those carriers that have little to no data on record. Does this not concern you Administrator Ferro?

Question 1a. How would the FMCSA account for this in making driver fitness determinations?

Answer. FMCSA proposes to amend the Federal Motor Carrier Safety Regulations to adopt a revised methodology for issuance of *motor carrier* safety fitness determinations (SFD). The Agency is not proposing to make *driver* fitness determinations at this time.

The proposed motor carrier SFD methodology would determine when a motor carrier is not fit to operate commercial motor vehicles (CMV) in or affecting interstate commerce based on: (1) the carrier's performance in relation to five of the Agency's Behavioral Analysis and Safety Improvement Categories (BASICS); (2) an investigation; or (3) a combination of on-road safety data and investigation information. The intended effect of this action is to reduce crashes caused by CMV drivers and motor carriers which result in death, injuries, and property damage, by more effectively using FMCSA data and resources to identify unfit motor carriers and removing them from the Nation's roadways. Incorporating on-road safety data into the Agency's SFD methodology has been an open recommendation from NTSB for several years.

FMCSA is developing a Notice of Proposed Rulemaking (NPRM) on SFD to address the availability and sufficiency of performance data in assessing a safety rating. The FMCSA has been clear that using on-road safety performance information to determine safety fitness is a separate and distinct process from SMS which is only used for prioritizing motor carriers for intervention. A relative threshold such as that used in SMS has never been presented as an option for this process. When the SFD NPRM is released and public comments are received, the Agency will carefully evaluate the input from all interested parties.

Question 2. Data accuracy is one of the reoccurring concerns often raised with CSA. Part of this data is submitted by the carriers themselves, so called census data. In an attempt to increase the frequency and accuracy of carrier-generated data, it is my understanding that FMCSA announced last fall that it would begin deactivating USDOT numbers for carriers that have failed to submit the required census data. According to that announcement, deactivations were supposed to begin in March for any carrier that had failed to update its census data by January 2014. Have these deactivations occurred?

Question 2a. If so, how many carriers have been deactivated?

Question 2b. Is there a process for them to easily be reactivated?

Answer. In March 2014, following outreach to carriers and public notice of its intent to do so, FMCSA started deactivating the USDOT numbers of carriers that failed to complete their biennial update by their designated month and year. As of May 2014, FMCSA deactivated over 56,000 USDOT numbers. Carriers that have their USDOT numbers deactivated for failing to complete the biennial update can go online to the FMCSA website and update their information. Unless the carrier's registration has been suspended or revoked for another reason, once the online update is completed, the USDOT number is immediately reactivated.

Question 3. I understand that the FMCSA includes a disclaimer with the SMS [Safety Management System] scores, indicating that they should not be used to draw safety conclusions and, instead, a carrier's official safety rating should be used. It is well known though that they are being used that way; in fact, SMS scores are even included on the FMCSA's own mobile phone application, SaferBus, designed to provide safety information and help consumers select a bus company. Again, given the limits on the data and the fact that 72 percent of carriers are without any SMS scores, are you not concerned about the impact it is having on otherwise safe carriers' businesses?

Question 3a. What is the FMCSA doing to address these concerns?

Question 3b. Do you believe this data and related programs should be promoted publicly when there are such limits on its usefulness for a large number of carriers?

Answer. FMCSA regulates a diverse industry consisting of more than 525,000 active interstate truck and bus companies, with fewer than 800 field operations personnel. To ensure that the Agency allocates its resources as effectively as possible, the Compliance, Safety, Accountability (CSA) Safety Measurement System (SMS) uses motor carrier data from roadside inspections, reportable crashes, and investigations, to prioritize motor carriers for safety interventions and identify the highest risk carriers before crashes occur.

SMS is designed to identify *patterns* of non-compliance and, therefore, applies data sufficiency standards (*i.e.*, minimum number of inspections). For example, in the driver-related BASICs, SMS requires three or more driver inspections.

Currently, FMCSA has enough data to assess approximately 38 percent of the 525,000 active companies. These companies are involved in over 91 percent of crashes. Therefore, while the Agency continues to focus efforts on improving data collection for all carriers, SMS has sufficient data to assess companies that are involved in the majority of crashes. Other methods FMCSA uses to increase data collection include: (1) New Entrant Safety Audits, many of which have limited roadside inspection data, and (2) Inspection Selection System (ISS), which prioritizes and generates inspection recommendations to roadside officers for entities with limited data.

The Agency is committed to providing a current, informed, and comprehensive picture of a motor carrier's safety and compliance posture and seeks to ensure understanding among stakeholders as to what SMS is, and what it is not. In addition, in November 2013, the Agency proposed several new SMS website display changes, with the following objectives: (1) provide easier, more intuitive navigation, and user-friendly features to clarify SMS's role as FMCSA's prioritization tool for CSA interventions; (2) provide a "one-stop-shop" for FMCSA safety information; and (3) retain and provide easy access to detailed information and new performance monitoring tools.

FMCSA will continue to evaluate stakeholder input. The Agency has been engaged in and remains committed to a collaborative, transparent, data-driven, and research-based process for changes to SMS.

Question 4. The GAO issued a Report to Congressional Committees regarding modifications to the CSA program. It is my understanding that the FMCSA has written a letter in response. Would you provide me with that response letter?

Answer. The Departmental letter is attached.

Hours of Service Question

Question 5. At the hearing you mentioned that you are in the process of collecting data on the new hours of service rules that went into effect last July. Can you please provide me with more details of that data collection including the information on what you are collecting, what you hope to show by this data, and when you expect to have enough data to draw conclusions? I am particularly interested in how this data collection relates to reductions in crashes since the rule was put into effect.

Answer. The Agency has collected and analyzed data on violations of the 2013 HOS rules, which showed that a significant percentage of violations cited during the first 1 to 2 months after the rule took effect were for violation of the new 30-minute break requirement. As drivers became more familiar with that requirement we have seen those violations taper off. Regarding the effect of the new rules on crashes, as the new hours of service rules have only been in effect for one year, FMCSA will be looking closely at any change in the number of crashes involving commercial motor vehicles, the time of day those crashes occurred, and any other circumstances surrounding the crash that may help us understand the impact of the new rule. Sufficient State-reported crash data for these analyses should be available to FMCSA in early 2015. FMCSA is also looking into ways to measure the impact the new rule may have on the volume of commercial motor vehicle traffic during daytime congestion hours.

Speed Limiter Question

Question 6. It is my understanding that the FMCSA is working on a new rule requiring the use of speed limiters. Can you provide an update on where you are in the process?

Answer. The National Highway Traffic Safety Administration (NHTSA) and FMCSA are jointly preparing a notice of proposed rulemaking (NPRM) in response to petitions from the American Trucking Associations and Roadsafe America that would require: (1) heavy vehicles to be equipped with a speed limiting system, and (2) motor carriers operating such vehicles in interstate commerce to maintain functional speed limiting systems for the service life of the vehicle. This rule would decrease the estimated 1,115 fatal crashes annually involving vehicles with a gross vehicle weight rating of over 11,793.4 kg (26,000 lbs) on roads with posted speed limits of 55 mph or above. The current rulemaking schedule posted at <http://www.dot.gov/regulations/report-on-significant-rulemakings> indicates an estimated publication date of October 23, 2014.

Question 6a. It is my understanding that Ohio and Illinois each standardized their speed limits last year, to allow trucks and other motor vehicles to travel at the same maximum speed. Before this change, trucks had lower maximum speeds

than other motor vehicles. It would seem to me that some of the same challenges faced by these states—and that motivated them to change their laws—would apply if speed limiters were put in place nationwide. Has the FMCSA looked into the reasons for these changes?

Answer. The NHTSA and FMCSA did not examine the bases for recent speed limit changes in Ohio and Illinois. However, the Agencies did consider the potential impact of speed differentials between light vehicles and heavy vehicles prior to NHTSA granting the petitions for rulemaking in 2011 (76 FR 78, January 3, 2011). On January 26, 2007, NHTSA and FMCSA jointly published a notice requesting public comment on the petitions. The Agencies received more than 3,800 comments in response to the notice.

Question 6b. One concern truckers in my home state have about a speed limiter rule actually dovetails with a concern they have about CSA. As you know, all crashes, no matter who is at fault, are reported to CSA. The truckers I have spoken with are afraid that having trucks and cars going at different speeds might increase the number of rear end collisions they are in, and thus might negatively impact their CSA scores. How would you respond to these concerns?

Answer. The FMCSA acknowledges the concerns of motor carriers about the impact that crashes would have on their SMS scores. First, the Agency believes the speed differentials between commercial vehicles traveling up to 68 miles per hour (the speed limit suggested in the petitioners) and other highway traffic approaching from the rear of the commercial vehicles is unlikely to increase the risk of a crash beyond what motor carriers experience today with the voluntary use of speed limiters to improve fuel efficiency. As argued by the American Trucking Associations (ATA), many of the Nation's largest truck fleets currently limit their speeds to save fuel, and thereby reduce operating expenses. The ATA did not indicate that any of these fleets experienced increased numbers of motorists striking the rear of the truck.

Second, the crash score from the BASICs (Behavioral Analysis Safety Improvement Categories) is not displayed to the public. This means that the public would be aware of the number of crashes a motor carrier has experienced but there would be no information indicating how many, if any, of the crashes were preventable. The Agency would address preventability during any investigation or interventions rather than make assumptions about these matters.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. ROY BLUNT TO
HON. ANNE S. FERRO

Question. FMCSA has been successfully sued at least 5 times in the past few years where the agency has not fully complied with law, has not adequately considered data, and has not fully justified the cost of regulatory decisions. The best example is the case of the three lawsuits regarding the hours of service rules. Also a recent GAO report found that fewer than 15 of more than 750 individual violations at the carrier level had a reliable statistical relationship with crash risk. Many FMCSA regulatory requirements are outdated or seem to not lend to safety. Does FMCSA recognize some of these shortcomings, and do you have plans going forward to address them?

Answer. The Agency acknowledges that some legal challenges to its rulemakings have been successful. It should be kept in mind, however, that many FMCSA initiatives—especially those involving hours of service—trigger intense disputes among interested parties. Publishing a proposed rule for notice and comment is often an occasion for groups to put on the record their non-negotiable and mutually incompatible positions, which is rarely helpful to FMCSA in crafting a final rule. And if that final rule does not satisfy their demands, these parties immediately seek legal review. While it is true that the courts identified certain procedural errors in earlier HOS rulemakings—which FMCSA has corrected—the D.C. Circuit concluded in 2013 that the Agency's 2011 final rule was well supported and well-reasoned, and it rejected the frontal attacks leveled by several groups.

With regard to the issue of the GAO report on individual violations, when prioritizing a company using the SMS, the Agency does not focus on a single violation, instead uses a robust data set of roadside inspections, reportable crashes, and investigations to prioritize the highest risk carriers *before crashes occur*, including carriers whose patterns of non-compliance are a flag for high-risk behavior. The Agency is continually working to improve its process through on-line comment tools, Federal Register notices, listening sessions, and the Motor Carrier Safety Advisory Committee, seeking and utilizing public comment to continuously improve the effectiveness of its process and system for identifying high risk carriers.

FMCSA spends a great deal of time and effort, not only to research and write effective and cost effective safety regulations, but also preemptively to address arguments likely to be raised by potential litigants.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. JOHN THUNE TO
HON. CYNTHIA L. QUARTERMAN

Question. I am pleased that the updated tank car design rule was finally transmitted to OMB, especially considering the initial petition for this update was submitted to PHMSA in 2011. Does either of you have concerns about moving forward with the tank car design rule before you have finished your work determining what, if any, unique characteristics Bakken crude has? It seems to me that an important first step in determining the adequacy of a tank car design would be to know if there are unique characteristics of the substance being put inside the tank car and what potential hazards these unique characteristics might pose.

Answer. No, PHMSA recognizes that Bakken crude has more light end materials and presents its own safety risks, when compared to other types of crude oil. Bakken crude is a light crude oil and has more gas content than conventional crude oil. However, the PHMSA's proposed rule, including the tank car design, is intended to improve the integrity and safety of not just transporting Bakken crude oil, but the transportation of other flammable materials with safety risks. Additionally, PHMSA's proposal will seek public comment to ensure the highest level of scrutiny before any changes are adopted.

Further, in developing the proposal, PHMSA used the data collected on crude oil characteristics in conjunction with physical testing of tank car integrity and predictive modeling tools to gather data on tank car performance in an accident scenario to develop its proposals. PHMSA is confident that its proposal, in coordination with public input, will account for the unique characteristics of crude oil and improve safety and looks forward to public comment on these proposals and the data that supported their development.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. ROY BLUNT TO
HON. CYNTHIA L. QUARTERMAN

Question 1. There are considerable Bakken crude testing and survey efforts under way by oil producers and shippers. The American Fuel and Petroleum Manufacturers recently completed a study based on 1,400 crude samples that found Bakken was no more volatile than traditional crude or other hazardous liquids transported by rail. A North Dakota Petroleum Council also study confirmed this. How will this data be utilized by PHMSA, and do you expect it to settle questions surrounding Bakken crude and how it compares to other crude types?

Answer. The Department is a data driven organization, and all data—to the greatest extent possible—is incorporated into all of the Department's regulatory activities. The data submitted to date and any submitted in the future will be analyzed and compared to PHMSA's sampling and testing results. Based on the shale oil boom producing Bakken and other crude oils, the large volumes and quantities of these materials being transported by rail in unit trains over long distances is unprecedented. Our focus has been to ensure this method of transportation is safe.

While many of the findings of the American Fuel and Petroleum Manufacturers' study are compelling, a number of its findings can only be verified through additional research. For example, do current test methods need to be improved or are there new test methods that need to be implemented to better characterize crude oil? While PHMSA will actively evaluate these findings, the Agency is also actively involved in an American Petroleum Institute working group tasked with developing industry best practices, including those regarding testing and sampling methods for crude oil.

Finally, PHMSA uses the data collected on crude oil characteristics in conjunction with physical testing of tank car integrity and predictive modeling tools to gather data on tank car performance in accident scenarios to develop its proposals.

Question 2. Will you be requesting more data or do you believe this is sufficient?

Answer. PHMSA always welcomes new information to better inform decisions and potential actions.

Question 3. Will it inform the rulemaking process your department already has underway?

Answer. Yes, PHMSA has used the data collected on crude oil characteristics in conjunction with physical testing of tank car integrity and predictive modeling tools

to gather data on tank car performance in accident scenarios to develop its proposals. The proposals in our rulemaking will account for the unique characteristics of crude oil.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. JOHN THUNE TO
HON. GREGORY D. WINFREE

Question 1. The Senate Committee on Environment & Public Works passed the MAP-21 Reauthorization Act last month, which shifted administration over much of OST-R's work, including Intelligent Transportation Systems (ITS) and the Bureau of Transportation Statistics (BTS), to the Federal Highway Administration. Are you supportive of this proposal since it appears to conflict with other changes that have been made at OST-R that have elevated certain responsibilities?

Answer. The Environment and Public Works Committee's reauthorization proposal, S. 2322, would transfer administration for the Intelligent Transportation Systems Joint Program Office (ITS JPO), the Bureau of Transportation Statistics (BTS), and the University Transportation Centers (UTC) programs from the Office of the Assistant Secretary for Research and Technology (OST-R) to the Federal Highway Administration (FHWA). These three programs are funded through the Highway Trust Fund and cumulatively represent \$198.5 million in annual authorized funding, over 90 percent of the funding OST-R receives from Congress.

In 2004, these three programs were incorporated into the Research and Innovative Technology Administration (RITA) via the *Norman Y. Mineta Research and Special Programs Improvement Act* (P.L. 108-426). Just as RITA was intended to be a cross-modal enterprise, each of these three programs is inherently multi-modal and was intentionally placed within the newly-created RITA:

- the ITS research program is a multi-modal hub of research activity and has applications across the surface and maritime operating administrations within the Department;
- the UTC program supports cross-cutting research and workforce development across the transportation enterprise; and
- BTS provides trusted data and statistics on a multi-modal range from ferries to freight to airlines.

In January, via the Consolidated Appropriations Act, 2014 (P.L. 113-76; at Division L, Title I), RITA was elevated into the Office of the Secretary as the Office of the Assistant Secretary for Research and Technology. Importantly, the Act made no change in mission or programmatic structure. This elevation began as a request in the President's Fiscal Year 2013 budget request and repeated again in the Fiscal Year 2014 proposal. Both budget requests included these three programs within OST-R.

In the first surface transportation legislation enacted since the creation of RITA, the *Moving Ahead for Progress in the 21st Century Act* (MAP-21, P.L. 112-141), Congress recognized the importance of these multi-modal programs by keeping them in OST-R (then RITA). Keeping the programs housed in RITA was consistent with the technical assistance offered by the Administration at the time. Furthermore, the Administration's current reauthorization proposal, the GROW AMERICA Act, recognizes the inherent multi-modality of the ITS JPO, BTS, and the UTC program and seeks to keep them within OST-R, as opposed to being confined to a single modal "silo." The Highway Trust Fund research and statistical programs of the Office of the Assistant Secretary will continue their existing missions and remain key components of the newly-elevated office. Additionally, the GROW AMERICA Act includes authorizing language to cement OST-R within the Office of the Secretary.

RITA's transition into the Secretary's Office is well underway—the ITS JPO, BTS, and UTC programs included. Indeed, the Department has "hit the ground running" in adopting the changes enacted into law, is transitioning to ensure this new office is the focal point for research across DOT, and is looking across the research investments made in all of the modes to improve the delivery of transportation research and technology programs, and of national statistical programs. Organizational change does not happen overnight but, already, what we do is being drawn into leadership discussions as part of the Office of the Secretary, in a way that it was not when RITA was an Operating Administration.

Question 1a. What consequences would this shift have on OST-R?

Answer. The ITS JPO, BTS, and UTC programs have a combined authorization of \$198.5 million in annual funding, via the Highway Trust Fund. If these programs were shifted to FHWA for administration, OST-R would continue to manage the De-

partment's research coordination efforts and the Office of Positioning, Navigation and Timing & Spectrum Management. These programs are funded via the General Fund; the budget request for Fiscal Year 2015 is \$14.625 million. OST-R would continue to oversee the Volpe National Transportation Systems Center in Cambridge, MA, and the Transportation Safety Institute in Oklahoma City, OK, both of which are fee-for-service organizations.

Question 1b. How would this impact the work done on ITS and at BTS?

Answer. As its name implies, the Intelligent Transportation Systems Joint Program Office (ITS JPO) is shared with FHWA. Specifics of the sharing agreement between the two organizations are detailed in a Memorandum of Understanding (MOU) formalized in 2006. In short, OST-R provides strategic management for the ITS JPO, and program staff are accountable to the Assistant Secretary. FHWA provides administrative, finance and procurement support. In practical terms, a shift to FHWA would shift the programmatic reporting chain for the ITS JPO.

Authorizing language for BTS in MAP-21 (sec. 52011; 49 USC sections 6301-6313) makes clear that BTS is intended to be a fully multi-modal and comprehensive source of statistics on the performance and impacts of the national transportation system, a scope that aligned with RITA's mission and continues to align with OST-R's mission. As an OMB-designated Federal Statistical Agency, the Bureau of Transportation Statistics (BTS) is required to ensure the integrity, objectivity, impartiality, utility, and confidentiality of information collected for statistical purposes, and of the analyses and reports which BTS prepares for policy uses and for public release. Past discussions of "assigning" the Bureau to any one modal administration have been met with concerns from the stakeholder community about "loss of independence" or "loss of objectivity." A BTS shift would impact FHWA in that the accountability for statistical products would now flow through FHWA, and FHWA would need to begin to provide administrative, finance and procurement support to BTS, currently provided through OST-R.

Both the ITS JPO and BTS are inherently multi-modal and provide research applications and statistical support across the transportation enterprise generally, and the USDOT specifically. Being housed in OST-R structurally will continue a cross-modal focus through which they can achieve their missions, delivering multi-modal solutions.

Question 2. GPS has been identified as a critical component of your office's Intelligent Transportation System (ITS). What research is being carried out by your office on the further use and integration of GPS into surface transportation safety and efficiency? What role does precision location play in the future of transportation?

Answer. The availability and accuracy of the Global Positioning System (GPS) offers increased efficiencies and safety for all modes of surface transportation. Many of the challenges associated with the routing and dispatch of commercial vehicles are significantly reduced or eliminated with the use of GPS. Implementation of GPS technology to track and forecast the movement of freight has created a logistical revolution, including an application known as time-definite delivery. GPS-based applications have also transformed the management of mass transit systems, road maintenance crews, and emergency vehicles.

GPS is an essential element of the Intelligent Transportation Systems (ITS) Connected Vehicle program designed to increase situational awareness and reduce or eliminate crashes through vehicle-to-vehicle (V2V) and vehicle-to-infrastructure (V2I) data transmission. Research is being conducted in the area of advanced driver assistance systems, which include road departure and lane change collision avoidance systems, among other safety-critical applications.

Railways are installing Positive Train Control (PTC) systems, many of which are GPS-enabled, to prevent collisions, derailments, work zone incursions, and passage through switches in the wrong position. A PTC system can automatically vary train speeds, and provide real-time information to re-route traffic, and safely direct maintenance crews onto and off tracks.

GPS also provides rail dispatchers and passengers more accurate information on train arrivals. It enables the automation of track surveying and mapping operations. GPS also allows the automation of track inspection systems that work much faster and detect more defects than human crews, saving time and money while improving safety.

Per U.S. National Space-Based Positioning, Navigation, and Timing (PNT) Policy, the U.S. Department of Transportation has the lead responsibility in representing civil Departments and Agencies in the development, acquisition, management, and operations of GPS and for the development of requirements for civil applications. Within DOT, this responsibility resides within the Office of the Assistant Secretary for Research and Technology (OST-R).

OST-R works with all of the DOT modal administrations in defining their requirements for positioning, navigation, and timing. These PNT requirements are captured in the *Federal Radionavigation Plan* which is developed biennially. OST-R also chairs the Civil GPS Service Interface Committee (CGSIC) which is the recognized worldwide forum for effective interaction between all civil GPS users and the U.S. GPS authorities, as well as the DOT Pos/Nav Working Group to share GPS implementation strategies and lessons learned across the modes.

Looking to the future, sub-meter location accuracies have been identified as needed to assist in improving safety and efficiency, including 10 cm horizontal accuracy (95 percent integrity) for vehicle collision avoidance. Also, there will be an increased focus on the integrity of the navigation solution which is the measure of the trust that can be placed in the correctness of information supplied by a navigation system solution and the ability of the system to provide a timely warning to users when the system should not be used for navigation.

GPS alone cannot always meet PNT requirements and, given increased awareness of the vulnerability of GPS to interference and spoofing, GPS most likely will not be the sole source of positioning for safety critical systems in the future. GPS in conjunction with map matching, inertial navigation systems (INS), accelerometers, Light Detection and Ranging (LIDAR), and other devices and techniques will be used to form an integrated approach, ensuring sufficient accuracy, availability, and integrity of the navigation and position solution to meet user needs.

