WRITTEN STATEMENT OF
SARAH FEINBERG,
ACTING ADMINISTRATOR, FEDERAL RAILROAD ADMINISTRATION,
U.S. DEPARTMENT OF TRANSPORTATION

BEFORE THE
SUBCOMMITTEE ON RAILROADS, PIPELINES, AND HAZARDOUS MATERIALS

COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE,
U.S. HOUSE OF REPRESENTATIVES

"OVERSIGHT OF
THE ONGOING RAIL, PIPELINE, AND HAZARDOUS MATERIALS
RULEMAKINGS"

April 14, 2015

Mr. Chairman, Ranking Member, and Members of the Subcommittee, thank you for the opportunity to appear before you today to discuss the safety of our Nation's railroads. Historically, rail has been a safe and reliable mode of transportation, and one that American passengers and shippers are choosing more than ever before.

- Over the last decade, Amtrak ridership increased 29 percent, from 24 million passengers in Fiscal Year (FY) 2005 to 30.9 million passengers in FY 2014;
- In FY 2014, Amtrak set a new ridership record on the Northeast Corridor with 11.6 million passengers, while eight other Amtrak routes also set new ridership records; and
- In 2014, U.S. rail intermodal freight volumes set a new record with nearly 13.5 million containers and trailers, up 5.2 percent over the previous record achieved in 2013.

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. We are a data-driven agency. We closely monitor data and trends to identify, reduce, and eliminate risks.

Today, I will present an overview of the railroad industry's safety performance over the last decade, and I will present an overview of the status of outstanding regulatory actions FRA is currently completing. Finally, I will discuss the U.S. Department of Transportation's (DOT or Department) actions in response to recent accidents and how we are addressing the safety challenges ahead, including through the GROW AMERICA Act.[1]

THE RAILROAD INDUSTRY'S SAFETY RECORD

FRA's top priority is safety. In the ten years from FY 2005 through FY 2014 (the latest year for

[1]The Secretary of Transportation submitted the GROW AMERICA Act to Congress on March 30, 2015. "GROW AMERICA" stands for "Generating Renewal, Opportunity, and Work with Accelerated Mobility, Efficiency, and Rebuilding of Infrastructure and Communities throughout America."

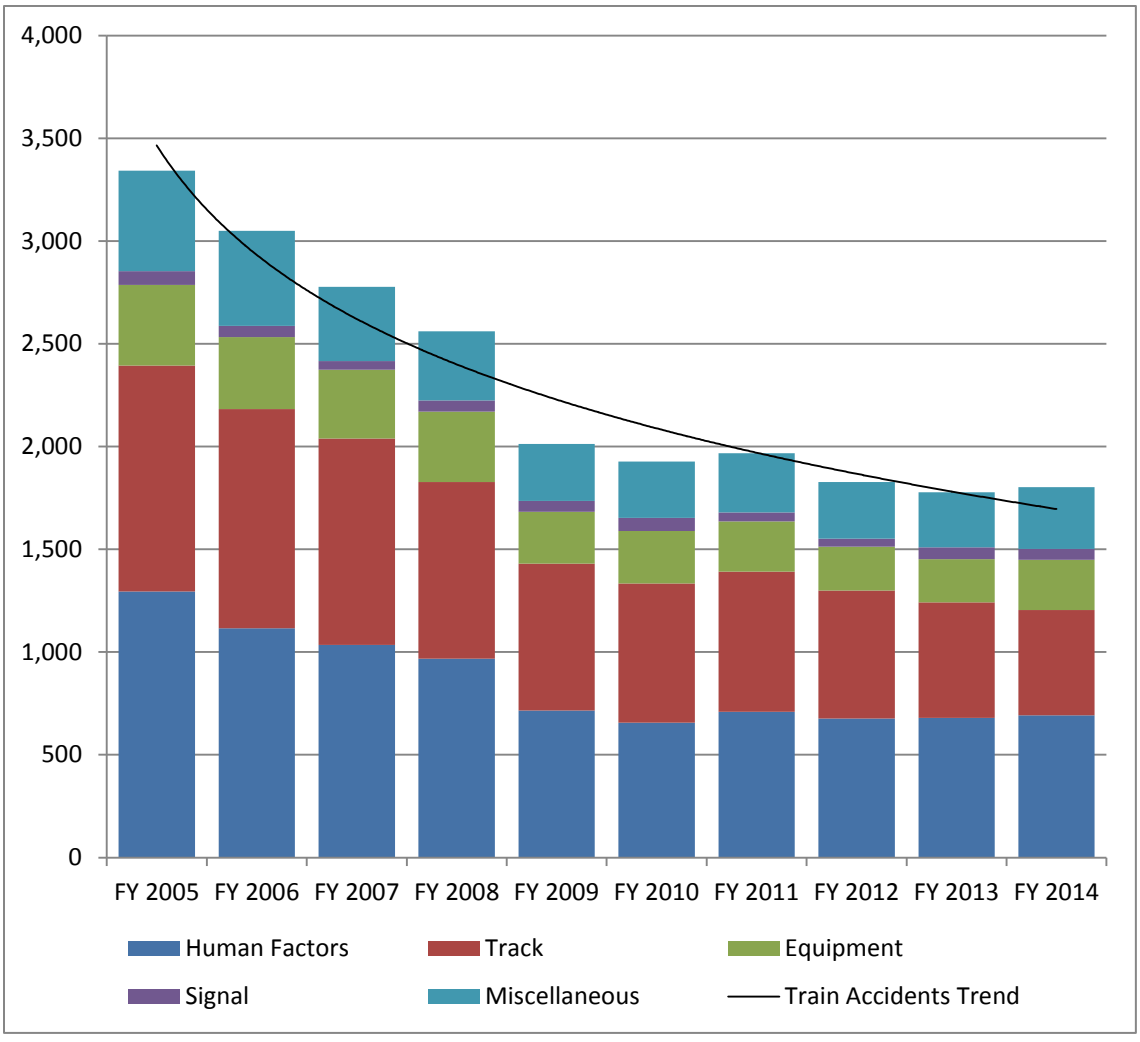
which complete data is available)--

- Total train accidents declined by 46 percent.
- Total derailments declined by 47 percent.
- Total highway-rail grade crossing (grade crossing) accidents declined by 24 percent.

These safety improvements have resulted in 14-percent fewer fatalities overall (906 fatalities to 773 fatalities–94 percent of which are trespassing or grade crossing related), 52-percent fewer employee fatalities, and 6.5-percent fewer injuries (9,386 injuries to 8,774 injuries) over 10 years.

The chart and table below illustrate a decade of safety improvement.

Ten-year Downward Trend for Number of Train Accidents (FY 2005-FY2014)
*Fiscal Year Representing Absolute Numbers



Ten-year Trends for Railroad Accident/Incident Rates, by Accident/Incident Cause

*Accident/Incident, Train Accident, and Grade Crossing Incident Numbers Are Normalized by Million Train-Miles for Fiscal Year.

Non-Accident Hazmat Releases Are Normalized by 200 Million Hazmat Ton-Miles for Fiscal Year.

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
Total Accidents/ Incidents	18.093	17.525	17.298	16.908	16.873	16.7	16.098	15.255	15.161	15.785
Human-Factor-Caused Train Accidents	1.648	1.38	1.297	1.23	1.039	0.949	0.996	0.922	0.915	0.901
Track-Caused Train Accidents	1.398	1.318	1.258	1.094	1.039	0.978	0.958	0.851	0.756	0.675
Equipment-Caused Train Accidents	0.499	0.433	0.418	0.436	0.368	0.37	0.342	0.291	0.28	0.32
Total Signal/Misc.-Caused Train Accidents	0.707	0.641	0.506	0.496	0.48	0.488	0.466	0.428	0.437	0.473
Grade Crossing Incidents	3.8	3.797	3.523	3.24	2.986	2.902	2.883	2.791	2.7	2.975
Non-Accident Hazmat Releases	1.406	1.154	1.226	1.234	1.163	1.098	1.082	0.755	0.789	0.821

A decade of steady improvement in safety outcomes, along with significant reductions in the rates of all types of accidents since FY 2008, is strong evidence that FRA's approach to oversight and enforcement is effective. Despite this good news, there are still many risks to mitigate, and we have a long way to go to reach zero accidents, injuries, and fatalities.

AN OVERVIEW OF OUTSTANDING REGULATORY ACTIONS

The Rail Safety Improvement Act of 2008 (RSIA) mandated that FRA, as the Secretary's designee, complete an unprecedented 43 discrete tasks, including the publication of final rules, guidance documents, model State laws, studies, and reports, as well as three types of annual reports and hundreds of periodic accident reporting audits.

Today, FRA has 10 remaining RSIA-mandated, non-periodic items left to complete. The majority of these are final rules that we are currently working with the Office of the Secretary of Transportation and the Office of Management and Budget (OMB) on completing. Appendix 1 lists the RSIA-mandated rulemakings, non-periodic reports and studies, guidance, and model State laws that FRA has completed as of April 1, 2015.

Currently, FRA has identified five significant rulemakings as priority rulemakings for the agency, including three that are at the final rule stage. These rulemakings include:

- ***A Final Rule on Railroad System Safety Programs.*** This RSIA rulemaking would improve the safety of passenger railroad operations through structured, proactive

processes and procedures developed by intercity passenger and commuter railroads. It would require each of these passenger railroads to establish and implement a customized, risk reduction program, called a System Safety Program, supported by certain FRA-approved plans that would systematically identify, evaluate, and mitigate risks on its railroad in order to reduce the number and rates of railroad accidents, incidents, injuries and fatalities. A draft final rule is in review in the Department.

- ***A Final Rule on Risk Reduction Programs.*** This RSIA rulemaking is the freight-railroad counterpart of the System Safety rulemaking. This rulemaking would require each major (i.e., Class I) freight railroad to establish and implement a customized Risk Reduction Program, also supported by certain FRA-approved plans. The notice of proposed rulemaking (NPRM) in this proceeding was published February 27, 2015, and public comments are due by April 28, 2015. Following the close of the comment period, FRA will prepare a final rule.

- ***A Final Rule on Securement of Unattended Equipment.*** This rulemaking would amend the brake system safety standards for freight and other non-passenger trains and equipment to ensure better compliance with the requirements relating to the securement of unattended equipment. Specifically, the NPRM in this rulemaking, published in September 2014, would codify some of the requirements already included in FRA's Emergency Order Establishing Additional Requirements for Attendance and Securement of Certain Freight Trains and Vehicles on Mainline Track or Mainline Siding Outside of a Yard or Terminal. 78 FR 48218 (Aug. 7, 2013). Amendments to FRA's existing regulations would include additional securement requirements for unattended equipment, primarily for those that include cars containing certain hazardous materials, and additional communication requirements relating to job briefings and securement verification.

- ***An NPRM on Train Crew Staffing.*** This rulemaking would propose train crew staffing requirements to address the safety risks posed to railroad employees, the general public, and the environment.

- ***An NPRM on Passenger Equipment Safety Standards.*** This rulemaking would propose amendments to 49 C.F.R. Part 238 to update existing safety standards for passenger rail equipment. Specifically, the proposed rulemaking would add standards for alternative compliance with requirements for Tier I passenger equipment, increase the maximum authorized speed for Tier II passenger equipment, and add requirements for a new Tier III category of passenger equipment needed to support the procurement of high speed train sets.

Additionally, FRA is committing significant resources to assist the Pipeline and Hazardous Materials Safety Administration (PHMSA) with the development of its final rule on high-hazard flammable trains.

Further, there are additional regulatory actions under development at FRA. These include the following:

- A final rule on Miscellaneous Amendments to Roadway Worker Protections;
- An RSIA final rule extending the alcohol and drug regulations to maintenance of way (MOW) employees and contractors;
- A final rule on Passenger Train Door safety;
- A final rule on rail equipment safety glazing;
- An RSIA NPRM on Fatigue Management Programs;
- An NPRM on Engineer Qualification Revisions;
- An NPRM on Hours of Service Recordkeeping Amendments; and
- An NPRM on Accident Reporting Threshold Calculation.

RESPONSE TO ACCIDENTS

Last year we conducted 71,380 compliance inspections and 100 accident investigations. The information learned as a result of these activities, along with other key data and research, plays an important role in our ability to identify future risks and how to mitigate those risks or eliminate them entirely. The data also inform our approach to necessary enforcement actions.

In recent months, the safe shipment of crude oil, passenger safety, and highway-rail grade crossing safety have attracted widespread attention after several high-profile incidents. Additionally, the installation and implementation of Positive Train Control (PTC) remains at the forefront of advancing safety. The following section reviews initiatives FRA has taken to address safety challenges in these areas.

SAFE TRANSPORTATION OF ENERGY PRODUCTS

Transportation of crude oil by rail has increased significantly. Between 2009 and 2013 (the last year for which data is available), the rail shipment of crude oil has increased by 4,000 percent. Much of this traffic is driven by new production from the Bakken oil fields in North Dakota.

This is a nationwide transportation safety concern as crude oil and other energy products are shipped from production areas to refineries on the East, West, and Gulf Coasts. The consequences of an accident involving containers of crude oil can be catastrophic, as demonstrated by the accident in Lac-Mégantic, Québec, which killed 47 people.

Since the Lac-Mégantic derailment on July 6, 2013, there have been 22 subsequent train accidents in the United States involving trains carrying crude oil. In response to these increased hazards, the Department is pursuing a holistic, all-of-the-above approach to ensure the safe movement of energy products in America. We believe this comprehensive approach must include enhancing the integrity of the tank car itself, strengthening the safety requirements of railroad operations, and taking whatever steps are possible to improve the safety of the product itself.

PHMSA and FRA have undertaken more than two dozen actions to enhance the safe transport of crude oil since December 2012, including issuing emergency orders, safety advisories, safety alerts, hosting public hearings, putting shippers and carriers on notice, as well as providing training for emergency first responders.

To address this growing challenge, FRA has requested 45 new staff positions dedicated to the Safe Transportation of Energy Products (STEP) in its FY 2016 Budget. This includes creation of five new Crude Oil Route Manager positions to focus on the Nation's main energy corridors. For the field, FRA requests 40 dedicated safety inspectors and rail safety specialists to oversee railroads' crude oil safety performance and to ensure that next generation tank cars are built to applicable standards. In addition, FRA seeks additional funds to expand the coverage of its Automated Track Inspection Program (ATIP) on routes with heavy traffic of energy products and to fully implement the Crude Oil Route Track Examination (CORTEX) program, which involves increased track inspections focused specifically on crude oil routes.

Oversight and enforcement are important strategies for making crude oil transportation by rail safer, and so are improving infrastructure and investing in capital. Short lines and local governments in particular require assistance making such investments. FRA's proposed $250 million Local Rail Facilities and Safety grant program, part of the Rail Service Improvement Program, would fund safety projects, including those involving crude oil and energy products.

For example, the Short Line Safety Institute (Institute) provides safety culture assessments, training and education, and recommendations to improve the safety culture on short line railroads involved in the movement of crude oil. In FY 2014, FRA's Office of Research and Development obligated $500,000 to support the development and pilot-testing of the Institute's safety culture assessments. In FY 2015, Congress appropriated $2 million to "improve safety practices and safety training for Class II and Class III freight railroads." FRA plans to add another $300,000 in available appropriations to this effort, for a total budget of $2.3 million. This includes a $1.8 million grant to the American Short Line and Regional Railroad Association (ASLRRA) to perform safety assessments and training on short lines that transport crude oil. Additionally, $100,000 will be awarded to the University of Connecticut to test and validate the safety culture assessment tools and support emerging needs as the pilot phase progresses. FRA will provide $400,000 to the Department's Volpe Center to provide a short line safety needs assessment and to evaluate the implementation and impact of the pilot safety assessments. Volpe will also support ASLRRA in the development of the Institute's long-term training and education needs.

PASSENGER RAILROAD SAFETY

The number of intercity passenger rail services and commuter trips is rapidly increasing. Today, there are more than 500 million railroad passenger trips annually. Protecting the safety and minimizing risks for these passengers as well as railroad crews is a top priority of FRA.

In the aftermath of four high-profile accidents on the Metro-North Railroad in 2013, FRA took unprecedented action by conducting a thorough, in-depth review of the railroad's safety culture. That review highlighted risks that are now managed and mitigated to ensure that policies, processes, and oversight are in place to reduce the risk of accidents in the future.

For FY 2016, FRA has requested 15 new staff positions to develop and implement risk reduction and system safety programs and provide direct oversight and technical assistance to commuter, shared use, and passenger operations. These new positions will enable FRA to conduct recurring evaluations of the safety culture of passenger rail providers across the Nation.

Oversight and enforcement are important strategies to ensure passenger rail safety. In addition, PTC will improve the safety of rail operations by significantly reducing the primary cause of train accidents–human error. Having heard repeatedly from commuter railroads of the financial challenges they face, a key component of FRA's FY 2016 budget includes $825 million to assist commuter railroads in achieving full compliance with the statutory mandate to implement PTC. The budget also provides funding to assist with the implementation of PTC on Amtrak routes.

GRADE CROSSING SAFETY AND TRESPASS PREVENTION

For more than a decade, the number of grade crossing collisions has been decreasing. However, that trend has begun to reverse. In FY 2014, the number of grade crossing incidents increased by nearly 13 percent over FY 2013 levels, and the number of fatalities at grade crossings increased by 6 percent. Overall, in FY 2014, grade crossing and trespassing fatalities accounted for 94 percent of all rail-related deaths.

In the wake of recent incidents near or at grade crossings in California, New York, and North Carolina, FRA launched a multi-faceted campaign to enhance grade crossing safety. The first initiative of the campaign was geared towards law enforcement agencies, requesting that they increase their presence at grade crossings, issue more citations to drivers that violate traffic laws at crossings, and consider the rapid implementation of best practices for grade crossing safety. The initial phase of the campaign has been successful, with a number of law enforcement jurisdictions increasing their presence at grade crossings and writing substantially more citations to drivers at crossings. In New York, for example, the Metropolitan Transportation Authority (MTA) Police Department issued six times as many citations during the first quarter of 2015 as they did for the same period last year. Most citations are being issued to drivers who drive around warning gates, stop on the tracks, or drive while distracted at grade crossings.

Subsequent phases of the campaign will include increasing public awareness, employing greater use of technology, improved signage, stronger partnerships with States and safety organizations, as well as exploring how additional funding for grade crossing safety can be effectively utilized to improve safety outcomes.

Similarly, trespass deaths followed the same pattern as grade crossing collisions between FY 2009 and FY 2014. There was an average of 420 fatalities per year between FY 2009 and FY 2013. The actual number of trespasser fatalities (473) increased in FY 2014 by 7.7 percent over the previous fiscal year. Trespassing is a leading cause of rail-related deaths and accounted for 61 percent of all rail-related fatalities in FY 2014.

In the FY 2016 budget, FRA requests 16 grade crossing safety manager and 8 trespass prevention manager positions. These employees would conduct nationwide safety outreach with the trucking industry, communities, local planners, schools, and others to improve the safety of the nearly 130,000 public grade crossings. FRA also seeks funds to bring together trespass prevention experts from freight, commuter, and transit railroads to share and develop new prevention initiatives. Moreover, FRA requests new funds to implement a pilot program to provide targeted and sustained community outreach.

Additionally, the proposed $250 million Local Rail Facilities and Safety grant program will enable local communities to build grade crossing improvements and relocate rail lines from residential neighborhoods or other highly trafficked areas, among other critical improvements.

IMPLEMENTATION OF PTC

The implementation of PTC is the single most important safety advancement facing the rail industry today. RSIA mandated the technology to be implemented on certain railroads and routes by December 31, 2015.

With limited exceptions and exclusions, PTC is required to be installed and implemented on Class I railroad main lines -- lines with 5 million or more gross tons annually – over which any poisonous or toxic by inhalation (PIH/TIH) hazardous materials are transported. By statute, the technology is also mandated on any railroad's main line over which regularly scheduled passenger intercity or commuter operations are conducted. It is currently estimated this will equate to approximately 70,000 miles of track and will involve approximately 20,000 locomotives.

PTC technology is capable of automatically controlling train speeds and movements should a train operator fail to take appropriate action for the conditions at hand. For example, PTC can force a train to a stop before it passes a signal displaying a "stop" indication, or before diverging on a switch improperly lined, thereby averting a potential collision. PTC systems required to comply must reliably and functionally prevent:

- Train-to-train collisions;
- Over-speed derailments;
- Incursion into an established work zone; and
- Movement through a main line switch in the improper position.

PTC systems must also provide for interoperability in a manner that allows for equipped locomotives traversing other railroad's PTC-equipped territories to communicate with and respond to that railroad's PTC system, including uninterrupted movements over property boundaries.

Although the railroads subject to the mandate are working diligently towards implementation of PTC systems, FRA is concerned that the vast majority of these railroads will not be able to meet the deadline. FRA's August 2012 Report to Congress "Positive Train Control: Implementation Status, Issues, and Impacts" summarized the major technical and programmatic challenges and obstacles associated with PTC implementation that FRA had identified so far. Subsequent to the report's submission, a new issue regarding historic preservation reviews of communications

towers required for PTC deployment arose under the jurisdiction of the Federal Communications Commission (FCC). Since then, the FCC has taken steps to address the issues by engaging stakeholders, including FRA, to develop a process to expedite the required historic preservation reviews.

Further, commuter rail operations are cash-strapped and unable to attain certain necessities for implementation, such as communications spectrum.

In recent months, significant interest in a path forward to implementing PTC in the face of a statutory deadline that most railroads will not be able to comply with has emerged among both members of Congress and industry representatives. FRA has proposed that it be granted provisional authority to review, approve, and certify PTC Safety Plans on an individual basis, even though the mandated deadline might be exceeded. FRA has also indicated its willingness to employ enforcement discretion in those situations where railroads have been consistently working towards PTC implementation but will not be able to comply with the current deadline. Moreover, FRA has proposed that it be provided the authority to provide limited extensions to any deadline imposed by Congress in order to permit some latitude in those circumstances where unforeseen events delay a railroad's ability to fully implement PTC.

In the FY 2015 appropriations law, Congress directed FRA to compile and complete a second report to Congress on PTC implementation. That report is due in June 2015; however, FRA is working to complete the report and transmit it to Congress sooner. The report will include a number of additional recommendations and will address issues surrounding the current statutory deadline for PTC implementation.

HOW FRA IS ADDRESSING SAFETY CHALLENGES AHEAD

Continuous safety improvement requires a comprehensive strategy designed to eliminate risk. Here is FRA's strategy:

1. Continuing a rigorous regulatory and inspection program based on strategic use of data;
2. Advancing proactive approaches for early identification and reduction of risk; as well as
3. Capital investments and robust research and development (R&D).

CONTINUING A RIGOROUS REGULATORY AND INSPECTION PROGRAM

We will continue this framework for safety oversight and enforcement and improve it. Data-driven analysis will continue to guide workforce planning and inspection activities.

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.

State rail inspectors are a force multiplier for FRA's compliance and enforcement efforts. The State Rail Safety Participation Program consists of 30 States employing 186 safety inspectors in

the 5 rail safety inspection disciplines: motive power and equipment; operating practices; track; signal and train control; and hazardous materials. States serve as FRA's safety partners. State programs conduct routine compliance inspections; and may undertake additional investigative and surveillance activities consistent with overall program needs and individual State authorities and capabilities. FRA provides on-the-job training to State inspectors. We invite additional State participation in this important program and view it as an opportunity to improve oversight in key States and regions.

Focus Areas

Safety overall has improved; however, accidents related to human error and track defects account for more than two-thirds of all train accidents, and for decades trespassing and grade crossing incidents have accounted for more than 90 percent of all rail-related fatalities. We will allocate resources and work with partners, such as Operation Lifesaver, to make improvements in these challenging areas. Over the last several years, FRA completed the following rulemakings, reports, guidance documents, and other actions, which are important milestones to guide our work in these areas:

Human Factors

- Final rule to advance nationwide implementation of PTC systems by defining statutory terms and the essential functionalities of PTC systems. FRA also issued two other rules designed to reduce some of the costs of PTC implementation. PTC systems are a technology that promotes safety improvement through the reduction of certain human-factor-related incidents and will complement FRA's other safety efforts, such as implementation of safety Risk Reduction Programs (RRP) and crash energy management as applied to rail equipment. On August 22, 2014, FRA published a final rule regarding exceptions to the current regulatory requirements to install and implement PTC systems. The final rule responds to a petition for rulemaking submitted by the Association of American Railroads (AAR). The final rule reduces the number of miles of track and the number of locomotives on which a PTC system must be installed and implemented. Publication of the final rule facilitated settlement of AAR's suit challenging the then-current PTC regulations.
- Final rule requiring a railroad to have a formal program for certifying train conductors. This raised the bar of professionalism and ensures that only those persons who meet minimum Federal safety standards serve as conductors.
- Final rule that establishes minimum training standards for each class or craft of safety-related railroad employees. The rule requires the qualification and documentation of the proficiency of such employees on their knowledge and ability to comply with Federal railroad safety laws and regulations and the employing railroad company's rules and procedures implementing those laws and regulations. FRA is presently reviewing a petition for reconsideration of this final rule.
- Final rule that enhances safety by mandating that certain railroads (each Class I railroad, intercity passenger railroad, and commuter railroad) have a Critical Incident Stress Plan that may help mitigate the long-term negative effects of critical incidents upon railroad employees and the impact of performing safety-sensitive duties in the days following

such incidents when the associated stress may hinder their ability to perform such duties safely.

- Final rule on the hours of service of passenger train employees. This rule draws on detailed research into the causes of train operator fatigue and analysis of thousands of operator work patterns. FRA also published in the Federal Register three detailed statements of agency policy and interpretation to clarify the hours of service laws as amended by RSIA.
- FRA-led industry-wide initiative to combat the dangers of electronic device distraction in the railroad workplace as well as an emergency order and then a final rule prohibiting distracted operation of trains.
- Proposed rule to extend FRA's alcohol and drug regulations to MOW employees, contractors, and subcontractors. Also, makes other substantive amendments that either respond to National Transportation Safety Board (NTSB) recommendations or update and clarify the alcohol and drug regulations based on a retrospective analysis.

Track Safety

- Final rule to improve rail inspections. Requires the use of performance-based rail inspection methods that focus on maintaining low rail failure rates per mile of track and generally results in more frequent testing for internal rail flaws that are invisible to the naked eye; provides a four-hour period to verify that certain less serious suspected defects exist in a rail section once track owners learn that the rail contains an indication of those defects; requires that rail inspectors are properly qualified to operate rail flaw detection equipment and interpret test results; and establishes an annual maximum allowable rate of rail defects and rail failures between inspections for each designated inspection segment of track. These changes are intended to reduce the risk of derailments caused by rail failures by improving the accuracy of rail inspections and shortening the time that latent, undetected rail flaws remain in track.
- Vehicle/track interaction safety standards. The final rule was based on research into vehicle/track interaction, and it promotes the safe interaction of rail vehicles with the track over which they operate under a variety of conditions at speeds up to 220 mph. The rule also adds flexibility for safely permitting high cant deficiency train operations[2] through curves at more conventional speeds so that both freight and passenger trains may better sustain maximum allowable speeds through curved track.
- New technology to improve track safety. Through our R&D program we are developing new technology for avoiding track buckles (sun-kinks). The device measures the neutral temperature of rail and warns the railroad when track maintenance is required to avoid track buckling. We are also developing technology to predict rail temperature variations. This provides railroads information needed to decide the extent and duration of slow orders to reduce safety risk on hot days.

[2] Cant deficiency involves traveling through a curve faster than the balance speed and produces a net lateral force to the outside of the curve. http://www.highspeed-rail.org/Documents/PRIIA%20305%20DocSpec%20and%20other%20NGEC%20Documents/305%20PRIIA%20Tilt%20presentation.pdf

Grade Crossing Safety and Trespass Prevention

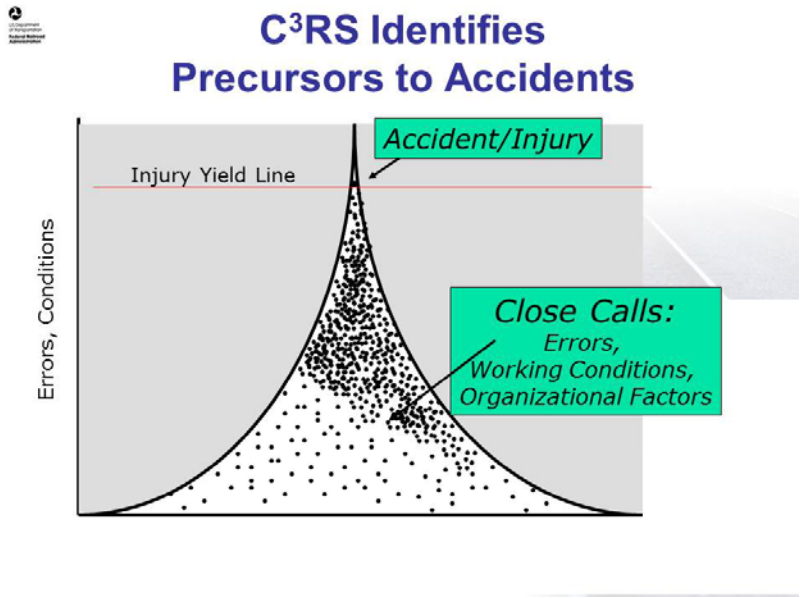
- Standards requiring railroads to establish and maintain toll-free "1-800" emergency notification systems by which the public can telephone the proper railroad about a stalled vehicle or other safety problem at a specifically-identified grade crossing.
- Regulations requiring 10 States to issue State-specific action plans to improve safety at grade crossings.
- Model State laws on highway users' sight distance at passively signed crossings and on highway motorists' violations of grade crossing warning devices.
- A final rule specifying the types of information that railroads have to report to the Department's National Crossing Inventory and periodically update.
- A five-year strategy to improve grade crossing safety, including an audit every two years of Class I railroads' grade crossing accident reports to ensure that these railroads are accurately reporting these incidents. Resources permitting, FRA will conduct such audits every five years on other railroads.
- Guidance addressing pedestrian safety at or near passenger rail stations.
- An FRA-released smartphone application with grade crossing information.

ADVANCING PROACTIVE APPROACHES TO REDUCE RISK

Continuous safety improvement requires a multi-faceted approach. The next level of safety will come from advancing proactive safety-based programs that analyze risks, identify hazards, and put in place customized plans to eliminate those risks.

- Risk Reduction Programs (RRP) and System Safety Programs (SSP) that help identify accident precursors so that corrective action can be taken in advance. As previously mentioned, a final rule to require passenger railroads to develop and implement SSPs is currently in review in the Department, and an NPRM that would require freight railroads to establish RRPs was published on February 27, 2015. Both are designed to require railroads to develop and implement systematic risk-based approaches to ensuring continuous safety improvement.

- Confidential Close Call Reporting System (C^3RS), a voluntary and non-punitive program for railroads and their employees to report close calls. Results from one C^3RS pilot site indicate nearly a 70-percent reduction in certain accidents. C^3RS helps develop a positive and proactive safety culture, using detailed data far beyond what is obtained during accident investigations. The magnitude of the information provided from proactive programs like C^3RS in comparison to traditional data from accidents and injuries is illustrated below:



Programs like C[3]RS allow us to gather data *before* an accident occurs and to develop risk mitigation strategies well in advance.

CAPITAL INVESTMENTS, INCLUDING ROBUST R&D

Safety is improved not just through regulations and inspections but also through capital investments and R&D. Through the American Recovery and Reinvestment Act of 2009 (Recovery Act) and subsequent Fiscal Year 2010 appropriation, Congress dedicated more than $10 billion to improve the Nation's rail system. The investments made with these funds have reduced trip times, improved reliability, added frequencies, and modernized stations and passenger equipment. In addition to these service improvements, this funding has also enhanced railroad safety through track and bridge improvements, grade crossing protection measures and separations, and PTC and signal system upgrades.

Decades of underinvestment have led to a multi-billion dollar backlog of projects required to maintain a state of good repair on our Nation's rail system, as well as a significant deficit in the capital funding required to meet this current need and rising future demand. The Administration has put forward comprehensive, $478 billion multi-modal surface transportation reauthorization proposal–the GROW AMERICA Act--to meet the transportation challenges facing the United States. The proposal includes $29 billion for rail over six years. The fundamental goal of this proposal is to implement a coordinated approach to enhancing the Nation's rail system–an integrated strategy that addresses safety and passenger and freight service improvements.
In addition to capital investments, FRA has consistently made gains in safety using advanced R&D. FRA's R&D efforts not only provide the scientific and engineering basis for FRA's rulemaking and enforcement mechanisms, such as FRA's 2011 substantive hours of service regulations for passenger train employees, FRA's R&D efforts also advance the next generation of rail safety technology and practices. FRA has a number of R&D initiatives underway and planned for FY 2016 that will lead to safety improvements across the railroad industry.

FRA'S REAUTHORIZATION PRIORITIES

FRA's two core authorizations–RSIA and the Passenger Rail Investment and Improvement Act of 2008 *(PRIIA)* –expired in 2013. FRA is proud of its accomplishments in implementing RSIA and PRIIA, particularly in light of the laws' sweeping provisions and the FRA's concurrent need to implement and administer the Recovery Act funding. Today, FRA is a very different agency than when these laws were passed, managing an investment portfolio of more than $24 billion in grants and loans. The rail industry has also changed dramatically since their passage in 2008. Despite the progress made since 2008, significant work remains to improve the national rail network. The Administration is encouraged that Congress, and this committee in particular, recognizes the need for action. The GROW AMERICA Act and the President's FY 2016 Budget (Budget) present an integrated strategy to enhance safety, maintain current rail services and infrastructure, and expand and improve the rail network to accommodate growing passenger and freight demand. The Administration's proposal for rail reflects the following priorities:

- **Build and strengthen our record of safety**. Rail is already among the safest modes of transportation. Nevertheless, continuous safety improvement is imperative. FRA is leading several related initiatives, such as the system safety and risk reduction programs that influence safety outcomes proactively and preemptively; expanding the successful C^3RS program; and supporting implementation of PTC system technology. The budget makes investments in advancing FRA's safety mission by supporting PTC system implementation on Amtrak and commuter rail routes. In addition, would provide funding to assist with the implementation of PTC on commuter railroads and Amtrak routes, study blocked crossings on a systematic basis, and would grant FRA authority to give merit-based extensions of the PTC implementation deadline, to permit provisional operation of PTC systems, and to prescribe science-based hours of service regulations for covered service employees still governed by the inadequate statutory provisions.

- **Grow our economy.** Rail plays a critical role in supporting the stability and growth of the U.S. economy. Freight rail is a $70 billion industry that is relied upon by various sectors across the economy. Collectively, freight and intercity passenger rail employs over 250,000 people across America. Additionally, recent Federal investments in passenger rail are contributing to a revival of domestic rail equipment, manufacturing, and supply industries.

- **Close the infrastructure deficit while modernizing our rail infrastructure**. Past generations of Americans invested heavily to build the infrastructure we rely on today. Passenger rail capital investments have failed to keep up with the needs of existing fleet and infrastructure requirements. The Northeast Corridor (NEC) alone requires nearly $1.5 billion per year over 15 years just to bring the corridor into a state of good repair and maintain it in that condition. The average age of the NEC's major bridges and tunnels is approximately 110 years old. These assets have remained in service well beyond their expected useful life and today require extensive maintenance and are major sources of corridor delays. Commuter rail and Amtrak intercity services move 750,000 people each day along the corridor on more than 2,000 daily trains. An unexpected loss

of the NEC for one day alone could cost the Nation nearly $100 million in transportation-related impacts and productivity losses. Maintaining and modernizing these assets would reduce long-term costs and result in safer, more reliable, and more efficient rail transportation. The Budget would make investments to reduce the backlog of rail maintenance needs, replace obsolete equipment, and modernize stations to comply with Americans with Disabilities Act requirements.

- **Meeting growing market demand**. With the United States expected to gain 70 million people by 2045, the national transportation system must prepare for substantial increases in the movement of people and goods. Rail transportation will be critical to meeting this growing demand. FRA's Budget would make strategic investments that reflect the needs of multiple stakeholders–passenger and freight rail operators, the traveling public and shippers, governments and private interests. The Budget would fund projects based on specific market needs and rigorous analysis of costs and benefits. The Budget would make investments in both new and improved passenger rail services with varying frequencies and speeds, offering ladders of opportunity and necessary mobility to a variety of communities.

- **Promoting innovation**. FRA's budget invests in R&D and workforce to enable America's global leadership in rail safety, productivity, and technological innovation. FRA's vision is a domestic rail industry that leads the world again–we want U.S. companies to patent state-of-the-art rail technology, supply rail operators throughout the world, and employ the best engineers and railway workers. The United States should export intellectual capital and rail products, not import them. The budget makes investments in America's workforce, manufacturing, and critical R&D activities.

- **Ensuring transparency and accountability**. Accomplishing the priorities described above can occur only if these programs are managed through a process that makes expected public benefits and service improvements transparent to the American people. The roles and responsibilities of the Federal government, States, Amtrak, freight railroads, and other stakeholders must be clear and based on sound public policy. One of the principles of GROW AMERICA and the FY 2016 Budget is to organize funding for current passenger rail services by business lines and invest Amtrak's NEC operating surpluses back into the corridor to address NEC infrastructure needs. This structure would improve transparency and accountability for taxpayer investments by aligning costs, revenues, and Federal grants to business lines to better ensure that our investments are advancing the nation's goals and objectives for rail services. GROW AMERICA and the FY 2016 Budget also request $350 million per year to bring Amtrak-served rail stations into compliance with the Americans with Disabilities Act. Accessibility to our Nation's rail system is a civil right, and DOT is committed to rectifying this issue. The Budget would provide a transparent structure that would ensure delivery of public benefits and a high level of accountability for public resources.

The Need for Predictable Funding

An overarching issue that runs across all of these priorities is the need for sustained and predictable Federal funding for rail programs, similar to the treatment of 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. Likewise, internationally, other major rail systems have been planned and developed through a predictable multi-year funding program. GROW AMERICA would establish a Rail Account within the Transportation Trust Fund to provide this funding certainty for rail.

CONCLUSION

Thank you for the opportunity to testify and answer your questions today. Safety is FRA's number one priority, and we appreciate your attention and focus on such an important issue for the American public. Our vision for the next generation of rail safety balances a comprehensive and effective regulatory framework with innovative, proactive ideas and capital investment, including critical R&D. We look forward to working with this Committee to improve our programs and make the American rail network as safe, reliable, and efficient as feasible. I will be happy to respond to your questions.

# # #

Appendix 1

FRA Rulemakings Completed as of April 1, 2015, that were Mandated, Explicitly or Implicitly, by RSIA[3] as amended by MAP-21[4]

1. To specify the essential functionalities of mandated PTC systems, define related statutory terms, and identify additional lines for implementation. *(Sec. 104).*[5] *Final rule with request for comments published on Jan. 15, 2010; final rule amendments published on Sept. 27, 2010.*

2. To establish substantive hours of service requirements for passenger train employees. *(Sec. 108(d)). Final rule published on Aug. 12, 2011.*

3. To update existing hours of service recordkeeping regulations. *(Sec.108(f)). Final rule published on May 27, 2009.*

4. To require State-specific action plans from certain States to improve safety at highway-rail grade crossings. *(Sec. 202). Final rule published on June 28, 2010.*

5. To implement the statutory requirement that railroads report certain information to DOT's National Crossing Inventory. (Sec. 204 as amended by MAP-21). *Final rule published on Jan. 6, 2015.*

6. To require toll-free telephone emergency notification numbers for reporting problems at public and private highway-rail grade crossings. *(Sec. 205). Final rule published on June 12, 2012; final rule amendments and response to petitions for reconsideration published on Mar. 15, 2013.*

7. Increase the ordinary maximum and aggravated maximum civil penalties per violation for rail safety violations to $25,000 and $100,000, respectively. *(Sec. 302*). *Final rule published on Dec. 30, 2008; correcting amendment published on Apr. 6, 2009.*

8. On prohibition of individuals from performing safety-sensitive functions in the railroad industry for a violation of hazardous materials transportation law. *(Sec. 305). Final rule on published May 19, 2009.*

---

[3] In 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)). These rulemaking or quasi-rulemaking mandates, involving a total of either six final rules or five final rules and one guidance document) remain open: Sec. 103 (for three rules--on system safety programs, risk reduction programs, and fatigue management plans); Sec. 406 (for guidance or a rule regarding rail safety technology on line in dark territory (lines not equipped with operational wayside signal or train control system); Sec. 412 (for a rule extending coverage of alcohol and drug rules to maintenance of way workers); and Sec. 420 (for a rule on emergency escape breathing apparatus).

[4] Effective October 1, 2012, Section 1519(c)(6) of the Moving Ahead for Progress in the 21st Century Act (MAP-21) amended a provision that was enacted in Sec. 204 of RSIA concerning the National Highway-Rail Crossing Inventory. In particular, MAP-21 repealed Subsections (l)(3) and (l)(4) of 49 U.S.C. 130.

[5] In addition to RSIA-mandated PTC rules, FRA has published three other PTC rules and PTC-related interim guidance.

9. On procedures for emergency waivers. *(Sec. 308). Final rule published on May 19, 2009.*

10. To require training standards and plans for categories of railroad employees. *(Sec.401). Final rule published on Nov. 7, 2014.*

11. To require the certification of conductors. *(Sec. 402*). *Final rule published Nov. 9, 2011; final rule amendments and response to petition for reconsideration published on Feb. 8, 2012.*

12. On the results of FRA's study of track inspection intervals and other track issues. *(Sec. 403(c)). Final rule published on Jan. 24, 2014.*

13. On concrete ties. *(Sec. 403(d)). Final rule published Apr. 1, 2011; stay of final rule published June 15, 2011; final rule responding to petitions for reconsideration published on Sept. 9, 2011.*

14. 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)). Final rule published on Mar. 25, 2014.*

15. To require owners of railroad bridges to implement programs for inspection, maintenance, and management of those structures. *(Sec. 417). Final rule published on Jul. 15, 2010.*

16. On camp cars used as railroad employee sleeping quarters. *(Sec. 420). Final rule published on Oct. 31, 2011.*

17. 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. *(Necessitated by RSIA as a whole, but not a specific section of RSIA) Published June 5, 2009.*

Completed RSIA-Mandated Guidance and Model State Laws[6]

1. Guidance on pedestrian safety at or near rail passenger stations. *(Sec. 201). Guidance provided in April 2012.*

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*)). *Guidance provided on June 25, 2009.*

3. Model State law on highway users' sight distances at passively signed highway-rail grade crossings. *(Sec. 203). Model State law provided on Jan. 7, 2011.*

4. Model State law on motorists' violations of grade crossing warning devices. *(Sec. 208). Model State law provided on Nov. 10, 2011.*

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

Completed RSIA-Mandated Non-periodic Reports or Studies[7]

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). Submitted with the President's budget for fiscal year 2011.*

2. Report to Congress on the progress of railroads' implementation of PTC. *(Sec. 104). Submitted in August 2012.*

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*). *Submitted on Oct. 21, 2011.*

4. Report to Congress on (a) "the effectiveness of any [hours of service] pilot project pursuant to a waiver" under 49 U.S.C. § 21108(a), (b) the status of all other waivers granted under that provision, and (c) recommendations for amendments to the hours of service laws. [8] *(Sec. 110). Submitted on Oct. 20, 2014.*

5. 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)). Posted on FRA's Web site in 2009.*

6. Report to Congress on the results of DOT research about track inspection intervals, etc. *(Sec. 403(a)-(b)). Submitted on May 2, 2011.*

7. Conduct study of methods to improve or correct passenger station platform gaps *(Sec. 404*). *Submitted on Jan. 10, 2011.*

8. 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). Submitted May 27, 2010.*

9. 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). Submitted on May 26, 2011.*

10. Report to Congress on the results of DOT research about exposure of railroad employees and others to radiation. *(Sec. 411*). *Submitted on Jan. 27, 2011.*

---

[7] Mandates for four individual reports/studies remain open. Sec. 108(e) contingently requires two studies. These studies are not yet due because the contingencies (two specified hours of service "pilot projects of sufficient size and scope to analyze" specified "practices . . . to reduce fatigue") have not yet arisen, as FRA must receive requests from railroads and rail labor organizations in order to conduct the pilot projects that FRA must study. FRA has not received any requests, but continues to encourage participation. Sec. 402 requires a study of whether additional certification programs are necessary, to be submitted within 6 months after promulgating the training standards required by Sec. 401; FRA has begun the study, having published the training standards final rule on Nov. 7, 2014. Sec. 703 requires a non-safety study that is being handled by the Office of the Secretary of Transportation and the Department of Energy.

[8] FRA has fulfilled this mandate unless and until a railroad conducts an additional pilot project under Sec. 110 of RSIA. If an additional such pilot project that occurs, another report to Congress will become due.

11. 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). Submitted on Jul. 27, 2010.*

12. 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). Submitted on Apr. 20, 2011.*