WRITTEN STATEMENT OF
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BEFORE THE
SUBCOMMITTEE ON SURFACE TRANSPORTATION AND MERCHANT MARINE INFRASTRUCTURE, SAFETY, AND SECURITY

COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,
U.S. SENATE

"ENHANCING OUR RAIL SAFETY: CURRENT CHALLENGES FOR PASSENGER AND FREIGHT RAIL"

March 6, 2014

Mr. Chairman, Ranking Member, and Members of the Subcommittee, thank you for the opportunity to appear before you today, on behalf of Secretary Foxx, to discuss the safety of our Nation's railroads. Rail is a particularly safe mode of transportation, and one that American passengers and shippers are choosing more than ever before. Today, I will first give an overview of the railroad industry's safety record and the Federal Railroad Administration's (FRA) safety program, including our implementation of the Rail Safety Improvement Act of 2008. Then, I will discuss the U.S. Department of Transportation's (DOT) actions in response to recent accidents and present FRA's vision to drive the next generation of rail safety.

FRA's 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. Every regulation, safety advisory and emergency order we issue is based on facts and sound research using advanced statistical methods and modeling. We closely monitor data and trends to identify, reduce, and eliminate risks.

Two straight years of record-breaking safety performance, along with significant reductions in all types of accidents since 2008, are strong evidence that FRA's approach to oversight and enforcement is effective.

THE RAILROAD INDUSTRY'S SAFETY RECORD AND FRA'S SAFETY PROGRAM

FRA's top priority is safety, and fiscal year (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 47 percent.
- Total derailments have declined by 47 percent.
- Total highway-rail grade crossing accidents have declined by 35 percent.

These safety improvements resulted in 13-percent fewer fatalities overall (895 fatalities to 779 fatalities – 95 percent of which are trespassing or grade crossing related), 59-percent fewer employee fatalities, and 9-percent fewer injuries (9,367 injuries to 8,534 injuries) over 10 years. These improvements are impressive in their own right, but especially if you consider the regulatory workload that FRA received from the Rail Safety Improvement Act of 2008 (RSIA) *and* passenger and freight rail's growth during this same time.

- Amtrak set new ridership records in 10 of the last 11 years,
- Rail was the fastest-growing mode of public transportation, and
- Intermodal freight traffic surged toward a new record.

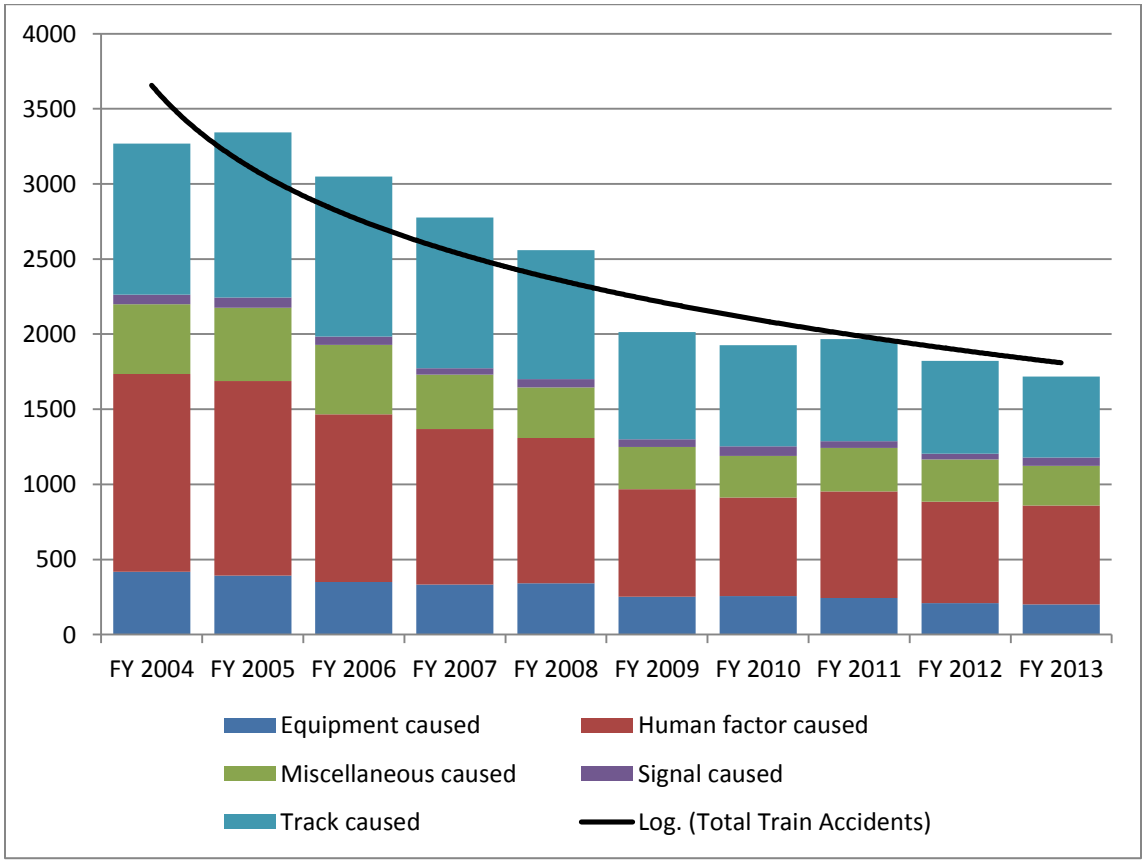
RSIA mandated that FRA, as the Secretary's designee, complete an unprecedented 42 tasks, including final rules, guidance documents, model State laws, studies, and reports as well three types of annual reports and hundreds of periodic accident reporting audits.

Thirty 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 February 26, 2014.

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

Ten-year Downward Trend for Train Accident Reductions (FY04-FY13)

*Fiscal Year Representing Absolute Numbers



Ten-year Railroad Safety Trends by Accident/Incident Cause

*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

	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	16.907	16.873	16.696	16.063	15.167	14.852
Human-Factor-Caused Train Accidents	1.721	1.648	1.380	1.297	1.230	1.041	0.948	0.995	0.919	0.888
Track-Caused Train Accidents	1.314	1.398	1.318	1.258	1.094	1.036	0.972	0.954	0.843	0.727
Equipment-Caused Train Accidents	0.548	0.499	0.433	0.418	0.435	0.366	0.370	0.342	0.286	0.271
Total Signal/Misc.-Caused Train Accidents	0.692	0.707	0.641	0.506	0.497	0.484	0.494	0.469	0.438	0.430
Highway-Rail Incidents	4.024	3.800	3.797	3.523	3.240	2.986	2.900	2.881	2.773	2.685
Non-Accident Hazmat Releases	1.387	1.398	1.147	1.221	1.227	1.149	1.063	1.079	0.933	0.932

Response to Accidents

As we use data and research to drive continuous safety improvement, we learn from every accident. FRA investigators focus on identifying an accident's root causes so we can further eliminate risk and take appropriate enforcement action. This is one more facet of our comprehensive approach to rail safety.

The Department, including FRA, has responded aggressively to recent accidents that have received widespread attention.

Metro-North Commuter Railroad Company[1]

As a result of several accidents on Metro-North Commuter Railroad Company (Metro-North), FRA issued Emergency Order 29 and Safety Advisory 2013-08 on December 11, 2013.

- Emergency Order 29 required Metro-North to take immediate action to prevent excessive train speeds by identifying and prioritizing high-risk areas, modifying its existing signal system to ensure speed limits are obeyed, and ensuring a higher level of engagement and communication among operating crewmembers in higher risk locations. To date, FRA has not identified any instances of noncompliance with Emergency Order 29.

[1] *A description of Metro-North Railroad is in Appendix 2 to this testimony.*

- Safety Advisory 2013-08 helps ensure that all railroads adhere to Federal regulations regarding maximum authorized train speed limits through training, operational testing, and train crewmember communication.

On December 16, 15 days after a fatal accident in New York, FRA commenced Operation Deep Dive, a comprehensive, multi-disciplinary safety assessment of Metro-North where technical and human factors experts are reviewing safety-critical procedures and processes, including operations, mechanical and engineering. The Federal Transit Administration is participating with FRA to ensure investments in Metro-North are properly prioritized to improve safety.

The rail safety team is assessing the following:

•Track, signal and rolling stock maintenance, inspection and repair practices;
•Protection for employees working on rail infrastructure, locomotives and rail cars;
•Communication between mechanical and transportation departments at maintenance facilities;
•Operation control center procedures and rail traffic controller training;
•Compliance with Federal hours of service regulations, including fatigue management programs;
•Evaluating results of operational data to measure efficiency of employees' execution and comprehension of all applicable Federal rail safety regulations;
•Locomotive engineer oversight;
•Engineer and conductor certification; and
•Operating crew medical requirements.

Operation Deep Dive ended February 14, 2014 and FRA will present a report of its findings within 30 days afterwards. FRA will meet with Metro-North to discuss the findings and appropriate remedial actions. Additionally, FRA will discuss best practices and lessons learned from Operation Deep Dive with other commuter rail chief executive officers (CEOs) through the American Public Transportation Association.

Rail Accidents involving Crude Oil

Crude oil transportation by rail rose quickly because of increasing production in the Bakken region of North Dakota. FRA is paying close attention to that region, and accident rates in North Dakota have fallen over the past three years, even with increased traffic.

In response to recent train accidents in the United States and Canada involving tank cars carrying crude oil, DOT, including FRA and the Pipeline and Hazardous Materials Safety Administration (PHMSA), has taken action on multiple fronts to mitigate risks and ensure the safe transportation of crude oil, ethanol, and other hazardous materials by rail. FRA and PHMSA have related but distinct responsibilities in managing the risk from the transportation of hazardous materials. PHMSA produces regulations pertaining to the transportation of hazardous materials by rail, which are primarily enforced by FRA's safety staff, while FRA's staff also acts to enforce comprehensive safety regulations for rail transportation.

On January 16th, oil industry representatives and rail industry CEOs met with the Secretary and heads of PHMSA, the Federal Motor Carrier Safety Administration, and FRA in a "Call to Action." The CEOs were asked to develop specific plans to immediately improve the safety of crude oil shipments, and recommendations on how to improve safety over the long term. After analyzing their plans and

suggestions, on February 20, 2014, Secretary Foxx sent a letter to the Association of American Railroads (AAR) with a list of actions to be voluntarily taken immediately by industry to dramatically improve the safety of railroads transporting crude oil and the communities they move through. AAR President and CEO Edward Hamberger signed the agreement that same day, and individual railroads are signing on subsequently. The letter from Secretary Foxx listed eight commitments:

1. By July 1, subscribers will apply HAZMAT routing analysis to trains with 20 or more tank cars loaded with petroleum crude oil (Key Crude Oil Trains). The routing analysis utilizes a computer model to analyze 27 risk factors to determine the safest and most secure route for the product to travel.
2. By July 1, subscribers will adhere to a speed restriction of 50 mph for all Key Crude Oil Trains, and 40mph in high-threat urban areas if they are using a DOT 111 tank car.
3. By April 1, subscribers will equip all Key Crude Oil Trains on main track with distributive power locomotives or an operative two-way telemetry end of train device to achieve benefits in braking speed and substantially reducing the kinetic energy in trains to prevent pile ups.
4. Effective March 25, subscribers will perform at least one internal rail inspection and two track geometry inspections more than is required by current regulations every calendar year on Key Crude Oil Train routes.
5. By July 1, subscribers will begin installing wayside defective bearing detectors every 40 miles on Key Crude Oil Train routes to prevent equipment-caused accidents.
6. Subscribers will develop an inventory of emergency response resources along Key Crude Oil Train routes. This information will be provided to DOT and emergency responders upon request.
7. Subscribers will provide $5 million to develop and provide training on hazardous material transportation and fund training for emergency responders through the end of 2014. Comprehensive training will occur at the Transportation Technology Center, Inc. facility in Colorado with a training program fully developed by July 1.
8. Subscribers will continue to work with communities on Key Crude Oil Train routes to address location-specific concerns.

A copy of the full agreement is included with this testimony. This agreement is an important step in improving the safety of crude oil transportation by rail. FRA will continue to use its regulatory authority to address this issue and act accordingly to maintain public safety and confidence.

Here is a summary of other DOT actions in response to accidents involving crude oil and other hazardous materials.

Order and Advisories

FRA issued Emergency Order 28, and both FRA and PHMSA issued safety advisories, held public hearings, and notified shippers and carriers of the critical importance of public safety when transporting hazardous materials.

- FRA's emergency order addresses unattended trains, train securement, the use of locks, communication between train crews and dispatchers, and daily safety briefings for railroad employees and was published August 7, 2013.
- A joint FRA-PHMSA safety advisory on related issues was also published August 7, 2013.

- A joint FRA-PHMSA follow-up safety advisory was published November 20, 2013.

Rulemakings

In addition to the emergency order and safety advisories, FRA is updating applicable rail safety regulations, and as PHMSA will describe in more detail, FRA is collaborating with PHMSA on a rulemaking that addresses DOT Specification 111 tank cars. All rulemakings are subject to extensive study and analysis.

But tank cars are only one part of the chain of delivery, and we must identify and evaluate *all* of the risks associated with bulk movements of hazardous material, such as ethanol and crude oil, and then work to eliminate those risks.

- On August 28, 2013, FRA and PHMSA held a public meeting with industry stakeholders to solicit input for a comprehensive review of the Hazardous Materials Regulations applicable to rail. PHMSA and FRA are collaborating to address comments received at the public meeting.

- On August 29, 2013, FRA convened an emergency session of the RSAC. During the emergency RSAC meeting, participants established three collaborative working groups to formulate new rulemaking recommendations regarding (1) transportation of hazardous materials by rail, (2) appropriate train crew sizes, and (3) train securement procedures. These working groups are meeting on a regular basis and we expect formal recommendations for consideration by April 1, 2014.

Operation Classification (the "Bakken Blitz")

In August 2013, PHMSA, supported by FRA, launched Operation Classification, which involves joint activities at all transportation phases to investigate how shippers and carriers are classifying crude oil and what actions they are taking to understand the characteristics of the material. The operations have primarily targeted shipments from the Bakken region and consisted of unannounced spot inspections, data collection, and sampling as well as verifying compliance with Federal safety regulations. Operation Classification is nearing completion.

As I have described, rail safety is at an all-time best. Yet, these accidents illustrate why we can never be complacent.

Our Vision for the Next Generation of Rail Safety

Continuous safety improvement requires a comprehensive strategy designed to eliminate risk. Here is FRA's strategy, founded on three pillars:

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; and
3. Capital investments, and robust research and development.

PILLAR I. CONTINUING A RIGOROUS REGULATORY AND INSPECTION PROGRAM

As stated previously, FRA's approach to rail safety has led to unprecedented safety improvements. 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 States employing safety inspectors in the five rail safety inspection disciplines. State programs conduct planned, routine compliance inspections; and may undertake additional investigative and surveillance activities consistent with overall program needs and individual State 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 trespassing and highway-rail grade crossing incidents account for approximately 95 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. The following rulemakings, reports, guidance documents, and other actions are important milestones that will guide our work in these areas:

Human Factors

- Final rule to advance nationwide implementation of positive train control (PTC) systems (which prevent overspeed derailments, train-to-train collisions, and other types of accidents often caused by human error) 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.
- Final rule requiring a railroad to have a formal program for certifying train conductors. This will raise the bar of professionalism and ensure that only those persons who meet minimum Federal safety standards serve as conductors.
- Proposed rule that would enhance 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 lengthy, detailed statements of agency policy and interpretation to clarify the hours of service laws as amended by RSIA.
- An 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.
- A proposed rule that would establish minimum training standards for each class or craft of safety-related employee and contractor. The rule would require 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. A final rule on minimum training standards and plans is under development.

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; 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 research and development program we are about to bring to market 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

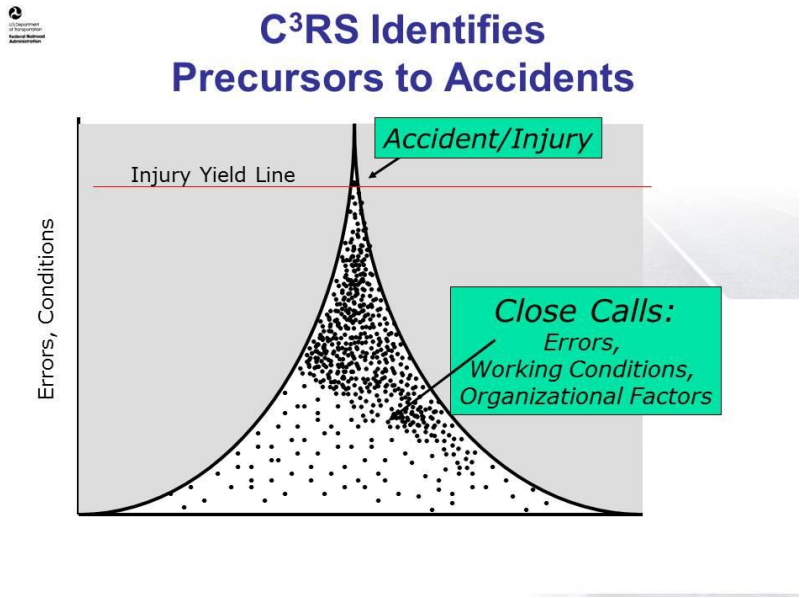
- Standards requiring railroads to establish and maintain toll-free "1-800" emergency notification systems by which the public can telephone the proper railroad about a stalled vehicle or other safety problem at a specifically identified grade crossing.
- Regulations requiring 10 States to issue State-specific action plans to improve safety at highway-rail 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 proposed rule specifying the types of information that railroads would have to report to the Department's National Crossing Inventory.
- A five-year strategy to improve highway-rail grade crossing safety, including an audit every two years of Class I railroads' highway-rail 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.

PILLAR II. 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. We will issue a final rule before the end of 2014 to require passenger railroads to develop and implement SSPs. A notice of proposed rulemaking that would require freight railroads to establish RRPs is currently under development. 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 Confidential Close Calls Reporting allow us to gather data *before* an accident occurs and to develop risk mitigation strategies well in advance.

PILLAR III. CAPITAL INVESTMENTS, INCLUDING ROBUST RESEARCH AND DEVELOPMENT

As you know, portions of two important rail laws expired at the end of FY 2013: RSIA and the Passenger Rail Investment and Improvement Act of 2008 (PRIIA). The President's FY 2014 budget for FRA laid out a comprehensive, multi-year reauthorization blueprint for moving forward. The fundamental goal of this proposal is to develop a coordinated approach to enhancing the Nation's rail system–an integrated strategy that addresses safety and passenger and freight service improvements. This new approach reflects the complex reality of how rail works in the United States–most track is privately-owned and carries a mix of passenger and freight trains. Safety is improved not just through regulations and inspections but also through capital investments and research and development.

For example, chokepoints often hinder the efficient movement of intercity passenger, commuter, and freight trains, while the elimination of grade crossings with strategic placement of overpasses and underpasses enhances rail, vehicular, and pedestrian safety.

FRA's reauthorization proposal's key priorities include the following:

- **Modernizing our rail infrastructure**. Past generations of Americans invested heavily in building the infrastructure we rely on today. Most segments of the Northeast Corridor were built more than a century ago. Maintaining and modernizing these assets will lower long-term costs and result in a safer, more efficient and reliable rail system.

- **Meeting the growing market demand**. With 100 million more Americans expected by 2050, the national transportation system must be prepared to handle substantial increases in the movement of people and goods. Given the existing capacity constraints on other modes, rail will play an increasingly vital role in balancing America's transportation system by accommodating

this growth, resulting in public benefits such as reduced reliance on foreign oil, reduced air pollution, increased safety, and more travel options. The budget incorporates market-based investments in building or improving passenger rail corridors, eliminating rail chokepoints, adding freight capacity, and conducting comprehensive planning.

- **Successfully implementing PTC.** The mandated deadline of December 2015 will likely not be reached by many railroads. Commuter rail operations are cash-strapped and unable to attain certain necessities for implementation, such as communications spectrum. FRA's budget proposes grants for those commuter railroads and research and development for new technologies to improve rail safety. 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. [3] Subsequent to the report's submission, a new issue regarding PTC communications towers deployment arose under the jurisdiction of the Federal Communications Commission.

- **Promoting innovation**. FRA's vision is for the domestic rail industry to be again world-leading. We want U.S. companies to develop patents for state-of-the-art rail technology, to supply rail operators throughout the world, and to employ the best engineers and railway workers. The United States should be exporting intellectual capital and rail products, not importing them.

- **Mitigating rail's impacts on communities.** Improving quality of life by eliminating grade crossings, sealing corridors, reducing noise impacts, and including safety enhancements that allow for service improvements and economic growth.

- **Research and Development.** Implementing new technology will be a key driver for future safety improvement. Here are a few examples of important research:
  - Track inspection technologies that detect defects before they become failures in service.
  - Computer modeling capabilities to improve understanding of vehicle/track interaction, wheel and rail profiles, and contact conditions.
  - Autonomous recording methods to provide more frequent and cost-effective measurements of track condition.
  - Research to develop new methods for monitoring difficult-to-detect safety issues such as longitudinal rail force, ballast lateral restraint, and ballast condition.
  - High-speed rail research and development, which has identified several key risk factors for corridors shared by passenger and freight operations. Research to understand these risks and mitigate them is ongoing.
  - Research on new technologies for improving grade crossing safety. One project that has significant potential is implementation of Intelligent Transportation Systems at grade crossings. FRA is also conducting human-factors research to understand the behavior of highway users when they approach grade crossings. This research is expected to lead to

[3] "Positive Train Control: Implementation Status, Issues, and Impacts" - http://www.fra.dot.gov/Elib/Details/L03718

recommendations for improved signage and warning systems. FRA will consider the benefits and costs, and feasible alternatives, for any recommendation.

- A research and development program to achieve reliable, long life from concrete ties. The program involves freight railroads, Amtrak, manufacturers, and universities.
- The National Cooperative Rail Research Program, which enhances the development of technical skills for a capable workforce to design and operate the next generation of safe railroads.

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.

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 research and development. We look forward to working with this Committee to improve our programs and make the American rail network as safe, reliable, and efficient as possible. I will be happy to respond to your questions.

# # #

Appendix 1

FRA Rulemakings Completed as of March 5, 2014, that Were Mandated, Explicitly or Implicitly, by RSIA[4]

1. To specify the essential functionalities of mandated PTC systems, define related statutory terms, and identify additional lines for implementation. *(Sec. 104*).[5]

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 owners of railroad bridges to implement programs for inspection, maintenance, and management of those structures. *(Sec. 417).*

13. On camp cars used as railroad employee sleeping quarters. *(Sec. 420).*

14. 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.

[4] 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)).

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

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

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).*

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)).*

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).*

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

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

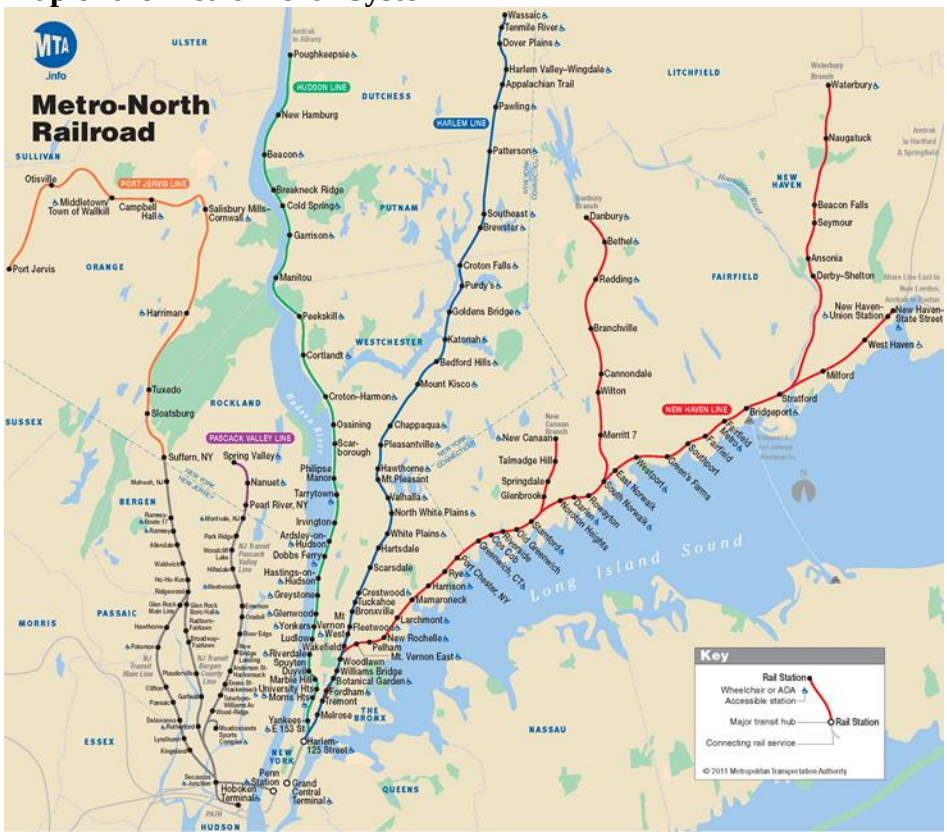
Metro-North Commuter Railroad Company (Metro-North) is the second largest commuter railroad in the nation, with an annual ridership of 82,953,628.[7] It is a subsidiary agency of the Metropolitan Transportation Authority, a New York State Authority.

- Three main lines, the Hudson, Harlem, and New Haven Lines, branch northward out of Grand Central Terminal, located in mid-town Manhattan, into suburban New York and Connecticut. Metro-North maintains the equipment and infrastructure and operates and controls the trains on these lines.

- Amtrak operates on the Hudson Line, between Spuyten Duyvil and Poughkeepsie, and on the New Haven Line, between New Rochelle and New Haven.

- The West of Hudson Service, the Port Jervis and the Pascack Valley Lines, operates from New Jersey Transit Rail Operations' (NJ Transit) Hoboken terminal, providing service to Rockland and Orange counties. NJ Transit maintains the equipment and operates and controls the trains. Metro-North maintains the infrastructure.

Map of the Metro-North System



[7] http://web.mta.info/mta/network.htm#statsmnr