WRITTEN STATEMENT OF THE HONORABLE JOSEPH C. SZABO, ADMINISTRATOR, FEDERAL RAILROAD ADMINISTRATION, U.S. DEPARTMENT OF TRANSPORTATION

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

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

June 3, 2014

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;
 - o \$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 farreaching 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 reliability, 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

_

¹ U.S. Department of Transportation, U.S. Department of Commerce, <u>Commodity Flow Survey</u>.

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. 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

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

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

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

U.S. Environmental Protection Agency, <u>Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2010</u>, April 2012.

Great Recession had some role in influencing habits, research indicates that 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

Amtrak, "State-Supported Corridor Trains, FY2011-12," April 2012.

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

- 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
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. <u>PTC</u>

- 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.

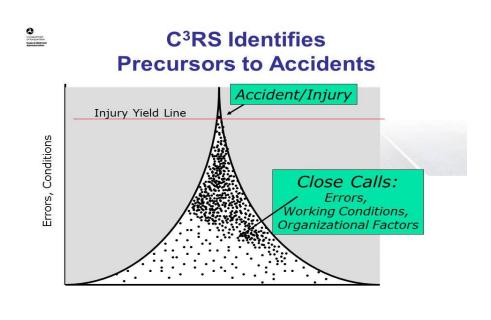
FRA, in selecting the recipients of grants for eligible projects, will consider the following factors:

- 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:



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 Amtrakserved 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

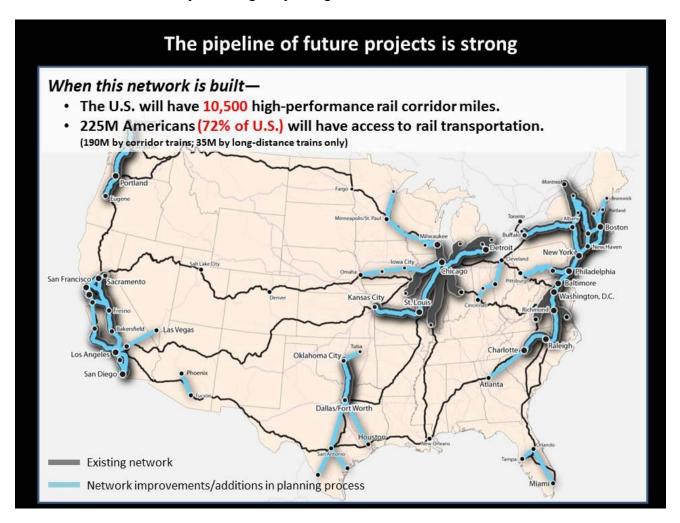
Since 2009, FRA and its State and private partners have invested nearly \$60 million in planning studies to establish a pipeline of future rail projects. These studies and independent planning efforts led by the States have resulted in a pipeline of more than \$20 billion worth of projects that are already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

Current

Safety & Operations

Amtrak Operating

Amtrak Capital/Debt

Railroad Safety Technology Grants

Research & Development

Capital Assistance for IPR/HSR

Rail Line Relocation

Highway-Rail Grade Crossing

Disaster Assistance

Other Misc.

Proposed

Safety & Operations
Research & Development
Current Passenger Rail Service
Rail Service Improvement Program

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.

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).

⁸ 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)).

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

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)).
- **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 In addition, FRA has published three guidance documents on the hours of service laws as amended by RSIA in the <u>Federal Register</u>.

- **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*).

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).