

**Written Statement of Ronald L. Batory, Administrator
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U.S. Department of Transportation**

**Before the Senate Committee on Appropriations
Subcommittee on Transportation, Housing and Urban Development, and Related Agencies
May 16, 2018**

Chairman Collins, Ranking Member Reed, and Members of the Subcommittee:

Thank you for the opportunity to testify today to discuss rail safety. I come to my position as Administrator of the Federal Railroad Administration (FRA) with 45 years of experience in the railroad industry, rising to become the President and Chief Operating Officer of a significant freight rail carrier in the United States. Throughout my career, I have been focused on continually improving safety performance, and I bring this same perspective to my current position with FRA. The mission of FRA is to enable the safe, reliable, and efficient movement of people and goods for a strong America, now and in the future. Under the leadership of Secretary Elaine L. Chao, the FRA is executing this mission by: enforcing safety regulations; promoting non-regulatory safety improvement initiatives; managing Federal investments in rail infrastructure and service; facilitating regional rail planning; and nurturing research and development efforts to advance innovative technologies and best practices. As we approach critical deadlines for railroads' implementation of positive train control (PTC) systems, FRA remains committed to working with the railroads to ensure implementation of this important rail-safety technology in a timely manner.

Positive Train Control Implementation

Railroads' implementation of PTC systems is at the top of our agenda. PTC systems represent the most fundamental change in rail safety technology since the introduction of Automatic Train Control in the 1920s. PTC is a processor-based and communication-based train control system designed to prevent certain train accidents. Specifically, a fully implemented PTC system should prevent train-to-train collisions, over-speed derailments, the movement of trains through a switch left in the wrong position, and incursions into established work zones. PTC accomplishes this by automatically controlling train speeds and movements if an operator fails to take appropriate action.

As mandated by the Rail Safety Improvement Act of 2008 (RSIA), each Class I railroad and entity providing regularly scheduled, intercity or commuter rail passenger service must implement a PTC system on certain main lines over which 5 million or more gross tons of annual traffic are transported. Specifically, railroads must implement PTC on main lines over which poison or toxic-by-inhalation hazardous materials (PIH/TIH) are transported, and main lines over which intercity or commuter rail service is regularly provided. Under RSIA, railroads were originally required to complete implementation by December 31, 2015. Approximately two months before that deadline, the House and Senate overwhelmingly passed, and the President signed, the Positive Train Control Enforcement and Implementation Act of 2015 (PTCEI Act), extending the deadline for full PTC system implementation to at least December 31, 2018.

In the PTCEI Act, Congress permits a railroad to request FRA's approval of an "alternative schedule" with a deadline extending beyond December 31, 2018, but no later than December 31, 2020, for PTC system implementation. The law requires FRA to approve a railroad's alternative schedule with a deadline no later than December 31, 2020, if a railroad submits a written request to FRA that demonstrates it has met the statutory criteria to qualify for such an alternative schedule. Currently, 41 railroads are required by statute to implement PTC systems: all 7 Class I freight railroads; 30 commuter and intercity passenger railroads, including the National Railroad Passenger Corporation (Amtrak); and 4 short line and terminal railroads. The technology is being implemented on approximately 60,000 miles of the 140,000-mile railroad network.

While railroads are making progress, most will need to request an alternative schedule. Under the direction of Secretary Chao, FRA is taking a proactive approach to help railroads acquire, install, test, and fully implement certified PTC systems as soon as possible. On December 27, 2017, one year ahead of the deadline, Secretary Chao sent letters to all railroads subject to the statutory mandate to implement PTC systems, stressing the urgency of safely implementing PTC systems and meeting the statutory deadline. At the direction of Secretary Chao, FRA senior leadership met individually with executives from each of the 41 railroads in January and February of this year. Railroads have generally been candid in detailing the challenges and obstacles confronting their properties. During the meetings, we sought to objectively evaluate each railroad's PTC

deployment status, and learn what remaining steps each railroad needs to take to meet the deadline or satisfy the statutory criteria necessary to qualify for an alternative schedule.

During these meetings, the railroads commonly conveyed the following ongoing challenges:

- There is a limited number of PTC system vendors and suppliers, all of which are significantly resource-constrained and serving all 41 railroads and their tenant railroads;
- As reliability and stability of PTC systems is still immature, railroads are experiencing significant technical issues with both PTC system hardware and PTC system software that often take considerable time to diagnose and resolve, impacting current operations;
- Host railroads noted that many tenant railroads that operate on main lines requiring PTC system implementation have made variable, and often unknown, progress equipping locomotives with operational PTC technology, while some tenant railroads report that their host railroads are not providing opportunity for testing;
- Railroads have only recently begun testing PTC systems for interoperability;
- Many commuter railroads stated that negotiating legal agreements with certain vendors and suppliers often took time to complete, given various insurance, liability, and State law issues; and
- Railroads noted concern about FRA's approval review and approval cycle, given the surge in submissions requiring FRA approval in 2018-2019.

Last month, FRA sent letters to fifteen railroads that we consider to be at risk of both missing the statutory implementation deadline, and failing to qualify for an alternative schedule. This assessment was based on railroads' self-reported progress as of December 31, 2017 (Quarterly PTC Progress Reports for Quarter 4 of 2017). Based on the information provided, these railroads had installed less than 80 percent of their PTC system hardware as of December 31, 2017.

Railroads' self-reported Quarterly PTC Progress Reports for Quarter 1 of 2018 were due to FRA on April 30, 2018. During the week of May 7, 2018, FRA released a status update with infographics depicting railroads' self-reported PTC implementation progress for the first quarter of 2018. Based on railroads' self-reported progress during the first quarter, FRA is in the process of determining which railroads FRA still considers at risk of failing to meet the statutory criteria necessary to qualify for an alternative schedule. Based on FRA's preliminary review, FRA believes

that approximately twelve of the fifteen railroads that were at risk as of December 31, 2017, remain at risk, as of March 31, 2018 representing a 20% improvement.

By law, it is the railroads' responsibility to implement PTC systems, but FRA is facilitating railroad and supplier collaboration to hasten, and urge, implementation. We have also met individually with PTC system component suppliers to learn more about their capacity to meet the high demand of railroads to achieve timely implementation. As noted in our most recent status update, as of March 31, 2018, PTC systems are in operation on approximately 60 percent of the freight railroads' route miles that are required to be governed by a PTC system. Passenger railroads have made less progress, with PTC systems in operation on 25 percent of required route miles. Fourteen railroads report they have completed installation of all hardware necessary for PTC system implementation and another thirteen report they have installed over 80 percent of the required hardware. In addition, as of March 31, 2018, all but two railroads report having acquired sufficient radio spectrum for their PTC system needs.

Grant Funding and Financial Assistance

The safety improvements PTC technology is designed to provide come with significant costs, both in terms of immediate acquisition and increased operations and maintenance costs. Industry estimates PTC acquisition will exceed \$14 billion, and maintenance will cost 10 to 20 percent of annual capital costs. Since 2008, FRA has awarded approximately \$735 million in grant funding to support railroads' implementation of PTC systems. FRA also supported the Federal Transit Administration (FTA) with its evaluation and selection of approximately \$197 million in grant fund awards to 17 commuter and intercity passenger railroads and state and local governments for installation of PTC systems, which were announced on May 31, 2017. The sources of the approximately \$932 million in FRA and FTA grant funding are:

- \$475 million from FRA's High-Speed Intercity Passenger Rail Grant Program;
- \$197 million in Section 3028 of the Fixing America's Surface Transportation Act (FAST Act) funding;
- \$120 million in annual capital grant funding to Amtrak (as of March 2018);
- \$86 million from FRA's Railroad Safety Technology Grant Program;
- \$52 million in American Recovery and Reinvestment Act grant funding to Amtrak; and

- \$2 million in Research and Development grants.

Additionally, in May 2015, FRA issued a \$967.1 million loan to Metropolitan Transportation Authority for Long Island Rail Road's and Metro-North Railroad's implementation of PTC systems. And on December 8, 2017, the Build America Bureau closed on a \$162 million Transportation and Infrastructure Finance and Innovation Act loan and a \$220 million Railroad Rehabilitation and Improvement Financing loan to be issued to the Massachusetts Bay Transportation Authority for PTC system implementation.

Furthermore, the FAST Act authorized three new competitive rail development grant programs—two capital grant programs and one operating grant program; the Consolidated Rail Infrastructure and Safety Improvements (CRISI), Federal-State Partnership for the State of Good Repair, and Restoration and Enhancement. For Fiscal Years 2017 and 2018, Congress appropriated an additional \$961 million in funding with an emphasis on assisting PTC implementation.

- \$661 million for CRISI for capital projects, regional and corridor planning, environmental analyses, research, workforce development, and training to improve the safety, efficiency, and reliability of passenger and freight rail systems; of which, \$250 million is set aside for PTC implementation;
- \$275 million for Federal-State Partnership for State of Good Repair for capital projects on public- or Amtrak-owned infrastructure, equipment, and facilities to replace existing assets in-kind or with assets that increase capacity or service, maintain service while existing assets are brought into a state of good repair, or bring existing assets into a state of good repair; and
- \$25 million for Restoration and Enhancement Grants for operating assistance for up to 3 years per route to initiate, restore, or enhance intercity passenger rail transportation.

In the Consolidated Appropriations Act, 2018, Congress specifically made commuter railroads eligible applicants for the \$250 million set-aside in the CRISI program for PTC system implementation. As such, commuter railroads will be able to join short line railroads and public agencies seeking CRISI financial assistance to implement PTC systems. FRA is working expeditiously to make this important funding for the grant programs available to prospective

grantees, with a primary focus on helping railroads implement PTC systems. In sum, thanks to the funding provided by this committee, the Department has made available over \$2.5 billion in grants and loans since 2008. This amounts to nearly 20% of industry estimates for PTC implementation costs.

Enforcement of the PTC Implementation Mandate

As we move closer to the end of 2018, there are important questions about FRA's enforcement policy. FRA is authorized to assess monetary civil penalties against any railroad that fails to implement a PTC system by the applicable statutory deadline (either December 31, 2018, or, if a railroad has an approved alternative schedule, the applicable date not later than December 31, 2020). FRA is developing an enforcement strategy consistent with governing statutes to address any instances of railroad non-compliance with the statutory deadlines.

FRA's civil penalty schedule recommends, as guidance, a \$16,000 civil penalty for a failure to timely complete PTC implementation on a track segment where it is required. For any violation of a Federal rail safety statute, regulation, or order, however, the statutory minimum civil penalty FRA may assess is \$853, and the ordinary statutory maximum is \$27,904. FRA may assess a civil penalty for each day the non-compliance continues, but FRA may elect to take enforcement action on a one-time basis or each month, quarter, year, or other interval of time during which the non-compliance continues. FRA is currently considering all options, within the framework established by law, to determine what type of enforcement action will be most effective and appropriate under the circumstances. Our goal must be to ensure any enforcement action compels a railroad to fully implement its PTC system as efficiently and safely as possible.

Highway-Rail Grade Crossing Safety and Trespass Prevention

The other frequently persistent safety challenge for FRA is collisions, injuries and fatalities at highway-rail grade crossings, and the prevalence of trespassing on railroad rights-of-way. Nearly 96 percent of all rail-related fatalities are attributable to these two types of events. While significant progress has been made, in 2017, there were over 2,100 collisions between highway users and trains, resulting in 273 deaths and 813 injuries. Another 560 persons were killed as a result of being hit by trains while trespassing on railroad property.

To further address this issue, in addition to traditional brand awareness campaigns such as Operation Life Saver (OLI), the National Highway Traffic Safety Administration and FRA have partnered together to enact a national public education campaign (*Stop. Trains Can't.*), targeted towards rail grade crossing safety. This high-visibility campaign is now in its third year, and underscores the importance of obeying railroad crossing signs and warning devices, as well as crossing train tracks only at designated locations.

Conclusion

Since this Administration took office, railroads have made progress with their PTC implementation. From Quarter 1 of 2017 to Quarter 1 of 2018, railroads increased the total amount of installed PTC system hardware from 77% to 93%. Notably, intercity passenger and commuter railroads increased their total PTC system hardware by 20% from Quarter 1 of 2017 to Quarter 1 of 2018, with freight railroads increasing hardware installation by 16% during that same period. Hardware installation is an initial, yet critical, phase of implementing a PTC system.

Additionally, from Quarter 1 of 2017 to Quarter 1 of 2018, railroads acquired 23% of the spectrum necessary for PTC system implementation, increasing to 93% acquired. At the onset of this Administration, PTC systems were in operation on approximately 18% of the freight railroads' route miles required to be governed by a PTC system, and this increased to 60% as of March 31, 2018. Intercity passenger and commuter railroads also increased, albeit at a much slower rate with PTC systems in operation on approximately 24% of the required route miles as of March 31, 2017, and increasing to 25% of the required route miles as of March 31, 2018.

This progress is a testament to Secretary Chao's commitment to ensuring our nation's railroads are safe. Additionally, it is a testament to the hard work and dedication of the men and women serving at FRA. Although first charged with the PTC mandate in October of 2008, the progress exhibited over the last few years shows that many railroads have prioritized PTC implementation and adhered to Secretary Chao's safety admonition.

Moving forward, FRA will continue to support and facilitate railroads' implementation of PTC technology by utilizing the tools afforded by Congress and providing extensive technical

assistance and guidance to railroads and suppliers. We remain vigilant in harnessing and leveraging all the personnel, financial, and other resources available to help expedite railroads' implementation efforts. FRA holds an unwavering commitment to the safe and effective operation of railroads across the country. We appreciate the Subcommittee's support for our critical programs, and we welcome your continued partnership to advance rail safety and service. I look forward to your questions.