

Joseph H. Boardman
President and Chief Executive Officer



October 5, 2015

The Honorable John Thune
Chairman
Committee on Commerce, Science and Transportation
United States Senate
Washington, DC 20510

Dear Chairman Thune:

We appreciate the opportunity to provide you with a status report on Amtrak's Positive Train Control (PTC) program and our efforts to meet the December 31, 2015, Congressional mandate for implementation under the Rail Safety Improvement Act of 2008 (RSIA).

Background

Amtrak's responsibility for PTC falls into three major areas: 1) Amtrak-owned right-of-way (ROW); 2) Amtrak-controlled ROW, including the Michigan Line East (Kalamazoo-Detroit) and Hudson Line (Poughkeepsie-Schenectady); and 3) Amtrak's locomotives and crews that operate across the national system.

Amtrak has played a prominent role in the development of PTC and, in partnership with industry, we developed two of the first three systems approved by the Federal Railroad Administration (FRA) for operation in the U.S. The Advanced Civil Speed Enforcement System (ACSES), introduced in 2000 on the NEC, is the only PTC system approved by FRA for 150-mph operation. The Incremental Train Control System (ITCS), currently in service on the 97-mile, Amtrak-owned segment of the Michigan Line (Porter, Indiana, and Kalamazoo, Michigan) was the third such system to be approved. It is the only system other than ACSES currently approved for operation at speeds in excess of 90 mph.

As you know, the type of PTC system installed on any given rail line segment is determined by the railroad's owner. The owner installs the necessary wayside equipment, such as transponders or wayside interface units, as well as the radio and server networks, which tie in to the existing dispatching system. Amtrak owns relatively little of the infrastructure we operate over, about 97 percent of our route mileage is owned by host railroads. Thus, while Amtrak uses ACSES and ITCS on its own territory, when operating on host railroads, Amtrak's onboard PTC equipment must be compatible with the wayside PTC system used by the host. Interoperable Electronic Train Management System (I-ETMS) is used by essentially all of Amtrak's host railroads, so Amtrak's locomotive and cab-car fleets must be equipped with I-ETMS for operation on host rails. Amtrak plans to install I-ETMS on certain Amtrak-owned trackage, where our tracks connect with host railroad-owned lines.

Amtrak and its state partners have invested significant amounts in PTC installation on both the Northeast Corridor (NEC) and the Michigan Line. Amtrak spent more than \$54 million to install the ACSES system on the NEC in the late 1990s. By the end of fiscal year 2015, we expect Amtrak's total spending on PTC for the post-RSIA timeframe (FY 2008 to the end of FY 2015) to reach \$162 million. In close



partnership with Amtrak, the state of Michigan has invested more than \$105 million over the past two years to install PTC on the state-owned portion of the Michigan Line (East) between Kalamazoo and Detroit. Prior to 2008, Amtrak spent an estimated \$7 million to install PTC on its equipment; this number is an estimate because the work was typically accomplished as part of ongoing overhaul and periodic maintenance, or included in a larger procurement cost. Post-2008 costs for equipment installation are included in the previous specified estimate of \$162 million.

Spectrum Availability

One issue that has slowed the implementation of ACSES on the NEC has been the matter of radio spectrum acquisition. ACSES currently operates with radios in the 900 MHz bandwidth, but our experience (and rail industry consensus) suggested that we needed to migrate to a bandwidth in the 220 MHz range. Amtrak attempted to purchase the necessary bandwidth on the open market, but the acquisition proved to be a challenging and time-consuming process, and our several requests to the FCC for a bandwidth allocation out of its inventory were not accepted. After five years of procurement efforts, we were able to complete the necessary commercial transactions to purchase spectrum on the open market. We provided this information as part of our testimony before the Commerce Committee on June 10, 2015.

We have been testing our system on the NEC North End for many months and we received Special Temporary Authority from the FCC to test on the NEC South End, which we received on May 29, 2015. With that authority, Amtrak can test all of its NEC South End wayside base stations at their full, designated power to be sure that they communicate appropriately with the trains along the entire segment (New York to Washington); and then to assure that the data that needs to be passed between the trains and the wayside computers will also work without causing interference to any nearby household television reception.

Amtrak anticipates that it will be able to implement its PTC solutions on Amtrak-controlled track between Washington, DC, and Boston, Massachusetts; between Philadelphia, Pennsylvania, and Harrisburg, Pennsylvania; and on its Michigan line by December 31, 2015. Amtrak has secured the necessary rights and authority to operate its system in the 220 MHz spectrum band being used by most other rail carriers.

The current authority to operate certain base stations between Washington and New York and between Philadelphia and Harrisburg is based on Special Temporary Authority approved by the FCC, as the agency reviews Amtrak's application for permanent authorization. Amtrak anticipates that this Special Temporary Authority will be converted to a permanent authorization in the near future.

Amtrak Infrastructure

Amtrak is on schedule to activate ACSES PTC on the *Amtrak controlled* portions of the NEC between Washington and Boston by the current federally mandated deadline of December 31, 2015. Amtrak is already in full PTC operation on the Amtrak-owned Michigan Line between Porter and Kalamazoo. Here are segment-by-segment details:



NEC Mainline

- Boston to New Haven (Division Post Line): Amtrak's ACSES positive train control system is installed and in service.
- New Rochelle to Gate Interlocking in New York: PTC will be installed and in service by December 31, 2015.
- East River Tunnels in New York: PTC will be installed and in service by December 31, 2015
- New York Penn Station to Washington: PTC will be installed and in service by December 31, 2015.

NEC Branch Lines

- Springfield Line between Mill River Interlocking (New Haven) and Spring Interlocking (Springfield, Massachusetts): PTC installation expected to be completed in 2016.
- Harrisburg Line between Philadelphia and Harrisburg: PTC will be installed and in service by December 31, 2015.

Non-Amtrak owned NEC infrastructure (where Amtrak is not responsible for PTC installation)

- Long Island Railroad (LIRR) Harold Interlocking (approximately 1 mile) in Queens, New York, will not be PTC-compliant by December 31, 2015.
- Metro-North controlled territory (56 miles) between New Haven and CP-216 (New Rochelle) will not be PTC-compliant by December 31, 2015.

Non-NEC Amtrak Infrastructure

- Amtrak has installed and is operating PTC along the 97 miles of Michigan Line track it owns in Michigan and Indiana, where PTC was introduced in 2002.
- Amtrak is installing PTC on other lines which will not be completed by the current December 31, 2015 deadline. These include:
 - 135 mile Dearborn-Kalamazoo segment of the Michigan line owned by Michigan (Michigan Line East).
 - Chicago Union Station and New Orleans terminal areas.
 - Hudson Line: 94-mile segment between Poughkeepsie and Hoffmans (just west of Schenectady, New York) which Amtrak has leased from CSX.

(Certain tenants on the NEC South End, NS, MARC, and potentially Conrail, have requested that Amtrak install a separate, wayside I-ETMS PTC system for their use. This system will not be in place by December 31, 2015.)



In compliance with the requirements of RSIA, Amtrak anticipates service restrictions may occur in areas where PTC is not installed on the wayside or on locomotives after the December 31 deadline. *This includes operations of the following railroads on the NEC:* Norfolk Southern (also on the Michigan-owned portion of the Michigan Line and on the Harrisburg Line), Conrail, MARC, NJT, Metro-North, LIRR and potentially CSXT on the NEC South End if it fails to complete ACSES installation on its locomotives by the December 31, 2015 deadline.

National Network and Host Railroads

Most of the 21,000-mile national network that Amtrak operates over is owned by other railroads that host our trains. The host is responsible for installation on their infrastructure. Amtrak crews will be trained to operate over each host railroad route when PTC is installed and certified by the FRA on the route.

Many freight railroads have stated they may refuse to transport certain freight and may suspend passenger service on their track that is not PTC-compliant, if the current December 31, 2015 deadline is not extended. Based on the information that we have gathered from the hosts, Amtrak will plan on suspending service on the national network beginning mid-December on routes that are not PTC compliant or where MTEAs have not been obtained. This suspension of service will also impact

Amtrak's state supported services that operate in partnership with states across the country (California, Connecticut, Illinois, Indiana, Maine, Massachusetts, Michigan, Missouri, New York, North Carolina, Oklahoma, Oregon, Pennsylvania, Texas, Vermont, Virginia, Washington, and Wisconsin). The six largest freight host railroads for Amtrak trains are BNSF Railway, Canadian National Railway, Canadian Pacific, CSXT, Norfolk Southern Railway, and Union Pacific.

Amtrak Commuter Contracts (NEC and Non-NEC Infrastructure)

Amtrak provides either services and/or access for 13 commuter agencies. Amtrak currently operates commuter service for the following state and regional authorities:

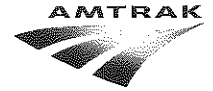
- MARC (Maryland Regional Commuter)
- Shore Line East (Connecticut)
- Metrolink (California)

Amtrak provides services of various types for three other agencies:

- Massachusetts Bay Transportation Authority (Maintenance of way and dispatching for MBTA)
- Sound Transit (Seattle--Maintenance of equipment)
- South Florida Regional Transportation Authority (Tri-Rail--dispatching)

Amtrak provides access (and in some cases, other services) for seven other agencies:

- Long Island Rail Road
- New Jersey Transit
- SEPTA (Philadelphia area)



- DelDOT (operated by SEPTA)
- RIDOT (operated by MBTA)
- Virginia Railway Express
- Metra (Chicago area)

Amtrak has had and continues to have discussions with commuter agencies and states to gain a better understanding of their respective situations and operating plans. In most cases, as you know, these plans are under development.

Freight Operators on Amtrak Controlled Lines

The following list includes Amtrak-controlled line segments where freight trains operate where either the freight railroad locomotives will not be equipped for the PTC system available on the rail line on December 31, or the rail line will not be equipped for PTC by the current December 31, 2015, deadline. This list excludes (1) the NEC North End which has had ACSES PTC for many years, and (2) the Amtrak-owned Porter-Kalamazoo Michigan Line which has had ITCS PTC for many years. On these lines the freight operators already use PTC, so the December PTC deadline is not an issue.

- NS: NEC South End, Harrisburg Line, Michigan East
- CSXT: Hudson Line
- Conrail: NEC South End
- Connecticut Southern: Springfield Line
- Pan Am Southern: Springfield Line
- UP, NS, CN: South Branch (Chicago)
- Jackson & Lansing, Grand Elk: Michigan Line East
- CN: North of New Orleans Union Passenger Terminal

OIG Recommendations

Lastly, I would like to provide you with an update on Amtrak's progress on the implementation challenges identified by the Amtrak OIG that you reference in your letter which include:

OIG Recommendation: Place a high priority on hiring a PTC program manager and ensure that he or she has clear authority and accountability for managing all implementation tasks.

Action: Senior Manager of PTC hired and brought on Board July 27, 2015. Individual has been heavily involved in all facets of PTC implementation and interface between internal departments at Amtrak.

OIG Recommendation: Further refine the recently developed master program plan to include detailed tasks, milestones for completion, and periodic review of the plan to measure progress and mitigate schedule slippage.

Action: Engineering and Mechanical Departments are both adjusting schedule on the Master Plan to address critical path items. Weekly conference calls held on implementation of PTC.



OIG Recommendation: Reassess the program office's staffing needs to determine whether the current staffing capabilities and capacities are adequate to successfully implement the FRA-approved plan.

Amtrak: *Staffing needs are being reviewed and costs associated with these being examined for FY16.*

OIG Recommendation: Re-evaluate program costs and ensure costs are disclosed in the company's financial plans, including the costs of reimbursing host railroads.

Amtrak: *Amtrak is working with its independent outside auditor and the Office of Inspector General to ensure PTC costs are properly disclosed in the company's financial plans, including the costs of reimbursing host railroads.*

Amtrak expects to operate Northeast Corridor services where PTC has been installed and will operate our national network of services to the extent permitted by law and the FRA. Should Congress fail to pass legislation to extend the PTC deadline beyond December 31, 2015, there will be significant impacts to our service and on our customers and tenant railroads. The potential economic impacts would also be substantial, since a vast majority of our network would be inoperable without an extension of the deadline. We will work with the multitude of partners that rely on Amtrak service, from state and local partners, to commuter rail operators, to the freight railroads, to ensure that passengers and partners are aware of any disruptions that may occur. To that end, we anticipate that starting December 1 we will need to begin notifying passengers through our reservations system of disruptions that may occur as a result of the PTC deadline.

We are grateful for your leadership on this important safety issue and we appreciate your interest in Amtrak's positive train control program. If you have any further questions or wish to speak with me directly, please let me know. We at Amtrak stand ready to provide you and your staff with any additional information you may need.

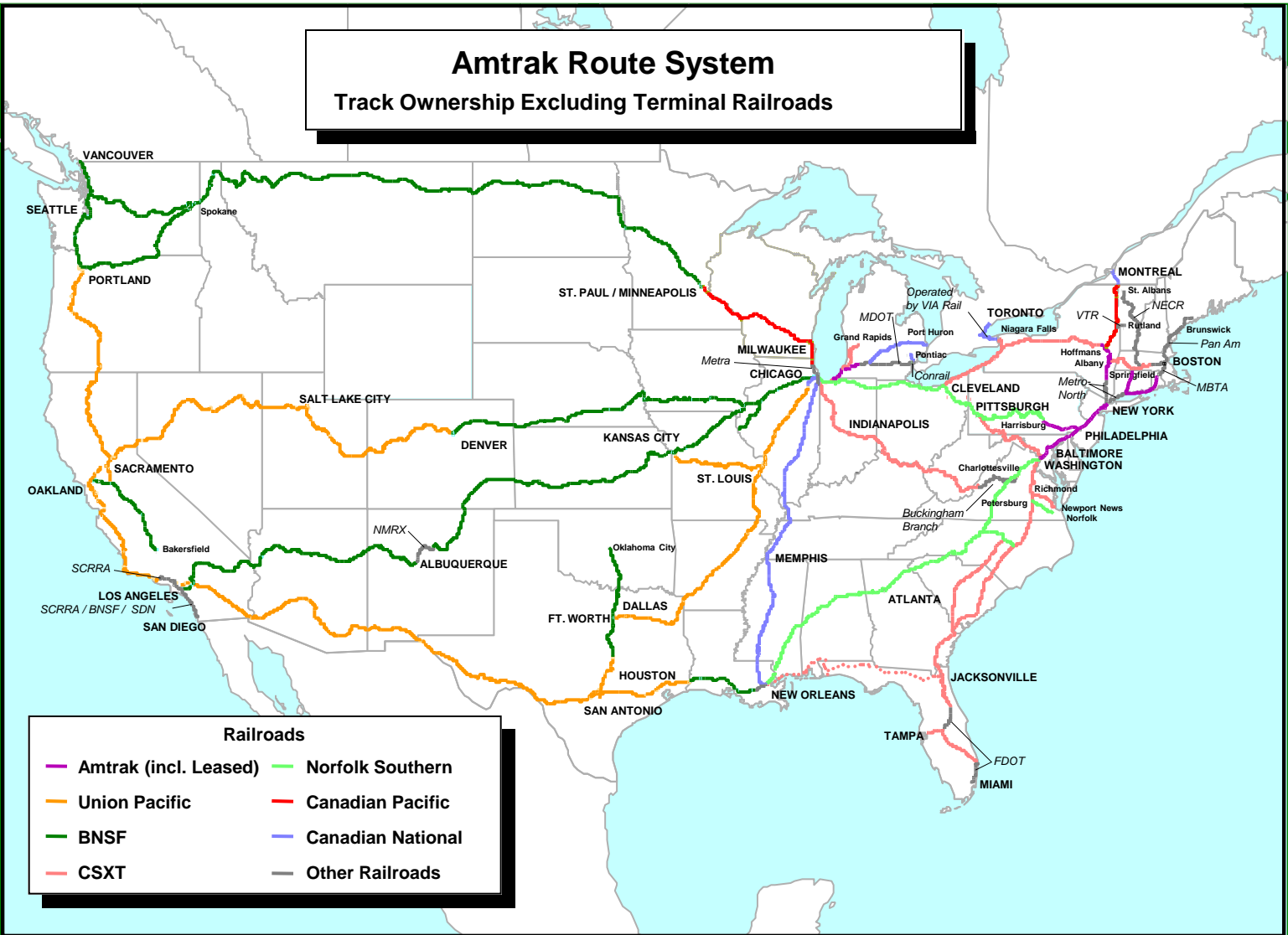
Sincerely,


Joseph H. Boardman
President and Chief Executive Officer

Enclosure (Amtrak Route System map with segment ownership)

Amtrak Route System

Track Ownership Excluding Terminal Railroads



Railroads	
— Amtrak (incl. Leased)	— Norfolk Southern
— Union Pacific	— Canadian Pacific
— BNSF	— Canadian National
— CSXT	— Other Railroads