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Issues in the Reauthorization of Amtrak

David Randall Peterman

Analyst in Transportation Policy

John Frittelli

Specialist in Transportation Policy

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Summary

Amtrak is the nation's primary provider of intercity passenger rail service. It was created by Congress in 1970 to preserve some level of intercity passenger rail service while enabling private rail companies to exit the money-losing passenger rail business. It is a quasi-governmental entity, a corporation whose stock is almost entirely owned by the federal government. It runs a deficit each year. Congressional appropriations cover about half its total loss, and represent essentially all of its funding for capital maintenance and improvements.

Amtrak can be divided into three parts. There is its Northeast Corridor (NEC) service between Washington, DC, and Boston, where Amtrak owns much of the infrastructure and operates frequent service using its fastest trains. There is its long-distance service, in which infrequent trains crisscross the country over tracks owned by freight rail companies. And there is its state-supported service, in which Amtrak operates shorter-distance trains under contract with states. Amtrak was last authorized in 2008, in the Passenger Rail Investment and Improvement Act. That authorization expired at the end of FY2013. Amtrak's annual appropriations do not rely on separate authorization legislation, but authorization legislation does allow Congress to set multiyear Amtrak funding goals and federal intercity passenger rail policies.

Since Amtrak's inception, Congress has been divided on the question of whether it should even exist. Amtrak is regularly criticized for failing to cover its costs, and thus requiring federal assistance. The need for federal financial support is often cited as evidence that passenger rail service is not financially viable, or that Amtrak should yield to private companies that would find ways to provide rail service profitably. Yet it is not clear that a private company could perform the same range of activities better than Amtrak does. Indeed, Amtrak was created because private-sector railroad companies in the United States lost money for decades operating intercity passenger rail service and wished to be relieved of the obligation to do so.

By some measures, Amtrak is performing as well as or better than it ever has in its 44-year history. For example, it is carrying a record number of passengers, and its passenger load factor and its operating ratio are at the upper end of their historic ranges. On the other hand, Amtrak's plans do not envision significant decreases in its need for federal funding. Among the perennial questions that Congress may examine in considering reauthorizing Amtrak are whether Amtrak should continue to exist, what range of services it should offer, the appropriate level of federal financial support for Amtrak, its relations with states and with private rail companies, and its level of accountability to Congress.

On March 4, 2015, the House passed H.R. 749, the Passenger Rail Reform and Investment Act of 2015. This bill would authorize \$7 billion for federal passenger rail programs over FY2016-FY2019, including \$5.8 billion for grants to Amtrak and \$1.2 billion for grants to states. It would also restructure Amtrak's financial structure, provide grants to states on the NEC for passenger rail improvement projects, streamline environmental review for passenger and freight rail construction projects, and make a variety of other changes in federal passenger rail policies.

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Overview

Amtrak—officially, the National Railroad Passenger Corporation—is the nation’s primary provider of intercity passenger rail service. Amtrak is structured as a private company, but virtually all its shares are held by the United States Department of Transportation (DOT). Amtrak was created by Congress in 1970 to preserve a basic level of intercity passenger rail service, while relieving private railroad companies of the obligation to provide money-losing passenger service. Although created as a for-profit corporation, Amtrak has never made a profit; in this it resembles both the experience of the private-sector companies that preceded it and of intercity passenger rail operators in many other countries.¹ During the 44 years from 1971 to 2015, federal assistance to Amtrak amounted to approximately \$78 billion in constant 2015 dollars (see **Appendix, Table A-1**).

Amtrak’s approximately 20,000 employees operate trains and maintain its infrastructure. It carries around 31 million passengers annually, providing slightly less than 1% of total U.S. intercity passenger miles traveled by common carrier (see **Table 1**). The company operates approximately 44 routes over 21,000 miles of track. Most of that track is owned by freight rail companies; Amtrak owns about 625 route miles.² The primary section it owns—the Northeast Corridor (NEC)—includes some of the most heavily used segments of track in the nation. The NEC is used not only by Amtrak’s intercity trains, but also by regional commuter lines and some freight trains. By far, the greatest volume of NEC traffic consists of commuter trains, not Amtrak trains.³ Amtrak also operates corridor routes (covering distances under 400 miles) and long-distance routes (over 400 miles in length). Some of Amtrak’s corridor routes are financially supported by states they serve. Amtrak also operates commuter service under contract with state and local commuter authorities in various parts of the country.

¹ Railroad finances are sufficiently complex to allow assertions that some railroad companies in some countries sometimes make a profit. Upon examination it turns out that a company may have made an operating profit, typically when counting certain types of government funding as operating revenue and excluding the capital costs of maintaining the infrastructure. High-speed trains are generally considered more profitable than regular trains, because their higher level of service allows the charging of higher fares. But the then-president of the International Union of Railways observed in 2009 that while high-speed rail offers a variety of social benefits, it was not a profitable business; he stated that only two routes had ever broken even (covering both their operating and capital costs, including construction costs). Victoria Burnett, “Spain’s High-Speed Rail Offers Guideposts for U.S.,” *New York Times*, May 25, 2009.

² Amtrak, *National Fact Sheet—FY2013*, p. 4, <http://www.amtrak.com/ccurl/826/406/Amtrak-National-Fact-Sheet-FY2013-rev.pdf>.

³ Commuter trains represented nearly 95% of the 2,361 average weekday passenger trains operating on the Northeast Corridor in 2010; Amtrak, *Northeast Corridor Infrastructure Master Plan*, May 2010, Table 1: Service Plan Summary, <http://www.amtrak.com/ccurl/870/270/Northeast-Corridor-Infrastructure-Master-Plan.pdf>.

Table 1. U.S. Intercity Passenger-Miles by Common Carriers, 2012
(millions)

Common Carriers	Passenger Miles Carried	% of Total
Airlines	580,501	64.5%
Buses	312,797	34.8%
Amtrak	6,804	0.8%
Total	900,102	100.0%

Source: Bureau of Transportation Statistics, *National Transportation Statistics 2014*, Table 1-40.

Notes: Bus figures include transit. Amtrak figures do not include contract commuter passengers.

Appropriations Status

Amtrak's expenses exceed its revenues each year. In FY2014, Amtrak's revenues totaled \$3.2 billion, against expenses of \$4.2 billion, for a net loss of \$1.1 billion (see **Table 2**). That loss was covered by federal capital and operating grants which are made to Amtrak by the DOT. In recent years, these federal grants have often covered Amtrak's operating loss, with some funding left over. The federal grant in excess of the operating loss and debt service essentially represents the funding Amtrak has available to undertake activities outside of keeping its trains running and covering depreciation of its assets, such as improving its infrastructure and bringing station platforms into compliance with Americans with Disabilities Act requirements.

Table 2. Amtrak Revenues, Expenses, and Federal Support, FY2010-FY2014
(in millions of nominal dollars)

	FY2010	FY2011	FY2012	FY2013	FY2014
Operating revenues					
Ticket revenue	\$1,702	\$1,852	\$1,968	\$2,056	\$2,148
Food and beverage revenue	98	109	122	123	126
State-supported train revenue	174	191	179	187	239
Total passenger-related revenue	1,974	2,152	2,269	2,367	2,512
Commuter revenue	152	164	140	112	119
Other revenue	358	360	434	474	542
Total operating revenue	2,484	2,676	2,844	2,953	3,173
Total expenses	3,560	3,792	4,063	4,184	4,234
Operating loss	(1,075)	(1,116)	(1,219)	(1,230)	(1,060)
Adjustments	655	664	910	934	896
Net operating loss	(420)	(452)	(389)	(359)	(189)
Federal capital and operating grants	1,490	1,484	1,418	1,344	1,390

Source: FY2010 and FY2011: Amtrak, *Fiscal Year 2013 Budget and Comprehensive Business Plan*, Summary Income Statement by Major Accounts, p. 82; FY2012: Amtrak, *Monthly Performance Report to Congress, September 2012*,

Consolidated Income Statement for the Year to Date, p. A-4.1; FY2013 and FY2014: Amtrak, Monthly Performance Report to Congress, September 2014, Consolidated Income Statement for the Year to Date, p. A-4.1. Federal funding taken from annual Department of Transportation appropriations reports.

Notes: The operating loss includes depreciation (an accounting concept which represents the portion of the value of assets that is being used up, not a direct cash expense). Depreciation, along with certain other expenses, is removed in the adjustments line to produce the adjusted (net operating) loss. Amtrak notes that the figures in this table are drawn from an income statement that represents the federal support required for Amtrak’s operations, and are not calculated according to Generally Accepted Accounting Principles.

Amtrak’s federal funding is primarily provided within the Department of Transportation’s appropriation.⁴ The Administration requests funding for Amtrak each year as part of its DOT funding request. Amtrak also submits a separate appropriation request directly to Congress each year;⁵ typically, that request is larger than the Administration request. **Table 3** shows the difference in the requests that were submitted for FY2016.

In recent years, Congress has typically divided Amtrak’s grant into two categories: operating and capital grants. Roughly, the operating grant can be thought of as relating to Amtrak’s annual cash loss, and the capital grant as relating to Amtrak’s depreciation loss, as well as an amount for Amtrak debt repayments.

Table 3. Amtrak Grant Requests, FY2016
(in millions of dollars)

Grants	FY2015 Enacted Grants	FY2016 Administration Budget Request	FY2016 Amtrak Request to Congress
Operating grant	\$290	—	\$732
Capital grant	936	—	1,100 ^a
Debt service grant	154	—	160
Amtrak IG	24	NA	NA
Other	10	2,450	8
Total grants	\$1,390	\$2,450^b	\$2,000

Source: H.Rept. 112-541, S.Rept. 112-157, *Amtrak FY2016 Grant and Legislative Request* (<http://www.amtrak.com/ccurl/62/480/AmtrakFY13%20Leg%20and%20Grant%20Final-w-appx.pdf>).

Notes: The Administration’s FY2016 budget request figures are taken from the crosswalk table on page 63 of the Federal Railroad Administration’s FY2016 Budget Estimates document at <http://www.dot.gov/sites/dot.gov/files/docs/FY2016-BudgetEstimate-FRA.pdf>. Although Amtrak’s Inspector General is part of the National Railroad Passenger Corporation (Amtrak), Congress provides funding to the IG separately; this funding is not included in Amtrak’s direct budget request.

- a. Composed of a “general capital request” of \$544 million and a PRIIA 212 capital grant request of \$556 million.
- b. The Administration’s FY2016 budget request is not directly comparable to FRA’s existing program structure, as it reflects a proposed reauthorization of surface transportation programs, including restructuring of FRA accounts and significantly increased funding for passenger rail activities.

⁴ As a result of a change in the subcommittee structure of the House and Senate Committees on Appropriations in 2006, the Department of Transportation appropriation is part of the Transportation, Housing and Urban Development, and Related Agencies annual appropriations act. For the past several years, Amtrak has also received a grant for security activities, in the range of \$25 million annually, in the Department of Homeland Security appropriations act.

⁵ Per 49 U.S.C. §24315(b)(1)(B).

Authorization Status

Amtrak funding was authorized through FY2013 in the Passenger Rail Investment and Improvement Act of 2008 (Division B of P.L. 110-432). **Table 4** shows the funding authorized for Amtrak in that act and proposed in H.R. 749, the Passenger Rail Reform and Investment Act of 2015, as passed by the House of Representatives, and the actual amount of funding provided to Amtrak through appropriations. During the most recent reauthorization of federal surface transportation programs, the Administration and the House and Senate proposed to include Amtrak in surface transportation reauthorization legislation, but the version enacted in 2012, covering the period FY2013-FY2014, did not include Amtrak.

Table 4. Amtrak Authorized and Appropriated Funding, FY2009-FY2015, and Proposed Authorizations, FY2016-FY2019, in H.R. 749
(in millions of dollars)

Fiscal Year	Authorized Funding	Appropriated Funding (nominal dollars)	Appropriated Funding (in 2014 dollars)
2009	\$1,550	\$2,790 ^a	\$3,079 ^a
2010	1,840	1,565	1,699
2011	1,927	1,484	1,562
2012	2,203	1,418	1,462
2013	2,256	1,344	1,366
2014	NA	1,390	1,390
2015	NA	1,390	1,390
2016	1,412	—	—
2017	1,438	—	—
2018	1,465	—	—
2019	1,495	—	—

Source: Authorized funding: P.L. 110-432, Division B, §§101-102; H.R. 749. Appropriated funding: Federal Railroad Administration FY2016 Budget Estimates, History of Appropriations, pp. 165-166.

Notes: Appropriated funding does not include funding for Amtrak Inspector General’s Office, discretionary grants received under the High Speed and Intercity Passenger Rail grant program under the Federal Railroad Administration, security grant funding received from the Department of Homeland Security, or \$297 million in emergency funding (FY2013) to repair damage from Hurricane Sandy. Appropriated funding figures prior to 2014 inflated to 2014 values using Bureau of Labor Statistics’ Consumer Price Index inflation calculator.

a. Includes \$1.3 billion provided in the American Recovery and Reinvestment Act.

Authorization Issues

Ongoing Funding Expenses

Amtrak is able to cover about two-thirds of its total costs from its passenger-related revenues. That leaves a portion of its operating (i.e., cash) expenses—and virtually all of its capital expenses, including depreciation—to be covered by outside funding, primarily federal funding.



The House of Representatives and Senate Explained

Congressional Procedure

**A Practical Guide to the Legislative
Process in the U.S. Congress**

Richard A. Arenberg

Foreword by Alan S. Frumin

 **TheCapitolNet**

The federal grants Amtrak receives have, in recent years, typically been enough to cover its annual loss with a little left over to go toward new projects.

Amtrak's requests for federal funding are not likely to shrink in the future. It reports a backlog of capital maintenance of many billions of dollars, and says this backlog grows larger each year because the amount of money available for capital repairs is not enough to keep up with the annual maintenance needs.

Amtrak's Federal Funding Stability

The stability, or predictability, of Amtrak's federal funding levels is a perennial issue. Like other railroad companies, Amtrak's operations require extensive spending on the maintenance and improvement of track, rolling stock, signaling systems, and other facilities. Roughly half of Amtrak's budget comes from federal funding appropriated on a year-to-year basis by Congress. The Department of Transportation's Inspector General has noted that the lack of long-term funding "has significantly affected Amtrak's ability to maintain safe and reliable infrastructure and equipment, and increased its capital program's annual cost."⁶ Amtrak has long sought some measure of certainty in its level of federal funding.

Amtrak authorization legislation has often authorized federal funding over a period of several years. But those authorization levels are not binding on appropriators. By contrast, the authorizations for highway and transit programs in surface transportation authorization legislation are typically in the form of a special form of budget authority (contract authority) drawn from a trust fund, which provides more predictable funding.⁷ There have been proposals to create a trust fund for Amtrak, in order to provide a greater level of stability to Amtrak's federal funding.

Such efforts have faced both a policy challenge and a practical challenge. The policy challenge is related to the issue of funding uncertainty; one reason that Amtrak's federal funding is uncertain is that some Members of Congress are opposed to Amtrak receiving federal funding, and therefore oppose providing a more predictable level of future federal funding. The practical challenge is to identify where the revenues for an Amtrak trust fund would come from. The level of federal funding that Amtrak receives could not be provided solely from a tax on Amtrak passengers; to provide the same level of federal funding Amtrak currently receives, the tax on passengers would have to be roughly two-thirds of the current ticket cost. Such a large cost increase would likely reduce ridership, so the tax would probably not raise the desired amount of revenue.

Another means of providing a reliable funding source might involve setting aside money from the existing Highway Trust Fund (HTF). This approach has met with opposition on the basis of both principle (the argument being that the HTF's revenue comes from road users, mainly through motor fuels taxes, and should be used for road-related purposes) and practicality (the revenues

⁶ Department of Transportation Office of Inspector General, *Amtrak Made Significant Improvements in Its Long-Term Capital Planning Process*, CR-2011-036, January 27, 2011, p. 1, <http://www.oig.dot.gov/library-item/5492>.

⁷ During the 2000s, these authorizations were usually described as "guaranteed funding levels," though the guarantee was not absolute. The mechanism that provided that "guarantee" was changed in the 112th Congress, but having the funding drawn from the trust fund still provides some level of predictability, since there are no competing uses: the funds in the Highway Trust Fund can only be used for highway and transit purposes.

flowing into the HTF are far below the level required to maintain the existing level of federal highway and transit spending provided by the fund).

In recent years, the shortfall in revenues to the highway trust fund, compared to its level of expenditures, has led Congress to transfer significant sums from the general fund of the Treasury to maintain the trust fund's solvency: \$34.5 billion during the period FY2008-FY2010, and another \$18.8 billion during the period FY2013-FY2014.⁸ Joseph Boardman, the CEO of Amtrak, has pointed to these transfers as undermining the principal argument against providing HTF funding to Amtrak, since a significant portion of HTF funding now comes from general revenues rather than highway-related taxes. He has urged that intercity passenger rail be eligible for funding from the portion of HTF funds coming from general fund revenues.⁹

Infrastructure Issues

Amtrak owned no infrastructure at the time of its creation. It was structured as a contracting agency, and Amtrak trains were operated by private railroads over tracks they owned.

Several years later, as Congress was dealing with the bankruptcy of the Penn Central Railroad, Congress decided that Amtrak would receive much of the trackage owned by the Penn Central in the 450-mile corridor running from Washington, DC, north through Philadelphia and New York City to Boston, along with shorter lines serving Harrisburg, PA, and Springfield, MA. The Northeast Corridor traverses one of the most densely populated and economically important corridors in the world and carries over 259 million passengers annually (the vast majority aboard trains run by regional commuter operators). The NEC also carries freight trains run by private railroads.¹⁰ (Amtrak also inherited 96 miles of track in Michigan, and controls short lengths of track in other locations.)

Portions of the NEC are well over a century old, and the alignment was laid out at a time when the top speed of trains was much less than is possible today. This has caused problems for Amtrak's efforts to improve service on the NEC. Amtrak has identified three general issues:

- a large backlog of capital projects needed to bring the NEC to a state of good repair;
- limits on the number of trains that can operate on the NEC, especially due to bottlenecks at tunnels; and
- increasing demands for service on the NEC, including service by commuter operators.

⁸ Joint Committee on Taxation, *Estimated General Fund and Trust Fund Effects of the Conference Agreement for the Revenue Provisions Contained in Division D of MAP-21*, committee print, 112th Cong., 2nd sess., June 28, 2012, JCX-58-12, pp. 1-3.

⁹ Amtrak, *FY2013 Legislative and Grant Request to Congress*, February 1, 2012, p. 22.

¹⁰ Amtrak, *Northeast Corridor Infrastructure Master Plan*, May 2010. Table 3 indicates that 95% of the passengers on the NEC are carried by commuter trains, though Amtrak passengers account for 47% of passenger miles, as the average Amtrak trip is much longer. <http://www.amtrak.com/ccurl/870/270/Northeast-Corridor-Infrastructure-Master-Plan.pdf>.

NEC Improvement Plans

The NEC is Amtrak's flagship corridor, with its fastest service. The Acela attains speeds of up to 125 mph on the southern section between Washington, DC, and New York City, and up to 150 mph (briefly) on the northern section between New York City and Boston. But those high speeds are possible only in limited stretches: the average speed of the Acela service is around 70 mph on the Boston-New York segment and 80 mph on the New York-Washington, DC, segment.

Travel time improvements on the NEC would be valuable. A 2008 analysis by the DOT IG estimated that reducing the New York-Washington travel time from nearly three to two-and-a-half hours and the New York-Boston travel time from over three-and-a-half to three hours would result in an average of \$500 million in annual benefits (in 2006 dollars).¹¹ Most of that was estimated to come from air passengers shifting to the train as its travel times shrank. The impact might be less now, as Amtrak's share of the air/rail market on the NEC has increased since that report was written.

Amtrak has published a plan for improvements to the NEC. This plan has two elements: a near-term Stair-Step Plan, and a longer-term Gateway Plan.

Stair-Step Plan

This plan involves short-range incremental increases in the capacity of the NEC. It includes increasing the frequency of Acela Express service from one to two trains per hour.

Gateway Plan

Beyond the elements of the Stair-Step Plan, Amtrak says that no further significant expansion of intercity service on the NEC is possible without increasing capacity into and through Manhattan. The Gateway Plan would add new tunnels under the Hudson River, replace the Portal Bridge east of Newark, NJ, with a new bridge, and expand station facilities in New York City. This would allow Amtrak to increase Acela operations to three departures per hour and to add other services. The initial cost estimates for this work are in the range of \$14 billion-\$16 billion.

The Federal Railroad Administration (FRA) is leading a program called NEC FUTURE, involving affected states, Amtrak, and freight railroads, to develop an improvement plan for the NEC. Public meetings were held in the fall of 2012, and a preliminary alternatives evaluation was published in 2014.¹² FRA expects to publish reports laying out a long-term vision and investment program for the NEC in 2016.

The Northeast Corridor Commission

The NEC is a complex system. It passes through eight states and the District of Columbia. While Amtrak owns the vast majority of the right-of-way and track, there are sections owned by

¹¹ DOT IG, *Analysis of the Benefits of High-Speed Rail on the Northeast Corridor*, CC-2008-091, June 26, 2008. The benefits were estimated at \$16.3 billion (in 2006 dollars) over a period of 33 years.

¹² Available at http://necfuture.com/project_docs/reports.aspx.

commuter rail agencies. In addition to Amtrak, eight commuter rail agencies operate on the NEC, as well as four freight railroads. Recognizing that improvements to the NEC would require collaboration between many groups, in PRIIA¹³ Congress directed the DOT to create a Northeast Corridor Infrastructure and Operations Advisory Commission. The commission is made up of members from each of the states (including the District of Columbia) traversed by the NEC, plus representatives of the U.S. Department of Transportation, Amtrak, and (as nonvoting members) freight rail companies that operate on the NEC.

The commission's mission is to promote mutual cooperation and planning for the rail operations and related activities of the NEC. Toward this end, the commission has published several reports on the infrastructure needs of the NEC.¹⁴ Also, the commission was directed to develop a formula for determining and allocating costs, revenues, and compensation for NEC commuter rail operators that use Amtrak facilities or services or that provide such facilities or services to Amtrak. The purpose of the formula is to ensure that there is no cross-subsidization of commuter rail service, intercity rail passenger service, or freight rail service on the NEC. The commission published this cost allocation policy in January 2015; it calls for cost-sharing to cover the annual operating costs and annual normalized replacement amounts for the NEC, but does not address the \$21 billion in capital maintenance backlog the commission estimated.

Capital Maintenance Backlog

Portions of the NEC date from before the Civil War, when trains were smaller and slower. In addition, this is the most heavily used rail line in the nation, with some 2,200 trains operating on the corridor daily. Amtrak's financial capacity to maintain this infrastructure, including more than 200 bridges, tunnels dating to the 1870s, and electric traction systems relying on 1930s-era components, has varied over time. Amtrak has estimated its capital maintenance backlog (that is, the work needed to return the system to a "state of good repair"),¹⁵ most of which is on the NEC, at around \$5 billion;¹⁶ the NEC Commission has estimated the total backlog of maintenance on the NEC at around \$21 billion, of which around \$16 billion is on Amtrak's main line.¹⁷

Major Projects

At a number of locations on the NEC, Amtrak's Acela trains have to slow down dramatically due to the state of the infrastructure. To address this situation, Amtrak has proposed a series of major construction projects:

¹³ §212, Division B, P.L. 110-432.

¹⁴ Reports available at <http://www.nec-commission.com/resources/documents/#costallocation>.

¹⁵ Amtrak states that the backlog of capital projects needed to return the NEC to a "state of good repair" "should not be understood as an accumulation of disintegrating or unsafe structures; rather, it is a list of projects that have passed the end of their useful lives but may continue to carry traffic safely, albeit at times with the additional burden of increased maintenance or impacts on reliability and performance." Amtrak, *FY2012-FY2016 Five Year Financial Plan*, January 2012, p. 19.

¹⁶ Amtrak, *FY2013 Budget and Comprehensive Business Plan*, p. 25.

¹⁷ NEC Commission, *Northeast Corridor Five-Year Capital Needs Assessment, Fiscal Years 2015 to 2019*, September 16, 2014, Table 4 (<http://www.nec-commission.com/wp-content/uploads/2012/12/NEC-Five-Year-Capital-Needs-Assessment-FY15-19.pdf>).

- Replacing several bridges on the NEC that have an average age of 100 years. Amtrak replaced the Niantic River Bridge in Connecticut in 2012, where trains were restricted to 45 mph, at a cost of \$140 million.¹⁸ Amtrak also seeks to replace the Portal Bridge in New Jersey, the Susquehanna River Bridge in Maryland, and several bridges in Connecticut.
- In Baltimore, trains must slow to 30 mph through a series of three tunnels. Amtrak wants to build replacement tunnels, in part because it cannot adequately rehabilitate the existing tunnels (which are 140 years old) while still running trains through them. Amtrak estimates that the new tunnels will take 12 years to construct at a cost of \$1.26 billion. Once the new tunnels are functional, Amtrak would repair the old tunnels, eventually using both rights-of-way.
- Amtrak received \$450 million to upgrade electrical power, signal systems, and overhead catenary wires on a 24-mile section of track between New Brunswick, NJ and Morrisville, PA.¹⁹ The upgrades will allow train speed to increase over this section from 135 mph to 160 mph, shaving 15 to 20 minutes from the trip time between New York City and Philadelphia. The estimated completion date is September 2017.
- Under its “Gateway Project,” Amtrak seeks to build two single-track rail tunnels under the Hudson River between Manhattan and New Jersey parallel to the existing single-track tunnels, replace the 100-year-old Portal Bridge over the Hackensack River in New Jersey, and expand Penn Station in Manhattan. The estimated cost of the bridge replacement alone is nearly \$1 billion.²⁰

Washington Union Station Redevelopment Proposal

Washington, DC’s, Union Station is the second-busiest station in Amtrak’s system, with 100,000 passenger boardings or alightings each day. It also hosts regional commuter rail services; a station on the region’s Metro heavy rail network; local, regional, tour, and intercity bus services; and two bicycle facilities. In addition, a streetcar line is planned to connect to the station. Amtrak says that the station is operating beyond its capacity; during rush hours lines of Amtrak passengers waiting to board trains extend into the public areas of the station, obstructing movement. Also, the tracks and platforms are not in compliance with ADA requirements and with life safety codes.

Amtrak and the other transportation agencies using Union Station have proposed a redevelopment plan to address these problems.²¹ The plan envisions four phases of construction, over a period of roughly 20 years. The first three phases, which focus on reconstruction of the station and increasing the capacity of the terminal, are estimated to cost around \$7 billion (in 2012 dollars).²²

¹⁸ Amtrak press release, September 7, 2012, ATK-12-078.

¹⁹ Amtrak press release, April 4, 2011, ATK-11-040.

²⁰ Amtrak, FY2016 Grant and Legislative Request, February 17, 2015, p. 9 (<http://www.amtrak.com/ccurl/785/933/Amtrak-FY16-Grant-Legislative-Final.pdf>).

²¹ Amtrak, *Union Station Master Plan Executive Summary*, July 25, 2012. <http://www.amtrak.com/ccurl/919/171/Washington-Union-Station-Master-Plan-201207.pdf>.

²² “... the full realization of Phase 4 is not included in the cost estimate included in this report ...”; *ibid.*, p. 23.

Fleet Replacement Strategy

Amtrak owns or leases more than 1,500 passenger cars, almost 400 locomotives, and 25 trainsets (in which locomotives and passenger cars stay together in a unit).²³ The average age of Amtrak's equipment today is just over 28 years—which is older than the average age of the equipment it inherited from the private railroads in 1971.²⁴

With \$184 million from the American Recovery and Reinvestment Act of 2009 (P.L. 111-5), Amtrak rebuilt or refurbished 15 locomotives and 81 passenger cars that had been wrecked or otherwise damaged and sitting in storage for a number of years.²⁵ Amtrak has ordered 130 long-distance passenger cars at a cost of \$298 million from CAF USA for delivery starting in the fall of 2013²⁶ and 70 electric locomotives at a cost of \$466 million from Siemens with delivery starting in the fall of 2014.

The electric locomotives used on the NEC, other than the newer units included in Acela trainsets, have been its least reliable equipment overall, and the new equipment is intended to rectify this problem. The Siemens purchase is financed by a \$563 million loan from the FRA under the Railroad Rehabilitation and Improvement Financing program (45 U.S.C. §821), which is by far the largest loan ever issued under the program.²⁷ California and Midwest states announced in 2012 that they have identified Sumitomo as the manufacturer of 130 bi-level passenger cars for state-supported Amtrak corridor services, a contract totaling \$352 million.²⁸ Amtrak issued a request for proposals for 28 high-speed trainsets to replace its Acela Express fleet.²⁹ Amtrak plans to purchase about 700 new single-level passenger cars between 2016 and 2022 (ordering about 100 per year) and about 500 bi-level cars between 2018 and 2022 (also ordering 100 per year).³⁰

As Amtrak moves forward in replacing its fleet, several oversight issues for Congress arise. These include the following:

- **High costs due to lack of scale economies.** Amtrak does not purchase enough equipment with enough frequency to establish a robust domestic manufacturing base. The Sumitomo purchase of 130 bi-level cars represents a step towards

²³ This does not include equipment owned by states and operated by Amtrak.

²⁴ The average age of that equipment was 22 years. Bureau of Transportation Statistics, *National Transportation Statistics 2012*, Table 1-33: Age and Availability of Amtrak Locomotive and Car Fleets.

²⁵ Amtrak, *FY2013 Grant and Legislative Request*, February 1, 2012, p. 5; <http://www.amtrak.com/ccurl/62/480/AmtrakFY13%20Leg%20and%20Grant%20Final-w-appx.pdf>.

²⁶ Amtrak press release, July 23, 2010, no. ATK-10-101.

²⁷ FRA press release, June 29, 2011, No. FRA 14-11. For a listing of railroads receiving RRIF loans, see <http://www.fra.dot.gov/Page/P0128>. Amtrak expects to repay the loan through the increased ticket sales that the more reliable equipment will make possible; Amtrak press release, June 29, 2011, ATK-11-098. Congressional appropriators have encouraged Amtrak to use RRIF loans, rather than seek private financing, as private lenders would charge a higher rate—the repayment of which might have to come from taxpayers. Also, use of RRIF loans enables DOT to more closely oversee implementation of the fleet plan. United States Senate, Committee on Appropriations, S.Rept. 112-83, September 21, 2011, p. 70.

²⁸ *Tendersinfo News*, “Multi-state partnership announces intent to award contract for next generation of American trains,” September 27, 2012.

²⁹ Amtrak press release, July 2, 2014.

³⁰ According to *Amtrak Fleet Strategy, version 3.1*, dated March 2012; <http://www.amtrak.com/ccurl/36/921/2012-Amtrak-Fleet-Strategy-v3.1-%2003-29-12.pdf>.

forming an equipment pool of standard cars that will be used on shorter-distance corridor services, as called for in Section 305 of PRIIA. The intent of this provision was to achieve economies of scale not only in the cars' manufacture, but also in repair and parts replacement. However, there is a risk that equipment standardization could retard development of innovative car designs and dampen competition among manufacturers.

- **Lack of import competition.** By law, passenger rail equipment must abide by certain domestic manufacturing requirements.³¹ Also, FRA safety standards put greater emphasis on crash survivability than crash avoidance compared to foreign standards. The need for bulkheads at the ends of cars generally makes U.S. equipment much heavier than foreign equipment, meaning that foreign car designs cannot simply be produced in U.S. plants. This likely increases Amtrak's cost to acquire equipment.³²
- **Equipment lease arrangements.** Amtrak does not actually own much of its rolling stock. Amtrak has sold locomotives and passenger cars to banks that can claim tax benefits (depreciation) while Amtrak rents the equipment from them. In Section 205 of PRIIA, Congress authorized the Secretary of the Treasury, in consultation with Amtrak and the Secretary of Transportation, to restructure Amtrak's capital leases. This authorization expired in October 2010. Under this authority, Amtrak restructured 13 capital leases, including sale and lease-back arrangements for its locomotive and passenger car fleet, at a cost of \$420 million, but with ultimate savings of \$152 million. The Amtrak IG has reported that 39 additional capital leases that could result in savings of \$426 million, at a cost of \$638 million, are still available if Congress were to extend the authorization to negotiate early buyout options.³³ Also, it is unclear how well the economic life of Amtrak's equipment corresponds with the length of its lease agreements, and therefore whether the lease agreements interfere with fleet replacement plans.

Defective Concrete Cross-Ties

A primary building block of higher speed passenger service is failing prematurely, requiring a significant amount of work hours and resources be devoted to fixing the problem. Concrete crossties make up an estimated 20% of all installed crossties on major railroads in the United States.³⁴ Concrete ties are supposed to last twice as long as wood ties (50 to 60 years instead of 25 to 30), can be spaced a few inches farther apart than wood ties, and are better at withstanding

³¹ Amtrak is subject to a "Buy American" preference under 49 U.S.C. §24305(f), while purchases made by FRA fall under the Buy America statute at 49 U.S.C. §24405(a). For further information, see CRS Report R43388, *Transportation Spending and "Buy America" Requirements*, by Alissa M. Dolan.

³² Amtrak has said it will seek a change in FRA's structural strength rules. Angela Greiling Keane, *Amtrak Seeks Safety Changes to Allow U.S. Bullet Trains*, Bloomberg News, January 2, 2013, <http://mobile.bloomberg.com/news/2013-01-02/amtrak-seeks-safety-changes-to-allow-u-s-bullet-trains.html>.

³³ Amtrak IG, *Passenger Rail Investment and Improvement Act of 2008: Amtrak Has Made Good Progress, but Continued Commitment Needed to Fully Address Provisions*, Report No. OIG-A-2012-001, October 26, 2011, pp. 7-9. See Amtrak's annual report and business plan reports for further details on leased rolling stock and early buyout transactions.

³⁴ According to the FRA, 76 FR 18073, April 1, 2011.

certain train forces. For this reason, they are a cornerstone to upgrading track for higher speed passenger service.

In 2007, Amtrak began finding that relatively new concrete ties on the NEC were cracking and required replacement.³⁵ Amtrak replaced 95,000 ties in FY2008,³⁶ 130,000 ties in FY2009, 207,000 ties in FY2010, and is planning to replace 170,000 ties per year from FY2011 through FY2013 and 120,000 ties per year from FY2014 through FY2016.³⁷ In total, Amtrak estimated in 2011 that about 1.4 million concrete ties along 500 miles of track were defective, and expected to replace all of them by 2021.³⁸ According to Amtrak, the defective ties do not present a safety hazard, but the problem has required Amtrak to reduce train speeds to stay within FRA safety standards. The majority of cracks are concealed within the tie or on the underside of the tie, and thus not visible to inspectors.

In March 2010, Amtrak reached a settlement agreement with the supplier, Rocla Concrete Tie of Denver, CO. Under the agreement, Amtrak said it “will receive a combination of annual payments totaling \$10 million and purchase discounts up to a total of an additional \$10 million for new concrete tie purchases through December 31, 2018.”³⁹ Amtrak has not stated whether the agreement with Rocla covers the labor cost of replacing the ties, but it has estimated its cost of tie replacement to be \$370 million. Amtrak has also disclosed that its New England Division has budgeted \$64 million for concrete tie replacement, of which \$50 million is provided from ARRA and \$14 million is from its FY2009 federal grant,⁴⁰ and that its Mid-Atlantic Division is using \$51 million of stimulus funds to replace failing concrete ties. Amtrak states that replacing the ties can cost up to three times the original cost of installation.⁴¹ Amtrak’s Office of Inspector General concluded in a September 2013 report that the railroad had taken positive steps to minimize the risk of procuring more defective concrete ties.⁴²

Other railroads have also encountered problems with concrete ties. The Metropolitan Transportation Authority (MTA), which operates Metro-North and Long Island commuter railroads in New York, sued Rocla in 2006 and is receiving 260,000 replacement ties from the supplier and \$1 million per year for 10 years to defray the labor costs of installing them.⁴³ The Massachusetts Bay Transportation Authority (MBTA) sued Rocla for the estimated \$92 million cost of replacing 147,000 concrete ties with wood ties on 61 miles of track, but settled for \$6 million.⁴⁴ More recently, Union Pacific Railroad found 115,000 defective concrete ties supplied

³⁵ Amtrak describes the cracks as being hairline and spider-like.

³⁶ Amtrak, *FY2010 Grant and Legislative Request*, February 17, 2009, p. 15.

³⁷ Amtrak, *Consolidated Financial Statements for the Years Ended September 30, 2010 and 2009*, p. 10.

³⁸ Amtrak presentation to the NEC Safety Advisory Committee, February 2012, Docket # FRA-2011-0027-0017, available at <http://www.regulations.gov>.

³⁹ Amtrak, *Consolidated Financial Statements, For the Years Ended September 30, 2010 and 2009*, p. 10.

⁴⁰ Amtrak, “Project Summaries by Task,” *American Recovery and Reinvestment Act*, Project # PRJ29116030.

⁴¹ Ibid. Project # PRJ29116098. The document does not explain why replacing the ties is so much costlier than the original installation.

⁴² Amtrak Office of Inspector General, *American Recovery and Reinvestment Act: Amtrak Has Taken Positive Steps to Safeguard Funds Used for Concrete Tie Replacement Program*, OIG-E-2013-017, September 19, 2013.

⁴³ “MBTA Sues Manufacturer of Faulty Ties on Rail Lines,” *Boston Globe*, May 5, 2010.

⁴⁴ “Rail Project Raises Questions About Use of Concrete Ties,” *Engineering News Record*, December 6, 2010, p. 15; “MBTA Settles on Rail Ties for \$6 Million,” *WBUR.org*, November 10, 2011.

by CXT, a subsidiary of L.B. Foster Company, on new track installed with federal funding for higher-speed passenger service between Chicago and St. Louis.⁴⁵

The railroad industry's state of knowledge with respect to concrete ties is of concern, because concrete ties are a building block for higher-speed passenger service. A 2015 study by DOT's Volpe National Transportation Systems Center notes that "the fundamental failure mechanisms are not well understood in several cases, thus hindering the efforts aimed at improved design and performance of concrete ties."⁴⁶ A 2014 FRA study notes that while concrete tie manufacturing specifications have been changed to address some known causes of cracking, the specifications do not address other potential causes.⁴⁷ Since the safety of the traveling public is the first priority of federal transportation policy, Congress may wish to seek independent confirmation that these defective ties pose no safety risk. Amtrak's problems with its crossties, a seemingly routine procurement for a railroad, also may raise questions about its ability to manage more complex construction projects.

Train Station Compliance with Americans with Disabilities Act

The Americans with Disabilities Act of 1990 required that intercity passenger rail stations be made usable by persons with disabilities no later than 2010.⁴⁸ The Passenger Rail Investment and Improvement Act of 2008 directed Amtrak to evaluate the improvements needed to accomplish this, and to produce a schedule for bringing all stations into compliance by the 2010 deadline.⁴⁹ The legislation did not provide any specific funding for this purpose, authorizing "such sums as may be necessary" for the improvements.

In its initial report, Amtrak noted that it provided service to 515 stations, 481 of which were required to meet ADA standards.⁵⁰ It solely owned 47 (10%) of the 481 platforms, and estimated that it was responsible, solely or jointly with other entities, for accessibility of approximately 70%-85% of the platforms. In this initial report, Amtrak included a table (see **Table 5**) in which it divided the 481 stations into six categories according to their level of service and staffing. As **Table 5** shows, Amtrak's 481 stations varied greatly in their level of usage, with less than 9% (the 41 Category I stations) of the stations serving almost two-thirds of total ridership, and less than half the stations (the 206 stations in Categories I and II) serving over 90% of ridership.

⁴⁵ "Union Pacific To Replace 115,000 Substandard Rail Ties Along Amtrak Line," *State Journal Register*, May 24, 2012; "L.B. Foster Unit Faces Warranty Claim," *American Metal Market*, August 7, 2011.

⁴⁶ Yu, H., Jeong, D.Y., Marquis, B., and Coltman, M., "Railroad Concrete Tie Failure Modes and Research Needs," 2015 Transportation Research Board 94th Annual Meeting, TRB15-0311, Washington, DC, 2015, p. 6.

⁴⁷ "Performance Evaluation of Concrete Railroad Ties on the Northeast Corridor," study performed by Simpson Gumpertz & Heger Inc. for FRA, Final Report, March 2014.

⁴⁸ 42 U.S.C. §12162(e)(2)(A)(ii)(I).

⁴⁹ P.L. 110-432, Division B, §219.

⁵⁰ Amtrak, *Intercity Rail Stations Served by Amtrak: A Report on Accessibility and Compliance with the Americans with Disabilities Act of 1990*, February 1, 2009, p. 2. Of the excepted stations, 9 were in Canada and 25 were "flag-stop" stations in rural areas served on a "stop-as-required" basis.



GOVERNMENT SERIES

The Federal Budget Process

A Description of the Federal and Congressional Budget Processes, Including Timelines



TheCapitolNet

Table 5. 2008 Amtrak Station Characteristics and Level of ADA Compliance

Station Category	Number of Stations	Total FY2008 Ridership (ons + offs) (millions)	Ridership Distribution	Total 100% Compliant	Average Compliance Scores (0-100)	Passenger-Weighted Compliance Score
I. Large Staffed	41	35.9	63%	11	78%	85%
II. Medium Staffed	165	16.1	28%	16	59%	77%
III. Medium Caretaker	53	1.1	2%	2	52%	68%
IV. Small Caretaker	114	2.0	4%	3	47%	63%
V. Small Shelter	89	1.6	3%	13	56%	64%
VI. Small Platform	19	0.3	1%	3	45%	70%
Total	481	57.1	100%	48	56%	81%

Source: Amtrak, Exhibit ES-1: Current Station Characteristics and Level of ADA Compliance,

Notes: Compliance score based on a composite measure of ADA compliance for a range of physical station attributes. Weighted by the number of passengers (ons and offs) in FY2008 at each station.

Amtrak's 2009 schedule for bringing all 481 stations into 100% compliance estimated that it would take until 2015, five years past the statutory deadline, and cost \$1.564 billion. Congress directed Amtrak to spend \$144 million of its FY2010 capital grant, and \$50 million of its FY2012 capital grant, on ADA compliance efforts.

The basic challenge in making Amtrak trains accessible to individuals with disabilities is that the boarding platforms typically are not at the same height as the seating areas of Amtrak trains. One complicating factor is that the various models of Amtrak passenger cars do not have uniform seating area heights above the wheels. Another complicating factor is that most station platforms used by Amtrak are owned by freight railroads, which generally do not permit platforms higher than 8 inches above the top of the rails in order to prevent physical conflicts with the freight rail rolling stock. Consequently, in most stations where freight and passenger trains operate on the same track, it is difficult to provide wheelchair-accessible level boarding platforms.

In 2011, after five years of consideration, DOT issued a final rule on ADA compliance for intercity and commuter passenger rail stations. The rule requires passenger railroads to provide level-entry boarding at stations not shared with freight rail operations. At stations that are shared with freight rail operations, passenger railroads may choose among several options to provide access to rail cars for persons with disabilities.⁵¹ According to Amtrak, the new rule has significantly delayed its plans for making its stations ADA compliant because "in order to ascertain whether a level boarding platform is required, a freight usage determination must first be made for every track adjacent to every platform at each station."⁵² At the end of calendar year

⁵¹ Department of Transportation, "Transportation for Individuals with Disabilities at Intercity, Commuter, and High Speed Passenger Railroad Station Platforms; Miscellaneous Amendments," 76 *Federal Register* 57924, September 19, 2011.

⁵² Amtrak, *Update on Accessibility and Compliance with the Americans with Disabilities Act of 1990*, May 11, 2012, p. 3, <http://www.amtrak.com/ccurl/83/1005/ADA-Accessibility-Compliance-Report-May2012.pdf>.

2011, the number of stations in complete compliance with ADA accessibility requirements remained 48, unchanged from the end of 2008.

Positive Train Control Implementation

Section 104 of the Rail Safety Improvement Act of 2008 (P.L. 110-432) requires that intercity passenger railroads, commuter railroads, and freight railroads that haul certain toxic or poisonous products install a “positive train control” (PTC) system by the end of 2015.⁵³ The distinctive feature of PTC is that an automatic override system or a dispatcher from a remote location could slow a train down or stop it in order to avoid a collision if the engineer fails to comply with a signal indication. The system relies on radio communications among a locomotive, track-side equipment, and a control center. PTC is intended to prevent accidents due to excessive train speed or conflicting train movements. As currently conceived, it will not address accidents caused by trespassers on railroad property, vehicles blocking tracks at grade crossings, or other factors.

Before enactment of Section 104, passenger and freight railroads were developing systems that could remotely control train movements, but there was no requirement that these systems be interoperable. Interoperability is a significant concern for Amtrak, which operates its trains over track owned by many different railroads and hosts freight and commuter railroads’ trains on its own tracks.

Amtrak began installation of a PTC system in 2000 on some NEC tracks as part of FRA requirements for higher speed Acela service. Amtrak stated that it would complete installation of PTC over the tracks it owns by the end of 2012, with installation on the NEC estimated to cost \$264 million.⁵⁴ Amtrak has had to install a different version of PTC on tracks it owns in Michigan, and must install PTC equipment on its diesel locomotives that is compatible with the host railroads’ versions of PTC.

In some cases, the presence of Amtrak trains on freight lines is the sole trigger of the PTC requirement, because the lines in question do not carry poisonous or toxic products. As Amtrak is required to pay host railroads for the incremental costs of operating its trains, it would be responsible for PTC installation in these circumstances, but Amtrak has stated it does not have the funds to install PTC on tracks it does not own.⁵⁵ The freight railroads have convinced FRA to reconsider how much freight track will be required to be equipped with PTC, using 2015 rather than 2008 as the base year for identifying track that is carrying poisonous or toxic products.⁵⁶ This could potentially increase the amount of track on which PTC would not be required, save for Amtrak’s presence.

⁵³ For background information on PTC, see GAO, *Rail Safety—Federal Railroad Administration Should Report on Risks to the Successful Implementation of Mandated Safety Technology*, December 2010, GAO-11-133; and docket no. FRA-2008-0132 at <http://www.regulations.gov> for PTC rulemakings and comments filed; and Ronald A. Lindsey, “A Primer on Positive Train Control,” *Journal of Transportation Law, Logistics, and Policy*, v. 71, no. 3, Spring 2004, pp. 303-312. PTC has been on the NTSB’s most wanted list of transportation safety improvements since the list’s inception in 1990.

⁵⁴ *NEC Infrastructure Master Plan*, May 2010, p. 31. Amtrak said that, as of January 2013, installation of wayside PTC equipment on the NEC was almost completed, but that putting the system into operation would require additional radio spectrum, which it was still seeking.

⁵⁵ Amtrak, *FY2012 Grant and Legislative Request*, p. 8.

⁵⁶ See also S. 301, 112th Congress.

Section 302(e) of H.R. 749 would make projects for installation of PTC systems on both passenger and freight railroads eligible for loans under the Railroad Reinvestment and Infrastructure Finance Program. S. 650, sponsored by Senators Blunt, McCaskill, Nelson, and Thune, would extend the compliance deadline for full implementation of PTC until 2020.⁵⁷

Operational Issues

Ridership Levels

Amtrak has reported steadily growing ridership for the past several years, and is now carrying more passengers than ever before. As **Table 6** shows, these increases have been seen on all types of trains. The corridor/short-distance trains have overtaken the flagship NEC service in terms of ridership, although the Northeast Corridor still provides the majority of ticket revenue.

Table 6. Amtrak Ridership, Ticket Revenue, and Average Ticket Price
(ridership in millions; revenue in millions of 2014 dollars; average ticket price in 2014 dollars)

Amtrak Route Group	FY2005		FY2010		FY2014	
	#!/\$	% of Grand Total	#!/\$	% of Grand Total	#!/\$	% of Grand Total
NEC (Acela/Metroliner)						
Ridership	11.0	43%	10.4	36%	11.65	38%
Ticket revenue	\$793.6	52%	\$976.2	52%	\$1,191.4	54%
Average ticket price	\$71.9	—	\$94.1	—	\$102.3	—
Corridor (Short-Distance)						
Ridership	10.6	42%	13.9	48%	14.7	48%
Ticket revenue	\$312.9	21%	\$423.4	22%	\$486.6	22%
Average ticket price	\$29.7	—	\$30.5	—	\$33.0	—
Long-Distance						
Ridership	3.8	15%	4.5	16%	44.5	15%
Ticket revenue	\$407.2	27%	\$492.7	26%	\$510.7	23%
Average ticket price	\$107.7	—	\$110.1	—	\$112.5	—
Grand Total						
Ridership	25.4	100%	30.8	100%	3130.9	100%
Ticket revenue	\$1,513.7	100%	\$1,892.3	100%	\$2,188.7	100%
Average ticket price	\$59.7	—	\$65.9	—	\$70.8	—

Source: Amtrak, *Monthly Performance Reports* for September 2005, 2010, and 2014. Average ticket prices calculated by CRS by dividing ticket revenue by ridership. Dollar figures for 2005 and 2010 inflated to 2014 using Bureau of Labor Statistics' Consumer Price Index inflation calculator.

⁵⁷ For further information, see CRS Report R42637, *Positive Train Control (PTC): Overview and Policy Issues*, by John Frittelli.

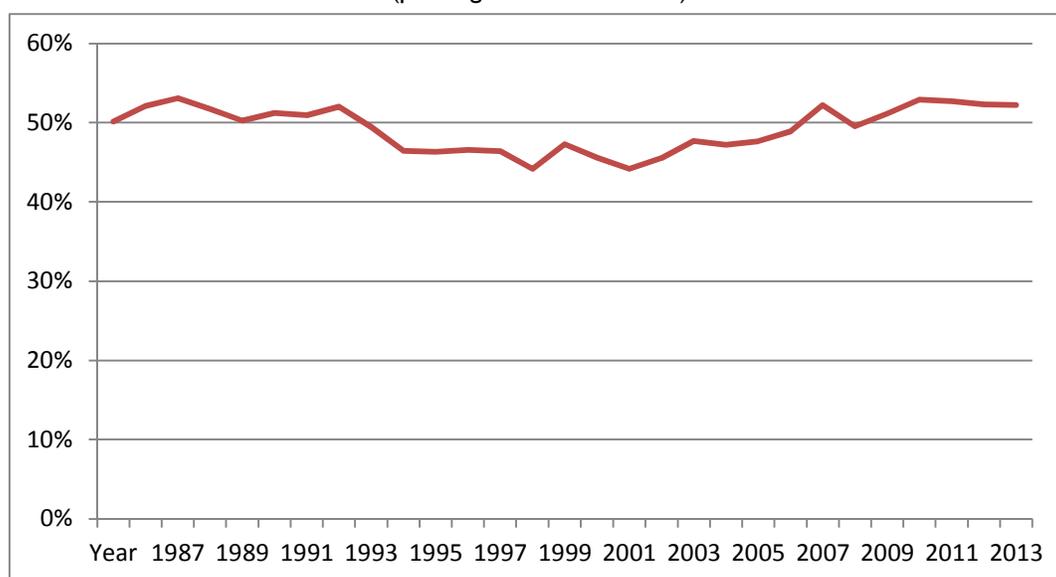
Operating Efficiency

The number of passengers carried is not the only measure that should be considered when evaluating Amtrak's performance. A railroad may boost ridership by increasing the supply of seats (running more trains or offering more seats per train) or by increasing demand (improving service or reducing fares absolutely or relative to competitors). Thus, measures of efficiency and measures that incorporate financial results are also useful to assess performance.

Passenger Load Factor

One measure of efficiency is the passenger load factor, which measures what percentage of the available seats is being used by passengers.⁵⁸ As **Figure 1** shows, Amtrak's load factor has varied within a fairly narrow band since 1986. Its current load factor, 52%, is near the record load factor Amtrak reported in FY1988, and higher than has been achieved since FY1993. In certain respects Amtrak's circumstances were more favorable at that time than today: its fleet was newer⁵⁹ and the rail network was less congested.⁶⁰

Figure 1. Amtrak Passenger Load Factor, 1986-2014
(passenger miles/seat miles)



Source: Calculated by CRS using data from Amtrak annual reports.

⁵⁸ At the direction of Congress (§207 of the Passenger Rail Investment and Improvement Act of 2008, Division B of P.L. 110-432), Amtrak uses a related metric, passenger miles per train miles. Congress has used this metric as far back as 1979 to measure Amtrak route performance. Since the number of passengers a train can carry is based on the number of seats on the train, and since the number of seats that a train carries may change from time to time due to reconfigurations of passenger cars, load factor (passenger miles divided by seat miles) is used here.

⁵⁹ Average age of Amtrak locomotives: 12.0 years (1990), 20.0 years (2011); average age of Amtrak passenger cars: 20.0 years (1990), 26.5 years (2011).

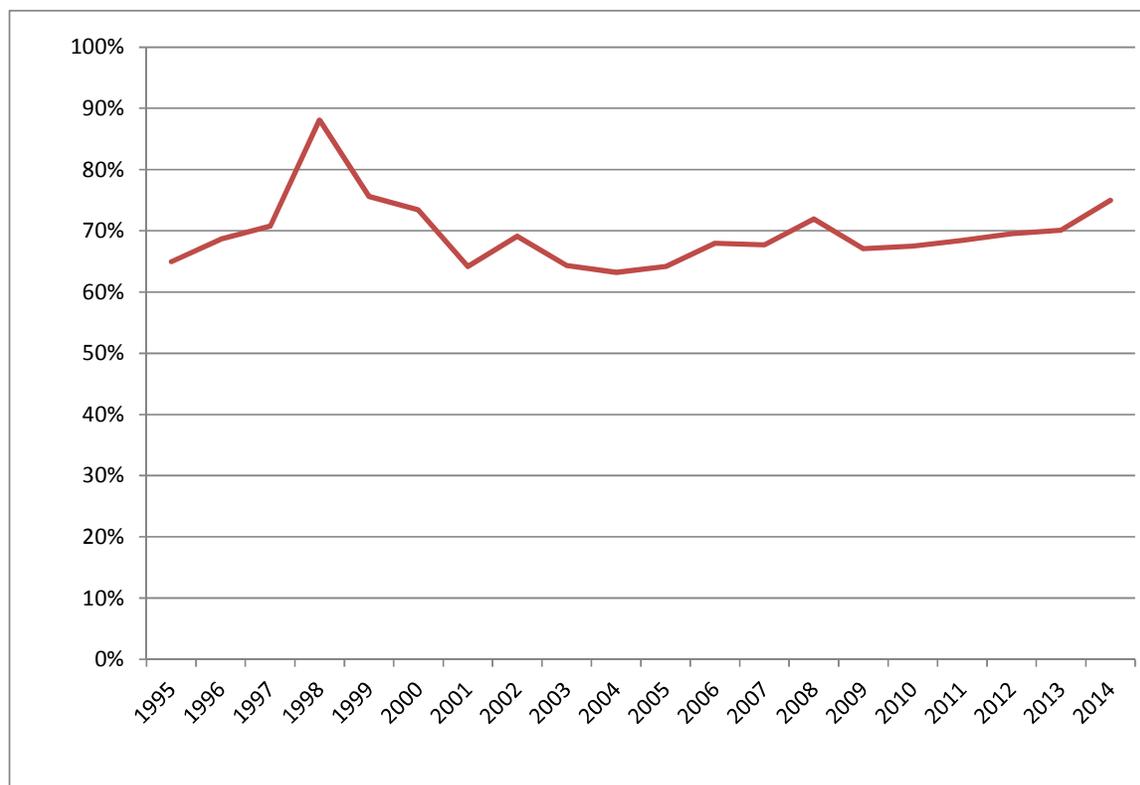
⁶⁰ One measure of network congestion is traffic density, which is calculated as millions of revenue ton-miles of cargo carried per owned mile of track. In 1990 the rail network density level was 5.17; in 2008 it was over twice that, 11.06. Association of American Railroads, *Railroad Facts 2009*, p. 42.

Operating Ratio

The most basic measure of financial performance may be operating ratio (the percentage of costs covered by revenues). Amtrak is able to cover about two-thirds of its operating costs from its revenues. As **Figure 2** shows, that ratio has been fairly constant over the past two decades, but Amtrak's operating ratio is currently about as high as it has ever been over that period.⁶¹

Figure 2. Amtrak Ratio of Revenues to Expenses, 1995-2014

(total revenues/total expenses)



Source: Calculated by CRS using data from Amtrak annual reports, except FY2014 is from Amtrak's *September 2014 Monthly Performance Report to Congress*, p. A-1.2.

Notes: 2014 figure is preliminary. The spike around FY1998-FY1999 was due to a change in the way Amtrak accounted for federal and state grants; see note 61.

Amtrak's On-Time Performance

Amtrak's ability to keep trains running on time has a direct bearing on its operating profit or loss.⁶² First and foremost, poor on-time performance reduces ridership (and ticket revenue).

⁶¹ The spike in the ratio of revenues to expenses in FY1998-FY1999 was due to a change in the way Amtrak counted federal and state capital grants, which increased their revenue by \$542 million in FY1998, \$191 million in FY1999, and \$112 million in FY2000; thereafter the contribution to revenue was around \$20 million. Without that change, Amtrak's ratio would have been 67% in FY1998 and 68% in FY1999.

⁶² U.S. DOT, IG, *Effects of Amtrak's Poor On-Time Performance*, March 28, 2008, CR-2008-047.

Secondly, it increases crew, fuel, and other operating costs. For Acela service, a train is considered on-time if it arrives at its final destination within 10 minutes of the scheduled time.⁶³ This is also the standard for any routes less than 250 miles. For longer routes, the standard depends on distance, with 30 minutes being the allowance for trips over 550 miles.⁶⁴

Amtrak’s on-time performance over a recent three-month period is shown in **Table 7**.

Table 7. Amtrak’s On-Time Performance (OTP)

Service	Endpoint OTP	
	Quarter ended June 2012	Quarter ended June 2014
NEC Acela	88.3%	77.09%
NEC Regional (Was-Bos)	86.4%	80.4%
Short Distance (24 routes)	from 44.9% to 96.1%	from 20.9% to 95.5%
Long Distance (15 routes)	from 25.6% to 91.8%	from 16.5% to 79.7%

Source: FRA, Quarterly Report on the Performance and Service Quality of Intercity Passenger Train Operations, Quarter ended June 2012; Quarter ended June 2014, Table 6.

Outside of the NEC, Amtrak trains run predominantly on track owned by freight railroads, and much of the delay on these routes is related to sharing track with freight trains.⁶⁵ The host freight railroad controls all the trains running on its network, including Amtrak trains. Freight railroads use automated systems that dispatch trains when all trains are running on schedule, but delays or unanticipated problems usually require that a human dispatcher intervene to make train control decisions. According to data recorded by Amtrak train conductors, interference from freight trains was the leading cause of Amtrak delays in FY2012.⁶⁶ “Slow order” track—track that is subject to a temporarily reduced speed limit until repair or maintenance can be performed—was the second-leading cause of Amtrak delays. Signal problems and interference from other passenger trains were the third- and fourth-leading causes of delay.

Figures on the causes of delays are based on the recordings of Amtrak train conductors. Freight railroads contend that the data are inaccurate because conductors may not be aware of the root causes of delay; for instance, the conductor of an Amtrak train stuck behind a freight train might record the cause of delay as “freight train interference” even though the freight train could be stopped because of a railroad crossing accident further ahead.

Several circumstances exacerbate interference between freight and Amtrak trains. A surge in rail shipments of oil from the Bakken formation in North Dakota has led to frequent delays on routes in the upper Midwest. In some areas, construction to add additional trackage in response to this additional traffic has caused delays in train movements. On some route segments, Amtrak uses a

⁶³ Oral testimony of William Crosbie, Amtrak’s COO, Surface Transportation Board, Public Hearing, Passenger Rail Investment and Improvement Act of 2008, February 11, 2009, Ex Parte 683, transcript pp. 55-56.

⁶⁴ These on-time standards were established by FRA through the rulemaking process. See FRA’s Issuance of Metrics and Standards, Docket No. FRA-2009-0016, n.d., p. 26; <http://www.fra.dot.gov/rpd/passenger/2165.shtml>.

⁶⁵ About 97% of the 22,000 miles over which Amtrak operates are owned by freight railroads.

⁶⁶ Amtrak, *Monthly Performance Report for September 2012*, December 4, 2012; <http://www.amtrak.com/ccurl/34/894/Amtrak-Monthly-Performance-Report-September-2012.pdf>.

secondary route of the owning freight railroad, which may not want to invest in improving the performance of that segment.⁶⁷ Off the NEC, about 70% of the mileage over which Amtrak operates consists of a single track with sidings, meaning that a single late train can cause many other trains to be delayed. Amtrak trains, which travel faster than most freights, require more headway clearance, complicating operations on a heavily used freight corridor.⁶⁸

Amtrak's Terms of Access to Freight Track

In 1973, shortly after Amtrak's creation, Congress granted Amtrak "preference" over freight trains in using a rail line, junction, or crossing (P.L. 93-146, §10(2), 87 Stat. 548). In Amtrak's view, this "preference" should be enforced each time a dispatcher makes a decision involving an Amtrak train and a freight train.⁶⁹ The freight railroads believe that the entire fluidity of the route has to be taken into consideration, and that this sometimes may involve giving priority to a freight over an Amtrak train in order to avoid delays on a larger scale.

Under the Rail Passenger Service Act of 1970 (P.L. 91-518, 84 Stat. 1327), Amtrak pays the host railroads for the *incremental* costs specific to Amtrak's usage of track, for instance, the additional track maintenance costs required for passenger trains. Amtrak is not required to contribute any share to a freight railroad's overhead costs. Based on agreements it has negotiated with each freight railroad, Amtrak provides incentive payments to host railroads when its trains arrive on time.⁷⁰ Part of this negotiation involves agreeing on a schedule for Amtrak trains. The DOT IG reported in 2008 that three of the four host freight railroads visited regard the incentive payments as insufficient to influence the way they dispatch Amtrak trains.⁷¹ There are also penalty provisions for late trains, but they only come into effect if the host railroad has received incentive payments within the last 12 months. In recent years, Amtrak has paid an average of \$100 million annually to the freight railroads for track usage and on-time incentive payments. This equates to about 0.2% of the freight railroads' annual freight revenues and about 1% of their annual capital expenditures.

PRIIA Initiatives to Improve On-Time Performance

In PRIIA (§207 and §213), Congress gave the Surface Transportation Board (STB) the power to investigate, in certain circumstances, failures by Amtrak to meet on-time performance standards. If these on-time performance standards have not been met for two consecutive quarters, the STB may start an investigation on its own initiative or upon a complaint from Amtrak, another passenger rail operator, or a freight railroad hosting Amtrak trains. If the STB determines that a host freight railroad has failed to provide preference to Amtrak trains, the STB may award damages against the host freight railroad and order other relief. The freight railroads challenged the constitutionality of this statute, arguing that Amtrak, as a private corporation, cannot have

⁶⁷ For instance, Amtrak's Southwest Chief route between Kansas City and Albuquerque runs over BNSF's more northerly route used by coal trains rather than the double tracked "transcon" route used by faster intermodal trains.

⁶⁸ Testimony of Jeffrey Elliot, Oliver Wyman Inc., STB hearing on PRIIA, Ex Parte 683, February 11, 2009.

⁶⁹ DOT IG, *Root Causes of Amtrak Train Delays*, September 8, 2008, report no. CR-2008-076.

⁷⁰ The Amtrak IG has found that Amtrak has significantly overpaid on these incentive payments, relying on invoices calculated by the host railroads and not adequately reviewing them before issuing payment. See, for instance, audit reports 403-2010 dated April 21, 2011 and 407-2003 dated September 24, 2010.

⁷¹ DOT IG, *Root Causes of Amtrak Train Delays*, September 8, 2008, report no. CR-2008-076, p. 23.

rule-making authority in developing performance standards and that the statute violates their due-process rights. On March 9, 2015, the Supreme Court ruled that Amtrak is a government entity for the purpose of developing the performance standards; it remanded the case to the U.S. Court of Appeals for the D.C. Circuit to consider the lawfulness of the standards.⁷²

In January 2012, Amtrak filed its first complaint with the STB under the PRIIA on-time performance provision. The complaint is against Canadian National Railroad (CN) for failing to comply with the metrics and standards on several routes serving Chicago.⁷³ This STB case illustrates the key issue for Congress: can passenger trains be accommodated on busy freight tracks without jeopardizing another national policy goal—supporting freight railroads’ effort to divert freight traffic from trucks on congested highways. As one freight rail executive has stated, “Taking rail capacity from freight to provide rail capacity for passengers is not the answer to America’s congestion problems, as it will only shift thousands of trucks onto highways.”⁷⁴

Interestingly, Amtrak’s complaint is against the freight railroad and over the same routes where the concept of the “scheduled” freight railroad originated. In its pleading with the STB, CN refers to erratic and unpredictable Amtrak trains that regularly miss their allotted time slots on CN tracks due to Amtrak trains running out of fuel, locomotives breaking down, and crews reaching their hours-of-service limit at unscheduled locations.⁷⁵ CN claims that Amtrak’s poor performance is interfering with its tightly scheduled freight operations, while Amtrak claims that its delays on CN’s track are far worse than on any other Class I railroad.⁷⁶ Amtrak has since narrowed the scope of its petition, which is still before the STB.⁷⁷

In November 2014, Amtrak filed its second complaint against a host freight railroad for causing delays to its passenger trains, in this case against Norfolk Southern and CSX railroads for delays on Amtrak’s Capital Limited route between Washington, DC, and Chicago.⁷⁸

Is Delay an Operations or Infrastructure Issue?

It is not clear to what extent more infrastructure (parallel tracking, upgrading signal systems, etc.) is necessary to alleviate the conflict between freight and Amtrak trains. However, an investigation by the DOT IG, based on data from 2002-2007, found that the two largest causes of Amtrak delays were practices by the host freight railroads (such as dispatching) and slow orders on their track, and that capacity utilization was a far less important cause of delay.⁷⁹ The study also found that the amount of delay due to host railroad practices varied considerably among host railroads. These findings suggest that modifying the dispatching practices of host freight railroads and

⁷² http://www.supremecourt.gov/opinions/14pdf/13-1080_f29g.pdf.

⁷³ See STB Docket # NOR_42134.

⁷⁴ James Young, CEO of Union Pacific Railroad, as quoted in “Freight Carriers Seek to Derail Amtrak Fines,” *Journal of Commerce*, September 5, 2011.

⁷⁵ These examples are from 2011. See CN’s Response to Amtrak’s petition, dated March 9, 2012; STB Docket # NOR_42134, ID 232010.

⁷⁶ Amtrak’s petition is dated as received by the STB on January 19, 2012; STB Docket # NOR_42134, ID 231709.

⁷⁷ To review the parties’ filings before the STB, see <http://www.stb.dot.gov/filings/all.nsf/>.

⁷⁸ See STB Docket # NOR_42141.

⁷⁹ Department of Transportation, Office of the Inspector General, Root Causes of Amtrak Train Delays, September 8, 2008, CR-2008-076 (<https://www.oig.dot.gov/library-item/29453>).

improving track maintenance could be the primary means of improving Amtrak's on-time performance, while investment in expanding capacity may be less important.

As economic growth returns and freight traffic increases, and states begin implementing plans to increase passenger train speeds over certain routes (from a prevailing maximum of 79 mph to 110 mph), tension between freight and passenger use of track is likely to intensify. However, the freight railroads do have an economic incentive to build sufficient infrastructure to allow for faster freight trains. This would allow them to capture cargo that is both more lucrative and has tremendous volume potential: parcel, refrigerated, and short-haul intermodal. Freight railroads are trying to "win back" some of the refrigerated cargo they have lost to trucks. They realize that there is a large untapped market (especially in the eastern United States) if they can make rail service competitive with trucks for shipments of 350 to 750 miles. These three potential markets for "express" freight rail delivery may give freight railroads an incentive to increase track capacity, which might also benefit Amtrak.

Food and Beverage Service

Amtrak has served food and beverages since it began operating in 1971, continuing the practice of its predecessor companies. As far back as 1981, Congress prohibited food and beverage service from being offered at a loss,⁸⁰ and this prohibition is still in the statutes governing Amtrak: "Amtrak may ... provide food and beverage services on its trains only if revenues from the services each year at least equal the cost of providing the services."⁸¹

The law does not define what is to be included in the cost of providing the services. Amtrak has stated that providing food and beverage service is essential to meet the needs of passengers, especially on long-distance trains, and it has interpreted the law as requiring that revenues cover the costs of food and beverage items and commissary operations but not the labor cost of Amtrak employees providing food service on board trains. When on-board labor costs are excluded, Amtrak says, the service covers its costs. When labor costs are included, however, the service operates at a significant deficit (see **Table 8**).

⁸⁰ P.L. 97-35 (enacted August 13, 1981), §1177, 95 STAT. 692.

⁸¹ 49 U.S.C. 24305(c)(4).

Table 8. Amtrak Food and Beverage Service Revenues and Expenses
(in millions of nominal dollars)

Fiscal Year	Total Revenues	Nonlabor Expenses	Labor Expenses	Total Expenses	Total Revenues as % of Total Expenses
2002	\$84.1	\$80.7	\$83.8	\$164.5	51%
2003	78.4	75.5	83.3	158.8	49%
2004	80.4	75.0	89.2	164.2	49%
2005	90.9	83.1	98.3	181.4	50%
2006	88.3	84.4	96.3	180.7	49%
2007	94.5	85.5	92.1	177.6	53%
2008	102.6	87.0	97.0	184.0	56%
2009	106.4	81.3	100.0	181.3	59%
2010	109.3	83.7	108.0	191.7	57%
2011	121.5	89.0	117.0	206.0	59%
2012	122.0	91.7	113.2	204.9	60%
2013	123.4	91.4	116.0	207.4	59%
2014	125.7	85.5	115.5	201.0	63%

Source: Amtrak provides figures for revenue, but not cost, for its food and beverage service in its monthly performance reports. The information in this table through 2011 comes from a memo prepared by House Transportation and Infrastructure Committee staff accompanying an August 2, 2012, oversight hearing on Amtrak operations. The 2002-2005 figures are estimates produced by GAO for a report (Government Accountability Office, *AMTRAK: Improved Management and Controls over Food and Beverage Service Needed*, August 2005, GAO-05-867, <http://www.gao.gov/assets/250/247490.pdf>, Appendix II), and the 2006-2011 figures are from Amtrak. The two sets of figures may not be directly comparable, but both include labor costs. Amtrak has declined to give figures for earlier years, saying that the information is not readily available and would not be comparable with the FY2006 and later data. The nonlabor expense was calculated based on the figures in the source table.

Amtrak has taken measures, at Congress's direction, to reduce costs for food and beverage service. In 1999, Amtrak shifted from handling food and beverage supplies internally to contracting out such activities. A House proposal in the 112th Congress would have required FRA to contract out Amtrak's on-board food and beverage service but acknowledged that the service may operate at a loss.⁸² H.R. 749 (114th Congress) requires Amtrak to develop a plan to eliminate losses, and prohibits federal funds from being used to cover losses starting five years after enactment—and provides that no Amtrak employee shall lose his or her job as a result of any changes made to eliminate losses.

⁸² H.R. 7 (112th Congress), §8106.

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Standardization of Financial Agreements Between Amtrak and States for State-Supported Service

Amtrak provides intercity passenger rail service in 19 states under contract to the states. Several of these services operate in more than one state, and the number of state-supported services has grown over time. For many years Amtrak had no uniform methodology to establish and allocate the operating and capital costs of these services between itself and the states. In 2008, Congress directed Amtrak to develop a standard methodology for determining and allocating these costs, in consultation with the DOT and the governors of the states.⁸³ The methodology was developed and submitted to the states for approval in September 2011.⁸⁴ Eighteen of the governors agreed with the methodology.⁸⁵ Since one did not, the issue was submitted to the STB, as provided for in the 2008 law. In March 2012 the STB ruled that the methodology complied with the PRIIA requirements.⁸⁶

The methodology allocates costs that are directly attributable or closely associated with a route to that route. Costs that are not attributable solely to a particular route (e.g., overhead costs) are allocated as a percentage of direct route costs, as proposed by a working group of the states. For routes that cross more than one state, the methodology leaves the allocation of costs among the affected states to be determined by the affected states.⁸⁷ Amtrak expects to receive additional revenue from states as a result of implementing this new cost methodology.⁸⁸

Table 9. Amtrak State-Supported Train Revenue
(in millions of dollars)

	FY2012	FY2013	FY2014	FY2015	FY2016
Budget/Plan	\$193	\$199	\$276	\$284	\$293
Actual	179	187	239	NA	NA

Source: Budget/Plan: Amtrak, *FY2012-FY2016 Five year Financial Plan*, Appendix: Summary Financial Table, p. 52; Actual: Amtrak, FY2013 Annual Report; September 2014 Monthly Report to Congress.

Privatization of Intercity Passenger Rail Services

In the 112th Congress, the House Transportation and Infrastructure Committee conducted hearings on privatization of intercity passenger rail service. When discussing privatization of intercity passenger rail service, details are important. Amtrak itself can be considered a privatized rail provider, as it is legally a for-profit company which receives grants from federal and state governments. Similarly, the rail service providers in Great Britain, for example, are not owned by

⁸³ PRIIA (P.L. 110-432), Division B, §209.

⁸⁴ The states covered by this agreement were California, Connecticut, Illinois, Indiana, Maine, Massachusetts, Michigan, Missouri, New Hampshire, New York, North Carolina, Oklahoma, Oregon, Pennsylvania, Texas, Vermont, Virginia, Washington, and Wisconsin.

⁸⁵ The state of Indiana did not agree, though according to Amtrak it did not provide a reason for its decision.

⁸⁶ Surface Transportation Board, *Amtrak Petition for Determination of PRIIA Section 209 Cost Methodology*, March 13, 2012, Docket Number FD_35571_0. Indiana did not file comments with the STB opposing the methodology.

⁸⁷ *Ibid.*, pp. 4-5.

⁸⁸ Amtrak, *FY2012-FY2016 Five Year Financial Plan*, January 2012, Table 6, p. 18.

the British government, but they receive government funding to operate routes which are not profitable on the basis of passenger-related revenues. The differences lie in how the government payments are structured, with the British companies receiving franchises to operate trains over a route for a certain amount of government funding over a period of years.⁸⁹

Suggestions for privatizing intercity passenger rail range from encouraging Amtrak to contract out more activities to encouraging private operators to compete with Amtrak on individual routes. One challenge to the latter is that, unlike in many other countries, the majority of the U.S. rail network is owned by private freight companies which control who can use their tracks and under what circumstances. Freight railroads have a statutory obligation to carry Amtrak trains, but they have discouraged the notion of having other passenger rail providers operating on their tracks.⁹⁰

In several instances, private railroads operate or propose to operate intercity passenger rail services over their own lines; most of these lines are short and operate seasonally. Other pending initiatives involve proposed construction of new privately owned lines specifically for high-speed passenger rail services. One major obstacle to such ventures is the financial challenge of spending billions of dollars to build the infrastructure before receiving any revenue. Three major initiatives are discussed below.

All Aboard Florida

Florida East Coast Industries, which owns a railroad providing freight service along the east coast of Florida, has announced plans to run a passenger service between Miami and Orlando (a distance of approximately 240 miles), with intermediate stops at Fort Lauderdale and West Palm Beach. The company already owns most of the right-of-way; it wants to construct 40 miles of track that would allow it to serve a station at the Orlando Airport. The trains, under the name All Aboard Florida, would travel at up to 110 mph over much of the route, and up to 125 mph on the section of track yet to be built. The company also owns land in downtown Miami where it would build a passenger terminal and a mixed-use development, using the availability of passenger rail service to enhance the value of its real estate development projects. The project is estimated to cost \$1 billion, and construction is expected to begin in 2015.⁹¹ The sponsor has applied for an FRA Railroad Rehabilitation and Improvement Financing (RRIF) loan.

Texas Central High Speed Railway

This project, which is being pursued by a group including the Central Japan Railway Company, one of the leading rail companies in Japan, would offer 200 mph passenger rail service between Dallas-Fort Worth and Houston. The project is still in the initial planning stages; the initial cost estimate is \$8 billion-\$12 billion. The target completion date is 2021. The project group says it

⁸⁹ Companies compete for the franchises based on the level of government support they seek, and occasionally a company finds that it has underestimated the amount of government funding needed (or overestimated the amount of passenger-related revenue it can earn). In these cases, the companies have typically turned the franchise back over to the British government.

⁹⁰ Edward R. Hamberger, President and CEO, Association of American Railroads, transcript of House Transportation and Infrastructure Committee Hearing, "An Update on the High Speed and Intercity Passenger Rail Program: Mistakes Made and Lessons Learned," December 6, 2012: "The association has long held the position that there should be one operator of intercity passenger rail and that that operator should be Amtrak."

⁹¹ All Aboard Florida (<http://www.allaboardflorida.com>).

does not expect to request government grants, though it may seek a federal loan and is cooperating with (and may benefit from) government planning efforts for a high-speed rail line in that corridor. There are other groups said to be interested in the project as well. There has been at least one previous attempt to develop a high-speed rail line in the region without federal funding; that effort was not successful.⁹²

XpressWest Southern California to Las Vegas

XpressWest (formerly known as DesertXpress) propose to build a dedicated high speed rail line from Victorville, CA (a community east of Los Angeles), to Las Vegas, a distance of 185 miles.⁹³ It proposed to run nonstop trains over this route at 150 mph, with trains operating at 20-minute intervals during peak periods, transporting tourists from southern California to Las Vegas and back. The project has been in development since 2005, and has completed various environmental and regulatory requirements. The project reportedly had private funding commitments of \$1.5 billion, and applied for a \$5.5 billion loan from the RRIF loan program, which would have been the largest RRIF loan to date. FRA halted review of the loan request in 2013, citing its failure to meet the RRIF program's Buy America requirements as part of the reason for the decision.⁹⁴ There has been no further news about the project.

Passenger Train Access to Freight Rail Tracks

If a state or a private passenger rail operator other than Amtrak wished to begin passenger service over freight-owned right of way, it would likely have to pay more than Amtrak does to gain access to freight property. Under laws enacted during Amtrak's first decade, Amtrak enjoys eminent domain power over freight railroad facilities and can use freight track at the railroad's incremental cost of hosting Amtrak trains.⁹⁵ To enforce these terms, Amtrak can appeal to the STB. No other potential passenger rail operator has access to freight track on these favorable terms. These provisions may make it difficult for other companies to compete directly with Amtrak, or to offer passenger service over any existing trackage without the support of the freight railroads that control the track.⁹⁶

Recent Congressional Action

On March 4, 2015, the House passed H.R. 749, the Passenger Rail Reform and Investment Act of 2015. This bill would authorize \$7 billion in funding for passenger rail programs, including \$5.8 billion for Amtrak and \$1.2 billion for grants to states for passenger rail activities (including states along the NEC) over four years, and would make a number of changes to federal intercity passenger rail policies. Proposed changes include the following:

⁹² Ryan Holeywell, "Texas and Calif.'s Contrasting High-Speed Rail Attempts," *Governing*, September 6, 2012.

⁹³ <http://www.xpresswest.com/>.

⁹⁴ Washington Post, "The XpressWest train project's deserved demise," July 17, 2013; http://www.washingtonpost.com/opinions/the-xpresswest-train-projects-deserved-demise/2013/07/17/8441378e-eebf-11e2-9008-61e94a7ea20d_story.html.

⁹⁵ See P.L. 91-518 (§402), 1970; P.L. 93-146 (§10), 1973; and P.L. 95-421 (§15) 1978.

⁹⁶ CRS Report R42512, *Passenger Train Access to Freight Railroad Track*, by John Frittelli.

- Restructuring DOT's Amtrak accounts into an NEC account and a national network account (§101). This will end the cross-subsidization of operating losses on Amtrak's long-distance routes with the operating profits from the NEC. All revenues from the NEC will go into the NEC account for use on the NEC, making the revenues and expenses of the NEC and of the long-distance routes more transparent to Congress (§202).
- Creating a program to provide grants to states for passenger rail service improvement projects on the NEC (§301).
- Streamlining of environmental review for passenger and freight rail construction projects in order to reduce the time required for review (§401).
- Limiting the review period for applications for long-term low-interest loans from the RRIF program (§302), and providing that 40% of the RRIF funding availability be set aside for projects on the NEC (§303).
- Prohibiting federal funding to cover operating losses from Amtrak's food and beverage service finances beginning five years after enactment—but no Amtrak employee shall be involuntarily separated as a result of any actions Amtrak takes to eliminate food and beverage service losses (§206).
- Directing Amtrak to develop a pilot program for carrying cats and dogs (§201).

Appendix. Federal Funding for Amtrak

Table A-1. Federal Funding for Amtrak
(in millions of dollars)

Fiscal Year	In Nominal Dollars	In 2015 Dollars
1971	\$140	\$716
1972	220	1,082
1973	59	282
1974	440	1,931
1975	677	2,705
1976	659	2,459
1977	801	2,791
1978	1,091	3,803
1979	1,244	4,091
1980	1,254	3,790
1981	1,276	3,493
1982	905	2,230
1983	895	2,055
1984	816	1,785
1985	712	1,487
1986	603	1,216
1987	624	1,232
1988	608	1,161
1989	604	1,111
1990	629	1,115
1991	815	1,411
1992	856	1,424
1993	891	1,417
1994	909	1,398
1995	972	1,469
1996	750	1,101
1997	843	1,215
1998	1,686	2,379
1999	1,701	2,387
2000	571	793
2001	520	706
2002	831	1,101
2003	1,043	1,362

Fiscal Year	In Nominal Dollars	In 2015 Dollars
2004	1,218	1,556
2005	1,207	1,507
2006	1,294	1,566
2007	1,294	1,517
2008	1,325	1,516
2009	1,490	1,649
ARRA	1,300	1,434
2010	1,565	1,703
2011	1,484	1,582
2012	1,418	1,480
2013	1,344	1,382
2014	1,390	1,408
2015	1,390	1,390
Total	\$44,365	\$78,388

Source: Annual nominal dollar amounts: Federal Railroad Administration. 2015 dollar figures calculated by CRS.

Notes: Nominal dollar amounts adjusted to constant 2015 dollars using the Total Non-defense column from Table 10: Gross Domestic Product and Deflators Used in the Historical Tables: 1940-2020, published in the *Historical Tables* volume of the Budget of the United States Government, Fiscal Year 2016 (<http://www.whitehouse.gov/omb/budget/Historicals>).

Author Contact Information

David Randall Peterman
 Analyst in Transportation Policy
 dpeterman@crs.loc.gov, 7-3267

John Frittelli
 Specialist in Transportation Policy
 jfrittelli@crs.loc.gov, 7-7033

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