BUDGET ESTIMATES

FISCAL YEAR 2017

FEDERAL RAILROAD ADMINISTRATION

SUBMITTED FOR THE USE OF
THE COMMITTEES ON APPROPRIATIONS

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

FY 2017 PRESIDENT'S BUDGET JUSTIFICATION

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DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION
ADMINISTRATOR'S OVERVIEW

FRA's mission is to enable the safe, reliable, and efficient movement of people and goods for a strong America, now and in the future. FRA executes this mission through development and enforcement of safety regulations, investment in passenger and freight rail services and infrastructure, and research into and development of innovations and technology solutions.

By 2045, the U.S. population is expected to grow by nearly 70 million people—more than the current populations of New York, Florida, and Texas, combined. The resulting increased travel demand will worsen congestion in the transportation system and make travel more challenging. As the American population grows and becomes increasingly centered in metropolitan areas, passenger rail will continue to become a very attractive option for many travelers. In fact, more Americans are choosing rail transportation every day. Amtrak ridership reached 31 million passengers in fiscal year (FY) 2014, about 29 percent more than the FY 2005 level and 50 percent higher than the FY 1993 level.

As our population grows, freight demand will also rise and increase stress on our already challenged freight system, which moves about 63 tons of goods per American per year. Rail freight movements are expected to increase by approximately 45 percent, as the U.S. economy doubles in size within 30 years. In FY 2014, U.S. rail intermodal freight traffic exceeded 13 million containers and trailers—5 percent more than FY 2013, the previous peak year.

In the face of these emerging challenges, today's rail transportation is safer than ever. From FY 2005 to FY 2014, total train accidents declined by 46 percent, derailments declined by 47 percent, and highway-rail grade crossing incidents declined by 24 percent. These data show that FRA's strategies and programs, including enforcement, research, and investment, are saving lives and preventing injuries—133 fewer deaths (15 percent) and 612 fewer injuries (7 percent) occurred in FY 2014 than in FY 2005.

Although safety performance has improved, significant risks remain in the rail transportation system. The rate of safety improvement has slowed and current safety strategies are approaching their effectiveness limits.

To continue improving rail safety and to support rising passenger and freight rail traffic, FRA will require significant new resources. FRA requests $6.3 billion for FY 2017, $4.6 billion more than the FY 2016 enacted level. The FY 2017 President's Budget introduces the Administration's *21st Century Clean Transportation Plan Investments* initiative, which provides $6.0 billion for High-Performance Rail in FY 2017, and $68.5 billion over 10 years. FRA also requests $213.3 million for its Safety and Operations account and $53.5 million for its Research and Development account, which together fund safety oversight, enforcement, and improvement *programs* and administrative functions.

21st Century Clean Transportation Plan Investments and High-Performance Rail

The *21st Century Clean Transportation Plan* advances high-performance rail by building on the 2015 surface transportation authorization act, *Fixing America's Surface Transportation Act* (FAST Act). The FAST Act incorporates several provisions proposed in the Administration's GROW AMERICA Act to improve the planning, delivery, and transparency of taxpayer investments in Amtrak by better aligning costs, revenues, and Federal grants to Amtrak's business lines. The FAST Act also creates new programs to improve aging rail assets, invest in railroad safety, and develop passenger rail corridors. Amtrak-owned infrastructure supports critical commuter rail services particularly in the Northeast corridor. More than 847,000 people on average depend on commuter rail services every weekday that use Amtrak infrastructure and shared operations. In addition, many states contract with Amtrak to provide intercity passenger rail services, which carry nearly half of all Amtrak passengers.

FRA's $6 billion request for High-Performance Rail groups FAST Act authorities under two broad programs: Current Passenger Rail Service and the Rail Service Improvement Program. The $2.3 billion request for Current Passenger Rail Service supports existing rail services, returning public rail assets to a state of good repair, and making critical investments to maintain current rail services. The $3.7 billion request for the Rail Service Improvement Program supports expansion and improvement of rail networks throughout the United States. The program will also fund critical safety priorities, such as the implementation of positive train control (PTC) by resource-constrained commuter railroads, short line railroads, and states, and highway-rail grade crossings improvements.

While the FAST Act provides guaranteed funding for grant programs in other surface transportation modes, rail programs depend on Congress providing funding through annual spending bills. Instead, the Administration's *21st Century Clean Transportation Plan* provides predictable, dedicated rail funding through a new trust fund. This structural change to FRA's budget is critical for enabling states and communities to develop long-range plans and to complete infrastructure projects successfully and efficiently.

Rail Safety Priorities

Rail transportation is safe and getting safer. Accident rates have fallen steadily since the 1990s; the number of fatal accidents involving railroad employees is now about half the number in early 1990s. To realize future safety improvements, railroads must adopt system safety and risk reduction programs, foster strong safety cultures, and implement better operating practices and technologies such as positive train control (PTC) and electronically controlled pneumatic brakes. The FY 2017 budget request directs resources to today's most pressing safety challenges:

- **Passenger Railroad Safety**: Commuter and intercity passenger railroads lack capital to deploy life-saving PTC technology and other safety improvements;

- **Grade Crossings and Pedestrian Safety**: Motor vehicle drivers and pedestrians continue to face significant risks at highway-rail grade crossings and around railroad rights of way;
- **Critical Assets**: Aging major infrastructure, including bridges and tunnels, on the Northeast Corridor; and
- **Energy Products**: Hazards from large volumes of crude oil and other energy products, including ethanol and liquefied natural gas, moving by rail.

Passenger Railroad Safety

An accident like the 2015 Amtrak derailment in Philadelphia makes clear that hard work remains. The good news is that technology exists today to prevent some catastrophic accidents on passenger routes—PTC. Both before and since this derailment, FRA has worked to assist railroads plan and implement this critical, Congressionally mandated technology that will save lives. Among other activities, FRA is reviewing railroads' revised PTC implementation plans and has issued a $967 million loan to the New York Metropolitan Transportation Authority, the nation's largest commuter rail service provider, for PTC deployment.

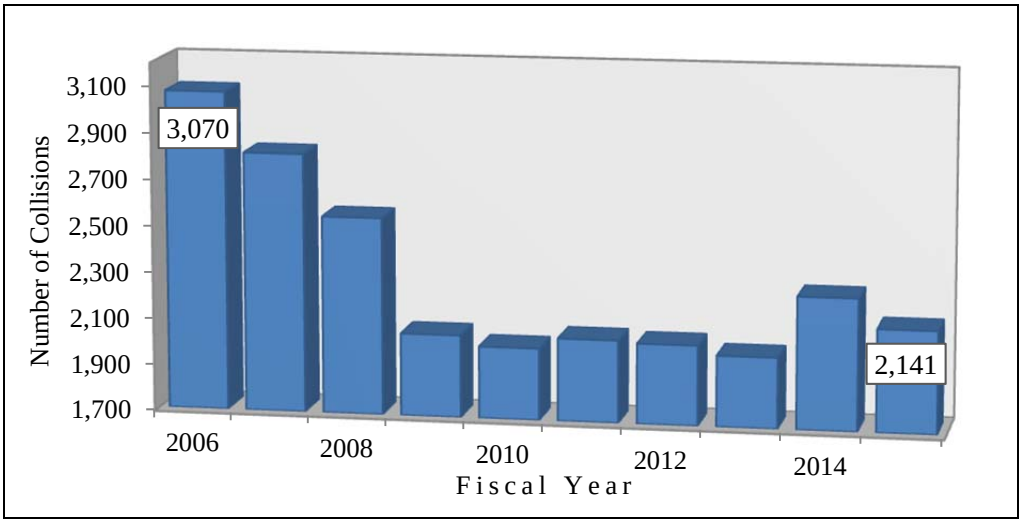
FRA has long stated that more public funding is necessary to implement PTC. Commuter railroads lack the billions of dollars they need for PTC costs. Similarly, many short line railroads lack funds to equip their locomotives when operating over Class I PTC territory. Amtrak, state sponsors, and host railroads continue to negotiate about sharing PTC costs. FRA's FY 2017 budget directly addresses this need. Of the $3.7 billion request for the Rail Service Improvement Program, $1.25 billion is for PTC implementation grants to commuter and short line railroads.

FRA also requests $6.6 million in its Safety and Operations account to ensure that FRA has adequate resources to review railroads' PTC safety plans, oversee implementation, and take enforcement action, if necessary, as provided in the *Positive Train Control Enforcement and Implementation Act of 2015*.

Grade Crossing and Pedestrian Safety

Improving safety at the almost 130,000 public highway-rail grade crossings is a top FRA priority. About 92 percent of fatal train accidents in FY 2015 were related to trespassing and highway-rail grade crossing incidents. Each crossing is the location of a potential collision between a train and motor vehicle. The risk of highway-rail grade crossing incidents will likely grow with future train and highway traffic increases. The safest crossing is a closed crossing; therefore, increased funding for capital investment is critical.

Highway-Rail Grade Crossing Collisions, Fiscal Years 2006 to 2015



Source: FRA data

As part of the High-Performance Rail proposal, FRA requests $250 million for local rail facilities and safety projects. FRA would dedicate some of these funds to local communities for highway-rail grade crossing improvements and mitigation of other adverse impacts of rail operations. FRA would also use these funds to help resource-constrained short line railroads improve their infrastructure.

Critical Assets

Maintaining infrastructure and equipment is essential for safe railroad operations. After decades of consolidation, freight railroad operators face rising costs to maintain equipment and infrastructure, resolve bottlenecks, and increase capacity to meet rising demand. Inadequate investment in passenger rail has led to a multi-billion dollar backlog of projects to maintain a state of good repair and accommodate higher ridership levels.

Within its FY 2017 High-Performance Rail proposal, FRA requests $400 million for the new FAST Act grant program to reduce the state of good repair backlog on the Northeast Corridor (NEC) and other publicly owned infrastructure. NEC is the 457-mile rail backbone of the Northeastern United States that connects metropolitan areas from Washington, D.C.to Boston, Massachusetts. Collectively, these areas:

- Generate about 20 percent of U.S. economic output (gross domestic product).
- Have a population of 51 million residents projected to grow to58 million by 2040.
- Choose rail for nearly 70 percent of combined air and rail travel in the Washington – New York market; and more than 50 percent in the New York - Boston market.

- Support more than 2,000 passenger trains, with approximately 750,000 intercity and commuter riders, every day on average.
- Average 50 to 70 freight trains daily.

In April 2015, the multi-party Northeast Corridor Infrastructure and Operations Advisory Commission released its first joint 5-year capital plan for the corridor. The plan identified a nearly $14 billion backlog of infrastructure assets (primarily bridges and tunnels) that have remained in service well beyond their expected useful lives, require extensive maintenance and rehabilitation, and are major sources of corridor delays. The average age of these bridges and tunnels is over 100 years and failure of any of them could cripple NEC travel.

The planning program includes funding to stand up a Southeast Corridor Rail Commission, similar to the NEC Commission, which has successfully promoted cooperation and planning among NEC States and stakeholders. The new Southeast Corridor Rail Commission would develop a regional rail plan and advance other discrete, consensus rail planning and capital projects in the region.

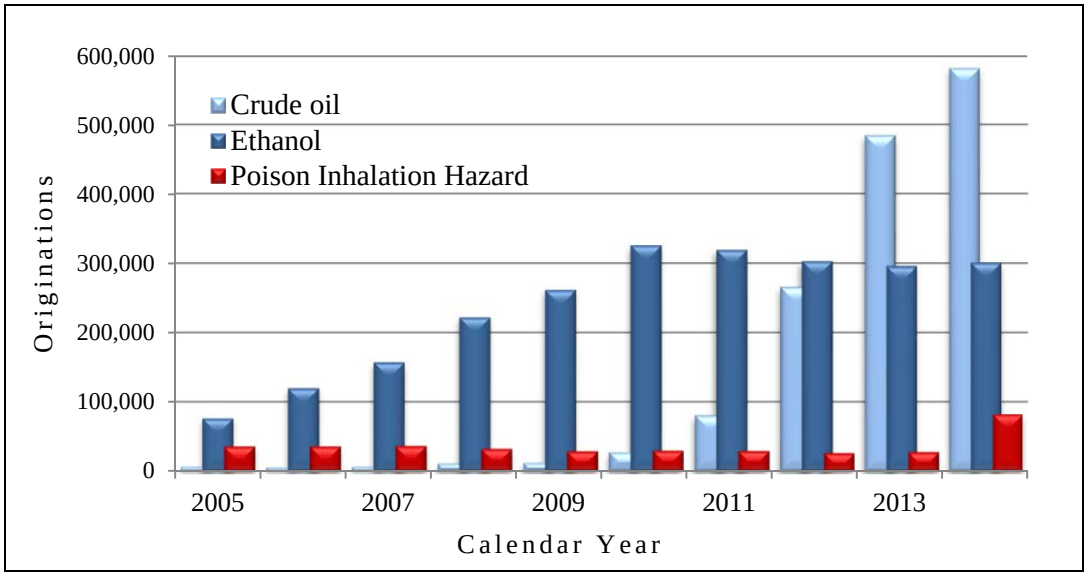
FRA also requests funding for eight additional bridge safety specialists – double the current staff level – to increase oversight of the estimated 100,000 railroad bridges. In addition, FRA requests $500,000 to establish a national inventory of railroad bridges. Similar to the Federal Highway Administration's bridge inventory, the railroad bridge inventory would help direct inspections and oversight of these critical assets.

Safe Transportation of Energy Products

Surging domestic energy production driven by new production from the Bakken oil fields in North Dakota and imports from Canada, has strained infrastructure in oil production regions and increased the risks of accidents and environmental damage. Ethanol and liquefied natural gas production also increased significantly during the last decade. As the safety and environmental risks grow with increasing shipments of energy products, Congress and the public are demanding rapid and effective safety measures.

Rail transportation of crude oil has increased dramatically since 2008, from less than 1 percent to more than 10 percent now. This is a nationwide phenomenon because energy products move from production areas to refineries on the East, West, and Gulf Coasts. An accident involving large volumes of crude oil can be catastrophic. The 2013 Lac-Mégantic derailment killed 47 people. In 2013, more than one million gallons of oil spilled due to train derailments, more than the total amount of oil spilled due to rail accidents in the previous 35 years. Since then, trains carrying crude oil have had 22 major accidents in the United States.

North American Originations of Certain Hazardous Material, Calendar Years 2005 to 2014



Source: Association of American Railroads, Annual Report of Hazmat Transported by Rail, 2015.

For FY 2017, FRA requests new resources for new research, development, and technology to mitigate rail transportation risks of crude oil and other energy products. FRA requests $12.5 million in new funding to begin analyzing and demonstrating the safety and environmental benefits of electronically controlled pneumatic (ECP) brakes. ECP brake systems enable freight trains to use less energy because they allow train engineers to apply and release brakes more quickly than conventional compressed air brake pipe systems. Average train speeds can increase, while stopping distances and the probability of collisions and derailments are reduced. Safer operations mean fewer spills and fires with hazardous materials and less environmental damage. With an additional $2 million, FRA will advance rail tank car testing and work with the Department of the Energy and the Pipeline and Hazardous Materials Safety Administration to understand safety risks of frequent rail transport of large volumes of crude oil.

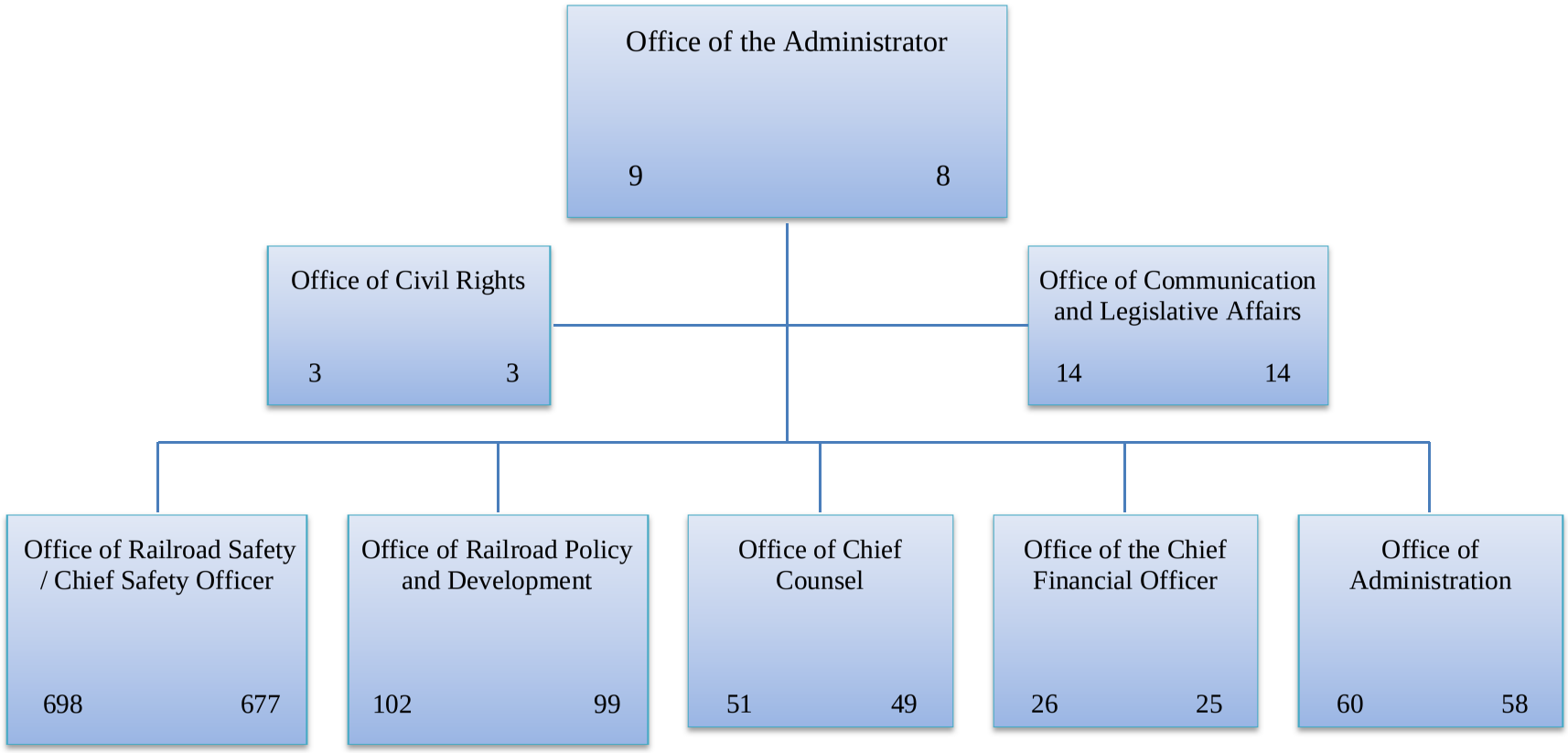
In addition, FRA requests $700,000 in new resources to expand its Automated Track Inspection Program, which complements the work of FRA's railroad safety inspectors to locate problems before they lead to derailments.

In conclusion, rail has never been safer and railroads are moving more people and carrying more goods today than in a generation. Amtrak ridership is up more than 50 percent since 2000. Freight rail traffic is near an all-time high. However, much can be done to improve safety, and rail must grow to balance the Nation's transportation options. FRA's FY 2017 Budget request will enable the agency to drive further safety gains and to further develop the rail system to benefit passengers and freight.

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

FY 2016 Organization Chart

963 Full-time Positions (FTP)*; 934 Full-time Equivalents (FTE)



*Employees on board end of fiscal year

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

FY 2017 Organization Chart

976 Full-Time Positions (FTP); 972 Full-Time Equivalents (FTE)

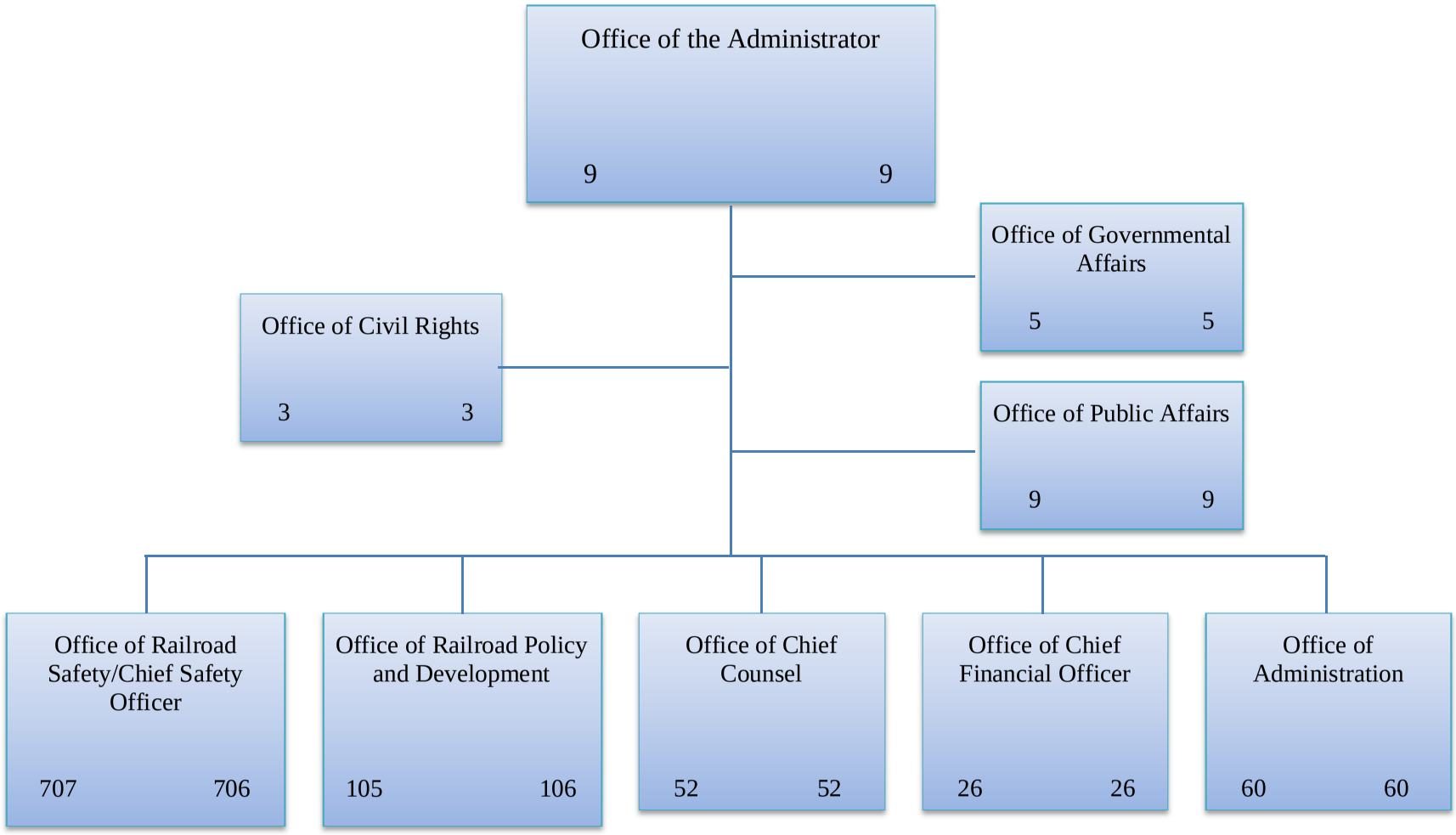


EXHIBIT II-1
FY 2017 COMPARATIVE STATEMENT OF NEW BUDGET AUTHORITY
FEDERAL RAILROAD ADMINISTRATION
($000)

Account Name	FY 2015 ENACTED	FY 2016 ENACTED	FY 2017 REQUEST
Safety and Operations	186,870	199,000	213,298
Railroad Research and Development	39,100	39,100	53,500
Current Passenger Rail Service (TF, Oblim)	-	-	2,300,000
Rail Service Improvement Program (TF, Oblim)	-	-	3,700,000
Operating Subsidy Grants to the National Railroad Passenger Corporation	250,000	288,500	-
Capital and Debt Service Grants to the National Railroad Passenger Corporation	1,140,000	1,101,500	-
Railroad Safety Grants	10,000	50,000	-
Northeast Corridor Improvement Program	-	19,163	-
Railroad Rehabilitation and Improvement Financing Program	-	1,960	-
Capital and Debt Service Grants to the National Railroad Passenger Corporation (Rescission)	-	(5,000)	-
Next Generation High Speed Rail (Rescission)	-	(4,945)	-
Rail Line Relocation and Improvement Program (Rescission)	-	(2,241)	-
Research and Development (Rescission)	-	(1,960)	-
Grants to the Nation Railroad Passenger Corporation (Rescission	-	(267)	-
Safety and Operations (Rescission)	-	(6,710)	-
TOTAL	**1,625,970**	**1,678,100**	**6,266,798**
Appropriations	1,625,970	1,699,223	6,266,798
Rescission	-	(21,123)	-

EXHIBIT II-2
FY 2017 TOTAL BUDGETARY RESOURCES BY APPROPRIATION ACCOUNT

FEDERAL RAILROAD ADMINISTRATION
Appropriation, Obligation Limitation, and Exempt Obligations
($000)

Account Name	FY 2015 ENACTED	FY 2016 ENACTED	FY 2017 REQUEST
Safety and Operations	186,870	199,000	213,298
Railroad Research and Development	39,100	39,100	53,500
Current Passenger Rail Service (TF, Oblim)	-	-	2,300,000
Rail Service Improvement Program (TF, Oblim)	-	-	3,700,000
Operating Subsidy Grants to the National Railroad Passenger Corporation (Rebased)	340,000	288,500	-
Capital and Debt Service Grants to the National Railroad Passenger Corporation (Rebased)	1,050,000	1,101,500	-
Railroad Safety Grants	10,000	50,000	-
Northeast Corridor Improvement Program (Rebased)	-	19,163	-
Railroad Rehabilitation and Improvement Financing Program	-	1,960	-
Capital and Debt Service Grants to the National Railroad Passenger Corporation (Rebased) (Rescission)	-	(5,000)	-
Next Generation High Speed Rail (Rescission)	-	(4,945)	-
Rail Line Relocation and Improvement Program (Rescission)	-	(2,241)	-
Railroad Research and Development (Rescission)	-	(1,960)	-
Grants to the Nation Railroad Passenger Corporation (Rescission)	-	(267)	-
Safety and Operations (Rescission)	-	(6,710)	-
TOTAL	**1,625,970**	**1,678,100**	**6,266,798**

EXHIBIT II-3

FY 2017 BUDGETARY RESOURCES BY DOT STRATEGIC GOALS AND OUTCOMES

FEDERAL RAILROAD ADMINISTRATION

Appropriations, Obligation Limitations, and Exempt Obligations

($000)

STRATEGIC GOALS AND OBJECTIVE	FY 2015 ENACTED	FY 2016 ENACTED	FY 2017 REQUEST
SAFETY	176,888	226,981	2,097,144
STATE OF GOOD REPAIR	737,348	737,348	1,525,000
ECONOMIC COMPETITIVENESS	106,484	106,484	1,080,665
QUALITY OF LIFE IN COMMUNITIES	424,616	424,616	1,260,665
ENVIRONMENTAL SUSTAINABILITY	146,583	146,583	269,197
ORGANIZATIONAL EXCELLENCE	34,052	34,052	31,995
SECURITY, PREPAREDNESS, AND OTHER SUPPORTING OBJECTIVES	-	2,038	2,133
TOTAL BUDGETARY RESOURCES	**1,625,970**	**1,678,100**	**6,266,798**

EXHIBIT II-3a

FY 2017 BUDGET BY DOT STRATEGIC GOALS AND OUTCOMES
FEDERAL RAILROAD ADMINISTRATION
($000)

DOT STRATEGIC GOAL AND OBJECTIVE	Account	FY 2017 Request
SAFETY		**2,097,144**
	Safety and Operations	138,644
	Current Passenger Rail Service	237,500
	Rail Service Improvement Program	1,680,000
	Research and Development	41,000
STATE OF GOOD REPAIR		**1,525,000**
	Current Passenger Rail Service	1,525,000
ECONOMIC COMPETITIVENESS		**1,080,665**
	Safety and Operations	10,665
	Rail Service Improvement Program	1,070,000
QUALITY OF LIFE IN COMMUNITIES		**1,260,665**
	Safety and Operations	10,665
	Current Passenger Rail Service	300,000
	Rail Service Improvement Program	950,000
ENVIRONMENTAL SUSTAINABILITY		**269,197**
	Safety and Operations	19,197
	Current Passenger Rail Service	237,500
	Research and Development	12,500
ORGANIZATIONAL EXCELLENCE		**31,995**
	Safety and Operations	31,995
SECURITY, PREPAREDNESS, AND OTHER SUPPORTING OBJECTIVES		**2,133**
	Safety and Operations	2,133
TOTAL, FY 2016 REQUEST		**6,266,798**

EXHIBIT II-4
FY 2017 BUDGET AUTHORITY
FEDERAL RAILROAD ADMINISTRATION
Appropriation, Obligation Limitation, and Exempt Obligations
($000)

Account Name	M / D	FY 2015 ENACTED	FY 2016 ENACTED	FY 2017 REQUEST
Safety and Operations	D	**186,870**	**199,000**	**213,298**
Railroad Research and Development	D	**39,100**	**39,100**	**53,500**
Track Research Program		11,279	11,279	11,279
Rolling Stock Program		10,322	10,322	24,722
Signals, Train Control & Communications		8,086	8,086	8,086
Human Factor Program		5,542	5,542	5,542
Railroad System Issues		3,871	3,871	3,871
Current Passenger Rail Service (TF, Oblim)	M	-	-	**2,300,000**
Grants To Amtrak -- FAST Act Sec. 11101		-	-	1,900,000
Federal State Partnership for State of Good Repair Program -- FAST Act. Sec. 11103		-	-	400,000
Rail Service Improvement Program (TF, Oblim)	M	-	-	**3,700,000**
Consolidated Rail Infrastructure and Safety Program -- FAST Act. Sec. 11102		-	-	3,680,000
Restoration and Enhancement Grants -- FAST Act Sec. 11104		-	-	20,000
Operating Subsidy Grants to the National Railroad Passenger Corporation (Rebased) 1/	M	**250,000**	**288,500**	**-**
Capital and Debt Service Grants to the National Railroad Passenger Corporation (Rebased) 1/	M	**1,140,000**	**1,101,500**	**-**
Railroad Safety Grants	D	**10,000**	**50,000**	**-**
Northeast Corridor Improvement Program (Rebased) 1/	M	**-**	**19,163**	**-**
Railroad Rehabilitation and Improvement Financing Program	D	**-**	**1,960**	**-**
Capital and Debt Service Grants to the National Railroad Passenger Corporation (Rebased) (Rescission) 1/	M	**-**	**(5,000)**	**-**
Next Generation High Speed Rail (Rescission)	D	**-**	**(4,945)**	**-**
Rail Line Relocation and Improvement Program (Rescission)	D	**-**	**(2,241)**	**-**
Research and Development (Rescission)	D	**-**	**(1,960)**	**-**
Grants to the Nation Railroad Passenger Corporation (Rescission)	D	**-**	**(267)**	**-**
Safety and Operations (Rescission)	D	**-**	**(6,710)**	**-**
TOTAL		**1,625,970**	**1,678,100**	**6,266,798**
Mandatory		1,390,000	1,404,163	6,000,000
Discretionary		235,970	273,937	266,798

Note:

1/ These accounts were funded with discretionary authority. The FY 2017 Budget reclassifies this baseline spending as mandatory contract authority to properly account for existing spending when comparing our FY 2017 reauthorization proposal to FY 2016 enacted spending levels.

EXHIBIT II-5
FY 2017 OUTLAYS
FEDERAL RAILROAD ADMINISTRATION
($000)

Account Name	M/D	FY 2015 Actual	FY 2016 Enacted	FY 2017 Request
Safety and Operations	D	219,632	192,000	203,000
Railroad Research and Development	D	36,711	38,000	42,000
Railroad Safety Grants	D	-	6,000	24,000
Grants to the National Railroad Passenger Corporation	D	54,223	50,000	40,000
Operating Grants to the National Railroad Passenger Corporation 1/	M	250,000	289,000	-
Capital and Debt Service Grants to the National Railroad Passenger Corporation 1/	M	998,761	911,000	-
Capital and Debt Service Grants to the National Railroad Passenger Corporation 1/	M	-	-	431,000
Intercity Passenger Rail Grant Program	D	12,886	14,000	10,000
Northeast Corridor Improvement Program	D	-	5,000	-
Northeast Corridor Improvement Program	M	-	-	10,000
Pennsylvania Station Redevelopment Project	D	3,879	10,000	10,000
Capital Assistance for High Speed Rail Corridors and Intercity Passenger Rail Service	D	1,095,875	2,065,000	3,052,000
Current Passenger Rail Services Program (TF)	M	-	-	1,219,000
Clean Transportation Rail Services Improvement Program (TF)	M	-	-	925,000
Railroad Rehabilitation and Improvement Program - Program Account (Upward	M	31,455	1,000	1,000
Next Generation High-Speed Rail	D	442	1,000	-
Emergency Railroad Rehabilitation and Repair	D	1,871	-	-
Rail Line Relocation and Improvement Program	D	13,794	10,000	7,000
Railroad Safety Technology Program	D	3,602	5,000	3,000
Total		**2,723,131**	**3,597,000**	**5,977,000**
Mandatory	M	*31,455*	*1,000*	*2,586,000*
Discretionary	D	*2,691,676*	*3,596,000*	*3,391,000*

EXHIBIT II-6
SUMMARY OF REQUESTED FUNDING CHANGES FROM BASE
FEDERAL RAILROAD ADMINISTRATION
Appropriations, Obligation Limitations, and Exempt Obligations

SAFETY AND OPERATIONS
($000)

		Baseline Changes									
	FY 2016 Enacted	Annualization of 2016 Pay Raises	Annualization of 2016 FTE	2017 Pay Raises	Two Less Compensable Day	GSA Rent	WCF Increase/ Decrease	Inflation/ Deflation	FY 2017 Baseline Estimate	Program Increases/ Decreases	FY 2017 Request
DIRECT:											
PERSONNEL RESOURCES											
Direct FTE	926	-	32	-	-	-	-	-	958	4	962
FINANCIAL RESOURCES											
ADMINISTRATIVE EXPENSES											
Salaries and Benefits	127,500	321	4,480	1,531	(997)	-	-	-	132,835	544	133,379
Benefits (Alasaks Railroad)	825	-	-	-	-	-	-	-	825	-	825
Travel	11,000	-	-	-	-	-	-	1,380	12,380	50	12,430
Transportation	150	-	-	-	-	-	-	30	180	-	180
GSA Rent	6,500	-	-	-	-	65	-	-	6,565	-	6,565
Communications, Rent & Utilities	1,420	-	-	-	-	-	-	14	1,434	-	1,434
Printing	303	-	-	-	-	-	-	3	306	-	306
Contractual Services	16,791	-	-	-	-	-	-	238	17,029	-	17,029
Working Capital Fund	8,695	-	-	-	-	-	(373)	-	8,322	-	8,322
Supplies and Materials	500	-	-	-	-	-	-	5	505	-	505
Equipment	2,210	-	-	-	-	-	-	22	2,232	-	2,232
Grants, subsidies, contributions	244	-	-	-	-	-	-	2	246	-	246
Insurance Claims	200	-	-	-	-	-	-	-	200	-	200
Admin Subtotal	**176,338**	**321**	**4,480**	**1,531**	**(997)**	**65**	**(373)**	**1,694**	**183,059**	**594**	**183,653**
SELECTED PROGRAMS											
Automated Track Inspection Program	9,800	-	-	-	-	-	-	-	9,800	700	10,500
Close Call Confidential Reporting System	4,240	-	-	-	-	-	-	42	4,282	-	4,282
RSIS/Data Management	3,731	-	-	-	-	-	-	-	3,731	500	4,231
Operation Life Saver Grant	1,030	-	-	-	-	-	-	10	1,040	-	1,040
PTC Support	900	-	-	-	-	-	-	-	900	5,700	6,600
Drug and Alcohol Program	766	-	-	-	-	-	-	8	774	-	774
RRIF Support	650	-	-	-	-	-	-	7	657	-	657
Security, Other Security Grants	468	-	-	-	-	-	-	5	473	-	473
RSAC	409	-	-	-	-	-	-	4	413	-	413
Technical Training Standards Division	400	-	-	-	-	-	-	4	404	-	404
Rail Enforcement System	268	-	-	-	-	-	-	3	271	-	271
Programs Subtotal	**22,662**	**-**	**-**	**-**	**-**	**-**	**-**	**83**	**22,745**	**6,900**	**29,645**
TOTAL	**199,000**	**321**	**4,480**	**1,531**	**(997)**	**65**	**(373)**	**1,777**	**205,804**	**7,494**	**213,298**

EXHIBIT II-6
SUMMARY OF REQUESTED FUNDING CHANGES FROM BASE
FEDERAL RAILROAD ADMINISTRATION
Appropriations, Obligation Limitations, and Exempt Obligations

RAILROAD RESEARCH AND DEVELOPMENT
($000)

	FY 2016 Enacted	Annualization of 2016 Pay Raises	Annualization of 2016 FTE	2017 Pay Raises	Two Less Compensable Day	GSA Rent	WCF Increase/ Decrease	Inflation/ Deflation	FY 2017 Baseline Estimate	Program Increases/ Decreases	FY 2017 Request
PERSONNEL RESOURCES											
Direct FTE		-	-	-		-	-	-	-	-	-
FINANCIAL RESOURCES											
ADMINISTRATIVE EXPENSES											
Travel	120	-	-	-	-	-	-	-	120	-	120
Advisory and assistance services	900	-	-	-	-	-	-	-	900	-	900
Admin Subtotal	**1,020**	-	-	-	-	-	-	-	**1,020**	-	**1,020**
PROGRAMS											
Track Research Program	11,279	-	-	-	-	-	-	-	11,279	-	11,279
Rolling Stock Program	10,322	-	-	-	-	-	-	-	10,322	14,400	24,722
Signals, Train Control & Communications	8,086	-	-	-	-	-	-	-	8,086	-	8,086
Human Factors Program	5,542	-	-	-	-	-	-	-	5,542	-	5,542
Railroad System Issues	2,851	-	-	-	-	-	-	-	2,851	-	2,851
Programs Subtotal	**38,080**	-	-	-	-	-	-	-	**38,080**	**14,400**	**52,480**
TOTAL	**39,100**	-	-	-	-	-	-	-	**39,100**	**14,400**	**53,500**

EXHIBIT II-6
SUMMARY OF REQUESTED FUNDING CHANGES FROM BASE
FEDERAL RAILROAD ADMINISTRATION
Appropriations, Obligation Limitations, and Exempt Obligations

AMTRAK / CURRENT PASSENGER RAIL SERVICE
($000)

	FY 2016 Enacted	Annualization of 2016 Pay Raises	Annualization of 2016 FTE	2017 Pay Raises	Two Less Compensable Day	GSA Rent	WCF Increase/ Decrease	Inflation/ Deflation	FY 2017 Baseline Estimate	Program Increases/ Decreases	FY 2017 Request
PERSONNEL RESOURCES											
Direct FTE 1/	5	-	-	-	-	-	-	-	5	2	7
FINANCIAL RESOURCES											
ADMINISTRATIVE EXPENSES											
Salaries and Benefits	620	-	-	-	-	-	-	-	650	300	950
Travel	150	-	-	-	-	-	-	-	150	150	300
Advisory and assistance services Contracts	4,738	-	-	-	-	-	-	-	4,708	5,543	10,250
Admin Subtotal	**5,508**	-	-	-	-	-	-	-	**5,508**	**5,993**	**11,500**
PROGRAMS											
Current Passenger Rail Service	-	-	-	-	-	-	-	-	-	**2,288,500**	**2,288,500**
Grants to Amtrak -- FAST Act Sec. 11101										1,892,000	1,892,000
Federal State Partnership for State of Good Repair Program -- FAST Act. Sec. 11103	-	-	-	-	-	-	-	-	-	396,500	396,500
Operating Subsidy Grants to Amtrak	**288,500**	-	-	-	-	-	-	-	**288,500**	**(288,500)**	-
Capital and Debt Service Grants to Amtrak	**1,095,993**	-	-	-	-	-	-	-	**1,095,993**	**(1,095,993)**	-
Programs Subtotal	**1,384,493**	-	-	-	-	-	-	-	**1,384,493**	**904,008**	**2,288,500**
TOTAL	**1,390,000**	-	-	-	-	-	-	-	**1,390,000**	**910,000**	**2,300,000**

EXHIBIT II-6
SUMMARY OF REQUESTED FUNDING CHANGES FROM BASE
FEDERAL RAILROAD ADMINISTRATION
Appropriations, Obligation Limitations, and Exempt Obligations

RAIL SERVICE IMPROVEMENT PROGRAM
($000)

	FY 2016 Enacted	Annualization of 2016 Pay Raises	Annualization of 2016 FTE	2017 Pay Raises	Two Less Compensable Day	GSA Rent	WCF Increase/ Decrease	Inflation/ Deflation	FY 2017 Baseline Estimate	Program Increases/ Decreases	FY 2017 Request
PERSONNEL RESOURCES											
Direct FTE	-	-	-	-	-	-	-	-	-	-	-
FINANCIAL RESOURCES											
ADMINISTRATIVE EXPENSES											
Admin Subtotal	-	-	-	-	-	-	-	-	-	-	-
PROGRAMS											
Rail Service Improvement Program										**3,700,000**	**3,700,000**
Consolidated Rail Infrastructure and Safety Program -- FAST Act Sec. 11102										3,680,000	3,680,000
Restoration and Enhancement Grants -- FAST Act Sec. 11104										20,000	20,000
Programs Subtotal	-	-	-	-	-	-	-	-	-	**3,700,000**	**3,700,000**
TOTAL	-	-	-	-	-	-	-	-	-	**3,700,000**	**3,700,000**

EXHIBIT II-6
SUMMARY OF REQUESTED FUNDING CHANGES FROM BASE
FEDERAL RAILROAD ADMINISTRATION
Appropriations, Obligation Limitations, and Exempt Obligations

RAILROAD SAFETY GRANTS
($000)

	FY 2016 Enacted	Annualization of 2016 Pay Raises	Annualization of 2016 FTE	2017 Pay Raises	Two Less Compensable Day	GSA Rent	WCF Increase/ Decrease	Inflation/ Deflation	FY 2017 Baseline Estimate	Program Increases/ Decreases	FY 2017 Request
PERSONNEL RESOURCES											
Direct FTE	-	-	-	-	-	-	-	-	-	-	-
FINANCIAL RESOURCES											
ADMINISTRATIVE EXPENSES											
Admin Subtotal	-	-	-	-	-	-	-	-	-	-	-
PROGRAMS											
Railroad Safety Grants	**50,000**								**50,000**	**(50,000)**	-
Programs Subtotal	**50,000**	-	-	-	-	-	-	-	**50,000**	**(50,000)**	-
TOTAL	**50,000**	-	-	-	-	-	-	-	**50,000**	**(50,000)**	-

EXHIBIT II-6
SUMMARY OF REQUESTED FUNDING CHANGES FROM BASE
FEDERAL RAILROAD ADMINISTRATION
Appropriations, Obligation Limitations, and Exempt Obligations

NORTHEAST CORRIDOR IMPROVEMENT PROGRAM
($000)

	FY 2016 Enacted	Annualization of 2016 Pay Raises	Annualization of 2016 FTE	2017 Pay Raises	Two Less Compensable Day	GSA Rent	WCF Increase/ Decrease	Inflation/ Deflation	FY 2017 Baseline Estimate	Program Increases/ Decreases	FY 2017 Request
PERSONNEL RESOURCES											
Direct FTE	-	-	-	-	-	-	-	-	-	-	-
FINANCIAL RESOURCES											
ADMINISTRATIVE EXPENSES											
Admin Subtotal	-	-	-	-	-	-	-	-	-	-	-
PROGRAMS											
Northeast Corridor Improvement Program	**19,163**								**19,163**	**(19,163)**	-
Programs Subtotal	**19,163**	-	-	-	-	-	-	-	**19,163**	**(19,163)**	-
TOTAL	**19,163**	-	-	-	-	-	-	-	**19,163**	**(19,163)**	-

EXHIBIT II-6
SUMMARY OF REQUESTED FUNDING CHANGES FROM BASE
FEDERAL RAILROAD ADMINISTRATION
Appropriations, Obligation Limitations, and Exempt Obligations

RAILROAD REHABILITATION AND IMPROVEMENT FINANCING PROGRAM
($000)

	FY 2016 Enacted	Annualization of 2016 Pay Raises	Annualization of 2016 FTE	2017 Pay Raises	Two Less Compensable Day	GSA Rent	WCF Increase/ Decrease	Inflation/ Deflation	FY 2017 Baseline Estimate	Program Increases/ Decreases	FY 2017 Request
PERSONNEL RESOURCES											
Direct FTE	-	-	-	-	-	-	-	-	-	-	-
FINANCIAL RESOURCES											
ADMINISTRATIVE EXPENSES											
Admin Subtotal	-	-	-	-	-	-	-	-	-	-	-
PROGRAMS											
Railroad Rehabilitation and Improvement Financing Program	**1,960**								**1,960**	**(1,960)**	-
Programs Subtotal	**1,960**	-	-	-	-	-	-	-	**1,960**	**(1,960)**	-
TOTAL	**1,960**	-	-	-	-	-	-	-	**1,960**	**(1,960)**	-

EXHIBIT II-7
WORKING CAPITAL FUND
FEDERAL RAILROAD ADMINISTRATION
($000)

	FY 2015 ENACTED	FY 2016 ENACTED	FY 2017 REQUEST	CHANGE FY2016 -2017
DIRECT:				
Safety and Operations	$ 7,734	$ 8,695	$ 8,322	$ (373)
SUBTOTAL, DIRECT	**$ 7,734**	**$ 8,695**	**$ 8,322**	**$ (373)**
TOTAL	**$ 7,734**	**$ 8,695**	**$ 8,322**	**$ (373)**

EXHIBIT II-8
FEDERAL RAILROAD ADMINISTRATION
PERSONNEL RESOURCE -- SUMMARY
TOTAL FULL-TIME EQUIVALENTS

	FY 2015 ENACTED	FY 2016 ENACTED	FY 2017 REQUEST
DIRECT FUNDED BY APPROPRIATION			
Safety and Operations	836.0	926.0	962.0
Capital Assistance for High-Speed and Intercity Rail	3.0	3.0	3.0
Capital and Debt Service Grants to Amtrak	3.0	5.0	-
Current Passenger Rail Service	-	-	7.0
TOTAL FTEs	**842.0**	**934.0**	**972.0**

EXHIBIT II-8
FEDERAL RAILROAD ADMINISTRATION
PERSONNEL RESOURCE -- SUMMARY
TOTAL FULL-TIME EQUIVALENTS

	FY 2015 ENACTED	FY 2016 ENACTED	FY 2017 REQUEST
DIRECT FUNDED BY APPROPRIATION			
Safety and Operations	836.0	926.0	962.0
Capital Assistance for High-Speed and Intercity Rail	3.0	3.0	3.0
Capital and Debt Service Grants to Amtrak	3.0	5.0	-
Current Passenger Rail Service	-	-	7.0
TOTAL FTEs	**842.0**	**934.0**	**972.0**

EXHIBIT II-9
FEDERAL RAILROAD ADMINISTRATION
RESOURCE SUMMARY – STAFFING
FULL-TIME PERMANENT POSITIONS [/1]

	FY 2015 ENACTED	FY 2016 ENACTED	FY 2017 REQUEST
DIRECT FUNDED BY APPROPRIATION			
Safety and Operations	873	953	961
Capital Assistance for High-Speed and Intercity Rail	3	3	3
Capital and Debt Service Grants to Amtrak	3	7	-
Current Passenger Rail Service	-	-	12
TOTAL POSITIONS	**879**	**963**	**976**

Notes:

1/ Employees on board end of fiscal year

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

SAFETY AND OPERATIONS
APPROPRIATIONS LANGUAGE

SAFETY AND OPERATIONS

For necessary expenses of the Federal Railroad Administration, not otherwise provided for, [$186,870,000] *$213,298,000* of which [$15,400,000] *$22,200,000* shall remain available until expended.

EXHIBIT III-1

SAFETY AND OPERATIONS
Summary by Program Activity
Appropriations, Obligation Limitations, and Exempt Obligations
($000)

	FY 2015 Enacted	FY 2016 Enacted	FY 2017 Request	Change FY 2016-2017
Safety and Operations	186,870	199,000	213,298	14,298
TOTAL	**186,870**	**199,000**	**213,298**	**14,298**
Full-Time Equivalents	836	926	962	36

Program and Performance Statement

Funds requested in the Safety and Operations account support the Federal Railroad Administration's (FRA) personnel and administrative expenses, the cost of rail safety inspectors, and other program activities including contracts. Resources are also provided to fund information management, research and technology, safety education, and outreach.

EXHIBIT III-1a
SAFETY AND OPERATIONS
SUMMARY ANALYSIS OF CHANGE FROM FY 2016 TO FY 2017
Appropriations, Obligations, Limitations, and Exempt Obligations
$000

Item	Change from FY 2016 to FY 2017	
	$0	**FTE**
FY 2016 ENACTED	**199,000**	**926**
ADJUSTMENTS TO BASE:		
Annualization of FY 2016 FTE	*4,480*	*32*
Non-Pay Inflation	*1,777*	-
FY 2017 Pay Raise	*1,531*	-
Annualization of FY 2016 Pay Raise	*321*	-
GSA Rent	65	
Working Capital Fund	-373	-
Two Less Compensable Days	*-997*	-
Subtotal, Adjustments to Base	**6,804**	**32**
NEW OR EXPANDED PROGRAMS:		
Positive Train Control Implementation	5,700	-
Automated Track Inspection Program	700	-
Personnel Increases	594	4
National Bridge Inventory	500	-
Subtotal, New or Expanded Programs	**7,494**	**4**
TOTAL, FY 2017 REQUEST	**213,298**	**962**

EXHIBIT III-2

ANNUAL PERFORMANCE RESULTS AND TARGETS
FEDERAL RAILROAD ADMINISTRATION

FRA integrates performance results into its budget request in alignment with the Department of Transportation's strategic plan. FRA's Safety and Operations account primarily supports FRA's safety activities and the safety goal:

DOT Strategic Goal: Safety—Improve public health and safety by reducing transportation-related fatalities and injuries

Strategic Objective: Improve the safety of the transportation system by addressing behavior, vehicle, and infrastructure safety issues through the innovative and effective use of partnerships, programs, and resources.

Performance Goal: Reduce the rate of rail-related accidents and incidents per million train-miles to no more than 15.880 by the end of FY 2017.*

	2013	2014	2015	2016	2017
Target	16.300	16.150	15.900	15.890	15.880
Actual	15.262	16.021	15.135	---	---

* Targets and actual data are subject to change and might differ from prior year budget materials based on the latest information available.

These funds also support DOT's **organizational excellence goal** – develop an innovative, world-class organization to advance the U.S. transportation system and serve the Nation's long-term safety, social, economic, security, and environmental needs strategic objectives – and the related strategic objectives:

- Build a capable, diverse, and collaborative workforce of highly skilled, innovative, and motivated employees by making FRA a workplace of choice through employee empowerment and engagement, learning and development, succession planning, workplace flexibilities, and a healthy and safe workforce.

- Advance secure and innovative information systems and technology platforms that protect against cyber threats and support the efficient use of information and data for financial management.

DOT has not established mode-specific performance goals for these objectives.

DETAILED JUSTIFICATION FOR RAILROAD SAFETY AND OPERATIONS

What Is The Request And What Funds Are Currently Spent on the Program?

FY 2017 Budget Request – Safety and Operations
$000

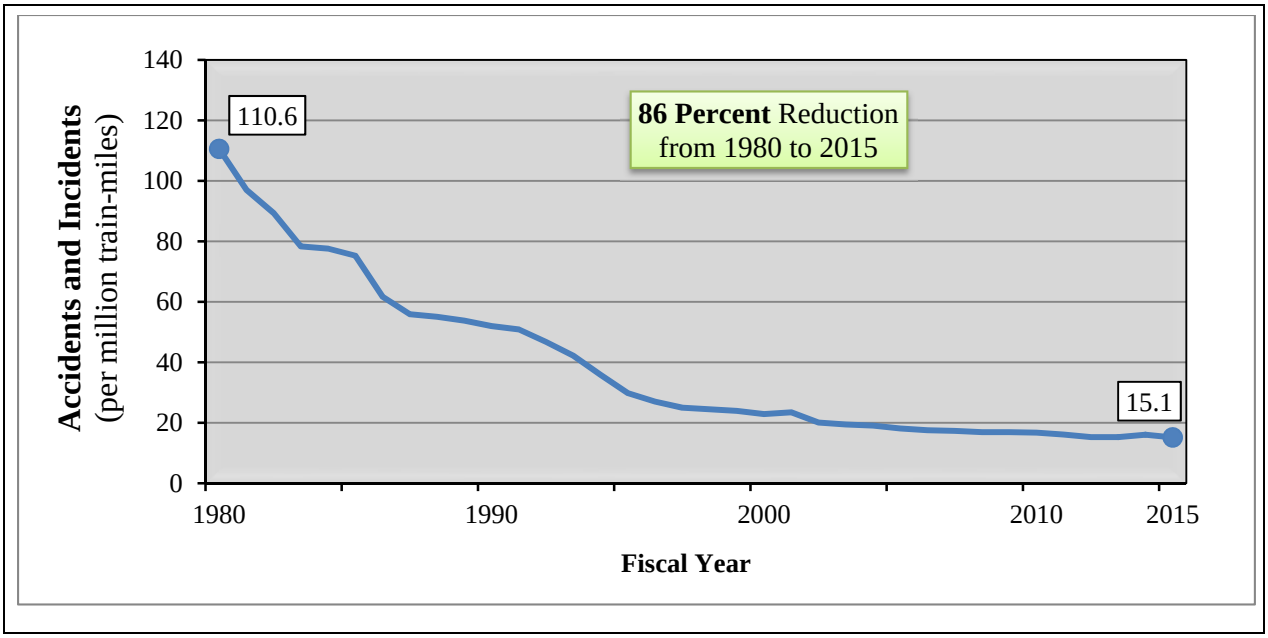
Account	FY 2015 Enacted	FY 2016 Enacted	FY 2017 Request	Change FY 2016-2017
Safety and Operations	186,870	199,000	213,298	14,298

What is This Program and Why is it Necessary?

The appropriation to Safety and Operations (S&O) account funds nearly all of FRA's safety-related program activities as well as FRA's personnel and administrative costs. It is necessary so FRA can carry out its mission of enabling the safe, reliable, and efficient transportation of people and goods for a strong America, now and in the future.

FRA's top priority is safety. From FY 2006 through FY 2015, total train accidents have declined by 38 percent, total derailments have declined by 39 percent, and total highway-rail grade crossing incidents have declined by 28 percent. However, progress has slowed in recent years as the regulations and tools are reaching the limits of their effectiveness.

Number of Train Accidents and Incidents, Per Million Train-Miles
Fiscal Years 1980 to 2015



Source: FRA data.

To make further gains, FRA plans to targets resources at today's most pressing rail safety issues:

- **Passenger Rail**: Capital for commuter and intercity passenger railroads to deploy positive train control technology and other safety improvements;
- **Grade Crossings and Pedestrian Safety**: Collision prevention technologies and motor vehicle driver awareness about highway-rail grade crossings dangers;
- **Critical Assets**: Aging major infrastructure, including bridges and tunnels, on the Northeast Corridor; and
- **Energy Products**: Hazards from large volumes of crude oil and other energy products, including ethanol and liquefied natural gas, moving by rail.

These resources are needed to support FRA staff, grants and programs, and research and development. FRA has requested funding in multiple appropriations accounts for these activities, including Safety and Operations.

FRA Safety Program:

FRA oversees, regulates, and enforces the safety of railroad operations nationwide. In addition, it actively supports the development of high-performance and intercity passenger rail, shared-use operations and proposed passenger rail operations, including line extensions, and the Nation's passenger rail operations.

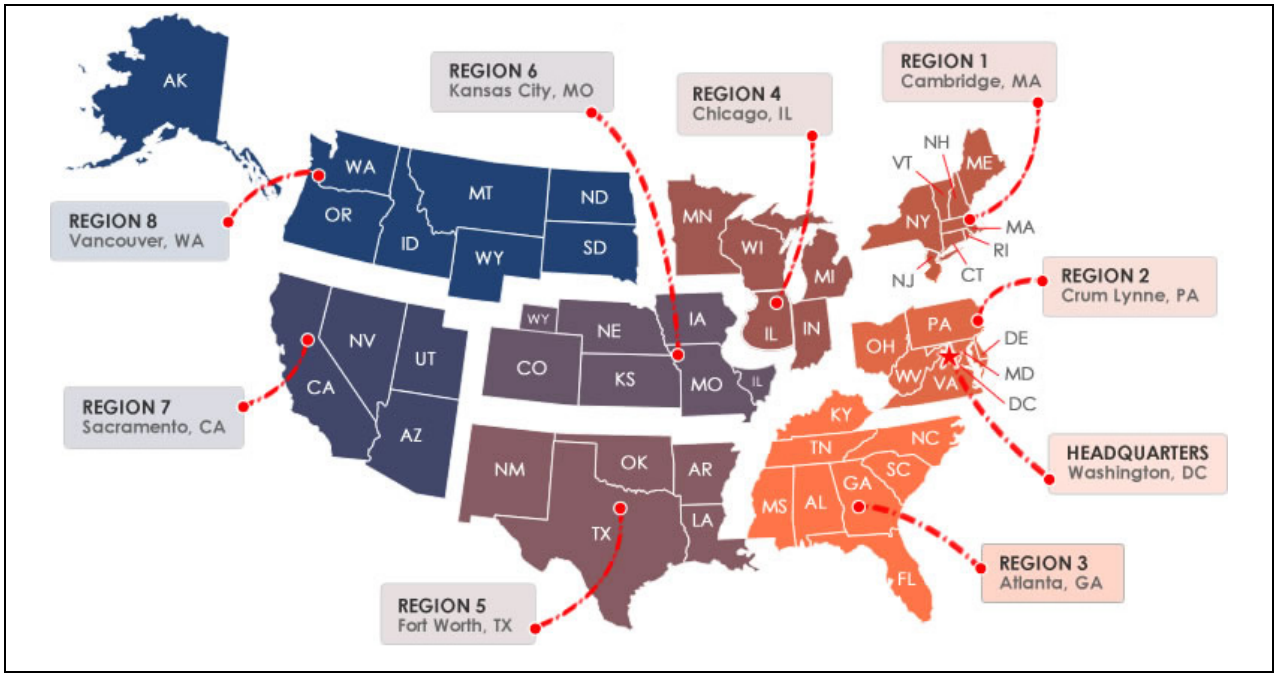
FRA executes its regulatory and inspection responsibilities through a diverse staff of railroad safety experts, inspectors, and other professionals. Most of FRA's safety personnel work in the

field at locations across the nation where they directly interact with railroads and other stakeholders. The largest cadre of staff is railroad safety inspectors who specialize in five safety disciplines. Below is the planned distribution of rail safety inspectors in FY 2016 based on FRA's staffing allocation process and a map showing the territory of each region:

Target Distribution of FRA FY 2016 Rail Safety Inspectors, By Safety Discipline and Geographic Region

Safety Discipline	FRA Region								Total
	1	2	3	4	5	6	7	8	
Motive Power and Equipment	7	13	13	14	12	10	7	8	84
Operating Practices	8	12	11	11	12	10	8	9	81
Track	9	11	12	9	13	9	8	10	81
Signal and Train Control	7	9	8	7	6	7	7	6	57
Hazardous Materials	4	8	9	9	11	8	5	9	59
Target Total	**35**	**53**	**53**	**50**	**54**	**44**	**35**	**42**	**336**

FRA Safety Regions



FRA's field presence also includes program managers for highway-rail grade crossing safety, trespass prevention, rail and infrastructure integrity experts, positive train control specialists, and industrial hygienists.

At FRA headquarters, the Office of Railroad Safety has 14 divisions that serve as technical experts on matters of railroad safety, provide technical assistance to field personnel, and aid in the development of regulations and the evaluation of waiver submittals. These divisions manage contracts and programs that account for a significant share of the Safety and Operations budget. Below are descriptions of largest safety programs according to their annual budgets:

Automated Track Inspection Program (ATIP)
FY 2016 Enacted: $9.8 million
FY 2017 Request: $10.5 million

ATIP uses several track geometry measurement vehicles to automatically measure track conditions such as gage alinement and cross level. ATIP vehicles are assigned strategically to the most important routes. ATIP is a critical tool for FRA's safety compliance program. The vision for the program is to provide objective information to target FRA safety oversight and enforcement activities, to audit railroad track safety compliance, and to determine the state-of-good repair of the Nation's railroads.

Through accurate, comprehensive, and objective automated inspections, ATIP supplements the work of FRA's inspectors to assure railroads are compliant with the FRA Track Safety Standards. ATIP provides information for risk-based planning to ensure inspection resources are used effectively. It also generates comprehensive infrastructure diagnostics to notify railroads of major safety risks, and it supports research that is used by the Railroad Safety Advisory Committee to improve FRA's track safety regulations.

Positive Train Control (PTC) Implementation
FY 2016 Enacted: $3.1 million
FY 2017 Request: $6.6 million

With limited exceptions and exclusions, the Rail Safety Improvement Act of 2008 required that railroads install and implement PTC by December 31, 2015. That date was extended by the *Positive Train Control Enforcement and Implementation Act of 2015,* which gives railroads until December 31, 2018 to implement PTC, and enables railroads to request from FRA an additional two years to December 31, 2020 if certain criteria are met. PTC must be used on Class I railroad main lines (i.e., lines with over 5 million gross tons annually) over which any poisonous- or toxic-inhalation hazard commodities are transported, and on any railroad's main lines over which regularly scheduled intercity passenger or commuter operations are operated. Approximately 40 railroads are subject to the mandate.

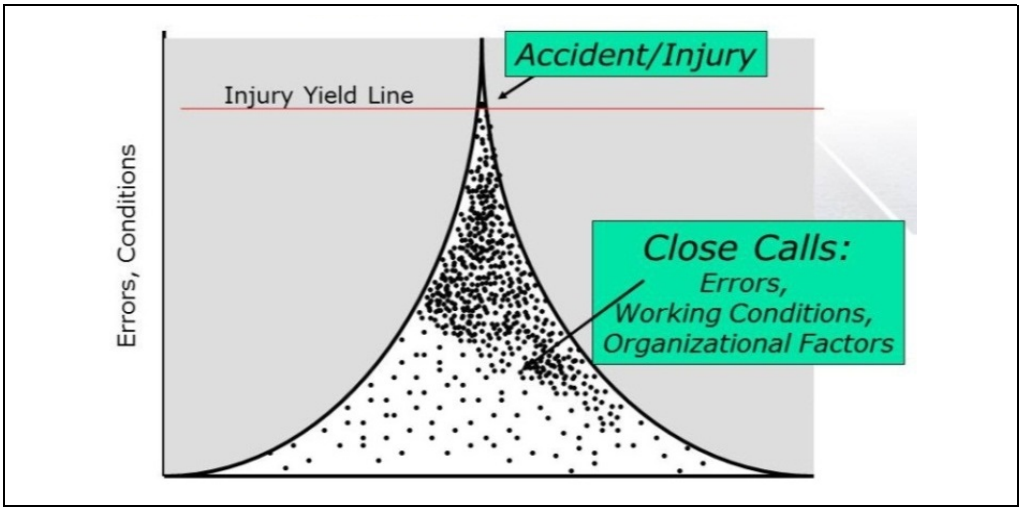
By statute, each railroad must submit to FRA a revised PTC implementation plan by January 27, 2016 outlining how the system would be built and by regulation, a safety plan that details how the railroad's PTC system would function once installed and operational. FRA's role is to monitor and enforce compliance with the revised implementation plans and applicable

statutes and regulations (including issuing penalties), review and approve safety plans, and provide on-going technical assistance. To conduct these functions, FRA relies on contractor support, including firms with specialized knowledge in advanced railroad signal technology.

Confidential Close Call Reporting System (C^3RS)
FY 2016 Enacted: $4.2 million
FY 2017 Request: $4.3 million

This program enables railroad employees to report near misses anonymously. The anonymity is critical because it alleviates employees' fear of retribution. The data is collected by a third party through this system, and provides insights into potential problem areas before accidents occur, which is central to FRA's push for continuous safety improvement. As part of a proactive approach to reducing accidents, injuries, and fatalities through continuous evaluation and management of safety risks, FRA is working with participating railroads to analyze risks, identify hazards, and put in place customized plans for railroads to eliminate those risks. C^3RS allows FRA and the railroads to develop safety strategies before accidents occur. Results from one C^3RS pilot site indicate a nearly 70 percent reduction in certain accidents.

Illustrative Comparison of Information Available from Post-Accident and Close Call Data Collection



Source: FRA

Notes:

- Each dot represents an event caused by error or condition
- The y-axis is severity, as events become more serious they approach and then cross the injury yield line
- Most organizations have no record of events below the injury yield line
- C3RS captures the information below the injury yield line so that safety actions can take place to prevent similar events from breaching the injury yield line, thus decreasing accidents and injuries

Data Management
FY 2016 Enacted: $3.7 million
FY 2017 Request: $4.3 million

To carry out its mission, FRA must collect and analyze significant amounts of information. The Railroad Safety Information System (RSIS) is FRA's principal repository of safety data. This system provides the support required to implement and enforce the safety regulations that have data collection and management requirements. FRA has either released, or is preparing to release the following rules that require railroads to report through RSIS:

- Training standards for safety related railroad employees
- Risk reduction programs for freight railroads
- Railroad system safety programs for passenger railroads
- Hours of service recordkeeping
- National highway-rail crossing inventory
- Conductor certification; and
- Positive Train Control

FRA is working to enhance the RSIS data management system by increasing the capabilities of the current platform for collecting, tracking, analyzing, and reporting electronic data submissions, evaluation of effectiveness, and ensuring compliance with new regulations.

Grade Crossing Safety/Operation Life Saver Grant
FY 2016 Enacted: $1.0 million
FY 2017 Request: $1.0 million

As of January 2015, there are 129,502 public highway-rail grade crossings located throughout the United States. Each presents potential for a collision between a train and highway vehicle. A motorist is 20 times more likely to die from a collision with a train than any other form of transportation. Collisions at highway-rail grade crossing intersections are the second leading cause of rail-related fatalities, accounting for one third of all such fatalities.

Operation Lifesaver, Inc. is a national, non-profit organization that is dedicated to reducing the number of highway-rail grade crossing collisions and trespassing incidents. FRA provides an annual grant to Operation Lifesaver, Inc. to conduct public outreach and educational programs, and increase law enforcement partnerships.

Why Do We Want/Need To Fund The Program At The Requested Level?

FRA requests a $14.3 million increase from its FY 2016 enacted budget. Of this amount, $6.8 million is for adjustments to base costs and $7.4 million is for new or expanded programs. FRA's FY 2017 budget targets resources at **today's four most pressing rail safety issues**:

- **Passenger Rail**: Capital for commuter and intercity passenger railroads to deploy positive train control technology and other safety improvements;

- **Grade Crossings and Pedestrian Safety**: Collision prevention technologies and motor vehicle driver awareness about highway-rail grade crossings dangers;
- **Critical Assets**: Aging major infrastructure, including bridges and tunnels, on the Northeast Corridor; and
- **Energy Products**: Hazards from large volumes of crude oil and other energy products, including ethanol and liquefied natural gas, moving by rail.

To address each issue, FRA plans to use a combination of people, program support, and research, development, and technology strategies.

SAFETY AND OPERATIONS ACCOUNT
STAFFING SUMMARY

	FY 2016		FY 2017		Change FY 16-17	
FRA Office	Positions	FTE	Positions	FTE	Positions	FTE
Office of the Administrator	26	25	26	26	-	1
Office of Administration	60	58	60	60	-	2
Office of Chief Financial Officer	25	24	25	25	-	1
Office of Chief Counsel	51	49	51	51	-	2
Office of Railroad Safety/Chief Safety Officer	698	677	706	707	8	30
Office of Railroad Policy and Development	93	92	93	93	-	1
Total	953	926	961	962	8	36

Positions refers to employees on board end of fiscal year

FRA requests funding for 8 new people (4 FTE) plus annualization costs of 32 FTE from the FY 2016 enacted level.

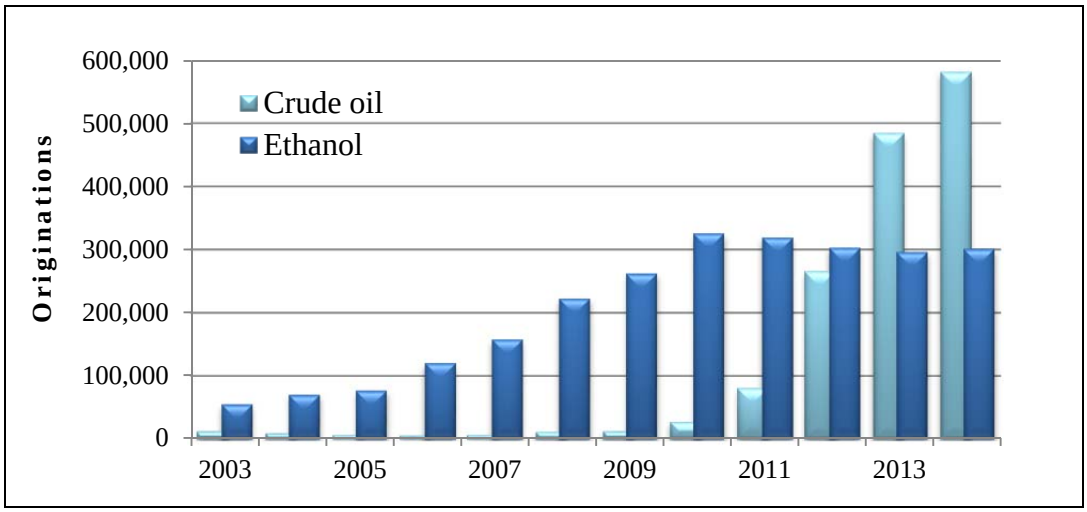
In addition to the employees funded through FRA's S&O appropriation, a small number FRA staff are funded through other FRA programs including the Capital and Debt Grants to the National Railroad Passenger Corporation and the FY 2010 appropriation for the High Speed and Intercity Passenger Rail program. Starting in FY 2017, FRA proposes creating a new 10-year $68.5 billion trust-fund grant-making program that builds on the authorities provided in the FAST Act. The proposal includes 15 staff that would be funded under this new program (7 existing staff funded under Amtrak plus 8 new employees). Adding to the existing efforts of the staff in FRA's Office Railroad Policy and Development, these new employees would help select, prepare, and monitor FRA's large portfolio of grants and projects.

Safe Transportation of Energy Products (STEP)

The transportation of crude oil by rail has increased significantly and rapidly, driven by new production from the Bakken oil fields in North Dakota and imports from Canada. The volume of crude oil moving by rail has increased 37-fold in less than a decade. Bakken crude oil has grown 100-fold since 2008, up to nearly 300,000 carloads in FY 2013. Estimates of 2014 carloads of Bakken crude oil are around 408,000. Production of ethanol and liquefied natural gas, which also pose transportation risks, has also significantly increased during the last decade.

This is a nationwide transportation phenomenon as energy products are shipped from areas of production to refineries on the East, West, and Gulf coasts. Bakken crude oil represents over 70 percent of crude oil that moves on the railroads, and on average a carload of crude oil from North Dakota travels over 1,600 miles.

North American Originations of Crude Oil and Ethanol
Calendar Years 2003 to 2014



Source: Association of American Railroads, Annual Report of Hazmat Transported by Rail, 2014.

The safety and environmental risks posed by these increased shipments are correspondingly growing. In the past 5 years, there have been five significant accidents in which crude oil was unintentionally released in the United States, and two in Canada. Moreover, the consequences of an accident involving crude oil can be catastrophic. The single accident in Lac Mégantic, Quebec, killed 47 people.

Since the Lac-Mégantic derailment on July 6, 2013, there have been 22 subsequent train accidents in the United States involving trains carrying crude oil. In response to these increased hazards, the Department is pursuing a holistic, all-of-the-above approach to ensure the safe movement of energy products in America. We believe this comprehensive approach must include enhancing the integrity of the tank car itself, strengthening the safety requirements of railroad operations, and taking whatever steps are possible to improve the safety of the product itself.

For FY 2017, FRA requests $10.5 million for its **Automated Track Inspection Program,** or $700,000 more than FY 2016 enacted. With this budget, FRA plans to accomplish the following:

- Increase inspection mileage with existing vehicles. FRA will operate two manned and two unmanned vehicles, increasing track geometry inspection mileage to the 105,000 and 120,000 miles from 81,500 miles in FY 2015. This will ensure that the majority of crude oil and energy product routes are inspected more frequently. Further, FRA projects identifying 12,500 to 15,500 track geometry defects per year at this increased mileage.

- Conduct a full system refresh (full computer replacement) on the manned vehicles.

Passenger Railroad Safety

Americans take more than 500 million railroad passenger trips annually, and the number of intercity passenger rail services and commuter trips is rapidly increasing. Protecting the safety and minimizing risks for these passengers as well as railroad crews is a top priority of FRA.

The Amtrak accident in Philadelphia last year underscores that FRA still has hard work ahead to make rail transportation as safe as possible, particularly when technology exists that can prevent some of the most tragic accidents. FRA is firmly committed to taking additional actions that will mitigate and or eliminate the risks and hazards identified in the ongoing investigation.

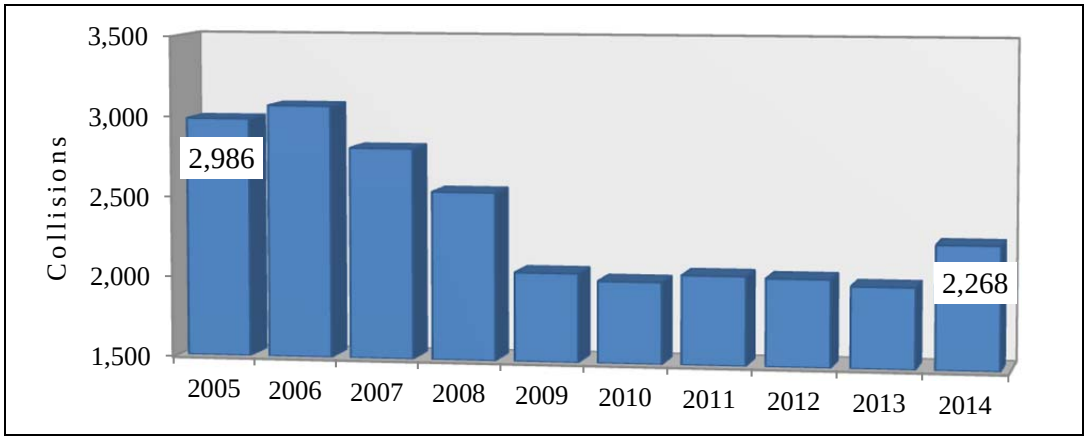
Positive Train Control technology is the single most important railroad safety technological development in more than a century. FRA requests $6.6 million to support railroads' implementation of PTC, particularly the certification of each railroad's PTC safety plan. To date, FRA has received four out of about 40 railroads' PTC safety plans, and, based on experience to date, FRA's in-house experts will need assistance processing the predicted large volume the technical documentation. FRA's work-plan is for Federal staff to review about one fourth of the PTC safety plans and for contractors with subject matter expertise to review the remainder. Between now and FY 2020, FRA expects to review about 80 plans (one initial and revised version on average per railroad) with the number increasing as the statutory December 31, 2018 deadline nears. In addition, FRA requires assistance monitoring railroad's compliance with their implementation plans. This monitoring is necessary for carry out FRA's enforcement responsibilities, as identified in the PTC Enforcement and Implementation Act of 2015.

Grade Crossing and Pedestrian Safety

From FY 2006 to FY 2015, the number of highway-rail grade crossing incidents and related fatalities has decreased by 30 percent and 31 percent, respectively. However, highway-rail grade crossing incidents are the second leading cause of rail-related deaths and the top cause of all railroad accidents. FRA expects the risk of highway-rail grade crossing incidents to grow as both train and highway traffic increase during the next decade.

815 people died in rail related accidents and incidents in FY 2015
255 were from highway-rail **grade crossing collisions**
496 were from **trespasser incidents**

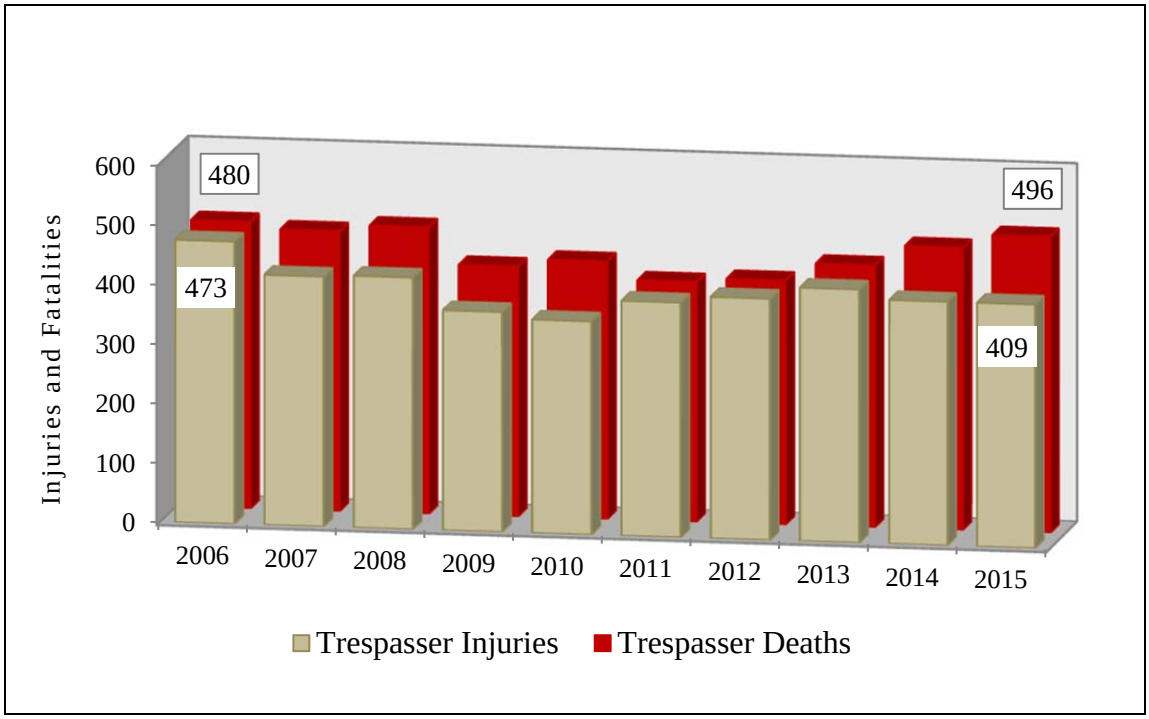
Highway-Rail Grade Crossing Incidents
Fiscal Years 2005 to 2014



Source: FRA data

There was an average of 450 trespasser fatalities per year between FY 2006 and FY 2015. Notably, recent years have shown a disturbing trend as trespasser fatalities increased 8 percent from FY 2013 to FY 2014 and increased 5 percent from FY2014 to FY2015. Highway-rail grade crossing and trespasser fatalities are the leading cause of rail-related deaths and accounted for 61 percent of all rail-related fatalities in 2015. FRA staff works closely with local communities and railroads on trespass prevention efforts by providing technical assistance and educating communities about risks. Making capital improvements is also to reducing these unnecessary deaths. As part of the *21st Century Clean Transportation Plan*, the High-Performance Rail reauthorization proposal includes $250 million for **Local Rail Facilities and Safety Projects** program to make strategic capital investments. FRA would ensure that a portion of these funds is dedicated to local communities to build safer highway-rail grade crossings, among other critical improvements.

Trespasser Injuries and Fatalities, Fiscal Years 2006-2015



Source: FRA data

Critical Assets

For FY 2017, FRA proposes a new effort to increase the **oversight of rail bridges**. In accordance with FRA's Bridge Safety Standards rule, railroads must maintain Bridge Management Programs for each of their bridges and ensure safety of the structures. FRA's role is to review each Bridge Management Program primarily through desk audits. Given the estimated number of rail bridges nationwide – (100,000) – and number of railroads – (735) – FRA is unable to keep pace with the goal of reviewing each plan every five years. At current staffing levels, it will take 8 to 10 years to review all bridge management programs.

FRA proposes **increasing the number of railroad bridge program staff** from 8 to 16 in FY 2017. The estimated cost of these new 8 positions (4 FTE) -- including associated travel costs -- is $594,000. The expanded bridge section would be able to review all railroads' Bridge Management Plans on a 3-year cycle. In addition, the staff will undertake new activities to increase bridge safety including placing greater emphasis on the performance of bridge inspection report audits to ensure that reports accurately reflect the condition of the bridges being documented.

FRA also proposes establishing a **nationwide bridge inventory** to document the age of bridges and the date of last inspection, among other pieces of data. The proposed inventory will allow FRA to analyze the data and target its inspection and review efforts to the areas of highest risk. FRA requests $500,000 to create a web-based portal to collect electronic data from railroads on the number and condition of railroad bridges. To clarify its authority to collect information from

railroads, FRA anticipates developing a regulation in FY 2016 requiring that railroads submit standard data about their inventory of bridges.

Baseline Activities

FRA's core activities and responsibilities are expanding. In FY 2016, Congress entrusted FRA with additional resources to increase the size of its workforce. Further, Congress assigned FRA new authorities and responsibilities in recently enacted *Fixing America's Surface Transportation Act*. For the agency to sustain these efforts, it will need additional resources in FY 2017. In total, FRA requests $6.8 million to maintain its baseline activities. This amount includes funds for the following areas:

Salaries and Benefits: FRA estimates its will have 953 people on board by the end of FY 2016, equivalent to 926 FTE. To maintain the same number of people throughout FY 2017, FRA would need an additional $5.335 million. This amount includes the 1.6 percent proposed FY 2017 pay raise and annulization costs for 32 FTE.

Travel: FRA staff must travel extensively to oversee the safety of railroads, work with communities, and oversee grants. Based on its current rate of spending, FRA estimates its travel budget must increase by $1.38 million in FY 2017 to maintain its baseline activities. Similar to salaries and benefits, FRA's travel budget must increase as the number of FTEs increases. Additionally, FRA will hold a major bi-annual safety meeting in FY 2017 attended by all FRA safety inspectors and state safety inspectors. The meetings, which add marginally to FRA's travel spending, are very beneficial by allowing staff to learn about the latest developments in railroad technologies, equipment, and practices.

Inflation: Conservatively estimated at 1 percent, FRA projects it will need $397,000 for inflation for various expenses including rent, contracts, equipment, and supplies.

What Benefits Will This Request Provide the American Public?

FRA is striving for continuous safety improvement, which means fewer people (including the members of the general public and railroad employees) killed and hurt in rail accidents. As discussed above, to drive this improvement, FRA is proposing to undertake new types of work, looking at today's three most pressing rail safety issues. To measure success, FRA tracks performance metrics according to FRA's five safety disciplines.

FRA set the following performance measure targets for FY 2017:

- Reducing the grade crossing incident rate to 2.790 per million train-miles.
- Reducing the human factors-caused train accident rate to 0.975 per million train-miles.
- Reducing the track-caused train accident rate to 0.925 per million train-miles.
- Reducing the equipment-caused train accident rate to 0.345 per million train-miles.
- Reducing the other (signal and miscellaneous) train accident rate to 0.465 per million train-miles.

- Reducing the non-accidental hazardous material releases rate to 1.025 per 200 million hazardous material ton-miles.

Achievement of these targets depends on a variety of factors including agency resources, regulatory actions, introduction of new technologies, and changes in the industry. FRA is currently evaluating the impacts of requested FY 2017 resources on performance, and looks forward to working with stakeholders to craft an effective strategy.

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION
SAFETY AND OPERATIONS (69-0700)
PROGRAM AND FINANCING
IN THOUSANDS OF DOLLARS ($000)

Account Number: 69-0700-0-1-401

Line	Line Title	FY 2015 Act	FY 2016 CY	FY 2017 BY
	Obligations by program activity:			
0001	Salaries and expenses	185,672	202,000	215,000
0002	Activity from RRIF Collections	865	1,000	2,000
0006	Alaska Railroad Liabilities		1,000	
0091	Direct program activities, subtotal	186,537	204,000	217,000
0100	**Total direct program**	**186,537**	**204,000**	**217,000**
0799	Total direct obligations	186,537	204,000	217,000
0801	Reimbursable services	425	10,100	0
0900	**Total new obligations**	**186,537**	**214,100**	**217,000**
	Budgetary Resources:			
	Unobligated balance:			
1000	Unobligated balance brought forward, Oct 1	13,606	16,000	5,000
1021	Recoveries of prior year unpaid obligations	1,306	0	0
1050	**Unobligated balance (total)**	**14,912**	**16,000**	**5,000**
	Budget authority:			
	Appropriations, discretionary:			
1100	Appropriation	186,870	199,000	213,000
1131	Unobligated balance of appropriations permanently reduced		-7,000	
1160	**Appropriation, disc (total)**	**186,870**	**192,000**	**213,000**
	Spending authority from offsetting collections, discretionary:			
1700	Collected	1,288	1,000	1,000

Account Number: 69-0700-0-1-401

Line	Line Title	FY 2015 Act	FY 2016 CY	FY 2017 BY
1750	**Spending auth from offsetting collections, disc (total)**	**1,288**	**1,000**	**1,000**
1850	**Spending auth from offsetting collections, mand (total)**	**0**	**0**	**0**
1900	**Budget authority (total)**	**188,158**	**193,000**	**214,000**
1930	**Total budgetary resources available**	**203,070**	**209,000**	**219,000**
	Memorandum (non-add) entries:			
1940	Unobligated balance expiring	**-611**	**0**	
1941	Unexpired unobligated balance, end of year	15,923	5,000	2,000
	Obligated balance, start of year (net):			
3000	Unpaid obligations, brought forward, Oct 1 (gross)	87,276	61,000	82,000
3001	Adjustments to unpaid obligations, brought forward, Oct 1			
3010	Obligations incurred, unexpired accounts	186,537	204,000	217,000
3011	Obligations incurred, expired accounts	228	172	0
3020	Outlays (gross)	-220,935	-193,000	-204,000
3030	Obligations incurred, unexpired accounts	0	0	0
3031	Unpaid obligations transferred from other accts [70-0560]	10,000	10,000	0
3040	Recoveries of prior year unpaid obligations, unexpired	-1,306	0	0
3041	Recoveries of prior year unpaid obligations, expired	-1,140	0	0
3050	Unpaid obligations, end of year (gross)	60,658	82,000	95,000
3060	Uncollected pymts, Brought Forward	-326		
3071	Change Uncollected pymts	326		
3100	**Obligated balance, start of year (net)**	**86,949**	**61,000**	**82,000**
3200	**Obligated balance, end of year**	**60,658**	**82,000**	**95,000**
	Budget authority and outlays, net:			
	Discretionary:			

Account Number: 69-0700-0-1-401

Line	Line Title	FY 2015 Act	FY 2016 CY	FY 2017 BY
4000	Budget authority, gross	188,158	193,000	214,000
	Outlays, gross:			
4010	Outlays from new discretionary authority	156,473	167,000	186,000
4011	Outlays from discretionary balances	64,462	26,000	18,000
4020	**Outlays, gross (total)**	**220,935**	**193,000**	**204,000**
	Offsets against gross budget authority and outlays:			
	Offsetting collections (collected) from:			
4030	Federal sources	-465	0	0
4033	Non-Federal sources	-838	-1,000	-1,000
4034	Offsetting governmental collections			
4040	**Offsets against gross budget authority and outlays, disc (total)**	**-1,303**	**-1,000**	**-1,000**
4070	**Budget authority, net (discretionary)**	**186,870**	**192,000**	**213,000**
4080	**Outlays, net (discretionary)**	**219,632**	**192,000**	**203,000**
4180	**Budget authority, net (total)**	**186,870**	**192,000**	**213,000**
4190	**Outlays, net (total)**	**219,632**	**192,000**	**203,000**

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

RAILROAD RESEARCH AND DEVELOPMENT
APPROPRIATIONS LANGUAGE

RAILROAD RESEARCH AND DEVELOPMENT

For necessary expenses for railroad research and development, [39,100,000] *$53,500,000* to remain available until expended.

EXHIBIT III-1

RAILROAD RESEARCH AND DEVELOPMENT
Summary by Program Activity
Appropriations, Obligation Limitations, and Exempt Obligations
($000)

Program Activity	FY 2015 Enacted	FY 2016 Enacted	FY 2017 Request	Change FY 2016-2017
Track Program	11,279	11,229	11,229	-
Rolling Stock Program	10,322	10,322	24,722	14,400
Train Control and Communication	8,086	8,086	8,086	-
Human Factors Program	5,542	5,542	5,542	-
Railroad Systems Issues Program	3,871	3,871	3,871	-
TOTAL	**39,100**	**39,100**	**53,500**	**14,400**
Full Time Equivalents	-	-	-	-

Program and Performance Statement

FRA's Research and Development Program is focused on improving railroad safety. It provides scientific and engineering support for the agency's safety rulemaking and enforcement efforts. It also identifies and develops emerging technologies for the rail industry to adopt voluntarily. The outcomes of the research and development are reduced railroad accidents and incidents. The program also supports intercity passenger rail development by providing technical assistance, equipment specifications, proposal evaluations, and Buy America compliance.

In addition to improving safety, the program contributes significantly towards achieving the Department of Transportation's other strategic goals, such as state of good repair, economic competitiveness and environmental sustainability.

The program has the following areas of research:

- **Track Program** - Reducing derailments due to track related causes.
- **Rolling Stock Program** - Reducing derailments due to equipment failures, minimizing the consequences of derailments, and minimizing hazardous material releases.
- **Train Control and Communication** - Reducing train-to-train collisions and train collisions with objects on the line and at grade crossings.

- **Human Factors Program** - Reducing accidents caused by human error.

- **Railroad System Issues Program** - Prioritizing R&D projects on the basis of relevance to safety risk reduction and other DOT goals.

EXHIBIT III-1a

RAILROAD RESEARCH AND DEVELOPMENT
Summary Analysis of Change from FY 2016 to FY 2017
Appropriations, Obligation Limitations, and Exempt Obligations
($000)

ITEM	Change from FY 2016 to FY 2017 $000	FTE
FY 2016 Enacted	**39,100**	**0**
NEW OR EXPANDED PROGRAM		
Track Program	-	-
Rolling Stock Program	14,400	-
Train Control and Communication	-	-
Human Factors Program	-	-
Railroad Systems Issues Program	-	-
SUBTOTAL, PROGRAM CHANGES	**14,400**	**0**
TOTAL FY 2017 REQUEST	**53,500**	**0**

EXHIBIT III-2

ANNUAL PERFORMANCE RESULTS AND TARGETS
FEDERAL RAILROAD ADMINISTRATION

FRA integrates performance results into its budget request to demonstrate alignment with the Department of Transportation's strategic plan. FRA Research and Development (R&D) account tracks and supports FRA's safety activities and the safety goal.

DOT Strategic Goal: Safety—Improve public health and safety by reducing transportation-related fatalities and injuries

Strategic Objective: Improve the safety of the transportation system by addressing behavior, vehicle, and infrastructure safety issues through the innovative and effective use of partnerships, programs, and resources.

Performance Goal: Reduce the rate of rail-related accidents and incidents per million train-miles to no more than 15.890 by the end of FY 2016.*

	2013	2014	2015	2016	2017
Target	16.300	16.150	15.900	15.900	15.890
Actual	15.028	16.160	14.553	---	---

* Targets and actual data are subject to change and might differ from prior year budget materials based on the latest information available.

These funds also support DOT's **organizational excellence goal** – develop an innovative, world-class organization to advance the U.S. transportation system and serve the Nation's long-term safety, social, economic, security, and environmental needs– and the related strategic objectives:

- Build a capable, diverse, and collaborative workforce of highly skilled, innovative, and motivated employees by making FRA a workplace of choice through employee empowerment and engagement, learning and development, succession planning, workplace flexibilities, and a healthy and safe workforce.

- Advance secure and innovative information systems and technology platforms that protect against cyber threats and support the efficient use of information and data for financial management.

DOT has not established mode-specific performance goals for these objectives.

DETAILED JUSTIFICATION FOR RAILROAD RESEARCH AND DEVELOPMENT

What is the Request and What Funds are Currently Spent on the Program?

FY 2017 - Railroad Research and Development - Budget Request
($000)

Program Activity	FY 2015 Enacted	FY 2016 Enacted	FY 2017 Request	Change FY 2016-2017
Track Program	11,279	11,229	11,229	-
Rolling Stock Program	10,322	10,322	24,722	14,400
Train Control and Communication	8,086	8,086	8,086	-
Human Factors Program	5,542	5,542	5,542	-
Railroad Systems Issues Program	3,871	3,871	3,871	-
TOTAL	**39,100**	**39,100**	**53,500**	**14,400**

What is This Program and Why is it Necessary?

The mission of FRA's Research and Development (R&D) is to enable the safe, reliable, and efficient movement of people and goods by rail through basic and applied research and development of innovations and solutions. It does so by providing the scientific and engineering basis for safety rulemaking and enforcement. FRA also collaborates with the railroad industry to develop and implement new technologies and practices that improve overall system safety.

FRA's R&D program is central to continuous safety improvement. Continuing support for its budget will enable FRA to pursue critical work in several areas, including today's most pressing rail safety issues:

- **Passenger Rail**: Commuter and intercity passenger railroads lack capital to deploy life-saving positive train control (PTC) technology and other safety improvements;
- **Grade Crossings and Pedestrian Safety**: Motor vehicle drivers and pedestrians continue to face significant risks at highway-rail grade crossings and around railroad rights of way;
- **Critical Assets**: Aging major infrastructure, including bridges and tunnels, on the Northeast Corridor; and
- **Energy Products**: Hazards from large volumes of crude oil and other energy products, including ethanol and liquefied natural gas, moving by rail.

As with many agency research programs, the work that was undertaken in the past 5 to 10 years contributes to today's safety performance. R&D projects typically follow one of three paths to implementation:

1. **Regulation**: R&D by FRA is necessary to develop the scientific and engineering foundation for valid, defendable regulations.
2. **Enforcement**: R&D by FRA creates new technology for efficient and effective oversight of railroad compliance with safety regulations.
3. **Voluntary Industry Adoption**: R&D by FRA is necessary for conducting higher-risk and longer-term projects, which private industry would not otherwise undertake, to develop advanced technologies and practices.

FRA's R&D program is organized around the following five rail safety disciplines:

- **Track Program**
  - Track and structure inspection techniques, material and component reliability, design, and performance
  - Track and train interaction, derailment mechanisms, and vehicle-track performance
  - Rail integrity related derailments and rail inspection systems
  - Track safety standards for freight and passenger operations
  - R&D facilities at the Transportation Technology Center (TTC)

- **Rolling Stock Program**
  - Rolling stock and components, onboard and wayside monitoring systems, material and design improvements
  - Hazardous materials transportation risk reduction, tank car damage assessment, inspection, and integrity
  - Safety and clean energy benefits of Electronically Controled Pneumatic brakes and other rolling stock technologie
  - Train occupant protection, locomotive and passenger car safety and performance

- **Train Control and Communication**
  - Development and testing of train control and communication systems
  - Grade crossing safety technologies and pilot studies, including intelligent rail systems, blocked crossings, and trespass prevention

- **Human Factors Program**
  - Safety culture pilot programs
  - Research into fatigue distraction, attention and situational awareness, and ergonomics
  - Job and cognitive task analyses
  - Usability studies of automation and new technology
  - Suicide prevention
  - Stop signal violation research
  - Guidance for implementing safety management systems
  - Studies of motorist decision-making at grade crossings

- Short Line Safety Institute support

- **Railroad System Issues Program**
  - Safety risk analysis, performance-based regulations, railroad environmental issues, and locomotive efficiency research
  - Program evaluation, including the Transportation Research Board's independent review of FRA's R&D programs
  - R&D related travel and contractor support

Why Do We Need to Fund the Program at the Requested Level?

FRA requests $53.5 million for R&D in FY 2017, $14.4 million more than the FY 2016 enacted level. Sustained funding is necessary to continue current activities and ensure R&D outputs contribute to continuous safety improvement in future. Additional funding enables acceleration of some projects and earlier implementation of results.

TRACK PROGRAM

FRA requests $11.2 million, equal to FY 2016 enacted, for its Track Research Program. This program includes key components of FRA's FY 2017 initiatives to address the **Safe Transportation of Energy Products.**

The number of accidents due to track-related causes decreased by 54 percent from 2005 to 2014. This reduction is due, in part, to the industry's adoption of technologies developed by FRA, such as:

- Gage restraint measurement system, a technology to assess the integrity of ties and fasteners.
- Vehicle-track interaction monitoring system developed for Amtrak and Class I freight railroads.
- Joint bar inspection system, an image-based technology that detects defects.
- Autonomous inspection technology used in Amtrak and freight assessment surveys.

Anticipated FY 2017 accomplishments for the Track Research Program include:

- Test and evaluation of multiple track geometry conditions and vehicles responses.
- Deployment of the redesigned air-coupled rail defect detection prototype in partnership with industry.
- Completion of the evaluation of a neutral temperature and incipient buckling detection system for continuously welded rail.
- Deployment of the redesigned rail neutral temperature prototype in partnership with industry.
- Development of engineering guidelines for track inspection parameters, based on correlations between measured data and track degradation.

- Completion of research into concrete tie design and manufacturing that will assist in modifying industry standards.
- Development and evaluation of concrete tie bending measurement methods to assess ballast support conditions.
- A research study into the use of commercially available satellite imagery for monitoring safety critical conditions (e.g., landslides, washouts, track buckling).
- Applied research and field testing of non-destructive rail stress measurement technology.
- Evaluation of a non-contact rail defect detection prototype operating at high speed.
- Development and evaluation of a machine vision-based track geometry measurement system.
- Evaluation of unmanned aircraft systems for railroad safety inspections.

21st Century Clean Transportation Plan Investments

Transportation Technology Center Investments and Sustainability

Separate from the Research and Development request, FRA proposes replacing critical capital assets at FRA's R&D facility – the Transportation Technology Center (TTC) – as part of the Administration's multi-year clean transportation plan proposal -- the *21st Century Clean Transportation Plan*. The $25 million capital investment initiative includes:

- Locomotive replacement for equipment testing - $11.0 million
- Overhead catenary replacement - $4.2 million
- Timber crosstie and fastener replacements - $4.0 million
- Refurbishment of the Project Management Building - $3.2 million
- Wheel lathe replacement - $2.0 million
- Track maintenance equipment - $0.6 million

TTC is FRA's world class research and testing facility in Pueblo, Colorado. It plays a vital role in the safe introduction of new rail equipment and improved infrastructure components. Examples of the facility's contributions to railroad safety include:

- A fully equipped test bed for industry to use in developing interoperable PTC components.
- Test tracks for the qualification of new rail vehicles and track inspection equipment.
- Facilities for training emergency responders on railroad accidents involving crude oil and other hazardous material.

FRA has managed TTC through a care, custody, and control contract since 1982 with Transportation Technology Center, Inc., a wholly-owned subsidiary of the Association of American Railroads. Although the contractor is required to invest a floor amount annually in site improvements, investment has not kept pace with the need to replace aging assets, many of which are more than 40 years old.

In addition to the funds requested, FRA seeks legislative language (included in the Administrative Provisions section) to further strengthen its investment in, and management of, TTC. The provision would enable FRA to continue cost-effectively managing the facility through a third party, while providing significant railroad safety benefits. Taking advantage of green energy remains a priority for FRA and the language also provides opportunities to develop renewable energy projects such as a solar array on TTC property involving standard long-term industry and Federal agreements. Taking advantage of green energy remains a priority for FRA. Past attempts to pursue energy projects have failed due to constraints related to contract length. FRA seeks authority to negotiate terms that are favorable to the Government for such a third-party agreement.

ROLLING STOCK PROGRAM

FRA requests $24.722 million, a $14.4 million increase from the FY 2016 enacted level. This program includes key components of FRA's FY 2017 budget initiative to address the **Safe Transport of Energy Products.**

The number of accidents due to equipment-related causes has decreased by 39 percent from 2005 to 2014. This has been due, in part, to previous research resulting in new Federal safety regulations and policies for conventional rail, high-speed rail, and hazardous material transportation.

Full-scale testing and computer modeling under this program have led to improvements in crashworthiness of passenger equipment. The Railroad Safety Advisory Committee used the research results to develop a process for evaluating the suitability of equipment designed to alternative standards to be operated in the United States. Based on this process, FRA granted a waiver to the Denton County (Texas) Transit Authority to operate new passenger equipment designed to alternative standards. The statutorily mandated Next Generation Equipment Committee adopted crash energy management features, based on FRA research, in its specifications for new passenger rail vehicles. Furthermore, the introduction of crashworthiness improvements developed by FRA is saving the lives of locomotive crews.

Anticipated FY 2017 accomplishments for the Rolling Stock Research Program include:

- Further research into safety and energy benefits from electronically controlled pneumatic brakes.
- Increased number of in-service demonstrations of advanced equipment monitoring systems and electronically driven hand brakes.
- A rule change implementing the findings on the causes of vertical split wheel rims.
- Enhanced operational practices for wayside monitoring.
- Evaluation of legacy natural gas fuel tender crashworthiness.
- In collaboration with PHMSA, completion of the full scale testing of tank cars carrying hazardous material.
- Continued development of an easy-to-use portable instrument to identify the packaging group of crude oil samples.
- Full-scale pool fire tests on tank cars designed to transport liquefied natural gas.
- Risk analysis of unit trains carrying liquefied natural gas and crude oil.
- Evaluation of new technologies and materials to improve the puncture resistance and construction of tank cars.
- Full testing and proof of the prototype vapor reclamation system for locomotive fuel tanks.
- Final rulemaking for Tier III (> 125 mph) passenger equipment safety standards.
- Together with the Access Board, new regulations for accommodations of disabled passengers.

Safe Transportation of Energy Products

Conceptual Sampling, Analysis, and Experiment with the Department of Energy (DOE) and PHMSA ..... $1.9 million

FRA requests $1.9 million in new funding to advance work begun between DOE and PHMSA. FRA's goal is to better understand and to mitigate risks associated with frequent and large volume rail transport of crude oil. With these funds, FRA, with PHMSA and DOE, will conduct rail tank car tests. Expected outcomes of this work include:

- Computer models for predicting crude oil behavior in rail transport accident scenarios, using the acquired chemical and physical property data.
- Validated computer models for predicting crude oil behavior under combustion and explosion conditions.
- Updated testing procedures to measure the thermal effects of protective systems and survivability when exposed to a pool fire.

FRA and PHMSA will continue to coordinate their tank car research in FY 2017. FRA carries out physical testing at TTC of alternative tank car designs, materials, and technologies and uses computer simulation tools to analyze alternative operating scenarios. FRA then provides the results to PHMSA for regulatory cost-benefit analyses. The results of FRA research are critical to PHMSA for its work to regulate safe hazardous materials transportation, including standards development, regulatory cost-benefit analysis, and decisionmaking.

Research Roles for the Safe Rail Transportation of Energy Products, by Operating Administration

Research Area	FRA	PHMSA
Tank Car Structural Integrity	• Tank car puncture test of at the Transportation Technology Center Full-scale valve protection systems tests • Scaled tests of tank	• Develop regulations for design of tank cars
Tank Car Manufacturing	• Evaluate non-destructive testing techniques used in manufacturing and repair of tank cars	• Develop standards, prototype testing specification and regulations for enhanced design, manufacturing and testing of tank car tanks and framing
Risk Analysis	• Refine and expand FRA modeling and simulation tools • Perform parametric analysis to determine sensitivity of simulations	• Quantify effects of routing, speed, train make-up, etc. for rulemaking cost-benefit analyses

Research Roles for the Safe Rail Transportation of Energy Products, by Operating Administration

Research Area	FRA	PHMSA
Operating Environment	• Quantify in-train forces experienced by tank cars and effects on commodities to guide and inform regulation and standard development	• Evaluation of national and United Nations regulations, as basis for enhanced standards and regulations
Damage Assessment	• Perform damage assessment of tank cars and appurtenances involved in accidents • Perform root cause analyses on components involved in non-accident releases	• Perform damage assessment of bulk packaging (cargo tanks, portable tanks, cylinders, etc.) involved in accidents

Energy Efficient Breaking Systems For Trains……$12.5 million

The President joined other world leaders at the recent Paris climate negotiations to launch Mission Innovation, a landmark commitment to dramatically accelerate public and private global clean energy innovation, by investing in new technologies that will define a clean, affordable, and reliable global power mix. Through this initiative, the U.S. and 19 other countries have committed to doubling their governmental clean energy research and development investment over five years. Successful innovation in clean energy requires broad participation, including nontraditional approaches and innovators close to stakeholders that will benefit from clean energy solutions. Mission Innovation provides a robust framework to expand and better integrate clean energy research across agencies. The Budget for FRA includes $12.5 million for energy efficient breaking systems for trains.

As part of the *21st Century Clean Transportation Plan,* FRA will analyze and demonstrate the safety and environmental benefits of Electronically Controlled Pneumatic (ECP) Brakes. ECP brake systems enable freight trains to use less energy traversing routes because they allow train engineers to apply and release brakes much more quickly than a conventional compressed air brake pipe system. Average train speeds are increased, stopping distances and the probability of collisions and derailments are reduced. Safer operations mean fewer spills and fires with hazardous materials and less environmental damage. ECP Brake systems are a proven technology, developed and tested in the United States, but limited in impact here due to economic constraints and industry concerns about reliability. This research would provide data to allay those concerns and prove the environmental benefits.

TRAIN CONTROL AND COMMUNICATION PROGRAM

FRA requests $8.086 million for its Train Control and Communication Research Program, equal to the FY 2016 enacted level. This program is includes key elements of FRA's FY 2017 initiative to address **Grade Crossing and Pedestrian Safety**.

The number of signal-related train accidents has decreased by 22 percent from FY 2005 to FY 2014 and has been small and constant each year. Further reduction is expected from the installation of PTC on certain routes.

The Train Control and Communication research activity has been developing PTC-related technologies for several years. Notable successes include:

- Adaptive braking enforcement algorithm to ensure freight trains stop at red signals without impacting operational performance.
- Positive train location technology to locate trains precisely and track train movement.
- Techniques to help employees in charge of work sites better ensure roadway worker protection.
- Interoperability standards in collaboration with the railroad industry.

With these developments, railroads were able to implement PTC systems, such as Amtrak's Incremental Train Control System in Michigan and BNSF Railway's Electronic Train Management System in Illinois and Texas. Other railroads have adopted the technologies in their pilot PTC systems.

The number of accidents at grade crossings fell by 24 percent from 2005 to 2014. Research that contributed to this reduction included the following:

- Research on the most significant influences on grade crossing safety, including commercial driver safety, locomotive conspicuity, crossing closure and grade separation, sight line clearance, and warning device upgrades.
- A study of a four-quadrant gate and an obstruction detection system showed the same effectiveness as closing the crossing, but without the economic and societal costs.

Anticipated FY 2017 accomplishments include:

- A more effective and less costly prototype system for broken rail detection using fiber optic cables.
- Design and test of the enhanced PTC braking algorithm to reduce unintended PTC enforcements.
- Deployment of an intelligent transportation system-based prototype to warn vehicle drivers of the status of railroad crossings and enforce compliance.
- Design and test of mitigating technology and techniques to prevent anticipated radio communication problems on the Northeast Corridor.
- New locomotive-based technologies for long-range trespasser detection and warning systems.
- Development and test of an advanced highway preemption system.

- Publication of best practice countermeasures for trespass prevention.
- Technology demonstrations and technology transfer activities.

HUMAN FACTORS PROGRAM

In FY 2017, FRA requests $5.54 million, equal to the FY 2016 enacted level, for its Human Factors Research Program. This program is a key element of FRA's FY 2017 initiative on **Safe Transport of Energy Products (STEP).**

There was a 47 percent reduction in human factors-caused accidents from 2005 to 2014, in part due to FRA's Human Factors R&D. Previous fatigue research has provided a scientific basis for new rules for commuter and intercity passenger rail hours of service and fatigue risk management, as required by the Rail Safety Improvement Act. Behavioral and work environment R&D has produced pilot programs that are enabling the railroads and rail labor to work together to identify ways to solve this problem area.

Crew fatigue continues to be an area of concern. Split shifts, irregular shifts, and lack of effective guidance and enforcement for rest requirements are areas that need further study and could require regulatory or voluntary changes in recommended practices to reduce the likelihood of fatigue-related accidents.

FRA's Cab Integration Technology Laboratory provides a test bed for projects to prevent distraction-based accidents in locomotive crews, to improve vigilance in operations, and to design human factors specifications for the next generation locomotive cab.

Anticipated FY 2017 accomplishments for the Human Factors Research Program include:

- Completion and distribution of a training program for sustaining attention in locomotive crews.
- Development of safety culture and safety compliance measurement tools for the Short Line Safety Institute of the American Short Line and Regional Railroad Association. In addition, completion of training and education tools, an organizational structure for the Safety Institute, and an implementation process to help improve safety across the short line and regional railroad industry.
- Completion of training materials and software for the Clear Signal for Action program, which will be made available to all passenger and commuter railroads.
- Development of a new workstation for locomotive engineers that incorporates new command and control technology, while reducing operator workload and error.
- A report on the safety of two-person locomotive crews compared to one-person crews.
- Through the Global Railway Alliance for Suicide Prevention (GRASP) Working Group, completion and implementation of a strategic framework for international collaboration.

Safe Transportation of Energy Products

Short Line Safety Institute Grant..... $2.0 million

For FY 2017, FRA plans to again allocate $2 million to the American Short Line and Regional Railroad Association (ASLRRA) Short Line Safety Institute. Assistance to the institute funds safety culture assessments, training and education, and recommendations to improve the safety performance of short line railroads. The Institute focusses on the transportation of crude oil by small railroads and thereafter expand to the transportation of all commodities for Class Ill railroads. It will send inspectors to member railroads to identify safety improvements and methods for achieving them. ASLRRA will work with the FRA Office of Research and Development Human Factors Division to:

- Create a process to evaluate the current safety and compliance attainment levels on small railroads,
- Contract and train qualified inspectors, and
- Develop training, assessment and reporting document systems. It will also work with FRA to create benchmarks and objectives to measure the progress and effectiveness of the Institute's programs.

RAILROAD SYSTEMS ISSUES

In FY 2017, FRA requests $3.87 million for its Railroad System Issues Program, the same level as the FY 2016 enacted level. A small portion of this funding is for staff to oversee contractors' and grantees' performance and to witness testing, including travel.

Anticipated FY 2017 accomplishments for the Railroad Systems Issues program include:

- Updating the safety risk model for guiding future R&D.
- Evaluating projects conducted by the four R&D divisions
- Supporting an FRA Workforce Development Program to support DOT, FRA, and external priorities (e.g., Ladders of Opportunity, Council on Women and Girls, Transportation Career Pathway Model Development, Minority Serving Institutions Task Force, YES Mentoring Program).
- Identifying two FRA initiatives that can be supported by Minority Serving Institutions.
- Conducting a railroad industry workforce assessment to gather data on trends, skill demands, training opportunities, industry best practices, cross-modal efforts, etc.

What Benefits Will Be Provided To The American Public Through This Request?

Research into tank cars will benefit the American public by reducing the spillage of hazardous material. FRA's R&D program will protect people who live in neighborhoods through which trains operate and reduce the likelihood of environmental damage due to hazardous material releases. Two areas of research that help achieve this are reducing failures such as broken

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wheels and rails that cause derailments and improving the strength of tank cars to better survive derailments that do occur.

Safe rail transportation directly benefits the public traveling by train. FRA's R&D program will reduce train collisions by facilitating the implementation of new technologies such as PTC. It will reduce collision risks when passenger trains share the same corridors as freight trains. The program will lay the foundation for improved regulation that will reduce the likelihood of derailments. FRA's R&D program will also improve occupant protection in collisions and derailments.

By addressing the root causes of grade crossing accidents, FRA's R&D program improves the safety of the American public that needs to cross railroad rights-of-way. Human factors research into driver behavior at highway-rail grade crossing and the effectiveness of alternative warning systems helps identify optimum solutions. Developing new technologies for crossing protection and train to vehicle communications leads to reduced incidents of grade crossing being blocked, which can delay emergency responders.

FRA's R&D program helps to reduce fatalities and injuries to trespassers on railroad property. Members of the public are known to take short cuts across railroad property. Innovative solutions for warning them of the danger they face need to be researched and implemented.

By funding universities to conduct R&D, FRA provides opportunity for students to prepare for rewarding jobs in the railroad industry. The age profile for railroad industry employees shows a growing demand for new entrants. University programs that offer railroad classes help provide the next generation of railroad professionals.

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION
RAILROAD RESEARCH AND DEVELOPMENT (69-X-0745)
PROGRAM AND FINANCING
IN THOUSANDS OF DOLLARS ($000)

Account Number: 69-0745-0-1-401

Line	Line Title	2015 Act	2016 CY	2017 BY
	Obligations by program activity:			
0091	Direct program activities, subtotal	39,236	41,000	56,000
0900	**Total new obligations**	**39,236**	**41,000**	**56,000**
	Budgetary Resources:			
	Unobligated balance:			
1000	Unobligated balance brought forward, Oct 1	7,742	10,000	8,000
1021	Recoveries of prior year unpaid obligations	1,776	0	0
1050	**Unobligated balance (total)**	**9,518**	**10,000**	**8,000**
	Budget authority:			
	Appropriations, discretionary:			
1100	Appropriation	39,100	39,000	54,000
1131	Unobligated balance of appropriations permanently reduced		-2,000	
1160	**Appropriation, disc (total)**	**39,100**	**37,000**	**54,000**
	Spending authority from offsetting collections, discretionary:			
1700	Collected	320	2,000	2,000
1701	Change in uncollected payments, Federal sources	-399	0	0
1750	**Spending auth from offsetting collections, disc (total)**	**-79**	2,000	**2,000**
1900	**Budget authority (total)**	**39,021**	**39,000**	**56,000**
1930	**Total budgetary resources available**	**48,539**	**49,000**	**64,000**
	Memorandum (non-add) entries:			
1941	Unexpired unobligated balance, end of year	9,302	8,000	8,000

Account Number: 69-0745-0-1-401

Line	Line Title	2015 Act	2016 CY	2017 BY
	Change in obligated balance:			
	Obligated balance, start of year (net):			
3000	Unpaid obligations, brought forward, Oct 1 (gross)	39,021	39,000	40,000
3010	Obligations incurred, unexpired accounts	39,236	41,000	56,000
3020	Outlays (gross)	-37,030	-40,000	-44,000
3040	Recoveries of prior year unpaid obligations, unexpired	-1,776	0	0
	Obligated balance, end of year (net):	39,451	40,000	52,000
3050	Unpaid obligations, end of year (gross)	39,451	32,624	52,000
3060	Uncollected pymts, Brought Forward	0	-1,000	-1,000
3070	Change Uncollected pymts	399	0	0
3090	Uncollected pymts, Fed sources, end of year	-295	-1,000	-1,000
3100	**Obligated balance, start of year (net)**	**38,326**	**38,000**	**39,000**
3200	**Obligated balance, end of year**	**39,156**	**39,000**	**51,000**
	Budget authority and outlays, net:			
	Discretionary:			
4000	Budget authority, gross	39,021	39,000	56,000
	Outlays, gross:			
4010	Outlays from new discretionary authority	15,775	12,000	18,000
4011	Outlays from discretionary balances	21,255	28,000	26,000
4020	**Outlays, gross (total)**	**37,030**	**40,000**	**44,000**
	Offsets against gross budget authority and outlays:			
	Offsetting collections (collected) from:			
4030	Federal sources	-320	-2,000	-2,000
4070	Budget authority, net (discretionary)	39,100	37,000	54,000
4080	**Outlays, net (discretionary)**	**36,710**	**38,000**	**42,000**
4180	**Budget authority, net (total)**	**39,100**	**37,000**	**54,000**
4190	**Outlays, net (total)**	**36,710**	**38,000**	**42,000**

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

HIGH-PERFORMANCE RAIL
APPROPRIATIONS LANGUAGE

CURRENT PASSENGER RAIL SERVICE

(LIMITATION ON OBLIGATIONS)

(TRANSPORTATION TRUST FUND)

Contingent upon enactment of multi-year clean transportation plan authorization legislation, funds available for the Current Passenger Rail Service Program authorized under title 49, United States Code, shall not exceed total obligations of $2,300,000,000, to remain available until expended: Provided, That the Secretary may retain up to one-half of one percent of the funds limited under this heading to fund program administration and oversight.

CURRENT PASSENGER RAIL SERVICE

(LIQUIDATION OF CONTRACT AUTHORIZATION)

(TRANSPORTATION TRUST FUND)

Contingent upon enactment of multi-year clean transportation plan authorization legislation, $2,300,000,000 to be derived from the Rail Account of the Transportation Trust Fund and to remain available until expended, for payment of obligations incurred in carrying out the Current Passenger Rail Service Program authorized under title 49, United States Code.

EXHIBIT III-1

HIGH-PERFORMANCE RAIL
Summary by Program Activity
Appropriations, Obligation Limitations, and Exempt Obligations
($000)

Item	FY 2015 Enacted	FY 2016 Enacted	FY 2017 Request	Change FY 2016-2017
Current Passenger Rail Service				
Grants to Amtrak: Section 11101	-	-	1,900,000	1,900,000
Federal-State Partnership for State of Good Repair: Section 11103	-	-	400,000	400,000
Subtotal	**-**	**-**	**2,300,000**	**2,300,000**
Rail Service Improvement Program				
Consolidated Rail Infrastructure and Safety Improvement: Section 11102	-	-	3,680,000	3,680,000
Restoration and Enhancement Grants: Section 11104	-	-	20,000	20,000
Subtotal	**-**	**-**	**3,700,000**	**3,700,000**
TOTAL, HIGH-PERFORMANCE RAIL	**-**	**-**	**6,000,000**	**6,000,000**
Full-time Equivalents (FTE)	**-**	**-**	10	10
Direct Funded				

Program and Performance Statement

Current Passenger Rail Service -- FAST Act Sections 11101 and 11103: Through the Current Passenger Rail Service program, FRA will make grants according to the authorities provided in the Fixing America's Surface Transportation (FAST) Act, specifically FAST Act Sections 11101 and 11103. Section 11101 authorizes grants to Amtrak including grants for the Northeast Corridor and the National Network, which includes Amtrak's state-supported routes, long-distance routes, and other Amtrak costs not allocated to the Northeast Corridor. Section 11103 authorizes FRA to make grants under the Federal-State Partnership for State of Good Repair program to bring publicly-owned or Amtrak-owned infrastructure, equipment, and facilities into a state of good repair. The FY 2017 Budget includes $1.9 billion for Grants to Amtrak and $400 million for Federal-State Partnership for State of Good Repair. This request exceeds the authorized funding levels of $1.45 billion and $82 million, respectively, in order to accelerate investment in critical infrastructure needs.

Rail Service Improvement Program -- FAST Act Sections 11102 and 11104: Through the Rail Service Improvement Program, FRA will make grants according to the authorities provided in FAST Act Sections 11102 and 11104. Section 11102 authorizes Consolidated Rail Infrastructure and Safety Improvement grants to fund a wide range of activities, including developing high-performance passenger rail networks throughout the United States; assisting commuter railroads, class II and class III railroads and states implement positive train control; and investing in highway-rail grade crossing enhancements and other railroad safety improvements. Section 11104 authorizes Restoration and Enhancement Grants for operating assistance to initiate, restore, or enhance intercity passenger rail service. The FY 2017 Budget requests $3.7 billion for this account including $3.68 billion for Consolidated Rail Infrastructure Improvement grants and $20 million for Restoration and Enhancement Grants. This request exceeds the authorized level of $98 million for the Consolidated Rail Infrastructure and Safety Improvement program in order to fund priority safety initiatives, including the implementation of positive train control and improving safety at highway-rail grade crossings, as well as meet the growing demand for new intercity passenger rail capital investments.

EXHIBIT III-1a

HIGH-PERFORMANCE RAIL
SUMMARY ANALYSIS OF CHANGE FROM FY 2016 TO FY 2017
Appropriations, Obligation Limitations, and Exempt Obligations ($000)

Item	Change from FY 2016 to FY 2017 $000	FTE
FY 2016 ENACTED	**-**	**-**
NEW OR EXPANDED PROGRAMS:		
Current Passenger Rail Service	2,300,000	]7
Rail Service Improvement Program	3,700,000	-
TOTAL, FY 2017 REQUEST	**6,000,000**	**7**

EXHIBIT III-2
ANNUAL PERFORMANCE RESULTS AND TARGETS
FEDERAL RAILROAD ADMINISTRATION

FRA integrates performance results into its budget request to demonstrate alignment with the Department of Transportation's strategic plan.

DOT Strategic Goal: Quality of Life in Communities – Foster quality of life in communities through place-based policies and investments that increase transportation choices and access to transportation services.

Strategic Objective: Expand convenient, safe, and affordable transportation choices for all users by directing federal investments toward projects that more efficiently meet transportation, land use, and economic development goals.

Performance Goal: Increase intercity passenger rail ridership to at least 7.50 billion miles traveled by the end of FY 2018.

	2013	2014	2015	2016	2017
Target	6.75 billion	6.90 billion	6.90 billion	7.05 billion	7..05 billion
Actual	6.80 billion	6.65 billion	6.60 billion	---	---

Strategic Objective: Ensure federal transportation investments benefit all users by emphasizing greater public engagement, fairness, equity, and accessibility in transportation investment plans, policy guidance, and programs.

Performance Goal: Improve access to transportation for people with disabilities and older adults by ensuring that 100 percent of intercity passenger rail stations*comply with the certain requirements of ADA by the end of 2020, subject to the availability of funds.

(1) Percentage of stations* that are **functionally accessible**

	2013	2014	2015	2016	2017
Target	n.a.	n.a.	94%	96%	98%
Actual	n.a.	n.a.	*n.a.*	---	

(2) Percentage of stations* that have **accessible restrooms**

	2013	2014	2015	2016	2017
Target	n.a.	n.a.	87%	97%	100%
Actual	n.a.	n.a.	*n.a.*	---	

EXHIBIT III-2 (Cont'd)
ANNUAL PERFORMANCE RESULTS AND TARGETS
FEDERAL RAILROAD ADMINISTRATION

Performance Goal: Improve access to transportation for people with disabilities and older adults by ensuring that 100 percent of intercity passenger rail stations*comply with the certain requirements of ADA by the end of 2020, subject to the availability of funds.

(3) Percentage of stations* that have **ADA-compliant passenger information display systems** installed where required

	2013	2014	2015	2016	2017
Target	n.a.	n.a.	84%	88%	90%
Actual	n.a.	n.a.	*n.a.*	---	---

* Where Amtrak is responsible for compliance.

n.a. FRA had not set a target and did not track this measure before FY 2015.

n.a. Not available at this time.

For the purposes of this goal, the following definitions apply—

(1) **Functionally accessible** means that passengers have an accessible path from the public right of way to the train platform.

(2) **Accessible restrooms** mean the station restrooms meet 2006 U.S. Department of Transportation standards, which provide minimum requirements for all facilities in a restroom to ensure all Americans, including those in wheelchairs, can use the facilities.

(3) **Passenger information display systems** mean integrated messaging services that deliver synchronized audible and visual messages regarding train service (arrival and departure times, gate and track assignments, boarding locations, stops and train status) and general announcements (passenger paging, emergency messages, etc.).

DETAILED JUSTIFICATION FOR THE HIGH-PERFORMANCE RAIL

What Do I Need To Know Before Reading This Justification?

- For the last four decades, intercity passenger rail service in the United States has been provided primarily by the National Railroad Passenger Corporation (Amtrak).

- During that time, Congress appropriated funds to FRA for Amtrak grants to support Amtrak's operating and capital costs. Amtrak also receives support from some States for certain routes, in addition to ticket and other revenue.

- Amtrak owns, leases, or controls most of the track and infrastructure along the Northeast Corridor (Washington, D.C., to Boston, Massachusetts). Elsewhere, Amtrak primarily operates on track owned and managed by private freight railroads.

- FRA's role in developing intercity passenger rail service grew substantially in recent years. Congress passed the *Passenger Rail Investment and Improvement Act of 2008* (PRIIA), which established significant new FRA policy, planning, and programmatic responsibilities. Subsequent appropriations acts provided more than $10 billion for a new, competitive, high-speed, and intercity passenger rail program and funding for continued investment in Amtrak.

- PRIIA included important reforms, such as requiring States to fund operating and capital costs for State corridor services; requiring performance measures and new management practices by Amtrak; and authorizing new multi-jurisdictional committees to advance next generation passenger rail equipment and Northeast Corridor operations and infrastructure management.

- On December 4, 2015, the President signed the latest multi-year surface transportation authorization act – *Fixing America's Surface Transportation Act (FAST) Act* – into law. The act makes several changes to FRA authorities, including establishing new grant programs for Amtrak, states, local governments, and other stakeholders. While the FAST Act provides guaranteed funding for grant programs in other surface transportation modes, availability of resources for rail projects will depend on subsequent action by Congress in annual spending bills.

FY 2017 – High-Performance Rail – Budget Request
($000)

	FY 2015 Enacted	FY 2016 Enacted	FY 2017 Request	Change FY 2016-2017
Current Passenger Rail Service				
FAST Act Sections 11101 and 11103				
Grants to Amtrak: Section 11101	-	-	1,900,000	1,900,000
Federal-State Partnership for State of Good Repair: Section 11103	-	-	400,000	400,000
Subtotal	**0**	**0**	**2,300,000**	**2,300,000**
Rail Service Improvement Program				
FAST Act Sections 11102 and 11104				
Consolidated Rail Infrastructure and Safety Improvement: Section 11102	-	-	3,680,000	3,680,000
Restoration and Enhancement Grants: Section 11104	-	-	20,000	20,000
Subtotal	**0**	**0**	**3,700,000**	**3,700,000**
TOTAL, HIGH-PERFORMANCE RAIL	**0**	**0**	**6,000,000**	**6,000,000**
Direct Full-time Equivalents (FTE)	-	-	10	10

FRA requests $68.5 billion over ten years for High-Performance Rail as part of the Administration's 10-year proposal to increase investment in clean transportation infrastructure. The funding would provide significant new capital investment for rail projects that benefit the public. High-Performance Rail has two major programs: **Current Passenger Rail Service** focuses on *maintaining* the current rail network and **Rail Service Improvement Program** focuses on *expanding and improving* the U.S. rail network to accommodate growing travel demand.

HIGH-PERFORMANCE RAIL FUNDING
FY 2017 to FY 2026
(millions of dollars)

Current Passenger Rail Service	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	10 Yr Total
Grants To Amtrak -- FAST Act Sec. 11101	1,900	2,000	2,000	2,050	2,200	2,170	1,940	1,835	1,800	1,800	19,695
Federal-State Partnership for State of Good Repair Program -- FAST Act Sec. 11103	400	500	500	700	800	830	810	665	500	500	6,205
Subtotal: Current Passenger Rail Service	**2,300**	**2,500**	**2,500**	**2,750**	**3,000**	**3,000**	**2,750**	**2,500**	**2,300**	**2,300**	**25,900**
Rail Service Improvement Program											
Consolidated Rail Infrastructure & Safety Improvements Program -- FAST Act Sec. 11102	3,680	5,980	5,980	7,130	4,980	4,980	3,730	2,480	1,980	1,480	42,400
Restoration & Enhancements Program -- FAST Act Sec. 11104	20	20	20	20	20	20	20	20	20	20	200
Subtotal: Rail Service Improvement Program	**3,700**	**6,000**	**6,000**	**7,150**	**5,000**	**5,000**	**3,750**	**2,500**	**2,000**	**1,500**	**42,600**
Total: High Performance Rail	**6,000**	**8,500**	**8,500**	**9,900**	**8,000**	**8,000**	**6,500**	**5,000**	**4,300**	**3,800**	**68,500**

What is This Program and Why is it Necessary?

Investing in high-performance rail will substantially improve the Nation's rail system to accommodate a growing population and volume of freight traffic. America's population is estimated to increase by 70 million people, or more than 20 percent, by 2045. Freight shipments are forecasted to increase by 45 percent over the same period.[1] Rail transportation will play a critical role in accommodating this growth and provide an alternative to the Nation's increasingly congested airports and highways.

As part of the Administration's *21st Century Clean Transportation Plan* infrastructure initiative, the High-Performance Rail program will build on the significant achievements to date to improve the nation's rail system.

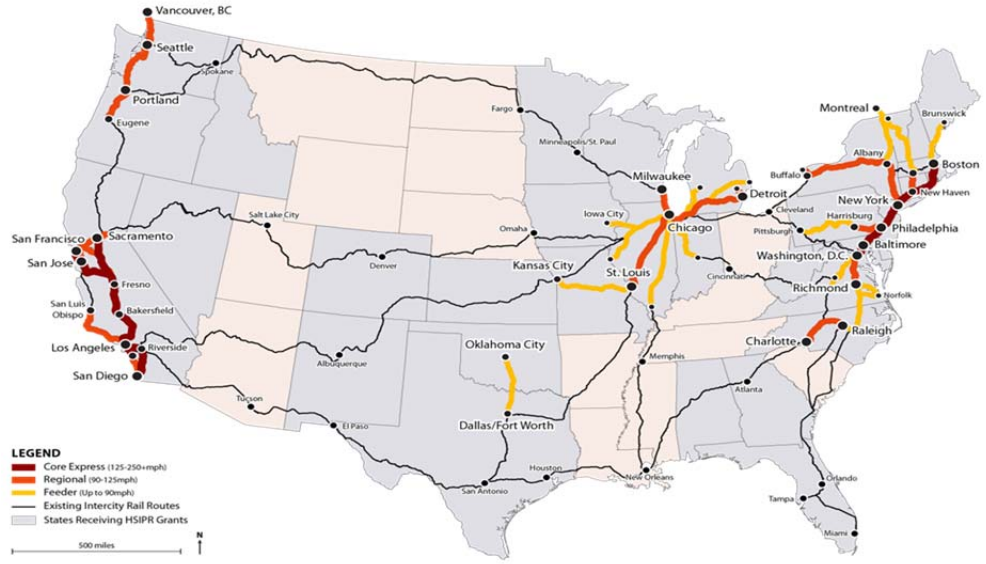
Over the last seven years, FRA's High-Speed and Intercity Passenger Rail (HSIPR) Program has proven that the Department of Transportation, states, Amtrak, freight railroads, and other industry stakeholders are capable of delivering an effective rail development program to help achieve our mobility goals. The more than $10 billion, including $8 billion from the *American Recovery and Reinvestment Act of 2009 (ARRA*), appropriated for the HSIPR Program has been well-invested, supporting nearly 150 projects in 35 states and the District of Columbia (75 ARRA-funded projects are located in 24 states and the District of Columbia).

[1] U.S. Department of Transportation, *Beyond Traffic 2045: Trends and Choices*, 2015.

Nearly 85 percent of these HSIPR Program investments are concentrated in 6 key corridors:

- San Francisco-Los Angeles
- Boston-New York City-Washington, D.C.
- Seattle-Portland-Eugene
- Charlotte-Washington, D.C.
- Chicago-St. Louis
- Chicago-Detroit

HIGH-SPEED AND INTERCITY PASSENGER RAIL PROGRAM
Current Investments



Through the HSIPR Program, thousands of corridor miles of track are being constructed or improved, more than 30 stations are being upgraded, and more than a hundred new passenger cars and locomotives are being procured. These projects will improve the customer experience by reducing trip times, improving reliability, adding new frequencies, and making stations and equipment more efficient and accessible. Examples of outcomes include:

- Reducing Trip Times: Michigan – $347 million to complete corridor acquisition and subsequent improvements that will allow trains to travel at 110 mph for more than three-quarters of the Chicago – Detroit corridor, resulting in a 30 minute reduction in trip time.

- Adding Frequencies: Washington – $752 million for infrastructure improvements necessary to add two round trips between Seattle – Portland, for a total of seven daily. The improved Pacific Northwest Rail Corridor reduces highway and freight railroad congestion while improving rail options between the United States and Canada.
- Improving Reliability: Missouri – $21 million to add a new bridge at the Osage River crossing, eliminating a one-track bottleneck and improving on-time performance for passenger and freight trains. A University of Missouri study of Amtrak delays and their causes projected a "dramatic decrease in Amtrak delays as a result of this project."
- Enhancing Stations: New York – $3 million to complete preliminary engineering and environmental analysis for a new multi-modal station in Rochester, NY. The project is now under construction thanks to a subsequent $15 million grant provided under the Department's successful TIGER Program.
- Modernizing Equipment: Multi-State – $800 million to procure approximately 47 new locomotives and 130 bi-level rail cars for routes in California, Washington, and the Midwest. This new rolling stock will replace existing Amtrak or state owned equipment, which will reduce the states' capital equipment costs and increase service capacity and reliability.
- Track and Bridge Improvements: Vermont – $52.7 million to complete track, signal, and bridge improvements on the *Vermonter*. The project installed approximately 150 miles of new rail across the state, replaced 130,000 rail ties, and upgraded or replaced 38 switches and 46 rail crossings. In addition to improving safety along the corridor, the track and signal upgrades reduced travel time by approximately 30 minutes.
- Grade Crossing Improvements: Pennsylvania – $18 million for final design and construction to eliminate three public grade crossings on the Keystone Corridor between Philadelphia – Harrisburg.
- PTC Installation: Nationwide – $460 million in signal upgrades to implement Positive Train Control (PTC) technology.

Project sponsors have substantially completed 74 projects, resulting in upgraded stations, improved operational efficiency, and enhanced services.[2] Passenger rail service has been extended to Freeport and Brunswick, Maine, and track, signal, and bridge improvements are now in-service on Amtrak's *Vermonter,* reducing travel times by nearly 30 minutes. Initial reliability and travel time improvements have also been achieved on the Chicago-St. Louis, Chicago-Detroit, Los Angeles-San Diego, and Philadelphia-Harrisburg corridors.

[2] As of January 2016.

CURRENT HIGH-SPEED AND INTERCITY PASSENGER RAIL PROGRAM INVESTMENTS

FUNDED WITH

AMERICAN RECOVERY AND REINVESTMENT ACT

AND

FISCAL YEAR 2010 HISPR APPROPRIATIONS

	Miles Under Development		**Federal Investment**		**Population Served**	
Type of Corridor	Number of Miles	Percentage of Total	Millions of Dollars	Percentage of Total	Millions of People	Percentage of U.S. Population
Core Express	1,250	20%	$4,919	48.8%	74	24%
Regional	3,127	50%	$4,578	45.4%	102	33%
Feeder	1,911	30%	$555	5.5%	39	8%
Other	*n.a.*	*n.a.*	$25	0.2%	*n.a.*	*n.a.*
TOTAL	**6,288**	**100%**	**$10,077**	**100%**	**135**	**44%***

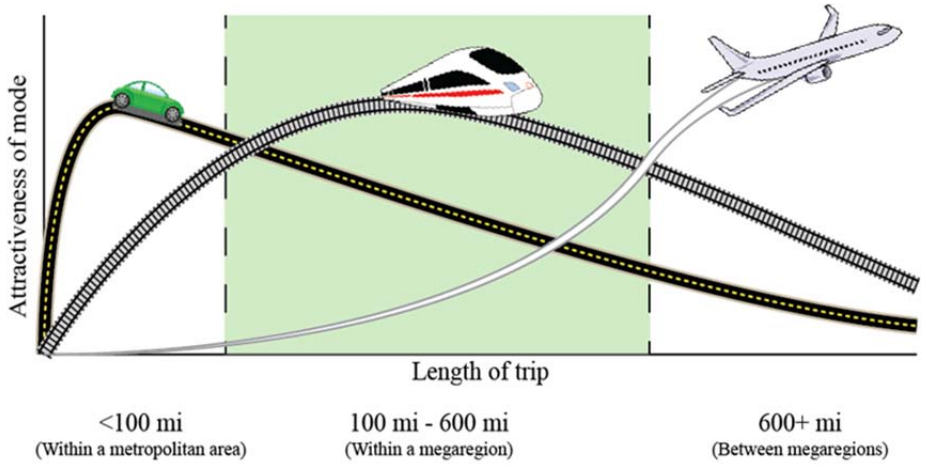
* Cumulative figure excludes double counting of populations served by more than one corridor type.

n.a. Not applicable.

Passenger Rail

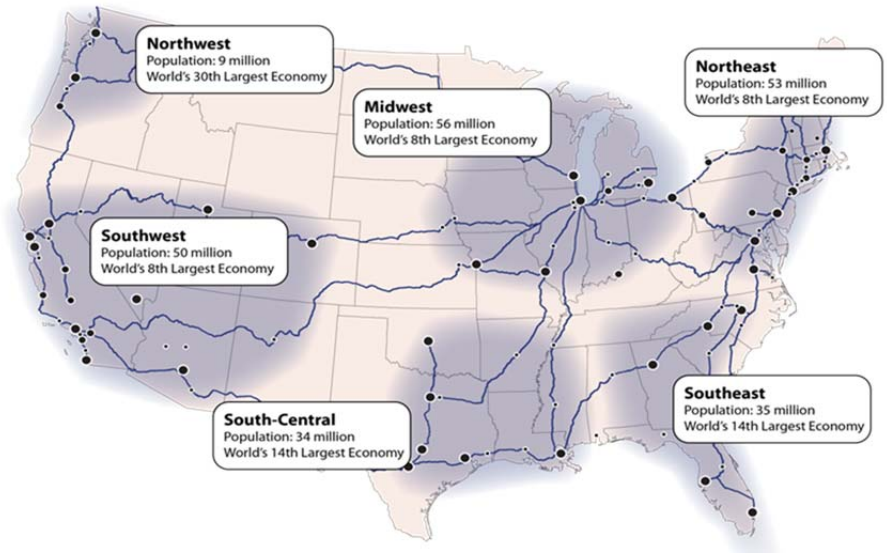
The *21st Century Clean Transportation Plan* proposal will support FRA's strategy to advance rail networks in the Nation's growing megaregions—densely populated, metropolitan areas with interlocking economies and shared transportation, environmental, and cultural resources. These megaregions are well-suited for intercity rail transportation, given the relatively short distances between large cities, generally less than 600 miles.

DISTANCES BEST-SUITED FOR HIGH-PERFORMANCE RAIL



Source: FRA analysis.

HIGH-PERFORMANCE RAIL REGIONS



Source: FRA analysis.

Each regional network will contain a range of corridor types and levels of service, based on its market conditions and transportation needs. In some regions, numerous trains per hour operating at speeds above 125 miles-per-hour will best address these needs; in others, incremental upgrades to existing services will be appropriate and cost-effective. This market-based approach is consistent with the investment strategy followed in rail programs throughout the world – including every nation with successful high-speed rail services.

FRA has identified three general types of high-performance passenger rail service, differentiated by characteristics such as speed, frequency of service, and whether the trains run on dedicated passenger track or shared track.

HIGH-PERFORMANCE INTERCITY PASSENGER RAIL SERVICES					
Service	**Top Speed** (miles-per-hour)	**Market**	**Frequency**	**Power**	**Track**
Core Express	125 to 250 +	Rail is dominant mode of choice for most travelers	At least hourly	Electrified	Dedicated
Regional	90 to 125	Rail is competitive with flying and driving	Hourly or bihourly	Electrified and Diesel	Dedicated and Shared
Feeder	Up to 90	Rail is competitive with driving	3 or more daily roundtrips	Diesel	Shared

Freight Rail

The Nation's 140,000-mile freight rail network is the most developed and cost-efficient in the world. Rail's share of total U.S. freight ton-miles is approximately 40 percent.[3] The $70 billion industry consists of seven Class I railroads[4] (which generate over 90 percent of the industry's revenue) and over 560 short line and regional railroads (which provide critical linkages to the Class I network).

The continued strong performance of the Nation's freight rail network is critical to meeting the needs of a growing economy. Shifting long-haul intercity trucks to rail would yield substantial public benefits, including fewer motor vehicle fatalities; improved state of good repair and less

[3] American Association of Railroads, *Overview of America's Freight Railroads*, August 2015.

[4] The seven Class I freight railroads are: BNSF Railway, CSX Transportation, Grand Trunk Corporation, Kansas City Southern Railway, Norfolk Southern Combined Railroad Subsidiaries, Soo Line Railroad, and Union Pacific Railroad.

damage to the highways; improved economic competitiveness due to lower fuel consumption and logistics costs; and improved environmental sustainability with avoided greenhouse gas emissions.

The Need for Coordinated Planning

FRA's goal is that each region will develop coordinated, multi-state plans, based on common parameters and standards that ensure national consistency and compatibility. Coordinated planning is essential to the development of regional passenger rail corridors and improved intermodal freight facilities, because of the complexity of the transportation system and stakeholder interests. Therefore, FRA recognizes that local, regional, public, and private stakeholders must guide the creation of rail plans. Developing rail plans in the context of a broader regional framework will yield more cost-effective investments that are responsive to the economically interdependent needs of communities across a region. Likewise, intermodal freight projects, particularly terminal area upgrades and improvements, involve multiple railroads and require partnerships with local and State officials, other modal representatives, planning organizations, and stakeholders to identify infrastructure needs and undertake strategic investments to improve capacity, relieve congestion, and enable cost savings for shippers and their customers.

In October 2014, FRA published its first multi-state plan for a comprehensive, high-performing passenger rail network, the Southwest Multi-State Rail Planning Study (Southwest Study). The Southwest Study will support rail planning and development in six Southwestern states and serve as a model for future regional rail planning.

DOT and FRA are also leading the NEC FUTURE program, a comprehensive planning effort to define, evaluate, and prioritize future investments in the Northeast Corridor (NEC). Through this effort, DOT and FRA are collaborating with numerous stakeholders along the corridor, including the Northeast Corridor Infrastructure and Operations Advisory Commission (NEC Commission). Composed of members from each of the NEC States, Amtrak, and the U.S. DOT – as well as other non-voting stakeholders – the NEC Commission was established by Congress to promote cooperation among the various NEC stakeholders. In April 2015, the NEC Commission released the first joint five-year capital plan for investing in the corridor. The plan integrates the priorities of the four infrastructure owners, nine operators, and government agencies along the corridor. Additionally, through NEC FUTURE, FRA will publish a final Tier 1 Environmental Impact Statement (FEIS) and issue a Record of Decision (ROD) in 2016, followed by a Service Development Plan (SDP) in 2017.

In addition to the FRA-led efforts in the Southwest and Northeast, states in the Northwest, Midwest, Gulf Coast, Southeast, and South-Central have also engaged in regional planning and cooperation. In July 2015, DOT announced that it was utilizing a portion of funds appropriated to FRA in FY 2014 to engage stakeholders further in both the Southeast and Midwest regions to help form more comprehensive regional governance organizations to sustain current planning work and develop a long-term vision for their respective regions. The program includes funding to stand up a Southeast Corridor Rail Commission, similar to the Northeast Corridor

Commission that has proven highly successful in promoting mutual cooperation and planning among NEC states and stakeholders. The new Southeast Corridor Rail Commission would develop a regional rail plan and advance other discrete, consensus rail planning and capital projects in the region.

In recent years, FRA has used the HSIPR program, among other sources, to develop plans for a variety of rail projects. This has yielded a pipeline of projects located across the country that are ready to advance to the construction phase. Keeping the project pipeline moving and growing is a cornerstone of FRA's High-Performance Rail Proposal.

Backlog of Needs on the Nation's Rail Network

As our population grows, so too does the use of our transportation infrastructure. However, the funding necessary to maintain and improve our transportation system has not kept pace with this usage and the burdens placed upon it, which has led to a widening infrastructure deficit as more and more transportation assets fall into a state of disrepair. This is particularly true on our nation's rail network, where a significant backlog of rail infrastructure, stations, and equipment repair or replacement needs have accumulated after decades of underinvestment. This 10 year *21st Century Clean Transportation Plan* will make significant progress towards addressing this backlog.

Rail Accessibility and Compliance with the Americans with Disabilities Act

The *Americans with Disabilities Act* (ADA) and its regulations prohibit Amtrak from discriminating against individuals with disabilities and required Amtrak to make all rail stations for which it is responsible accessible to and useable by individuals with disabilities by July 2010. In July 2015, the U.S. Department of Justice issued a letter finding that Amtrak had failed to achieve accessibility at the stations for which it is responsible.

Access to the Nation's rail system is a civil right and FRA considers station accessibility a top priority. As such, FRA proposes a Ladders of Opportunities Initiative to provide $350 million per year over the next six years to bring all Amtrak-served stations into compliance. For FY 2017, FRA is requesting that $100 million from the Current Passenger Rail Service program be dedicated to Amtrak's ADA program. FRA is requesting an additional $250 million from the Rail Service Improvement Program for the new Building Railroad Infrastructure for Dignity and Greater Equality (BRIDGE) grant program to fund ADA implementation at intercity passenger rail stations owned by entities other than Amtrak. Grant recipients would include state and local governments, transit agencies, and other responsible entities (including Amtrak if it chooses to apply). While Amtrak is responsible for 377 stations, there are over 100 stations where other entities are responsible for achieving compliance with the ADA. The BRIDGE Grant Program is an opportunity to address access challenges in these critical locations in an efficient and timely manner.

HIGH-PERFORMANCE RAIL PROPOSAL

The Administration's proposal consists of two complementary programs that incorporate the new grant programs authorized by the FAST Act:

Current Passenger Rail Service

DOT requests $2.3 billion for grants to Amtrak and preservation and renewal of the Nation's existing rail services.

CURRENT PASSENGER RAIL SERVICE ($2.3 billion)
FY 2017 Request, Objectives, and Eligibility

Grant Program and FY 2017 Request	Objective	Eligible Recipients
Grants to Amtrak FAST Act Section 11101 $1,900 million	To support Amtrak's operating, capital, and debt service needs related to the • Northeast Corridor ($700 million), and • National Network ($1,200 million)	Amtrak
Federal-State Partnership for State of Good Repair FAST Act Section 11103 $400 million	To reduce the state of good repair backlog on publically-owned or Amtrak-owned infrastructure, equipment, and facilities	States, interstate compacts, public agencies/authorities established by states, political subdivisions of states, Amtrak

***** Amtrak's State-supported routes, long-distance routes, and other costs not allocated to the Northeast Corridor

Grants to Amtrak: FAST Act Sec. 11101 – $1.9 billion

In authorizing grants to Amtrak under the FAST Act, Congress created two separate authorizations of appropriations: one to support the Northeast Corridor and one to support the National Network:

Northeast Corridor ($700 million): The Northeast Corridor is one of the most important transportation assets in the United States. The lifeblood to the regional economy, the NEC carries more than 750,000 people each day on Amtrak and commuter services. Amtrak's NEC train operations account for more than a third of its ridership (11.7 million) and more than half of its ticket revenue ($1.2 billion).[5] The FY 2017 budget requests funding for the following needs:

[5] Amtrak, *Monthly Performance Report*, September 2015.

- Backlog state-of-good repair needs on Northeast Corridor infrastructure. The NEC Commission's 5-Year Capital Plan identified a maintenance backlog exceeding $21 billion[6]. This backlog includes $13.8 billion for major bridges and tunnels that have remained in service well beyond their expected useful life. The average age of these bridges and tunnels is over 100 years and failure of any of these infrastructure assets could halt travel on the NEC.
- The portion of annual equipment overhauls that the Corridor's operating surplus does not cover.
- Principal and interest payments on Amtrak's legacy debt that is attributable to the NEC.
- Information technology and other "backbone" services to support NEC infrastructure and operations.
- Upgrades to Amtrak-served stations on the NEC to comply with Americans with Disabilities Act (ADA) requirements. For FY 2017, FRA is requesting $100 million from the Current Passenger Rail Service Program (to be shared between the NEC and National Network) and $250 million from the Rail Service Improvement Program for ADA improvements.

During first half of the 10-year proposal, Federal funding for this program increases to address more of the state-of-good repair backlog on the NEC. Larger, more complex projects (such as bridge and tunnel replacements) generally require long lead times before construction begins. After the backlog is cleared, Federal support for ongoing Northeast Corridor services will be minimal. The Corridor's operating surpluses and other revenue should pay for most capital replacement and equipment overhauls. Amtrak and States will be eligible for competitive Federal grants through the Rail Service Improvement Program to upgrade Northeast Corridor services.

ALLOCATING COSTS – PRIIA SECTION 212

Section 212 of PRIIA required the Northeast Corridor Infrastructure and Operations Advisory Commission (representatives from Amtrak, U.S. DOT, NEC Northeast Corridor States, and other NEC stakeholders) to develop and implement a method to allocate costs in order to avoid cross-subsidization among the Corridor's infrastructure owners and service operators. The Commission voted to approve an interim policy in December 2014 and reaffirmed the policy in September 2015. The first owner and operator payments began in FY 2016.

Under the adopted policy, Amtrak and commuter railroads that operate over the Northeast Corridor will pay a proportional amount of the Corridor's operating and capital resources that they consume. FRA expects that Amtrak will use its Northeast Corridor operating surplus to pay this cost.

[6] Northeast Corridor Infrastructure and Operations Advisory Commission, Northeast Corridor Five-Year Capital Plan (2016-2020), April 2015.

National Network ($1.2 billion): The National Network supports the operating, capital, and debt service needs of Amtrak's State-Supported routes, Long-Distance routes, and other activities not allocated to the Northeast Corridor. The FY 2017 budget requests funding for the following needs:

- State Corridors ($120 million): The 29 State-Supported routes provide corridor service in 18 states. Section 209 of PRIIA required States to be financially responsible for supporting their corridor services, beginning in FY 2014. In FY 2014, states paid Amtrak more than $230 million for capital and operating costs associated with State-Supported routes. These payments were anticipated to rise to more than $300 million in FY 2015. This strong financial commitment demonstrates the importance of these routes to State transportation systems, economies, and communities' quality of life.

  FRA funding will provide capital assistance to help States pay a fixed-asset capital charge to be phased-in as part of Section 209 implementation, as well as the operating costs not covered by State-Supported train revenues and the Section 209 policy.

- Long-Distance Routes ($850 million): The 15 Long-Distance routes operated by Amtrak provide a critical transportation alternative to communities throughout the United States. The Long-Distance routes serve 39 States and are the only form of intercity rail transportation in 23 of these States. FRA funding will support operating and capital needs, including the 130 single-level replacement passenger cars, currently being manufactured by CAF USA in Elmira, New York.

  FRA's budget shows the full cost of supporting Long-Distance routes, including operating losses and capital expenses. During the 10-year proposal, Federal funding declines slightly as the passenger car equipment order is paid for and operational efficiencies are gained. FRA anticipates that long-distance routes will need between $700 million and $750 million annually in Federal operating and capital subsidy for the current routes, assuming no changes to the current route structure.

- Other National Network Activities ($230 million): This funding is primarily dedicated to "backbone" costs that support all aspects of Amtrak's services and cannot efficiently be allocated to the NEC, State-Supported, or Long-Distance business lines. These costs include some information technology systems, national reservations system, and training centers and programs. Funding will also support the implementation of positive train control on Amtrak routes not located on the NEC. Additionally, these funds will provide the principal and interest payments on Amtrak's legacy debt that is not attributable to the NEC.

  Finally, these funds will also cover the National Network's portion of the $100 million requested under the Current Passenger Rail Service program (to be shared with the NEC) to fund ADA station upgrades on Amtrak's State-Supported and Long-Distance routes. FRA is requesting an additional $250 million for ADA upgrades under the Rail Service Improvement Program.

Following the FAST Act, FRA also requests funding to support the various committees and studies authorized by the FAST Act to receive support from Amtrak funding, including the Gulf Coast Working Group ($500,000), State-Supported Route Committee ($2 million), NEC Commission ($5 million).

Federal-State Partnership for State of Good Repair: Fast Act Sec. 11103 – $400 million

For decades, resources available for intercity passenger rail capital projects have not matched investment needs. This has led to a backlog of state of good repair and other basic infrastructure issues on the nation's rail network, in particular on the Northeast Corridor (NEC).

In addition to being one of the most important transportation assets in the United States, the Northeast Corridor is also one of the most complex assets, running through 8 States and Washington, D.C. and hosting more than 2,000 daily trains on 8 commuter railroads, 4 freight railroads, and Amtrak. Although Amtrak owns 363 miles of the 457-miles of the NEC, more than 700,000 of the 750,000 people that ride on the corridor each day utilize commuter rail service. The NEC Commission, in adopting its cost allocation policy in December 2014 and September 2015, called for the creation of a Federal investment program to restore the NEC to a state of good repair.

The FAST Act authorized such a program to fund capital projects to reduce the state of good repair backlog on the NEC and other publically-owned infrastructure. FRA would provide grants on a competitive basis to Amtrak, States, and other public agencies/authorities, among others stakeholders, to carry out this work. Eligible projects include capital projects to (1) replace existing assets in-kind or with assets that increase capacity or service levels, (2) ensure that service can be maintained while existing assets are brought into a state of good repair, (3) bring existing assets into a state of good repair.

Rail Service Improvement Program

DOT requests $3.7 billion to expand and improve the U.S. rail network to accommodate growing demand for rail travel and increasing freight traffic, as well as make critical safety improvements on the network.

RAIL SERVICE IMPROVEMENT PROGRAM ($3.7 billion) FY 2017 Request, Objectives, and Eligibility		
Grant Program / FY 2017 Request	**Objective**	**Eligible Recipients**
Consolidated Rail Infrastructure and Safety Improvements (FAST Act Sec. 11102)* **$3,680 million**	To improve the safety, efficiency, and reliability of passenger and freight rail systems	States, Interstate Compacts, Public Agencies/Authorities Established by States, Political Subdivisions of States, Amtrak or other Rail Carriers that Provide Intercity Passenger Rail Service, Class II/III Railroads, Any Rail Carrier or Rail Equipment Manufacturer in Partnership with another Eligible Public Applicant, Transportation Research Board, University Transportation Centers, Rail-Related Non-Profit Labor Organizations
Restoration and Enhancements (FAST Act Sec. 11104) **$20 million**	For operating assistance to initiate, restore, or enhance intercity passenger rail transportation	States, Interstate Compacts, Public Agencies/Authorities Established by States, Political Subdivisions of States, Amtrak or Other Rail Carriers that Provide Intercity Passenger Rail Service, Any Rail Carrier in Partnership with another Eligible Public Applicant

*The Consolidated program covers a wide range of capital, planning, environmental analyses, research, workforce development, and training projects.

Consolidated Rail Infrastructure and Safety Improvement: FAST Act Sec. 11102 – $3.68 billion

Rail Development Grants ($1.55 billion): This program will continue funding projects that lead to new or substantially improved passenger rail corridors, as well as projects to mitigate congestion at rail chokepoints and enhance multi-modal connections. Several corridor development projects that began planning and engineering studies in the initial years of the High-Speed Intercity Passenger Rail Program will be ready to begin construction in FY 2017.

FRA multi-disciplinary teams of rail engineering, planning, and operations experts will review all applications. FRA will select projects based on rigorous analysis of quantitative and qualitative benefits and costs. FRA will ensure that selected projects have strong business and public investment cases and meet demonstrated current and future market needs. FRA will assess applicants' travel time and cost savings, safety and environmental improvements, congestion mitigation on other transportation modes, and economic benefits related to long-term productivity and job creation. Cost assessments will consider capital, operating, maintenance, renewal, and replacement, and the degree to which applicants contribute non-Federal funds and private sector participation.

Railroad Safety Technology (PTC Compliance) ($1.25 billion): PTC technology is arguably the single most important railroad safety technological development in more than a century. Our Nation's rail system is not as safe as it could be without full implementation of PTC. The public deserves nothing less than a safe rail system where PTC-preventable accidents – such as the tragic Amtrak Train 188 and Metro-North derailments that took place on May 12, 2015 and December 1, 2013, respectively – do not occur.

The majority of funding under this proposed program area would provide 80-20 matching grants to assist commuter railroads, short line railroads, and states (for the proportional share of the intercity passenger rail network not owned by Amtrak) to implement PTC. Additional funding, particularly as more railroads reach compliance with the PTC mandate, will be focused on the deployment of other railroad safety technology measures.

FRA has long stated that public sector funding is necessary to assist these entities in implementing PTC. Commuter railroads lack the financial resources to fund their multi-billion dollar PTC implementation costs, estimated to be at least $3.48 billion by the American Public Transportation Association. Similarly, many short line railroads operate under extremely limited capital budgets – which are often fully-dedicated to funding the ongoing maintenance costs needed to continue operations. As such, short lines lack the funding they require to equip their locomotives with PTC when operating over class I PTC territory. Finally, Amtrak and the host railroads over which Amtrak operates (outside of the NEC, Michigan, and a few other locations) continue to negotiate the proportional cost share of implementing PTC where the technology is required due to Amtrak operations. Many of these costs will be borne by the state-sponsors of these routes, who over the last two years have already assumed a significantly greater financial responsibility for supporting these services as a result of implementing the requirements of section 209 of PRIIA.

The *Positive Train Control Enforcement and Implementation Act of 2015* provides that railroads have until December 31, 2018 to fully implement PTC. FRA anticipates railroads will need assistance during the entire period. In addition to the $1.25 billion proposed for FY 2017, FRA proposes a program level of $2.5 billion FY 2018, with $1 billion requested in FY 2019 and FY 2020.

Local Rail Facilities and Safety Projects ($520 million): This program area will fund four types of projects to help mitigate the impacts of rail in local communities:

- Improvements to highway-rail grade crossings, resulting in significant safety and local traffic operations benefits. Grade crossing safety remains one of FRA's top priorities.
- Upgrades to short-line railroads, which often provide the connective last mile link between local business and the mainline freight network. FRA will coordinate the delivery grants. These projects may also benefit from credit assistance under the Railroad Rehabilitation and Improvement Financing (RRIF) program. The objective is ensure all financial assistance programs (both grants and loans) work together in a cohesive and comprehensive fashion, improving the Nation's passenger and freight rail networks through an integrated investment portfolio.
- Relocation of rail lines that run through residential neighborhoods or other land use contexts that are not compatible with rail operations.
- Training and technical assistance to help local governments better coordinate with railroads on operations and safety challenges, and integrate rail considerations into land use and transportation planning processes.

ADA BRIDGE Program ($250 million): The new Building Railroad Infrastructure for Dignity and Greater Equality (BRIDGE) Grant Program is a component of FRA's $350 million request to bring Amtrak-served stations into compliance with the ADA. FRA requested $100 million for Amtrak's ADA program under the Current Passenger Rail Service Program. While Amtrak is responsible for 377 stations, there are over 100 stations where entities other than Amtrak are responsible for achieving compliance with the ADA. This Ladders of Opportunity Initiative will make $250 million in matching grants competitively available to state and local governments, transit agencies, and other responsible entities (including Amtrak if they choose to apply) to complete ADA station upgrades.

FRA intends to award funds to ADA BRIDGE projects that achieve the maximum public benefits possible, given the amount of funding available. Factors that will be considered include the number of boardings, the extent to which the proposed project will mitigate mobility and access barriers and better connect communities to centers of employment, education, and services and that hold promise to stimulate long-term job growth, especially in economically distressed areas.

Planning, Research, and Workforce ($110 million): This program area will support comprehensive rail planning processes and research and development related to workforce, technology, and other areas of innovation necessary to advance America's rail industry, including:

- Planning: FRA believes the success of High-Performance Rail hinges on development of sound planning, analysis, and implementation strategies. The demand for planning funds is strong, exhibited by the substantial volume of applications FRA received in prior funding rounds. Through grants, contracts, and other forms of support, FRA will undertake the following activities:
  - National, multi-state, and state planning activities necessary to advance regional rail networks and ensure that projects are appropriately prioritized through a comprehensive understanding of costs and benefits. For FY 2017, this includes funding to establish a Southeast Corridor Rail Commission, similar to the Northeast Corridor Commission that has proven highly successful in promoting mutual cooperation and planning among NEC states and stakeholders. The new Southeast Corridor Rail Commission would develop a regional rail plan and advance other discrete, consensus rail planning and capital projects in the region. Funding will also support the study authorized under section 11311 of the FAST Act to evaluate the shared-use of right-of-way by passenger and freight rail systems.
  - Service development plans and environmental analyses for corridors and terminal areas.

- Workforce Development: The United States needs a workforce that is ready to develop, build, and operate a modern, high-performance rail system. Unlike other modes of transportation, no railroad engineering degree programs exist in the United States. Moreover, existing rail apprenticeship programs generally do not prepare individuals for working with new rail technologies. The request resources would fund the development of degree and apprenticeship programs at partner universities and community colleges.

- Rail Related Research:

  - *Upgrades to the Transportation Technology Center*: The Transportation Technology Center (the Center) in Pueblo, Colorado, does not have facilities for testing, evaluating, and demonstrating state-of-the-art high-performance rail infrastructure and equipment. Upgrading the Center will result in faster approvals for new equipment, stronger safety standards, and early identification of reliability issues, saving long-term maintenance costs and ensuring better passenger service. These upgrades will also improve the ability for American companies to design and test new technologies, helping to boost their global competitiveness and further growing the domestic rail workforce.

  - *National Cooperative Rail Research Program*: Section 306 of PRIIA established this program, managed by the National Academy of Sciences, to provide a rail research program similar to those for aviation, highways, and transit. FRA

launched the program in 2012 to develop the intellectual infrastructure needed to advance effective rail policy, and proposes to continue funding the program.

- *Rail-based University Transportation Center***:** Predictable on-going Federal funding is essential to sustain universities' development of rail-based degree programs. UTCs will provide dual benefits of (1) conducting basic research that FRA can apply to improve railroad safety and performance; and (2) producing qualified professionals who can lead implementation of high-performance rail.

- *Buy America Support*: This activity will allow FRA to continue coordinating with the Manufacturing Extension Partnership, a National Institute of Standards and Technology program that works with private manufacturing firms to meet the industry needs and grow capacity for American-made rail products.

- *Advance Rail Technology Pilots:* As part of the Administration's *21st Century Clean Transportation Plan,* planning will commence in FY 2017 to further development and implementation of advanced rail technologies in a series of pilot projects. To promote implementation of these technologies, grants will be awarded competitively for one or more pilot deployments of advanced rail technology. Funding from these grants would also support capacity building for effective rail deployment at federal and regional levels, including implementation of key safety technologies.

Restoration and Enhancement Grants: FAST Act Sec. 11104 – $20 million

FRA requests $20 million in FY 2017 for operating assistance to initiate, restore, or enhance intercity passenger rail service. Grants will be awarded competitively, are limited to three years per route, and may not be renewed following the third year. Over the three year eligibility period per route, operating assistance will decrease from up to 80 percent of the projected net operating costs for the first year of service, up to 60 percent of the projected net operating costs for the second year of service, and up to 40 percent of the projected net operating costs for the third year of service. Among other priorities identified in FAST Sec. 11303, Congress directed that priority consideration be given to restoring routes formerly operated by Amtrak, including service between New Orleans, Louisiana and Orlando, Florida.

Why Do We Need To Fund the Program At The Request Level?

The $6 billion requested is needed to build on accomplishments to date that are providing significant benefits to the American people.

Rail Investment is underway and it works. Major activities and accomplishments for High-Performance Rail include:

- **Success of Initial Investments.** The $10.1 billion provided under ARRA and the subsequent FY 2010 appropriation for the High-Speed Intercity Passenger Rail Program is having a substantial impact on the Nation's rail system: 6,000 corridor miles are being improved, 30 stations are being upgraded, and hundreds of new passenger cars and locomotives are being procured. These projects are improving the customer experience by reducing trip times, improving reliability, adding additional frequencies, and making stations and equipment more efficient and accessible. These projects are also enhancing rail safety through track and bridge improvements, grade crossing protection and separations, and PTC and signal system upgrades. Collectively, these projects represent the foundational elements to fulfill the long-term vision for high-performance rail.

- **Projects Completed and Rail Services Improved.** Project sponsors have substantially completed 74 projects, resulting in upgraded stations, improved operational efficiency, and enhanced services.[7] Passenger rail service has been extended to Freeport and Brunswick, Maine, and track, signal, and bridge improvements are now in-service on Amtrak's *Vermonter,* reducing travel times by nearly 30 minutes. Initial reliability and travel time improvements have also been achieved on the Chicago-St. Louis, Chicago-Detroit, Los Angeles-San Diego, and Philadelphia-Harrisburg corridors.

- **Construction Underway throughout the United States.** Construction is underway on 35 projects for approximately $5.5 billion in Federal investments.[8] FRA's partners are investing billions of their own funds to match these Federal investments. Additionally, the freight rail industry invested more than $28 billion of private capital in the Nation's rail network in 2014, and was projected to invest a record $29 billion in 2015.[9] FY 2015 will see significant corridor construction underway in North Carolina, Michigan, Illinois, California, and the State of Washington.

  Program progress to date includes:

  - *Illinois*: In October 2014, the Englewood Flyover opened outside Chicago, eliminating one of the worst passenger and freight train bottlenecks in the country. Additionally, 110 mile-per-hour service began on the Chicago – St. Louis corridor in November 2012.

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[7] As of January 2016.

[8] As of January 2016.

[9] American Association of Railroads, 2015 Outlook.

- *North Carolina*: Station upgrades in Cary, High Point, and Burlington; projects at the Raleigh Capital Yard; and locomotive rehabilitations are complete on the Charlotte-Raleigh corridor. Construction continues for several grade separation, passing siding, and track crossover projects along the corridor, with six of twelve grade separations complete and open to traffic. In September 2015, the FRA Administrator signed the final environmental impact study (EIS) for the Richmond-Raleigh section of the Southeast High Speed Rail Corridor, and the final record of decision is expected to be issued in early 2016.
- *California:* On January 6, 2015 major construction work began on the California High-Speed Train with a groundbreaking ceremony in Fresno, CA. Construction on the first 29-mile section of track is underway between Merced and Fresno in California's Central Valley. The California High-Speed Rail Authority awarded two groups of large construction projects in June 2015, and the Notice to Proceed was given in July 2015. Additionally, construction work is progressing at the new Transbay Transit Center, which will permit intercity and commuter trains to provide direct access to downtown San Francisco. On the Pacific Surfliner corridor, PTC signaling and traffic control equipment have been installed between Moorpark and San Onofre, CA, and all PTC wayside, base station units, and towers have been installed between San Diego and San Onofre.
- *Oregon and Washington*: Construction projects in Seattle, Tacoma, and Portland are complete, and construction is ongoing to add additional daily round trips, reduce travel time, and improve on-time performance between Seattle and Portland. The $15 million Port of Vancouver grade separation project was completed in July 2015 and will allow freight trains to access the port without disrupting passenger rail service on the Seattle-Portland corridor.
- *Michigan:* Approximately 135 miles of rail line between Kalamazoo and Dearborn has been purchased and track and signal rehabilitation work is now underway. New multimodal transit facilities have been constructed in Dearborn and Troy, and rail improvements are nearly complete in West Detroit, all of which will improve passenger rail service in the Detroit area.
- *Northeast Corridor:* In November 2015, FRA completed a Tier 1 draft environmental impact statement (DEIS) for the Northeast Corridor as part of the NEC FUTURE project, and public hearings are currently underway to receive comments. In Maryland, the DEIS for replacing the nearly 150-year-old Baltimore & Potomac (B&P) Tunnel was completed and published in the Federal Register in December 2015.

- **Pipeline of New Projects.** Seventy-five planning, environmental analysis, and engineering projects are completed or underway across the country. The products that result from these efforts will lay the foundation for future construction projects and service improvements. See the related discussion on FY 2015 and 2016 accomplishments.

- **Next Generation of Passenger Rail Equipment.**
  - *Technical Specifications*: With FRA's participation, the Next Generation Equipment Committee (NGEC) has approved specifications for single- and bi-level passenger rail

cars, diesel locomotives, train sets and diesel multiple units. The remaining equipment specification for dual-mode locomotives is close to finalization. These specifications will substantially advance the goals of ensuring interoperability of equipment and lowering unit costs.

- *Procurement*: A multi-state contract for the procurement of 130 bi-level passenger rail cars was issued to Sumitomo/Nippon-Sharyo, with first deliveries expected in 2017; Siemens Industry Inc. was selected in December 2013 to build 35 high-performance diesel locomotives through a second multi-state procurement. An option order for 12 additional locomotives for the Midwest was executed in March 2015. Additionally, Amtrak has selected Siemens to manufacture 70 high-performance Northeast Corridor electric locomotives in California, Georgia, and Ohio, and CAF to manufacture 130 single-level passenger cars in New York.
- *Fleet Management:* The Illinois Department of Transportation and other Midwest states are developing standards for the integrated management of rail equipment, addressing issues such as fleet planning, state-of-the-art maintenance practices, institutional fleet ownership structures, cost-sharing methodologies for cross-state border services, funding and financing arrangements, and other factors essential to developing an efficient and effective equipment pool in the Midwest. These standards may be further developed to function as guiding policies for all states procuring, owning, and operating equipment.

- **Rail Research.** FRA, jointly with the Transportation Research Board, established the National Cooperative Rail Research Program in September 2010 to advance research on issues critical to rail policy development. The initial set of research projects are nearing conclusion. The first three reports were released in 2015: (1) "Alternative Funding and Financing Mechanisms for Passenger and Freight Rail Projects," (2) "Building and Retaining Workforce Capacity for the Railroad Industry," and (3) "Comparison of Passenger Rail Energy Consumption with Competing Modes."

Anticipated FY 2015 and FY 2016 Accomplishments

- **Passenger network development:** Since the passage of PRIIA, states and local governments have spent significant time and money preparing planning, engineering, and environmental analyses. Until recent years, no federal funds were available to support this critical groundwork necessary to inform capital investment. But now, many states and local governments have plans in place, which has created a strong "pipeline" of potential rail capital projects in regions across the country. FRA expects this pipeline will create heavy demand for the new grant assistance programs proposed in the Rail Service Improvement Program. These new grant programs will provide the funding required to make market-based investments to turn these studies into improved and new services. Substantial private sector participation is also anticipated for several of these corridors, particularly those operating at a Core Express level of service.

  Additionally, FRA estimates it can accomplish the following with requested funds:

  - At least **30 state rail plans and corridor service development plans** will establish the framework for future rail investments throughout the country. The Northeast Corridor service development plan and environmental impact statement will be complete, which is

a significant pre-requisite to making major improvements on the Nation's busiest rail corridor.

- Complete major grade separations and other highway-rail grade crossing improvements that will significantly enhance safety and railroad operations.
- Accelerate projects to **reduce the infrastructure maintenance backlog on the Northeast Corridor**, leading to service and reliability improvements.

The cumulative impact of these investments is that rail travel will become a more attractive option by offering travelers and shippers faster travel times, better reliability, and more frequent trains. Increased rail ridership and freight movement means fewer people driving on congested roads or flying to/from congested airports, reduced greenhouse gas emissions and fuel consumption, and other public benefits.

What benefits will the American public receive through this request?

The importance of transportation infrastructure to global economic competitiveness is indisputable. The World Economic Forum (WEF) notes, "Extensive and efficient infrastructure is critical for ensuring the effective functioning of the economy... Well-developed infrastructure reduces the effect of distance between regions, integrating the national market and connecting it at low cost to markets in other countries and regions." [10]

Even in challenging fiscal situations, it is imperative that the United States continue to invest in the infrastructure that will enable the country to maintain and strengthen its position as a global economic leader in the 21st century and beyond. The funding necessary to maintain and improve our transportation system has not kept pace with this usage and the burdens placed upon it, which has led to a widening infrastructure deficit as more and more transportation assets fall into a state of disrepair. The WEF currently ranks the U.S. 16th in quality of overall infrastructure, down from 7th in 1999 and below several western European, Asian, and Middle Eastern countries.[11]

Maintaining economic competitiveness over the long-term will require the U.S. to address a number of interconnected transportation challenges:

- **Population growth**—America's population will grow by 70 million by 2045. The vast majority of this growth will be concentrated in a small number of "megaregions." The U.S. DOT and Department of Commerce have found that 40 tons of freight is moved through the U.S. for each resident.[12] However growth in freight ton shipments is expected to outpace

[10] World Economic Forum, Global Economic Competitiveness Report, 2014-2015, 2014.

[11] World Economic Forum, Global Economic Competitiveness Report, 2014-2015, 2014.

[12] U.S. Department of Transportation, U.S. Department of Commerce, Commodity Flow Survey.

population growth over the next 30 years; while the United States population will grow by approximately 20%, freight rail shipments will likely grow by 45%.[13]

- **Energy consumption**— The United States uses more than 13 million barrels of petroleum products every day for transportation and accounts for 20 percent of the world's petroleum consumption in general.[14]

- **Energy costs**—The inflation-adjusted cost of oil increased 129 percent from 1990 to 2010. As a result, Americans spent $630 million more *per day* on oil for transportation than they did 20 years earlier—an average annual increase of nearly $750 for every American. The Energy Information Administration expects crude oil prices to rise an additional 45 percent between 2014 and 2040.[16]

- **Environmental protection**—In April of 2015, the *Inventory of U.S. Greenhouse Gas Emissions and Sinks* found that the U.S. emitted 5.9 percent more greenhouse gases in 2013 than it did in 1990.[17] In addition, 27 percent of all greenhouse gas emissions are now from the transportation sector. Many of these emissions have serious public health implications, which can have substantial impacts on quality of life and the economy. In December 2015, President Obama and the leaders of more than 190 countries came together to adopt the most ambitious climate change agreement in history (Paris Agreement). The Paris Agreement sets a path for reducing global greenhouse gas emissions and pursuing clean energy solutions. Reducing fossil fuel consumption in the transportation sector will reduce emissions of both urban air pollutants and greenhouse gas emissions. Both types of emissions can have impacts on public health, the environment and quality of life.

- **Congestion and Mobility—**Highway and aviation congestion continues to rise, with an estimated economic impact growing from $24 billion in 1982 to $121 billion in 2011 in lost time, productivity, and fuel.[18] In many places with the worst congestion, expanding airports and highways is difficult, as land is limited and environmental/community impacts are significant. On average, Americans spend more than 40 hours stuck in traffic each year.

- **Changing Demographics**— As the U.S. population grows, it is also changing. A large number of Americans are entering their retirement years and are choosing to drive less often, particularly over longer distances. Only 15 percent of Americans older than 65 drive regularly, and that rate declines to just 6 percent for those older than 75.[19] At the same time, younger generations of Americans are choosing to drive both less often and for fewer miles

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[13] U.S. Department of Transportation, Beyond Traffic 2045:Trends and Choices, 2015.
[14] U.S. Energy Information Administration, Monthly Energy Review, December 2015.

[16] U.S. Energy Information Administration, AEO2014 Early Release Overview, April 14, 2015.

[17] U.S. Environmental Protection Agency, Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2013, April 2015.

[18] Texas Transportation Institute, 2012 Urban Mobility Report, December 2012.

[19] AARP, Travel Behavior by Age, 2012.

than previous generations, and are obtaining driver's licenses at record low rates.[20] This cohort uses public transportation more frequently than older Americans and has different expectations for the composition of their transportation system. As the U.S. population grows, it is also changing.

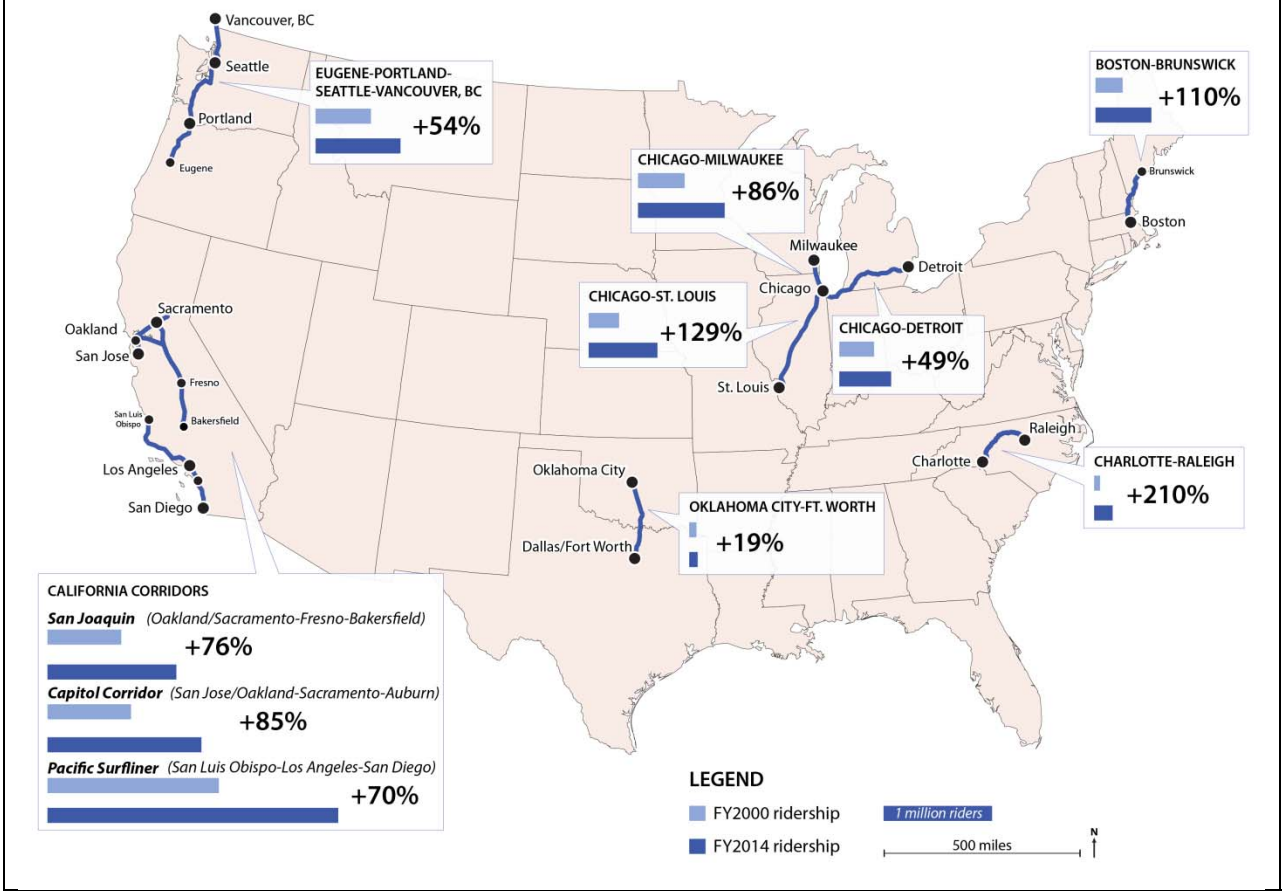
Rail is uniquely well-suited to meeting these challenges. To accommodate population growth, rail provides very high capacity within a relatively limited geographic "footprint." As highway and airport congestion increases, rail can provide a more reliable and efficient travel options for many markets.

Americans are choosing rail in record numbers— Demand for passenger rail continues to climb across the United States. In FY 2015, Amtrak carried 30.8 million passengers and set a new ridership record on the NEC with 11.7 million passengers.[21] These ridership levels are being achieved even before many of the substantial service improvements funded in recent years begin to come online. Once new trains are added and trip times and delays reduced, the system will see even higher levels of ridership.

[20] Dutzik, Tony; Inglis, Jeff; Baxandall, Phineas, Millennials in Motion, Frontier Group/U.S. PIRG Education Fund, October 2014.

[21] Amtrak, Amtrak Ridership and Ticket Revenue Steady in Fiscal Year 2015, December 2, 2015.

RIDERSHIP GROWTH ON SELECTED PASSENGER RAIL CORRIDORS, 2000 TO 2014



Source: Amtrak.

More goods are traveling by rail—The intermodal market has been the fastest growing segment of the freight rail industry since 1980. In 2015, U.S. rail intermodal freight volumes set a new record with nearly 13.7 million containers and trailers, up 1.6 percent over the previous record achieved in 2013.[22] Furthermore, goods are traveling shorter distances by rail on average, as new infrastructure to support intermodal freight comes online. This growth demonstrates the demand for intermodal rail transportation as more shippers decide to take advantage of the mode's inherent economic advantages.

Communities across the Nation are competing for rail investment dollars—Every region in the U.S. has demonstrated demand for investments in passenger rail services. Between

[22] American Association of Railroads, AAR Reports Freight Rail Traffic for 2015, January 6, 2016

August 2009 and April 2011, FRA evaluated nearly 500 applications submitted by 39 states, the District of Columbia, and Amtrak, requesting more than $75 billion. In the absence of recent HSIPR appropriations, prospective applicants have also turned to the Transportation Investment Generating Economic Recovery (TIGER) program, which has awarded more than $300 million for intercity passenger rail projects since the passage of the Recovery Act.

Rail has demonstrated public benefits, domestically and internationally—

- Strengthening passenger rail services can help balance the Nation's transportation network, as demonstrated on the Northeast Corridor (NEC). Since the introduction of the *Acela* service 15 years ago, Amtrak has almost tripled its air/rail market share on the NEC, carrying 75 percent of travelers between New York and Washington.[23] These changing travel patterns can free airport capacity for more cost-efficient long-distance flights.

- Rail is among the most energy-efficient ways to travel, and also has lower pollution emission rates than other modes. One intermodal train between Chicago and Los Angeles can save 75,000 gallons of fuel by replacing 300 trucks.[24] Diverting just 5 percent of the freight that moves by truck to rail would save 800 million gallons of fuel each year; the resulting decrease in greenhouse gas emissions would be the equivalent of taking nearly 2 million cars off the road for a year.[25]

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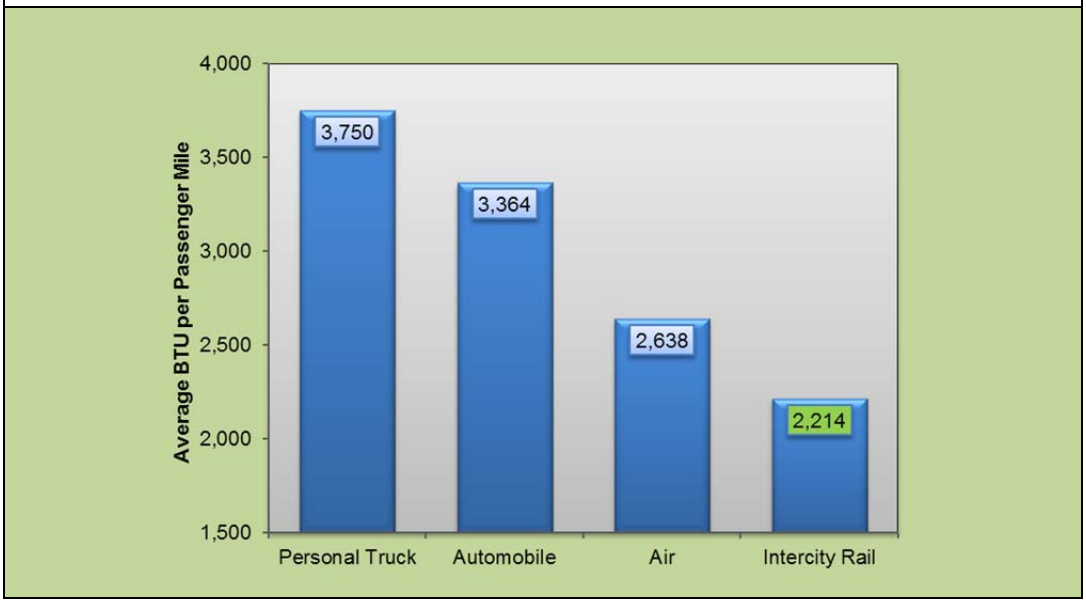
[23] Nixon, Ron, Frustrations of Air Travel Push Passengers to Amtrak, The New York Times, August 15, 2012.

[24] Federal Railroad Administration, Comparative Evaluation of Rail and Truck Fuel Efficiency on Competitive Corridors, November 19, 2009.

[25] American Association of Railroads, Freight Railroads Help Reduce Greenhouse Gas Emissions, August 2015.

ENERGY EFFICIENCY PER PASSENGER-MILE, BY MODE



Source: U.S. Department of Energy, *Transportation Energy Data Book*, Edition 32, July 2013.

- Furthermore, freight rail systems consist primarily of privately-owned infrastructure and are maintained out of railroad revenues. In contrast, heavy intercity trucks pay only 80 percent of the costs they impose on Federal highways through wear-and-tear.[26]

- Finally, investing in rail produces tangible economic returns even beyond the improved transportation network. For example, German towns connected to high-speed rail achieved 2.5 percent greater economic growth than comparable, nearby towns not connected to the rail system.[27]

[26] Federal Highway Administration, Addendum to 1997 *Federal Highway Cost Allocation Study*, May 2000.

[27] Gabriel Ahlfeldt and Arne Feddersen, From Core To Periphery, London School of Economics and University of Hamburg, 2010.

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION
CURRENT PASSENGER RAIL SERVICE (69-X-8320)
PROGRAM AND FINANCING
IN THOUSANDS OF DOLLARS ($000)

Account Number:	**69-8320-Combined-1-401**			
Line	**Line Title**	**2015 ACT**	**2016 CY**	**2017 BY**
	Obligations by program activity:			
0001	Current Passenger Rail Service	-	-	2,288,000
0002	Program Oversight			12,000
0091	Direct program activities, subtotal	-	-	2,300,000
0100	**Total direct program**	**-**	**-**	2,300,000
0900	**Total new obligations**	**-**	**-**	**2,300,000**
	Appropriations, discretionary:			
1101	Appropriation (special or trust fund_			2,300,000
1,137	Appropriations applied to liquidate contract authority			(2,300,000)
1,160	**Appropriation, disc (total)**	**-**	**-**	**-**
1,600	Contract authority, mandatory			2,300,000
1,640	**Contract authority, mand (total)**	**-**	**-**	**2,300,000**
1,850	**Spending auth from offsetting collections, mand (total)**	**-**	**-**	-
1,900	**Budget authority (total)**	**-**	**-**	2,300,000
1,930	**Total budgetary resources available**	**-**	**-**	2,300,000
	Change in obligated balance:			
3,010	Obligations incurred, unexpired accounts	-	-	2,300,000
3,020	Outlays (gross)	-	-	(1,219,000)
	Obligated balance, end of year (net):	**-**	**-**	**1,081,000**
3050	Unpaid obligations, end of year (gross)	**-**	**-**	**(1,219,000)**
3,091	Uncollected pymts, Fed sources, end of year			
3,100	**Obligated balance, start of year (net)**	**-**	**-**	**1,081,000**
3200	**Obligated balance, end of year**	**-**	**-**	**(1,219,000)**
4,160	Budget authority, net (mandatory)			**2,300,000**
4,170	Outlays, net (mandatory)			**1,219,000**
4,180	**Budget authority, net (total)**	**-**	**-**	**2,300,000**
4,190	**Outlays, net (total)**	**-**	**-**	**1,219,000**

EXHIBIT III-1

OPERATING SUBSIDY GRANTS TO THE NATIONAL RAILROAD PASSENGER CORPORATION
Summary by Program Activity
Appropriations, Obligation Limitations, and Exempt Obligations
($000)

ACCOUNT	FY 2015 Actual	FY 2016 Enacted	FY 2017 Request	Change FY 2016-2017
Operating Grants to the National Railroad Passenger Corporation	250,000	288,500	-	-288,500
TOTAL	**250,000**	**288,500**	-	**-288,500**
Full-Time Equivalents	-	-	-	-

Program and Performance Statement

The Federal Railroad Administration receives appropriations to this account to make quarterly grants to the National Railroad Passenger Corporation for the operation of intercity passenger rail.

No funds are requested for this account in 2017. The Administration is proposing funding for these programs within the multi-year clean transportation plan proposal. As part of that proposal, programs currently administered from this account would be continued in a new Current Passenger Rail Service account that would be funded from the Rail Account of the Transportation Trust Fund.

EXHIBIT III-1a

OPERATING SUBSIDY GRANTS TO THE NATIONAL RAILROAD PASSENGER CORPORATION
Summary Analysis of Change from FY 2016 to FY 2017
Appropriations, Obligation Limitations, and Exempt Obligations
($000)

ITEM	Change from FY 2016 to FY 2017 $000	FTE
FY 2016 ENACTED	**288,500**	**-**
PROGRAM CHANGES		
Operating Grants To The National Railroad Passenger Corporation	(288,500)	-
SUBTOTAL, PROGRAM CHANGES	**(288,500)**	**-**
TOTAL FY 2017 REQUEST	**-**	**-**

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION
OPERATING SUBSIDY GRANTS TO AMTRAK (69-X-0121)
PROGRAM AND FINANCING
IN THOUSANDS OF DOLLARS ($000)

Account Number: 69-0121-Combined-1-401

Line	Line Title	2015ACT	2016 CY	2017 BY
	Obligations by program activity:			
0001	Operating Subsidy Grants	250,000	288,500	-
0091	Direct program activities, subtotal	250,000	288,500	-
0100	**Total direct program**	**250,000**	**288,500**	-
0900	**Total new obligations**	**250,000**	**288,500**	-

Account Number: 69-0121-Combined-1-401

Line	Line Title	2015ACT	2016 CY	2017 BY
	Budgetary Resources:			
	Budget authority:			
	Appropriations, mandatory:			
1200	Appropriation	250,000	288,500	-
1,260	**Appropriation, mand (total)**	**250,000**	**288,500**	-
1,900	**Budget authority (total)**	**250,000**	**288,500**	-
1,930	**Total budgetary resources available**	**250,000**	**288,500**	-
	Memorandum (non-add) entries:			
1,940	Unobligated balance expiring			
1,941	Unexpired unobligated balance, end of year	-	-	-
	Change in obligated balance:			
3,010	Obligations incurred, unexpired accounts	250,000	288,500	-
3,020	Outlays (gross)	(250,000)	(288,500)	-
3050	Unpaid obligations, end of year (gross)	-	-	-
	Budget authority and outlays, net:			
	Mandatory:			
4,090	Budget authority, gross	250,000	288,500	-
	Outlays, Gross			
4,100	Outlays from new discretionary authority	250,000	288,500	-
4,101	Outlays from discretionary balances			
4,110	**Outlays, gross (total)**	**250,000**	**288,500**	-
4,180	**Budget authority, net (total)**	-	-	-
4,190	**Outlays, net (total)**	**250,000**	**288,500**	-

CAPITAL AND DEBT SERVICE GRANTS TO THE NATIONAL RAILROAD PASSENGER CORPORATION
Summary by Program Activity
Appropriations, Obligation Limitations, and Exempt Obligations
($000)

ACCOUNT	FY 2015 Actual	FY 2016 Enacted	FY 2017 Request	Change FY 2016-2017
Capital and Debt Service Grants to the National Railroad Passenger Corporation	1,140,000	1,101,500	-	(1,101,500)
TOTAL	**1,140,000**	**1,110,500**	**-**	**(1,101,500)**
Full-Time Equivalents	3	5	-	(5)

Program and Performance Statement

The Federal Railroad Administration receives appropriations to this account to make grants to the National Railroad Passenger Corporation for capital investments.

No funds are requested in this account for 2017. The Administration is proposing funding for these programs within the multi-year clean transportation plan proposal. As part of that proposal, programs currently administered from this account would be continued in a new Current Passenger Rail Service account that would be funded from the Rail Account of the Transportation Trust Fund.

EXHIBIT III-1a

CAPITAL AND DEBT SERVICE GRANTS TO THE NATIONAL RAILROAD PASSENGER CORPORATION
Summary Analysis of Change from FY 2016 to FY 2017
Appropriations, Obligation Limitations, and Exempt Obligations
($000)

ITEM	Change from FY 2015 to FY 2016 $000	FTE
FY 2016 ENACTED	1,101,500	**5**
PROGRAM CHANGES		
Capital and Debt Service Grants to the National Railroad Passenger Corporation	(1,101,500)	(5)
SUBTOTAL, PROGRAM CHANGES	**(1,101,500)**	**(5)**
TOTAL FY 2017 REQUEST	**-**	**-**

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION
CAPITAL & DEBT SERVICE GRANTS TO THE NATIONAL RAILROAD PASSENGER CORPORATION (69-X-0125)
PROGRAM AND FINANCING
IN THOUSANDS OF DOLLARS ($000)

Account Number: 69-0125 -X-1-401

Line	Line Title	2015 ACT	2016 CY	2017 BY
	Obligations by program activity:			
0900	**Total new obligations**	**1,129,800**	**1,128,000**	**-**
	Budgetary Resources:			
	Unobligated balance:			
1,000	Unobligated balance brought forward, Oct 1	21,692,484	32,000	1,000
1,100	Appropriation	1,140,000	1,102,000	-
1,131	Unobligated balance of appropriations permanently reduced	-	(5,000)	
1,160	**Appropriation, disc (total)**	**1,140,000**	**1,102,000**	**-**
1,930	**Total budgetary resources available**	**1,161,707**	**1,129,000**	**1,000**

Account Number:	69-0125 -X-1-401			
Line	Line Title	2015 ACT	2016 CY	2017 BY
1,941	Unexpired unobligated balance, end of year	31,907	-	1,000
	Change in obligated balance:			
	Obligated balance, start of year (net):			
3,000	Unpaid obligations, brought forward, Oct 1 (gross)	169,305	300,000	517,000
3,010	Obligations incurred, unexpired accounts	1,129,800	1,128,000	-
3,011	Adjustments to uncollected pymts, Fed sources, brought forward, Oct 1	-	-	
3,020	Outlays (gross)	(998,760)	(911,000)	(431,000)
3,040	Recoveries of prior year unpaid obligations, unexpired	-	-	-
3041	Recoveries, prior year unpaid obs. Expired account	-	-	-
3050	Unpaid obligations, end of year	300,330	517,000	86,000
3200	**Obligated balance, end of year (net):**	**300,330**	**517,000**	**86,000**
3050	Unpaid obligations, end of year (gross)	300,330	517,000	**86,000**
3,091	Uncollected pymts, Fed sources, end of year			
3,100	**Obligated balance, start of year (net)**	**169,305**	**300,000**	**86,000**
3200	**Obligated balance, end of year**	**300,330**	**517,000**	**86,000**
	Budget authority and outlays, net:			
	Discretionary:			
4,000	Budget authority, gross	1,140,000	1,097,000	-
	Outlays, gross:			
4,010	Outlays from new discretionary authority	834,876	711,000	-
4,011	Outlays from discretionary balances	163,884	200,000	431,000
4,020	**Outlays, gross (total)**	**998,760**	**911,000**	**431,000**
4,070	Budget authority, net (discretionary)	1,140,000	1,097,000	-
4,080	**Outlays, net (discretionary)**	**998,760**	**911,000**	**431,000**
4,180	**Budget authority, net (total)**	**1,140,000**	**1,097,000**	**-**
4,190	**Outlays, net (total)**	**998,760**	**911,000**	**431,000**

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION
GRANTS TO NATIONAL RAILROAD PASSENGER CORPORATION (69-X-0704)
PROGRAM AND FINANCING
IN THOUSANDS OF DOLLARS ($000)

Account Number: 69-0704 -0-1-401

Line	Line Title	2015 ACT	2016 CY	2017 BY
	Obligations by program activity:			
0900	**Total new obligations**	**50,730**	**32,000**	-
	Budgetary Resources:			
	Unobligated balance:			
1000	Unobligated balance brought forward, Oct 1	82,548	32,000	-
1050	**Unobligated balance (total)**	**82,548**	**32,000**	-
1930	**Total budgetary resources available**	**31,818**	**32,000**	-
	Memorandum (non-add) entries:			
1940	Unobligated balance expiring			
1941	Unexpired unobligated balance, end of year	31,818	-	-
	Change in obligated balance:			
	Obligated balance, start of year (net):			
3000	Unpaid obligations, brought forward, Oct 1 (gross)	61,020	58,000	40,000
3001	Adjustments to unpaid obligations, brought forward, Oct 1			
3010	Obligations incurred, unexpired accounts	50,730	32,000	-
3011	Obligations incurred: Expired accounts	0	-	-
3020	Outlays (gross)	-54,005	-50,000	-40,000
3040	Recoveries of prior year unpaid obligations, unexpired	-	-	-
3041	Recoveries of prior year unpaid obligations, expired accts	-218	-	-
	Obligated balance, end of year (net):	**57,527**	**40,000**	-
3050	Unpaid obligations, end of year (gross)	**57,527**	**40,000**	-
3091	Uncollected pymts, Fed sources, end of year			
3100	**Obligated balance, start of year (net)**	**61,020**	**58,000**	-
3200	**Obligated balance, end of year**	**57,527**	**40,000**	-
	Budget authority and outlays, net:			
	Discretionary:			

Account Number:	69-0704 -0-1-401			
Line	Line Title	2015 ACT	2016 CY	2017 BY
4000	Budget authority, gross	50,730	-	-
	Outlays, gross:			
4010	Outlays from new discretionary authority	-	-	
4011	Outlays from discretionary balances	54,005	50,000	40,000
4080	**Outlays, net (discretionary)**	**54,005**	**50,000**	**40,000**
4190	**Outlays, net (total)**	**54,005**	**50,000**	**40,000**

Program and Performance Statement:

The National Railroad Passenger Corporation (Amtrak) was established in 1970 through the Rail Passenger Service Act. Amtrak is operated and managed as a for-profit corporation with all Board members appointed by the President, with the advice and consent of the Senate. Amtrak is not an agency or instrument of the U.S. Government, although since the railroad's creation FRA has provided it annual grants for operating and capital costs.

Prior to 2006, FRA received annual appropriations in this account for grants to Amtrak. Since that time, FRA has received individual appropriations for capital, operating, and efficiency incentive grants.

In addition, the American Recovery and Reinvestment Act of 2009 (Recovery Act) provided $1.3 billion to Amtrak for capital grants, of which $450 million was for improving security and $850 million was for improving infrastructure.

In FY 2013, FRA received $112 million in this account from the Disaster Relief Appropriations Act of FY 2013 (PL 113–2) to fund Amtrak's recovery from Superstorm Sandy, including $30 million for repair work and $81 million for disaster mitigation projects. FRA also received a $185 million transfer from the Federal Transit Administration for the Hudson Yards disaster resiliency project in New York City. No funds are requested for this account for fiscal year 2016.

EXHIBIT III-1

RAILROAD SAFETY GRANTS
Summary by Program Activity
Appropriations, Obligation Limitations, and Exempt Obligations
($000)

ACCOUNT	FY 2015 Actual	FY 2016 Enacted	FY 2017 Request	Change FY 2016-2017
Railroad Safety Grants	**10,000**	**50,000**	**-**	**(50,000)**
TOTAL	**10,000**	**50,000**	**-**	**(50,000)**
Full-time Equivalents	-	-	-	-

Program and Performance Statement

Funding for this program was provided in 2015 for competitive grants for grade crossing and track improvement on rail routes that transport energy products. For 2016, $50 million was provided for Railroad Safety Infrastructure Improvement grants and Railroad Safety Technology grants. No new funds are requested in this account for 2017.

EXHIBIT III-1a

Railroad Safety Grants
SUMMARY ANALYSIS OF CHANGE FROM FY 2016 TO FY 2017
Appropriations, Obligations, Limitations, and Exempt Obligations
($000)

ITEM	Change from FY 2016 to FY 2017 $000	FTE
FY 2016 ENACTED	**50,000**	**-**
PROGRAM CHANGES		
Railroad Safety Grants	(50,000)	-
SUBTOTAL, PROGRAM CHANGES	**(50,000)**	**-**
TOTAL FY 2017 REQUEST	**-**	**-**

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION
RAILROAD SAFETY GRANTS (69-0702)
PROGRAM AND FINANCING
IN THOUSANDS OF DOLLARS ($000)

Account Number: 69-0702-0-1-401

Line	Line Title	2015 Act	2016 CY	2017 BY
	Obligations by program activity:			
0001	Railroad Safety Grants		20,000	40,000
0002	Railroad Safety		-	
0900	**Total new obligations**	**-**	**20,000**	**40,000**
	Budgetary Resources:			
	Unobligated balance:			
1,000	Unobligated balance brought forward, Oct 1	7	10,000	40,000
1,021	Recoveries of prior year unpaid obligations	-	-	-
1,050	**Unobligated balance (total)**	**7**	**10,000**	**40,000**
	Budget authority:			
	Appropriations, discretionary:			
1,100	Appropriation	10,000	50,000	-
1,160	**Appropriation, disc (total)**	**10,000**	**50,000**	**-**
1,900	**Budget authority (total)**	**10,000**	**50,000**	**-**
1930	**Total budgetary resources available**	**10,007**	**60,000**	**40,000**
	Obligated balance, start of year (net):			
3,000	Unpaid obligations, brought forward, Oct 1 (gross)		-	14,000
3,010	Obligations incurred, unexpired accounts		20,000	40,000
3,011	Obligations incurred, expired accounts			

Account Number: **69-0702-0-1-401**

Line	Line Title	2015 Act	2016 CY	2017 BY
3,020	Outlays (gross)		(6,000)	(24,000)
3,040	Recoveries of prior year unpaid obligations, unexpired	-		
3041	Recoveries of prior year unpaid obligations, expired			
	Obligated balance, end of year (net):	-	-	-
3050	Unpaid obligations, end of year (gross)	-	14,000	30,000
3,100	**Obligated balance, start of year (net)**	**-**	**-**	**14,000**
3200	**Obligated balance, end of year**	**-**	**14,000**	**30,000**
	Budget authority and outlays, net:			
	Discretionary:			
4,000	Budget authority, gross	10,000	50,000	-
	Outlays, gross:			
4,010	Outlays from new discretionary authority		5,000	
4,011	Outlays from discretionary balances		1,000	24,000
4,020	**Outlays, gross (total)**	**-**	**6,000**	**24,000**
4,070	**Budget authority, net (discretionary)**	**10,000**	**50,000**	**-**
4,080	**Outlays, net (discretionary)**	**-**	**6,000**	**24,000**
4,180	**Budget authority, net (total)**	**10,000**	**50,000**	**-**
4,190	**Outlays, net (total)**	**-**	**6,000**	**24,000**

EXHIBIT III-1

NORTHEAST CORRIDOR IMPROVEMENT PROGRAM
Summary by Program Activity
Appropriations, Obligation Limitations, and Exempt Obligations
($000)

ACCOUNT	FY 2015 Actual	FY 2016 Enacted	FY 2017 Request	Change FY 2016-2017
Northeast Corridor Improvement Program	-	19,163	-	-19,163
TOTAL	-	**19,163**	-	**-19,163**
Full-time Equivalents	-	-	-	-

Program and Performance Statement

Previous to FY 2001, this program provided funds to continue the upgrade of passenger rail service in the corridor between Washington, District of Columbia, and Boston, Massachusetts. Since FY 2001, capital funding has been provided in the National Railroad Passenger Corporation (Amtrak) appropriation.

For 2016, $19 million was provided for grants to Amtrak for shared use infrastructure on the Northeast Corridor identified in the Northeast Corridor Operations Advisory Commission's 5 year capital plan. No funds are requested for this account in 2017.

The Administration is proposing funding for these programs within the multi-year clean transportation plan proposal. As part of that proposal, programs currently administered from this account would be continued in a new Current Passenger Rail Account that would be funded from the Rail Account of the Transportation Trust Fund.

EXHIBIT III-1a

NORTHEAST CORRIDOR IMPROVEMENT PROGRAM
Summary Analysis of Change from FY 2016 to FY 2017
Appropriations, Obligation Limitations, and Exempt Obligations
($000)

ITEM	Change from FY 2016 to FY 2017 $000	FTE
FY 2016 ENACTED	**19,163**	**-**
PROGRAM CHANGES		
Northeast Corridor Improvement Program	(-19,163)	-
SUBTOTAL, PROGRAM CHANGES	**(-19,163)**	**-**
TOTAL FY 2017 REQUEST	**-**	**-**

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION
NORTHEAST CORRIDOR IMPROVEMENT PROGRAM (69-X-0123)
PROGRAM AND FINANCING
IN THOUSANDS OF DOLLARS ($000)

Account Number: 69-0123-0-1-401

Line	Line Title	2015 ACT	2016 CY	2017 BY
	Obligations by program activity:			
0001	Northeast Corridor Improvement Program	1,000	5,000	14,000
0900	**Total new obligations**	**-**	**5,000**	**-**
	Budgetary Resources:			
	Unobligated balance:			
1000	Unobligated balance brought forward, Oct 1	1,000	-	14,000
1050	**Unobligated balance (total)**	**1,000**	**-**	**14,000**
	Budget authority:			

Account Number: 69-0123-0-1-401

Line	Line Title	2015 ACT	2016 CY	2017 BY
1100	Appropriation	-	19,000	-
1131	Unobligated balance of appropriations permanently reduced	-	-	-
1160	**Appropriation, disc (total)**	**-**	**19,000**	**-**
1930	**Total budgetary resources available**	**1,000**	**19,000**	**14,000**
	Memorandum (non-add) entries:			
1940	Total Budgetary Resources Available	-	19,000	14,000
1941	Unexpired unobligated balance, end of year	-	14,000	-
	Change in obligated balance:			
3000	Unpaid obligations, brought forward, Oct 1 (gross)	-	1,000	1,000
3010	Obligations incurred, unexpired accounts	1,000	5,000	14,000
3020	Outlays (gross)	-	(5,000)	(10,000)
3040	Recoveries of prior year unpaid obligations, unexpired	-	-	-
	Obligated balance, end of year (net):	1,000	1,000	5,000
3050	Unpaid obligations, end of year (gross)	1,000	1,000	5,000
3100	**Obligated balance, start of year (net)**	**-**	**1,000**	**1,000**
3200	**Obligated balance, end of year**	**1,000**	**1,000**	**5,000**
	Budget authority and outlays, net:			
	Discretionary:			
4000	Budget authority, gross	-	19,000	-
	Outlays, gross:			
4010	Outlays from new discretionary authority			
4011	Outlays from discretionary balances	-	-	10,000
4020	**Outlays, gross (total)**	**-**	**5,000**	**10,000**
4070	Budget authority, net (discretionary)	-	19,000	-
4080	**Outlays, net (discretionary)**	**-**	**5,000**	**10,000**
4180	**Budget authority, net (Disc. And Mand.)**	**-**	**19,000**	**-**
4190	**Outlays, net (total)**	**-**	**5,000**	**10,000**

EXHIBIT III-1

RAILROAD REHABILITATION AND IMPROVEMENT FINANCING PROGRAM
Summary by Program Activity
Appropriations, Obligation Limitations, and Exempt Obligations
($000)

Account	FY 2015 Enacted	FY 2016 Enacted	FY 2017 Request	Change FY 2016-2017
RAILROAD REHABILITATION AND IMPROVEMENT FINANCING	-	1,960	-	-1,960
TOTAL	**-**	**1,960**	**-**	**-1,960**

Program and Performance Statement

The Transportation Equity Act of the 21st Century of 1998 established the Railroad Rehabilitation and Improvement Financing loan and loan guarantee program. The Safe, Accountable, Flexible, Efficient Transportation Equity Act of 2005: A Legacy for Users, changed the program to allow FRA to issue direct loan and loan guarantees up to $35,000,000,000, and it required that no less than $7,000,000,000 be reserved for projects primarily benefiting freight railroads other than Class I carriers. The program was expanded by the Rail Safety Improvement Act of 2008 and again by the Fixing America's Surface Transportation Act in 2015. Loans may be used: (1) to acquire, improve, or rehabilitate intermodal or rail equipment or facilities, including track, components of track, bridges, yards, buildings, or shops; (2) to refinance debt; (3) to develop and establish new intermodal or railroad facilities, (4) to reimburse related planning and design expenses; (5) finance (by December 2019) certain economic development related to passenger rail stations. For 2016, $1.96 million was made available to assist Class II and Class III railroads to applicant expenses in preparing to apply and applying for direct loans and loan guarantees. The recently enacted FAST Act made a series of updates to the program's authorities. These include expanding project eligibilities, changing repayment terms, and enhancing program management by, among other things, providing application processing guidelines and supporting multiple related projects through the use of master credit agreements.

What Is This Program and Why is it Necessary?

The RRIF program is authorized to provide direct loans or loan guarantees up to $35 billion of which $7 billion is reserved for projects benefiting freight railroads other than Class I carriers.

RRIF loans may be used to:

- Acquire, improve, or rehabilitate intermodal or rail equipment or facilities, including track, components of track, bridges, yards, buildings and shops, and costs related to these activities, including pre-construction costs;
- Refinance outstanding debt incurred for the purposes listed above;
- Develop or establish new intermodal or railroad facilities;
- Reimburse planning and design expenses related to the activities described above;
- Finance economic development, including commercial and residential development, and related infrastructure in certain circumstances (available through December 4, 2019.)

The program gives priority to projects that provide public benefits, including benefits to public safety, the environment and economic and transit-oriented development. In providing financial assistance through RRIF, FRA must fulfill its obligations under the National Environmental Policy Act and related laws, regulations, and orders.

The program serves a number of goals in the interest of increasing overall investment in the nation's network of rail infrastructure. Recently, the program has supported innovative projects like the rail-component of Denver Union Station, and critical safety investments like the New York Metropolitan Transportation Authority's work to comply with positive train control.

In FY 2015, FRA approved three loans worth $982.1 million dollars, taking on average 466 days to process each loan. Currently, FRA is evaluating and corresponding with 6 RRIF potential and actual applications seeking a total of $3.212 billion in financial assistance.

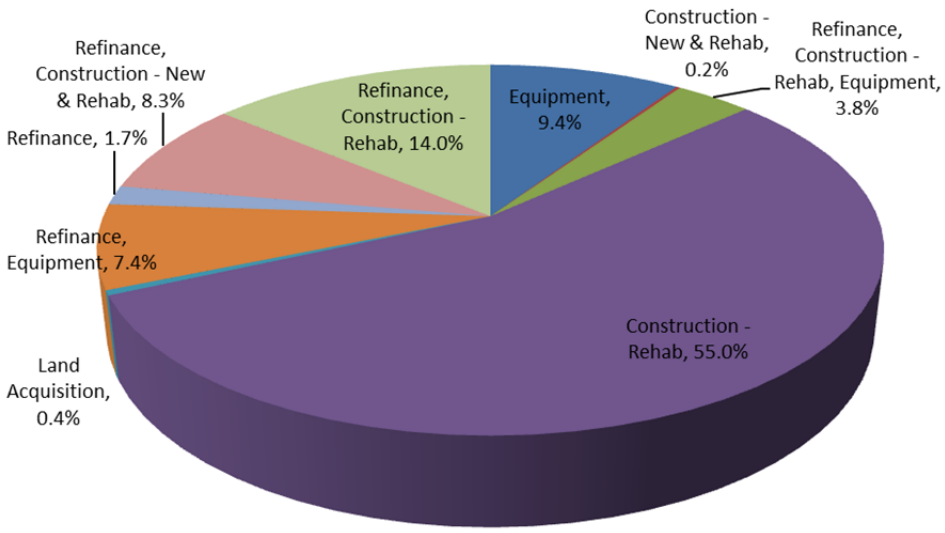
Eligible applicants include government sponsored authorities and corporations; railroads, and other joint ventures with eligible applicants. Direct loans can be made for up to one hundred percent of the total project cost, for terms up to 35 years beyond substantial completion of the project and at an interest rate not less than the cost of borrowing for a comparable term based on the current Treasury rate at the time of closing.

The program is necessary to provide financing for rail projects that would otherwise be funded through the private markets. For example, small railroads cannot easily access long-term financing from private financial institutions. Short lines, being mostly independent and privately held, do not enjoy the same access to private-sector capital as the Class I railroads. Private sector loans with favorable rates are typically only available on short term loans. Short line railroads need long-term loans to support track and structure upgrades that will enjoy useful lives of 20 to 30 years. Given the greater risk of longer term repayments, these loans carry a much higher interest rate. The cost to upgrade and repair a rail line is expensive, but necessary, to avoid safety-related speed reductions and derailments. Of the 35 loans FRA has made since 2002, 15 were for less than $10 million.

Likewise, the program has funded major safety investments and forward leaning projects. In FY 2015, FRA issued a $967 million loan to the New York Metropolitan Transportation Authority, the nation's largest commuter rail service provider, for PTC deployment, which is a requirement that most commuter railroads and shortlines cannot accommodate in their annual capital budgets. In another example, the program was part of the financing package for the innovative Denver Union Station project, which combined multiple sources of public and private funds to promote livability and provide environmental, social and economic benefits to the Denver region.

FRA's assessment of RRIF loans to short line railroads shows that 55 percent went to construction (rehabilitation) while 14 percent went to loans for a combination of refinancing and construction (rehabilitation) (See Figure 1.) Figure 1 also shows that 9.4 percent of RRIF loans went to equipment purchases and 8.3 percent of loans were for a combination of refinancing and construction (new and rehabilitation). Loans that were for refinancing, construction (rehabilitation), and equipment accounted for 3.8 percent. Refinancing-specific loans accounted for 1.7 percent, loans for land acquisitions 0.4 percent, and construction (new and rehabilitation)-specific loans for 0.2 percent.

Figure 1. Class II and Class III Railroad RRIF Loan Allocation



Source: FRA data, as of December, 2014.

FRA's recent study of investment needs of the rail industry[1] found that the small railroads generally have insufficient capital to meet their infrastructure needs:

> Carriers reported that they did not believe that they would be able to meet all of these future spending needs… Overall, the Class II carriers responding reported that they would meet nearly 83 percent of their spending requirements for infrastructure. The Class IIIs reported that they would be able to meet 69 percent of their needs. For equipment, the Class IIs reported that they would be able to meet 71 percent of equipment, while the Class IIIs reported that they would meet nearly 69 percent.

In the report, FRA estimated the entire shortline industry faces an unmet investment need of $6.9 billion.

[1] Class II and Class III Railroad Capital Needs and Funding Sources. http://www.fra.dot.gov/eLib/Details/L16020

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION
RAILROAD REHABILITATION IMPROVEMENT FUND PROGRAM ACCOUNT (69-15-0750)
PROGRAM AND FINANCING
IN THOUSANDS OF DOLLARS ($000)

Account Number	69-0750-0			
Line	**Line Title**	**2015 Act**	**2016 CY**	**2017 BY**
	Obligations by program activity:			
0001	Rounding Amount	-	-	-
	Credit program obligations:			
0705	Reestimates of direct loan subsidy	4,118	-	-
0706	Interest on reestimates of direct loan subsidy	27,337	-	-
0709	Administrative expenses	-	1,960	-
0791	Direct program activities, subtotal	31,455	1,960	-
0900	**Total new obligations**	**31,455**	**1,960**	**-**
	Budgetary resources:			
	Budget authority:			
	Appropriations, discretionary:			
1100	Appropriation	-	1,960	-
1160	Appropriation, discretionary (total)	-	1,960	-
	Appropriations, mandatory:			
1200	Appropriation	31,455	-	-
1260	Appropriations, mandatory (total)	31,455	-	-
1930	**Total budgetary resources available**	**31,455**	**1,960**	**-**

Line	Line Title	2015 Act	2016 CY	2017 BY
3000	Unpaid obligations, brought forward, Oct 1	-	-	980
3010	Obligations incurred, unexpired accounts	31,455	1,960	-
3020	**Outlays (gross)**	**(31,455)**	**(980)**	**(980)**
3050	Unpaid obligations, end of year	-	980	-
	Memorandum (non-add) entries:			
3100	Obligated balance, start of year	-	-	980
3200	Obligated balance, end of year	-	980	-
	Budget authority and outlays, net:			
	Discretionary:			
4000	Budget authority, gross	-	1,960	-
	Outlays, gross:			
4010	Outlays from new discretionary authority	-	980	-
4011	Outlays from discretionary balances	-	-	980
4020	Outlays, gross (total)	-	980	980
4070	Budget authority, net (discretionary)	-	1,960	-
4080	Outlays, net (discretionary)	-	980	980
	Mandatory:			
4090	**Budget authority, gross**	**31,455**	**-**	**-**
	Outlays, gross:			
4100	Outlays from new mandatory authority	31,455	-	-
4160	Budget authority, net (mandatory)	31,455	-	-
4170	Outlays, net (mandatory)	31,455	-	-
4180	**Budget authority, net (total)**	**31,455**	**1,960**	**-**

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION
EMERGENCY RAILROAD REHABILITATION AND REPAIR (69-X-0124)
PROGRAM AND FINANCING
IN THOUSANDS OF DOLLARS ($000)

Account Number 69-0124 -0-1-401

Line	Line Title	2015 ACT	2016 CY	2017 BY
	Obligations by program activity:			
0001	Emergency Railroad Rehabilitation & Repair	1,656	-	-
0900	**Total new obligations**	**1,656**	**-**	**-**
	Budgetary Resources:			
	Unobligated balance:			
1000	Unobligated balance brought forward, Oct 1	1,656	-	-
1930	**Total budgetary resources available**	**1,656**	**-**	**-**
3000	Unpaid obligations, brought forward, Oct 1 (gross)	256	-	-
3001	Adjustments to unpaid obligations, brought forward, Oct 1			
3010	Obligations incurred, unexpired accounts	1,656	-	-
3020	Outlays (gross)	(1,870)	-	-
3040	Recoveries of prior year unpaid obligations, unexpired	-	-	-
3050	Unpaid obligations, end of year (gross)	42	-	-
3100	**Obligated balance, start of year (net)**	**256**	**-**	**-**
3200	**Obligated balance, end of year**	**42**	**-**	**-**
	Budget authority and outlays, net:			
	Discretionary:			
4010	Outlays from new discretionary authority	1,656		
4011	Outlays from discretionary balances	214	-	-
4080	**Outlays, net (discretionary)**	**1,870**	**-**	**-**
4190	**Outlays, net (total)**	**1,870**	**-**	**-**

Program and Performance Statement

Funding for this program was provided in a supplemental appropriation in 2008. This program provides discretionary grants to States to repair and rehabilitate Class II and Class III railroad infrastructure damaged by hurricanes, floods, and other natural disasters in areas for which the President declared a major disaster under title IV of the Robert T. Stafford Disaster

Relief and Emergency Assistance Act of 1974. No new funding is requested in 2017 for this program.

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION
RAILROAD SAFETY TECHNOLOGY (69-X-0701)
PROGRAM AND FINANCING
IN THOUSANDS OF DOLLARS ($000)

Account Number:	**69-0701-0-1-401**			
Line	**Line Title**	**2015 Act**	**2016 CY**	**2017 BY**
	Obligations by program activity:			
0001	Railroad Safety Technology Program	550	0	0
0900	**Total new obligations**	**550**	**0**	**0**
	Budgetary Resources:			
	Unobligated balance:			
1000	Unobligated balance brought forward, Oct 1	603	0	-
1021	Recoveries of prior year unpaid obligations	59	-	-
1041	Anticpated recoveries of prior year unpaid obligations			-
1050	**Unobligated balance (total)**	**662**	**0**	**-**
	Budget authority:			
	Appropriations, discretionary:			
1160	**Appropriation, disc (total)**	**0**	**0**	**0**
1930	**Total budgetary resources available**	**662**	**0**	**0**
	Change in obligated balance:			
	Obligated balance, start of year (net):			
3000	Unpaid obligations, brought forward, Oct 1 (gross)	10,894	8,000	3,000
3010	Uncollected pymts, Fed sources, brought forward, Oct 1	550	0	0
3020	Outlays (gross)	-3,602	-5,000	- 3,000
3040	Recoveries of unpaid prior year obligations, unexpired	-59		-
3050	Unpaid obligations, end of year	7,783	3,000	0
3100	**Obligated balance, start of year (net)**	**10,894**	**8,000**	**3,000**
3200	**Obligated balance, end of year (net)**	**7,783**	**3,000**	**-**
	Budget authority and outlays, net:			
	Discretionary:			
	Outlays, gross:			
4010	Outlays from new discretionary authority	5		

Account Number:	69-0701-0-1-401			
Line	**Line Title**	**2015 Act**	**2016 CY**	**2017 BY**
4080	Outlays, net (discretionary)	3,602	5,000	3,000
4160	Budget authority, net (mandatory)			
4170	Outlays, net (mandatory)			
4180	Budget authority, net (total)	-	-	-
4190	Outlays, net (total)	3,602	5,000	3,000

Program and Performance Statement

The Railroad Safety Technology Program is a competitive grant program for the deployment of train control technologies to passenger and freight rail carriers, railroad suppliers, and State and local governments. Projects may include the deployment of train control technologies, train control component technologies, processor-based technologies, electronically controlled pneumatic brakes, rail integrity inspection systems, rail integrity warning systems, switch position indicators and monitors, remote control power switch technologies, track integrity circuit technologies, and other new technologies that improve the safety of railroad systems.

FRA has given priority to projects that make technologies interoperable between railroad systems; accelerate the deployment of train control technology on high risk corridors, such as those that have high volumes of hazardous materials shipments, or over which commuter or passenger trains operate; or benefit both passenger and freight safety and efficiency.

No new funds are requested in this account for fiscal year 2017.

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION
Intercity Passenger Rail Grant Program (69-X-0715)
PROGRAM AND FINANCING
IN THOUSANDS OF DOLLARS ($000)

Account Number: 69-0715 -0-1-401

Line	Line Title	2015 ACT	2016 CY	2017 BY
	Obligations by program activity:			
0001	Intercity Passenger Rail Grants	-	0	-
0002	Oversight	-	0	-
0900	**Total new obligations**	-	**0**	**0**
	Budgetary Resources:			
	Unobligated balance:			
1000	Unobligated balance brought forward, Oct 1	18,600	20,000	20,000
1050	**Unobligated balance (total)**	**19,775**	**20,000**	**20,000**
1930	**Total budgetary resources available**	**19,775**	**20,000**	**20,000**
	Memorandum (non-add) entries:			
1940	Unobligated balance expiring			
1941	Unexpired unobligated balance, end of year	19,775	20,000	20,000
	Change in obligated balance:			
	Obligated balance, start of year (net):			
3000	Unpaid obligations, brought forward, Oct 1 (gross)	39,869	26,000	12,000
3010	Obligations incurred, unexpired accounts	-	0	0
3020	Outlays (gross)	-12,886	-14,000	-10,000
3040	Recoveries of prior year unpaid obligations, unexpired	-1,175	-	-
	Obligated balance, end of year (net):	25,808	12,000	2,000
3050	Unpaid obligations, end of year (gross)	25,808	12,000	2,000
3091	Uncollected pymts, Fed sources, end of year			
3100	**Obligated balance, start of year (net)**	**39,869**	**26,000**	**12,000**
3200	**Obligated balance, end of year**	**25,808**	**12,000**	**2,000**
	Budget authority and outlays, net:			
	Discretionary:			
4011	Outlays from discretionary balances	12,886	14,000	10,000
4020	**Outlays, gross (total)**	**12,886**	**14,000**	**10,000**
	Offsets against gross budget authority and outlays:			
	Offsetting collections (collected) from:			
4080	**Outlays, net (discretionary)**	**12,886**	**14,000**	**10,000**
4190	**Outlays, net (total)**	**12,886**	**14,000**	**10,000**

Program and Performance Statement

This competitive grant program encourages state participation in passenger rail service. Under this program, a State or States may apply for grants for up to 50 percent of the cost of capital investments necessary to support improved intercity passenger rail service that either requires no operating subsidy or for which the State or States agree to provide any needed operating subsidy. To qualify for funding, States must include intercity passenger rail service as an integral part of statewide transportation planning as required under 23 U.S.C. 135. Additionally, the specific project must be on the Statewide Transportation Improvement Plan at the time of application.

No new funds are requested for this program in 2017.

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION
RAIL LINE RELOCATION AND IMPROVEMENT PROGRAM (69-X-0716)
PROGRAM AND FINANCING
IN THOUSANDS OF DOLLARS ($000)

Account Number: 69-0716 -0-1-401

Line	Line Title	2015 Act	2016 CY	2017 BY
	Obligations by program activity:			
0001	Rail Line Relocation	3,147	3,000	3,000
0900	**Total new obligations**	**3,147**	**3,000**	3,000
	Budgetary Resources:			
	Unobligated balance:			
1000	Unobligated balance brought forward, Oct 1	10,503	10,000	5,000
1021	Recoveries of prior year unpaid obligations	1,790	-	-
1050	**Unobligated balance (total)**	**12,293**	**10,000**	5,000
1930	**Total budgetary resources available**	**12,293**	**10,000**	5,000
1941	Unexpired unobligated balance, end of year	9,146	5,000	2,000
	Change in obligated balance:			
	Obligated balance, start of year (net):			
3000	Unpaid obligations, brought forward, Oct 1 (gross)	31,890	19,000	12,000
3010	Obligations incurred, unexpired accounts	3,147	3,000	3,000
3020	Outlays (gross)	-13,794	-10,000	-7,000
3040	Recoveries of prior year unpaid obligations, unexpired	-1,790	-	-
	Obligated balance, end of year (net):	19,453	12,000	8,000
3050	Unpaid obligations, end of year (gross)	19,453	12,000	8,000
3100	**Obligated balance, start of year (net)**	**31,890**	**19,000**	**12,000**
3200	**Obligated balance, end of year**	**19,453**	**12,000**	**8,000**

Account Number: 69-0716 -0-1-401

Line	Line Title	2015 Act	2016 CY	2017 BY
	Outlays, gross:			
4011	Outlays from discretionary balances	13,794	10,000	7,000
4020	**Outlays, gross (total)**	**13,794**	**10,000**	**7,000**
4070	Budget authority, net (discretionary)	0	-2,000	0
4080	**Outlays, net (discretionary)**	**13,794**	**10,000**	**7,000**
4180	**Budget authority, net (total)**	**0**	**-2,000**	**0**
4190	**Outlays, net (total)**	**13,794**	**10,000**	**7,000**

Program and Performance Statement

This program provides Federal assistance to States for relocating or making necessary improvements to local rail lines. No new funds are requested for this program in 2017.

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION
CAPITAL ASSISTANCE HIGH-SPEED RAIL ACCOUNT (69-X-0719)
PROGRAM AND FINANCING
IN THOUSANDS OF DOLLARS ($000)

Account Number: 69-X-0719-X-Combined-401

Line	Line Title	2015 ACT	2016 CY	2017 BY
	Obligations by program activity:			
0003	Capital Assistance High-Speed Rail Corridors and IPR Service Grants	-	-	58,000,000
0004	Capital Assistance High-Speed Rail Corridors and IPR Service Oversight	4,898,000	4,000,000	3,000,000
0006	Capital Assistance High-Speed Rail Corridors and IPR Service Research and Demonstrating Technologies	-	-	-
	Capital Assistance High-Speed Rail Corridors and IPR Service Planning Activities	-	-	-
0100	**Total direct program**	**4,898,000**	**4,000,000**	**61,000,000**
0900	**Total new obligations**	**4,898,000**	**4,000,000**	**61,000,000**
	Budgetary Resources:			
	Unobligated balance:			
1,000	Unobligated balance brought forward, Oct 1	68,458,000	65,000,000	61,000,000
1,021	Recoveries of prior year unpaid obligations	2,146,000	-	10,000,000
1,050	**Unobligated balance (total)**	**70,604,000**	**65,000,000**	**71,000,000**
1,930	**Total budgetary resources available**	**70,604,000**	**65,000,000**	**71,000,000**
	Memorandum (non-add) entries:			
1,940	Unobligated balance expiring	-	-	-
1,941	Unexpired unobligated balance, end of year	65,706,000	61,000,000	10,000,000
	Change in obligated balance:			
	Obligated balance, start of year (net):			
3,000	Unpaid obligations, brought forward, Oct 1 (gross)	7,324,000	6,211,000	4,150,000
3,010	Obligations incurred, unexpired accounts	4,898,000	4,000	61,000
3,020	Outlays (gross)	-	(2,065,000)	(3,052,000)
3,040	Recoveries of prior year unpaid obligations, unexpired	(2,146,000)	-	(10,000)
3041	Recoveries of prior year unpaid obligations, expired	(20,307,000)	-	-

Account Number: 69-X-0719-X-Combined-401

Line	Line Title	2015 ACT	2016 CY	2017 BY
	Obligated balance, end of year (net):	(10,231,000)	4,150,000	1,149,000
3050	Unpaid obligations, end of year (gross)	6,210,000	5,770,000	1,149,000
3,100	**Obligated balance, start of year (net)**	**7,324,000**	**6,211,000**	**4,150,000**
3200	**Obligated balance, end of year**	**6,210,000**	**5,770,000**	**1,149,000**
4,011	Outlays from discretionary balances	1,095,000	2,065,000	3,052,000
4,020	**Outlays, gross (total)**	**1,095,000**	**2,065,000**	**3,052,000**
4,060	**Additional offsets against budget authority only (total)**	-	-	-
4,070	Budget authority, net (discretionary)	-	-	-
4,080	**Outlays, net (discretionary)**	**1,095,000**	**2,065,000**	**3,052,000**
4,110	**Outlays, gross (total)**	**1,095,000**	**2,065,000**	**3,052,000**
4,170	Outlays, net (mandatory)	-	-	-
4,190	**Outlays, net (total)**	**1,095,000**	**2,065,000**	**3,052,000**

Program and Performance Statement

Through this program, FRA provides capital grants to States to invest and improve intercity passenger rail service, including the development of new high-speed rail capacity. Activity in this account includes the $8 billion provided by the American Recovery and Reinvestment Act of 2009 and an additional $2.1 billion provided in subsequent enacted appropriations. No funds are requested in this account for 2017.

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION
NEXT GENERATION HIGH SPEED RAIL (69-X-0722)
PROGRAM AND FINANCING
IN THOUSANDS OF DOLLARS ($000)

Account Number: **69-0722-X-1-401**

Line	Line Title	2015 ACT	2016 CY	2017 BY
	Obligations by program activity:			
0001	Next Generation High Speed Rail	-	-	-
0900	**Total new obligations**	-	**5,000**	-
	Budgetary Resources:			
1,000	Unobligated balance brought forward, Oct 1	9,038	10,000	-
1,021	Recoveries of prior year unpaid obligations	530	-	-
1,050	**Unobligated balance (total)**	**9,568**	**10,000**	-
	Budget authority:			
1,131	Unobligated balance of appropriations permanently reduced	-	(5,000)	-
1,160	**Appropriation, disc (total)**	**-**	**(5,000)**	-
1,850	**Spending auth from offsetting collections, mand (total)**	**-**	**-**	**-**
1,930	**Total budgetary resources available**	**9,568**	**5,000**	**-**
1,941	Unexpired unobligated balance, end of year	9,568	-	-
	Change in obligated balance:			
3,000	Unpaid obligations, brought forward, Oct 1 (gross)	2,480	1,000	5,000
3,010	Obligations incurred, unexpired accounts	-	5,000	-
3,020	Outlays (gross)	(442)	(1,000)	-
3,040	Recoveries of prior year unpaid obligations, unexpired	(530)	-	-
3050	Unpaid obligations, end of year (gross)	1,508	5,000	5,000
3,100	**Obligated balance, start of year (net)**	**2,480**	**1,000**	**5,000**
3200	**Obligated balance, end of year**	**1,508**	**5,000**	**5,000**
	Budget authority and outlays, net:			
	Discretionary:			
4,000	Budget authority, gross	-	(5,000)	-

Account Number:	69-0722-X-1-401			
Line	**Line Title**	**2015 ACT**	**2016 CY**	**2017 BY**
	Outlays, gross:			
4,011	Outlays from discretionary balances	442	1,000	
4,020	**Outlays, gross (total)**	**442**	**-**	**-**
4,070	Budget authority, net (discretionary)	-	(5,000)	-
4,080	**Outlays, net (discretionary)**	**442**	**1,000**	**-**
4,180	**Budget authority, net (total)**	**-**	**(5,000)**	**-**
4,190	**Outlays, net (total)**	**442**	**1,000**	**-**

Program and Performance Statement

The Next Generation High-Speed Rail Program funds research, development, technology demonstration programs, and the planning and analysis required to evaluate high speed rail technology proposals. No new funds are requested for this program in 2017.

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION
Pennsylvania Station Redevelopment Project (69-X-0723)
PROGRAM AND FINANCING
IN THOUSANDS OF DOLLARS ($000)

Account Number: 69-0723 -0-1-401

Line	Line Title	2015 ACT	2016 CY	2017 BY
	Obligations by program activity:			
0001	Pennsylvania Station Redevelopment Project	18	-	
0900	**Total new obligations**	-	**-**	-
	Budgetary Resources:			
	Unobligated balance:			
1,000	Unobligated balance brought forward, Oct 1	18	-	-
1,050	**Unobligated balance (total)**	**18**	**-**	-
1,930	**Total budgetary resources available**	**18**	**-**	-
	Change in obligated balance:			
	Obligated balance, start of year (net):			
3,000	Unpaid obligations, brought forward, Oct 1 (gross)	33,049	29,000	19,000
3,001	Adjustments to unpaid obligations, brought forward, Oct 1			
3,010	Obligations incurred, unexpired accounts	18	-	-
3,020	Outlays (gross)	(3,878)	(10,000)	(10,000)
3200	Obligated balance, end of year (net):	29,189	19,000	9,000
3050	Unpaid obligations, end of year (gross)	29,189	19,000	9,000
3,091	Uncollected pymts, Fed sources, end of year			
3,100	**Obligated balance, start of year (net)**	**33,049**	**29,000**	**9,000**
3200	**Obligated balance, end of year**	**29,189**	**19,000**	**9,000**
	Budget authority and outlays, net:			
	Discretionary:			
4,011	Outlays from discretionary balances	3,878	10,000	10,000
4,080	**Outlays, net (discretionary)**	**3,878**	**10,000**	**10,000**
4,190	**Outlays, net (total)**	**3,878**	**10,000**	**10,000**

Program and Performance Statement

Funds are used to redevelop the Pennsylvania Station in New York City, which involves renovating the James A. Farley Post Office building. Funding for this project was included in the Grants to the National Railroad Passenger Corporation appropriation in 1995 through 1997, and the Northeast Corridor Improvement Program in 1998. In 2000, FRA received an advance appropriation of $20 million for 2001, 2002, and 2003. In 2001, the Congress specified that the $20 million advance appropriation for the Farley Building be used exclusively for fire and life safety initiatives. No new funds are requested for this program in 2017.

FEDERAL RAILROAD ADMINISTRATION

ADMINISTRATIVE PROVISIONS

~~Sec. 150. The Secretary of Transportation may receive and expend cash, or receive and utilize spare parts and similar items, from non-United States Government sources to repair damages to or replace United States Government owned automated track inspection cars and equipment as a result of third-party liability for such damages, and any amounts collected under this section shall be credited directly to the Safety and Operations account of the Federal Railroad Administration, and shall remain available until expended for the repair, operation and maintenance of automated track inspection cars and equipment in connection with the automated track inspection program.~~

Explanation: The above language was included in the US Code via section 11413 of the FAST ACT.

Sec. ~~151~~ 150. None of the funds provided to the National Railroad Passenger Corporation may be used to fund any overtime costs in excess of $35,000 for any individual employee: *Provided*, That the President of Amtrak may waive the cap set in the previous proviso for specific employees when the President of Amtrak determines such a cap poses a risk to the safety and operational efficiency of the system: *Provided further*, That the President of Amtrak shall report to the House and Senate Committees on Appropriations each quarter of the calendar year on waivers granted to employees and amounts paid above the cap for each month within such quarter and delineate the reasons each waiver was granted: *Provided further*, That the President of Amtrak shall report to the House and Senate Committees on Appropriations by March 1, ~~2016~~ 2017, a summary of all overtime payments incurred by the Corporation for ~~2015~~ 2016 and the three prior calendar years: *Provided further*, That such summary shall include the total number of employees that received waivers and the total overtime payments the Corporation paid to those employees receiving waivers for each month for ~~2015~~ 2016 and for the three prior calendar years.

Explanation: The above language from the FY 2016 appropriations act is updated for the next fiscal year.

~~Sec. 152. Of the unobligated balances of funds available to the Federal Railroad Administration from the "Railroad Research and Development" account, $1,960,000 is permanently rescinded: *Provided*, That such amounts are made available to enable the Secretary of Transportation to assist Class II and Class III railroads with eligible projects pursuant to sections 501 through 504 of the Railroad Revitalization and Regulatory Reform Act of 1976 (Public Law 94-210), as amended: *Provided further*, That such funds shall be available for applicant expenses in~~

~~preparing to apply and applying for direct loans and loan guarantees: *Provided further*, That these funds shall remain available until expended.~~

Explanation: FRA does not propose repeating one-time rescissions from the FY 2016 appropriations act.

~~Sec. 153. Of the unobligated balances of funds available to the Federal Railroad Administration, the following funds are hereby rescinded: $5,000,000 of the unobligated balances of funds made available to fund expenses associated with implementing section 212 of division B of Public Law 110–432 in the Capital and Debt Service Grants to the National Railroad Passenger Corporation account of the Consolidated and Further Continuing Appropriations Act, 2015; and $14,163,385 of the unobligated balances of funds made available from the following accounts in the specified amounts—"Grants to the National Railroad Passenger Corporation", $267,019; "Next Generation High-Speed Rail", $4,944,504; "Rail Line Relocation and Improvement Program", $2,241,385; and "Safety and Operations", $6,710,477: *Provided*, That such amounts are made available to enable the Secretary of Transportation to make grants to the National Railroad Passenger Corporation as authorized by section 101(c) of the Passenger Rail Investment and Improvement Act of 2008 (division B of Public Law 110–432) for state-of-good-repair backlog and infrastructure improvements on Northeast Corridor shared-use infrastructure identified in the Northeast Corridor Infrastructure and Operations Advisory Commission's approved 5-year capital plan: *Provided further*, That these funds shall remain available until expended and shall be available for grants in an amount not to exceed 50 percent of the total project cost, with the required matching funds to be provided consistent with the Commission's cost allocation policy.~~

Explanation: FRA does not propose repeating one-time rescissions from the FY 2016 appropriations act.

Sec. 151. Notwithstanding any other provision of law, including specifically, but not limited to, section 1302 of title 40, United States Code, and section 1341 of title 31, United States Code, the Federal Railroad Administration shall have authority to enter into contracts, leases, agreements, other transactions, and to commit to obligations in connection with third-party contracts or agreements, with any entity, for whatever term and under such conditions as the Secretary of Transportation determines to be in the best interests of the Government, for the operation and maintenance of the Transportation Technology Center near Pueblo, Colorado, and to enable the use of the property at the Transportation Technology Center. (Department of Transportation Appropriations Act, 2016.)

Explanation: FRA seeks legislative language to further strengthen its investment in and management of the Transportation Technology Center (TTC). The language would enable FRA to continue cost-effectively managing the facility through a third party, while providing significant railroad safety benefits. The legislation also provides opportunities for development of a renewable energy plant on TTC property, involving standard long-term industry and Federal agreements.

EXHIBIT IV-1

FEDERAL RAILROAD ADMINISTRATION
RESEARCH, DEVELOPMENT, AND TECHNOLOGY
BUDGET AUTHORITY
($000)

	FY 2015 Enacted	FY 2016 Enacted	FY 2017 Request	FY 2017 Applied	FY 2017 Development
By Account/Program					
Railroad Research and Development Account	**39,100**	**39,100**	**53,500**	**44,095**	**9,405**
Track Program	11,279	11,429	11,429	8,927	2,502
Rolling Stock Program	10,322	10,322	24,722	22,450	2,272
Train Control and Communication	8,086	8,086	8,086	5,256	2,830
Human Factors Program	5,542	5,542	5,542	4,322	1,220
Railroad Systems Issues Program	3,871	3,721	3,721	3,140	581
Rail Service Improvement Program	***0***	***0***	***25,000***	***4,556***	***7,244***
Safety and Operations	**3,677**	**4,028**	**4,028**	**2,578**	**1,450**
Salaries & Expenses (R&D)	3,677	4,028	4,028	2,578	1,450
Total FRA	**42,777**	**43,128**	**82,528**	**51,229**	**18,099**
By Function					
Subtotal, Research &Development	**39,776**	**40,127**	**66,527**	**51,229**	**18,099**
Subtotal, Technology Investment			**8,000**	**N/A**	**N/A**
Subtotal, Facilities (F)	**3,001**	**3,001**	**8,001**	**N/A**	**N/A**
Total, FRA	**42,777**	**43,128**	**82,528**	**51,229**	**18,099**

This Exhibit IV-1, "Research, Development and Technology", and any related summary, fulfills the requirements of 23 USC 508 (b) – Annual Report, in effect on December 3, 2015. The Department of Transportation recognizes the changes to this requirement effected by the passage of the Fixing America's Surface Transportation (FAST) Act (P.L. 114-94; Dec. 4, 2015; 129 Stat. 1312), creating Chapter 65 – Research Planning in Subtitle III of title 49, United States Code. The Department will implement the new requirements with the FY 2018 Budget Estimates.

FEDERAL RAILROAD ADMINISTRATION
HISTORY OF APPROPRIATIONS
FY 2006 - 2016
($000)

Account	FY 2006 [1/]	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011 [5/]	FY 2012	FY 2013 [7/]	FY 2014	FY 2015	FY 2016
Safety and Operations	144,490	150,271	150,193	159,445	172,270	176,596	178,596	169,254	184,500	186,870	199,000
Safety and Operations											-6,710 [10/]
Railroad Safety Technology Program	--	--	--	--	50,000	--	--	--	--	--	--
Railroad Research and Development	54,524	34,524	35,964	33,950	37,613	35,030	35,000	33,169	35,250	39,100	39,100 [11/]
Railroad Research and Development											(1,960) [11/]
Rail Line Relocation and Improvement	--	--	20,040 [2/]	25,000	34,532	10,511	--	--	--	--	(2,241) [12/]
Rail Safety Grants										10,000	50,000
Operating Subsidy Grants to National Railroad Passenger Corporation	490,050	490,050	475,000	550,000	563,000	563,000	466,000	441,625	340,000	250,000	288,500
Capital and Debt Service Grants to National Railroad Passenger Corporation	772,200	772,200	850,000	940,000	1,001,625	920,652	952,000	902,205	1,050,000	1,140,000	1,101,500
Capital and Debt Service Grants to National Railroad Passenger Corporation											(5,000) [13/]
Efficiency Grants to National Railroad Passenger Corporation	31,383	31,300	--	--	--	--	--	--	--	--	--
Grants to the National Railroad Passenger Corporation	--	--	--	--	--	--	--	297,100 [8/]	--	--	(267) [14/]
Intercity Passenger Rail Grants	--	--	30,000	90,000	--	--	--	--	--	--	--
Next Generation High-Speed Rail	--	--	--	--	--	--	--	--	[-1,973] [9/]	--	(4,945) [15/]
North East Corridor	--	--	--	--	--	--	--	--	[-4,419] [9/]	--	19,163
Alaska Railroad Rehabilitation	9,900	--	--	--	--	--	--	--	--	--	--
Capital Assistance for HSR Corridors and IPR	--	--	--	--	2,500,000	[-400,000] [6/]	--	--	--	--	--
Railroad Rehab and Improvement Program	--	3,294	20,751	16,753	18,441	23,692	--	--	--	--	1,960
Emergency Railroad Rehabilitation & Repair	--	--	20,000 [3/]	--	--	--	--	--	--	--	--
Capital Grants to National Railroad Passenger Corporation	--	--	--	1,300,000 [4/]	--	--	--	--	--	--	--
Capital Assistance for High Speed Rail Corridors and Intercity Passenger Rail Service	--	--	--	8,000,000 [4/]	--	--	--	--	--	--	--
Total FRA Budget Authority	**1,502,547**	**1,481,639**	**1,601,948**	**11,115,148**	**4,377,481**	**1,729,481**	**1,631,596**	**1,843,353**	**1,609,750**	**1,625,970**	**1,678,100**

Notes:

1/ FY 2006 appropriations (P.L. 109-115) reflect a 1.0% across-the-board rescission.

2/ FY 2008 Rail Line Relocation and Improvement appropriation (P.L. 110-161) reflects a 2% rescission on $5.24M in earmarks.

3/ FY 2008 Emergency Supplemental (P.L. 110-329).

4/ FY 2009 ARRA appropriations (P.L. 111-5) reflects $1.3B for Amtrak and $8.0B for HSIPR.

5/ FY 2011 full year CR appropriations (P.L. 112-10) reflect a 0.02% across-the-board rescission.

6/ FY 2011 appropriations (P.L. 112-10) reflect a $400M rescission of prior year unobligated balances.

7/ FY 2013 figures reflect .2% rescission and sequestered amounts excluded.

8/ FY 2013 The Disaster Relief Appropriations Act of FY 2013 (P.L. 113-2) provided funds to Amtrak for Hurricane Sandy, including $32 million for repair work and $86 million for disaster mitigation projects, less sequestration. $ 185 million for transferred from FTA to FRA for the Hudson Yards Project.

9/ FY 2014 Omnibus (P.L. 113-76) reflects a $4,419M rescission on the NEC prior year unobligated balances, and $1,973M rescission on the Next Generation High-Speed Rail prior year unobligated balances.

10/ FY2016 (P.L.114-113) rescineded $6,710,477 of unobligated balances

11/ FY2016 (P.L.114-113) rescineded $1,960,000 of unobligated balances

12/ FY2016 (P.L. 114-113) rescinded $2,241,385 of unobligated balances

13/ FY2016 (P.L.114-113) rescinded $5,000,000 of unobligated balances (NEC 2015)

14/FY2016 (P.L.114-113) rescinded $267,019 of unobligated balances

15/FY2016 (P.L. 114-113) rescinded $4,944,504 of unobligated balance