# BUDGET ESTIMATES FISCAL YEAR 201,

FEDERAL RAILROAD ADMINISTRATION

SUBMITTED FOR THE USE OF THE COMMITTEES ON APPROPRIATIONS

### DEPARTMENT OF TRANSPORTATION FEDERAL RAILROAD ADMINISTRATION

### FY 2018 PRESIDENT'S BUDGET JUSTIFICATION

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# DEPARTMENT OF TRANSPORTATION FEDERAL RAILROAD ADMINISTRATION ADMINISTRATOR'S OVERVIEW

The Federal Railroad Administration's (FRA) mission is to enable the safe, reliable, and efficient movement of people and goods for a strong America, now and in the future. FRA executes this mission through development and enforcement of safety regulations, data-driven analysis, stakeholder coordination and management of investments to advance nationally and regionally significant passenger and freight rail infrastructure and services, and research and development of emerging technologies and other innovative solutions that benefit rail safety, operational performance, and development.

The President's Fiscal Year (FY) 2018 Budget requests \$1.05 billion in support of the FRA mission. The request for FRA reflects the Administration's commitment to increasing the effectiveness of Federal Government investments by focusing FRA's resources on critical railroad safety oversight functions and additional, targeted priorities that advance rail safety and the long-term economic growth of the country.

The U.S. rail network serves a vital role in meeting the freight and passenger mobility needs of a population that is projected to increase by more than 55 million people over the next 25 years. The 140,000-mile U.S. freight rail network is the most developed and cost efficient in the world, carrying over 1.6 billion tons of freight per year.<sup>1</sup> The seven largest freight railroads alone contribute more than \$273 billion in economic output.<sup>2</sup> In terms of intercity passenger rail, Amtrak achieved record ridership and ticket revenue figures in FY 2016 – 31.3 million passengers and \$2.14 billion, respectively. Amtrak and the passengers that rely on Amtrak's services to carry them to their jobs, residences, and other destinations generate nearly \$11 billion in economic benefits per year.<sup>3</sup>

These accomplishments are sustained by a rail network that is achieving record-level safety performance, thanks in part to FRA's enforcement, oversight, and technical assistance programs. Over the last decade, rail accidents and incidents have decreased by 20 percent. However, in order to accommodate the country's future freight and passenger demands, FRA, railroads, and other public- and private-sector partners must continue working to eliminate safety risks on railroads and strategically invest in the infrastructure and services that provide the highest returns and greatest benefits.

<sup>&</sup>lt;sup>1</sup> Federal Highway Administration, <u>2016 Freight Quick Facts Report</u>, September 2016.

<sup>&</sup>lt;sup>2</sup> Irani, Daraius; Frye, Raquel; Grimm, Jessica; Menking, Catherine, <u>Economic and Fiscal Impact Analysis of Class I</u> <u>Railroads</u>, Towson University, May 16, 2016.

<sup>&</sup>lt;sup>3</sup> Amtrak, <u>FY 2016 Budget and Business Plan</u>.

The President's FY 2018 Budget aligns with these priorities by dedicating resources to major FRA initiatives, including:

- **Passenger Railroad Safety**: Compliance monitoring, grant funding, and technical assistance for commuter and intercity passenger railroads in the deployment of 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 crossing dangers;
- **Energy Products**: Hazards from large volumes of crude oil and other energy products, including ethanol and liquefied natural gas, moving by rail;
- Amtrak Performance: Improved management and focus on Amtrak's successful Northeast Corridor and State-Supported train services. This reprioritization will be realized by the President's FY 2018 Budget proposal to terminate Federal support for Amtrak's inefficient and costly Long Distance services, which incurred operating losses of nearly \$500 million in FY 2016.<sup>4</sup>

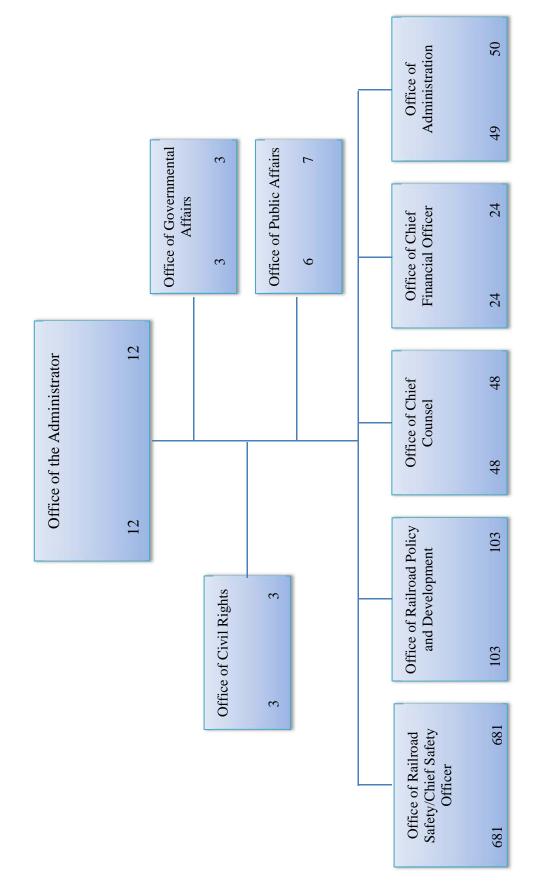
These and other efforts supported by the President's FY 2018 Budget will enable rail to continue and grow its essential role in the American economy and transportation system.

<sup>&</sup>lt;sup>4</sup> Amtrak, <u>Monthly Performance Report for September 2016</u>, March 31, 2017.



# **FY 2017 Organization Chart**

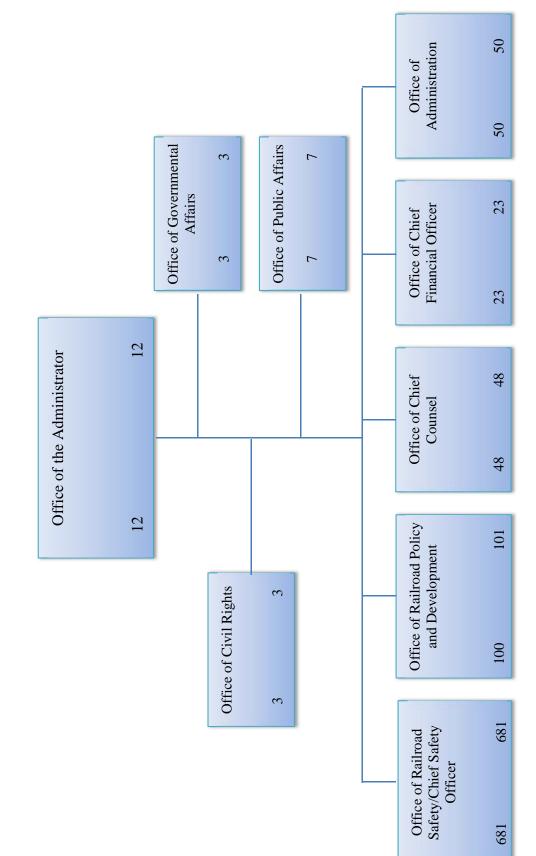
929 Full-Time Positions (FTP); 931 Full-Time Equivalents (FTE)





# **FY 2018 Organization Chart**

927 Full-Time Positions (FTP); 928 Full-Time Equivalents (FTE)



### EXHIBIT II-1 FY 2018 COMPARATIVE STATEMENT OF NEW BUDGET AUTHORITY FEDERAL RAILROAD ADMINISTRATION (\$000)

ACCOUNT NAME	FY 2016 ACTUAL	FY 2017 ANNUALIZED CR	FY 2017 ENACTED	FY 2018 REQUEST
Safety and Operations	199,000	198,634	218,298	199,000
Safety and Operations (Rescission) <sup>1/</sup>	(6,710)	(6,710)	-	-
Railroad Research and Development	39,100	39,029	40,100	39,100
Railroad Research and Development (Rescission) <sup>1/</sup>	(1,960)	(1,960)	-	-
Northeast Corridor Grants to the National Railroad Passenger Corporation <sup>2/</sup>	-	235,000	328,000	235,000
National Network Grants to the National Railroad Passenger Corporation <sup>2/</sup>	-	1,155,000	1,167,000	525,000
Operating Grants to the National Railroad Passenger Corporation <sup>2/</sup>	288,500	-	-	-
Capital and Debt Service Grants to the National Railroad Passenger Corporation $^{2'}$	1,101,500	-	-	-
Consolidated Rail Infrastructure and Safety Improvements	-	-	68,000	25,000
Federal-State Partnership for State of Good Repair	-	-	25,000	25,945
Restoration and Enhancement Grants	-	-	5,000	-
Railroad Safety Grants	50,000	49,905	-	-
Northeast Corridor Improvement Program	19,163	19,127	-	-
Railroad Rehabilitation and Improvement Financing Program	1,960	1,956	-	-
Capital and Debt Service Grants to the National Railroad Passenger Corporation (Rescission) $^{\prime\prime}$	(5,000)	(5,000)	-	-
Next Generation High Speed Rail (Rescission) <sup>1/</sup>	(4,945)	(3,563)	-	-
Rail Line Relocation and Improvement Program (Rescission) <sup>1/</sup>	(2,241)	(2,241)	-	-
Grants to the Nation Railroad Passenger Corporation (Rescission) <sup>1/</sup>	(267)	(267)	-	-
TOTAL Appropriations Rescissions	1,678,100 1,699,223 (21,123)	<b>1,678,910</b> 1,698,651 (19,741)	<b>1,851,398</b> 1,851,398	<b>1,049,045</b> 1,049,045

1/ For presentation purposes only, one-time rescissions of unobligated balances that occurred in FY 2016 are shown as repeating in FY 2017 due to the Continuing Resolution. If enacted in the FY 2017 appropriations bill, FRA will absorb these reductions accordingly.

2/ Until FY 2017, Congress appropriated funding for the National Railroad Passenger Corporation (Amtrak) through an Operating account and a Capital and Debt Service account. The FAST Act restructured Amtrak's appropriations accounts, providing separate authorizations for the Northeast Corridor and National Network. Congress adopted this new account structure in an anomaly to the FY 2017 Continuing Resolution (Sec. 143 of P.L. 114-223). The President's FY 2018 Budget requests funding for Amtrak under the new account structure.

### EXHIBIT II-2 FY 2018 TOTAL BUDGETARY RESOURCES BY APPROPRIATION ACCOUNT FEDERAL RAILROAD ADMINISTRATION Appropriations, Obligation Limitations, and Exempt Obligations

(\$000)

ACCOUNT NAME	FY 2016 ACTUAL	FY 2017 ANNUALIZED CR	FY 2017 ENACTED	FY 2018 REQUEST
Safety and Operations	199,000	198,634	218,298	199,000
Safety and Operations (Rescission) <sup>1/</sup>	(6,710)	(6,710)	-	-
Railroad Research and Development	39,100	39,029	40,100	39,100
Railroad Research and Development (Rescission) <sup>1/</sup>	(1,960)	(1,960)	-	-
Northeast Corridor Grants to the National Railroad Passenger Corporation $^{2'}$	-	235,000	328,000	235,000
National Network Grants to the National Railroad Passenger Corporation <sup>2/</sup>	-	1,155,000	1,167,000	525,000
Operating Grants to the National Railroad Passenger Corporation <sup>2/</sup>	288,500	-	-	-
Capital and Debt Service Grants to the National Railroad Passenger Corporation $^{2'}$	1,101,500	-	-	-
Consolidated Rail Infrastructure and Safety Improvements	-	-	68,000	25,000
Federal-State Partnership for State of Good Repair	-	-	25,000	25,945
Restoration and Enhancement Grants	-	-	5,000	-
Railroad Safety Grants	50,000	49,905	-	-
Northeast Corridor Improvement Program	19,163	19,127	-	-
Railroad Rehabilitation and Improvement Financing Program	1,960	1,956	-	-
Capital and Debt Service Grants to the National Railroad Passenger Corporation (Rescission) $^{1\prime}$	(5,000)	(5,000)	-	-
Next Generation High Speed Rail (Rescission) <sup>1/</sup>	(4,945)	(3,563)	-	-
Rail Line Relocation and Improvement Program (Rescission) <sup>1/</sup>	(2,241)	(2,241)	-	-
Grants to the Nation Railroad Passenger Corporation (Rescission) <sup>1/</sup>	(267)	(267)	-	-
TOTAL: Appropriations Rescissions	<b>1,678,100</b> 1,699,223 (21,123)	<b>1,678,910</b> 1,698,651 (19,741)	<b>1,851,398</b> 1,851,398	<b>1,049,045</b> 1,049,045

1/ For presentation purposes only, one-time rescissions of unobligated balances that occurred in FY 2016 are shown as repeating in FY 2017 due to the Continuing Resolution. If enacted in the FY 2017 appropriations bill, FRA will absorb these reductions accordingly.

2/ Until FY 2017, Congress appropriated funding for the National Railroad Passenger Corporation (Amtrak) through an Operating account and a Capital and Debt Service account. The FAST Act restructured Amtrak's appropriations accounts, providing separate authorizations for the Northeast Corridor and National Network. Congress adopted this new account structure in an anomaly to the FY 2017 Continuing Resolution (Sec. 143 of P.L. 114-223). The President's FY 2018 Budget requests funding for Amtrak under the new account structure.

### EXHIBIT II-4 FY 2018 BUDGET AUTHORITY FEDERAL RAILROAD ADMINISTRATION (\$000)

ACCOUNT NAME	M/D	FY 2016 ACTUAL	FY 2017 ANNUALIZED CR	FY 2017 ENACTED	FY 2018 REQUEST
Safety and Operations	D	199,000	198,634	218,298	199,000
Safety and Operations (Rescission) <sup>1/</sup>	D	(6,710)	(6,710)	-	-
Railroad Research and Development	D	39,100	39,029	40,100	39,100
Track Research		11,279	11,259	11,279	11,279
Rolling Stock		10,322	10,303	10,322	10,322
Signals, Train Control & Communications		8,086	8,071	8,086	8,086
Human Factor		5,542	5,532	5,542	5,542
Railroad System Issues		3,871	3,864	4,871	3,871
Railroad Research and Development (Rescission) <sup>1/</sup>	D	(1,960)	(1,960)	-	-
Northeast Corridor Grants to the National Railroad Passenger Corporation $^{2/}$	D	-	235,000	328,000	235,000
National Network Grants to the National Railroad Passenger Corporation $^{2\prime}$	D	-	1,155,000	1,167,000	525,000
Operating Grants to the National Railroad Passenger Corporation <sup>2/</sup>	D	288,500	-	-	-
Capital and Debt Service Grants to the National Railroad Passenger Corporation <sup>2/</sup>	D	1,101,500	-	-	-
Consolidated Rail Infrastructure and Safety Improvements	D	-	-	68,000	25,000
Federal-State Partnership for State of Good Repair	D	-	-	25,000	25,945
Restoration and Enhancement Grants	D	-		5,000	-
Railroad Safety Grants	D	50,000	49,905	-	-
Northeast Corridor Improvement Program	D	19,163	19,127	-	-
Grants to Class II and III Railroads for RRIF	D	1,960	1,956	-	-
Railroad Rehabilitation and Improvement Financing Program	М	563	1,000	1,000	-
Capital and Debt Service Grants to the National Railroad Passenger Corporation (Rescission) $^{1\prime}$	D	(5,000)	(5,000)		-
Next Generation High Speed Rail (Rescission) <sup>1/</sup>	D	(4,945)	(3,563)	-	-
Rail Line Relocation and Improvement Program (Rescission) <sup>1/</sup>	D	(2,241)	(2,241)	-	-
Grants to the Nation Railroad Passenger Corporation (Rescission) <sup>1/</sup>	D	(267)	(267)	-	-
TOTAL:		1,678,663	1,679,910	1,852,398	1,049,045
Mandatory		563	1,000	1,000	-
Discretionary		1,678,100	1,678,910	1,851,398	1,049,045

1/ For presentation purposes only, one-time rescissions of unobligated balances that occurred in FY 2016 are shown as repeating in FY 2017 due to the Continuing

Resolution. If enacted in the FY 2017 appropriations bill, FRA will absorb these reductions accordingly. 2/ Until FY 2017, Congress appropriated funding for the National Railroad Passenger Corporation (Amtrak) through an Operating account and a Capital and Debt Service account. The FAST Act restructured Amtrak's appropriations accounts, providing separate authorizations for the Northeast Corridor and National Network. Congress adopted this new account structure in an anomaly to the FY 2017 Continuing Resolution (Sec. 143 of P.L. 114-223). The President's FY 2018 Budget requests funding for Amtrak under the new account structure.

### EXHIBIT II-5 FY 2018 OUTLAYS FEDERAL RAILROAD ADMINISTRATION (\$000)

ACCOUNT NAME	M / D	FY 2016 ACTUAL	FY 2017 ANNUALIZED CR	FY 2018 REQUEST
Safety and Operations	D	203,700	192,000	197,000
Railroad Research and Development	D	36,002	39,000	40,000
Grants to the National Railroad Passenger Corporation	D	41,549	16,000	16,000
Northeast Corridor Grants to the National Railroad Passenger Corporation	D	-	234,000	235,000
National Network Grants to the National Railroad Passenger Corporation	D	-	1,152,000	527,000
Operating Grants to the National Railroad Passenger Corporation	D	288,500	-	-
Capital and Debt Service Grants to the National Railroad Passenger Corporation	D	1,081,790	295,000	42,000
Consolidated Rail Infrastructure and Safety Improvements	D	-	-	2,500
Federal-State Partnership for State of Good Repair	D	-	-	2,595
Railroad Safety Grants	D	-	10,000	25,000
Capital Assistance to States Intercity Passenger Rail Service	D	12,180	10,000	7,000
Northeast Corridor Improvement Program	D	-	5,000	14,000
Pennsylvania Station Redevelopment Project	D	15,353	14,000	5,000
Capital Assistance for High Speed Rail Corridors and Intercity Passenger Rail Service	D	2,077,331	2,721,000	300,000
Next Generation High-Speed Rail	D	61	-	3,000
Emergency Railroad Rehabilitation and Repair	D	42	-	-
Rail Line Relocation and Improvement Program	D	5,843	9,000	9,000
Railroad Safety Technology Program	D	2,034	3,000	3,000
Railroad Rehabilitation and Improvement Program - Program Account	D	-	2,000	2,000
Railroad Rehabilitation and Improvement Program - Program Account (Upward Reestimates	) M	563	1,000	-
TOTAL:		3,764,948	4,703,000	1,430,095
[Mandatory] [Discretionary]		563 3,764,385	1,000 4,702,000	- 1,430,095

					•	2-9						
FRA Total	FY 2016 Actual	FY 2017 Annualized CR	FY 2017 Annualization of Annualization FY 2016 Actual Annualized CR 2017 Pay Raises of 2017 FTE	Annualization of 2017 FTE	2018 Pay Raises	Compensable Days (260 days) no change	GSA Rent	WCF Increase/ Decrease	Inflation/ Deflation	FY 2018 Baseline Estimate	Program Increases/ Decreases	FY 2018 Request
PERSONNEL RESOURCES (FTE) Direct FTE	606	931		2						933	(5)	928
FINAN CIAL RESOURCES												
ADMINISTRATIVE EXPENSES												
Salaries and Benefits	125,197	128,928	676	237	1,850	1				131,691	(694)	130,997
Benefits for Former Employees (AK RR)	857	857	'		'	'	'			857		857
Travel	11,128	12,440	1	'	'	1	'	'	I	12,440	(006)	11,540
Advisory and assistance services	1,600	1,600	1	·	'	1			I	1,600		1,600
Transportation	70	150	I	I	'	I	'		2	152	,	152
GSA Rent	6,387	6,500	I	'	ı	I		I	I	6,500	,	6,500
Communications, & Utilities	1,079	1,079	I	I	ı	I	'	'	11	1,090	'	1,090
Printing	442	321	ı	I	ı	ı	1	'	3	324	,	324
Other Services:	22,586	18,704	ı	I	ı	ı	1	'	I	18,704	(3,435)	15,269
-WCF	8,358	8,600	I	ı	ı	I	1	341	I	8,941	'	8,941
-ESC	2,630	2,884	1	I	ı	1		'	I	2,884		2,884
Supplies	387	390	1	I	ı	1		'	4	394		394
Equipment	1,645	1,645							130	1,775		1,775
Admin Subtotal	182,366	184,098	676	237	1,850		•	341	149	187,351	(5,029)	182,322
PROGRAMS	094 40	100 50								23 804	(100)	305 50
Dately & Operations	001,114 2 6 7 9 0	11520								112.20		000,02
	20, /02	11702								11.202.050	11	757,700 757,700
Amutak	1,384,492	000,000,1		•	'		ı	•		000,080,1	(000,020)	007'00/
Consolidated Rail Infrastructure and Safety Immovements	I	'	ı			ı		ı	ı	ı	24,750	24,750
Federal-State Partnership for State of Good	I							ı			25,686	25,686
Repair	000 01	10000										
Kail Safety	000,00	c00,64					'			49,905	(006,64)	'
Northeast Corridor Improvement Program	19,163	19,127		'			'			19,127	(19,127)	
Railroad Rehabilitation and Improvement Financing Program	1,960	1,956		'						1.956	(1,956)	
Programs Subtotal	1,516,857	1,514,553								1,514,553	(647,830)	866,723
Rescission <sup>1/</sup>	(13,670)	(13,670)	•	•	•	•			•			
TOTAL	1,685,553	1,684,981	676	237	1,850			341	149	1,701,904	(652,859)	1,049,045

EXHIBIT II-6 SUMMARY OF REQUESTED FUNDING CHANGES FROM BASE	Federal Railroad Administration	Appropriations, Obligation Limitations, and Exempt Obligations	(\$000)
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					B	Baseline Changes						
Safety and Operations	FY 2016 Actual	FY 2016 Actual Annualized CR 2017 Pay Raises	Annualization of Annualization of 2017 Pay Raises 2017 FTE		1 2018 Pay Raises	Compensable Days (260 days) no change	GSA Rent	WCF Increase/ Decrease	Inflation/ Deflation	FY 2018 Baseline Estimate	Program Increases/ Decreases	FY 2018 Request
PERSONNEL RESOURCES (FTE) Direct FTE	903	920								920		920
<u>FINANCIAL RESOURCES</u> ADMINISTRATIVE EXPENSES												
Salaries and Benefits	124,577	127,528	670	,	1,827	,	ı		·	130,025		130,025
Benefits for Former Employees (AK RR)	857	857	,	,		,	•	,	,	857	,	857
Travel	10,878	12,190	,	·	,		ı	ı	,	12,190	(006)	11,290
Transportation	70	150					'		2	152		152
GSA Rent	6,387	6,500			•					6,500		6,500
Communications, & Utilities	1,079	1,079	·	·	,		'		Π	1,090		1,090
Printing	424	303					'		ŝ	306		306
Other Services:	17,548	13,004					•			13,004	(1,222)	11,782
-WCF	8,358	8,600					'	341	'	8,941		8,941
-ESC	2,630	2,884					'			2,884		2,884
Supplies	387	390							4	394		394
Equipment	1,345	1,345				-		-	130	1,475		1,475
Admin Subtotal	174,540	174,830	670		1,827			341	149	177,817	(2,122)	175,695
SELECTED PROGRAMS												
Automated Track Inspection Program	10,499	9,577		ı						9,577		9,577
Confidential Close Call Reporting System	3,261	2,640								2,640	(40)	2,600
RSIS/DATA Management	3,241	3,731								3,731	(31)	3,700
Grade Crossing (incl:Operation Lifesaver)	1,501	615	,	,	,	ı	,	'	,	615	,	615
Washington Union Station	75	1,194		,		ı	·	,	,	1,194	(245)	949
PTC Support	3,216	2,865	ı	ı		1	ı			2,865	135	3,000
Drug and Alcohol Program	465	611	ı	ı	,	ı	ı	'	,	611	,	611
Security, Other Security Grants	554	569	ı	ı		1	ı			569	·	569
RSAC	250	319	,	,	,	ı	,	'	,	319	,	319
Technical Training Standards Division	815	700								700		700
Transportation Technology Center (TTC)	463	390								390	110	500
Rail Enforcement System	120	593	·	,	ı	ı	ı		ı	593	(428)	165
Programs Subtotal	24,460	23,804				,				23,804	(499)	23,305
Rescission <sup>1/</sup>	(6,710)	(6,710)				,						
TOTAL	192,290	191,924	670		1,827			341	149	201,621	(2,621)	199,000

1/ For presentation purposes only, one-time rescissions of unobligated balances that occurred in FY 2016 are shown as repeating in FY 2017 due to the Continuing Resolution. If enacted in the FY 2017 appropriations bill, FRA will absorb these reductions accordingly.

**Baseline Changes** 

Railroad Research and Develonment			00162160004V			Companeehle				XIX	LUCLUCIA.	
	FY 2016 Actual Annualized CR	FY 2017 Annualized CR	of 2017 Pay Raises	Annualization of 2017 FTE	Annualization of 2017 FTE 2018 Pay Raises	Days (260 days) no change	GSA Rent	WCF Increase/ Decrease	Inflation/ Deflation	Estimate	rrogram Increases/ Decreases	FY 2018 Request
PERSONNEL RESOURCES (FTE)												
Direct FTE					ı							
FINANCIAL RESOURCES												
ADMINISTRATIVE EXPENSES												
Salaries and Benefits	,	I	ı		ı	ı	ı	,	,	ı	I	,
Travel	100	100	ı		ı	,	ı	,	,	100	,	100
Advisory and assistance services	1,600	1,600	ı		ı	ı	ı	,	,	1,600	I	1,600
Transportation	,	,	,	1	ı	,	,	,	,	,	,	ı
GSA Rent	,	,	'	'	,	,	,	,	,	,	,	,
Communications, & Utilities	,	,	ı	ı	ı	,	,	,	,	,	,	ı
Printing	18	18	'	'	,	,	,		,	18	,	18
Other Services:	300	300	ı		ı	,	ı	,	,	300	I	300
-WCF	,	ı	ı	ı	ı	ı	,	ı	,	ı	ı	,
Supplies	,	I	ı		ı		ı		,	ı	I	
Equipment	300	300			'					300		300
Admin Subtotal	2,318	2,318	•	•	•	•	•	•	•	2,318	•	2,318
PROGRAMS												
Track Research	11,279	11,259		'	'			ı		11,259	20	11,279
Rolling Stock	10,322	10,303								10,303	19	10,322
Communication	8,086	8,071		ı						8,071	15	8,086
Human Factors	5,542	5,532			'		,			5,532	10	5,542
Railroad System Issues	1,553	1,546	ı	ı	ı	I	ı	ı	ı	1,546	7	1,553
Programs Subtotal	36,782	36,711	•		ı	,				36,711	11	36,782
Rescission	(1,960)	(1,960)			I	·						
TOTAL	37,140	37,069						,		39,029	71	39,100

1/ For presentation purposes only, one-time rescissions of unobligated balances that occurred in FY 2016 are shown as repeating in FY 2017 due to the Continuing Resolution. If enacted in the FY 2017 appropriations bill, FRA will absorb these reductions accordingly.

EXHIBIT II-6 SUMMARY OF REQUESTED FUNDING CHANGES FROM BASE FEDERAL RAURDANDINGTRATION	Appropriations, Obligation Limitations, and Exempt Obligations (\$000)
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	9	
<b>Baseline Changes</b>	Compensable Days (260 days) no change	
	Compensable FY 2017 Amualization of Ammalization of Days (260 days FY 2016 Actual Ammalized CR 2017 Pay Raises 2017 FTE 2018 Pay Raises no change	
	Annualization 6 2017 FTE	
	Amualization of Amualization of 2017 Pay Raises 2017 FTE	
	FY 2017 Annualized CR	
	FY 2016 Actual	

Amtrak

FY 2018 Request

Program Increases/ Decreases

FY 2018 Baseline Estimate

Inflation/ Deflation

WCF Increase/ Decrease

**GSA Rent** 

<b>FERSONNEL RESOURCES (FIE)</b>												
Direct FTE	3	10	,	2	ı		ı	ı		12	(5)	7
FINANCIAL RESOURCES												
ADMINISTRATIVE EXPENSES												
Salaries and Benefits	620	1,400	9	237	23	ı	ı	I		1,666	(694)	972
Travel	150	150	ı	,	,	ı	ı	ı	ı	150	ı	150
Transportation	ı	ı	ı	,	,	ı	ı	ı	ı	,	ı	
GSA Rent	,	,	,	,	,	,	,	,	ı	,	,	
Communications, & Utilities	,	ı	ı	,	,	ı	ı	ı		,	,	
Printing	,	ı	·	,	,	ı	ı	ı		ı	,	'
Other Services:	4,738	5,400	·	,	,	ı	ı	ı		5,400	(2,722)	2,678
-WCF		ı	,		,	ı	ı	ı		,	,	,
Supplies		ı			,	ı	ı	I		ı	,	,
Equipment									ı			·
Admin Subtotal	5,508	6,950	9	237	23					7,216	(3,416)	3,800
PROGRAMS												
Onevoting Grants to Amtral IV	100 500											
	000,002											•
Capital and Deot Service Grants to Annuak	266,060,1			•					ı	•		
Northeast Corridor Grants to Amtrak <sup>1/</sup>		233,825		,	,	,		ı		233,825	ı	233,825
National Network Grants to Amtrak <sup>1/</sup>		1,149,225								1,149,225	(626,850)	522,375
Programs Subtotal	1,384,492	1,383,050								1,383,050	(626,850)	756,200
$\operatorname{Rescission}^2$	(5,000)	(5,000)										
TOTAL	1,385,000	1,385,000	9	237	23					1,390,266	(630,266)	760,000

1/ Until FY 2017, Congress appropriated funding for the National Pairoad Passenger Corporation (Amtrak) through an Operating account and a Capital and Debt Service account. The FAST Act restructured Amtrak's appropriations accounts, providing separate authorizations for the Northeast Corridor and National Network. Congress adopted this new account structure in an anomaly to the FY 2017 Continuing Resolution (Sec. 143 of P.L. 114-223). The President's FY 2018 Budget requests funding for Amtrak under the new account structure.
2/ For presentation purposes only, one-time rescissions of unobligated balances that occurred in FY 2016 are shown as repeating in FY 2017 due to the Continuing Resolution. If enacted in the FY 2017 appropriations bill, FRA will absorb these reductions accordingly.

				B	<b>Baseline Changes</b>						
Consolidated Rail Infrastructure and Safety Improvements	FY 2016 Actual Annualized CR	Annualization of 2017 Pay CR Raises	Annualization of 2017 FTE	Compensabl Days (260 day 2018 Pay Raises no change	Compensable Days (260 days) no change	GSA Rent	WCF Increase/ Decrease	Inflation/ Deflation	FY 2018 Baseline Estimate	Program Increases/ Decreases	FY 2018 Request
PERSONNEL RESOURCES (FTE)											
Direct FTE											'
FINANCIAL RESOURCES											
ADMINISTRATIVE EXPENSES											
Salaries and Benefits			,	'		,	,	'	,		,
Travel				ı		'					
Transportation	·			,	ı	'		,		ı	
GSA Rent						'					
Communications, & Utilities						'					
Printing						'					
Other Services:										250	250
-WCF					·	,		'		ı	
Supplies										·	
Equipment					'	'					
Admin Subtotal										250	250
PROGRAMS											
Consolidated Rail Infrastructure and Safety Improvements			ı	ı	ı	ı	ı	ı	ı	24,750	24,750
Programs Subtotal					·					24,750	24,750

25,000

25,000

TOTAL

					æ	<b>Baseline Changes</b>						
Federal-State Partnership for State of Good Repair	FY 2016 Actual Annualized CR	FY 2017 Annualized CR	Annualization of 2017 Pay Raises	Annualization of 2017 FTE	Annualization of 2017 FTE 2018 Pay Raises	Compensable Days (260 days) no change	GSA Rent	WCF Increase/ Decrease	Inflation/ Deflation	FY 2018 Baseline Estimate	Program Increases/ Decreases	FY 2018 Request
PERSONNEL RESOURCES (FTE)	(1											
Direct FTE	ı	ı	ı	ı	ı	ı	ı	ı	ı		ı	
FINANCIAL RESOURCES												
ADMINISTRATIVE EXPENSES												
Salaries and Benefits	,	,	ı	I	ı	·	ı	ı	ı	ı	ı	ı
Travel									ı		ı	ı
Transportation				ı			ı	·	ı	ı		ı
GSA Rent	,	,	,	I	,	,	,	ı	I	ı	ı	ı
Communications, & Utilities												
Printing	,	,	,	ı	,	,	I	ı	ı	ı	ı	ı
Other Services:										ı	259	259
-WCF				ı				ı	ı	·	ı	ı
Supplies				ı			ı	ı	ı	·	ı	ı
Equipment				'						'		
Admin Subtotal		•	•	•	•	•	•				259	259
<b>PROGRAMS</b>												
Federal-State Partnership for State of												
Good Repair									·		25,686	25,686

25,686

25,686

**Programs Subtotal** 

TOTAL

25,945

25,945

					B	<b>Baseline Changes</b>						
Rail Safety Grants	FY 2016 Actual Annualized CR	FY 2017 Annualized CR	Annualization of 2017 Pay Raises	Annualization of 2017 FTE	Compensabl Days (260 day 2018 Pay Raises no change	Compensable Days (260 days) no change	GSA Rent	WCF Increase/ Decrease	Inflation/ Deflation	FY 2018 Baseline Estimate	Program Increases/ Decreases	FY 2018 Request
PERSONNEL RESOURCES (FTE)												
Direct FTE			·								ı	ľ
FINANCIAL RESOURCES												
ADMINISTRATIVE EXPENSES												
Salaries and Benefits	'	ı	,	ı	ı	ı			,	·	·	,
Travel				'			,					
Transportation		ı		'	·		·	,	'	,	ı	
GSA Rent	,	I	ı	ı	ı	I		ı	ı	ı	ı	ı
Communications, & Utilities		ı	ı	ı	ı	ı	,	·	,	,	,	,
Printing		ı	·	'	ı	·	'		'	,	,	,
Other Services:	ı	ı	ı	,	ı	,	ı	ı	ı	ı	ı	ı
-WCF	,	,		I	ı	ı			ı	ı	ı	,
Supplies				'			,					
Equipment				-		-			-			
Admin Subtotal	•	•	•	•	•		•	•	•	•	•	
PROGRAMS												
	000 02	10.005								10.005	(10.005)	
Kail Safety Grants	000,00	c0 <del>6</del> ,64							•	c06,64	(006,64)	I
Programs Subtotal	50,000	49,905	•	•	•	•	•		•	49,905	(49,905)	•

49,905

50,000

TOTAL

(49,905)

49,905

					H	saseline Changes						
Northeast Corridor Improvement Program	Annualization FY 2017 of 2017 Pay FY 2016 Actual Annualized CR Raises	FY 2017 Annualized CR	Annualization of 2017 Pay Raises	Annualization of 2017 FTE	2018 Pay Raises	Compensable Annualization Days (260 days) of 2017 FTE 2018 Pay Raises no change	GSA Rent	WCF Increase/ Inflation/ GSA Rent Decrease Deflation	Inflation/ Deflation	FY 2018 Baseline Estimate	Program Increases/ Decreases	FY 2018 Request
PERSONNEL RESOURCES (FTE)												
Direct FTE	ı	ı	ı		ı		ı		ı		ı	ı
FINANCIAL RESOURCES												

Direct FTE	ı	ı	ı	ı	,	ı	ı	ı	ı	,	ı	ı
<u>FINANCIAL RESOURCES</u> ADMINISTRATIVE EXPENSES							,					,
Salaries and Benefits				,								
Travel	,		ı	,	,					,		,
Transportation	,	ı	ı	ı	,	ı	ı	ı	ı	·	,	
GSA Rent	,	ı	ı	ı	,	ı	ı	ı	ı	,	ı	
Communications, & Utilities	,	ı	ı	ı	·	ı	ı	ı	ı	,	ı	
Printing	,	ı	ı	ı	,	ı	ı	ı	ı	,	ı	
Other Services:	,	ı	ı	ı	,	ı	ı	ı	ı	·	ı	
-WCF		,	·	,	,	,	,	,	,	,	,	,
Supplies	,	ı	ı	ı	,	ı	ı	ı	ı	·	,	
Equipment		·	ı	ı		·	·	·	·	·		,
Admin Subtotal												.
PROGRAMS												
Northeast Corridor Improvement Program	19.163	19.127	,							19.127	(19.127)	,
	0101	107 OF								201 OF		
Programs Subtotal	19,163	19,127	•	•	•		•	•	•	19,127	(19,127)	

Northeast Corridor Improvement Program	19,163	19,127	ı	ı	ı	ı	ı	ı	19,127	(19,127)
Programs Subtotal	19,163	19,127							19,127	(19,127)
TOTAL	19,163	19,127	•						19,127	(19,127)

					B	<b>Baseline Changes</b>						
Railroad Rehabilitation and Improvement Financing Program	FY 2016 Actual Annualized CR	FY 2017 Annualized CR	Annualization of 2017 Pay Raises	Annualization of 2017 FTE	2018 Pay Raises	Compensable Days (260 days) no change	GSA Rent	WCF Increase/ Decrease	Inflation/ Deflation	FY 2018 Baseline Estimate	Program Increases/ Decreases	FY 2018 Request
PERSONNEL RESOURCES (FTE)												
Direct FTE			ı	ı		ı	ı			ı		
FINANCIAL RESOURCES												
ADMINISTRATIVE EXPENSES												
Salaries and Benefits	ı	ı	I	ı	ı	ı	I	ı	·	ı	ı	ı
Travel	ı	ı	ı	ı		ı	ı			ı		,
Transportation	ı	ı	ı	ı	ı	ı	I	ı	,	ı	,	ı
GSA Rent	ı	I	I	ı	ı	ı	I	ı	,	ı	,	ı
Communications, & Utilities	ı	I	I	ı	ı	ı	I	ı	,	ı	,	ı
Printing	ı	ı	ı	ı	ı	ı	ı	ı	,	ı	·	ı
Other Services:	ı	ı	ı	ı	ı	ı	ı	ı	,	ı	·	ı
-WCF	ı	,	ı	ı	ı	ı	I	ı	,	ı	,	ı
Supplies	·	ı	,	ı	ı	ı	ı	,		ı		ı
Equipment			'				'					
Admin Subtotal		•		•			•	•				.
PROGRAMS												
Railroad Rehabilitation and Improvement Financing Program	1,960	1,956	ı	ı	ı		ı	1	ı	1,956	(1,956)	ï

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(1,956)

1,956

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1,956

1,960

**Programs Subtotal** 

TOTAL

1,956

1,960

(1,956)

1,956

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

		FY 2017	
	FY 2016 ACTUAL	ANNUALIZED CR	FY 2018 REQUEST
DIRECT:			
Safety and Operations	8,358	8,600	8,941
SUBTOTAL	8,358	8,600	8,941
TOTAL	8,358	8,600	8,941

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

	FY 2016 ACTUAL	FY 2017 ANNUALIZED CR	FY 2018 REQUEST
DIRECT FUNDED BY APPROPRIATION			
Safety and Operations	903	920	920
Capital Assistance for High-Speed and Intercity Rail	3	1	1
Capital and Debt Service Grants to Amtrak	3	-	-
National Network Grants to Amtrak	-	10	7
SUBTOTAL, DIRECT FUNDED	909	931	928
TOTAL FTEs	909	931	928

## EXHIBIT II-9 FEDERAL RAILROAD ADMINISTRATION RESOURCE SUMMARY – STAFFING FULL-TIME PERMANENT POSITIONS

	FY 2017	
FY 2016	ANNUALIZED	FY 2018
ACTUAL	CR	REQUEST
937	916	920
2	1	-
7	-	-
-	12	7
946	929	927
946	929	927
	ACTUAL 937 2 7 - 946	FY 2016 ACTUAL         ANNUALIZED CR           937         916           2         1           7         -           -         12           946         929

### 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, \$199,000,000, of which \$15,900,000 shall remain available until expended.

## EXHIBIT III-1 SAFETY & OPERATIONS Summary by Program Activity Appropriations, Obligation Limitations, and Exempt Obligations (\$000)

Safety and Operations	<b>FY 2016</b> <u>ACTUAL</u> 199,000	<b>FY 2017</b> <b>ANNUALIZED</b> <b>CR</b> 198,634	<b>FY 2018</b> <b>REQUEST</b> 199,000	CHANGE FY 2017-2018 366
TOTAL	199,000	198,634	199,000	366
Full-Time Equivalents	909	920	920	-

### **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 & OPERATIONS SUMMARY ANALYSIS OF CHANGE FROM FY 2017 TO FY 2018 Appropriations, Obligations, Limitations, and Exempt Obligations (\$000)

	Change from FY 2017 to FY 2018	Change from FY 2017 to FY 2018
ITEM	\$000	FTE
FY 2017 ANNUALIZED CR	198,634	920
ADJUSTMENTS TO BASE		
Administrative Adjustments to Base:	2,497	-
Annualization of FY 2017 FTE	-	-
Annualization of FY 2017 Pay Raise	670	-
FY 2018 Pay Raise	1,827	-
GSA Rent	-	-
Travel	(900)	
Other Services	(1,222)	
Working Capital Fund	341	-
Non-Pay Inflation	149	
Subtotal, Adjustments to Base	865	-
PROGRAM REDUCTIONS		
RSIS/DATA Management	(40)	-
Grade Crossings (including Operation	(31)	
Lifesaver)	(51)	-
Washington Union Station	(245)	-
Rail Enforcement System	(428)	-
Subtotal, Program Reductions	(744)	-
NEW OR EXPANDED PROGRAMS:		
Positive Train Control Implementation	135	-
Transportation Technology Center (TTC)	110	-
Subtotal, New or Expanded Programs	245	-
FY 2018 REQUEST	199,000	920

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

FRA integrates performance results into its budget request to monitor and communicate the effectiveness of FRA's programs and policies in achieving specific performance goals. For the Safety and Operations account, FRA's goal is to reduce the rate of rail-related accidents and incidents per million train-miles to no more than 15.840 by the end of FY 2018. \*

	2014	2015	2016	2017	2018
Target	16.150	15.900	15.890	15.850	15.840
Actual	16.212	15.808	16.044		

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

### DETAILED JUSTIFICATION FOR RAILROAD SAFETY AND OPERATIONS

### What Is the Request and What Funds Are Currently Spent on the Program?

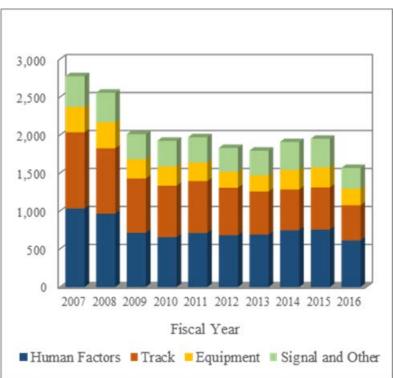
FY 2018 Budget Request – Safety and Operations – Budget Request \$000

Account	FY 2016	FY 2017	FY 2018	Change	
	Actual	Annualized CR	Request	FY 2017-2018	
Safety and Operations	199,000	198,634	199,000	366	

### What is this Program and Why is it Necessary?

The appropriation for the 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. The program is necessary for FRA to carry out its mission of enabling the safe, reliable, and efficient movement of people and goods for a strong America, now and in the future.

FRA's top priority is safety. FRA's enforcement, oversight, and technical assistance efforts contributed to FY 2016 being one of the safest years in recent record, with total accidents and incidents falling 7 percent from FY 2015 to FY 2016 alone, and 20 percent overall since FY 2007. In addition, from FY 2007 to FY 2016, total derailments declined by 44 percent, railroad industry employee fatalities declined by 31 percent, and total highway-rail grade crossing incidents have declined by 29 percent. However, FRA must remain diligent and examine new approaches to advance continuous safety improvement in the railroad industry.



**Rail Accidents By Cause** Fiscal Years 2007 to 2016

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

- **Passenger Railroad Safety**: Compliance monitoring and technical assistance for commuter and intercity passenger railroads in the deployment of 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 crossing dangers; 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, safety initiatives, financial assistance programs, and research and development. The President's Budget 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, FRA supports the development of intercity passenger rail and freight rail services, as well as new technologies and investments to improve railroad safety and efficiency.

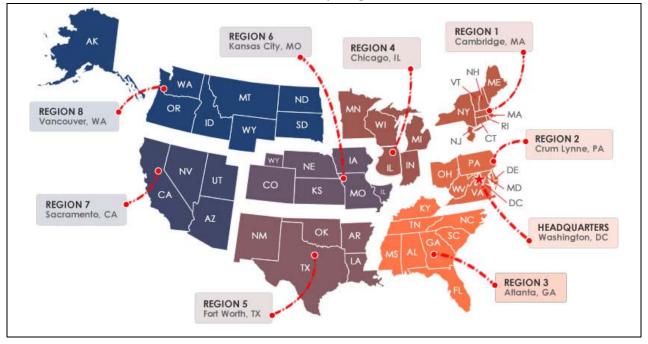
Source: FRA data.

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 2018 based on FRA's staffing allocation process and a map showing the territory of each region:

	FRA Region								
Safety Discipline	1	2	3	4	5	6	7	8	Total
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	63
Target Total	35	53	53	50	54	44	35	42	366

### Target Distribution of FRA FY 2018 Rail Safety Inspectors, By Safety Discipline and Geographic Region

### **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 as well as railroad system oversight managers.

At FRA headquarters, the Office of Railroad Safety has 16 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 priority safety programs for FY 2018:

### Automated Track Inspection Program (ATIP)

FY 2016 Actual: \$10.49 million FY 2017 Annualized CR: \$9.57 million FY 2018 Request: \$9.57 million

ATIP uses several track geometry measurement vehicles to automatically measure track conditions such as gauge alignment and cross level. ATIP vehicles are strategically assigned to the most important routes, including those over which passengers and hazardous materials are transported. 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 Actual: \$3.22 million FY 2017 Annualized CR: \$2.87 million FY 2018 Request: \$3.00 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 rail services are operated. Approximately 40 railroads are subject to the mandate.

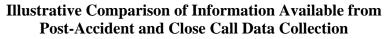
By statute, each railroad subject to the PTC mandate was required to submit to FRA a revised PTC implementation plan by January 27, 2016 outlining how the system would be built and by regulation, a safety plan that details how the railroad's PTC system would function once installed and operational. FRA's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

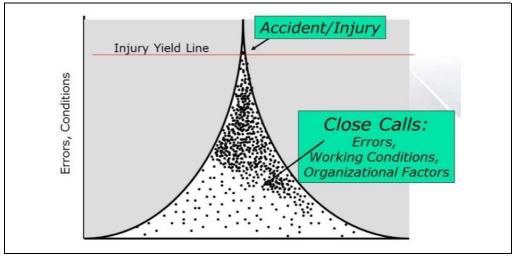
implementation plans and applicable statutes and regulations (including issuing penalties), review and approve safety plans, and provide on-going technical assistance. To conduct these functions, FRA relies on contractor support, including firms with specialized knowledge in advanced railroad signal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

### Confidential Close Call Reporting System (C<sup>3</sup>RS)

FY 2016 Actual: \$3.26 million FY 2017 Annualized CR: \$2.64 million FY 2018 Request: \$2.60 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 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 over 19,000 railroad employees to analyze risks, identify hazards, and put in place customized plans for railroads to eliminate those risks. C<sup>3</sup>RS allows FRA and the railroads to develop safety strategies before accidents occur. Results from C<sup>3</sup>RS pilot sites indicate significant improvements in many safety categories including a 41% reduction in human factor incidents and a 53% reduction in human factor incident related costs at one site and a 27% reduction in reportable incidents along with an 18% reduction in injuries at another.





### 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 Actual: \$3.24 million FY 2017 Annualized CR: \$3.73 million FY 2018 Request: \$3.70 million

To carry out its mission, FRA must collect and analyze significant amounts of safety-related information. This information allows FRA to not only enforce current safety regulations that have data collection requirements, such as the National highway-rail crossing inventory and accident/incident/injury reporting, but it also directly supports implementation of proposed rulemakings that have data collection elements, such as risk reduction and system safety programs. This safety information is publically available to support not only the FRA's efforts, but also to states, railroads and other stakeholders for use in conducting safety analyses and planning.

An example of frequently used data is the Web Accident Prediction System (WBAPS) located on FRA's Safety data website. WBAPS allows the user to run dynamic queries and view statistical information on railroad safety, generating reports listing public highway-rail crossings for a specific State, County, City or railroad ranked by predicted collisions per year, taking into account the past 10 years of activity, to assist in determining where scarce highway-rail grade crossing resources can best be directed and ultimately improving the safety at these intersections.

FRA will continue to enhance its 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 (including Operation Lifesaver)

FY 2016 Actual: \$1.0 million FY 2017 Annualized CR: \$0.61 million FY 2018 Request: \$0.61 million

As of March 2017, there are 130,187 public highway-rail grade crossings located throughout the United States. Each crossing 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.

FRA provides annual funding to Operation Lifesaver, Inc., a national, non-profit organization that is dedicated to reducing the number of highway-rail grade crossing collisions and trespassing incidents. Operation Lifesaver, Inc. utilizes these funds to conduct public outreach and educational programs, and increase law enforcement partnerships. FRA also provides funding to enable active or retired law enforcement officers to raise awareness on the importance of enforcing traffic laws at highway-rail grade crossings and trespassing laws on railroad rights-of-way.

### Washington Union Station (WUS) FY 2016 Actual: \$0.07 million FY 2017 Annualized CR: \$1.19 million FY 2018 Request: \$0.95 million

As the Congressionally appointed owner of Washington Union Station (WUS), FRA's Office of Railroad Safety is responsible for carrying out the duties of the Authority Having Jurisdiction (AHJ). As the AHJ for WUS, FRA is required to ensure compliance with applicable building codes and fire life safety codes and requirements. To perform these duties, FRA must contract for specialized knowledge in the areas of building code compliance and inspection as well as knowledge in the area of fire life safety codes and inspections. The function of the AHJ will be to conduct periodic oversight inspections of WUS, review drawings and plans of new construction initiatives being contemplated at WUS, provide input to ensure code compliance, and to inspect any repair work done at WUS to ensure compliance with applicable building and life fire safety codes.

### Transportation Technology Center (TTC)

FY 2016 Actual: \$0.46 million FY 2017 Annualized CR: \$0.39 million FY 2018 Request: \$0.50 million

Since its establishment in the 1970s, TTC has been a vital resource in FRA's and the railroad community's pursuit of safer, more reliable, and more efficient rail services. Through FRA's unique partnership with the Association of American Railroads' subsidiary, Transportation Technology Center, Inc., TTC has matured, evolved, and prospered. The partnership has a robust multi-year research and development program in place. Recently, FRA began offering technical training at TTC for its inspectors, safety specialists, and the state employees in FRA's State Participation Program for rail safety inspectors. Collocating training and research and development provides inspectors and safety specialists opportunities for hands on learning with state of the art rail technology unavailable in traditional classroom settings.

Now into its fifth decade, TTC consists of 15 buildings, almost 50 structures, multiple laboratories, and hundreds of test devices and equipment on more than 50 square miles in Colorado. Some assets are new and in good condition, while others have exceeded their useful lives or fallen into disrepair. While FRA will continue to use its Research and Development appropriations to support TTC research activities, the President's Budget is requesting new resources to ensure TTC has appropriate facilities to service training participants in a quality and safe learning environment.

### What does this funding level support?

FRA's FY 2018 budget targets resources at today's most pressing rail safety issues, including:

- **Passenger Railroad Safety**: Compliance monitoring and technical assistance for commuter and intercity passenger railroads in the deployment of 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 crossing dangers; 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.

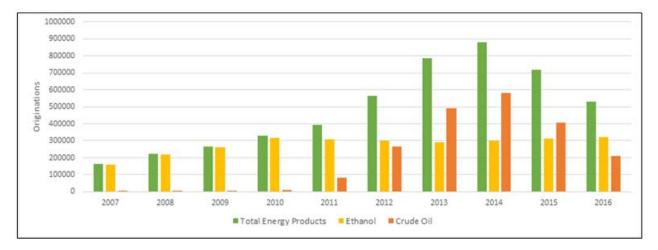
In recent years, Congress has provided FRA with increased funding in the Safety and Operations account expressly for the purpose of hiring new employees to reinforce efforts related to several safety priorities, including grade crossing managers, trespass prevention, safe transportation of energy products, and passenger rail safety. The President's Budget requests funding in FY 2018 to maintain FRA's workforce at the FY 2017 Annualized CR levels.

### Safe Transportation of Energy Products

The transportation of energy products (including crude oil and ethanol) by rail has increased significantly over the last decade as our nation has become more energy independent. The overall volume of these commodities moving by rail has increased by approximately 530% from 170,000 car loads (466 per day) in 2007, to approximately 900,000 car loads (2,466 per day) in 2014. Although estimates for energy product shipments by rail for 2017 show a decline due to increased pipeline capacity, the estimated 500,000 shipments (1,370 per day) of these commodities, along with increased shipments of other energy related products such as Liquefied Petroleum Gas (LPG) and Liquefied Natural Gas (LNG), continue to pose increased risks in transportation.

These energy products are shipped to refineries and other customers all across our nation, and represent approximately 35% of all hazardous materials shipments by rail. The safety and environmental risks posed by these shipments continue to be a significant concern across the country as communities along energy product routes prepare their emergency plans. These concerns are based on the knowledge gained from the limited number of significant accidents involving energy product shipments in the United States and Canada. These incidents resulted in the unintentional release of significant amounts of these commodities impacting the environment, or have been catastrophic due to the loss of life and significant property damage.

In response to the hazards posed by these commodities, the Department is continuing to pursue its holistic, all-of-the-above approach to ensure the safe movement of energy products across our nation. We believe this approach continues the enhancing of the integrity of tank cars used to transport hazardous materials, continuing to strengthen the safety requirements of rail operations, continuing to take steps to improve the safety of the product itself, and to work with and support the emergency response community in preparing for rail emergencies.



North American Originations of Energy Products Calendar Years 2007 to 2016

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 has pursued 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 2018, the President's Budget requests \$ 9.57 million for FRA's **Automated Track Inspection Program.** With this budget, FRA plans to accomplish the following:

- Introduce an additional vendor to provide ATIP services. This will create a dynamic environment to encourage the introduction of new detection technology, create competition to lower future costs and position ATIP for future program improvements with enhanced capabilities.
- Continue to prioritize crude oil and energy products routes; Northeast Corridor and other Amtrak routes; and respond to FRA Regional Office priorities.

#### Passenger Railroad Safety

Americans take more than 500 million railroad passenger trips annually. Protecting the safety and minimizing risks for these passengers as well as railroad crews is a top priority of FRA. The May 12, 2015 Amtrak Train 188 accident in Philadelphia 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.

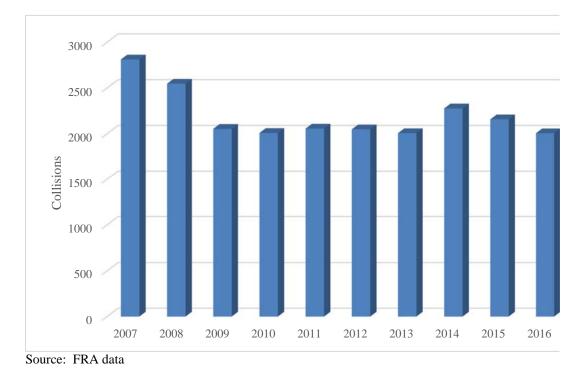
**Positive Train Control** technology is the single most important railroad safety technological development in more than a century. In FY 2018, \$3 million is requested for contractor support to supplement the processing and review of pertinent PTC related documentation, including the certification of railroads' PTC safety plans. Certification of the PTC system prior to railroad use is a statutory requirement levied by Congress in the Rail Safety Improvement Act of 2008 and the PTC Enforcement and Implementation Act of 2015. This process, alone, requires a significant resource pool of subject matter experts concentrated in a relatively short timeframe, and the contracted staff is intended to supplement internal staff to help bridge the anticipated resource gap. To date, FRA has received and reviewed only 9 out of approximately 40 railroads' PTC safety plans. Based on current railroad schedules, FRA anticipates receiving 25 PTC safety plans in FY 2018 and an additional 6 PTC safety plans in FY 2019. In addition, FRA requires the continued use of contract support staff to assist with monitoring railroad's compliance with their implementation plans and its associated enforcement responsibilities, as identified in the PTC Enforcement and Implementation Act of 2015. This support is essential to providing the program management support necessary to allow internal experts to focus on the critical technical matters of PTC test monitoring and system certification.

#### Grade Crossing and Pedestrian Safety

From FY 2007 to FY 2016, the number of highway-rail grade crossing incidents and related fatalities has decreased by 29 percent and 23 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. 805 people died in rail related accidents and incidents in FY 2016

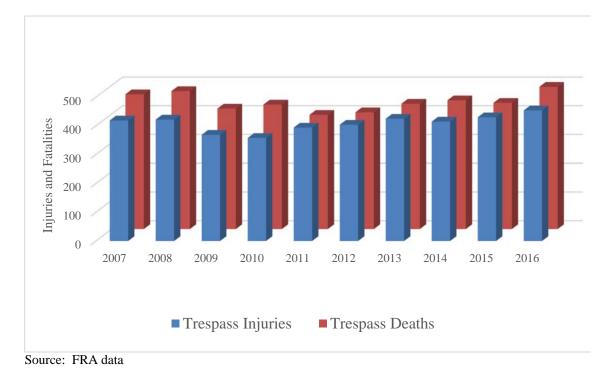
273 were from highway-rail grade crossing collisions

495 were from trespasser incidents



#### Highway-Rail Grade Crossing Incidents Fiscal Years 2007 to 2016

There was an average of 442 trespasser fatalities per year between FY 2007 and FY 2016. Notably, recent years have shown a disturbing trend as trespasser fatalities increased 10 percent from FY 2014. Highway-rail grade crossing and trespasser fatalities are the leading cause of rail-related deaths and accounted for 95 percent of all rail-related fatalities in FY 2016. 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 reducing these unnecessary deaths. The President's Budget request for \$25 million under the **Consolidated Rail Infrastructure and Safety Improvements** program will support a wide range of freight and passenger rail capital projects. FRA will 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 2007-2016**

# 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 maintain and improve upon its core safety functions. To measure success, FRA tracks performance metrics according to FRA's five safety disciplines.

FRA set the following performance measure targets for FY 2018:

- Reducing the grade crossing incident rate to 2.785 per million train-miles.
- Reducing the human factors-caused train accident rate to 0.965 per million train-miles.
- Reducing the track-caused train accident rate to 0.850 per million train-miles.
- Reducing the equipment-caused train accident rate to 0.335 per million train-miles.
- Reducing the other (signal and miscellaneous) train accident rate to 0.460 per million train-miles.
- Reducing the non-accidental hazardous material releases rate to 0.950 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 2018 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

T	T : T:41-	FY 2016	FY 2017	FY 2018
Line	Line Title	Act	CY	BY
0001	Obligations by program activity: Salaries and expenses	181,700	201,000	198,000
0001	Activity from RRIF Collections	831	1,000	198,000
0002	Alaska Railroad Liabilities	857	1,000	1,000
0000	Direct program activities, subtotal	183,388	203,000	1,000
0100				
0100	Total direct program	183,388	203,000	199,000
0799	Total direct obligations	183,388	203,000	199,000
0801	Reimbursable services	831,732	0	0
0900	Total new obligations	183,388	203,000	199,000
	Budgetary Resources:			
	Unobligated balance:			
1000	Unobligated balance brought forward, Oct 1	15,814	11,000	1,000
1021	Recoveries of prior year unpaid obligations	1,497	0	0
1050	Unobligated balance (total)	17,311	11,000	1,000
	Budget authority:			
	Appropriations, discretionary:			
1100	Appropriation	199,000	199,000	199,000
1121	Unobligated balance of appropriations			
1131	permanently reduced	-6,710	-7,000	
1160	Appropriation, disc (total)	192,290	192,000	199,000
	Spending authority from offsetting collections, discretionary:			
1700	Collected	866	1,000	0
		000	1,000	0

Account

Number: 69-0700-0-1-401

Line	Line Title	FY 2016 Act	FY 2017 CY	FY 2018 BY
1750	Spending auth from offsetting collections, disc (total)	866	1,000	(
1850	Spending auth from offsetting collections, mand (total)	0	0	(
1900	Budget authority (total)	193,156	193,000	199,000
1930	Total budgetary resources available	210,467	204,000	200,00
	Memorandum (non-add) entries:			
1940	Unobligated balance expiring	-542	0	(
1941	Unexpired unobligated balance, end of year	10,600	1,000	1,00
	Obligated balance, start of year (net):			
3000	Unpaid obligations, brought forward, Oct 1 (gross)	9,973	61,000	71,00
3001	Adjustments to unpaid obligations, brought forward, Oct 1			
3010	Obligations incurred, unexpired accounts	199,309	203,000	199,00
3011	Obligations incurred, expired accounts		0	
3020	Outlays (gross)	-174,056	-193,000	-197,00
3030	Obligations incurred, unexpired accounts	0	0	
3031	Unpaid obligations transferred from other accts [70-0560]	10,000	0	(
3040	Recoveries of prior year unpaid obligations, unexpired	-1,497	0	1
3041	Recoveries of prior year unpaid obligations, expired		0	
3050	Unpaid obligations, end of year (gross)	44,134	71,000	73,00
3060	Uncollected pymts, Brought Forward	44,134	/1,000	75,00
3071	Change Uncollected pymts			
3100	Obligated balance, start of year (net)	9,973	61,000	71,00
3200	Obligated balance, end of year	43,729	71,000	73,00

Discretionary:

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

Line	Line Title	FY 2016 Act	FY 2017 CY	FY 2018 BY
4000	Budget authority, gross	193,140	193,000	199,000
	Outlays, gross:			
4010	Outlays from new discretionary authority	165,806	168,000	173,000
4011	Outlays from discretionary balances	8,249	25,000	24,000
4020	Outlays, gross (total)	174,055	193,000	197,000
	Offsets against gross budget authority and outlays:			
	Offsetting collections (collected) from:			
4030	Federal sources	-125	0	0
4033	Non-Federal sources	-185,140	-1,000	0
4034	Offsetting governmental collections			
4040	Offsets against gross budget authority and outlays, disc (total)	-185,265	-1,000	0
4070	Budget authority, net (discretionary)	192,089	192,000	199,000
4080	Outlays, net (discretionary)	173,004	192,000	197,000
4180	Budget authority, net (total)	192,089	192,000	199,000
4190	Outlays, net (total)	173,004	192,000	197,000

# 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 to remain available until expended.

# EXHIBIT III-1 RAILROAD RESEARCH AND DEVELOPMENT Summary by Program Activity Appropriations, Obligation Limitations, and Exempt Obligations (\$000)

	FY 2016 ACTUAL	FY 2017 ANNUALIZED CR	FY 2018 REQUEST	CHANGE FY 2017- 2018
Track	11,279	11,259	11,279	20
Rolling Stock	10,322	10,303	10,322	19
Train Control and Communication	8,086	8,071	8,086	15
Human Factors	5,542	5,532	5,542	10
Railroad Systems Issues TOTAL	<u>3,871</u> <b>39,100</b>	<u>3,864</u> <b>39,029</b>	<u>3,871</u> <b>39,100</b>	<u> </u>
				/1
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 enforcement and rulemaking 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 research.

In addition to improving safety, the program contributes significantly towards activities to achieve and maintain a state of good repair and promote job creation and economic growth.

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 Program** 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 2017 TO FY 2018 Appropriations, Obligations, Limitations, and Exempt Obligations (\$000)

	Change from FY 2017 to FY 2018	Change from FY 2017 to FY 2018
ITEM	\$000	FTE
FY 2017 ANNUALIZED CR	39,029	-
NEW OR EXPANDED PROGRAMS:		
Track	20	-
Rolling Stock	19	-
Train Control and Communication	15	-
Human Factors	10	-
Railroad Systems Issues	7	-
Subtotal, New or Expanded Programs	71	-

FY 2018 REQUEST

39,100

#### EXHIBIT III-2

## ANNUAL PERFORMANCE RESULTS AND TARGETS FEDERAL RAILROAD ADMINISTRATION

FRA integrates performance results into its budget request to monitor and communicate the effectiveness of FRA's programs and policies in achieving specific performance goals. For the Railroad Research and Development account, FRA's goal is to reduce the rate of rail-related accidents and incidents per million train-miles to no more than 15.840 by the end of FY 2018.\*

	2014	2015	2016	2017	2018
Target	16.150	15.900	15.890	15.850	15.840
Actual	16.212	15.808	16.044		

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

## DETAILED JUSTIFICATION FOR RAILROAD RESEARCH AND DEVELOPMENT

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

Program Activity	FY 2016 Actual	FY 2017 Annualized CR	FY 2018 Request	Change FY 2017- 2018
Track	11,279	11,259	11,279	20
Rolling Stock	10,322	10,303	10,322	19
Train Control and Communication	8,086	8,071	8,086	15
Human Factors	5,542	5,532	5,542	10
Railroad Systems Issues	3,871	3,864	3,871	7
TOTAL	39,100	39,029	39,100	71

# FY 2018 - Railroad Research and Development - Budget Request \$000

## What is this Program and Why is it Necessary?

The mission of FRA's Research and Development (R&D) program 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 enforcement and rulemaking. 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 Railroad Safety**: Compliance monitoring and technical assistance for commuter and intercity passenger railroads in the deployment of 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 crossing dangers; 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 rolling stock technologies
- 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
- o Job and cognitive task analyses
- Usability studies of automation and new technology
- Suicide prevention
- Stop signal violation research
- o Guidance for implementing safety management systems
- o Studies of motorist decision-making at grade crossings
- o 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

# What does this funding level support?

The President's Budget requests \$39.1 million for FRA's R&D program in FY 2018, equal to the FY 2016 actual level. Sustained funding is necessary to continue current activities and ensure R&D outputs contribute to continuous safety improvement in future.

# TRACK PROGRAM

The President's Budget requests \$11.27 million, equal to FY 2016 actual level, for FRA's Track Research Program. This program includes key components of FRA's FY 2018 initiatives to address the **Safe Transportation of Energy Products.** 

The number of accidents due to track-related causes decreased by 45 percent from 2008 to 2016. 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 2018 accomplishments for the Track Research Program include:

- Development of foundational elements for a predictive analysis of track and ballast conditions through a joint research effort with Amtrak.
- Completion of research into engineered-polymer composite tie design and manufacturing that will assist in modifying industry recommended practices.
- Development and evaluation of risk-based models for track deterioration, including broken rails, for inspection prioritization/optimization.
- Automated inspection systems research to reduce inspection intervals and maximize data flow.
- Evaluation of automated, wireless bridge condition monitoring technology.
- Pre-production prototypes and field testing of automated frog repair and signal wire attachment technologies designed to improve rail integrity.

- Pilot testing of automated, image-based track change detection systems and algorithms to efficiently provide safety data to decision makers.
- Evaluation of the redesigned air-coupled rail defect detection prototype and test on the railroad test track at TTC at speeds up to 80 mph.
- 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.
- Applied research and field testing of non-destructive rail stress measurement technology.
- Initiate the enhanced acoustic birefringence method for measuring longitudinal rail stress project.
- Development and evaluation of a machine vision-based track geometry measurement system.
- Test and evaluation of multiple track geometry conditions and vehicles responses.
- Initiate defect growth characterization in modern rail steel project.
- Complete the library matrix of manufactured rail flaws for calibration and evaluation of new rail flaw detection systems.
- Complete the Portable Track Geometry Measurement System (PTGMS).
- Evaluation of unmanned aircraft systems for railroad safety inspections.

# **ROLLING STOCK PROGRAM**

The President's Budget requests \$10.32 million, equal to the FY 2016 actual level, for FRA's Rolling Stock Research Program. This program includes key components of FRA's FY 2018 budget initiative to address the **Safe Transport of Energy Products.** 

The number of accidents due to equipment-related causes has decreased by 15 percent from 2008 to 2016. 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 2018 accomplishments for the Rolling Stock Research Program include:

- Research to gain a better understanding of current wheel failure modes and mechanisms.
- Completion of testing and analysis to develop the technical basis for potential rulemaking related to passenger equipment fuel tanks under dynamic loading scenarios.
- Further research into safety and energy benefits from automated brake technologies.
- Completion of research to comprehensively describe the engineering requirements placed on glazing systems, develop effective strategies for balancing all of the safety demands and provide recommendations for glazing strategies which offer maximized occupant containment in accidents.
- Continuation of analysis and full scale testing of passenger locomotives retrofitted with crashworthy components to improve performance and operator protection during train collisions.
- Collaboration with other modes on alternative fuels, such as natural gas, for improved emissions and assured safety.
- Continue research and support rulemaking in collaboration with PHMSA to assure the safety of containers and railcars intended to transport LNG.
- Assess the safety of new tank cars intended for the transport of hazardous materials

# TRAIN CONTROL AND COMMUNICATION PROGRAM

The President's Budget requests \$8.08 million for FRA's Train Control and Communication Research Program, equal to the FY 2016 actual level. This program is includes key elements of FRA's FY 2018 initiative to address **Grade Crossing and Pedestrian Safety**.

The number of signal-related train accidents has decreased by 21 percent from FY 2008 to FY 2016 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:

- Radio desense to eliminate radio interference and improve wireless communication between locomotives, wayside, and back office, especially in highly congested corridors
- Passenger Braking Algorithm development and refinement to improve braking enforcement performance for passenger railroads
- Rail Crossing Violation Warning Application Development, a cooperative vehicle and infrastructure system that assists drivers in avoiding crash-imminent situations at railroad crossings.

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 2016. 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 2018 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 the interoperable vital Employee In Charge Portable Terminal to protect roadway workers in work zones.
- New locomotive-based technologies for long-range trespasser detection and warning systems.
- Development and test of an advanced highway preemption system.
- Technology demonstrations and technology transfer activities.

# HUMAN FACTORS PROGRAM

In FY 2018, the President's Budget requests \$5.54 million, equal to the FY 2016 actual level, for FRA's Human Factors Research Program. This program is a key element of FRA's FY 2018 initiative on **Safe Transport of Energy Products (STEP).** 

There was a 31 percent reduction in human factors-caused accidents from 2008 to 2016, 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 2018 accomplishments for the Human Factors Research Program include:

- Human reliability studies following full implementation of Positive Train Control technology in the Cab Technology Integration Laboratory (CTIL) to understand the challenges of human computer interaction and integration of multiple interfaces.
- Completion of the Maintenance of Way (MOW) fatigue study to support the FRA Office of Railroad Safety's needs for issuing safety advisories and rulemaking.
- Completion of safety culture and safety compliance measurement tools for the Short Line Safety Institute of the American Short Line and Regional Railroad Association. Continued support in standing up the Safety Institute to help improve safety across the short line and regional railroad industry.
- Continued efforts in development and implementation of Clear Signal for Action program to improve safety culture by demonstration of CSA materials at pilot sites.
- Developing a list of leading human factors causes in rail accidents from FRA and National Transportation Safety Board accident reports. The results will help align the focus of human factors research with the leading causes of accidents due to human error.
- Continued study of drivers' behavior at grade crossings by introducing data from naturalistic settings and driving simulator.
- Develop communication strategy to expand the use of "Railroaders' Guide to Healthy Sleep" website.

# Safe Transportation of Energy Products

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For FY 2018, the President's Budget proposes 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 expands to the transportation of all commodities for Class III 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 PROGRAM

In FY 2018, the President's Budget requests \$3.87 million for FRA's Railroad System Issues Program, equal to the FY 2016 actual level. A small portion of this funding is for staff to oversee contractors' and grantees' performance and to witness testing, including travel.

Anticipated FY 2018 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 the Workforce Development Program covering: Council on Women and Girls, Transportation Career Pathway Model Development, Minority Serving Institutions Task Force, and the YES Mentoring Program.
- 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 help 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 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 crossings 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 shortcuts across railroad property. Innovative solutions for warning people 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	FY 2016 Act	FY 2017 CY	FY 2018 BY
	Obligations by program activity:			
0001	Track Program	11,494	10,493	11,279
0002	Rolling Stock Program	10,898	9,786	10,322
0003	Train Control and Communication	8,099	7,466	8,086
0004	Human Factors	5,606	5,654	5,542
0005	Railroad System Issues	3,759	3,670	3,871
0091	Direct program activities, subtotal	39,856	37,069	39,100
0100	Total direct program	39,856	37,069	39,100
0791	Direct program activities, subtotal			
0799	Total direct obligations	39,856	37,069	39,100
0801	Reimbursable services	0	0	0
0809	Reimbursable program activities, subtotal	0	0	0
0900	Total new obligations	39,856	37,069	39,100
	Budgetary Resources:			
	Unobligated balance:			
1000	Unobligated balance brought forward, Oct 1	9,303	8,000	10,000
1021	Recoveries of prior year unpaid obligations	1,607	0	0
1050	Unobligated balance (total)	10,910	8,000	10,000
	Budget authority:			
	Appropriations, discretionary:			
1100	Appropriation	39,100	37,069	39,100
1131	Unobligated balance of appropriations permanently reduced	-1,960	0	0
<b>1131</b> <b>1160</b>	Appropriation, disc (total)	<u>-1,960</u> <b>37,140</b>	37,069	<u> </u>
1100	Appropriation, uise (total)	37,140	37,009	39,100

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

Line	Line Title	FY 2016 Act	FY 2017 CY	FY 2018 BY
	Spending authority from offsetting collections,			
	discretionary:			
1700	Collected	0	2,000	2,000
1 - 0 1	Change in uncollected payments, Federal	110	0	0
1701	sources	-110	0	0
1750	Spending auth from offsetting collections, disc (total)	-110	2,000	2,000
1750 1900	Budget authority (total)	37,030	<u> </u>	<u> </u>
1900	budget authority (total)	57,030	39,009	41,100
1930	Total budgetary resources available	47,940	47,152	51,183
	Memorandum (non-add) entries:			
1940	Unobligated balance expiring	0	0	0
1941	Unexpired unobligated balance, end of year	8,083	10,000	11,000
	Change in obligated balance:			
	Obligated balance, start of year (net):			
	Unpaid obligations, brought forward, Oct 1			
3000	(gross)	39,451	41,000	37,000
3010	Obligations incurred, unexpired accounts	39,856	37,000	40,000
3020	Outlays (gross)	-36,002	-41,000	-42,000
	Recoveries of prior year unpaid obligations,			_
3040	unexpired	-1,607	0	0
3050	Unpaid obligations, end of year (gross)	41,698	37,000	35,000
3060	Uncollected pymts, Brought Forward	-295	0	0
3070	Change Uncollected pymts	110	0	0
3090	Uncollected pymts, Fed sources, end of year	-185	0	0
3100	Obligated balance, start of year (net)	39,155	41,000	37,000
3200	Obligated balance, end of year	41,513	37,000	35,000
	Budget authority and outlays, net:			
	Discretionary:			
4000	Budget authority, gross	37,030	37,069	41,100
	Outlays, gross:			
4010	Outlays from new discretionary authority	11,339	12,000	14,000
4011	Outlays from discretionary balances	24,663	29,000	28,000
4020	Outlays, gross (total)	36,002	41,000	42,000

Account

Number: 69-0745-0-1-401

Line	Line Title	FY 2016 Act	FY 2017 CY	FY 2018 BY
	Offsets against gross budget authority and			
	outlays:			
	Offsetting collections (collected) from:			
4030	Federal sources	0	-2,000	-2,000
	Offsets against gross budget authority and			
4040	outlays, disc (total)	0	-2,000	-2,000
	Additional offsets against gross budget authority only:			
	Change in uncollected pymts, Fed sources,			
4050	unexpired	110	0	0
	Offsetting collections credited to expired			
4052	accounts	0	0	0
	Additional offsets against budget authority		_	
4060	only (total)	110	0	0
4070	Budget authority, net (discretionary)	37,140	37,069	39,100
4080	Outlays, net (discretionary)	36,002	39,000	40,000
4110	Outlays, gross (total)	0	0	0
4180	Budget authority, net (total)	37,140	37,069	39,100
4190	Outlays, net (total)	36,002	39,000	40,000

## DEPARTMENT OF TRANSPORTATION FEDERAL RAILROAD ADMINISTRATION

## NATIONAL RAILROAD PASSENGER CORPORATION APPROPRIATIONS LANGUAGE

#### NORTHEAST CORRIDOR GRANTS TO THE NATIONAL RAILROAD PASSENGER CORPORATION

To enable the Secretary of Transportation to make grants to the National Railroad Passenger Corporation for activities associated with the Northeast Corridor as authorized by section 11101(a) of the Fixing America's Surface Transportation Act (division A of Public Law 114— 94), \$235,000,000, to remain available until expended: *Provided*, That the Secretary may retain up to one-half of 1 percent of the funds provided under both this heading and the National Network Grants to the National Railroad Passenger Corporation heading to fund the costs of project management and oversight of activities authorized by section 11101(c) of division A of Public Law 114—94. *Provided further*, That in addition to the project management oversight funds authorized under section 11101(c) of division A of Public Law 114—94, the Secretary may retain up to an additional \$5,000,000 of the funds provided under this heading to fund expenses associated with implementing section 24905 of title 49, United States Code. *Provided further*, That of the amounts made available under this heading and the National Network Grants to the National Railroad Passenger Corporation heading, not less than \$50,000,000 shall be made available to bring Amtrak-served facilities and stations into compliance with the Americans with Disabilities Act.

#### NATIONAL NETWORK GRANTS TO THE NATIONAL RAILROAD PASSENGER CORPORATION

To enable the Secretary of Transportation to make grants to the National Railroad Passenger Corporation for activities associated with the National Network as authorized by section 11101(b) of the Fixing America's Surface Transportation Act (division A of Public Law 114— 94), \$525,000,000, to remain available until expended. *Provided*, That the Secretary may retain up to an additional \$2,000,000 of the funds provided under this heading to fund expenses associated with the State-Supported Route Committee established under 24712 of title 49, United States Code.

Explanation: The President's Budget proposes to fund Amtrak grants through the account structure authorized by the FAST Act. The FY 2017 Continuing Resolution contained an anomaly to utilize the FAST Act account structure for Amtrak. The FY 2018 language is consistent with the FY 2017 anomaly, with the exception that the President's Budget proposes to strike the set-aside for ADA station upgrades; approximately 90 percent of the ADA set-aside in FY 2017 was for projects on the National Network. Due to the reduction in National Network funding from the Administration's proposal to eliminate Long Distance services, the President's Budget recommends providing more flexibility to determine the appropriate amount for ADA upgrades. This requirement can be handled through FRA's grant agreement with Amtrak.

#### **OPERATING GRANTS TO THE NATIONAL RAILROAD PASSENGER CORPORATION**

To enable the Secretary of Transportation to make quarterly grants to the National Railroad Passenger Corporation, in amounts based on the Secretary's assessment of the Corporation's seasonal cash flow requirements, for the operation of intercity passenger rail, as authorized by section 101 of the Passenger Rail Investment and Improvement Act of 2008 (division B of Public Law 110-432), as in effect the day before the enactment of the Passenger Rail Reform and Investment Act of 2015 (division A, title XI of the Fixing America's Surface Transportation Act), \$288,500,000, to remain available until expended: Provided, That the amounts available under this paragraph shall be available for the Secretary to approve funding to cover operating losses for the Corporation only after receiving and reviewing a grant request for each specific train route: Provided further, That each such grant request shall be accompanied by a detailed financial analysis, revenue projection, and capital expenditure projection justifying the Federal support to the Secretary's satisfaction: Provided further, That not later than 60 days after enactment of this Act, the Corporation shall transmit, in electronic format, to the Secretary and the House and Senate Committees on Appropriations the annual budget, business plan, the 5-Year Financial Plan for fiscal year 2016 required under section 204 of the Passenger Rail Investment and Improvement Act of 2008 and the comprehensive fleet plan for all Amtrak rolling stock: Provided further, That the budget, business plan and the 5 Year Financial Plan shall include annual information on the maintenance, refurbishment, replacement, and expansion for all Amtrak rolling stock consistent with the comprehensive fleet plan: Provided further, That the Corporation shall provide monthly performance reports in an electronic format which shall describe the work completed to date, any changes to the business plan, and the reasons for such changes as well as progress against the milestones and target dates of the 2012 performance improvement plan: Provided further, That the Corporation's budget, business plan, 5-Year Financial Plan, semiannual reports, monthly reports, comprehensive fleet plan and all supplemental reports or plans comply with requirements in Public Law 112-55: Provided further, That none of the funds provided in this Act may be used to support any route on which Amtrak offers a discounted fare of more than 50 percent off the normal peak fare: Provided further, That the preceding proviso does not apply to routes where the operating loss as a result of the discount is covered by a State and the State participates in the setting of fares.

#### CAPITAL AND DEBT SERVICE GRANTS TO THE NATIONAL RAILROAD PASSENGER CORPORATION

National Railroad Passenger Corporation for capital investments as authorized by sections 101(c), 102, and 219(b) of the Passenger Rail Investment and Improvement Act of 2008 (division B of Public Law 110–432), as in effect the day before the enactment of the Passenger Rail Reform and Investment Act of 2015 (division A, title XI of the Fixing America's Surface Transportation Act), \$1,101,500,000, to remain available until expended, of which not to exceed \$160,200,000 shall be for debt service obligations as authorized by section 102 of such Act: Provided, That of the amounts made available under this heading, not less than \$50,000,000 shall be made available to bring Amtrak-served facilities and stations into compliance with the Americans with Disabilities Act: Provided further, That after an initial distribution of up to \$200,000,000, which shall be used by the Corporation as a working capital

account, all remaining funds shall be provided to the Corporation only on a reimbursable basis: Provided further, That of the amounts made available under this heading, up to \$50,000,000 may be used by the Secretary to subsidize operating losses of the Corporation should the funds provided under the heading "Operating Grants to the National Railroad Passenger Corporation'' be insufficient to meet operational costs for fiscal year 2016: Provided further, That the Secretary may retain up to one half of 1 percent of the funds provided under this heading to fund the costs of project management and oversight of activities authorized by subsections 101(a) and 101(c) of division B of Public Law 110-432, of which up to \$500,000 may be available for technical assistance for States, the District of Columbia, and other public entities responsible for the implementation of section 209 of division B of Public Law 110-432: Provided further, That the Secretary shall approve funding for capital expenditures, including advance purchase orders of materials, for the Corporation only after receiving and reviewing a grant request for each specific capital project justifying the Federal support to the Secretary's satisfaction: Provided further, That except as otherwise provided herein, none of the funds under this heading may be used to subsidize operating losses of the Corporation: Provided further, That none of the funds under this heading may be used for capital projects not approved by the Secretary of Transportation or on the Corporation's fiscal year 2016 business plan: Provided further, That in addition to the project management oversight funds authorized under section 101(d) of division B of Public Law 110-432, the Secretary may retain up to an additional \$3,000,000 of the funds provided under this heading to fund expenses associated with implementing section 212 of division B of Public Law 110-432, including the amendments made by section 212 to section 24905 of title 49, United States Code: Provided further, That Amtrak shall conduct a business case analysis on capital investments that exceed \$10,000,000 in life-cycle costs: Provided further, That each contract for a capital acquisition that exceeds \$10,000,000 in life-cycle costs shall state that funding is subject to the availability of appropriated funds provided by an appropriations Act.

Explanation: The President's Budget proposes to fund Amtrak grants through the account structure authorized by the FAST Act. The FY 2017 Continuing Resolution contained an anomaly to utilize the FAST Act account structure for Amtrak.

# EXHIBIT III-1 GRANTS TO THE NATIONAL RAILROAD PASSENGER CORPORATION Summary by Program Activity

Appropriations, Obligation Limitations, and Exempt Obligations

(\$000)

	FY 2016 ACTUAL	FY 2017 ANNUALIZED CR	FY 2018 REQUEST	CHANGE FY 2017- 2018
Northeast Corridor Grants to the National Railroad Passenger Corporation <sup>1/</sup>		235,000	235,000	
National Network Grants to the National Railroad Passenger Corporation <sup>1/</sup>	-	1,155,000	525,000	(630,000)
Operating Grants to the National Railroad Passenger Corporation <sup>1/</sup>	288,500	-	-	-
Capital and Debt Service Grants to the National Railroad Passenger Corporation <sup>1/</sup>	1,101,500	-	-	-
TOTAL	1,390,000	1,390,000	760,000	(630,000)
Full-Time Equivalents	3	10	7	(3)

1/ Until FY 2017, Congress appropriated funding for the National Railroad Passenger Corporation (Amtrak) through an Operating account and a Capital and Debt Service account. The FAST Act restructured Amtrak's appropriations accounts, providing separate authorizations for the Northeast Corridor and National Network. Congress adopted this new account structure in an anomaly to the FY 2017 Continuing Resolution (Sec. 143 of P.L. 114-223). The President's FY 2018 Budget requests funding for Amtrak under the new account structure.

#### **Program and Performance Statement**

FRA's Grants to Amtrak provide capital, operating, and debt service funding to Amtrak, as well as support FRA's management oversight of Amtrak. Funding is made available by FRA in accordance with the authorities provided under Section 11101 of the Fixing America's Surface Transportation Act of 2015 (FAST Act). Section 11101 of the FAST Act authorizes separate funding for the Northeast Corridor and the National Network, which includes Amtrak's State-Supported services, Long Distance services, and other Amtrak costs not allocated to the Northeast Corridor. The FY 2018 President's Budget proposes to terminate Federal funding for Amtrak's Long Distance services.

# EXHIBIT III-1a GRANTS TO THE NATIONAL RAILROAD PASSENGER CORPORATION SUMMARY ANALYSIS OF CHANGE FROM FY 2017 TO FY 2018 Appropriations, Obligations, Limitations, and Exempt Obligations (\$000)

ITEM	Change from FY 2017 to FY 2018 \$000	Change from FY 2017 to FY 2018 FTE
FY 2017 ANNUALIZED CR	1,390,000	10
ADJUSTMENTS TO BASE		
Administrative Adjustments to Base:	266	2
Annualization of FY 2017 FTE	237	2
Annualization of FY 2017 Pay Raise	6	-
FY 2018 Pay Raise	23	-
Subtotal, Adjustments to Base	266	2
PROGRAM REDUCTIONS		
Management Oversight	(3,416)	(5)
National Network Grants to the National Railroad Passenger Corporation	(626,850)	-
Subtotal, Program Reductions	(630,266)	(5)
FY 2018 REQUEST	760,000	7

# DETAILED JUSTIFICATION FOR GRANTS TO THE NATIONAL RAILROAD PASSENGER CORPORATION

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

#### FY 2018 – Grants to the National Railroad Passenger Corporation - Budget Request \$000

Program Activity	FY 2016 Actual	FY 2017 Annualized CR	FY 2018 Request	Change FY 2017- 2018
Northeast Corridor Grants to the National Railroad Passenger Corporation <sup>1/</sup>	-	235,000	235,000	-
National Network Grants to the National Railroad Passenger Corporation <sup>1/</sup>	-	1,155,000	525,000	(630,000)
Operating Grants to the National Railroad Passenger Corporation <sup>1/</sup>	288,500	-	-	-
Capital and Debt Service Grants to the National Railroad Passenger Corporation <sup>1/</sup>	1,101,500	-	-	-
TOTAL	1,390,000	1,390,000	760,000	(630,000)

1/ Until FY 2017, Congress appropriated funding for the National Railroad Passenger Corporation (Amtrak) through an Operating account and a Capital and Debt Service account. The FAST Act restructured Amtrak's appropriations accounts, providing separate authorizations for the Northeast Corridor and National Network. Congress adopted this new account structure in an anomaly to the FY 2017 Continuing Resolution (Sec. 143 of P.L. 114-223). The President's FY 2018 Budget requests funding for Amtrak under the new account structure.

#### What is this Program and Why is it Necessary?

The National Railroad Passenger Corporation (Amtrak) is currently the sole operator of intercity passenger rail service in the United States, operating three primary types of intercity passenger rail services:

- 1. Higher speed, high frequency, Northeast Corridor services;
- 2. **State-Supported**, short distance, corridor service on 29 routes that are located in densely populated regions; and
- 3. **Long Distance** services on 15 routes greater than 750 miles that connect rural areas and population centers.

Since its establishment by Congress in 1970, Amtrak has relied upon Federal funding to support its statutory mandate to operate a national rail passenger transportation system. The majority of Amtrak's annual operating losses that are subsidized by the Federal Government

are attributable to the operation of Long Distance trains (approximately \$500 million in FY 2016). The President's FY 2018 Budget proposes to direct Federal investment to Amtrak's Northeast Corridor (NEC) and State-Supported services, while terminating Federal support for Long Distance services, which suffer from poor on-time performance (55 percent all-stations OTP in FY 2016) and account for only 15 percent of Amtrak ridership but 38 percent of train system operating costs.<sup>1</sup>

Amtrak Service	Ridership	Revenue	Operating Costs	On-Time Performance
Northeast Corridor	•	\$\$ \$\$\$\$ \$\$\$ \$\$	\$\$\$ \$\$\$\$\$	
State- Supported	- For - For - For - For - For - For	\$\$\$\$ \$\$\$\$\$	\$\$\$\$\$ \$\$\$\$\$	
Long Distance	<b>ŤŤŤŤ</b>	\$ \$\$\$\$\$	\$ \$\$\$\$\$ \$\$\$\$\$	

Amtrak FY 2016 Ridership, Revenue, Operating Costs by Service Line\*

\*Ridership icon equals 1 million; revenue/cost icon equals \$100 million; OTP percentage in pie chart

Terminating Federal funding for Long Distance services will allow Amtrak to focus its resources – and those appropriated by Congress – on better managing its successful corridor services that provide transportation options within more densely populated regions. Over the last decade, Amtrak ridership has increased by over 20 percent, with more than 2.7 million additional passengers riding State-Supported trains and nearly 1.9 million additional NEC passengers over this period. Amtrak has made significant strides during this timeframe to improve financial performance and cost recovery. In FY 2016, Amtrak set new ridership and ticket revenue records of 31.3 million passengers and \$2.14 billion, respectively, as well as covered 94 percent of its operating costs.<sup>2</sup> Most telling, this growth and improvement has

<sup>&</sup>lt;sup>1</sup> Amtrak, <u>Monthly Performance Report for September 2016</u>, March 31, 2017.

<sup>&</sup>lt;sup>2</sup> Amtrak, <u>Amtrak Delivers Strong FY 2016 Financial Results</u>, November 17, 2016.

occurred in spite of challenges posed by heavy construction in many corridors and an increasing backlog of state of good repair projects on the NEC.

# FAST Act Reforms

The FAST Act contained several provisions intended to improve the transparency and management of Amtrak funding, target Federal investments in rail infrastructure and state of good repair needs, and enhance project planning and coordination. Until FY 2017, Amtrak's annual Federal funding was previously appropriated to two accounts:

- **Operating Grant** to offset losses primarily attributable to Amtrak's Long Distance routes that were not covered by ticket revenues or surpluses from Northeast Corridor operations or other Amtrak businesses.
- **Capital/Debt Grant** to support Amtrak's capital program and service debt obligations

The President's FY 2018 Budget requests funding under the new account structure authorized by the FAST Act – Northeast Corridor Grants and National Network Grants. This new structure is designed to focus NEC appropriations, revenues, and other funds with projects and activities related to the NEC (and similarly National Network funds with National Network-related activities), and eliminate the cross subsidization of Northeast Corridor surpluses to losses in other Amtrak service lines. Under the new account structure, NEC revenues are reinvested into the corridor's extensive capital needs.

Anticipated FY 2017 and FY 2018 accomplishments for Amtrak include:

- Continued support of Amtrak's annual capital program to maintain and improve infrastructure, equipment, stations, facilities, information technology, and other support services required to provide intercity passenger rail operations;
- On-going development and production of next-generation high-speed trainsets for the Acela service on the NEC and major station improvements at Moynihan Station in New York City, Washington Union Station, Baltimore Penn Station, and New Carrollton Station in Maryland. These projects were financed by the U.S. DOT's Build America Bureau in 2016 through the Railroad Rehabilitation and Improvement Financing (RRIF) Program;
- Implementation of the new account structure mandated by Section 11201 of the FAST Act; and
- Adoption of new 5-year service line and asset line plans as required by Section 11203 of the FAST Act. These plans replace Amtrak's previous requirement to develop a 5-year financial plan and are intended to help to better inform Amtrak's decision-making process and more clearly communicate with U.S. DOT, Congress, States, passengers and other partners on Amtrak's business priorities and financial performance.

# What does this funding level support?

**Northeast Corridor (\$235 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 (11.9 million) and more than half of its ticket revenue (\$1.2 billion).<sup>3</sup> The FY 2018 President's Budget requests funding for the following needs:

- Normalized replacement of NEC infrastructure in order to safely maintain operations;
- Targeted investments in major state of good repair backlog and infrastructure improvement projects, such as the Gateway Program<sup>4</sup>;
- The portion of annual equipment overhauls that the NEC'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; and
- Upgrades and repairs to Amtrak-served stations on the NEC, including projects to bring stations into compliance with Americans with Disabilities Act (ADA) requirements.

**National Network (\$525 million):** The National Network supports the operating, capital, and debt service needs of Amtrak's State-Supported routes and other activities not allocated to the Northeast Corridor. The President's FY 2018 Budget requests funding for the following needs:

- <u>State-Supported Services</u>: The 29 State-Supported routes provide corridor service in 18 states. Section 209 of the Passenger Rail Investment and Improvement Act of 2008 (PRIIA) required States to be financially responsible for supporting their corridor services, beginning in FY 2014. In FY 2016, states paid Amtrak more than \$285 million for capital and operating costs associated with State-Supported routes. FRA funding will provide capital assistance for the infrastructure, equipment, stations, and other assets utilized for State-Supported services. Federal funding will also be used to offset operating costs not covered by State-Supported train revenues and the Section 209 policy (approximately \$74 million in FY 2016).
- <u>Infrastructure Access</u>: While the majority of track over which Amtrak trains operate are owned by other railroads, Amtrak owns some infrastructure outside of the NEC on the National Network. Amtrak-owned or controlled infrastructure on the National Network includes, but is not limited to:
  - o 96 miles of the Michigan Line between Kalamazoo, MI Porter, IN;
  - o 103 miles of the Keystone Corridor between Philadelphia Harrisburg, PA;
  - o 61 miles of the Springfield Line between New Haven, CT Springfield, MA;

<sup>&</sup>lt;sup>3</sup> Amtrak, <u>Monthly Performance Report for September 2016</u>, March 31, 2017.

<sup>&</sup>lt;sup>4</sup> Gateway is a comprehensive program of infrastructure improvements to add track and tunnel connections around New York City to address the NEC's most critical capacity constraint.

- 94 miles of the Hudson Line owned by CSX and leased to Amtrak between Poughkeepsie, NY - Hoffmans, NY (near Schenectady); and
- o the terminal areas in Chicago, New Orleans, and other locations.

For these Amtrak-owned or controlled infrastructure and facilities, Amtrak is responsible for planning, developing, managing, and providing access to other rail operators (freight and passenger) and public or private entities that use those assets. Unlike on the NEC, National Network revenues are not sufficient to fully cover costs and Federal assistance is required.

• <u>Long Distance Services</u>: The President's FY 2018 Budget proposes to terminate Federal funding for Long Distance services.



## **Proposed Amtrak Network with the Elimination of Long Distance Routes**

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

The United States' population is projected to increase by more than 55 million people over the next 25 years. Demand for intercity passenger rail service will continue to grow as the public seeks transportation alternatives to complement our increasingly congested highways and airports. An Amtrak network focused on operating NEC and State-Supported trains will be better positioned to serve the small number of megaregions where a majority of this projected growth is expected to be concentrated. Through the cost allocation polices developed for the NEC and State-Supported routes under PRIIA, states have made a strong financial commitment that affirms the importance of Amtrak services and infrastructure to state transportation systems, economies, and communities' quality of life.

**Relieves Congestion** - Amtrak removes almost 8 million cars from the road, and eases air congestion by eliminating the need for 50,000 airplanes each year. A typical Amtrak corridor train has the same capacity as six or more 50-seat regional jets, and a single train's capacity can be increased by adding cars.<sup>5</sup>

**Helps Meet Current Travel Demand** - More people travel through Amtrak's Penn Station in New York every day than through JFK, LaGuardia and Newark airports combined.<sup>6</sup>

**Increases Freight Mobility** – Approximately 70 freight trains per day use Amtrak-owned or maintained tracks to serve industries, power plants, ports, and other rail shippers or customers throughout the Northeast and in portions of three Midwestern states. The NEC transports 14 million car-miles of freight each year and links seaports with manufacturers to export goods.<sup>7</sup> Major companies including Ford, John Deere, Mitsubishi, and Caterpillar with facilities in states such as Illinois, Indiana, Iowa, and Kansas use the NEC to access ports in Baltimore and Wilmington to export their products abroad.<sup>8</sup>

**Economic Development** – In 2014, Amtrak and its passengers generated an economic benefit of approximately \$10.8 billion which supported 117,200 jobs and generated \$1.7 billion in taxes for Federal, State, and local governments.<sup>9</sup> In addition, station development yields sizable economic benefits including attracting housing and retail development, restored parks and civic and private buildings, an increase in housing and property rental values, and tourism growth. Recent station redevelopment examples include Normal, Illinois, and Brunswick, Maine.<sup>10</sup>

<sup>&</sup>lt;sup>5</sup> Amtrak, <u>Critical Link</u>, 2007.

<sup>&</sup>lt;sup>6</sup> Amtrak, <u>New Passenger Information Displays Improve Customer Experience at Penn Station</u>, October 11, 2016.

<sup>&</sup>lt;sup>7</sup> NEC Commission, <u>Investing in the Northeast Corridor</u>, February 2016.

<sup>&</sup>lt;sup>8</sup> NEC Commission, <u>Supporting Midwest Manufacturing Jobs and American Exports</u>.

<sup>&</sup>lt;sup>9</sup> Amtrak, <u>FY 2016 Budget and Business Plan</u>.

<sup>&</sup>lt;sup>10</sup> Amtrak, <u>Great American Stations</u>.

#### DEPARTMENT OF TRANSPORTATION FEDERAL RAILROAD ADMINISTRATION NORTHEAST CORRIDOR GRANTS TO THE NATIONAL RAILROAD PASSENGER CORPORATION (69-X-1774) PROGRAM AND FINANCING IN THOUSANDS OF DOLLARS (\$000)

Account

Number: 69-1774-X-1-401 **FY 2016** FY 2017 FY 2018 Line Line Title ACT CY BY **Obligations by program activity:** 0001 Grants for Northeast Corridor 224,000 229,000 0002 Management Oversight 1,000 1,000 \_ 0003 Northeast Corridor Commission 5,000 5,000 \_ American with Disabilities Act (ADA)<sup>11</sup> 0004 5.000 0900 Total new obligations 235,000 235,000 **Budgetary Resources:** Unobligated balance: 1100 Appropriation 235,000 235,000 1160 Appropriation, discretionary (total) 235.000 235.000 1930 Total budgetary resources available 235,000 235,000 Change in obligated balance: Unpaid obligations: Unpaid obligations, brought forward, 3000 Oct 1 1,000 3010 New obligations, unexpired accounts 235,000 235,000 3020 Outlays (gross) (234,000)(235,000)Unpaid obligations, end of year 3050 1,000 1,000 Memorandum (non-add) entries: 3100 Obligated balance, start of year 1,000 Obligated balance, end of year 3200 1.000 1,000 **Budget authority and outlays, net:** Discretionary: 4000 Budget authority, gross 235,000 235,000 Outlays, gross: Outlays from new discretionary authority 4010 234.000 234.000 4011 Outlays from discretionary balances 1,000 Outlays, gross (total) 4020 234,000 235,000 Budget authority, net (discretionary) 4070 235,000 235,000

<sup>&</sup>lt;sup>11</sup> Due to the reduction in National Network funding from the Administration's proposal to eliminate Long Distance services, the President's Budget recommends providing more flexibility to determine the appropriate amount for ADA upgrades. This requirement can be handled through FRA's grant agreement with Amtrak.

Account Number: 69-1774-X-1-401

		FY 2016	FY 2017	FY 2018
Line	Line Title	ACT	СҮ	BY
4080	Outlays, net (discretionary)	-	234,000	235,000
4180	Budget authority, net (total)	-	235,000	235,000
4190	Outlays, net (total)	-	234,000	235,000

## DEPARTMENT OF TRANSPORTATION FEDERAL RAILROAD ADMINISTRATION NATIONAL NETWORK GRANTS TO THE NATIONAL RAILROAD PASSENGER CORPORATION (69-X-1775) PROGRAM AND FINANCING IN THOUSANDS OF DOLLARS (\$000)

Account Number: 69-17

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r: 69-1775-X-1-401

Number:	09-1//J-A-1-401			
Line	Line Title	FY 2016 ACT	FY 2017 CY	FY 2018 BY
Line		ACI	U	DI
0001	<b>Obligations by program activity:</b>		1 100 000	500 000
0001	Grants for National Network	-	1,102,000	520,000
0002	Management Oversight	-	6,000	3,000
0003	State-Supported Route Commission	-	2,000	2,000
0004	American with Disabilities Act (ADA) <sup>12</sup>	-	45,000	-
0900	Total new obligations	-	1,155,000	525,000
	Budgetary Resources:			
	Unobligated balance:			
1100	Appropriation	-	1,155,000	525,000
1160	Appropriation, discretionary (total)	-	1,155,000	525,000
1930	Total budgetary resources available	-	1,155,000	525,000
	Change in obligated balance:			
	Unpaid obligations:			
	Unpaid obligations, brought forward,			
3000	Oct 1	-	-	3,000
3010	New obligations, unexpired accounts	_	1,155,000	525,000
			(1,152,000	
3020	Outlays (gross)	-	)	(527,000)
3050	Unpaid obligations, end of year	-	3,000	1,000
	Memorandum (non-add) entries:			
3100	Obligated balance, start of year	-	-	3,000
3200	Obligated balance, end of year	-	3,000	1,000
	Budget authority and outlays, net:			
	Discretionary:			
4000	Budget authority, gross	-	1,155,000	525,000
	Outlays, gross:		, ,	,
	Outlays from new discretionary			
4010	authority	_	1,152,000	524,000
4011	Outlays from discretionary balances	_	-,102,000	3,000
4020	Outlays, gross (total)	_	1,152,000	527,000
1020	Cully 5, 51055 (10111)		1,152,000	527,000

<sup>&</sup>lt;sup>12</sup> Due to the reduction in National Network funding from the Administration's proposal to eliminate Long Distance services, the President's Budget recommends providing more flexibility to determine the appropriate amount for ADA upgrades. This requirement can be handled through FRA's grant agreement with Amtrak.

Account Number: 69-1775-X-1-401

		FY 2016	FY 2017	FY 2018
Line	Line Title	ACT	CY	BY
4070	Budget authority, net (discretionary)	-	1,155,000	525,000
4080	Outlays, net (discretionary)	-	1,152,000	527,000
4180	Budget authority, net (total)	-	1,155,000	525,000
4190	Outlays, net (total)	-	1,152,000	527,000

## 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-X-1-401

Line	Line Title	FY 2016 ACT	FY 2017 CY	FY 2018 BY
	Obligations by program activity:			
0001	Operating subsidy grants	288,500	-	-
0900	Total new obligations	288,500	-	-
	<b>Budgetary Resources:</b> Budget authority:			
	Appropriations, discretionary:			
1100	Appropriation	288,500	-	-
1930	Total budgetary resources available	288,500	-	-
	Change in obligated balance:			
3010	New obligations, unexpired accounts	288,500	-	-
3020	Outlays (gross)	(288,500)	-	-
	<b>Budget authority and outlays, net:</b> Discretionary:			
4000	Budget authority, gross Outlays, gross:	288,500	-	-
4010	Outlays from new discretionary authority	288,500	-	-
4070	Budget authority, net (discretionary)	288,500	-	-
4080	Outlays, net (discretionary)	288,500	-	-
4180	Budget authority, net (total)	288,500	-	-
4190	Outlays, net (total)	288,500	-	-

# 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	IN THOUSANDS OF DOL			
Number:	69-0125-X-1-401			
Inumber.	07-0125-X-1-401	FY 2016	FY 2017	FY 2018
Line	Line Title	ACT	CY	BY
	Obligations by program activity:		01	
0002	Capital and Debt Service Grants	1,049,393	17,000	_
0002	Grants Oversight	2,298	2,000	_
0006	Northeast Corridor Commission	3,000	2,000	_
0007	American Disability Act (ADA)	50,000	-	-
0900	Total new obligations	1,104,691	19,000	-
0,00		1,101,091	17,000	
	Budgetary Resources:			
	Unobligated balance:			
1000	Unobligated balance brought forward, Oct 1	31,907	24,000	-
1100	Appropriation	1,101,500	-	-
	Unobligated balance of appropriations	, ,		
1131	permanently reduced	(5,000)	(5,000)	
1160	Appropriation, discretionary (total)	1,096,500	(5,000)	-
1930	Total budgetary resources available	1,128,409	19,000	-
	Memorandum (non-add) entries:			
1941	Unexpired unobligated balance, end of year	23,718	-	-
	Change in obligated balance:			
	Unpaid obligations:			
3000	Unpaid obligations, brought forward, Oct 1	300,330	323,000	47,000
3010	New obligations, unexpired accounts	1,104,691	19,000	
3020	Outlays (gross)	(1,081,790)	(295,000)	(42,000)
3050	Unpaid obligations, end of year	323,230	47,000	5,000
	Memorandum (non-add) entries:	,	,	,
3100	Obligated balance, start of year	300,330	323,000	47,000
3200	Obligated balance, end of year	323,230	47,000	5,000
	Budget authority and outlays, net:			
1000	Discretionary:	1 00 6 700	(7.000)	
4000	Budget authority, gross	1,096,500	(5,000)	-
	Outlays, gross:			
4010	Outlays from new discretionary authority	782,636	(4,000)	-
4011	Outlays from discretionary balances	299,154	299,000	42,000
4020	Outlays, gross (total)	1,081,790	295,000	42,000

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

		FY 2016	FY 2017	FY 2018
Line	Line Title	ACT	CY	BY
4070	Budget authority, net (discretionary)	1,096,500	(5,000)	-
4080	Outlays, net (discretionary)	1,081,790	295,000	42,000
4180	Budget authority, net (total)	1,096,500	(5,000)	-
4190	Outlays, net (total)	1,081,790	295,000	42,000

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

Account Number: 69-070

69-0704-X-1-401

Number:	09-0704-A-1-401	EV 2016	EV 2017	EV 2010
Line	Line Title	FY 2016 ACT	FY 2017 CY	FY 2018 BY
	Obligations by program activity:			
0007	Capital and Debt Grant - Sandy Mitigation	-	32,000	-
0900	Total new obligations	-	32,000	-
	Budgetary Resources:			
	Unobligated balance:			
1000	Unobligated balance brought forward, Oct 1	31,819	32,000	-
1050	Unobligated balance (total)	31,819	32,000	-
1930	Total budgetary resources available	31,819	32,000	-
	Memorandum (non-add) entries:			
1941	Unexpired unobligated balance, end of year	31,819	-	-
	Change in obligated balance:			
	Unpaid obligations:			
3000	Unpaid obligations, brought forward, Oct 1	57,527	16,000	32,000
3010	New obligations, unexpired accounts	-	32,000	-
3020	Outlays (gross)	(41,549)	(16,000)	(16,000)
3050	Unpaid obligations, end of year	15,977	32,000	16,000
	Memorandum (non-add) entries:			
3100	Obligated balance, start of year	57,527	16,000	32,000
3200	Obligated balance, end of year	15,977	32,000	16,000
	Budget authority and outlays, net:			
	Discretionary:			
	Outlays, gross:			
4011	Outlays from discretionary balances	41,549	16,000	16,000
4080	Outlays, net (discretionary)	41,549	16,000	16,000
4190	Outlays, net (total)	41,549	16,000	16,000

## DEPARTMENT OF TRANSPORTATION FEDERAL RAILROAD ADMINISTRATION

## Consolidated Rail Infrastructure and Safety Improvements Appropriations Language

#### CONSOLIDATED RAIL INFRASTRUCTURE AND SAFETY IMPROVEMENTS

For necessary expenses related to Consolidated Rail Infrastructure and Safety Improvements Grants as authorized by section 24407 of title 49, United States Code, \$25,000,000, to remain available until expended: Provided, That the Secretary may withhold up to one percent of the amount provided under this heading for the costs of award and project management oversight of grants carried out under section 24407 of title 49, United States Code.

Explanation: The President's Budget is requesting funding for a new grant program authorized by the FAST Act.

# Summary by Program Activity Appropriations, Obligation Limitations, and Exempt Obligations (\$000)

	FY 2016 ACTUAL	FY 2017 ANNUALIZED CR	FY 2018 REQUEST	CHANGE FY 2017- 2018
Consolidated Rail Infrastructure and Safety Improvements	-	-	25,000	25,000
TOTAL	<u> </u>		25,000	25,000
Full-Time Equivalents	-	-	-	-

#### **Program and Performance Statement**

As authorized by Section 11301 of the FAST Act, grants awarded under the Consolidated Rail Infrastructure and Safety Improvements program are intended to improve the safety, efficiency, and reliability of passenger and freight rail systems. Eligible activities include a wide range of freight and passenger rail capital, planning, environmental analyses, research, workforce development, and training projects. Eligible recipients include states, local governments, Class II and Class III railroads, Amtrak and other intercity passenger rail operators, rail carriers and equipment manufacturers that partner with an eligible public-sector applicant, the Transportation Research Board, University Transportation Centers, and non-profit rail labor organizations.

FRA multi-disciplinary teams of rail engineering, planning, economists, 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 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.

# EXHIBIT III-1a CONSOLIDATED RAIL INFRASTRUCTURE AND SAFETY IMPROVEMENTS SUMMARY ANALYSIS OF CHANGE FROM FY 2017 TO FY 2018 Appropriations, Obligations, Limitations, and Exempt Obligations (\$000)

ITEM	Change from FY 2017 to FY 2018 \$000	Change from FY 2017 to FY 2018 FTE
FY 2017 ANNUALIZED CR	-	-
NEW OR EXPANDED PROGRAMS		
Consolidated Rail Infrastructure and Safety Improvements	25,000	-
Subtotal, New or Expanded Programs	25,000	-
FY 2018 REQUEST	25,000	-

# DETAILED JUSTIFICATION FOR CONSOLIDATED RAIL INFRASTRUCTURE AND SAFETY IMPROVEMENTS

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

FY 2018 – Consolidated Rail Infrastructure and Safety Improvements - Budget Request
\$000

Program Activity	FY 2016 Actual	FY 2017 Annualized CR	FY 2018 Request	Change FY 2017- 2018
Consolidated Rail Infrastructure and Safety Improvements	-	-	25,000	25,000
TOTAL	-	-	25,000	25,000

#### What is this Program and Why is it Necessary?

The U.S. rail network is central to the success of the American economy, carrying over 31.3 million passengers on Amtrak services<sup>1</sup> and more than 1.6 billion tons of freight valued at nearly \$600 billion.<sup>2</sup> The Consolidated Rail Infrastructure and Safety Improvements program provides a comprehensive solution for funding capital project development and implementation in support of both intercity passenger and freight railroads. Congress authorized these grants for the Secretary to invest in projects to mitigate congestion at both passenger and freight rail chokepoints, enhance multi-modal connections, and lead to new or substantially improved passenger rail corridors. The program will also fund critical rail safety projects – such as grade crossing enhancements, rail line relocation, and the implementation of positive train control – and assist resource-constrained short line railroads. Finally, funds will be available to support rail planning and environmental analyses, rail research and technology initiatives, and workforce development and training activities intended to advance America's rail industry.

<sup>&</sup>lt;sup>1</sup> Amtrak, <u>Amtrak Delivers Strong FY 2016 Financial Results</u>, November 17, 2016.

<sup>&</sup>lt;sup>2</sup> Federal Highway Administration, <u>2016 Freight Quick Facts Report</u>, September 2016.

U.S. Rail System



# What does this funding level support?

Of the amounts available for Consolidated Rail Infrastructure and Safety Improvements, at least 25 percent shall be available for projects in rural areas and the Federal share of total project costs cannot exceed 80 percent. Examples of potential projects that could be funded from this grant program include:

**Freight Rail Congestion and Fluidity Improvements** - There are a number of key chokepoints on the U.S. rail network where heavy volumes or a confluence of freight and passenger trains introduce critical mobility delays, which can have far-reaching effects on both shippers and passengers across the rail network, including in Chicago, St. Louis and Northern Virginia, as illustrative examples.

**Passenger Rail Corridor Development** - In recent years, FRA, states, and other funding partners have made significant investments in pre-construction planning, environmental, and engineering/design studies, which has established a robust pipeline of corridors and projects that are now ready for construction, including approximately \$2.5 billion in projects for FY 2018.

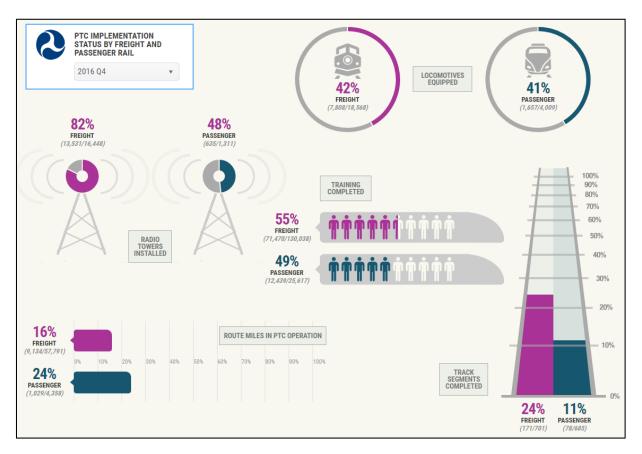
**Positive Train Control (PTC)** - Since originally mandated by Congress in 2008, the railroad industry and its partners have been working to implement PTC on the 60,000 route-miles of

required routes. PTC refers to an integrated set of advanced technologies, that when fully and properly configured, can prevent certain accidents caused by human factors including (1) trainto-train collisions; (2) over-speed derailments; (3) incursions into established work zones; and (4) the movement of a train through a switch left in the wrong position. Class I railroads, Amtrak, commuter railroads and short line railroads all share responsibility for implementing PTC on their systems.

Commuter railroads lack the financial resources to fund their multi-billion dollar PTC implementation costs, originally 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 three years have already assumed a significantly greater financial responsibility for supporting these services as a result of implementing the requirements of section 209 of the Passenger Rail Investment and Improvement Act of 2008. These resource-constrained entities require financial assistance to implement the remainder of their PTC obligations by the December 31, 2018 statutory deadline.<sup>3</sup> <sup>4</sup>

<sup>&</sup>lt;sup>3</sup> Congress has allowed railroads to apply for up to a two-year extension (December 31, 2020) to achieve full PTC implementation if certain criteria are met. The railroad must have all spectrum acquired and hardware installation completed by the end of 2018 for an alternative schedule to be considered.

<sup>&</sup>lt;sup>4</sup> FRA, <u>Railroad Progress on Positive Train Control Implementation</u>, March 15, 2017.



# **PTC Implementation Status**

**Grade Crossing Enhancements -** Improving safety at the more than 130,000 public highwayrail at-grade crossings in the United States is a top FRA priority. Each crossing represents a potential collision location between a train and motor vehicle, and the risk of highway-rail grade crossing incidents is likely to grow as future train and highway traffic increases. Highway-rail grade crossing collisions and trespasser deaths account for approximately 95 percent of rail-related fatalities. While states and municipalities have typically used existing programs for projects such as grade separations, improved equipment and warning devices, and outreach and education, the President's Budget proposes to utilize a portion of Consolidated Rail Infrastructure and Safety Improvement funds for alternative and innovative approaches that have not previously received government funding. These alternative approaches and innovative initiatives to improve highway-rail grade crossing safety, trespasser prevention, and other emerging issues, such as blocked crossings, will help guide and inform future risk mitigation strategies. Potential projects could include the evaluation of new law enforcement strategies and coordination, implementation of innovative technologies, and assessing the effectiveness of quiet zone safety measures.

**Class II and III (Short line) Railroad Investments** - In addition to the 7 major Class I railroads, there are more than 500 smaller regional and short line railroads that comprise the U.S. freight rail network. These short line railroads play a vital role in the U.S. transportation system, often providing the first- and last-mile connections to the Class I network for freight

shippers and customers. However, unlike the Class I railroads, many short line railroads lack the capital funding necessary to invest in improvements to their infrastructure and equipment. FRA estimates that a nearly \$7 billion funding gap exists to address the current and near-term capital needs of Class II and Class III short line railroads.<sup>5</sup>

Although Congress created the Railroad Rehabilitation & Improvement Financing (RRIF) loan program in part to assist Class II and Class III railroads<sup>6</sup>, many short line railroads lack the resources necessary to cover RRIF application fees and credit risk premium costs or struggle to meet Federal and private market credit worthiness thresholds. As such, other funding assistance is required to help short lines upgrade their tracks to accommodate modern 286,000-pound rail cars, repair or upgrade aging bridges, and renew or replace rolling stock and equipment.

These are just a sample of the types of projects that the Consolidated Rail Infrastructure and Safety Improvement program could support.

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

Our nation's rail network is a critical component of the U.S. transportation system and economy and has been for over 185 years. The Consolidated Rail Infrastructure and Safety Improvement program will enhance rail safety, relieve congestion, and increase our nation's mobility as the U.S. freight and passenger rail system are called upon to meet the demands of a larger population. In addition, high capacity mobility improvements can be made within a relatively small, and in many cases an existing, geographic footprint.

**Increased Safety** - The rail network is achieving record-level safety performance, with significant reductions in all types of accidents since 2008.<sup>7</sup> According to a recent report by the OneRail Coalition, riding intercity passenger rail or commuter rail is on average 10 times safer than riding in a passenger car. Looking at freight accidents, fatal accidents involving freight rail take place at less than one-third the rate of truck accidents. Accidents involving injuries are one-fifth as frequent, and property damage accidents are 62 times less frequent.<sup>8</sup>

**Reduced Congestion and Increased Mobility** - Each American requires the movement of approximately 40 tons of freight per year across the freight network and approximately 85,000 passengers per day ride intercity trains. In addition to its intercity riders, the Northeast Corridor supports more than 700,000 commuter rail passengers per day. By 2045, the U.S. freight system is projected to experience a nearly 40 percent increase in the total amount of tonnage it moves, with the rail share expected to increase by 24 percent.<sup>9</sup> Over this same timeframe, U.S. population is anticipated to grow by over 20 percent. Passenger and freight rail transportation

<sup>&</sup>lt;sup>5</sup> FRA, <u>Summary of Class II and Class III Railroad Capital Needs and Funding Sources</u>, October 2014.

<sup>&</sup>lt;sup>6</sup> By statute, up to \$7 billion of the \$35 billion RRIF portfolio is reserved for short line railroads.

<sup>&</sup>lt;sup>7</sup> FRA, <u>Safety Fact Sheet</u>, December 2016.

<sup>&</sup>lt;sup>8</sup> OneRail, <u>Rail Safety in the United States</u>, 2016.

<sup>&</sup>lt;sup>9</sup> U.S. DOT, <u>Beyond Traffic 2045</u>, January 2017.

must play a critical role in accommodating this projected growth and provide an alternative to the nation's increasingly congested airports and highways.

**Energy Efficient** – The United States uses nearly 14 million barrels of petroleum products every day for transportation, more than 70 percent of which is for motor fuel, and accounts for 20 percent of the world's petroleum consumption in general.<sup>10</sup> On average, rail transportation is four times more fuel efficient than trucks. In 2015, U.S. railroads moved a ton of freight an average of 473 miles per gallon of fuel.<sup>11</sup>

Addressing Transportation Demand of the Nation's 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.<sup>12</sup> At the same time, younger generations of Americans are choosing to drive both less often and for fewer miles than previous generations, and are obtaining driver's licenses at record low rates. This cohort uses public transportation more frequently than older Americans and has different expectations for the composition of their transportation system.<sup>13</sup>

**Leverages Private Sector Investment** – Rail is uniquely suited to leverage private sector investment since private freight rail infrastructure serves as the backbone for much of the nation's passenger rail system.

**Americans continue to choose rail in record numbers** - Despite on-time performance challenges, demand for intercity passenger rail continues to grow. In FY 2016, Amtrak carried a record 31.3 million passenger and ridership has increased by 20 percent over the last decade. Opportunity exists to serve new markets and significantly improve reliability, frequencies, speed, and trip times across the network.

<sup>&</sup>lt;sup>10</sup> U.S. Energy Information Administration, <u>Monthly Energy Review</u>, March 2017.

<sup>&</sup>lt;sup>11</sup> Association of American Railroads, <u>Overview of America's Freight Railroads</u>, March 2017.

<sup>&</sup>lt;sup>12</sup> AARP, <u>Travel Behavior by Age</u>, 2012.

<sup>&</sup>lt;sup>13</sup> Dutzik, Tony; Inglis, Jeff; Baxandall, Phineas, <u>Millennials in Motion</u>, Frontier Group/U.S. PIRG Education Fund, October 2014.

# DEPARTMENT OF TRANSPORTATION FEDERAL RAILROAD ADMINISTRATION CONSOLIDATED RAIL INFRASTRUCTURE AND SAFETY IMPROVEMENTS (69-2811-0-1-401) PROGRAM AND FINANCING IN THOUSANDS OF DOLLARS (\$000)

Account Number: 69-2811-0-1-401

Line	Line Title	FY 2016 Act	FY 2017 CY	FY 2018 BY
	Obligations by program activity:	1100		
	Consolidated Rail Infrastructure and Safety			
0001	Improvements Grants	-	-	25,000
0900	Total new obligations	-	-	25,000
1050	Unobligated balance (total)	-	-	-
	Budget authority:			
	Appropriations, discretionary:			
1100	Appropriation	-	-	25,000
1103	Advance funding			
1105	Reappropriation			
1130	Appropriations permanently reduced			
	Unobligated balance of appropriations			
1131	permanently reduced	-	-	-
1160	Appropriation, disc (total)	-	-	25,000
1930	Total budgetary resources available	-	-	25,000
3000	Unpaid obligations, brought forward, Oct 1 (gross)	-	-	-
3010	Obligations incurred, unexpired accounts	-	-	25,000
3020	Outlays (gross)	-	-	-2,000
3050	Unpaid obligations, end of year (gross)	-	-	23,000
3100	Obligated balance, start of year (net)	-	-	-
3200	Obligated balance, end of year	-	-	23,000
	Budget authority and outlays, net:			

Discretionary:

Account Number: 69-2811-0-1-401

Line	Line Title	FY 2016 Act	FY 2017 CY	FY 2018 BY
1000				• =
4000	Budget authority, gross	-	-	25,000
	Outlays, gross:			
4010	Outlays from new discretionary authority	-	-	2,000
4070	Budget authority, net (discretionary)	-	-	25,000
4080	Outlays, net (discretionary)	-	-	2,000
4180	Budget authority, net (total)	-	-	25,000
4190	Outlays, net (total)	-	-	2,000

## DEPARTMENT OF TRANSPORTATION FEDERAL RAILROAD ADMINISTRATION

## Federal-State Partnership for State of Good Repair Appropriations Language

FEDERAL-STATE PARTNERSHIP FOR STATE OF GOOD REPAIR

For necessary expenses related to Federal-State Partnership for State of Good Repair Grants as authorized by section 24911 of title 49, United States Code, \$25,945,000, to remain available until expended: *Provided*, That the Secretary may withhold up to one percent of the amount provided under this heading for the costs of award and project management oversight of grants carried out under section 24911 of title 49, United States Code.

Explanation: The President's Budget is requesting funding for a new grant program authorized by the FAST Act.

# EXHIBIT III-1 FEDERAL-STATE PARTNERSHIP FOR STATE OF GOOD REPAIR **Summary by Program Activity Appropriations, Obligation Limitations, and Exempt Obligations** (\$000)

	FY 2016 ACTUAL	FY 2017 ANNUALIZED CR	FY 2018 REQUEST	CHANGE FY 2017- 2018
Federal-State Partnership for State of Good Repair	-	-	25,945	25,945
TOTAL	<u> </u>	<u> </u>	25,945	25,945
Full-Time Equivalents	-	-	-	-

#### **Program and Performance Statement**

As authorized by Section 11302 of the FAST Act, grants awarded under the Federal-State Partnership for State of Good Repair program are intended to reduce the state of good repair backlog on publically-owned or Amtrak owned infrastructure, equipment, and facilities. Eligible activities 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, and (3) bring existing assets into a state of good repair. Eligible recipients include states, local governments, and Amtrak.

# EXHIBIT III-1a FEDERAL-STATE PARTNERSHIP FOR STATE OF GOOD REPAIR SUMMARY ANALYSIS OF CHANGE FROM FY 2017 TO FY 2018 Appropriations, Obligations, Limitations, and Exempt Obligations (\$000)

ITEM	Change from FY 2017 to FY 2018 \$000	Change from FY 2017 to FY 2018 FTE
FY 2017 ANNUALIZED CR	-	-
NEW OR EXPANDED PROGRAMS		
Federal-State Partnership for State of Good Repair	25,945	-
Subtotal, New or Expanded Programs	25,945	-
FY 2018 REQUEST	25,945	-

# DETAILED JUSTIFICATION FEDERAL-STATE PARTNERSHIP FOR STATE OF GOOD REPAIR

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

#### FY 2018 – Federal-State Partnership for State of Good Repair – Budget Request \$000

Program Activity	FY 2016 Actual	FY 2017 Annualized CR	FY 2018 Request	Change FY 2017- 2018
Federal-State Partnership for State of Good Repair	-	-	25,945	25,945
TOTAL	_	-	25,945	25,945

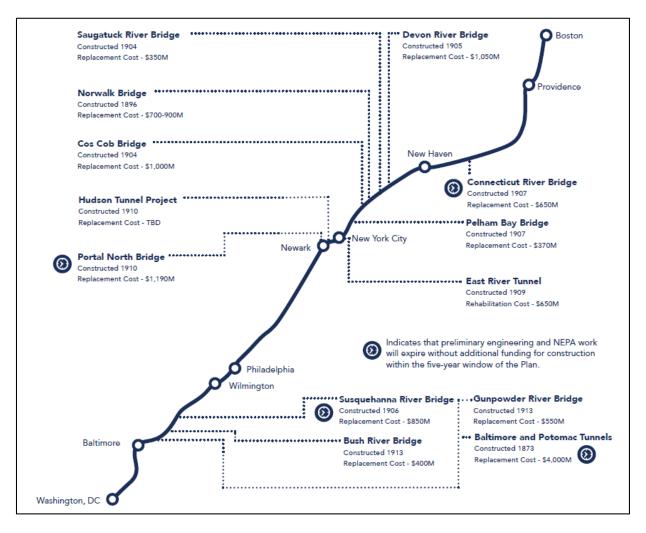
# What is this Program and Why is it Necessary?

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

Despite the important role that the NEC plays in the lives of millions of Americans and our economy, many segments of the corridor operate at or near capacity and are in need of major repairs. The Northeast Corridor Infrastructure and Operations Advisory Commission (NEC Commission)<sup>1</sup> estimates that a \$38 billion backlog of maintenance needs has accumulated on the corridor. This backlog includes \$26 billion for major bridges and tunnels that have remained in service well beyond their expected useful life and today require extensive maintenance and are major sources of corridor delays. 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.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> Composed of members from each of the NEC States, Amtrak, and the U.S. DOT, as well as other non-voting stakeholders.

<sup>&</sup>lt;sup>2</sup> Northeast Corridor Commission, <u>Capital Investment Plan (Fiscal Years 2018-2022)</u>, May 2017.



# NEC Major State of Good Repair Backlog Projects<sup>3</sup>

The Northeast Corridor is one of the nation's most complex transportation assets, running through 8 states and Washington, DC and hosting more than 2,000 daily trains on 8 commuter railroads, 4 freight railroads, and Amtrak. 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.

While the NEC – which is owned by Amtrak, Connecticut, Massachusetts, and the New York Metropolitan Transportation Authority – is arguably the highest profile example for the need to invest in state of good repair projects on the U.S. passenger rail network, similar issues are prevalent outside of the NEC as well. Infrastructure, stations, and other facilities owned by Amtrak, states, and local governments – including major rail hubs such as Chicago Union Station, the Keystone Corridor in Pennsylvania, and Michigan Line – could be eligible for funding under the program.

<sup>&</sup>lt;sup>3</sup> Northeast Corridor Commission, <u>State of Good Repair Backlog</u>, 2016.

## What does this funding level support?

Through the Federal-State Partnership for State of Good Repair program, FRA will competitively award funds for eligible projects owned by Amtrak and public entities. The Joint Explanatory Statement of the Committee of the Conference on the FAST Act expressly identified investment in the Northeast Corridor as a priority for the program. The NEC Commission has developed a cost allocation policy and long-term planning process to better address the corridor's infrastructure needs; however, additional investment is required to tackle the extensive state of good repair backlog, including the 13 major bridges and tunnels requiring replacement. The Gateway Program alone faces a funding gap of more than \$1.7 billion for its major backlog projects in FY 2018 (e.g. Hudson Tunnel Project, Portal North Bridge, Sawtooth Bridge), with billions more required for basic infrastructure, improvements, and other major backlog projects on the NEC. The President's FY 2018 Budget request will provide an infusion of new funding to help meet these state of good repair needs on the NEC and elsewhere on the passenger rail network.

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

The Northeast region is responsible for \$3 trillion in economic output per year – which would equate to the fifth largest economy in the world – and is home to 24 million U.S. jobs.

The NEC plays a vital role in the region's transportation network and supporting its economic activity, each day carrying over 750,000 people and 2,000 intercity, commuter, and freight trains. The NEC moves a workforce that contributes \$50 billion annually to the American economy. In addition, the four freight railroads that operate over portions of the corridor move approximately 350,000 carloads annually. The NEC Commission estimates that the loss of the NEC for a single day costs the U.S. \$100 million in travel delays and lost productivity.<sup>4</sup>

Hurricane Sandy, which struck the Eastern Seaboard in October 2012, underscored the importance of the NEC to the region and the urgency that exists to rebuild and modernize our nation's infrastructure. Specifically, Hurricane Sandy caused extensive flooding in and associated damage to the Hudson River tunnels, resulting in the cessation of all Amtrak NEC intercity passenger rail and New Jersey Transit service into New York City for approximately five days, affecting nearly 600,000 daily riders and causing substantial economic harm.

The FY 2018 President's Budget will provide targeted investments through the Federal-State Partnership for State of Good Repair program to help ensure that essential U.S. passenger rail infrastructure is maintained and improved.

<sup>&</sup>lt;sup>4</sup> NEC Commission, <u>Investing in the Northeast Corridor</u>, February 2016.

# DEPARTMENT OF TRANSPORTATION FEDERAL RAILROAD ADMINISTRATION FEDERAL-STATE PARTNERSHIP FOR STATE OF GOOD REPAIR (69-2810-0-1-401) PROGRAM AND FINANCING IN THOUSANDS OF DOLLARS (\$000)

Account Number: 69-2810-0-1-401

Line	Line Title	FY 2016 Act	FY 2017 CY	FY 2018 BY
	Obligations by program activity:			
0001	Federal-State Partnership for State of Good Repair Grants	-	-	26,000
0002	Federal-State Partnership for State of Good Repair Oversight	-	-	-
0900	Total new obligations	-	-	26,000
1100	Appropriation	-	-	26,000
1160	Appropriation, disc (total)	-	-	26,000
1930	Total budgetary resources available	-	-	26,000
	Unpaid obligations, brought forward, Oct 1			
3000	(gross)	-	-	-
3010	Obligations incurred, unexpired accounts	-	-	26,000
3020	Outlays (gross)	-	-	-3,000
3050	Unpaid obligations, end of year (gross)	-	-	23,000
3100	Obligated balance, start of year (net)	-	-	-
3200	Obligated balance, end of year	-	-	23,000
	Budget authority and outlays, net:			
	Discretionary:			
4000	Budget authority, gross	-	-	26,000
	Outlays, gross:			
4010	Outlays from new discretionary authority	-	-	3,000
4070	Budget authority, net (discretionary)	-	-	26,000
4080	Outlays, net (discretionary)	-	-	3,000
4180	Budget authority, net (total)	-	-	26,000
4190	Outlays, net (total)	-	-	3,000

#### DEPARTMENT OF TRANSPORTATION FEDERAL RAILROAD ADMINISTRATION

#### **Railroad Safety Grants**

**RAILROAD SAFETY GRANTS** 

For necessary expenses related to railroad safety grants, \$50,000,000, to remain available until expended, of which not to exceed \$25,000,000 shall be available to carry out 49 U.S.C. 20167, as in effect the day before the enactment of the Passenger Rail Reform and Investment Act of 2015 (division A, title XI of the Fixing America's Surface Transportation Act); and not to exceed \$25,000,000 shall be made available to carry out 49 U.S.C. 20158.

Explanation: The President's Budget proposes to fund competitive rail grants through the FAST Act authorized grant programs.

# EXHIBIT III-1 RAILROAD SAFETY GRANTS Summary by Program Activity Appropriations, Obligation Limitations, and Exempt Obligations (\$000)

	FY 2016 ACTUAL	FY 2017 ANNUALIZED CR	FY 2018 REQUEST	CHANGE FY 2017- 2018
Railroad Safety Grants	50,000	49,905	-	(49,905)
TOTAL	50,000	49,905		(49,905)

Full-Time Equivalents

#### **Program and Performance Statement**

For FY 2016, \$50 million was appropriated under the Railroad Safety Grants heading to be equally distributed to Railroad Safety Infrastructure Improvement Grants and Railroad Safety Technology Grants. The FAST Act repealed the Railroad Safety Infrastructure Improvement Grants program and did not authorize new funding for the Railroad Safety Technology Grants program. No new funds are requested for this account for FY 2018. The President's Budget is requesting funding under the FAST Act authorized Consolidated Rail Infrastructure and Safety Improvements program, which largely encompasses the recipient and project eligibilities contained in the FY 2016 funded program.

# EXHIBIT III-1a RAILROAD SAFETY GRANTS SUMMARY ANALYSIS OF CHANGE FROM FY 2017 TO FY 2018 Appropriations, Obligations, Limitations, and Exempt Obligations (\$000)

	Change from FY 2017 to FY 2018	Change from FY 2017 to FY 2018
ITEM	\$000	FTE
FY 2017 ANNUALIZED CR	49,905	-
PROGRAM REDUCTIONS		
Railroad Safety Grants	(49,905)	-
Subtotal, Program Reductions	(49,905)	-

-

FY 2018 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

		FY 2016	FY 2017	FY 2018
Line	Line Title	Act	CY	BY
	Obligations by program activity:			
0001	Railroad Safety Grants	4,967	40,000	40,000
0900	Total new obligations	4,967	40,000	40,000
	Budgetary Resources:			
	Unobligated balance:			
1000	Unobligated balance brought forward, Oct 1	10,007	55,000	65,000
1050	Unobligated balance (total)	10,007	55,000	65,000
	Budget authority:			
	Appropriations, discretionary:			
1100	Appropriation	50,000	50,000	-
1160	Appropriation, disc (total)	50,000	50,000	-
1930	Total budgetary resources available	60,007	105,000	65,000
3000	Obligated balance, start of year (net): Unpaid obligations, brought forward, Oct 1			
	(gross)	-	5,000	35,000
3010	New obligations, unexpired accounts	4,967	40,000	40,000
3020	Outlays (gross)	-	(10,000)	(25,000)
3050	Unpaid obligations, end of year (gross)	4,967	35,000	50,000
2100	Memorandum (non-add) entries:		<b>7</b> 000	25 000
3100	Obligated balance, start of year (net)	-	5,000	35,000
3200	Obligated balance, end of year	4,967	35,000	50,000
	Budget authority and outlays, net:			
	Discretionary:			
4000	Budget authority, gross	50,000	50,000	-
	Outlays, gross:			
4010	Outlays from new discretionary authority	-	5,000	-
4011	Outlays from discretionary balances	-	5,000	25,000
4020	Outlays, gross (total)	-	10,000	25,000

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

		FY 2016	FY 2017	FY 2018
Line	Line Title	Act	CY	BY
4070	Budget authority, net (discretionary)	50,000	50,000	-
4080	Outlays, net (discretionary)	-	10,000	25,000
4180	Budget authority, net (total)	50,000	50,000	-
4190	Outlays, net (total)	-	10,000	25,000

# EXHIBIT III-1 NORTHEAST CORRIDOR IMPROVEMENT PROGRAM Summary by Program Activity Appropriations, Obligation Limitations, and Exempt Obligations (\$000)

	FY 2016 ACTUAL	FY 2017 ANNUALIZED CR	FY 2018 REQUEST	CHANGE FY 2017- 2018
Northeast Corridor Improvement Program	19,163	19,127	-	(19,127)
TOTAL	19,163	19,127		(19,127)

**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 the District of Columbia and Boston, Massachusetts.

-

For FY 2016, \$19 million was appropriated for grants to Amtrak for shared use infrastructure on the Northeast Corridor identified in the Northeast Corridor Infrastructure and Operations Advisory Commission's 5 year capital plan. No new funds are requested for this account for FY 2018. The President's Budget is requesting funding under the FAST Act authorized Federal-State Partnership for State of Good Repair program, which encompasses the intent of the FY 2016 program and expands eligibility to states and local governments.

#### **EXHIBIT III-1a**

# NORTHEAST CORRIDOR IMPROVEMENT PROGRAM SUMMARY ANALYSIS OF CHANGE FROM FY 2017 TO FY 2018 Appropriations, Obligations, Limitations, and Exempt Obligations (\$000)

	Change from FY 2017 to FY 2018	Change from FY 2017 to FY 2018
ITEM	\$000	FTE
FY 2017 ANNUALIZED CR	19,127	-
PROGRAM REDUCTIONS		
Northeast Corridor Improvement Program	(19,127)	-
SUBTOTAL, PROGRAM REDUCTIONS	(19,127)	-

-

-

### FY 2018 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	FY 2016 ACT	FY 2017 CY	FY 2018 BY
	Obligations by program activity:			
0001	Northeast Corridor Improvement Program	-	19,000	19,000
0900	Total new obligations	-	19,000	19,000
	Budgetary Resources:			
	Unobligated balance:			
1000	Unobligated balance brought forward, Oct 1	1,000	20,000	20,000
1050	Unobligated balance (total)	1,000	20,000	20,000
	Budget authority:			
	Appropriations, discretionary:			
1100	Appropriation	19,163	19,000	-
	Unobligated balance of appropriations permanently	,	,	
1131	reduced	-	-	-
1160	Appropriation, disc (total)	19,163	19,000	-
1930	Total budgetary resources available	20,163	39,000	20,000
	Memorandum (non-add) entries:			
1940	Total Budgetary Resources Available	20,163	-	-
1941	Unexpired unobligated balance, end of year Change in obligated balance:	20,163	20,000	1,000
3000	Unpaid obligations, brought forward, Oct 1 (gross)	-	-	14,000
3010	Obligations incurred, unexpired accounts	-	19,000	19,000
3020	Outlays (gross)	-	(5,000)	(14,000)
3040	Recoveries of prior year unpaid obligations, unexpired	-	-	-

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

Line	Line Title	FY 2016 ACT	FY 2017 CY	FY 2018 BY
	Obligated balance, end of year (net):	-	14,000	19,000
3050	Unpaid obligations, end of year (gross)	-	14,000	19,000
3100	Obligated balance, start of year (net)	-	-	14,000
3200	Obligated balance, end of year	-	14,000	19,000
	Budget authority and outlays, net: Discretionary:			
4000	Budget authority, gross Outlays, gross:	19,163	19,000	-
4010	Outlays from new discretionary authority	-	5,000	-
4011	Outlays from discretionary balances	-	-	14,000
4020	Outlays, gross (total)	-	5,000	14,000
4070	Budget authority, net (discretionary)	19,163	19,000	-
4080	Outlays, net (discretionary)	-	5,000	14,000
4180	Budget authority, net (Disc. And Mand.)	19,163	19,000	-
4190	Outlays, net (total)	-	5,000	14,000

#### DEPARTMENT OF TRANSPORTATION FEDERAL RAILROAD ADMINISTRATION

#### **Railroad Rehabilitation and Improvement Financing**

RAILROAD REHABILITATION AND IMPROVEMENT FINANCING

The Secretary of Transportation is authorized to issue direct loans and loan guarantees pursuant to sections 501 through 504 of the Railroad Revitalization and Regulatory Reform Act of 1976 (Public Law 94–210), as amended, such authority to exist as long as any such direct loan or loan guarantee is outstanding. *Provided*, That pursuant to section 502 of such Act, as amended, no new direct loans or loan guarantee commitments shall be made using Federal funds for the credit risk premium during fiscal year 2016.

Explanation: The President's Budget proposes to allow Federal funding, when otherwise allowable, to be used to pay the credit risk premium of Railroad Rehabilitation and Improvement Financing loans.

# EXHIBIT III-1 RAILROAD REHABILITATION AND IMPROVEMENT FINANCING PROGRAM Summary by Program Activity Appropriations, Obligation Limitations, and Exempt Obligations

(\$000)

	FY 2016 ACTUAL	FY 2017 ANNUALIZED CR	FY 2018 REQUEST	CHANGE FY 2017- 2018
Railroad Rehabilitation and Improvement Financing Program	1,960	1,956	-	(1,956)
TOTAL	1,960	1,956		(1,956)
Full-Time Equivalents	-	-	-	_

**Program and Performance Statement** 

The Transportation Equity Act of the 21st Century of 1998 established the Railroad Rehabilitation and Improvement Financing (RRIF) 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 FY 2016, \$1.96 million was appropriated to assist Class II and Class III railroads in covering RRIF loan application expenses. No new funds are requested for this account for FY 2018.

# EXHIBIT III-1a RAILROAD REHABILITATION AND IMPROVEMENT FINANCING PROGRAM SUMMARY ANALYSIS OF CHANGE FROM FY 2017 TO FY 2018 Appropriations, Obligations, Limitations, and Exempt Obligations (\$000)

	Change from FY 2017 to FY 2018	Change from FY 2017 to FY 2018
ITEM	\$000	FTE
FY 2017 ANNUALIZED CR	1,956	
PROGRAM REDUCTIONS		
Railroad Rehabilitation and Improvement		
Financing Program	(1,956)	
Subtotal, Program Reductions	(1,956)	

-

FY 2018 REQUEST

# DETAILED JUSTIFICATION RAILROAD REHABILITATION AND IMPROVEMENT FINANCING PROGRAM

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

Program Activity	FY 2016 Actual	FY 2017 Annualized CR	FY 2018 Request	Change FY 2017- 2018
Railroad Rehabilitation and Improvement Financing	1,960	1,956	-	(1,956)
TOTAL	1,960	1,956	-	(1,956)

#### FY 2018 – Railroad Rehabilitation and Improvement Financing – Budget Request \$000

# 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, economic development and competitiveness in international markets, the environment, and transit-oriented development. In providing financial assistance through RRIF, the Department 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 such as the rail-component of Denver Union Station, critical safety investments like the New York Metropolitan Transportation Authority's work to comply with positive train control, and the procurement of next-generation high-speed trainsets for Amtrak's Acela service on the Northeast Corridor.

In FY 2016, the Department closed one loan in the amount of \$2.45 billion. Currently, the Department is evaluating three RRIF applications seeking a total of \$645 million in financial assistance, with several additional potential RRIF applications in the pipeline.

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.

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

The RRIF program is necessary to provide financing for rail projects that would not otherwise be funded through the private markets. For example, many short line railroads lack the capital funding necessary to invest in improvements to their infrastructure and equipment, and cannot easily access long-term financing from private financial institutions. FRA's 2014 study on the capital investment needs of Class II and Class III railroads found that a nearly \$7 billion funding gap exists to address these railroads' current and near-term capital needs.<sup>1</sup>

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 36 loans FRA has made since 2002, 14 were for less than \$10 million.

Likewise, the program has funded major safety investments and forward leaning projects. In FY 2016, the Department issued its largest-ever loan, \$2.45 billion, to assist Amtrak in procuring 28 next-generation high-speed trainsets for the Acela service on the Northeast Corridor and undertaking major station improvements at Moynihan Station in New York City, Washington Union Station, Baltimore Penn Station, and New Carrollton Station in Maryland. These improvements will enable Amtrak to increase capacity and service levels to meet rising demand and improve the safety and reliability of service.

Additionally, in FY 2015, the Department issued a \$967 million loan to the New York Metropolitan Transportation Authority, the nation's largest commuter rail service provider, for deployment of positive train control, which is a requirement that most commuter railroads and short line railroad 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.

<sup>&</sup>lt;sup>1</sup> FRA, <u>Summary of Class II and Class III Railroad Capital Needs and Funding Sources</u>, October 2014.

# DEPARTMENT OF TRANSPORTATION FEDERAL RAILROAD ADMINISTRATION RAILROAD REHABILITATION IMPROVEMENT FUND PROGRAM ACCOUNT (69-0750) PROGRAM AND FINANCING

**IN THOUSANDS OF DOLLARS (\$000)** 

Account Number	69-0750-0-3-401			
Tumber	07-0750-0-5-401	2016		
Line	Line Title	ACT	2017 CY	2018 BY
	Obligations by program activity			
0001	<b>Obligations by program activity:</b> Rounding Amount	_	_	_
0001	Credit program obligations:	-	-	-
0706	Interest on reestimates of direct loan subsidy	563	1,000	-
0709	Administrative expenses	-	2,000	2,000
	1		,	,
0791	Direct program activities, subtotal	563	3,000	2,000
0900	Total new obligations	563	3,000	2,000
	Budgetary resources:			
	Unobligated balance:			
1000	Unobligated balance brought forward, Oct 1	-	2,000	2,000
	Discretionary unobligated balance brought			
1001	fwd, Oct 1	-	2,000	-
1050	Unobligated balance (total)	-	2,000	2,000
	Budget authority:			
	Appropriations, discretionary:			
1100	Appropriation	1,960	2,000	-
1160	Appropriation, discretionary (total)	1,960	2,000	-
	Appropriations, mandatory:			
1200	Appropriation	563	1,000	-
1260	Appropriations, mandatory (total)	563	1,000	-
1900	Budget authority (total)	2,523	3,000	-
1930	Total budgetary resources available	2,523	5,000	2,000
	Memorandum (non-add) entries:			
	Unexpired unobligated balance, end of year	1,960	2,000	-
	Change in obligated balance:			
	Unpaid obligations:			
3000	Unpaid obligations, brought forward, Oct 1	-	-	-

Account

Number 69-0750-0-3-401

<u>I tullioci</u>	07 0750 0 5 401	FY 2016	FY 2017	FY 2018
Line	Line Title	ACT	CY	BY
3010	New obligations, unexpired accounts	563	3,000	2,000
3020	Outlays (gross)	(563)	(3,000)	(2,000)
3050	Unpaid obligations, end of year	-	-	-
	Memorandum (non-add) entries:			
3100	Obligated balance, start of year	-	-	-
3200	Obligated balance, end of year	-	-	-
	Budget authority and outlays, net:			
	Discretionary:			
4000	Budget authority, gross	1,960	2,000	-
	Outlays, gross:			
4010	Outlays from new discretionary authority	-	1,000	-
4011	Outlays from discretionary balances	-	1,000	2,000
4020	Outlays, gross (total)	-	2,000	2,000
4070	Budget authority, net (discretionary)	1,960	2,000	-
4080	Outlays, net (discretionary)	-	2,000	2,000
	Mandatory:			
4090	Budget authority, gross	563	1,000	-
	Outlays, gross:			
4100	Outlays from new mandatory authority	563	1,000	-
4160	Budget authority, net (mandatory)	563	1,000	-
4170	Outlays, net (mandatory)	563	1,000	-
4180	Budget authority, net (total)	2,523	3,000	-
4190	Outlays, net (total)	563	3,000	2,000

# 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	FY 2016 Act	FY 2017 CY	FY 2018 BY
	Obligations by program activity:	1100		DI
0001	Emergency Railroad Rehabilitation and Repair	-	-	-
0900	Total new obligations	-	-	-
	Budgetary Resources:			
	Unobligated balance:			
1000	Unobligated balance brought forward, Oct 1	-	-	-
1050	Unobligated balance (total)	-	-	-
	Budget authority:			
	Appropriations, discretionary:			
1160	Appropriation, disc (total)	-	-	-
1930	Total budgetary resources available	-	-	-
	Change in obligated balance:			
	Obligated balance, start of year (net):			
	Unpaid obligations, brought forward, Oct 1			
3000	(gross)	42	-	-
3020	Outlays (gross)	(42)	-	-
3050	Unpaid obligations, end of year	-	-	-
3100	Obligated balance, start of year (net)	42	-	-
3200	Obligated balance, end of year (net)	0	-	-
	Budget authority and outlays, net:			
	Discretionary:			
	Outlays, gross:			
4011	Outlays from discretionary balances	42	-	-
4080	Outlays, net (discretionary)	42	-	-
4190	Outlays, net (total)	42	-	-

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 funds are requested for this account for FY 2018.

# 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	FY 2016 Act	FY 2017 CY	FY 2018 BY
	Obligations by program activity:	Att	CI	DI
0001	Railroad Safety Technology Program	-	-	-
0900	Total new obligations	-	-	-
	Budgetary Resources:			
	Unobligated balance:			
1000	Unobligated balance brought forward, Oct 1	112	-	-
1050	Unobligated balance (total)	112	-	-
	Budget authority:			
	Appropriations, discretionary:			
1160	Appropriation, disc (total)	-	-	-
1930	Total budgetary resources available	112	-	-
	Change in obligated balance:			
	Obligated balance, start of year (net):			
	Unpaid obligations, brought forward, Oct 1			
3000	(gross)	7,783	6,000	3,000
3020	Outlays (gross)	(2,034)	(3,000)	(3,000)
3050	Unpaid obligations, end of year	5,749	3,000	-
3100	Obligated balance, start of year (net)	7,783	6,000	3,000
3200	Obligated balance, end of year (net)	5,749	3,000	-
	Budget authority and outlays, net:			
	Discretionary:			
	Outlays, gross:			
4011	Outlays from discretionary balances	2,034	3,000	3,000
4080	Outlays, net (discretionary)	2,034	3,000	3,000
4190	Outlays, net (total)	2,034	3,000	3,000

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 for this account for FY 2018. The FAST Act did not authorize new funding for the Railroad Safety Technology Grants program. The President's Budget is requesting funding under the FAST Act authorized Consolidated Rail Infrastructure and Safety Improvements program, which largely encompasses the recipient and project eligibilities contained in the Railroad Safety Technology Grants program.

# 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

Number:	09-0715-0-1-401	FY 2016	FY 2017	FY 2018
Line	Line Title	ACT	CY	BY
	Obligations by program activity:			
0001	Intercity Passenger Rail Grants	9,426	2,000	10,000
0900	Total new obligations	9,426	2,000	10,000
	Budgetary Resources:			
	Unobligated balance:			
1000	Unobligated balance brought forward, Oct 1	19,776	12,000	10,000
1021	Recoveries of prior year unpaid obligations	1,337	-	-
1050	Unobligated balance (total)	21,113	12,000	10,000
1930	Total budgetary resources available	21,113	12,000	10,000
1941	Memorandum (non-add) entries: Unexpired unobligated balance, end of year	11,687	10,000	-
	Change in obligated balance:			
	Unpaid obligations:			
3000	Unpaid obligations, brought forward, Oct 1	25,808	22,000	14,000
3010	New obligations, unexpired accounts	9,426	2,000	10,000
3020	Outlays (gross)	(12,180)	(10,000)	(7,000)
	Recoveries of prior year unpaid obligations,			
3040	unexpired	(1,337)	-	-
3050	Unpaid obligations, end of year	21,717	14,000	17,000
	Memorandum (non-add) entries:			
3100	Obligated balance, start of year	25,808	22,000	14,000
3200	Obligated balance, end of year	21,717	14,000	17,000
	Budget authority and outlays, net:			
	Discretionary:			
	Outlays, gross:			
4011	Outlays from discretionary balances	12,180	10,000	7,000
4080	Outlays, net (discretionary)	12,180	10,000	7,000
4190	Outlays, net (total)	12,180	10,000	7,000

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 account for FY 2018.

# 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	FY 2016 Act	FY 2017 CY	FY 2018 BY
Line	Obligations by program activity:	1100	01	DI
0001	Rail Line Relocation	-	5,000	3,000
0900	Total new obligations	-	5,000	3,000
	Budgetary Resources:			
	Unobligated balance:			
1000	Unobligated balance brought forward, Oct 1	9,147	10,000	3,000
1021	Recoveries of prior year unpaid obligations	3,298	-	-
1050	Unobligated balance (total)	12,445	10,000	3,000
1131	Unobligated balance of appropriations, permanently reduced	(2,241)	(2,000)	-
1930	Total budgetary resources available	10,204	8,000	3,000
	Memorandum (non-add) entries:			
1941	Unexpired unobligated balance, end of year	10,204	3,000	-
	Change in obligated balance:			
	Obligated balance, start of year (net):			
3000	Unpaid obligations, brought forward, Oct 1	19,453	10,000	6,000
2010	(gross)	0	<b>-</b> 000	2 000
3010	Obligations incurred, unexpired accounts	0	5,000	3,000
3020	Outlays (gross)	(5,843)	(9,000)	(9,000)
3040	Recoveries of prior year unpaid obligations, unexpired	(3,298)	-	-
3050	Unpaid obligations, end of year (gross)	10,312	6,000	-
3100	Obligated balance, start of year (net)	19,453	10,000	6,000
3200	Obligated balance, end of year	10,312	6,000	-
	Budget authority and outlays, net:			
	Discretionary:			
4000	Budget authority, gross	(2,241)	(2,000)	-
	Outlays, gross:			

Number:	69-0716 -0-1-401			
		FY 2016	FY 2017	FY 2018
Line	Line Title	Act	CY	BY
4010	Outlays from new discretionary authority	-	(1,000)	-
4011	Outlays from discretionary balances	5,843	10,000	9,000
4020	Outlays, gross (total)	5,843	9,000	9,000
4070	Budget authority, net (discretionary)	(2,241)	(2,000)	0
4080	Outlays, net (discretionary)	5,843	9,000	9,000
4180	Budget authority, net (total)	(2,241)	(2,000)	0
4190	Outlays, net (total)	5,843	9,000	9,000

This program provides Federal assistance to States for relocating or making necessary improvements to local rail lines.

No new funds are requested for this account for FY 2018.

Account

# 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	FY 2016 ACT	FY 2017 CY	FY 2018 BY
Line	Obligations by program activity:	nei	<u> </u>	DI
0003	Capital Assistance High-Speed Rail	_	48,000	_
0005	Corridors and IPR Service Grants	-	40,000	-
0004	Capital Assistance High-Speed Rail	655	5,000	3,000
0001	Corridors and IPR Service Oversight	055	5,000	5,000
0006	Capital Assistance High-Speed Rail	-	1,000	-
0000	Corridors and IPR Service Planning		1,000	
	Activities			
0900	Total new obligations	655	54,000	3,000
	Budgetary Resources:			
	Unobligated balance:			
1000	Unobligated balance brought forward,	65,707	66,000	13,000
	Oct 1	,	,	,
1021	Recoveries of prior year unpaid	1,415	1,000	1,000
	obligations			
1050	Unobligated balance (total)	67,122	67,000	14,000
1930	Total budgetary resources available	67,122	67,000	14,000
	Memorandum (non-add) entries:			
1941	Unexpired unobligated balance, end	66,467	13,000	11,000
	of year			
	Change in obligated balance:			
	Unpaid obligations:			
3000	Unpaid obligations, brought forward,	6,210,610	4,126,000	1,319,000
	Oct 1			
3010	New obligations, unexpired accounts	655	54,000	3,000
3020	Outlays (gross)	(2,077,331)	(2,721,000)	(300,000)
3040	Recoveries of prior year unpaid	(1,415)	(1,000)	(1,000)
	obligations, unexpired			
3041	Recoveries of prior year unpaid obligations, expired	(8,025)	(139,000)	
2050		4 104 404	1 210 000	1 001 004
3050	Unpaid obligations, end of year	4,124,494	1,319,000	1,021,000

Account Number:	69-X-0719-X-Combined-401			
Line	Line Title	FY 2016 ACT	FY 2017 CY	FY 2018 BY
	Memorandum (non-add) entries:			
3100	Obligated balance, start of year	6,210,610	4,126,000	1,319,000
	(net)			
3200	Obligated balance, end of year	4,124,494	1,319,000	1,021,000
	Budget authority and outlays, net:			
	Discretionary:			
	Outlays, gross:			
4011	Outlays from discretionary balances	2,077,331	2,721,000	300,000
4080	Outlays, net (discretionary)	2,077,331	2,721,000	300,000
4190	Outlays, net (total)	2,077,331	2,721,000	300,000

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 new funds are requested for this account for FY 2018.

# **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	FY 2016 ACT	FY 2017 CY	FY 2018 BY
	Obligations by program activity:			
0001	Next Generation High Speed Rail	1,127	-	-
0900	Total new obligations	1,127	-	-
	Budgetary Resources:			
1000	Unobligated balance brought forward, Oct 1	9,568	4,000	-
1021	Recoveries of prior year unpaid obligations	46	-	-
1050	Unobligated balance (total)	9,615	4,000	-
	Budget authority: Unobligated balance of appropriations			
1131	permanently reduced	(4,945)	(4,000)	-
1160	Appropriation, disc (total)	(4,945)	(4,000)	-
1930	Total budgetary resources available	4,670	-	-
1941	Unexpired unobligated balance, end of year	3,543	-	-
	Change in obligated balance: Unpaid obligations, brought forward, Oct 1			
3000	(gross)	1,508	3,000	3,000
3010	Obligations incurred, unexpired accounts	1,127		-
3020	Outlays (gross)	(61)	_	(3,000)
	Recoveries of prior year unpaid obligations,			(-,)
3040	unexpired	(46)	-	-
3050	Unpaid obligations, end of year (gross)	2,528	3,000	-
3100	<b>Obligated balance, start of year (net)</b>	1,508	3,000	3,000
3200	Obligated balance, end of year	2,528	3,000	-
	Budget authority and outlays, net: Discretionary:			
4000	Budget authority, gross	(4,945)	(4,000)	-
	Outlays, gross:			
4010	Outlays from new discretionary authority	-	(4,000)	0
4011	Outlays from discretionary balances	61	4,000	3,000
4020	Outlays, gross (total)	61	-	3,000

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

		FY 2016	FY 2017	FY 2018
Line	Line Title	ACT	CY	BY
4070	Budget authority, net (discretionary)	(4,945)	(4,000)	-
4080	Outlays, net (discretionary)	61	-	3,000
4180	Budget authority, net (total)	(4,945)	(4,000)	-
4190	Outlays, net (total)	61	-	3,000

#### **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 account for FY 2018.

# 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	FY 2016 ACT	FY 2017 CY	FY 2018 BY
	Obligations by program activity:			
0002	Pennsylvania Station risk reduction projects	-	40,000	-
0900	Total new obligations	-	40,000	-
	Budgetary resources:			
	Unobligated balance:			
1000	Unobligated balance brought forward, Oct 1 Unobligated balance transfer from other	-	40,000	
1011	accounts [069-1140]	40,200	-	
1050	Unobligated balance (total)	40,200	40,000	
1930	Total budgetary resources available	40,200	40,000	
	Memorandum (non-add) entries:			
1941	Unexpired unobligated balance, end of year	40,200	-	
	Change in obligated balance:			
	Unpaid obligations:			
3000	Unpaid obligations, brought forward, Oct 1	29,189	14,000	40,00
3010	New obligations, unexpired accounts	-	40,000	
3020	Outlays (gross)	(15,353)	(14,000)	(5,000
3050	Unpaid obligations, end of year	13,836	40,000	35,00
	Memorandum (non-add) entries:			
3100	Obligated balance, start of year	29,189	14,000	40,00
3200	Obligated balance, end of year	13,836	40,000	35,00
	Budget authority and outlays, net:			
	Discretionary:			
	Budget authority, gross	40,200	-	
4011	Outlays, gross:	15 252	1/ 000	5 00
4011 4070	Outlays from discretionary balances	15,353	14,000	5,00
	Budget authority, net (discretionary)	40,200	- 1/ 000	5 00
4080 4180	Outlays, net (discretionary) Budget authority, net (total)	15,353	14,000	5,00
		40,200	- 14,000	5 00
4190	Outlays, net (total)	15,353	14,000	5,00

Funds are used to redevelop the Pennsylvania Station in New York City, which involves renovating the James A. Farley Post Office building as Moynihan Station. 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. In FY 2016, \$40 million was transferred from the Federal Transit Administration's Hurricane Sandy funding into this account for risk reduction projects at Moynihan Station.

No new funds are requested for this account for FY 2018.

# 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 U.S. Code via section 11413 of the FAST ACT (49 U.S.C. 20121)

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, <del>2016</del> 2018, a summary of all overtime payments incurred by the Corporation for <del>2015</del> 2017 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 <del>2015</del> 2017 and for the three prior calendar years.

Explanation: The above language from the FY 2016 appropriations act is updated for FY 2018.

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: The President's Budget 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: The President's Budget does not propose repeating one-time rescissions from the FY 2016 appropriations act.

Sec. 151. Notwithstanding section 1302 of title 40, the Federal Railroad Administration may lease to others or enter into contracts, for such consideration, and subject to such terms and conditions, as it determines to be in the best interests of the government, for a term of up to 20 years for the continued operation and maintenance and capital reinvestment of the Transportation Technology Center near Pueblo, Colorado.

Explanation: The President's Budget seeks legislative language to further strengthen FRA's 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.

#### EXHIBIT IV-1

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

	FY 2016 Actual	FY 2017 Annualized CR	FY 2018 Request	FY 2018 Applied	FY 2018 Development
By Account/Program					
Railroad Research and Development Account	39,100	39,029	39,100	29,695	9,405
Track Program	11,279	11,259	11,279	8,777	2,502
Rolling Stock Program	10,322	10,303	10,322	8,050	2,272
Train Control and Communication	8,086	8,071	8,086	5,256	2,830
Human Factors Program	5,542	5,532	5,542	4,322	1,220
Railroad Systems Issues Program	3,871	3,864	3,871	3,290	581
Safety and Operations	4,491	4,418	4,528	2,578	1,450
Salaries & Benefits	4,028	4,028	4,028	2,578	1,450
Transportation Technology Center (TTC)	463	390	500		
Total FRA	43,591	43,447	43,628	32,273	10,855
By Function					
Subtotal, Research & Development	40,127	,	40,127	32,273	10,855
Subtotal, Facilities (F)	3,464	/	3,501	N/A	N/A
Total, FRA	43,591	43,447	43,628	32,273	10,855

FEDERAL RAILROAD ADMINISTRATION	HISTORY OF APPROPRIATIONS	FY 2008 - 2017
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			5 ) 1	(000\$) (107 - 2007)						
Account	FY 2008	FY 2009	FY 2010	<b>FY 2011</b> <sup>4/</sup>	FY 2012	FY 2013 <sup>6/</sup>	FY 2014	FY 2015	FY 2016	FY 2017
Safety and Operations	150,193	159,445	172,270	176,596	178,596	169,254	184,500	186,870	199,000	218,298
Safety and Operations	I	ł	I	I	I	I	I	I	$(6,710)^{9/}$	I
Rail Safety Technology Program	I	I	50,000	I	I	I	I	I	I	I
Railroad Research and Development	35,964	33,950	37,613	35,030	35,000	33,169	35,250	39,100	39,100	40,100
Railroad Research and Development	ł	ł	ł	:	:	ł	ł	1	$(1,960)^{9/}$	1
Rail Line Relocation and Improvement Program	20,040	25,000	34,532	10,511	I	ł	I	ł	$(2,241)^{9/}$	ł
Railroad Safety Grants	1	ł	1	1	:	I	1	10,000	50,000	ł
Consolidated Rail Infrastructure and Safety Improvements	I	1	1	I	:	I	1	:	ł	68,000
Federal-State Partnership for State of Good Repair	I	I	I	I	:	I	I	:	I	25,000
Restoration and Enhancement Grants	:	-	1			:	I		1	5,000
Northeast Corridor Grants to the National Railroad Passenger										000 975
Colporation National Network Grants to the National Railroad Passenner	1	I	I	I	I	I	I	I	I	000,026
Corporation	:	ł	1	I	:	I	I	:	I	1,167,000
Operating Grants to the National Railroad Passenger Corporation	475,000	550,000	563,000	563,000	466,000	441,625	340,000	250,000	288,500	ı
Capital and Debt Service Grants to the National Railroad										
Passenger Corporation	850,000	940,000	1,001,625	920,652	952,000	902,205	1,050,000	1,140,000	1,101,500	I
Capital and Debt Service Grants to the National Railroad Passenger Corporation	:	I	ł	I	I	ł	ł	I	(5,000) <sup>9/</sup>	ł
Grants to the National Railroad Passenger Corporation	:	I	I	I	I	$297,100$ $^{7/}$	I	I	(267) <sup>9/</sup>	ł
Pennsylvania Station Redevelopment Project	:	ł	ł	ł	ł	I	I	ł	40,200 <sup>10/</sup>	I
Intercity Passenger Rail Grant Program	30,000	90,000	I	I	1	I	I	1	1	I
Next Generation High-Speed Rail	1	ł	1	1	:	I	$(1,973)^{8/}$	:	(4,945) <sup>9/</sup>	ł
Northeast Corridor Improvement Program	I	ł	ł	I	:	I	$(4,419)^{8/}$	I	19,163	I
Capital Assistance for HSR Corridors and IPR	I	I	2,500,000	(400,000) <sup>5/</sup>	:	I	ł	:	ł	I
Railroad Rehabilitation and Improvement Financing Program	20,751	16,753	18,441	23,692	I	I	I	ł	1,960	I
Emergency Railroad Rehabilitation and Repair	$20,000^{2/}$	I	I	I	ł	I	I	1	I	I
Capital Grants to National Railroad Passenger Corporation	I	$1,300,000^{3/}$	I	I	1	I	I	I	I	I
Capital Assistance for High Speed Rail Corridors and Intercity		3/								
Passenger Rail Service	1	8,000,000	1	1	I	1	ł	I	1	1
Total FRA Budget Authority	1,601,948	11,115,148	4,377,481	1,329,481	1,631,596	1,843,353	1,603,358	1,625,970	1,718,300	1,851,398
Notes: 1/EV 2008 Boilt ins Balovation and Immericanant ammeniation (BT 110.161) reflacts a	1) raflacte a 206 raeci	20% resolved on SS 24M in earliest	o dro croco							
<ol> <li>I. I. I. 2000 Nati Line redocation and improvement appropriation (1.42, 110-10).</li> <li>P.Y. 2008 Emerginal Complemental (D.I. 110, 220).</li> </ol>	1) 101100 8 7/0 10201									
2/ F1 2006 Emergency Supplemental (F.L. 110-529). 3/ FY 2000 ARR a summariations (PI 111-5) reflects \$1.38 for Amtrals and \$8.08 for HSIDE	\$8 OB for HSIDE									

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

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

5/ FY 2011 appropriations (P.L. 112-10) reflect a \$400M rescission of prior year unobligated balances.
6/ FY 2013 figures reflect 2% rescission and sequestread amounts excluded.
7/ FY 2013 The Distater 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. Also in FY 2013, \$185 million was transferred from FTA to FRA for the Hudson Yards Project.

8/ FY 2014 Omnibus (P.L. 113-76) reflects a \$4419M rescission on the NEC prior year unobligated balances, and \$1,973M rescission on the Next Generation High-Speed Rail prior year unobligated balances. 9/ FY 2016 Omnibus (P.L. 114-113) reflects the following rescissions from prior year unobligated balances. \$6,710,477 from Safety & Operations, \$1,960,000 from Railroad Research and Development, \$2,241,385 from Rail Line Relocation and Improvement, \$5,000,000 from Capital and Debt Service Grants to the National Railroad Passenger Corporation (NEC 2015), \$267,019 from Grants to the National Railroad Passenger Corporation, \$4,944,504 from Next Generation High-Speed Rail 10<sup>7</sup> In FY 2016, \$40.2M from the Disaster Relief Appropriations Act of FY 2013 (P.L. 113-2) was transferred from FTA to FRA for risk reduction projects at Pennsylvania Station, which was an area impacted by Hurricane Sandy.