

Before the Committee on Commerce, Science, and Transportation United States Senate

> March 1, 2018 CC2018003

Chairman Thune, Ranking Member Nelson, and Members of the Committee:

Thank you for inviting me to this important hearing on positive train control (PTC) implementation. We are all here today in the interest of advancing safety to protect the traveling public. Over the last decade, several fatal rail incidents led the U.S. rail industry and congressional leaders to commit to implementing PTC on railways nationwide. In 2008, Congress enacted this requirement and set a deadline of December 31, 2015, through the Rail Safety Improvement Act (RSIA),¹ after a devastating crash between a commuter train and freight train. Since that time, implementing PTC has been a priority for industry and the Department of Transportation (DOT). Recent accidents, such as the December 2017 derailment in Washington State that resulted in 3 deaths and more than 60 injuries, have renewed attention on this important issue and highlighted the difficulties in carrying out this critical mandate by congressional deadlines.

Citing funding and technical challenges, the industry did not meet the 2015 deadline, and Congress extended it by 3 years with the possibility of an additional 2-year extension if a railroad meets the statutory criteria set forth in the Positive Train Control Enforcement and Implementation Act of 2015.² Since the enactment of the RSIA, DOT has been tasked with overseeing funding support for PTC implementation, including grants and loans.

My testimony today is based on our ongoing work, conducted at the request of this Committee, regarding Federal funding for PTC and the Department's oversight of those funds and other financial support. Specifically, my statement will provide our observations and information to date on (1) the amount of Federal financial assistance for PTC implementation and the types of projects, (2) the Department's oversight of the Federal funds invested in PTC projects, and (3) key funding challenges and concerns as rail systems implement PTC. We plan to complete our audit work and issue to this committee our final report with the agencies' responses in April 2018.

¹ Pub. L. No. 110-432 (2008).

² 49 U.S. Code § 20157.

Summary

To reduce the number of rail crashes caused by human error, the U.S. rail industry and Congress are working to implement PTC systems, and DOT has provided \$2.9 billion to date to implement PTC. However, \$2.3 billion had been obligated as of September 30, 2017, which was the focus of our work since this was the actual amount available to recipients for expenditure. PTC is an advanced communication-based technology designed to prevent certain accidents caused by human error, including train-to-train collisions and derailments caused by exceeding safe speeds. However, PTC projects vary greatly based on the type of railroad, the need for interoperability, and available communication systems. The Department's financial oversight also varies, based on funding sources and other factors, with each organization following its own established oversight mechanisms. Our ongoing review has noted that the Department's financial and grant management systems do not always provide the detail necessary to identify PTC-specific costs. Instead DOT relies on the rail systems to provide accurate information. We are also finding that only a few funding recipients have used all of their PTC funds despite the approaching mandate. Some funding recipients are concerned about potential shortfalls in funding to operate and maintain PTC, which could result in funds being shifted from other safety priorities. These will be key watch items for the Department and Congress—as rail systems move forward with PTC implementation—to maintain a sense of urgency and ensure that there are no negative effects on the safety of the system despite the improvements that PTC can deliver.

Background

Since the 2008 fatal rail crash that led to the enactment of the RSIA, several other fatal rail incidents have strengthened the Department's commitment to implementing PTC nationwide (see table 1).

Table 1. Examples of PTC-Prev	ventable Crashes
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Date	Location	Incident
September 2008	Chatsworth, CA	A distracted engineer ran a Metrolink train through a red signal, causing a collision that killed 25 and injured 135.
May 2011	Mineral Springs, NC	Human error contributed to the rear-end collision of two freight trains, killing two crew members and injuring two more
June 2012	Near Goodwell, OK	Human inattentiveness contributed to the collision of two freight trains, killing three crew members.
December 2013	Bronx, NY	An engineer fell asleep and caused a Metro-North passenger train derailment that killed 4 and injured 61.
May 2015	Philadelphia, PA	A distracted engineer accelerated into a sharp curve, causing an Amtrak derailment that killed 8 and injured 185.
December 2017	Near DuPont, WA	A derailment caused 3 deaths and over 60 injuries. The National Transportation Safety Board's investigation is expected to last 12 to 24 months.

Source: OIG

The RSIA required Class I railroad main lines handling poisonous-inhalationhazard materials and any railroad main lines with regularly scheduled intercity and commuter rail passenger service to fully implement PTC.³ A fully functioning PTC system must be able to precisely determine the location and speed of trains, warn train operators about potential problems, and take action if the operator does not respond to a warning. A PTC system is made up of more than 20 major components in various stages of development, which must then be integrated and installed across the rail network.

The Federal Railroad Administration (FRA) identified rail systems⁴ as subject to congressional requirements for PTC implementation. Subsequently, eight of these rail systems were granted a waiver from the PTC statutory mandate, related to overarching FRA regulations for safety rule waivers.⁵ Of the 41 rail systems still required to implement PTC, per the statutory mandate, 25 are receiving Federal financial support. Four others have chosen to implement PTC and also receive Federal assistance—either because the rail system's future operations will be subject to the statutory mandate or because the rail system is a tenant railroad that operates on a track segment already required to have PTC. By the end of fiscal year 2017, 29 rail systems had received

³ The RSIA defines main lines as those carrying 5 million or more gross tons of freight annually and authorizes the Federal Railroad Administration (FRA) to define the term "mainline" by regulation for passenger routes or segments over which limited or no freight railroad operations occur.

⁴ For the purpose of our review, we refer to all direct recipients of PTC funding as "funding recipients" and "rail systems," whether railroads, commuter rail, etc.

⁵ As implemented by 49 CFR 236.1019.

financial support from such sources as FRA, the Federal Transit Administration (FTA), and the Build America Bureau (BAB). 6

DOT Provided \$2.9 Billion for PTC Projects, With Nearly \$2.3 Billion Obligated by End of Fiscal Year 2017

As of the end of fiscal year 2017,⁷ approximately 60 percent of the U.S. rail systems required to implement PTC are receiving financial support. Specifically, 29 rail systems have received Federal assistance. According to estimates provided to us by the funding recipients, DOT has provided \$2.9 billion to date to implement PTC. However, \$2.3 billion had been obligated as of September 30, 2017, which was the focus of our work since this was the actual amount available to recipients for expenditure. Of this amount, the Department has obligated \$1.3 billion through various Federal grants, and the BAB issued approximately \$1 billion through a loan (see exhibit A). Funding recipients rely on various departmental funding programs to support PTC work, such as formula grants, discretionary grants, and loans.⁸

Federal funding grants ranged widely, depending on size of the rail system, the quantity and scope of projects, or the amount of funding requested. For example,

- Providence and Worcester Railroad received just under \$1 million for a single project to purchase and equip locomotives with on-board kits.
- Southeastern Pennsylvania Transportation Authority received approximately \$181 million for a total of seven projects that included

⁶ The enactment of the FAST Act led to the July 2016 creation of BAB to oversee various grant and credit programs administered by the Department. BAB is responsible monitoring and reviewing the Railroad Rehabilitation and Improvement Financing (RRIF), Transportation Infrastructure Finance and Innovation Act (TIFIA), and Private Activity Bonds (PAB) programs as well as the recently enacted Infrastructure for Rebuilding America (INFRA) grant program.

⁷ As requested, we reviewed DOT's funding and financing for implementation of PTC since 2008. For timely reporting purposes, the scope of this review includes funding that had been obligated by September 30, 2017 (end of fiscal year 2017).

⁸ Formula grant programs are noncompetitive awards based on a predetermined formula. Unlike a formula grant, a discretionary grant awards funds on the basis of a competitive process. The Department reviews applications, in part through a formal review process, in light of the legislative and regulatory requirements and published selection criteria established for a program. Additionally, the Department is authorized to provide credit assistance, direct loans and loan guarantees to finance development of railroad infrastructure.

installing signals, interlocking, and right-of-way improvements throughout multiple rail lines.

On average, those using Federal funding grants received \$36.1 million. In addition, two rail systems secured financial loans from the Department—approximately \$967 million went to the New York Metropolitan Transportation Authority and, subsequent to the data collection portion of our review, Massachusetts Bay Transportation Authority borrowed \$382 million.⁹

A rail system can receive Federal support from multiple sources, whether as a direct recipient or through another grantee. Some railroads, such as Amtrak, receive funds both directly and indirectly. At the end of fiscal year 2017, the 29 rail systems mentioned above had received Federal assistance from 37 different funding recipients. Nineteen received funding from FRA, 25 from FTA, 7 from both FRA and FTA, and 1 was funded through a loan from BAB.¹⁰

Rail systems were at different points of implementation when they applied for Federal funding and may have used State or local money to pay for some PTC-related projects. Projects vary greatly based on the type of railroad, the need for interoperability,¹¹ and available communication systems. For example, some funding recipients may seek to acquire wireless communications equipment, while others have obtained financial assistance to purchase onboard equipment for locomotives. The California High-Speed Train System is using awarded funds to produce a detailed design development plan for implementing PTC in the Caltrain corridor, which connects San Francisco and San Jose; the plan includes identifying the necessary interoperable interfaces. The Nashville Regional Transportation Authority received funding to cover its PTC-related costs on the Music City Moves commuter rail line that operates on the Nashville & Eastern Railroad. The two organizations have established an agreement concerning their shared responsibilities through September 2036.¹²

⁹ On December 8, 2017, BAB issued two loans to the Massachusetts Bay Transportation Authority. One was a RRIF loan for \$220 million, and the other was a TIFIA loan for \$162 million, for a total of \$382 million.

¹⁰ This was the loan to the New York Metropolitan Transportation Authority discussed above.

¹¹ Commuter railroads often run on tracks owned by Class I freight railroads, as well as freights on commuterowned track. All tenant railroads equipped with PTC must be interoperable with the PTC system installed by the host railroad.

¹² We plan to issue our final report in April 2018; it will include a description of all 54 PTC projects nationwide using Federal funding support.

DOT's Oversight of Financial Support for PTC Varies

DOT's oversight of Federal support for PTC implementation is generally dictated by the type of funding program, which is typical for all projects supported by the Department (see table 2 below for a list of grants, loans, and programs that support PTC implementation). Each DOT organization follows its own established oversight mechanisms for grant or loan procurement activities. These include a combination of recurring reviews of financial reports; regular phone calls, meetings, and emails with funding recipients; and onsite monitoring visits. In addition, BAB monitors financial plans and reviews credit worthiness throughout the span of a project to minimize the Federal Government's risk.

While DOT relies on various oversight methods, those methods cannot readily identify the funding support or the PTC projects on which the funds were spent. With the exception of projects funded by the PTC-specific grant programs authorized by the Fixing America's Surface Transportation Act,¹³ DOT-awarded funds may support more than one project or other activities in addition to PTC. Consequently, when PTC is a component of a larger grant or loan, funding recipients may not be required to capture or report PTC-specific expenditures to the Department. This would be the case, for example, with Federal formula funding, which is apportioned to States based on population and not subject to DOT's discretion.

In addition, the Department's financial and grant management systems do not always provide the granularity necessary to precisely identify PTC costs. For example, grant management systems generally track expenditures by broader budget codes like "signals," which may include signaling for PTC and non-PTC projects. As a result, it is difficult for FRA and FTA to extract PTCspecific spending from Federal awards for other types of activities, and the two agencies must rely on the rail systems to provide more accurate and detailed information. We obtained estimates from FRA and FTA on how much funding has been used for PTC but found that either the grantees had provided the information or the agencies' estimates were incorrect.

Officials at the rail systems confirmed that they have more detailed information about expenditures and provided the information used in our review. More specifically, we found that the grantees' financial systems generally capture more data than DOT's grant management systems

¹³ Pub. Law No. 114-94 (2015).

regarding expenditures and budget line items, which may include funding from local, State, and Federal entities. Each funding recipient uses its own financial tracking mechanisms to document all of its grants and issue reports to DOT agencies. These mechanisms range from internal controls for price and cost analyses to accounting software for tracking budgets, expenditures, and work progress.

Table 2. Grants, Loans, and Programs That Have Funded PTC Implementation

Funding or Financial Assistance Program	Oversight Agency	Legal Citation
American Recovery and Reinvestment Act of 2009	FRA	Pub. L. 111–5
Amtrak National Network Grant	FRA	49 U.S.C. § 24319
Fixed Guideway Modernization	FTA	49 U.S.C. 5309
FTA Revenue Bond	FTA	§ 3011 of Pub. L. 105-178
High-Speed Intercity Passenger Rail Grant	FRA	Div. B, Pub. L. 110-432
New Starts	FTA	49 U.S.C. 5309
PTC Implementation Grant	FTA	§ 3028 of FAST Act, Pub. L, 114-94
Railroad Rehabilitation & Improvement Financing (RRIF) Loan	BAB	45 U.S.C. 822
Railroad Safety Technology Grant	FRA	49 U.S.C. 20158
Research and Development Grant	FRA	Pub. L. 115-31 and previous appropriations acts
State of Good Repair Formula Grant	FTA	49 U.S.C. 5337
Transportation Infrastructure Finance and Innovation Act (TIFIA) Loan	BAB	§ 2001 of FAST Act, Pub. L, 114-94
Transportation Investment Generating Economic Recovery (TIGER) Grant	FTA	Pub. L. 115-31 and previous appropriations acts
Urbanized Area Formula – Economic Recovery	FTA	49 U.S.C. 5307
Urbanized Area Formula Grant	FTA	49 U.S.C. 5307

Source: OIG

Funding Recipients Are Concerned About Funding Shortfalls and Delays

While approximately \$2.3 billion has been provided for PTC projects, only 4 of 37 funding recipients have completely expended their Federal funds—and the extended deadline for PTC implementation is approaching at the end of this year. More than half of the recipients reported spending over 50 percent of their funds, and about 40 percent reported spending over 75 percent.

It is important to note that funding and financial assistance was made available at various points over the last decade, which makes it challenging to compare spending at rail systems. For example, FRA's Railroad Safety Technology Grants provided funds specifically for PTC implementation— \$50 million in fiscal year 2010, \$11 million in fiscal year 2015, and \$25 million in fiscal year 2016. However, our analysis noted that nearly \$15 million of the \$25 million awarded in August 2016 had not been obligated to the grantees.¹⁴ Similarly, out of the \$197 million authorized for PTC implementation under the FAST Act, approximately \$190 million had not been obligated to the grantees, even though award selections were announced last May. Since grantees have yet to receive these dollars, we excluded unobligated grant awards from our analysis of Federal funds provided to rail systems for PTC implementation. Exhibit B provides the status of individual awards for the fiscal year 2016 Rail Safety Technology and fiscal year 2017 FAST Act grant programs.

In addition, some funding recipients are concerned about future shortfalls and delays in grant funding to support PTC, which could result in funds being shifted from other projects. Most funding recipients stated general concerns about budgeting for PTC implementation, which has led some to divert funds from other safety priorities. Of the funding recipients we surveyed, 12 of 34 respondents said PTC implementation was having a negative effect on other funding priorities or general rail service. One recipient pointed out that the \$15.8 million in PTC-specific grants it received was minimal compared to the \$310 million in Federal and State funds it had to divert to implement PTC, which delayed investment in state-of-good-repair projects elsewhere in the system. According to the recipient, these challenges reduced capital funds to a 15-year low.

Other funding recipients expressed concerns about the uncertainty of ongoing operating and maintenance costs after PTC implementation and how

¹⁴ The scope of this review includes funding obligated by September 30, 2017 (the end of fiscal year 2017).

that will affect their operational budgets. In 2016 the American Public Transportation Association estimated the operation and maintenance of PTC would cost commuter railroads about \$100 million a year and stated that many rail systems were still uncertain about the magnitude of future longterm costs. Officials at FRA and FTA said they are aware of this concern, but they too are not sure whether additional funding will be allocated to support ongoing operational and maintenance costs after full PTC implementation.

Conclusion

PTC is one of the most complex and costly safety mandates ever undertaken by the railroad industry. Recent accidents, although rare, remind us that they can and do occur and have a profound impact on lives and communities. While the U.S. rail industry and Congress are committed to implementing PTC nationwide, progress has been slower than anticipated, and ensuring that the rail industry has a sense of urgency will be a key watch item for the Department. Given the potential impact on safety projects throughout the Nation's rail systems, the Department must also be mindful of industry concerns that the costs of operating and maintaining the PTC system, once implemented, could crowd out other safety-critical projects. We are committed to working with DOT and this Committee to monitor the funding implications that could impact railroads' deployment of PTC and expect to issue our final report in April 2018.

This concludes my prepared statement. I will be happy to answer any questions you or other Committee Members may have.

Exhibit A. Estimates of Federal Funding and Financing Obligated for PTC Implementation by End of FY 2017

	Funding Recipients	Estimated Total Cost of PTC Implementation	FTA Funds	FRA Funds	Total Federal Funds	% Federal Funds Expended
1	Connecticut DOT	\$180,000,000	\$144,055,237	\$3,836,100	\$147,891,337	17.5%
2	Maryland DOT	\$30,458,627	\$9,476,056	\$642,445	\$10,118,501	77.0%
3	New York DOT	\$54,214,286	\$-	\$3,000,000	\$3,000,000	0.0%
4	New York Metropolitan Transportation Authority	\$1,063,000,000	\$90,236,669	\$6,597,000	\$96,832,669	88.5%
5	Pennsylvania DOT	\$-	\$7,034,353	\$1,350,000	\$8,384,353	50.4%
6	Southern California Regional Rail Authority	\$240,365,079	\$19,168,366	\$9,005,446	\$28,173,813	92.5%
7	Amtrak	\$232,800,000	\$-	\$187,820,938	\$187,820,938	94.5%
8	California DOT	\$12,810,000	\$-	\$38,400,000	\$38,400,000	86.1%
9	California High-Speed Rail Authority	\$20,000,000	\$-	\$16,000,000	\$16,000,000	99.0%
10	Fort Worth & Western Railroad	\$3,648,496	\$-	\$2,538,768	\$2,538,767	20.0%
11	Illinois DOT	\$88,000,000	\$-	\$72,387,079	\$72,387,079	93.2%
12	Michigan DOT	\$168,965,682	\$-	\$152,772,015	\$152,772,015	100.0%
13	Missouri DOT	\$60,000,000	\$-	\$3,000,000	\$3,000,000	0.0%
14	Providence & Worcester Railroad Co.	\$1,300,000	\$-	\$965,832	\$965,832	0.0%
15	Kansas City Southern (KCS) Railway Company, MO*	\$300,000,000	\$-	\$1,867,449	\$1,867,449	73.3%
16	Twin Cities & Western Railroad Company	\$5,065,000	\$-	\$1,100,550	\$1,100,550	0.0%
17	Washington State DOT	\$7,909,170	\$-	\$6,382,182	\$6,382,182	100.0%
18	Alaska Railroad Corporation	\$171,100,000	\$77,211,524	\$735,000	\$77,946,524	89.5%
19	Dallas Area Rapid Transit (DART)	\$44,500,000	\$12,500,000	\$-	\$12,500,000	0.0%
20	Denton County Transportation Authority	\$20,000,000	\$13,588,430	\$-	\$13,588,430	68.7%
21	Florida DOT (SFRTA)	\$73,500,000	\$6,725,482	\$-	\$6,725,482	7.5%
22	Fort Worth Transportation Authority	\$-	\$17,000,000	\$-	\$17,000,000	0.0%
23	Massachusetts Bay Transportation Authority	\$492,028,418	\$2,560,000	\$-	\$ 2,560,000	74.0%
24	Metra - Northeast Illinois Regional Commuter Railroad Corporation	\$385,879,609	\$155,948,676	\$-	\$155,948,676	60.7%
25	Minnesota DOT (Met Council)	\$4,400,000	\$4,219,303	\$-	\$4,219,303	72.9%

	Funding Recipients	Estimated Total Cost of PTC Implementation	FTA Funds	FRA Funds	Total Federal Funds	% Federal Funds Expended
26	Nashville Regional Transportation Authority (RTA)	\$25,000,000	\$2,425,445	\$-	\$2,425,445	0.7%
27	Northern Indiana Commuter Transportation District (NICTD)	\$117,767,416	\$11,073,177	\$-	\$11,073,177	75.5%
28	North County Transit District	\$87,292,969	\$7,668,038	\$-	\$7,668,038	87.5%
29	Orange County Transportation Authority	\$-	\$4,147,427	\$-	\$4,147,427	57.9%
30	Peninsula Corridor Joint Powers Board	\$231,000,000	\$27,433,269	\$1,250,000	\$28,683,269	96.5%
31	Prince William County/Potomac and Rappahannock Transportation Commission	\$14,192,000	\$8,442,714	\$-	\$8,442,714	68.7%
32	Regional Transportation District (RTD)	\$22,682,612	\$5,512,543	\$-	\$5,512,543	100.0%
33	Riverside County Transportation Commission	\$5,100,000	\$2,095,447	\$-	\$2,095,447	100.0%
34	San Joaquin Regional Rail Commission (SJRRC)	\$9,000,000	\$6,400,868	\$-	\$6,400,868	52%
35	Southeastern Pennsylvania Transportation Authority (SEPTA)	\$310,000,000	\$187,271,060	\$-	\$187,271,060	95.6%
36	Tri-County Metropolitan Transportation District of Oregon (TriMet)	\$14,000,000	\$2,704,000	\$-	\$2,704,000	0.0%
37	Utah Transit Authority (UTA)	\$31,158,524	\$3,520,000	\$-	\$3,520,000	0.0%
Gra	nt Funding Totals	\$4,527,137,888	\$822,618,085	\$509,653,804	\$1,332,271,888	76.45%
Grai KCS	nt Funding Totals, Without	\$4,227,137,888	\$822,618,085	\$507,786,355	\$1,330,404,439	76.46%
		USDOT Loan	s Issued for PTC-R	elated Projects		
	New York Metropolitan Transportation Authority			\$967,100,000 (RRIF)	\$967,100,000	15.1%
	Massachusetts Bay Transportation Authority		\$162,000,000 (TIFIA)	\$220,000,000 (RRIF)	\$382,000,000	0%**
Tota	al with MTA Loan	\$4,527,137,888	\$822,618,085	\$1,476,753,803	\$2,299,371,888	50.67%
Tot	al, Including Both Loans	\$4,527,137,888	\$984,618,084	\$1,696,753,803	\$2,681,371,888	43.45%
	al, Including Both Loans Without KCS	\$4,227,137,888	\$984,618,084	\$1,694,886,355	\$2,679,504,439	43%

*Kansas City Southern is a Class I railroad that indicated it had received funding to enhance wireless communications capabilities in preparation for PTC implementation, including a conversion from their analog system to a digital communications system.

** The TIFIA and RRIF loans to the Massachusetts Bay Transportation Authority were issued after the end of fiscal year 2017 and are therefore outside the scope of our review. We provide these details to acknowledge that additional financing was issued.

Source: OIG analysis of information provided by PTC funding recipients. Note: \$- as an implementation cost indicates an entity that received funds on behalf of a railroad operating within that State; e.g., Pennsylvania DOT does not own or operate its own

railroad, but it received a grant from FTA that was used for SEPTA's system. Entities whose implementation costs were less than the total funds received partially funded other rail projects; e.g., California DOT provided funds to North County Transit District for Metrolink. Additionally, OIG noted several grants that were in process but not awarded by the end of fiscal year 2017. For example, Capital Metro is in the process of being awarded \$12,762,969 for PTC implementation, and New Jersey Transit expects to receive an award of \$10 million.

Exhibit B. Examples of PTC Grants Pending Obligation

During our analysis of FTA and FRA grant funding, we noted that a number of recent PTC-specific grants had been announced but were not documented in DOT's grant management systems. These grants had not yet been officially obligated and were technically still in the award process. We analyzed the status for grants in the two most recent announcements for PTC-specific funding, fiscal year 2016 FRA Railroad Technology Grants and fiscal year 2017 PTC Implementation Grants (see tables B1 and B2). FTA and FRA explained that once allocations for grants are made, the grantee must complete application requirements, including those for environmental and program review at the agency. Only when that work is completed can the grant be officially obligated. The DOT agencies stressed that most grants are eligible for pre-award authority, allowing pre-award expenditures on approved programs to be reimbursed after the funds are obligated. However, it is important to note that we did not include unobligated grants in our analysis since grantees have yet to fully receive the funding.

	Grantee	State	Grant Allocation	Status
1	American Short Line and Regional R.R. Association	DC	\$2,500,000	Not Obligated
2	Amtrak	DC	\$2,640,000	Not Obligated
3	Caltrain	СА	\$2,880,000	Not Obligated
4	Capital Metropolitan Transportation Auth.	ТХ	\$3,000,000	Not Obligated
5	Fort Worth and Western Railroad	ТХ	\$2,560,000	Obligated
6	Missouri DOT	МО	\$3,000,000	Obligated
7	North Carolina DOT	NC	\$771,070	Not Obligated
8	Providence and Worcester Railroad Co.	МА	\$965,832	Obligated
9	Metrolink	СА	\$2,400,000	Obligated
10	Sonoma-Marin Area Rail Transit/SMART	СА	\$3,000,000	Not Obligated
11	Twin Cities and Western Railroad Co.	MN	\$1,100,000	Obligated
	Total		\$24,816,902 Allocated	\$14,791,070 Not Obligated

Table B1. Status of FY 2016 Railroad Technology Grant Recipients

Source: OIG

Table B2. Status of FY 2017 FAST Act PTC Funding Recipients

	Grantee	State	Grant Allocation	Status
1	Capital Metropolitan Transportation Authority	ТХ	\$9,760,000	Not Obligated
2	Florida DOT	FL	\$1,840,000	Not Obligated
3	Illinois DOT	IL	\$18,870,000	Not Obligated
4	Mass. Bay Transportation Authority	MA	\$7,820,000	Not Obligated
5	Maryland Transportation Authority	MD	\$9,440,000	Not Obligated
6	Missouri DOT	МО	\$12,020,000	Not Obligated
7	New Jersey Transit	NJ	\$10,000,000	Not Obligated
8	New York State DOT	NY	\$33,750,000	Not Obligated
9	Oregon DOT	OR	\$1,200,000	Not Obligated
10	Peninsula Corridor Joint Powers Board	CA	\$21,680,000	Not Obligated
11	Regional Transportation Authority/Metra	IL	\$20,200,000	Not Obligated
12	Rio Metro Transportation Authority	NM	\$3,600,000	Not Obligated
13	South Florida Regional Transportation Authority	FL	\$31,630,000	Not Obligated
14	Southeastern Pennsylvania Transportation Authority	PA	\$5,800,000	Not Obligated
15	Southern California Regional Rail Authority	CA	\$3,200,000	Not Obligated
16	Tri-County Metropolitan District of Oregon	OR	\$2,700,000	Obligated
17	Utah Transit Authority	UT	\$3,520,000	Obligated
	Total		\$197,030,000 Allocated	\$190,810,000 Not Obligated

Source: OIG