Northeast Corridor Annual Report: Operations and Infrastructure

Fiscal Year 2017

April 2018

Congress established the Northeast Corridor Commission to develop coordinated strategies for improving the Northeast's core rail network in recognition of the inherent challenges of planning, financing, and implementing major infrastructure improvements that cross multiple jurisdictions. The expectation is that by coming together to take collective responsibility for the NEC, these disparate stakeholders will achieve a level of success that far exceeds the potential reach of any individual organization.

The Commission is governed by a board comprised of one member from each of the NEC states (Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, and Maryland) and the District of Columbia; four members from Amtrak; and five members from the U.S. Department of Transportation (DOT). The Commission also includes non-voting representatives from four freight railroads, states with connecting corridors and several commuter operators in the Region.

Contents

Letter from the Executive Director

Years from now, we may look back on 2017 as the canary in the coal mine.

Two slow speed derailments in March and April at New York Penn Station made visible to the entire country what stewards of the Northeast Corridor have been warning for years: our infrastructure is failing.

NEC stakeholders sprang into action, diverting financial resources from other projects and reducing service levels to create track time for infrastructure repair and replacement. NJ TRANSIT and Long Island Rail Road commuters adjusted their schedules, stood on overcrowded trains, or shifted to other trains, buses, and ferries. Amtrak passengers had fewer trains or departed from alternative locations.

With reduced service levels, on-time performance actually improved in the summer of FY17 over FY16, suggesting that normal service levels already stretch Penn Station beyond its capacity. However, over the entire year, FY17 suffered far worse performance than FY16 particularly with a 92 percent jump in severe-delay days (where one out of five trains is delayed or not completed). And an increasing number of train delay minutes were engineering-related (infrastructure failure, maintenance, and speed restrictions) with a 45 percent jump in FY17 over FY16.

The fragile condition of the NEC is especially acute in, but by no means limited to, the vicinity of New York Penn Station. With some level of inconvenience and expense, portions of one major interlocking (A) were repaired and one station track (10) was rebuilt at the station during the summer of 2017, with more track work planned in 2018. But the NEC has hundreds of miles of aging track bed, hundreds of century-old small bridges, over a dozen century-old major bridges and tunnels, and power supply and signal systems that still rely on 1930s technology. NEC stakeholders are prepared to work cooperatively to improve the scheduling of maintenance to minimize impacts on our customers and the economy, but we must bear in mind that future work to replace these assets will require more sacrifice in the form of disruptions to existing train services.

The Northeast Corridor Annual Report summarizes ridership, train performance, and capital investment over the past federal fiscal year. Owners of infrastructure and operators of service on the NEC shared over $1 billion in FY17 capital and operating costs through the Northeast Corridor Commuter and Intercity Cost Allocation Policy. These funds went to critical capital renewal investments, including the Penn Station Infrastructure Renewal Program. But this level of investment doesn't support the federal-state funding partnership required to reduce the estimated $38 billion worth of assets in the state-of-good-repair backlog that are at risk of failure.

It is impossible to predict the precise location of the next infrastructure failure. But it is time to heed the warning that if we do not act, it is coming.

Mitch Warren
Executive Director
Northeast Corridor Commission

Executive Summary

Operations

The Northeast Corridor is the busiest rail corridor in the United States

The NEC is the busiest rail corridor in the United States, carrying over 800,000 daily weekday riders on over 2,000 daily commuter and intercity trains. The NEC is a critical link for Amtrak and the eight commuter railroads to the major economic centers of the Northeast. One half of all Amtrak riders nationwide utilize the NEC. And almost two thirds of all commuter rail riders in the NEC Region rely on the NEC for some or all of their trip.

Delays increased on the NEC in FY17

In FY17, the NEC as a whole saw a significant increase in delays compared to FY16. Major events, like a series of infrastructure failures at NY Penn Station in March and April 2017, caused a higher number of delay incidents in FY17. In total, NEC trains experienced approximately 1.2 million minutes of delay, a 16% increase over FY16.

Engineering-related delays point to the need to invest in failing infrastructure

The largest source of delay on the NEC in FY17 was engineering-related delays, which were responsible for about one-third of all delay incidents on the corridor. Engineering-related delays include a range of issues, including infrastructure failure, speed restrictions due to infrastructure condition or the presence of maintenance crews on nearby tracks, and delays caused by programmed maintenance. However, more than half of engineering-related delays (in terms of minutes of delay) are caused by infrastructure failure and point to the need to invest in infrastructure to improve reliability.

New York Penn Station Infrastructure Renewal Program

Infrastructure failure caused major delays

In March and April 2017, Amtrak and NJ TRANSIT experienced a series of minor derailments caused by track failures at NY Penn Station. These incidents caused major delays that rippled across the corridor for several days and required Amtrak to impose speed restrictions that worsened congestion at NY Penn Station and caused delays for the several months.

Penn Station Renewal completed accelerated repairs in summer 2017

To address the track conditions at NY Penn Station, Amtrak launched the Penn Station Renewal Program. Together, Amtrak, NJ TRANSIT, and Long Island Rail Road, agreed to an extended outage of station tracks at NY Penn Station to allow Amtrak workers to complete a complete rehabilitation of critical infrastructure in just two months. During this time, the railroads made major service reductions and customers made sacrifices to accommodate this work. All work was completed on time and these three railroads expect to continue phases of this work in 2018 and beyond.

Infrastructure

NEC stakeholders invested $1.5 billion in FY17

Northeast Corridor stakeholders invested $1.5 billion in infrastructure in FY17, including over $934 million in Special Projects and over $562 million in basic infrastructure capital renewal.

Additional funding is necessary

NEC stakeholders made an historic commitment to share over $1 billion in annual operating and capital costs in adopting the Commission's Cost Allocation Policy in 2015. The Policy requested that the federal government match the increased contribution by Amtrak and the states. In FY17, total funding did not reach the recommended Policy level. Prior to FY17, Congress established a new Federal-State Partnership program that has potential to provide important new funding to address state of good repair. In the future, a consistent and sustained commitment of funding from all sources is essential to continued success of the corridor.

New improvements will benefit customers

- **New Haven-Hartford-Springfield-Rail Program (CT)**: Two new stations opened and major track was completed to support the opening of the CT***rail*** Hartford Line service in 2018.
- **Moynihan Station Phase 1 (NY)**: The new West End Concourse was opened below the future Moynihan Station train hall, with new street entrances and connections to tracks at NY Penn.

Major repairs advanced but need additional funding

- **Portal Bridge North (NJ)**: NJ TRANSIT performed early-action construction on the replacement of Portal Bridge. The project is shovel-ready and funding is needed for full construction.
- **Hudson Tunnel Project (NY/ NJ)**: NJ TRANSIT and FRA completed environmental review for the construction of new rail tunnels. Additional funding is needed for construction.
- **Baltimore & Potomac Tunnel (MD)**: Maryland DOT and FRA completed environmental review for new tunnels below Baltimore. Additional funding is needed for permitting and construction.

Recommendation to improve Amtrak's capital renewal program

The FY16 NEC Annual Report noted challenges from the viewpoint of federal and state agencies in how Amtrak plans for and reports on capital renewal. In FY17, the Commission convened a working group of federal, state, and Amtrak stakeholders. The working group established a common view of challenges regarding Amtrak capital renewal planning and reporting and compared methods of defining and managing capital renewal projects across different NEC owners. Two key recommendations emerged for Amtrak to (1) Separate planned from unplanned maintenance; and (2) Define planned capital renewal by location rather than by activity type.

In response, Amtrak has reaffirmed its commitment to work with NEC stakeholders to add utility to the NEC capital planning process—including defining capital renewal and production projects using a location-based approach as much as practicable. Commission stakeholders are currently evaluating how to collaboratively advance the implementation of these recommendations in FY18.


Boston
Springfield
Providence
Hartford
CT rail
Metro-North Railroad
New Haven
NJ TRANSIT
Long Island Rail Road
Newark
New York
AMTRAK
SEPTA
Harrisburg
Philadelphia
Wilmington
MARC
Baltimore
Washington DC
VRE

Introduction

The Northeast Corridor Commission

Congress established the Northeast Corridor Commission to develop coordinated strategies for improving the Northeast's core rail network in recognition of the inherent challenges of planning, financing, and implementing major infrastructure improvements that cross multiple jurisdictions. The expectation is that by coming together to take collective responsibility for the NEC, these disparate stakeholders will achieve a level of success that far exceeds the potential reach of any individual organization.

The Northeast Corridor

The Northeast Corridor supports over 800,000 passenger trips each day, approximately 770,000 on eight commuter railroads and over 40,000 on Amtrak's various intercity services. The 457-mile main line railroad still includes many bridges and tunnels that date back to the period between the Civil War and the New Deal. Service disruptions caused by infrastructure failures, rail traffic congestion, and other factors already cost the economy $500 million per year in lost productivity. Without higher levels of capital investment, those losses are likely to grow. A loss of all NEC services for just one day would cost the economy an estimated $100 million.

The NEC Annual Report

The NEC Annual Report is a requirement of the Fixing America's Surface Transportation (FAST) Act (49 U.S.C. §24905(b)(3)) and was developed in collaboration with eight states, the District of Columbia, the United States Department of Transportation, Amtrak, and eight commuter rail agencies.

NEC Capital Plans

The Commission produces two capital plans on an annual basis:

- **NEC Capital Investment Plan:** The NEC Capital Investment Plan identifies how available capital funding is anticipated to be spent over a five-year time horizon, plus how additional capital funding could be used to eliminate the state-of-good-repair backlog and improve performance of the railroad.
- **NEC One-Year Implementation Plan:** The One-Year Implementation Plan is a consolidated cross-agency record of the anticipated capital project activity in the upcoming federal fiscal year based on available capital funding.

These plans are developed in collaboration with eight states, the District of Columbia, the United States Department of Transportation, Amtrak, and eight commuter rail agencies. Download a copy of these plans and reports at: www.nec-commission.com.

The report documents the operational performance of NEC trains and the implementation of the capital program for federal fiscal year 2017 (FY17). The NEC Annual Report also contains recommendations for improving planning for and reporting on capital projects.

The report is focused on the NEC main line and connecting corridors to Harrisburg, PA; Spuyten Duyvil, NY; and Springfield, MA. (Shown in dark blue at left.) This infrastructure supports a broader network of connecting corridors that feed additional commuter rail and Amtrak lines onto the NEC.

1. Operations

Analyzing the operations and performance of the NEC is essential to understanding how the corridor is serving the national economy and to determine how the corridor must be improved to reduce delays, improve reliability, and better serve customers. Ridership trends and other market data demonstrate that the NEC is a critical transportation asset for the region and for the country. However, worsening delays on the corridor and infrastructure failures, including major delay incidents at NY Penn Station in March and April 2017, demonstrate the need to invest in critical infrastructure components that are a key cause of delay.

1.1 Ridership and Service

The Northeast Corridor is the busiest rail corridor in the United States

The NEC is the busiest rail corridor in the United States, carrying over 800,000 daily weekday riders on over 2,000 daily commuter and intercity trains. The NEC is a critical link for Amtrak, the eight commuter railroads, and freight railroads to the major economic centers of the Northeast. One half of all Amtrak riders nationwide utilize the NEC. And almost two thirds of all commuter rail riders in the NEC Region rely on the NEC for some or all of their trip. For example, the Long Island Rail Road utilizes the NEC for just three miles between Queens and Manhattan in New York City. But approximately 75% of all LIRR customers use this stretch of the NEC to travel to and from NY Penn Station.

Average weekday riders and weekday trains, FY17[1]

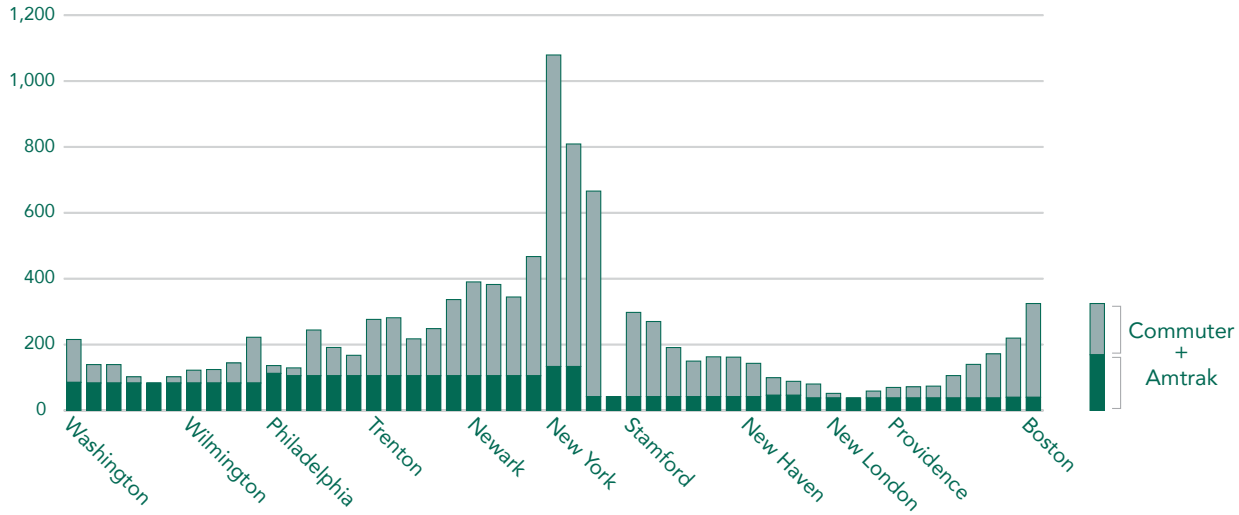
	Northeast Corridor		System-wide		% of System-Wide Activity on the NEC	
	Riders	Trains	Riders	Trains	Riders	Trains
Amtrak	43,000	148	87,000	300	49	49
MBTA[1]	80,000	289	125,000	516	64	56
Shore Line East[2]	2,000	34	2,000	34	100	100
Metro-North	128,000	297	298,000	673	43	44
Long Island Rail Road	233,000	462	311,000	735	75	63
NJ TRANSIT	241,000	415	316,000	700	76	59
SEPTA	54,000	357	120,000	768	45	46
MARC Train	33,000	95	36,000	95	92	100
Virginia Railway Express	4,500	32	19,000	32	24	100
TOTAL	**818,500**	**2,129**	**1,314,000**	**3,853**		

Notes: Results cover the NEC main line and connecting corridors identified in the Introduction. The results in this report do not necessarily match the statistics reported by any individual agency for their overall system because NEC trains are a subset of operations for most agencies. This report confines its analysis to regularly scheduled operating days and does not include holidays. (1) MBTA ridership on the NEC is only an estimate at this time due to limited data availability. (2) Shore Line East riders traveling between New Haven and Stamford are included in Metro-North ridership.

New York Penn Station is the busiest station on the NEC serving over 1,000 daily trains

The busiest sections of the NEC are near major employment centers: Washington, DC; Philadelphia, PA; New York, NY; Stamford, CT; and Boston, MA. The stretch of the NEC between Newark, NJ and New York Penn Station is the most densely used section of passenger rail in the Western Hemisphere, carrying over 450 daily trains on just two tracks.

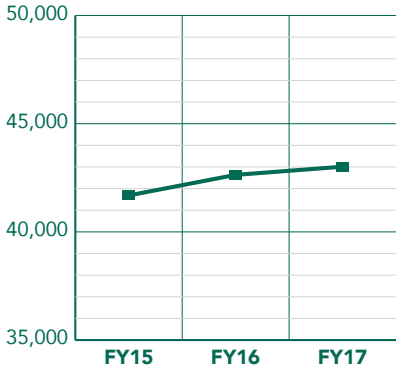
Average daily weekday trains on the NEC by segment, FY17



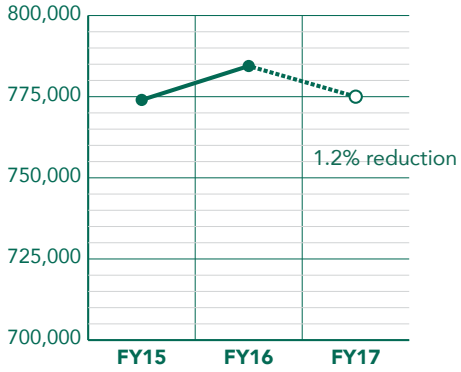
Amtrak ridership grew and total commuter rail ridership slightly declined

In FY17 Amtrak reported a slight increase in riders on the NEC, growing from approximately 30.8 million annual riders in FY16 to 31.4 million annual riders in FY17. Data suggest that commuter ridership on the NEC decreased slightly in FY17, caused, in part, by service changes at NY Penn Station to accommodate emergency repairs.

Amtrak, Estimated daily riders on the NEC[1]



Commuter rail, Estimated daily riders on the NEC



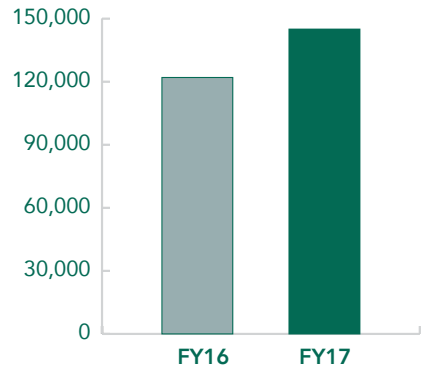
Notes: (1) Amtrak ridership is estimated from annual ridership totals.

1.2 Performance

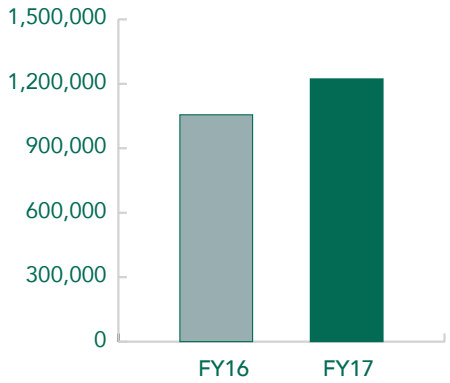
Delays increased in FY17, largely due to events at New York Penn Station

In FY17, the NEC as a whole saw a significant increase in delays compared to FY16. Major events, like a series of infrastructure failures at NY Penn Station in March and April 2017, caused a higher number of delay incidents in FY17. In total, in FY17, the NEC experienced approximately 129,000 incidents of delay across Amtrak and all commuter railroad trains, an 18% increase over FY16.

Delay incidents, FY16-17



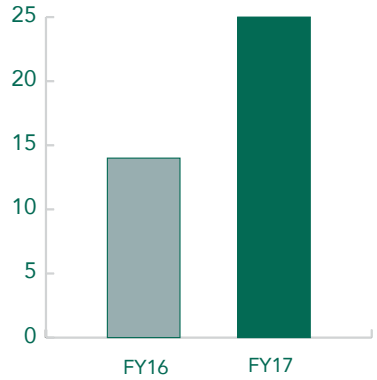
Minutes of delay, FY16-17



The number of severe delays increased in FY17

Severe-delay days are days where over 20% of the scheduled trains are late or not completed (or days where over 3% of the scheduled trains are not completed). These severe-delay days can be useful indicators for the NEC, because they can help explain differences in performance year-over-year. In FY16, there were 13 days with severe delays. In FY17, this metric nearly doubled—to 25 days. These severe-delay days, just 7% of all days in FY17, accounted for 15% of delay incidents for the year, 21% of delay minutes, and 36% of the trains that were canceled or otherwise not completed.

Days with severe delays, FY16-17



Infrastructure played an increased role in the severe-delay days. In FY16, two of the 13 severe-delay days were associated with infrastructure, whereas in FY17, 15 of the 25 days were primarily associated with infrastructure. This increase is almost entirely attributable to the impact of infrastructure incidents. Some of those incidents include those in and around New York Penn Station, particularly between April and June, when Amtrak, NJ TRANSIT, and Long Island Rail Road operated full scheduled services while under speed restrictions at the station.

On-time performance on the NEC was steady or declined

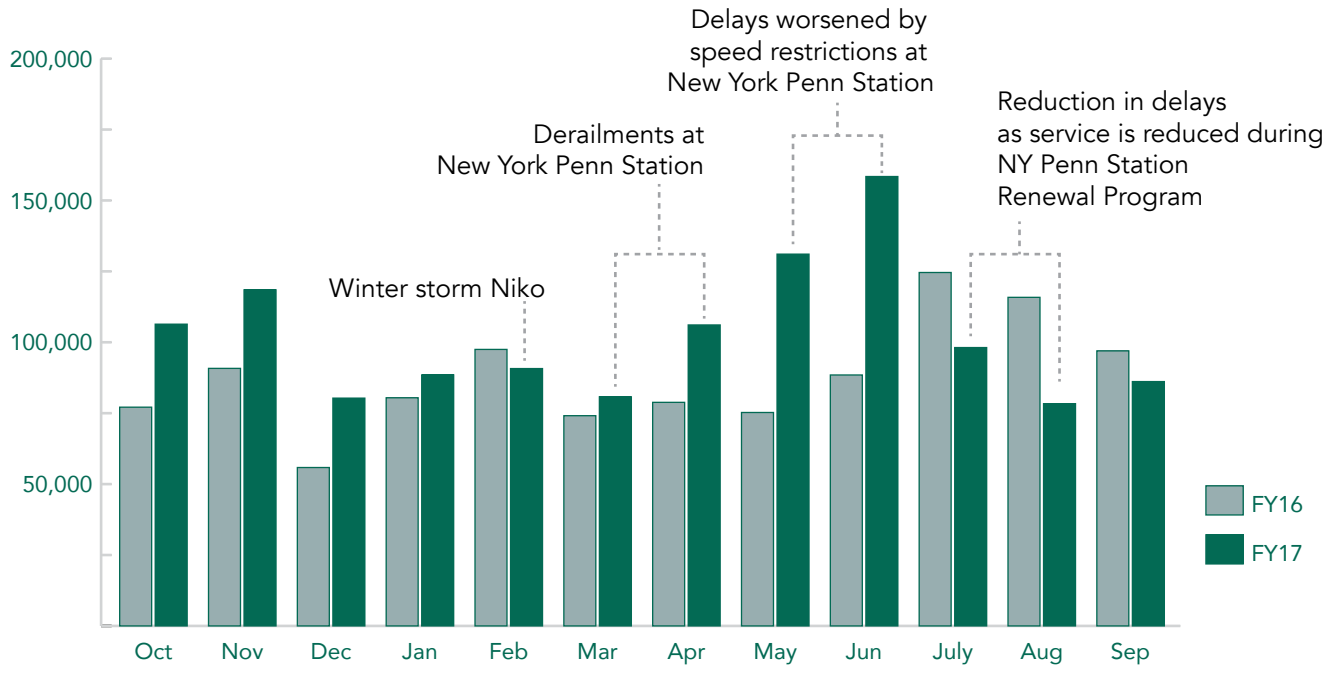
In FY17, Amtrak and most commuter rail operators saw on-time performance worsen for trains on the NEC, with increases in the percentage of trains late, annulled, or terminated. MBTA Commuter Rail and SEPTA were the only services where trains on the NEC improved on-time performance between FY16 and FY17.

Percentage of trains late, annulled, or terminated on the NEC

	FY15	FY16	FY17	FY16-17 Change
Amtrak	29.4	23.4	26.7	↑
MBTA	15.1	10.7	10.1	↓
Shore Line East	11.1	7.9	8.1	↑
Metro-North	8.7	6.9	8.0	↑
Long Island Rail Road	10.2	7.9	10.2	↑
NJ TRANSIT	8.4	7.4	11.4	↑
SEPTA	16.2	19.1	17.5	↓
MARC Train	8.6	5.6	8.1	↑
Virginia Railway Express	8.1	11.3	11.5	↑
TOTAL	**12.7**	**11.1**	**12.4**	

Major events were associated with increases in delay

Minutes of Delay, FY16-17



Infrastructure issues were the largest source of delay

The pattern of delays on the corridor underscores the importance of investing in infrastructure. In total, NEC trains experienced approximately 1.2 million minutes of delay in FY17. Delays due to infrastructure are called engineering-related and were responsible for approximately 394,000 minutes of delay or about one-third of all delays on the corridor. Engineering-related delays include right-of-way infrastructure failure, speed restrictions due to infrastructure condition or the presence of maintenance crews on adjacent tracks, and delays due to planned maintenance. However, the majority of engineering-related delay (in terms of minutes of delay), is caused by infrastructure failure and points to the need to invest in infrastructure to improve reliability.

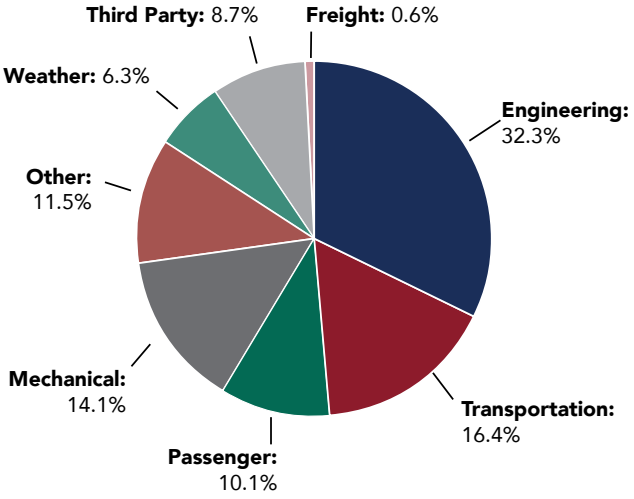
Individual railroads maintain their own classifications of delay causes. The Commission gathers, consolidates, and analyzes causes of delay from all NEC railroads to create a consistent and accurate framework that allows for a corridor-wide analysis. Under this approach, the Commission utilizes eight categories of cause of delay defined below.

Cause of delay categories and examples

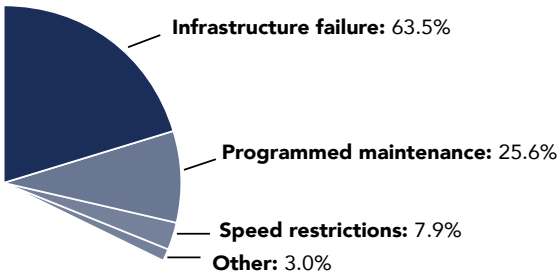
Engineering	Transportation	Passenger	Mechanical
Infrastructure failure, programmed maintenance, and speed restrictions.	Train dispatching and routing, train interference, crew availability, etc.	Passenger loading time, passenger behavior or injury, holding for connections, etc.	Locomotive failure, coach failure, disabled train ahead, etc.
Weather	**Third Party**	**Freight**	**Other**
Winter conditions, excessive cold or heat, slippery rail, etc.	Trespassers, police action, bridge openings, debris on tracks, utility failure, etc.	Freight train interference	No report provided, delay cause unknown, human error, etc.

The majority of engineering-related delays were from infrastructure failure

Minutes of delay on the NEC by cause, FY17



Breakdown of engineering-related minutes of delay

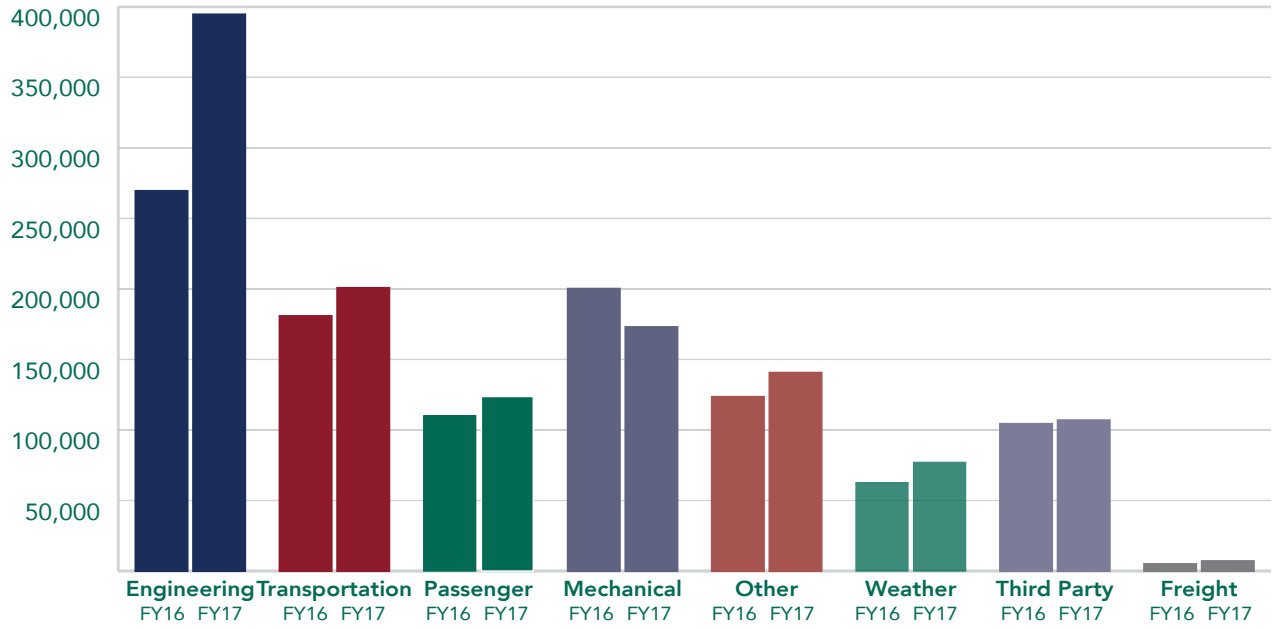


Metro-North workers install a temporary platform on the New Haven Line. Source: NY Metropolitan Transportation Authority.

Engineering-related delays grew by 45%

While engineering-related delays were the largest cause of delay in both FY16 and FY17, these delays increased by approximately 45% in FY17 (in terms of total minutes of delay). At the same time, other types of delay causes showed more modest increases or even decreased year-over-year. For example, in FY17, the corridor experienced a second consecutive year of mild winter weather, which likely helped mitigate weather-related delays. In addition, SEPTA re-introduced new train equipment and Amtrak had its first full year with recently acquired electric locomotives, which, along with other equipment initiatives, helped reduce the number of mechanical-related delays.

Minutes of delay on the NEC by cause, FY16-17



New York Penn Station Infrastructure Renewal Program

Infrastructure failures at NY Penn Station caused major delays in 2017

On March 24, 2017, Acela Express train 2151 derailed while departing New York Penn Station, sideswiping an incoming NJ TRANSIT train and causing delays for thousands of people. Less than two weeks later on April 3, NJ TRANSIT train 3926 derailed while pulling into Penn Station. In both cases there were no serious injuries; however, the derailments and the immediate repairs that followed not only caused severe disruptions for commuters, but also changes to operations from Amtrak, NJ TRANSIT, and Long Island Rail Road.

Amtrak undertook an ambitious infrastructure renewal plan during the summer

Investigations revealed that track conditions caused both derailments. Amtrak announced on April 27 its **Penn Station Infrastructure Renewal Program**, a series of major track and switch renewal projects to begin in July 2017 and continue in 2018. The renewal program aimed to replace the station's aging infrastructure at an accelerated schedule, which required continuous track outages to allow workers to complete a large number of tasks in a short amount of time. Planning for the renewal program required coordination between Amtrak, NJ TRANSIT, and LIRR, and would cause service disruption for riders.

During summer 2017, Amtrak, NJ TRANSIT, and LIRR, agreed to an extended outage of station tracks to enable Amtrak to complete an accelerated set of repairs that would normally have taken much longer. Over a two-month work period that concluded September 5, Amtrak replaced Track 10 in its entirety and key elements of "A" Interlocking, which directs trains in and out of the station from the Hudson River Tunnels and LIRR's West Side Yard.

All three railroads worked together to make the infrastructure renewal program happen

Amtrak's ambitious renewal program required cooperation and sacrifice from all stakeholders. Riders had to adjust their schedules, routes, and commute time. Amtrak, NJ TRANSIT, and LIRR each adjusted their service to accommodate the track outages implemented for the repairs to take place:

- NJ TRANSIT terminated and originated most of its Morris & Essex Midtown Direct line trains in Hoboken instead of New York Penn Station.
- LIRR reduced service in and out of Penn Station by roughly 20%.
- Amtrak canceled three round trip Northeast Regional trains, shortened Keystone Service and long-distance routes, and rerouted some Empire Service trains to Grand Central Terminal.

As a result, all three service operators experienced a reduction in overall ridership and passenger revenue, but saw improved on-time performance during the outages.

NJ TRANSIT and LIRR provided alternative forms of transportation to their customers to compensate for reduced or canceled rail service. Both operators offered supplemental and express bus and ferry service, with additional buses, in some cases contracted with private carriers, on standby in the event

Amtrak workers at NY Penn Station in summer 2017. Source: Amtrak.

Penn Station Infrastructure Renewal Program, Summer 2017

897
Track ties installed

1,000 tons
Ballast distributed

176 cubic yards
Concrete poured

360
Skilled employees

1,296 feet
Of track surfacing

of overcrowding. The agencies also offered their customers fare discounts, free transfers, and cross-honored rail tickets for the supplemental services. Amtrak, NJ TRANSIT, and LIRR also improved their customer and media communication, providing transparent and plentiful updates as early as possible, allowing customers to minimize disruption.

Future work at New York Penn Station will require additional sacrifice by Amtrak, NJ TRANSIT, and LIRR riders, as well as ongoing coordination among the three railroads, to ensure that the renewal program advances successfully. Amtrak will complete the next phase of the program, which will involve replacing Tracks 15 and 18 and renewal work in "C" Interlocking, from January 5 through May 28, 2018.

The experience at Penn Station offers useful lessons for the entire NEC. As the region addresses repairs up and down the corridor, extended service outages may be an increasingly important option for accelerating work and maintaining safe and reliable service. All NEC railroads will need to continue working together to identify these critical repairs and limit potential impacts on customers.

2. Infrastructure

Each year, the Commission develops and approves a One-Year Implementation Plan prior to the start of the fiscal year. Throughout the year, NEC owners and operators are required to report on the capital work completed, including the progress made in implementing the plan. This information provides transparency on how investments are being made on the NEC and demonstrates how each railroad's capital contributions are being spent.

FY17 Overview

Northeast Corridor stakeholders invested $1.5 billion in infrastructure in FY17 compared to approximately $1.06 billion in FY16.

As part of these investments, Amtrak and the states are making significant contributions to the corridor. In 2015, the NEC Commission made an historic agreement to share capital renewal costs in approving the Northeast Corridor Commuter and Intercity Rail Cost Allocation Policy. Per the Policy, each operator contributes a Baseline Capital Charge, a proportional share, relative to use, of steady-state capital renewal cost (an estimate of the annual level of investment required to maintain assets if they were in a state of good repair). The BCCs across all owners and operators totaled approximately $444 million in FY17.

Despite this commitment, the corridor faces significant funding needs even for capital renewal. According to the Commission's Policy, a federal-state funding partnership is essential to the success of the Corridor. In FY17, total funding did not reach the recommended Policy level. In the future, a consistent and sustained commitment is needed from all sources.

Annual totals, FY17 expenditure by type

Programs/ Projects	FY17 Expenditures
Capital Renewal	**$562,546,000**
Amtrak maintained territory	$437,619,000
Connecticut DOT owned territory	$115,245,000
Metro-North owned territory	$9,682,000
Special Projects	**$934,837,000**
Major Backlog	$112,291,000
Improvement Projects	$822,546,000
Grand total	**$1,497,383,000**

Capital Renewal, FY17 BCC Obligations

Service Operator	BCC Obligation (at 80% NR*)
Amtrak	$231,250,000
MBTA	$12,430,000
Rhode Island DOT	$1,480,000
CTDOT (Shore Line East)	$4,000,000
CTDOT (New Haven Line)	$35,610,000
Metro-North Railroad	$9,830,000
Long Island Rail Road	$18,010,000
NJ TRANSIT	$85,210,000
SEPTA	$30,440,000
Delaware DOT	$2,000,000
Maryland DOT	$13,370,000
Virginia Railway Express	$460,000
Total	**$444,090,000**

*Normalized Replacement

Left: Ribbon cutting at the newly renovated Kingston Station in Rhode Island. Source: Office of U.S. Senator Jack Reed. **Right**: Connecticut Governor Dannel Malloy at the new Wallingford Station for the new Hartford Line. Source: Office of Governor Dannel Malloy.

2.1 Special Projects

Special Projects include Major Backlog projects (the replacement of century-old major bridges and tunnels) and Improvement Projects (which upgrade existing infrastructure, provide new capacity, and make repairs on important railroad systems to preserve existing capacity and improve reliability). In FY17, NEC stakeholders invested over $934 million in Special Projects.

The region completed major improvements that provide direct benefits to riders

- **CT*rail* Hartford Line Program (CT/ MA):** Connecticut DOT and Amtrak achieved major milestones in upgrading the rail corridor between New Haven and Hartford, CT, and Springfield, MA. In 2017, the state opened two new rail stations in Meriden and Wallingford, CT, each with a new station building, elevators, and high-level platforms, to replace existing and antiquated facilities. After years of investment in station and track infrastructure, the state will launch the new CT***rail*** Hartford Line service in May 2018, expanding service from six round trips a day to an initial service of 17 round trips.

- **Moynihan Station Phase 1 (NY):** The Empire State Development Corporation, in partnership with Amtrak and the Long Island Rail Road, completed Phase 1 of the Moynihan Station project. When complete, the full Moynihan Station project will expand the Penn Station complex by transforming the James A. Farley Post Office Building into a dramatic train hall for LIRR and Amtrak customers. In Phase 1, the project completed the new West End Concourse (a bright and expanded waiting area below the future train hall), new stairs and elevators to 16 station tracks, two new entrances to the concourse on Eighth Avenue, and an expanded corridor to the existing Penn Station below 33rd Street.

- **Kingston Track and Platform Capacity Improvements (RI):** Amtrak and Rhode Island DOT completed a capacity expansion project in Kingston, RI. The project, which was managed and designed by Amtrak in partnership with RIDOT, was funded in part by a High-Speed Intercity Passenger Rail (HSIPR) Program grant awarded to RIDOT. The project completed two high-level platforms at Kingston Station, which provide full access to passengers with disabilities, and a new third track that increases capacity and will reduce train delays in this section of the NEC.

Special Projects exceeding $10M in annual expenditures, FY17

Project Name	Coordinating Agency	FY17 Expend.	FY17 Activities
Moynihan Station	Amtrak	$288.9M	Full project will complete an expansion of Penn Station complex with a new train hall and underground concourse. In FY17, construction was completed on Phase 1: the expansion of a fully modernized West End Concourse below the future train hall, new station entrances, and connections to 12 station tracks.
Harold Interlocking	MTA Capital Construction	$141.5M	Full project will reduce conflicts between Amtrak and LIRR and support LIRR's future service to Grand Central Terminal. In FY17, construction advanced on the Westbound Bypass and was completed on various components, including retaining walls, catenary, and foundations.
CT*rail* Hartford Line Program	CTDOT	$120.3M	Construction nearly completed on track, signals, and station work between New Haven and Hartford (Phases 1 and 2), including completion of two new stations: Wallingford and Meriden. Construction advanced on work between Hartford and Windsor (Phase 3A).
New Jersey HSR Improvement Program	Amtrak	$59.3M	Construction advanced on the complete modernization of track, catenary, signals, and structures between Trenton and New Brunswick, NJ.
Norwalk Bridge Replacement	CTDOT	$38.9M	Environmental review is complete on the full replacement of 1896 bridge. Final design advanced and early break-out projects were initiated, including construction of new interlocking.
Frazer Rail Shop and Yard Upgrade	SEPTA	$28.6M	Project will expand and renovate SEPTA storage and maintenance facility to support growth of train fleet. In FY17, construction advanced on this multi-year project, expected to be completed in FY22.
New Haven Yard Master Complex Improvements	CTDOT	$29.6M	Project will upgrade Connecticut DOT's maintenance-of-way and train storage facilities. In FY17 construction advanced and is on-schedule.
Gateway Program: Tunnel Box	Amtrak	$22.4M	Full project preserves a right-of-way in Manhattan for the future Hudson Tunnel Project and is one component of the larger Gateway Program. In FY17, construction advanced.
Gateway Program: Hudson Tunnel Project	Amtrak, NJ TRANSIT, FRA	$25.9M	Project will build new rail tunnel capacity, enabling existing tunnels to be repaired. In FY17, the draft environmental analysis was released by NJ TRANSIT and FRA and preliminary engineering advanced by Amtrak.
Sunnyside Yard	Amtrak	$16.6M	Project will upgrade Amtrak train storage facility to support new trainsets. In FY17, design was completed and work advanced on site preparation and early construction.
Kingston Track and Platform Capacity Improvements	Amtrak	$14.9M	Construction completed on capacity expansion at Kingston station, including two high-level platforms and a new bypass track that will reduce delays.
Baltimore & Potomac Tunnel Project	Amtrak	$13.3M	Environmental analysis completed for the full replacement of the existing tunnels originally from 1873 below Baltimore.
Washington Union Station 2nd Century Plan	Amtrak	$11.6M	Full project will complete short- and long-term improvements at Washington Union Station. In FY17, environmental analysis progressed for the station's long-term redevelopment and short-term work advanced on the modernization of the existing Clayton Concourse.
Paoli Transportation Center	Amtrak	$10.6M	Continued construction to make existing station ADA accessible and construct a pedestrian overpass with elevators connecting to parking lots and a new high-level center platform.

Left: Workers replace sections of Batchelder Road Bridge as part of the CT*rail* Hartford Line Program. (Source: NHHS Rail Program). **Right:** The Baltimore & Potomac Tunnel was built in 1873 and is a key chokepoint in the NEC since the right-of-way is reduced from four to two tracks and poor condition require trains to reduce speeds to 30 mph. (Source: Amtrak).

Additional funding is needed to advance critical projects

In FY17, owners and operators completed important milestones on Major Backlog projects, the replacement of the large-scale bridges and tunnels on the NEC that are over a century old and beyond their useful life. Key investments include advancement of key components of the Gateway Project between New York and New Jersey, such as Portal Bridge North and the Hudson River Tunnel project. Without additional funding, these important repair and replacement projects cannot advance to the next stage of development and to construction.

- **Hudson Tunnel Project (NY/ NJ):** In June 2017, NJ TRANSIT and the Federal Railroad Administration (FRA) completed planning and environmental review for the construction of new rail tunnels between NY and NJ. Additional funding is required to proceed to the construction phase. When constructed, these new tunnels will allow the existing tunnels to be taken out of service for a multi-year period of repairs, which have become critical since the tunnels were inundated with water during Superstorm Sandy in 2012.

- **Portal Bridge North (NJ):** During FY17, NJ TRANSIT performed preliminary construction activities on Portal Bridge North, which would replace the existing Portal Bridge between the towns of Secaucus and Kearny, NJ. The existing bridge opened in 1910 and carries over 450 trains per day in the most densely utilized section of the NEC. Planning and environmental review are complete. Additional funding would advance the project to full construction.

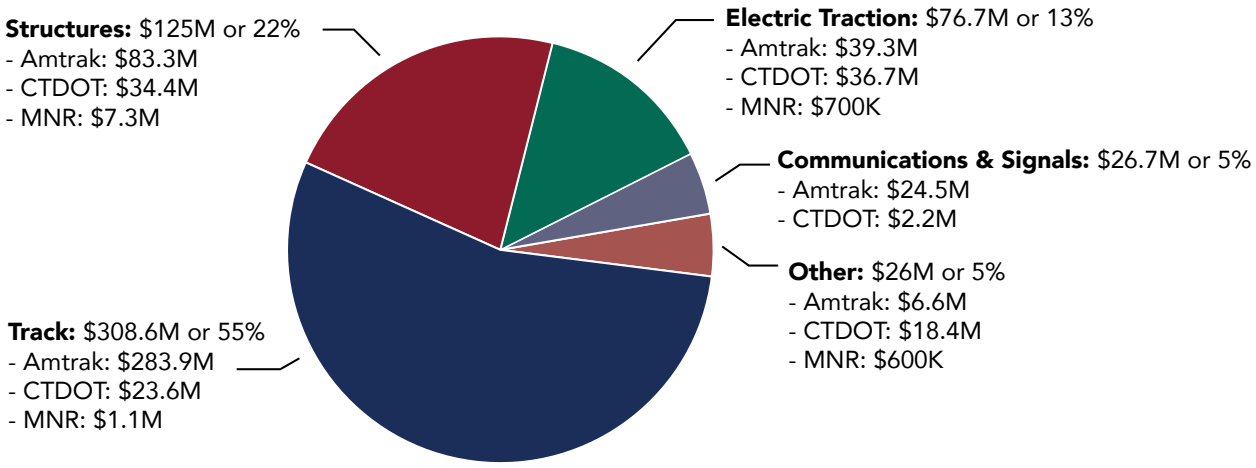
- **Baltimore & Potomac Tunnel (MD):** In March 2017, FRA and Maryland DOT completed planning and environmental review for the Baltimore & Potomac Tunnel. The project is ready to advance to permitting, final design, and construction if not for lack of funding. The new tunnel would replace the existing two-track tunnel which opened in 1873 and is a significant capacity bottleneck.

- **Susquehanna River Bridge (MD):** FRA and Maryland DOT also completed planning and environmental review for the Susquehanna River Bridge replacement in May 2017. When completed, the project would replace the existing two-track bridge, originally built in 1906, with up to two new bridges that would expand capacity, increase speeds, and improve reliability. Like the Baltimore & Potomac Tunnel project, with additional funding, the project is ready to advance to permitting, final design, and construction.

2.2 Capital Renewal of Basic Infrastructure

Capital renewal of basic infrastructure covers the ongoing repair and replacement of existing assets (excluding the replacement of major bridges and tunnels). On the NEC, capital renewal of basic infrastructure is managed primarily by the infrastructure owners: Amtrak, Connecticut DOT, Metro-North Railroad, and MBTA.

Capital renewal expenditures by discipline, FY17



States, transit agencies, and Amtrak invested over $562M in capital renewal in FY17

Capital renewal investments addressed urgent infrastructure needs

In FY17, infrastructure owners completed significant investments in repair, replacement, and modernization of existing assets, including accelerated repairs in the track infrastructure at NY Penn Station, continued investment in undergrade bridges and catenary on the New Haven Line in Connecticut, and major track repairs in Maryland.

In certain territories, particularly the sections of the NEC maintained by Amtrak, the actual activities completed in FY17 deviated significantly from the activities forecasted in the FY17 NEC One-Year Implementation Plan, often to accommodate changing priorities and unexpected repairs. Of the 151 Amtrak capital renewal projects listed in the FY17 plan, 27 projects have no actual spending in FY17 (see Appendix C, Figure C-5). Of the 291 projects with FY17 actual expenditures, 167 projects, or approximately 57%, were not forecasted in the FY17 plan (see Appendix C, Figure C-6).

Highlights include:

- **Track work at New York Penn Station:** In July and August, Amtrak completed a major rehabilitation of track and interlocking infrastructure at NY Penn Station, after a series of infrastructure failures in March and April. To accelerate these repairs, Amtrak took multiple tracks out of service to allow workers continuous access. In total, capital renewal expenditures on NY Penn Station track infrastructure was $30 million higher than the original FY17 plan to accommodate this accelerated work. By adjusting priorities to focus on this project, Amtrak was required to change the schedule or postpone activities that had been previously anticipated to occur in FY17.

Amtrak completes repairs on tracks at New York Penn Station in summer 2017. Source: Amtrak.

- **New Haven Line improvements (CT/ NY):** Connecticut DOT continued progress on its ongoing, annual renewal programs for tracks and bridges on the New Haven Line, including $21 million for the Atlantic Street bridge in Stamford. In addition, CTDOT spent $18 million on its multi-year program to replace the catenary system from 1907 with constant tension catenary that will dramatically improve reliability. FY17 activities focused on the final sections of catenary to be replaced, from East Norwalk to Green's Farms and from Bridgeport to Milford. In New York, Metro-North also completed investments in ongoing bridge and track maintenance programs.
- **Section-by-section repairs:** In FY17, Amtrak also completed major capital renewal repairs on large sections of track across the NEC, which help increase reliability and improve ride quality. Amtrak performed undercutting and resurfacing, which replaces the ballast and drainage infrastructure that keeps tracks in place, on sixteen miles of track in Maryland near New Carrollton. The railroad installed 40,000 concrete ties at major locations, including near Newark Airport (NJ), North Philadelphia (PA), Baltimore (MD), and track 3 in Delaware. Amtrak also installed new track switches in Baltimore and near Bryn Mawr, PA on the Harrisburg Line.
- **Dock Interlocking improvements (NJ):** Amtrak completed a multi-year project to fully modernize Dock Interlocking, a complex track and signal system that controls the movements of trains through Newark Penn Station (NJ). Thanks to this investment, Dock Interlocking was incorporated into the NEC's centralized dispatching system in early FY18, significantly improving the efficiency of dispatching at the station, which will improve reliability and reduce delays.
- **30th Street Station facade project:** In FY17, Amtrak spent $31 million on the rapid implementation of repairs to the deteriorating facade at Philadelphia 30th Street Station, approximately 6% of all capital renewal investment. Of this total, Amtrak contributed $7 million of its own BCCs and the remainder was not funded by BCCs from operators, but through separate, additional funding from Amtrak.

A multi-agency working group recommended reforms for Amtrak's basic infrastructure capital renewal program

In addition to allocating approximately $500 million in annual basic infrastructure capital renewal costs, the Policy outlined expectations for planning and reporting on shared capital investments. The FY16 NEC Annual Report noted challenges from the viewpoint of federal and state agencies in how Amtrak plans for and reports on capital renewal. The report recommended the Commission convene a working group of federal, state, and Amtrak stakeholders to collaborate on a unified framework for defining, planning, and reporting on projects with a particular emphasis on improving the availability of geographically specific information. This working group met four times in FY17.

As a key first step, the working group established a common view of challenges regarding Amtrak capital renewal planning and reporting:

1. Capital plans have weak relationships with reported spending
2. Plans do not provide locational explanations of scope, schedule, or budget
3. Reports do not provide locational explanations of progress, changes in schedule, or variance from budget

As a second step, the working group compared methods of defining and managing capital renewal projects across different NEC owners. A few key differences emerged. Amtrak's current approach to capital renewal primarily defines projects as corridor-wide activity types with expenditure forecasts for the federal fiscal year (e.g., FY17 NEC Concrete Tie Replacement) and more closely resembles an operating budget.

Connecticut DOT (in partnership with Metro-North Railroad) defines basic infrastructure capital renewal projects as bundles of activities (e.g., tie replacement, rail replacement, turnout replacement, surfacing) within specified mileposts on the NEC. Budgets estimate the capital need to complete work at that location and are drawn down over one to three years until the scope is completed. Multiple projects are underway at any given time; the order of work is determined by track outages and asset conditions.

Capital Framework Working Group Membership

- Amtrak
- Federal Railroad Administration
- Connecticut DOT
- NJ TRANSIT
- SEPTA

The key distinction is that:

1. Amtrak's capital renewal projects, with budgets by activity type, are flexible on location within a rigid time frame for expenditure.
2. CTDOT's capital renewal projects, with budgets by location, are flexible on time frame for expenditure within a rigid location.

The federal and state members of the working group found significant potential benefit in moving Amtrak toward location-based project definitions for capital renewal. Potential benefits include an improved ability for states and transit agencies to track projects in their territory and for all stakeholders, including Amtrak and the federal government, to track delivery of capital renewal work relative to planned scope, schedule, and budget.

Bearing in mind that some Amtrak capital renewal is reactive and difficult to plan by location, the federal and state members of the working group developed two recommendations:

1. **Separate planned from unplanned maintenance.** A portion of reserve capital funds should be set aside annually for the kinds of activities that are especially difficult to predict by location and scale. These projects could be defined NEC-wide. The share of funding reserved for unplanned work should be as low as possible but sufficient to minimize the probability that planned work would lose budget in unplanned reprogrammings.

2. **Define planned capital renewal as related activities concurrently at a location.** The definition of "location" should be flexible and respond to the nature of the work. A "location" for one project might be a single interlocking receiving a comprehensive overhaul. A "location" for another project might be a series of 5 adjacent interlockings receiving the same switch heater upgrade. A "location" for linear track work might reasonably comprise a set of mileposts that cross multiple operator territories. However, NEC-wide planned asset replacement projects should be eliminated.

   Additionally, multi-year plans with full project scopes, schedules, and budgets would be required to meaningfully implement this recommendation so that projects have a budget control for the life of the project, not a new one for each federal fiscal year. Amtrak should then use schedule changes to push projects into out years during budget reprogrammings rather than have projects disappear from tracking systems.

These recommendations were delivered to Amtrak in a memorandum with a letter dated October 30, 2017. Amtrak responded in writing on November 20, 2017, reaffirming its commitment to work with NEC stakeholders to add utility to NEC capital planning process—including defining capital renewal and production projects using a location-based approach as much as practicable.

Commission stakeholders are currently evaluating how to collaboratively advance the implementation of these recommendations during FY18.

> "We also agree with the Working Group's recommendation that delivering and reporting against the capital program requires wholesale changes in engineering management philosophy and business practice at Amtrak…"
>
> -Amtrak response
> dated November 2017

Technical Appendix

A-1. Working Group Memo

Capital Planning/Reporting Working Group Recommendations

Summary

This memorandum provides recommendations to Amtrak leadership from a federal and state agency working group regarding NEC capital maintenance and production projects. The group convened to address two chief concerns:

1. Capital plans have a weak relationship with reported spending
2. Capital reports do not provide meaningful, location-specific explanations of progress or changes in scope and schedule, or variance from budget

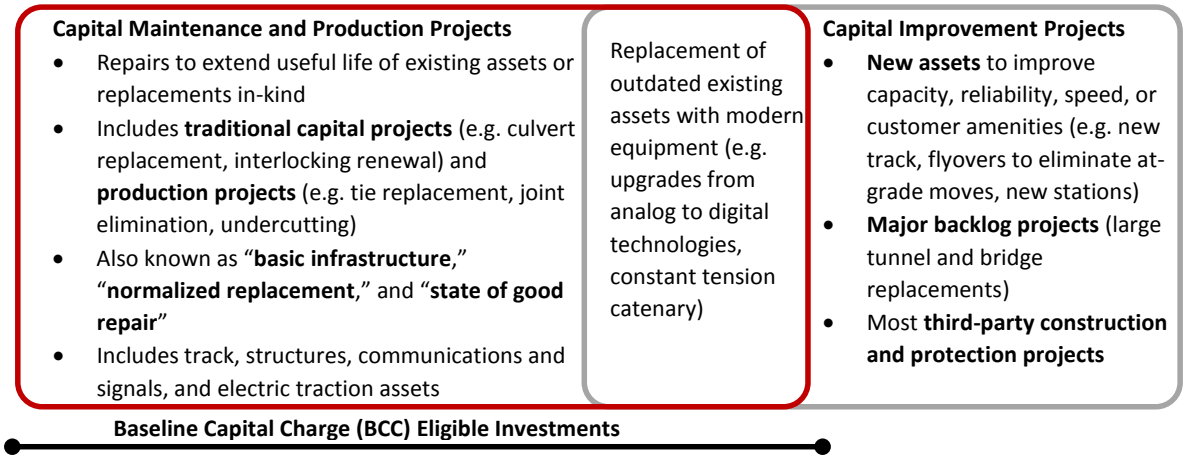
This memorandum makes two recommendations:

1. Parse out a reasonably sized pool of funding for emergency capital repairs
2. Redefine planned capital maintenance and production projects using a location-based approach rather than the current activity-based approach

These recommendations would generate meaningful scopes, schedules, and budgets and an ability to track progress and performance not available today. These recommendations do not propose to restrict Amtrak's flexibility to reprogram funding between projects.

Introduction

This memorandum provides recommendations for defining Amtrak Northeast Corridor (NEC) capital maintenance and production projects to improve the ability of Amtrak executive leadership and federal and state funders to measure the performance of the capital program. These recommendations come from a working group comprised of staff at the Federal Railroad Administration (FRA) and state/commuter rail agencies that provide funding for NEC capital maintenance and production projects through the approximately $440 million annual Baseline Capital Charge (BCC) Program created by the NEC Commuter and Intercity Rail Cost Allocation Policy, of which approximately $210 million is provided by the states and commuter rail agencies. Amtrak staff participated in the working group to provide input and perspective, but the recommendations reflect the views of the state and federal participants.



A need to improve performance measurement of the capital maintenance and production portion of the Amtrak capital program was highlighted by the Amtrak Office of the Inspector General's report, "Governance: Addressing Remaining Shortcomings Would Lead to a Budget Development Process More Fully Aligned with Leading Practices,"[1] (January 2017) and the NEC Commission's FY16 Annual Report (May 2017).

The NEC Commission's Annual Report called for a working group to develop a unified framework for planning and reporting on BCC-funded capital work so that Amtrak can implement one process to satisfy the requirements of all potential state and federal BCC funding sources while retaining enough flexibility to manage its capital program. The working group has concluded that the core obstacle to improved capital program performance reporting rests on how Amtrak currently defines NEC capital maintenance and production projects. The working group recommends an alternative approach to defining and tracking projects that would provide funders with sufficient information without locking Amtrak's capital program rigidly in place or making reprogrammings subject to Commission approval.

The Commission will shortly begin development of a Mid-Term Evaluation of the Cost Allocation Policy which will determine whether to increase BCC obligations from $425 million annually (2015 dollars) to $530 million annually (2015 dollars) for FY19 and FY20. State-level Commissioners have expressed reservations for increasing BCC obligations without a clear action plan for improving Amtrak capital project planning and delivery.

Current NEC Capital Maintenance Project Definitions

Amtrak defines most NEC capital maintenance and production projects as NEC-wide asset replacement activity types for the federal fiscal year (e.g. NEC Turnout Replacement, NEC Undergrade Bridge Upgrades).[2] Project managers are assigned; budgets are estimated, approved, and controlled; and project information is generated for each NEC-wide activity type. Where design work is relevant, it also is defined as an NEC-wide activity type and tracked for budgeting purposes without a location (e.g. System Structures Bridges/Tunnels/Walls Future Design).

The second largest owner of NEC infrastructure, Connecticut DOT, has an alternative approach which is instructive regarding the recommendations that follow. Connecticut defines capital maintenance and production projects as bundles of asset replacement activities that take place concurrently (e.g. tie replacement, rail replacement, turnout replacement, surfacing) during a track outage.

Scopes typically comprise track numbers, sets of mileposts, and anticipated production metrics for each activity, or name and describe the asset to be replaced (e.g. Atlantic Street Bridge). Budgets are estimated, approved, and controlled for the set of activities to take place at the locations within the scope, regardless of how long it takes to complete the work (typically 1-3 years). Schedules comprise

[1] The report identified that about 60 percent of Amtrak capital funds in FY16 were assigned to Tier II, or state-of-good-repair projects, over which "executive leadership does not have a say in setting priorities."
[2] About 80 percent of forecasted spending in the Amtrak FY17 BCC Program was by NEC-wide activity type. The remainder was forecasted for projects defined by a named asset.

the forecasted geographic sequence of work given anticipated track outages but are flexible given the dynamic nature of the railroad.

A core difference between these two approaches is that Amtrak's program is flexible on the location of asset replacement within a rigid timeframe (federal fiscal year); Connecticut DOT's program is flexible on the timeframe of asset replacement for a rigidly defined location. Amtrak's budgets estimate and control work by activity type; Connecticut DOT's budgets estimate and control work by location.

Challenges

The Cost Allocation Policy calls for a One-Year Implementation Plan to forecast BCC-eligible expenditures by operator territory and a system for tracking value delivered on scope, schedule, and budget. Federal and state agencies have two chief concerns regarding performance measurement for Amtrak NEC capital maintenance and production projects, each of which is at least in part related to Amtrak's method of defining such projects.

1. **Capital plans have a weak relationship with reported spending.** Amtrak invests some share of capital dollars in asset replacement activities that were not anticipated before the start of the fiscal year given the poor condition of assets, the effects of winter weather, and the scarcity of excess track capacity. Amtrak also has a threshold for distinguishing operating from capital costs such that a significant level of reactive spending is covered by capital dollars. Defining capital projects by activity type does not distinguish budget for work that is likely to take place from budget in place to respond to future unforeseen events. Defining capital projects by activity in the federal fiscal year does not track cases where planned work at a location might shift from one fiscal year to the next; it just registers as a failure to meet budget.

   Budgets end up being poor predictors of actual costs incurred. Comparing the FY16 One-Year Implementation Plan to the FY16 Annual Report, 233 of 322 projects spent 50 percent above or below their original budget. Amtrak has begun to forecast each project's annual expenditure for each of 28 BCC Segments for Cost Allocation Policy compliance, but these forecasts have an even weaker relationship to actual costs incurred than the NEC-wide project budgets.[3] Budget controls for Amtrak board or FRA grant reprogramming approval are still mostly NEC-wide.

2. **Capital reports do not provide meaningful, location-specific explanations of progress or changes in scope and schedule, or variance from budget.** Project managers for each NEC-wide activity type are responsible for generating qualitative information on scope,

[3] BCC Segments are defined by operator territory and determine eligibility for applying non-Amtrak BCC funding sources to capital expenses incurred. BCC funds contributed by non-Amtrak operators are only eligible for use in the contributing operator's territory (i.e. MARC BCCs are only eligible for costs incurred between Perryville, MD and Washington, DC). BCC Segments do not necessarily have a relationship with how a capital project should be defined. Roughly one third of BCC Segments are under 5 miles long, one third are between 5 and 40 miles long, and one third are between 40 and 80 miles long. This range makes BCC Segment expenditure forecasts of limited use. State agencies have expressed a willingness to accept expenditure forecasts that cross BCC Segments if projects are scoped with reasonable (not NEC-wide) locations.

schedule, and budget. Defining capital projects by activity type has resulted in scopes that comprise a description of the activity without reference to the anticipated location of work. Schedule milestones are not provided since all activities are ongoing. Plans and reports do not synthesize information across related activity types or explain where resources are being deployed and why based on asset conditions, weather events, or track outages.

Even if projects were defined by location, measuring capital projects in federal fiscal year increments makes it impossible to track overall project progress. Multi-year projects like interlocking renewals need full project budgets and schedules to gauge quarterly or annual performance. Ongoing activities like surfacing and tie replacement need location information and multi-year schedules to measure adherence to budget and track where planned work might shift from one fiscal year to the next. Where design work is required, capturing design and construction of the same asset as subsets of different NEC-wide activity type projects also makes it difficult to track overall project development.

Recommendations

Federal and state agencies propose the following changes to how Amtrak defines NEC capital maintenance and production projects to improve the ability of Amtrak executive leadership and BCC funders to measure performance of capital program delivery.

1. **Separate planned from unplanned capital maintenance.** A set of reserve capital funds should be set aside annually for the kinds of activities that are especially difficult to predict by location and scale. These projects could be defined NEC-wide (e.g. NEC Mud Spot Elimination, NEC Undergrade Bridge Emergency Repairs). The share of funding reserved for unplanned work should be as low as possible but sufficient to minimize the probability that planned work would lose budget in unplanned reprogrammings.

2. **Define planned capital maintenance and production projects as related activities that take place concurrently at a location.** The definition of "location" should be flexible and respond to the nature of the work. A "location" for one project might be a single interlocking receiving a comprehensive overhaul. A "location" for another project might be a series of 5 adjacent interlockings receiving the same switch heater upgrade. A "location" for linear track work might reasonably comprise a set of mileposts that cross multiple BCC Segments. However, NEC-wide planned asset replacement projects should be eliminated.

   Several key steps would need to take place to meaningfully implement this recommendation.
   a. Define full (multi-year, where relevant) project scopes and schedules that include all phases (design, procurement, construction, etc., as relevant) across all activities and disciplines relevant to the project at the location.
   b. Estimate, approve, and control full (multi-year, where relevant) project budgets across all phases, activities, and disciplines relevant to the project at the location.
   c. Use schedule changes to push projects at a location into out years during budget reprogrammings rather than have projects disappear from tracking systems.
   d. Assign single project managers accountable for coordinating across all phases, activities, and disciplines relevant to the project at the location and responsible for

providing explanations of variance from budget, progress on scope, and changes in schedule.

e. Program capital dollars on a multi-year basis based on five-year projections of BCC (and other) funding sources to fully fund selected projects.
f. Continue to forecast annual expenditures by project for Cost Allocation Policy compliance.

The key steps identified above should apply to capital maintenance projects that are both traditional capital projects (e.g. culvert replacements, interlocking renewals) and production programs (e.g. tie replacement, joint elimination, undercutting). The working group would also recommend following these steps for capital improvement projects.

Conclusion

These recommendations are not intended to lock Amtrak's capital program rigidly in place or to make reprogrammings subject to Commission approval. They are intended to build a framework within which Amtrak would automatically generate the information needed to support Cost Allocation Policy compliance to the satisfaction of all federal and state BCC funding sources as Amtrak executive leadership manages its own program. In addition, defining Amtrak NEC capital maintenance and production projects by location would be required for grant eligibility through the new Federal-State Partnership for State of Good Repair Program so that funding above the BCC Program could begin to reduce the basic infrastructure state-of-good-repair backlog.

The federal and state/agency members of the working group request that Amtrak respond to these high-level recommendations, acknowledging that acting upon them would later require the development of a detailed strategy for doing so. Implementing these recommendations would require considerable time, resources, and planning, and would likely be phased in over several fiscal years versus implemented all at once. The federal and state/agency members are committed to working constructively with Amtrak to advance these proposals, and believe the medium- and long-term benefits of these recommendations are worth the effort and will strengthen Amtrak's funding partnership relationships.

This page left intentionally blank.

A-2. Letter from Operations and Performance Committee chairs to Amtrak

NORTHEAST CORRIDOR COMMISSION
840 First Street NE, Suite 440
Washington, DC 20002
(202) 847-0284
www.nec-commission.com

October 30, 2017

Stephen Gardner, Executive Vice President, Planning, Technology & Public Affairs
Scot Naparstek, Executive Vice President, Chief Operating Officer
Byron Comati, Vice President, Corporate Planning
Gery Williams, Vice President, Chief Engineer

Amtrak
One Massachusetts Avenue NW
Washington, DC 20001

Dear Mr. Gardner, Mr. Naparstek, Mr. Comati, and Mr. Williams,

The Northeast Corridor Commission agreed to an historic sharing of capital investment in approving the Northeast Corridor Commuter and Intercity Rail Cost Allocation Policy in 2015. In addition to funding approximately $500 million in annual capital costs for capital maintenance and production projects, the Policy outlines expectations for planning and reporting on shared capital investments. The straightforward premise is that funders expect upfront information on what they are buying and subsequent confirmation of their purchase.

Two years on, capital plans have weak relationships with reported spending; plans do not provide locational explanations of scope, schedule, or budget; and reports do not provide locational explanations of progress, changes in schedule, or variance from budget. It has become clear that Amtrak will need to dramatically change the way it budgets, plans for, and delivers capital projects to meet the expectations of the Policy. While we believe senior leadership within Amtrak strongly supports change, we have seen no specific plan of action to embrace necessary changes at all levels of the organization.

For about 80 percent of capital maintenance and production dollars funded through the Policy, Amtrak's budget controls are by NEC-wide activity type. In effect, this portion of Amtrak's capital program functions more like an operating budget. Amtrak has justified this approach pointing to the poor condition of the railroad, the limited availability of capital dollars, and a reliance on unpredictable annual federal appropriations.

The Policy intended to change that dynamic by creating a predictable funding stream. In return, Amtrak was to develop a capital program that could be tracked with sufficient geographic specificity to demonstrate how state and/or transit agency dollars will be spent in their respective operating territories. Instead of making that transformation, Amtrak has reprocessed data from existing systems to comply with the terms of the Policy. This effort has not produced useful results or addressed Amtrak's commitments outlined in the Policy.

Though our most immediate concern regards the capital maintenance and production projects funded through the Policy, we believe that improvements to the delivery of such projects have the potential to enhance support for funding major backlog projects. By contrast, without meaningful change here, we believe both the prospects of Commission approval in March 2018 to boost baseline capital

funding from $425 to $530 million annually (2015 dollars) and the Policy's long-term viability are at risk.

Recognizing that Amtrak receives funding from many government sources, the Operations and Performance Committee convened an FRA, state, and commuter agency working group, with Amtrak participation, to channel a broad range of views into a single set of recommendations. (See memorandum attached.) FRA, state, and commuter agency members of the working group have concluded the core obstacle to tracking scope, schedule, and budget effectively rests on Amtrak's activity-based definitions for capital maintenance and production projects.

The working group recommends moving toward location-based definitions where cost estimates and budget controls cover bundles of related activities concurrently at a location, rather than siloed activity types across the company. Location-based projects should have a budget control for the life of the project, not a new one for each federal fiscal year.

We request Amtrak take these recommendations and propose an approach that can be implemented over a specific timeframe through a multi-agency working group to achieve a mutually agreeable plan of action. Given the considerable time and resources that would be required for organizational change at this scale, it is critical that all funding partners be aligned in the path forward before execution.

Over the past several decades, states and transit agencies have moved toward a much more transparent approach to capital planning, budgeting, and project delivery. The current approach employed by Amtrak simply cannot meet the reasonable expectations of policymakers and taxpayers now funding the capital maintenance component of Amtrak's capital program. We look forward to a response to these recommendations in the hopes of continuing to advance the partnership framework of the Cost Allocation Policy.

Sincerely,

Paul Nissenbaum
Chair, Operations and Performance Committee, Northeast Corridor Commission
Associate Administrator for Railroad Policy and Development, Federal Railroad Administration

Toby Fauver
Vice Chair, Operations and Performance Committee, Northeast Corridor Commission
Deputy Secretary for Multimodal Transportation, Pennsylvania Department of Transportation

Enclosure: NEC Commission Capital Planning/Reporting Working Group Memorandum

A-3. Letter from Amtrak to NEC Commission

SENT VIA EMAIL

November 20, 2017

AMTRAK

Toby Fauver
Deputy Secretary for Multimodal Transportation
Pennsylvania Department of Transportation
400 North Street, 8th Floor
Harrisburg, PA 17120

Paul Nissenbaum
Associate Administrator for Railroad Policy & Development
Federal Railroad Administration / U. S. DOT
1200 New Jersey Avenue, SE
Washington, DC 20590

Dear Mr. Fauver and Mr. Nissenbaum:

Thank you for your letter of October 30, 2017, transmitting the capital planning and reporting recommendations from the Working Group convened by the Commission's Operations and Performance Committee related to capital investments. We recognize and agree that Amtrak needs to meet the commitments as set forth in the *Northeast Corridor Commuter and Intercity Rail Cost Allocation Policy* ("the Policy") associated with capital project planning and reporting. We value your candor regarding the various challenges that remain for us to overcome and that, despite your frustrations, the letter and working group memorandum contained several constructive recommendations for improvements.

The Policy set out a new approach for the Northeast Corridor (NEC) where owners and users pay their fair share for the Corridor's use and, in return, all parties are able to clearly see how and where respective funds are invested. Amtrak concedes that up to this point, plans and reports have had less-than-desired levels of utility and that the necessary culture changes and process improvements at Amtrak have taken longer than we hoped to achieve.

We also agree with the Working Group's recommendation that delivering and reporting against the capital program requires wholesale changes in engineering management philosophy and business practice at Amtrak and we have taken steps beyond those briefly described here to institute these important changes.

The derailments at Penn Station New York last spring reinforced this need. After months of planning, last month Amtrak's Engineering department began restructuring to change how we manage, maintain, and deliver our capital program by creating three functional organizations: one responsible for engineering, standards, and design; a second responsible for maintenance; and the third dedicated to project delivery. Furthermore, we are looking at aspects of our work practices and labor environment that impact project and maintenance performance, as improvements in efficiency are in everyone's interests.

Amtrak is committed to working with our NEC partners and the Commission to add utility to the NEC capital planning process – this includes defining capital maintenance and production

projects using a location-based approach as much as is practicable. We also concur that reserving a reasonably-sized amount of funds for emergency, unforeseen, and efficiency-driven project delivery needs is a good idea and are determining appropriate levels for various asset classes and types of work. We also agree with the Working Group's recommendation not to restrict Amtrak's reprogramming flexibility.

Our efforts are aimed at generating location-based scopes and budgets with more resource-driven project and outage information schedules. Additionally, as we described at the last Commission meeting, our FY2018 plan infrastructure investment plan for the NEC requires lengthened maintenance windows to maximize productivity and cost-effectiveness. Longer service outages enabled us to deliver the summer's NY Penn Infrastructure Renewal program within budget and ahead of schedule and we will continue this strategy to ensure safe and reliable infrastructure for commuter and intercity rail services. We have already begun working with the various commuter railroads to implement this strategy.

Amtrak, as both an owner and user of NEC infrastructure, remains committed to the partnership established by the Policy and expects the Commission to hold all owners and users accountable for meeting its terms. Our own co-CEOs and Board of Directors requires the same level of transparency and clarity regarding our NEC investments as the Commission and we believe we have the right leadership in place to provide the appropriate level of information in both planning and reporting of work. We will continue to proactively communicate our progress and solicit feedback and recommendations as we implement changes to systems and procedures.

Finally, we acknowledge and appreciate your dedication to the Policy's development and your subsequent leadership in advancing initiatives that will bring the NEC into a state of good repair and create the capacity and performance necessary to permit rail service to play an increasingly important role within the region.

Regards,

STEPHEN GARDNER
Executive Vice President & Chief Commercial Officer

SCOT NAPARSTEK
Executive Vice President & Chief Operating Officer

BYRON COMATI
Vice President, Corporate Planning & Strategy

GERHARD WILLIAMS
Vice President, Chief Engineer

Appendix B. Operations and Performance

Ridership and Service

Figure B-1, Riders and Trains by Operator

	Weekday Ridership on the NEC			Weekday Number of Trains on the NEC		
	FY15	FY16	FY17	FY15	FY16	FY17
Amtrak	42,000	43,000	43,000	152	152	148
MBTA	76,000	80,000	80,000	302	313	289
CT*rail*	2,000	2,000	2,000	34	34	34
MNR	127,000	127,000	128,000	294	297	297
LIRR	230,000	233,000	233,000	459	457	462
NJT	240,000	246,000	241,000	413	417	415
SEPTA	60,000	59,000	54,000	352	356	357
MARC	34,000	34,000	33,000	93	95	95
VRE	4,000	4,000	4,500	29	32	32
Total	**815,000**	**828,000**	**818,500**	**2,128**	**2,153**	**2,129**

Note: FY16 ridership was revised in 2018 to include updated actuals for SEPTA, MNR, and LIRR. MBTA ridership is an estimate at this time due to limited data availability.

Performance

Figure B-2, Percent trains late, annulled, or terminated, Quarterly and Four-quarter rolling average, FY15-FY17

	2015				2016				2017			
Quarterly	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**
Intercity	24.2%	35.0%	28.6%	29.9%	23.3%	21.1%	22.1%	27.0%	21.0%	25.3%	32.8%	27.7%
Commuter	10.0%	14.2%	10.6%	10.7%	9.8%	9.0%	8.8%	12.5%	12.2%	10.0%	13.6%	9.2%
Commuter Peak	11.6%	17.4%	11.9%	12.8%	11.9%	11.5%	9.5%	12.5%	15.3%	12.6%	16.3%	10.0%
NEC Total	11.1%	15.8%	12.0%	12.1%	10.8%	9.9%	9.8%	13.6%	12.8%	11.2%	15.0%	10.5%

Rolling average	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**
Intercity	28.0%	28.1%	29.2%	29.4%	29.3%	25.8%	24.2%	23.4%	22.8%	23.9%	26.6%	26.7%
Commuter	9.6%	10.1%	10.7%	11.3%	11.3%	10.0%	9.6%	10.0%	10.6%	10.9%	12.1%	11.3%
Commuter Peak	11.4%	11.8%	12.4%	13.4%	13.4%	12.0%	11.4%	11.3%	12.1%	12.4%	14.2%	13.6%
NEC Total	11.0%	11.6%	12.2%	12.7%	12.6%	11.2%	10.7%	11.0%	11.5%	11.8%	13.1%	12.4%

Figure B-3, Percent Intercity Trains Late, Annulled, or Terminated (LAT), Quarterly Rolling Average

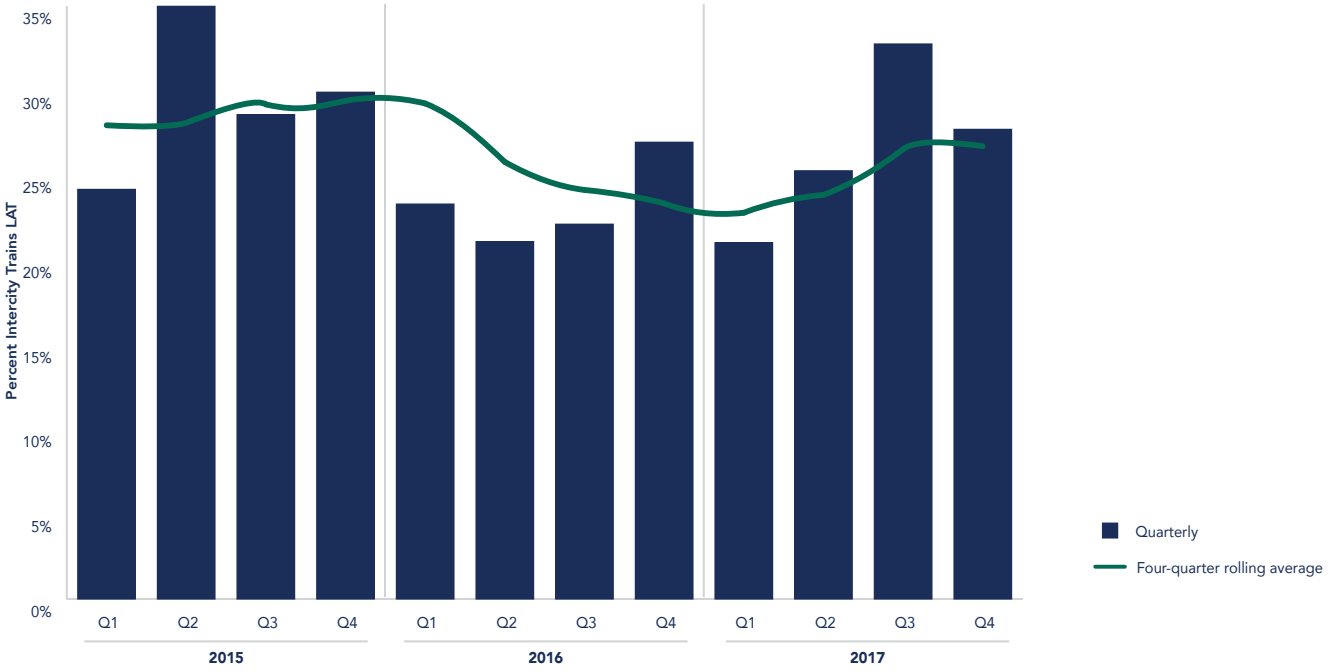


Figure B-4, Percent Commuter Trains Late, Annulled, or Terminated (LAT), Quarterly Rolling Average

Figure B-5, Incidents of delay, monthly, FY16-17

	Incidents of Delay		
	FY15	**FY16**	**FY17**
October	11,930	9,081	12,523
November	13,687	12,023	13,693
December	10,508	6,379	9,682
January	9,624	8,809	10,418
February	22,336	10,073	9,814
March	16,063	8,235	10,642
April	11,862	8,701	11,332
May	10,548	9,222	15,374
June	12,978	10,967	18,768
July	13,130	14,288	12,736
August	11,833	13,698	10,567
September	11,039	11,003	9,430
Total	**155,538**	**122,479**	**144,979**

Figure B-6, Total service levels by month

	Trains on the NEC	
	FY16	**FY17**
October	54,130	53,846
November	49,498	51,586
December	54,712	54,818
January	49,955	52,342
February	50,873	49,209
March	57,244	57,123
April	54,663	52,961
May	54,469	55,461
June	55,519	55,509
July	51,931	50,948
August	55,873	54,582
September	51,808	51,660

Cause of delay

Figure B-7, Minutes of delay by major cause category, FY15-17

	FY15	FY16	FY17
Engineering	314,620	269,483	394,605
Transportation	197,113	180,775	200,710
Passenger	161,231	110,005	123,691
Mechanical	218,915	200,153	172,956
Other	115,151	123,476	140,593
Weather	196,963	62,637	77,006
Third Party	85,973	104,305	106,876
Freight	15,504	4,930	7,023
Total	**1,305,470**	**1,055,764**	**1,223,460**

Figure B-8, Minutes of Delay by Major Cause Category, FY15-17

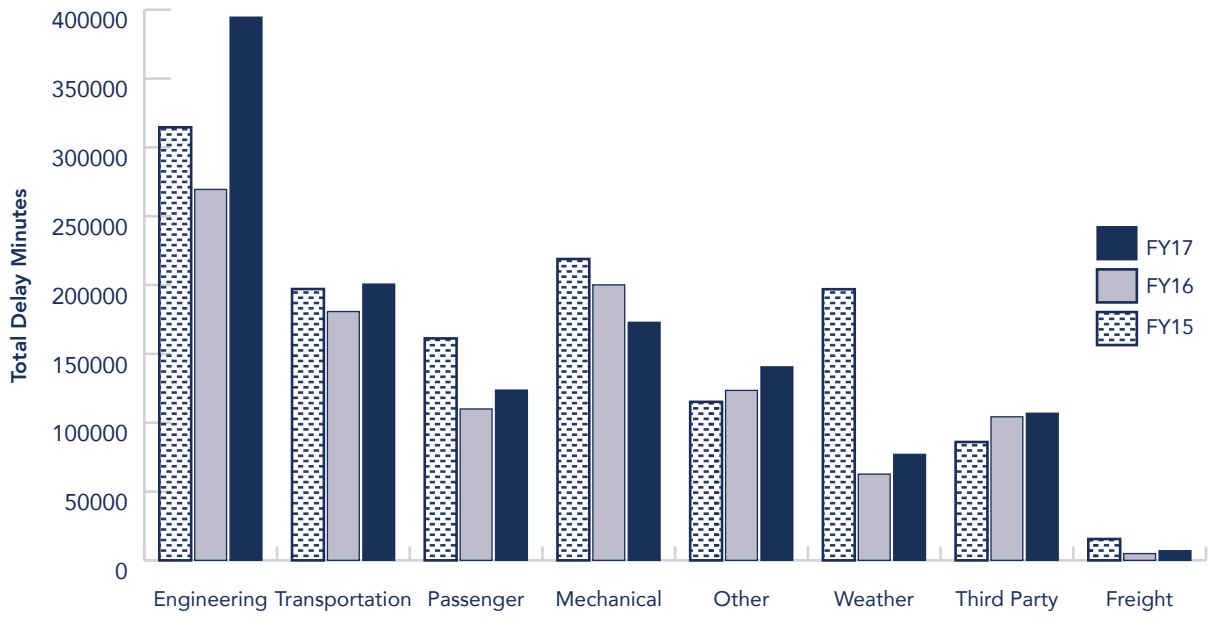


Figure B-9, Delay occurrences by major cause category, FY15-17

	FY15	FY16	FY17
Engineering	43,462	32,610	46,759
Transportation	28,673	25,402	29,030
Passenger	31,124	21,207	24,905
Mechanical	15,195	15,129	12,998
Other	12,948	15,842	17,778
Weather	17,067	6,519	7,066
Third Party	5,740	5,327	5,952
Freight	1,329	443	491
Total	**155,538**	**122,479**	**144,979**

Figure B-10, Delay Occurrences by Major Cause Category, FY15-17

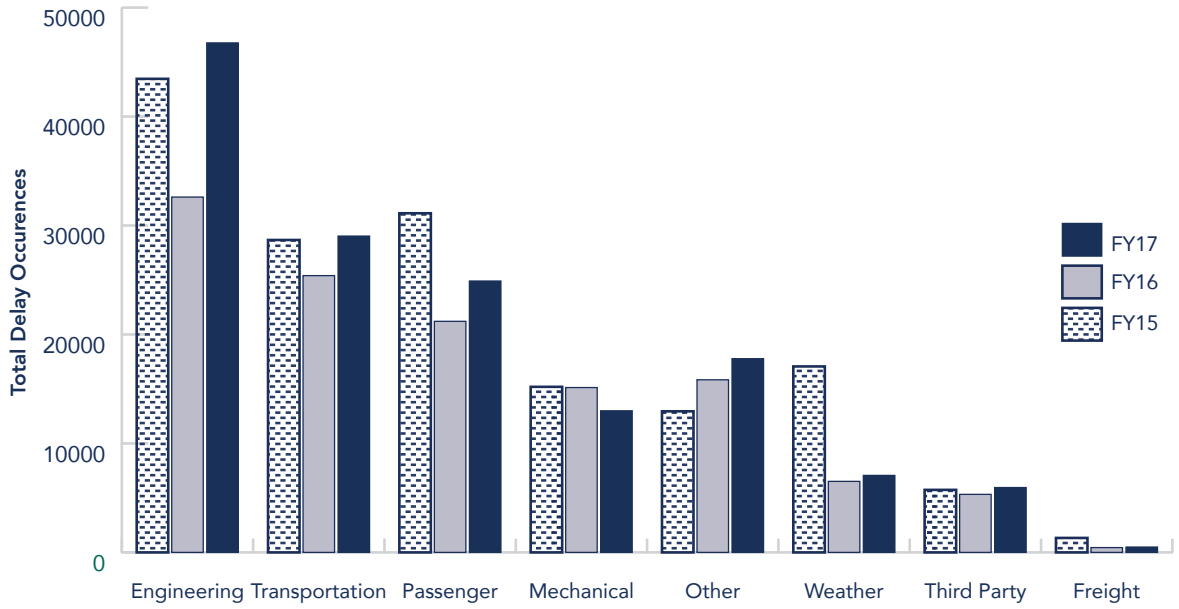
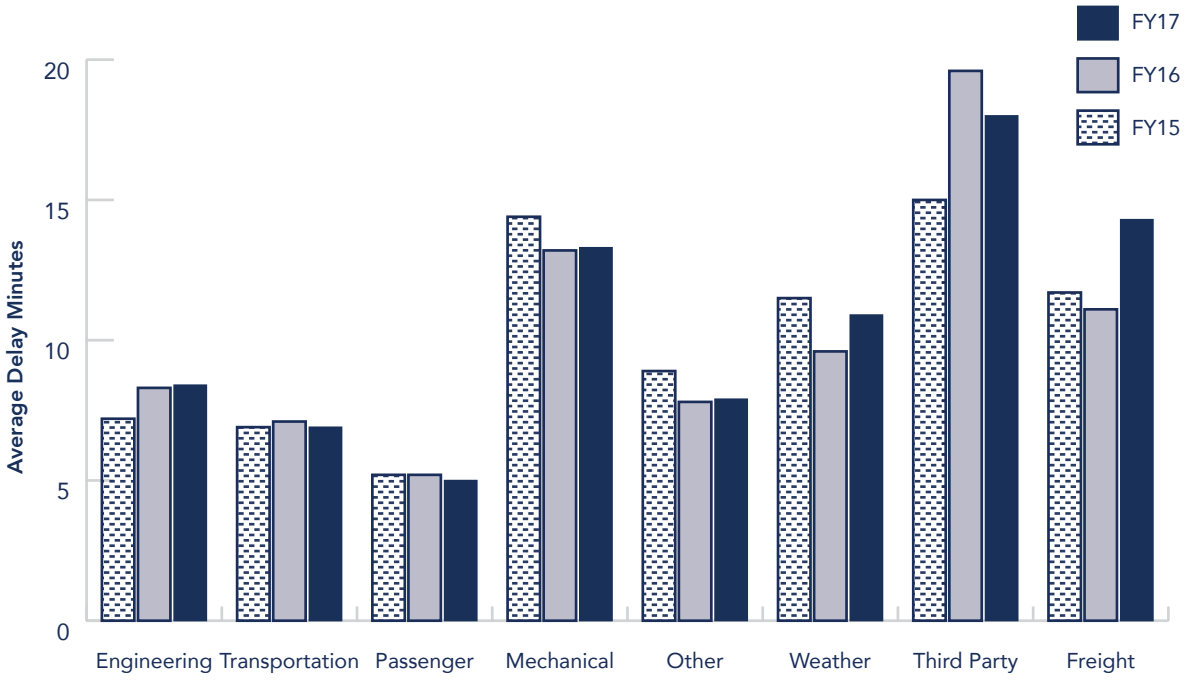


Figure B-11, Average minutes of delay by major cause category, FY15-17

	FY15	FY16	FY17
Engineering	7.2	8.3	8.4
Transportation	6.9	7.1	6.9
Passenger	5.2	5.2	5.0
Mechanical	14.4	13.2	13.3
Other	8.9	7.8	7.9
Weather	11.5	9.6	10.9
Third Party	15.0	19.6	18.0
Freight	11.7	11.1	14.3

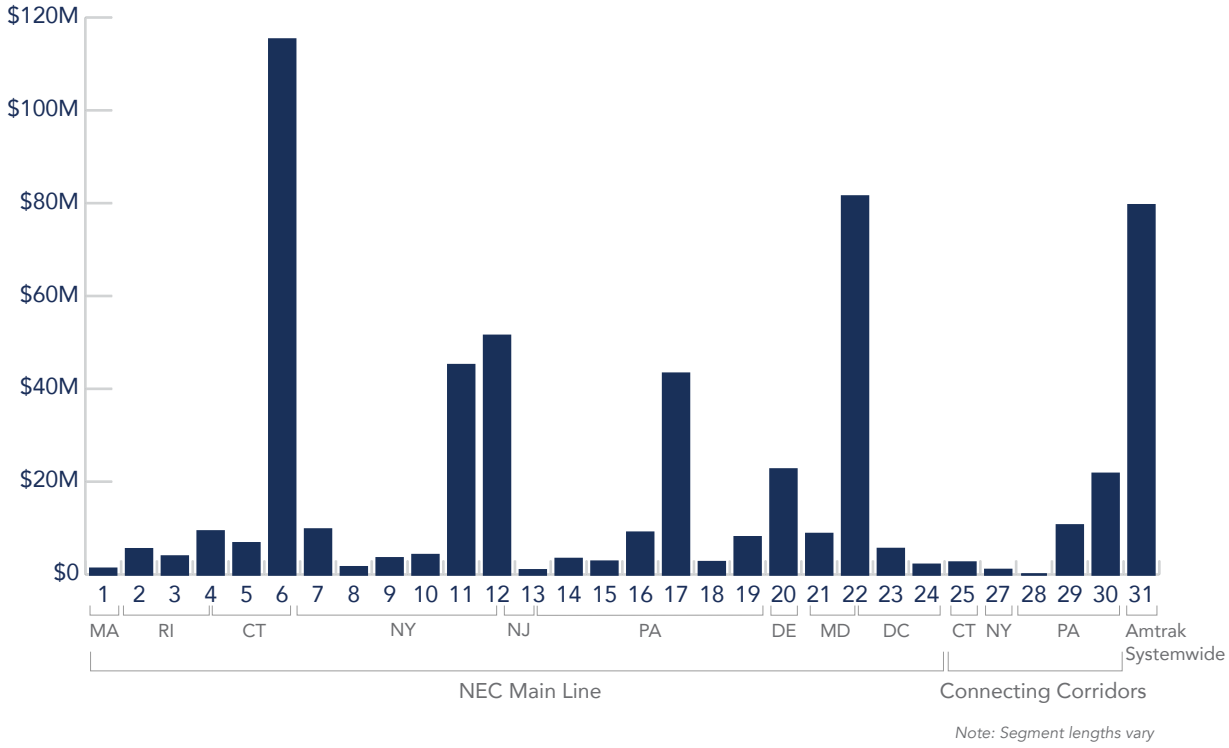
Figure B-12, Average Delay Minutes by Major Cause Category, FY15-17



Appendix C. Capital Renewal of Basic Infrastructure

Capital Renewal Summary

Figure C-1, FY17 Capital renewal expenditures by segment



Note: Segment lengths vary

Figure C-2, FY17 Capital renewal expenditures by discipline

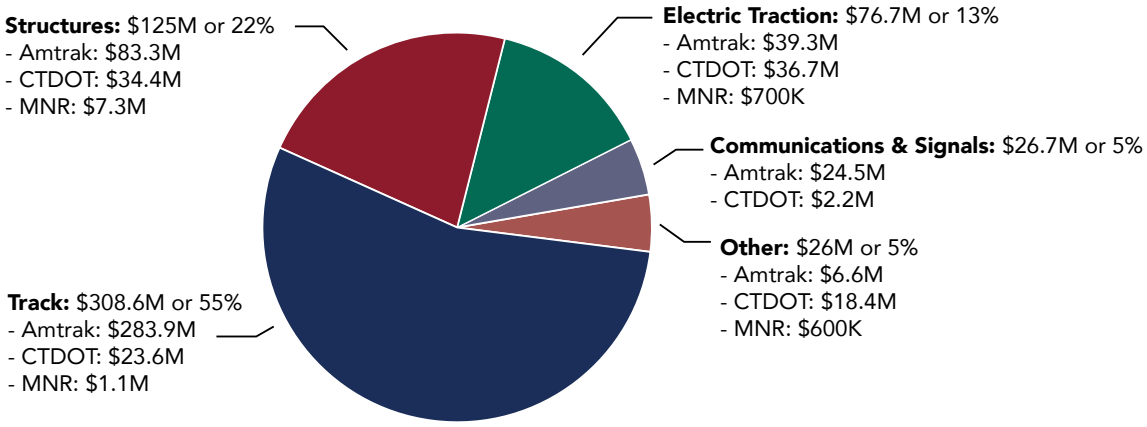


Figure C-3, FY17 Baseline Capital Charge Program Actuals

BCC Segment	Amtrak (BCC)	Amtrak (Third party/ Other)	MBTA	RIDOT	CTDOT (SLE)	CTDOT (NHL)	MNR	LIRR*	NJT	SEPTA	DelDOT	MDOT	VRE	Total
1	68,409	0	1,152,064	0	0	0	0	0	0	0	0	0	0	1,220,473
2	1,124,223	0	4,298,510	0	0	0	0	0	0	0	0	0	0	5,422,734
3	936,853	0	1,450,040	1,473,451	0	0	0	0	0	0	0	0	0	3,860,344
4	9,267,115	0	0	0	0	0	0	0	0	0	0	0	0	9,267,115
5	2,763,632	0	0	0	3,946,650	0	0	0	0	0	0	0	0	6,710,282
6	13,230,000	0	0	0	0	102,015,581	0	0	0	0	0	0	0	115,245,581
7	1,920,000	0	0	0	0	0	7,761,828	0	0	0	0	0	0	9,681,828
8	1,545,374	0	0	0	0	0	0	0	0	0	0	0	0	1,545,374
9	3,413,233	0	0	0	0	0	0	0	60,432	0	0	0	0	3,473,665
10	73,364	2,522,234	0	0	0	0	0	1,124,367*	443,875	0	0	0	0	4,163,840
11	12,908,466	237,989	0	0	0	0	0	2,473,013*	29,470,752	0	0	0	0	45,090,220
12	9,715,217	0	0	0	0	0	0		41,509,883	177,954	0	0	0	51,403,054
13	156,205	0	0	0	0	0	0	0	526,978	205,846	0	0	0	889,029
14	253,298	11	0	0	0	0	0	0	0	3,073,441	0	0	0	3,326,750
15	411,293	0	0	0	0	0	0	0	0	2,339,421	0	0	0	2,750,714
16	1,004,130	0	0	0	0	0	0	0	0	7,989,640	0	0	0	8,993,771
17	17,874,027	24,194,148	0	0	0	0	0	0	1,068,916	113,209	0	0	0	43,250,300
18	2,645,961	0	0	0	0	0	0	0	0	0	0	0	0	2,645,961
19	959,628	0	0	0	0	0	0	0	0	7,046,115	0	0	0	8,005,743
20	17,289,373	3,287,010	0	0	0	0	0	0	0	0	2,039,267	0	0	22,615,650
21	8,709,116	0	0	0	0	0	0	0	0	0	0	0	0	8,709,116
22	67,967,620	121,867	0	0	0	0	0	0	0	0	0	13,337,354	0	81,426,841
23	5,393,328	0	0	0	0	0	0	0	0	0	0	0	85,323	5,478,651
24	1,720,290	0	0	0	0	0	0	0	0	0	0	0	353,354	2,073,644
25	2,556,917	0	0	0	0	0	0	0	0	0	0	0	0	2,556,917
27	965,503	0	0	0	0	0	0	0	0	0	0	0	0	965,503
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	1,073,700	0	0	0	0	0	0	0	0	9,490,742	0	0	0	10,564,443
30	21,669,523	4,094	0	0	0	0	0	0	0	0	0	0	0	21,673,617
31	77,667,579	342,213	42,262	0	0	0	0	0	1,479,241	3,339	0	500	0	79,535,133
Total	285,283,380	30,709,567	6,942,877	1,473,451	3,946,650	102,015,581	7,761,828	3,597,380*	74,560,077	30,439,706	2,039,267	13,337,854	438,676	562,546,294

*Preliminary proposal from Amtrak, subject to approval.

Capital Renewal of Basic Infrastructure Detail

Figure C-4, Amtrak, planned projects (in FY17 Plan with Actuals in FY17)

			FY17 Actuals										
Program Code	Project Name	FY17 Actual	Amtrak	CTDOT	DelDOT	LIRR*	MARC	MBTA	NJT	RIDOT	SEPTA	VRE	3rd party/ Other
1. Amtrak - planned projects (in FY17 Plan with Actuals in FY17)													
C.EN.100006	SYS LIFE SAFETY - PROJECT MANAGEMENT	545,866	545,866										
C.EN.100039	STA 30TH STREET STATION - FACADE RESTORATION	31,420,972	7,226,824										24,194,148
C.EN.100078	APP ENGINEERING ASSET INFORMATION CENTER - DEVELOPMENT	844,600	844,600										
C.EN.100081	CETC PENN STATION NY - SCADA PHASE II	1,004,833	258,110						746,723				
C.EN.100119	CETC NEW CETC CONTROL CENTER-CONSOLIDATION OF NEC CETC	1,682,485	1,682,485										
C.EN.100122	SUB SOUTHAMPTON SUBSTATION - SUBSTATION DESIGN	27,105	27,105										
C.EN.100123	APP ENGINEERING ASSET MANAGEMENT SYSTEM	1,332,341	1,325,123										7,218
C.EN.100139	STA 30TH STREET STATION - ELECTRICAL UPGRADES	-	-										
C.EN.100203	INTB MID-ATLANTIC DIVISION-INTERLOCKING LIGHTING UPGRADES	145,940	41,952		25,573		21,014				57,402		
C.EN.100213	STA 30TH STREET STATION - FIRE ALARM SYSTEM IMPROVEMENTS	7,297,832	7,231,560						39,865		26,407		
C.EN.100231	STA PENN STATION NEW YORK - FACILITIES UPGRADES	-	-										
C.EN.100269	BLST AMTRAK NEC - SYSTEM UNDERCUTTING PROGRAM	26,247,505	20,497,835		12,380		5,615,422						121,867
C.EN.100281	CETC PSCC NEW YORK - COMPUTER HARDWARE/ SOFTWARE UPGRADES	5,923	5,923										
C.EN.100316	STA PENN STATION NEW YORK - ESCALATOR REPLACEMENT	1,619,043	126,138			176*			1,492,729				
C.EN.100331	SYS ELECTRIC TRACTION DESIGN REVIEW	353,397	341,684						11,713		-		

*Preliminary proposal from Amtrak, subject to approval.

			FY17 Actuals										
Program Code	Project Name	FY17 Actual	Amtrak	CTDOT	DelDOT	LIRR*	MARC	MBTA	NJT	RIDOT	SEPTA	VRE	3rd party/ Other
1. Amtrak - planned projects (in FY17 Plan with Actuals in FY17)													
C.EN.100332	SYS STRUCTURES FACILITIES - FUTURE DESIGN	1,114,866	996,766				1,624	67,206	36,337		12,933		
C.EN.100333	SYS TRACK - FUTURE DESIGN	169,686	115,560		7,054			25,392	21,208		473		
C.EN.100371	SAFE EMPLOYEE ARC FLASH PROTECTION	186,467	14,587										171,880
C.EN.100418	SYS ENGINEERING CAPITAL PROGRAM - PROJECT MANAGEMENT	5,050,722	5,050,722										
C.EN.100422	BGMS STRUCTURES - MOVABLE BRIDGE COMPONENT DESIGN	96,154	75,035						21,118				
C.EN.100477	SYS STRUCTURES BRIDGES/ TUNNELS/WALLS - FUTURE DESIGN	707,510	432,351		9,859				170,216		95,084		
C.EN.100478	SYS C&S LANCASTER SHOP EQUIPMENT PURCHASE/ UPGRADES	156,497	156,497										
C.EN.100578	STA HARRISBURG LINE STATIONS - STATION IMPROVEMENTS	2,160,392	2,160,392								-		
C.EN.100618	CAT ELECTRIC TRACTION TRAINING FACILITY - UPGRADES	429,072	429,072										
C.EN.100627	STA 30TH STREET STATION - ELEVATOR REPLACEMENT	79,938	79,938										
C.EN.100679	INRL SOUTH PENN INTERLOCKING - INTERLOCKING RENEWAL	2,165,426	2,165,426										
C.EN.100688	TURN CHARLES INTERLOCKING - TURNOUT RENEWAL	5,154,472	5,154,472										
C.EN.100709	BGMS NJ008.50 DOCK BRG-UPGR CTRL LINE/EMGY BCKUP ENG/AUX DRV	1,170,545	603,680						566,865				
C.EN.100732	SAFE NEW YORK EMPIRE LINE OVERBUILD - LIGHTING UPGRS	-	-										
C.EN.100739	TKAP WASHINGTON TO BOSTON - RAIL LUBICATOR REPLACEMENT	373,973	373,973								-		

*Preliminary proposal from Amtrak, subject to approval.

			FY17 Actuals										
Program Code	Project Name	FY17 Actual	Amtrak	CTDOT	DelDOT	LIRR*	MARC	MBTA	NJT	RIDOT	SEPTA	VRE	3rd party/ Other
1. Amtrak - planned projects (in FY17 Plan with Actuals in FY17)													
C.EN.100750	GEOM AMTRAK SYSTEM - SURFACING PROGRAM DEVELOPMENT	365,456	365,456										
C.EN.100755	STIP NEW YORK EAST RIVER TUNNELS-RAIL/TIE REPL LINE 1/2	1,482,968	326						47,685				1,434,957
C.EN.100756	STIP NEW YORK EAST RIVER TUNNELS-RAIL/TIE REPL LINE 3/4	964,561	-										964,561
C.EN.100758	TURN ADVANCED TECHNOLOGY TURNOUT DEVELOPMENT/DESIGN	25,320	25,320										
C.EN.100764	XINR NEW ENGLAND DIVISION - CROSSING UPGRADES	820,861	820,861										
C.EN.100837	STA 30TH STREET STATION - HVAC AIR HANDLERS UPGRADES	2,747	2,747										
C.EN.100846	CABF WAS TO NEW YORK-INSTALL REDUNDANT COMM CBL	1,086,925	462,231						594,738		29,956		
C.EN.100850	STA WASHINGTON TERM & IVY CITY-FACILITY ELECTRICAL UPGRADES	128,771	124,575									4,196	
C.EN.100870	APP ENGINEERING - PROJECT ESTIMATING APPLICATION DEVELOPMENT	-	-										
C.EN.100940	INTB NEW YORK DIV - INTERLOCKING LIGHTING FIXTURE UPGRADES	312,056	65,995			164*			174,790		71,108		
C.EN.101104	TURN PENN STATION NY - ZERO DEFECT PROGRAM TURNOUT RENEWAL	37,758,054	9,681,698			2,070,665*			26,005,691				
C.EN.101110	BGTI STRUCTURES - BRIDGE TIE DESIGN	243,650	209,579								34,071		
C.EN.101116	STA PENN STATION NEW YORK - FACILITIES UPGRADES	1,757,398	1,209,627			384*			547,387				
C.EN.101178	TIES CONCRETE TIE - REDESIGN OF CONCRETE TIES	860,853	860,853										
C.EN.101182	EQIR UNDERCUTTER & CONSIST UPGRADE AND EQUIPMENT ACQUISITION	-	-										

*Preliminary proposal from Amtrak, subject to approval.

			FY17 Actuals										
Program Code	Project Name	FY17 Actual	Amtrak	CTDOT	DelDOT	LIRR*	MARC	MBTA	NJT	RIDOT	SEPTA	VRE	3rd party/ Other
1. Amtrak - planned projects (in FY17 Plan with Actuals in FY17)													
C.EN.101211	STA NEW ENGLAND DIVISION - STATION CONSTRUCTION UPGRADES	1,478,007	27,967					1,450,040					
C.EN.101221	STA MID ATLANTIC DIVISION - STATION CONSTRUCTION UPGRADES	4,851,961	4,567,454						257,630		26,877		
C.EN.101243	TOWR MID ATLANTIC DIVISION-TRANSPORTATION FACILITY UPGRADES	416,509	51,945						364,555		9		
C.EN.101244	TUN MID ATLANTIC DIVISION - TUNNEL UPGRADES	808,476	761,466									47,010	
C.EN.101276	STA NEW YORK DIVISION - STATION CONSTRUCTION UPGRADES	1,885,147	1,584,196			20,952*			279,999				
C.EN.101277	INRL FAIR INTERLOCKING - INTERLOCKING RENEWAL	1,209,350	347,488						861,862				
C.EN.101391	CATC NEW ENGLAND DIVISION - BRIDGE ICILE MITIGATION DESIGN	-	-										
C.EN.101415	RAD AMTRAK SYSTEM-RADIO SITE BACKUP AND EMERGENCY PWR UPGRS	55,876	55,876								-		
C.EN.101416	ABS MID-ATLANTIC SOUTH - C&S CABLE REPLACEMENT	-	-										
C.EN.101420	TEL AMTRAK SYSTEM - OPERATIONS VOICE RECORDING SYS UPGRS	-	-										
C.EN.101503	CETC NEC SIGNAL SYSTEM REMOTE DIAGNOSTIC SYSTEM	96,970	96,970										
C.EN.101511	INT SIGNALS - FUTURE DESIGN	102,421	73,321						27,523		1,577		
C.EN.101515	CETC LOAD DISPATCHER-PWR DIRECTOR OFFICE - OVERVIEW BOARDS	804,158	804,158										
C.EN.101517	SAFE ELECTRIC TRACTION EMPLOYEE ARC FLASH PROTECTION	6,479	6,479										
C.EN.101538	CETC NEC CETC FACILITIES-SOFTWARE AND HARDWARE UPGRADES	177,597	177,597										

*Preliminary proposal from Amtrak, subject to approval.

			FY17 Actuals										
Program Code	Project Name	FY17 Actual	Amtrak	CTDOT	DelDOT	LIRR*	MARC	MBTA	NJT	RIDOT	SEPTA	VRE	3rd party/ Other
1. Amtrak - planned projects (in FY17 Plan with Actuals in FY17)													
C.EN.101542	MOFW PENN COACH YARD - WELDING TRAINING FACILITY	70,289	70,289										
C.EN.101593	RAD WASHINGTON 1ST STREET TUNNEL - RADIO IMPROVEMENTS	612,409	612,409										
C.EN.101607	PTC SPRINGFIELD LINE - PTC INSTALLATION WAYSIDE	6,527	6,527										
C.EN.101611	CAT AMTRAK ELECTRIFIED TERRITORY-OSHA FALL PROTECTION STUDY	612,729	612,729										
C.EN.101622	TUN NORTH RIVER TUNNELS - TUNNEL IMPROVEMENTS	927,090	(11,616)						938,705				
C.EN.101624	TUN EAST RIVER TUNNELS - TUNNEL IMPROVEMENTS	677,762	22,687			578,644*			76,430				
C.EN.101625	TUN EMPIRE TUNNEL - TUNNEL IMPROVEMENTS	613,299	613,299										
C.EN.101627	STA PENN STATION NEW YORK-LIFE SAFETY FACILITY IMPROVEMENTS	510,990	-			510,990*							
C.EN.101647	BLST AMTRAK NEC - SPOT UNDERCUTTING PROGRAM	7,046,756	3,190,030	1,111,474	1,593			142,922	1,847,897		741,746	11,093	
C.EN.101648	FAST AMTRAK NEC - CONCRETE TIE FASTENER HARDWARE	27,834	13,863					29	13,942				
C.EN.101649	GEOM AMTRAK NEC - SURFACING PROGRAM	25,468,580	14,547,956	123,435				1,546,533	5,877,080	1,141,809	2,231,768		
C.EN.101651	DRAN AMTRAK NEC - DRAINAGE-ROADBED IMPROVEMENTS	4,742,677	3,253,910						1,488,767				
C.EN.101652	TLS AMTRAK NEC - TLS CONCRETE TIE REPLACEMENT PROGRAM	38,844,278	24,944,844				6,728,578		2,874,557		4,296,299		
C.EN.101653	TKAP AMTRAK NEC - WAYSIDE DETECTOR REPLACEMENT PROGRAM	456,564	286,063						170,500				
C.EN.101655	RAIL AMTRAK NEC - JOINT ELIMINATION PROGRAM	7,473,295	3,688,408					393,063	1,601,152	94,065	1,696,606		
C.EN.101656	TIES AMTRAK NEC - TIE-TIMBER REPLACEMENT PROGRAM	24,144,546	13,212,165	268,006	1,283,993	21,788*		826,022	6,866,268	65,587	1,600,717		

*Preliminary proposal from Amtrak, subject to approval.

			FY17 Actuals										
Program Code	Project Name	FY17 Actual	Amtrak	CTDOT	DelDOT	LIRR*	MARC	MBTA	NJT	RIDOT	SEPTA	VRE	3rd party/ Other
1. Amtrak - planned projects (in FY17 Plan with Actuals in FY17)													
C.EN.101657	TIES AMTRAK NEC - CONCRETE TIE REPLACEMENT PROGRAM	3,023,997	953,359	283,298				649,797	305,405	104,551	686,757	40,831	
C.EN.101658	TURN AMTRAK NEC - INTERLOCKING STEEL RENEWAL PROGRAM	7,829,814	3,359,744	119,177	611,908			272,062	1,425,539	33,031	1,741,357	266,996	
C.EN.101660	TURN AMTRAK NEC - TURNOUT RENEWAL PROGRAM	5,808,427	3,441,351	501,345				1,152,064	59,758		653,909		
C.EN.101661	RAIL AMTRAK NEC - RAIL REPLACEMENT PROGRAM	5,395,342	2,038,544						3,356,798				
C.EN.101662	SUB AMTRAK NATIONAL - SUBSTATION UPGRADES	6,159,256	6,159,256										
C.EN.101663	CAT AMTRAK NATIONAL - CATENARY HARDWARE RENEWAL	163,907	163,907										
C.EN.101665	SIGP AMTRAK NATIONAL - SIGNAL POWER UPGRADES	93,535	93,535										
C.EN.101666	TRN AMTRAK NATIONAL - TRANSMISSION LINE UPGRADES	124,352	73,738								50,614		
C.EN.101667	BLST AMTRAK NATIONAL - SPOT UNDERCUTTING PROGRAM	1,018,461	480,705	102							537,654		
C.EN.101668	GEOM AMTRAK NATIONAL - SURFACING PROGRAM	3,198,864	2,430,207								768,657		
C.EN.101672	RAIL AMTRAK NATIONAL - JOINT ELIMINATION PROGRAM	941,553	272,852								668,700		
C.EN.101673	TIES AMTRAK NATIONAL - TIE-TIMBER REPLACEMENT PROGRAM	9,982,068	8,625,914								1,356,154		
C.EN.101674	TURN AMTRAK NATIONAL - INTERLOCKING STEEL RENEWAL PROGRAM	819,303	375,342								443,960		
C.EN.101675	TURN AMTRAK NATIONAL - TURNOUT RENEWAL PROGRAM	3,262,181	69,207								3,192,975		
C.EN.101678	BGUG AMTRAK NATIONAL - UNDERGRADE BRIDGE UPGRADES	174,483	150,727								23,756		

*Preliminary proposal from Amtrak, subject to approval.

			FY17 Actuals										
Program Code	Project Name	FY17 Actual	Amtrak	CTDOT	DelDOT	LIRR*	MARC	MBTA	NJT	RIDOT	SEPTA	VRE	3rd party/ Other
1. Amtrak - planned projects (in FY17 Plan with Actuals in FY17)													
C.EN.101679	CULV AMTRAK NATIONAL - CULVERT UPGRADES	83,611	83,611										
C.EN.101680	MOFW AMTRAK NATIONAL - MOFW BASE UPGRADES	110,391	8,389								102,003		
C.EN.101682	INT AMTRAK NATIONAL - C&S INTERLOCKING UPGRADES	-	-								-		
C.EN.101684	TEL AMTRAK NATIONAL - COMMUNICATION SYSTEM UPGRADES	1,152	1,152										
C.EN.101688	SUB AMTRAK NEC - SUBSTATION UPGRADES	5,247,757	3,938,197						873,429		436,130		
C.EN.101689	CAT AMTRAK NEC - CATENARY UPGRADES	4,760,681	2,845,166				195,705		11,428		1,708,381		
C.EN.101690	POLE AMTRAK NEC - CATENARY POLE UPGRADES	1,143,603	676,132						344,325		123,146		
C.EN.101691	FREQ AMTRAK NEC - FREQUENCY CONVERTER UPGRADES	5,289,176	3,722,966						1,565,936		275		
C.EN.101692	SWHT AMTRAK NEC - ELECTRIC TRACTION SW HTR IMPROVEMENTS	1,323,364	1,323,364										
C.EN.101693	TRN AMTRAK NEC - TRANSMISSION LINE UPGRADES	214,053	25,092						188,962				
C.EN.101694	SIGP AMTRAK NEC - SIGNAL POWER UPGRADES	725,768	722,641						3,127				
C.EN.101695	CATC AMTRAK NEC - CONSTANT TENSION CATENARY HARDWARE RENEWAL	518,700	518,700										
C.EN.101696	BGTI AMTRAK NEC - BRIDGE TIMBER REPLACEMENT	1,841,674	1,605,816						31,948		203,911		
C.EN.101697	BGUG AMTRAK NEC - UNDERGRADE BRIDGE UPGRADES	6,387,088	3,600,529	1,172,535					308,968		1,305,056		
C.EN.101698	CULV AMTRAK NEC - CULVERT UPGRADES	79,915	5,350						74,566				
C.EN.101699	MOFW AMTRAK NEC - MOFW BASE UPGRADES	3,004,755	1,797,759			243,221*		138,734	663,036		162,005		

*Preliminary proposal from Amtrak, subject to approval.

			FY17 Actuals										
Program Code	Project Name	FY17 Actual	Amtrak	CTDOT	DelDOT	LIRR*	MARC	MBTA	NJT	RIDOT	SEPTA	VRE	3rd party/ Other
1. Amtrak - planned projects (in FY17 Plan with Actuals in FY17)													
C.EN.101701	INT AMTRAK NEC - C&S INTERLOCKING UPGRADES	1,730,451	1,442,536					9,827	11,403	3,852	262,833		
C.EN.101702	ABS AMTRAK NEC - SIGNAL SYSTEM UPGRADES	1,126,664	550,792						297,619		40,263		237,989
C.EN.101703	TEL AMTRAK NEC - COMMUNICATION SYSTEM UPGRADES	27,701	753			7,331*		19,617					
C.EN.101705	BGMS AMTRAK NEC - MOVABLE BRIDGE UPGRADES	1,243,387	1,075,394	56,116					111,877				
C.EN.101706	BGSG AMTRAK NEC - SIGNAL BRIDGE UPGRADES	1,031,133	245,709								785,424		
C.EN.101707	WALL AMTRAK NEC - RETAINING WALL UPGRADES	779,271	118,983						412,149		248,138		
C.EN.101708	BGMS AMTRAK NATIONAL - MOVABLE BRIDGE UPGRADES	33,868	33,868										
C.EN.101709	WALL AMTRAK NATIONAL - RETAINING WALL UPGRADES	172,842	172,842										
C.EN.101710	FEN AMTRAK NATIONAL - FENCE UPGRADES	523,758	523,758										
C.EN.101711	FEN AMTRAK NEC - FENCE UPGRADES	3,082,806	1,446,696				775,335	56,201	804,575				
C.EN.101713	RAIL AMTRAK NEC - INSULATED JOINT REPLACEMENT PROGRAM	2,577,715	1,168,866	38,720				131,119	361,164		827,038	50,807	
C.EN.101714	CETC AMTRAK SYSTEM-MOFW ENHANCED EMPLOYEE PROTECTION SYSTEM	421,503	409,692										11,811
C.EN.101732	RAD AMTRAK NEC - RADIO SYSTEM UPGRADES	-	-										
C.EN.101737	STA PENN STATION NY - STATION CHILLED WATER SYSTEM UPGRADE	-	-										
C.EN.201034	ACSE AMTRAK OWNED-POSITIVE TRAIN CONTROL PTC INSTALLATION	3,150,755	3,023,578										127,177
C.EN.201264	POLE ZOO TO PAOLI - CATENARY STRUCTURE REPLACEMENT DESIGN	71,846	12,551								59,295		
C.TR.100074	STA NEW ENGLAND DIV - INSTALL TRAIN APPROACH MESSAGE SYS	286,337	133,789	152,547									

*Preliminary proposal from Amtrak, subject to approval.

Figure C-5, Amtrak, Unused projects (in FY17 Plan but no Actuals in FY17)

Program Code	Project Name	FY17 Actual
2. Amtrak - Unused Projects (In FY17 Plan, but with no Actuals in FY17)		
C.EM.100037	TOWR CNOC - EMERGENCY OPERATIONS CENTER SETUP	
C.EN.101239	FREQ SUNNYSIDE YARD - CONVERTER REPLACEMENT	
C.EN.101354	NET C&S SYSTEM - NETWORK UPGRADES	
C.EN.101417	NET NEC - IT AND POLICE VIDEO BANDWIDTH AUGMENTATION	
C.EN.101424	CETC NEC CETC FACILITIES-SOFTWARE AND UPS BATTERY UPGRADES	
C.EN.101523	MOFW NORTHEAST CORRIDOR - CATENARY CAR STORAGE FACILITIES	
C.EN.101608	STA PENN STATION NY - STATION CHILLED WATER SYSTEM UPGRADE	
C.EN.101643	TKRN WESTSIDE CONNECTION 76TH ST - NEW STORAGE YARD	
C.EN.101646	TKRH WESTSIDE CONNECTION TUNNEL - TRACK INFRASTRUCTURE UPGRS	
C.EN.101686	POLE AMTRAK NATIONAL - CATENARY POLE UPGRADES	
C.EN.101687	FREQ AMTRAK NATIONAL - FREQENCY CONVERTER UPGRADES	
C.EN.101704	SWHT AMTRAK NEC - C&S SWITCH HEATER IMPROVEMENTS	
C.EN.101712	BGSG AMTRAK NATIONAL - SIGNAL BRIDGE UPGRADES	
C.EN.201039	3RD NEW YORK EAST RIVER TUNNEL/HAROLD - REPLACE 3RD RAIL	
C.EV.100011	ENV MIDWAY, CT MOFW FACILITY- STORMWATER TREATMENT SYSTEM	
C.EV.100032	ENV PENN STATION - TRACK REMEDIATION	
C.MK.100031	STA WASHINGTON UNION STATION - PIDS REPLACEMENT	
C.PO.100016	STA BALTIMORE STATION - POLICE OFFICE AND LOCKER ROOM UPGRS	
C.PO.100027	RAD AMTRAK SYSTEM - POLICE RADIO REPEATER UPGRADES	
C.PO.100028	RAD AMTRAK POLICE DEPT - PURCHASE MOTOROLA APX 8000 RADIOS	
C.PO.100034	SAFE AMTRAK POLICE DEPARTMENT - BODY CAMERAS PURCHASE	
C.SP.100011	SYS NEC IID CAPITAL PLANNING - PROGRAM SUPPORT	
C.SP.100032	STA BALTIMORE STATION - CONCOURSE & FACILITIES UPGRADES DESIGN	
C.SP.100033	STA 30TH STREET STATION - CONCOURSE & FACILITIES UPGRADES	
C.SP.100793	STA WASHINGTON UNION TERMINAL MASTER PLAN IMPLEMENTATION	
C.SP.XXXXXX	STA PENN STATION/ MOYNIHAN STATION ELECTRIC TRACTION SECTIONALIZATION	
C.TR.100065	CETC WASHINGTON TERMINAL - K TOWER UPGRADE TO CETC	

Figure C-6, Amtrak, New projects (Not in FY17 Plan, but with Actuals in FY17)

			FY17 Actuals										
Program Code	Project Name	FY17 Actual	Amtrak	CTDOT	DelDOT	LIRR*	MARC	MBTA	NJT	RIDOT	SEPTA	VRE	3rd party
3. Amtrak - New Projects (Not in FY17 Plan, but with Actuals in FY17)													
C.EN.100038	INRL LANE INTERLOCKING - INTERLOCKING RENEWAL	618,406	4,635						613,771				
C.EN.100042	FREQ LAMOKIN - TRANSFORMER/ CIRCUIT BREAKERS REPLACEMENT	37,830	37,830										
C.EN.100046	TURN BRYN MAWR INTERLOCKING - TURNOUT REPLACEMENT	1,436,602	47,471								1,389,130		
C.EN.100074	CATC NEW ENGLAND DIVISION OVERHEAD BRG - CATENARY UPGR	46,658	46,658										
C.EN.100091	POLE PHILADELPHIA SUBDIVISION - CATENARY POLE REPLACEMENT	7,196	234								6,962		
C.EN.100096	CAT PHILADELPHIA SUBDIV - INTERLOCKING RTU REPLACEMENT	27,530	1,254								26,276		
C.EN.100097	CAT WILMINGTON TO WASHINGTON - INTERLOCKING RTU REPLACEMENT	14,155	14,155										
C.EN.100120	INT DOCK INTERLOCKING - INTERLOCKING RENEWAL C&S/ET	3,512,466	300,726						3,211,740				
C.EN.100125	INRL UNION/MERCK/ROADS INTERLOCKING-INTERLOCKING RENEWAL C&S	37,857	1,383						36,475				
C.EN.100130	CAT JO/ZOO INTERLOCKING - CATENARY HARDWARE RENEWAL	(6,282)	(6,282)										
C.EN.100142	SUB HARRISBURG LINE - INSTALL 12KV BREAKERS 8 SUBSTATIONS	8,875	8,356								519		
C.EN.100152	CULV NEW ENGLAND DIVISION - CULVERT UPGRADES	17,705	17,705										
C.EN.100157	EQIR SYSTEM TRACK - EQUIPMENT HEAVY OVERHAULS	8,503,544	8,500,312								3,233		
C.EN.100159	POLE NEW YORK DIVISION - CATENARY POLE UPGRADES	1,634	(2,949)						4,582				
C.EN.100190	BGMS CT106.89 CONNECTICUT RIVER - BRIDGE REPLACEMENT DESIGN	15,493	15,493										
C.EN.100223	TURN DOCK INTERLOCKING - TURNOUT RENEWAL	151,695	11,794						139,901				
C.EN.100260	BGSG MID-ATLANTIC DIVISION - SIGNAL BRIDGE UPGRADES	44,708	44,708								-		

*Preliminary proposal from Amtrak, subject to approval.

			FY17 Actuals										
Program Code	Project Name	FY17 Actual	Amtrak	CTDOT	DelDOT	LIRR*	MARC	MBTA	NJT	RIDOT	SEPTA	VRE	3rd party
3. Amtrak - New Projects (Not in FY17 Plan, but with Actuals in FY17)													
C.EN.100261	BGTI NEW ENGLAND DIV - BRIDGE TIMBER REPLACEMENT	127,954	127,954										
C.EN.100285	EQIR TRACK MAINTENANCE VEHICLES-EQUIPMENT ACQUISITION	20,424,612	20,424,506								106		
C.EN.100324	SUB MID-ATLANTIC SOUTH - SUBSTATION CONTROL HOUSE UPGRADES	91	25				66						
C.EN.100347	FREQ SAFE HARBOR - FREQUENCY CONVERTER UPGRADE	10,634,594	10,634,594										
C.EN.100350	RAIL MID-ATLANTIC DIVISION - JOINT ELIMINATION	(1,982)	(1,982)										
C.EN.100361	TOWR DOCK I/L TOWER - ELECTRICAL DISTRIBUTION EQUIP UPGR	166,327	(312)						166,639				
C.EN.100362	TURN MID-ATLANTIC DIVISION - TURNOUT REPLACEMENT	21,651	(3,645)		25,296								
C.EN.100363	XINR HARRISBURG LINE - PRIVATE GRADE CROSSING ELIMINATION	(25,484)	(25,484)										
C.EN.100370	TUN NEW YORK TUNNELS - UPGRADE TUNNEL FLOOD GATES	141,431	756			145*			140,529				
C.EN.100379	BGTI MID-ATLANTIC DIVISION - BRIDGE TIMBER REPLACEMENT	27,958	27,958										
C.EN.100406	STA WILMINGTON, DE - STATION RESTORATION AMTRAK	(11,982)	(11,982)										
C.EN.100433	CAT ELMORA TO UNION - CATENARY HARDWARE RENEWAL TRACK A, B	1,565	1,565										
C.EN.100449	INT NEW ENGLAND DIV INTERLOCKINGS - BATTERY BANK REPLACEMENT	20,177	20,177										
C.EN.100451	MOFW IVY CITY - B&B BLD REPLACE ROOF/FURNACE/AC/OFFICE DSN	39,768	39,768										
C.EN.100482	TKAP NJ006.10 PORTAL BRIDGE - MITRE RAIL REPLACEMENT	5,070	(182)						5,251				
C.EN.100494	TKAP NORTHEAST CORRIDOR-WAYSIDE DETECTOR COMMUNICATIONS SYS	18,325	18,325										
C.EN.100522	BGMS CT132.16 MYSTIC RIVER - BRIDGE CTRL DRIVE UPGRADES	(253,252)	(253,252)										

*Preliminary proposal from Amtrak, subject to approval.

			FY17 Actuals										
Program Code	Project Name	FY17 Actual	Amtrak	CTDOT	DelDOT	LIRR*	MARC	MBTA	NJT	RIDOT	SEPTA	VRE	3rd party
3. Amtrak - New Projects (Not in FY17 Plan, but with Actuals in FY17)													
C.EN.100533	BGUG CT130.63 NOANK COVE - ABUTMENT/PIER RESTORATION	(209)	(209)										
C.EN.100552	CULV ADAMS SUBDIV - CULVERT UPGRADES	49,240	10,048						39,192				
C.EN.100554	FEN WASHINGTON TO NEW YORK - INSTALL SECURITY FENCE	891,860	321,705						570,155				
C.EN.100562	INT AMTRAK NEC MAD SOUTH – INTERLOCKING UPGRADES	132,735	112,334		20,401								
C.EN.100563	INT AMTRAK NEC MAD NORTH – INTERLOCKING UPGRADES	85,810	42,459		29,121						14,230		
C.EN.100567	MOFW PROVIDENCE M/W BASE - HEADQUARTER UPGRADES	(18,361)	(18,361)										
C.EN.100571	POLE PERRYVILLE SUBDIV - CATENARY POLE UPGRADES	6,004	504		5,500								
C.EN.100585	SUB NEW ENGLAND DIVISION - SUBSTATION UPGRADES	26,879	26,879										
C.EN.100590	TIES NEW ENGLAND DIVISION - HEADBLOCK TIE REPLACEMENT	(4,365)	(4,365)										
C.EN.100646	TUN EAST RIVER TUNNELS- BENCHWALL AND DIAMOND PLATE UPGRADES	133,954	-			271*							133,683
C.EN.100649	RAD PENN STATION NY - RADIO SYSTEM UPGRADES DESIGN & INSTALL	115,112	11,997						103,104				11
C.EN.100653	TKRH WASHINGTON TERMINAL & IVY CITY - UPGRADE TRACKS	102,881	102,068									813	
C.EN.100656	INT FAIR INTERLOCKING - RELOCATE C&S EQUIP ABOVE FLOOD LINE	1,598,993	61,489						1,537,504				
C.EN.100662	TUN NY NORTH RIVER TUNNELS- BENCHWALL AND DIAMOND PLATE UPGRS	14,106	(16,788)						30,894				
C.EN.100663	SUB CONESTOGA STEPUP YARD - TRANSFORMER REPLACEMENT	516	516										
C.EN.100669	ABS BALTIMORE SUBDIVISION - PHASE SELECTIVE UNIT UPGRADES	71,850	71,850										
C.EN.100671	TUN EMPIRE LINE - OVERBUILD SAFETY IMPROVEMENTS	5,463	5,463										
C.EN.100682	SUB METUCHEN SUB 38 - TRANSFORMER INSTALLATION	65,628	1,338						64,291				

*Preliminary proposal from Amtrak, subject to approval.

			FY17 Actuals										
Program Code	Project Name	FY17 Actual	Amtrak	CTDOT	DelDOT	LIRR*	MARC	MBTA	NJT	RIDOT	SEPTA	VRE	3rd party
3. Amtrak - New Projects (Not in FY17 Plan, but with Actuals in FY17)													
C.EN.100693	ABS BALTIMORE SUBDIVISION - INSTALL TRACK AND CODE RELAYS	19,570	19,570										
C.EN.100702	STA 30TH STREET STATION - EMERGENCY GENERATOR	1,527	1,527										
C.EN.100705	HAZH NEW YORK DIVISION - HOT BOX DETECTOR REPLACEMENT	279,003	4,628						271,133		3,241		
C.EN.100727	INT DAVISVILLE INTERLOCKING - UPGRADE TO MICROLOK 2	138,663	138,663										
C.EN.100733	STA 30TH STREET STATION - CHILLER REPLACEMENT	123,160	123,160										
C.EN.100747	EQIR ADVANCED TECHNOLOGY TRACK INSPECTION SYSTEM	29,624	29,624										
C.EN.100749	GEOM AMTRAK SYSTEM - MUD SPOT ELIMINATION	1,100	990				110						
C.EN.100752	RAIL HELLGATE/EMPIRE - RAIL RENEWAL	5,959	5,959										
C.EN.100754	RBED AMTRAK SYSTEM - ROADBED STABILITY UPGRADES	1,238	1,238										
C.EN.100760	TURN NEW ENGLAND DIV - TURNOUT REPLACEMENT	9,222	2,693					6,530					
C.EN.100823	CAT PENN STATION NEW YORK-WALKOVER 18 CONDUIT/CABLE REPL	1,972	(54)						2,026				
C.EN.100828	SUB EDGELY SUB 33 - SUBSTATION IMPROVEMENTS	4,371	388								3,983		
C.EN.100857	TLS NEW YORK DIVISION - CONCRETE TIE REPLACEMENT	24,739	1,812						22,927				
C.EN.100859	TIES NEW ENGLAND DIVISION - WOOD TIE PROGRAM	245,617	245,617										
C.EN.100884	INT STONY INTERLOCKING - EBHS SIGNAL BRIDGE DSN AND INSTALL	10,835	10,835										
C.EN.100891	STA MIDDLETOWN, PA STATION - NEW STATION DESIGN	4,094	-										4,094
C.EN.100920	MOFW ENGINEERING MOFW BASES - INVENTORY SECURITY IMPRV	(3,000)	(3,000)										
C.EN.100935	TUN NY TUNNELS-TUNNEL STANDPIPE INSTALLATION PH 3/4 LIRR	(10,967)	-										(10,967)

*Preliminary proposal from Amtrak, subject to approval.

			FY17 Actuals										
Program Code	Project Name	FY17 Actual	Amtrak	CTDOT	DelDOT	LIRR*	MARC	MBTA	NJT	RIDOT	SEPTA	VRE	3rd party
3. Amtrak - New Projects (Not in FY17 Plan, but with Actuals in FY17)													
C.EN.100937	STA ROUTE 128 STATION MA - PLATFORM LIGHTING UPGRADES	4,402	76					4,325					
C.EN.100954	TLS MID-ATLANTIC DIVISION - CONCRETE TIE REPLACEMENT	294,924	238,695		4,265						51,964		
C.EN.100959	STA PENN STATION NY - EMERGENCY OPERATION PLAN DEVELOPMENT	16,506	-						16,506				
C.EN.100963	EQIM 10002 GEOMETRY CAR - TESTING EQUIPMENT UPGRADES	60	60										
C.EN.100999	FEN NEW ENGLAND DIVISION - INSTALL R/W FENCE	474	(3,436)	307				3,604					
C.EN.101107	SIGP BALTIMORE SUBDIVISION - SIGNAL POWER UPGRADES	25,477	25,477										
C.EN.101111	CAT BALTIMORE SUBDIVISION - CATENARY HARDWARE RENEWAL	55,335	55,335										
C.EN.101113	SIGP PERRYVILLE SUBDIVISION - SIGNAL POWER UPGRADES	21,099	21,099										
C.EN.101114	TURN NEW YORK DIV EAST NJT TERRITORY - INTERLOCKING STEEL	1,369	416						952				
C.EN.101118	DRAN MID-ATLANTIC DIVISION - DRAINAGE IMPROVEMENTS	5,645	5,645								-		
C.EN.101119	MOFW NEW ENGLAND DIVISION - MOFW BASE UPGRADES	388,338	359,097					29,241					
C.EN.101120	RAIL NEW ENGLAND DIVISION - CURVE PATCH RAIL REPLACEMENT	1,364	1,364										
C.EN.101140	SIGP SUB 32 TO SUB 34 - SIGNAL POWER SYSTEM UPGRADE	2,154	97								2,057		
C.EN.101167	SUB BALTIMORE SUBDIV-SERVICE AND POTENTIAL TRANSFORMER UPGR	653	653										
C.EN.101169	SUB PERRYVILLE SUBDIVISION - TROLLEY BREAKER UPGRADE	37,267	37,267										
C.EN.101170	SUB BALTIMORE SUBDIVISION - TROLLEY BREAKER UPGRADE	1,393	1,393										
C.EN.101174	TRN KEARNY, NJ- PASSAIC RIVER TRANSMISSION TOWER REPLACEMENT	2,222	(15)						2,237				
C.EN.101176	SUB NEC SUBSTATIONS - CONTROL HOUSE REPLACEMENT DESIGN	6	6										

*Preliminary proposal from Amtrak, subject to approval.

			FY17 Actuals										
Program Code	Project Name	FY17 Actual	Amtrak	CTDOT	DelDOT	LIRR*	MARC	MBTA	NJT	RIDOT	SEPTA	VRE	3rd party
3. Amtrak - New Projects (Not in FY17 Plan, but with Actuals in FY17)													
C.EN.101194	BGUG NEW ENGLAND DIVISION - UNDERGRADE BRIDGE IMPROVEMENTS	108,999	18,022	90,977									
C.EN.101202	MOFE MID ATLANTIC DIVISION - FACILITY UPGRADES	2,311	2,311										
C.EN.101206	MOFW MID ATLANTIC DIVISION - MOFW BASE UPGRADES	270,332	113,123						114,844		42,365		
C.EN.101245	WALL NEW YORK DIVISION - RETAINING WALL UPGRADES	202,459	6,830						195,629				
C.EN.101249	WALL MID ATLANTIC DIVISION - RETAINING WALL UPGRADES	92,772	3,781								88,992		
C.EN.101254	BGSG NEW YORK DIVISION - SIGNAL BRIDGE SAFETY UPGRADES	9,331	247						9,085				
C.EN.101257	BGTI NEW YORK DIVISION - BRIDGE TIMBER REPLACEMENT	83,644	3,626						80,018				
C.EN.101259	BGUG MID ATLANTIC DIVISION - UNDERGRADE BRIDGE UPGRADES	1,089,609	699,837								389,772		
C.EN.101262	BGUG NEW YORK DIVISION - UNDERGRADE BRIDGE UPGRADES	131,568	39,889						5,075		86,604		
C.EN.101273	MOFW NEW YORK DIVISION - MOFW BASE UPGRADES	142,483	-			142,483*							
C.EN.101290	BGMS NEW YORK DIVISION - MOVABLE BRIDGE UPGRADES	23,524	322						23,203				
C.EN.101291	BGMS NEW ENGLAND DIVISION - MOVABLE BRIDGE UPGRADES	(1,059)	(1,059)										
C.EN.101317	CABC HELLGATE LINE - C&S CABLE RENEWAL	218	218										
C.EN.101319	INT PENN INTERLOCKING-C&S INTERLOCKING UPGRADES DESIGN	55,089	55,089										
C.EN.101345	STIP NEW ENGLAND DIVISION - RIDE QUALITY IMPROVEMENT PROGRAM	(635,049)	(635,049)										
C.EN.101357	TEL NEW ENGLAND DIVISION - REPLACE COMM EQUIPMENT HOUSES	(890)	(890)										
C.EN.101372	CABF NEW ENGLAND DIVISION - INSTALL INTERLOCKING FIBER CABLE	3,552	3,552										

*Preliminary proposal from Amtrak, subject to approval.

			FY17 Actuals										
Program Code	Project Name	FY17 Actual	Amtrak	CTDOT	DelDOT	LIRR*	MARC	MBTA	NJT	RIDOT	SEPTA	VRE	3rd party
3. Amtrak - New Projects (Not in FY17 Plan, but with Actuals in FY17)													
C.EN.101385	TRN P&H LINE TRANSMISSION LN SUB 40 TO 41-UPGRS CONSTRUCTION	1,168	107						1,061				
C.EN.101387	SUB FRANKFORD SUB 30 - TRANSFORMER INSTALLATION	2,557	487								2,070		
C.EN.101388	CAT B&P TUNNEL - CATENARY BRACKET UPGRADES	19,583	19,583										
C.EN.101397	SUB LANDISVILLE SUB 69 - TRANSFORMER INSTALLATION	42,301	42,301										
C.EN.101410	SUB PHILADELPHIA SUBDIVISION - SUBSTATION UPGRADES-DIVISION	40	24		16								
C.EN.101414	CATC NEW ENGLAND DIVISION-CONSTRUCT BRIDGE ICILE MITIGATION	138,577	138,577										
C.EN.101418	SUB NEW ENGLAND DIVISION - SUBSTATION SCADA-RTU UPGRADES	161,736	161,736										
C.EN.101419	ABS NEW YORK DIVISION WEST - C&S CABLE REPLACEMENT	82,285	18,243						64,042				
C.EN.101421	ABS MID-ATLANTIC NORTH - C&S CABLE REPLACEMENT	343,577	4,185								339,393		
C.EN.101425	TEL HARRISBURG LINE - COMM SHELTER BACKUP POWER UPGRADES	105,409	48,144								57,265		
C.EN.101426	TEL MID-ATLANTIC DIVISION - COMM SHELTER ALARM SYSTEM UPGRS	1,948	1,948										
C.EN.101427	TEL PHILADELPHIA COMM CTRL CENTER-BATTERY PLANT REPLACEMENT	111,256	111,256										
C.EN.101436	INT HOOK INTERLOCKING - UPGRADE TO MICROLOK 2	8,879	-								8,879		
C.EN.101455	EQIV ENGINEERING - VEHICLE ACQUISITION	6,469,358	6,469,358										
C.EN.101456	EQIM ENGINEERING - ROLLING STOCK HEAVY OVERHAULS	3,915,893	3,915,893										
C.EN.101467	SUB RHEEMS SUB 70 - TRANSFORMER INSTALLATION	8,258	8,258										
C.EN.101474	INT AMTRAK NEC NYD WEST - INTERLOCKING UPGRADES	198,818	198,818										

*Preliminary proposal from Amtrak, subject to approval.

			FY17 Actuals										
Program Code	Project Name	FY17 Actual	Amtrak	CTDOT	DelDOT	LIRR*	MARC	MBTA	NJT	RIDOT	SEPTA	VRE	3rd party
3. Amtrak - New Projects (Not in FY17 Plan, but with Actuals in FY17)													
C.EN.101510	SWHT NEW ENGLAND DIVISION - ENERGY EFFICIENT SW HEATER REPL	90,447	90,447										
C.EN.101512	INRL SWIFT INTERLOCKING - INTERLOCKING RENEWAL	1,536,623	48,688						1,487,935				
C.EN.101518	POLE MID-ATLANTIC NORTH - CATENARY POLE ATTACHMENT UPGRADES	(4,323)	(4,323)										
C.EN.101519	FREQ ELECTRIC TRACTION - FREQENCY CONVERTER UPGRADES	2,716	2,716										
C.EN.101520	EQIR ELECTRIC TRACTION - MAINTENANCE EQUIPMENT ACQUISITION	1,455,457	1,455,457										
C.EN.101524	SWHT HAM INTERLOCKING - SWITCH HEATER IMPROVEMENTS	4,218	55								4,163		
C.EN.101549	TURN NEW YORK DIVISION WEST - INTERLOCKING STEEL RENEWAL	(6,698)	(6,698)										
C.EN.101551	TIES NEW YORK DIVISION - CONCRETE TIE REPLACEMENT	3,026	1,856			121*					1,049		
C.EN.101552	RAIL NEW YORK DIVISION WEST - JOINT ELIMINATION	14,444	1,199						2,561		10,684		
C.EN.101553	BLST NEW YORK DIVISION - VACUUM TRAIN PROGRAM	177,736	7,002			5*			169,950		780		
C.EN.101555	BLST NEW ENGLAND DIVISION - SPOT UNDERCUTTING PROGRAM	1,101,911	1,100,418					1,492					
C.EN.101556	RAIL NEW YORK DIVISION WEST - INSULATED JOINT REPLACEMENT	2,201	554								1,647		
C.EN.101561	TURN MID-ATLANTIC DIVISION - INTERLOCKING STEEL RENEWAL	156,775	90,672								66,103		
C.EN.101562	RAIL NEW YORK DIVISION EAST - JOINT ELIMINATION	54,280	54,280										
C.EN.101563	TIES NEW YORK DIVISION EAST- TIE/ TIMBER PROGRAM	4,675	3,312						1,363				
C.EN.101564	RAIL NEW ENGLAND DIVISION - JOINT ELIMINATION	17,958	17,848							110			
C.EN.101565	RAIL NEW YORK DIVISION EAST - INSULATED JOINT REPLACEMENT	20,885	20,885										
C.EN.101566	TIES MID-ATLANTIC DIVISION - TIE/ TIMBER PROGRAM	1,513,707	1,356,804								139,973	16,931	

*Preliminary proposal from Amtrak, subject to approval.

			FY17 Actuals										
Program Code	Project Name	FY17 Actual	Amtrak	CTDOT	DelDOT	LIRR*	MARC	MBTA	NJT	RIDOT	SEPTA	VRE	3rd party
3. Amtrak - New Projects (Not in FY17 Plan, but with Actuals in FY17)													
C.EN.101567	TIES MID-ATLANTIC DIVISION - CONCRETE TIE REPLACEMENT	4,455	2,305		639						1,510		
C.EN.101568	RAIL MID-ATLANTIC DIVISION - INSULATED JOINT REPLACEMENT	7,822	6,147								1,675		
C.EN.101569	GEOM MID-ATLANTIC DIVISION - SURFACING PROGRAM	152,229	115,085								37,144		
C.EN.101570	GEOM NEW ENGLAND DIVISION - SURFACING PROGRAM	94,436	46,188	28,611				11,565		8,073			
C.EN.101572	CAT PERRYVILLE SUBDIVISION - CATENARY HARDWARE RENEWAL	18,948	18,948										
C.EN.101573	TURN NEW YORK DIVISION EAST - INTERLOCKING STEEL RENEWAL	79,868	79,868										
C.EN.101574	GEOM NEW YORK DIVISION - SURFACING PROGRAM	14,973	3,886			41*			5,829		5,218		
C.EN.101575	TURN NEW ENGLAND DIVISION - INTERLOCKING STEEL RENEWAL	25,328	23,032					2,296					
C.EN.101576	RAIL MID-ATLANTIC DIVISION - JOINT ELIMINATION	10,168	9,466								702		
C.EN.101577	TIES NEW ENGLAND DIVISION - CONCRETE TIE REPLACEMENT	7,905	1,168					407		6,330			
C.EN.101579	FAST NEW YORK DIV - REPLACE CONCRETE TIE FASTENER HARDWARE	55,352	54,160						1,192				
C.EN.101580	BLST MID-ATLANTIC DIVISION - SPOT UNDERCUTTING PROGRAM	430,810	203,792		1,236						225,782		
C.EN.101581	CAT PERRYVILLE SUBDIV INTERLOCKING - SECTIONALIZING SW REPL	19,759	19,759										
C.EN.101582	TIES NEW ENGLAND DIVISION - TIE/ TIMBER PROGRAM	16,348	(2,483)					2,788		16,043			
C.EN.101592	TKRN TRENTON NJ - INTERCHANGE EXTENSION	177,175	3,384								173,791		
C.EN.101606	INT RIVER-POINT INTERLOCKING - AIR COMPRESSOR UPGRADES	72,354	72,354										
C.EN.101620	INT NEW ENGLAND DIVISION- INTERLOCKING SURGE PROTECTION UPGRS	52,654	28,526										24,127
C.EN.101659	EQIR ADVANCED TECHNOLOGY TRACK INSPECTION SYSTEMS	94,568	94,568										

*Preliminary proposal from Amtrak, subject to approval.

			FY17 Actuals										
Program Code	Project Name	FY17 Actual	Amtrak	CTDOT	DelDOT	LIRR*	MARC	MBTA	NJT	RIDOT	SEPTA	VRE	3rd party
3. Amtrak - New Projects (Not in FY17 Plan, but with Actuals in FY17)													
C.EN.101700	MOFE AMTRAK NEC - MOFE FACILITY UPGRADES	61,182	61,182										
C.EN.101726	CETC AMTRAK NEC - ADVANCED TRAIN CONTROL	677,854	677,854										
C.EN.101731	ABS AMTRAK NEC - AS IS IN SERVICE SIGNAL SYSTEM REVISIONS	121,289	121,289										
C.EN.101733	BGCS NJ006.10 PORTAL - UPGRADE MITER RAILS PROXIMITY SENSORS	125,205	57,776						67,429				
C.EN.101735	ABS BACON TO GRACE - UPGRADE SIGNAL SYSTEM TO 562	1,593,784	1,593,784										
C.EN.101736	INT AMTRAK NEC NYD EAST - INTERLOCKING UPGRADES	149,358	34,243						115,114				
C.EN.201031	INT KINGSTON INTERLOCKING - UPGRADE TO MICROLOK 2	1,664,797	1,664,797										
C.EN.201126	STIP BRANDY TO RAGAN - SECTION IMPROVEMENT	5,264,391	1,976,949		432								3,287,010
C.EN.201148	RAIL NORTHEAST CORRIDOR-MITRE RAIL/EXPANSION JT REPLACEMENT	(16,127)	(16,127)										

*Preliminary proposal from Amtrak, subject to approval.

Figure C-7, Amtrak Total

	FY17 Actual	Amtrak	CTDOT	DelDOT	LIRR*	MARC	MBTA	NJT	RIDOT	SEPTA	VRE	3rd party
Amtrak Total	437,618,885	270,074,399	3,946,650	2,039,267	3,597,380	13,337,854	6,942,877	74,560,077	1,473,451	30,498,686	438,676	30,709,567

*Preliminary proposal from Amtrak, subject to approval.

Figure C-8, Connecticut DOT

Program Code	Project Name	FY17 Actual
DOT01350301CN	NHL CT - Bridges - Atlantic Street, Stamford	21,098,039
DOT03000149	Positive Train Control	18,367,034
DOT03000170CN DOT03000182CN DOT03000190CN	NHL CT - Track Program C Program	18,516,516
DOT03000173CN DOT03000161CN	NHL S Program/Timber Program	5,054,615
DOT03000175PE	NHL CT - Bridge Design	1,891,438
DOT0300072CN DOT03000153CN DOT03010169CN	NHL CT - Catenary Replacement - Segments C1A and C2 - Construction Substation Replacements	36,685,926
DOT03010092CN	NHL CT - Bridges - sound Beach/Tomac Ave Construction	5,297,412
DOT03010154CN DOT03000150CN DOT03010154CN	NHL CT - Signal System Replacement	2,193,482
DOT03010168PE DOT3010139CN	Devon Repairs	1,229,357
DOT03010173CN	Cos Cob Interim Repairs	4,408,721
ED (DOT03010172CN)	NHL - WALK Movable Bridge	503,040
	Connecticut DOT Total	**115,245,581**

Figure C-9, Metro-North Railroad

Program Code	Project Name	FY17 Actual
L08A2645	GIS Expansion	11,725
L08A2735	Purchase Two (2) Catenary Maintenance Vehicles	700,317
L08A2737	Autonomous Track Geometry Measurement System	6,146
M6030105	Maintenance of Way Equipment / Rolling Stock	73,389
M6030210	Replace / Repair Undergrade Bridges	445,755
M6050101	Bridge 23	2,633,211
M6080104	Independent Engineer	2,839
M7020207	Customer Communication	- *
M7030101	Cyclical Track Program	661,591
M7030102	Cyclical Repl. Insulated Joint	2,101
M7030103	Rock Slope Inspection/Stabilization	12,784
M7030107	Rebuild Retaining Walls	298,369
M7030109	Purchase MoW Equipment	85,790
M7030201	Overhead Bridge Program - E of H	3,161,147
M7030208	Replace Timbers - Undergrade Bridges	1,035,050
M7030212	Catenary Structure Rehab	- *
M7040101	Network Infrastructure Replacement	- *
M7080102	Environmental Remediation	1,304
M7080103	Railroad Protective Liability	- *
M7080104	Independent Engineer	95,394
M7080106	Program Administration - 2015	184820.7726
M7080107	Program Scope Development - 2015	133,224
M7080108	OCIP Insurance	136,872
	Metro-North Railroad Total	**9,681,828**

*Project included for reference only. Project was included in the NEC Commission FY17 One-Year Implementation Plan (approved September 2016). No spending for this project is reported in the territory between New Rochelle NY and the NY/CT state line in federal fiscal year 2017.

Figure C-10, NEC Total

	FY17 Actual
NEC Grand Total	562,546,294

	Amtrak	CTDOT	DelDOT	LIRR*	MARC	MBTA	NJT	RIDOT	SEPTA	VRE	3rd party	Not Spec.
NEC Grand Total	270,074,399	3,946,650	2,039,267	3,597,380	13,337,854	6,942,877	74,560,077	1,473,451	30,498,686	438,676	30,709,567	124,927,409

*Preliminary proposal from Amtrak, subject to approval.

Appendix D. Special Projects

The following is a list of Special Projects included in the FY17 NEC One-Year Implementation Plan organized by the coordinating agency and project type (i.e., Major Backlog Projects or Improvement Projects) listed alphabetically.

Amtrak

Major Backlog Projects

Improvement Projects

Connecticut DOT

Major Backlog Projects

Improvement Projects

Delaware DOT

Improvement Projects

Long Island Rail Road

Improvement Projects

Maryland DOT

Improvement Projects

MBTA

Improvement Projects

Metro-North Railroad

Improvement Projects

MTA Capital Construction

Improvement Projects

NJ TRANSIT

Improvement Projects

Pennsylvania DOT

Improvement Projects

Rhode Island DOT

Improvement Projects

SEPTA

Improvement Projects

Special Projects: Amtrak (Major Backlog)

Baltimore & Potomac Tunnel Replacement

Coordinating Agency: Amtrak

Partner Agency: Maryland DOT

Type: Major Backlog

Benefit: Shared

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project would replace the aging B&P Tunnel, a key chokepoint where the right-of- way is reduced from four to two tracks and the tunnel's tight curvature require trains to reduce speeds to 30 mph. The existing tunnel is in need of constant monitoring and maintenance at high cost. This project would replace the existing two-track tunnel with a new four-track tunnel (as four single track bores) on an improved alignment. Preliminary engineering and environmental review were funded by a $60 million High-Speed Intercity Passenger Rail (HSIPR) grant and the FRA issued the Record of Decision on March 24, 2017. Additional funding is required for final design and construction.

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Budget: $4,520,000,000

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Schedule:

NEPA: Apr 2011 - Oct 2017

PE: Nov 2013 - Oct 2017

Final Design: Oct 2017 - Dec 2021

Construction: Oct 2020 - Dec 2032

Source: Collected March 2018

Explanation of changes from 2017 Plan

N/A

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure	$38,731,000
Planned Activities	The FY17 project scope is to complete preliminary engineering (30% design plans) and environmental documentation (NEPA).

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure	$13,262,227
FY17 Accomplishments	Environmental review for the Baltimore & Potomac Tunnel Replacement was completed in March 2017 with FRA releasing a Record of Decision.

East River Tunnel Rehabilitation

Coordinating Agency: Amtrak

Type: Major Backlog

Partner Agency: LIRR, NJ TRANSIT

Benefit: Shared

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project would rehabilitate East River Tunnel tubes 1 and 2 which connect Penn Station, NY to Queens, NY. Each tunnel is approximately 13,000 feet in length. Through this project, both tunnel tubes will be gutted to the concrete liner and entirely rebuilt with new bench walls, communication systems, and electrical and signaling conduit. Rehabilitation of the track and drainage systems will require removal and replacement of track and ballast, new welded rail installations, new impedance bond installations, new I joint installations, drainage system cleaning, and the removal and replacement of the third rail for the entire length of each tube. Some funding is available through FRA Superstorm Sandy recovery grants, but a significant funding gap remains.

Source: FY18-22 Capital Investment Plan, collected Spring 2017

Project Budget: $750,000,000

Source: FY18-22 Capital Investment Plan, collected Spring 2017

Explanation of changes from 2017 Plan

N/A

Source: FY17 Annual Report Update, collected Jan 2018

Project Schedule:

Conceptual Design: Apr 2015 - Jan 2016

Final Design: Feb 2016 - Sep 2020

Construction: Oct 2020 - Sep 2025

Source: FY18-22 Capital Investment Plan, collected Spring 2017

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure $2,200,000

Planned Activities The FY17 project scope to restore 5 SCADA control panels that were submerged or damaged by Hurricane Sandy flood waters. These vital SCADA panels transmit critical status and action events from PSCC to the local control panels. The corrosion from brackish floodwaters ruined hundreds of pieces of vital equipment, including electromechanical relays, motors and switches. Furthermore, damaged sump pump/dewatering systems - located at mid river pump rooms, ventilation shafts, and yard pumping stations - and damaged light fixtures will be replaced in-kind. The light fixtures were either surged in salient water or exposed to a hostile environment resulting in the inability to release energy in the form of visible light. Finally, work will be undertaken to upgrade the damaged third rail system for Lines 1,2,3 and 4 in the East River Tunnels.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure $2,704,903

FY17 Accomplishments In October 2016, the team produced the Feeder Cable Study White Paper. In November 2016, the team completed the 30 percent design submittal. In July 2017, the team received the Notice to Proceed (NTP) for the Final Design and is now working on the Final Design Scope Preparation and procurement. In August 2017, as part of the Final Design Phase, a Value Engineering Report was initiated. It was produced prior to FY18, along with three night tunnel inspections. The team is producing an ongoing 3-tube Operations Analyses, which includes studies, presentations, system modeling, etc.

Gateway Component: Hudson Tunnel Project

Coordinating Agency: Amtrak

Type: Major Backlog

Partner Agency: NJ TRANSIT

Benefit: Shared

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project will construct a new two-track rail tunnel beneath the Hudson River and rehabilitate and modernize the existing two-track North River Tunnel, which was inundated with corrosive salt water during Superstorm Sandy and continues to deteriorate without comprehensive rehabilitation. Additional funding is required for construction. The project has been accepted by the FTA into project development for its Capital Investment Grant program but still requires funding for construction. The project is the subject of an Emerging Projects Agreement with USDOT which will lay the technical groundwork for obtaining federal Railroad Rehabilitation & Improvement Financing (RRIF) and/or Transportation Infrastructure Finance and Innovation Act (TIFIA) loans for construction of the project.

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Budget: $12,900,000,000

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Schedule:

NEPA: Apr 2016 - Mar 2018

PE: Apr 2016 - Jun 2018

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Explanation of changes from 2017 Plan

N/A

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure $20,900,000

Planned Activities The FY17 project scope will advance preliminary engineering and the environmental review process for the Hudson Tunnel Project environmental impact statement that is underway.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure $25,904,302

FY17 Accomplishments In October 2016, the Preliminary Engineering team completed the ten percent design submittal. In February 2017, the Port Authority Board approved the 2017-2026 Capital Plan that includes $2.7 billion for the Gateway Program; this amount includes previously authorized funding for preliminary engineering (March 2016) and Portal North Bridge (October 2016, subject to facility certification and other conditions); the remainder of the Capital Plan amount requires board approval. In July 2017, the Hudson Tunnel Project Draft Environmental Impact Statement was released, with public hearings held in NY and NJ. In September 2017, the Hudson Tunnel Project financial rating package was submitted for inclusion in the FY18 President's Budget.

Gateway Component: Portal North Bridge

Coordinating Agency: Amtrak

Type: Major Backlog

Partner Agency: NJ TRANSIT

Benefit: Shared

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project would replace the century-old swing-span Portal Bridge over the Hackensack River with a new two-track, fixed-span bridge, allowing a modest expansion of capacity. Amtrak and NJ TRANSIT have completed final design and environmental review. The project has been accepted by the FTA into project development for its Capital Investment Grant - Core Capacity grant program but still requires funding for construction. The project is the subject of an Emerging Projects Agreement with USDOT which will lay the technical groundwork for obtaining federal Railroad Rehabilitation & Improvement Financing (RRIF) and/or Transportation Infrastructure Finance and Innovation Act (TIFIA) loans for construction of the project.

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Budget: $1,700,000,000

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Schedule:

Construction: Aug 2017 - Jun 2025

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Explanation of changes from 2017 Plan

N/A

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure $17,000,000

Planned Activities The first construction contract, which consists of early action construction items, is expected to be awarded in September 2016. In FY17, property easements that will facilitate contractor access to the site are expected to be purchased. Subsequently, construction-staging work will begin, including building access roads on both sides of the Hackensack River and a pier that would allow barges to load and unload materials.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure $22,234

FY17 Accomplishments In October 2016, the Port Authority Board authorized debt service support for up to $284 million in borrowing for Portal North Bridge by Gateway Program Development Corporation (GDC), and up to $18 million in associated fees (subject to facility certification and other conditions). In May 2017, NJ TRANSIT Board authorized the award of the early work construction contract for the Portal North Bridge Project. In July 2017, FTA issued a Record of Decision to formally adopt FRA's Final EIS for the Portal Bridge Capacity Enhancement Project (Portal North Bridge) and subsequent reevaluations. In September 2017, the Portal North Bridge financial rating package was submitted for inclusion in the FY18 President's Budget.

Pelham Bay Bridge Replacement

Coordinating Agency: Amtrak

Type: Major Backlog

Partner Agency: MNR

Benefit: Shared

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project would replace the century-old movable Pelham Bay Bridge, which crosses the Hutchinson River in the Bronx, NY, with either a new high-level fixed bridge or a mid-level movable bridge with clearance for marine traffic. Additional funding is required for evaluation of these alternatives as well as the NEPA compliance for this project

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Budget: $410,000,000

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Schedule:

PE: 2018 - 2019

Final Design: 2020 - 2021

Construction: 2021 - 2025

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Explanation of changes from 2017 Plan

N/A

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure $1,000,000

Planned Activities The FY17 project scope is associated with the design of the replacement bridge, including a Comprehensive Operational Analysis in coordination with FRA.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure $108,674

FY17 Accomplishments The team is currently completing Pre-NEPA work to clarify some issues raised by FRA. Once pre-NEPA work is complete and Amtrak has finalized answers to FRA's Pre-NEPA issues, Amtrak will meet with FRA to determine whether the NEPA process will proceed as an EA or EIS. The team is planning meetings with the Coast Guard, NYCDOT and the Army Corps of Engineers to get consensus on potential project issues and how these may impact their infrastructure. The team is currently reviewing the project with the New York City Harbor Group on the preferred fixed bridge option; meetings will determine the approximate minimum vertical clearance of this option.

Susquehanna River Bridge Replacement

Coordinating Agency: Amtrak

Partner Agency: Maryland DOT

Type: Major Backlog

Benefit: Shared

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project would replace the existing two-track movable Susquehanna River Bridge with two modern high-level, fixed structures, each with two tracks. The project would benefit commuter and intercity rail as well as Norfolk Southern, which uses the segment to access the Port of Baltimore. Using a $22 million High-Speed Intercity Passenger Rail (HSIPR) grant, preliminary engineering and environmental review were completed in FY17. Additional funding is required for final design and construction.

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Budget: $1,700,000,000

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Schedule:

NEPA: Jun 2013 - Apr 2017

PE: Jun 2013 - Apr 2017

Final Design: May 2017 - Oct 2020

Construction: Jun 2020 - Oct 2025

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Explanation of changes from 2017 Plan

N/A

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure	$10,846,000
Planned Activities	The FY17 project scope is to complete preliminary engineering (30% design plans) and environmental documentation (NEPA).

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure	$2,673,463
FY17 Accomplishments	Environmental review for the Susquehanna River Bridge replacement was completed in May 2017 with FRA issuing a Finding of No Significant Impact (FONSI).

Baltimore Penn Station Master Plan

Coordinating Agency: Amtrak

Partner Agency: Maryland DOT

Type: Improvement

Benefit: Shared

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project would provide a comprehensive and integrated approach for Baltimore Penn Station to advance key near-term state-of-good-repair projects while establishing a development framework to leverage under utilized assets and accommodate future growth and redevelopment, potentially through a public private partnership. Additional funding is required for design and construction of improvements.

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Budget: $100,000,000

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Explanation of changes from 2017 Plan

N/A

Source: FY17 Annual Report Update, collected Jan 2018

Project Schedule:

Conceptual Design: May 2017 - Feb 2018

PE: Mar 2018 - Apr 2019

Final Design: Apr 2018 - Apr 2019

Construction: Start Jan 2020

Source: FY18 One-Year Implementation Plan, collected Fall 2017

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure $5,000,000

Planned Activities The FY17 work program will continue master plan development and implementation efforts at Baltimore Penn Station including the replacement of the station's roof system (SOGR Group 1a & 1b), other building repair engineering and design work (SOGR Group 2), and rail infrastructure improvements. Additional project elements include the solicitation to select a preferred master developer to partner with all aspects of project delivery and the execution of a development agreement. The master developer partner will work with Amtrak to advance all aspects of project delivery, including master plan development, design, construction, financing, as well as identification of expansion opportunities and commercial development in surrounding areas.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure $1,254,863

FY17 Accomplishments Through a procurement process, Amtrak selected "Penn Station Partners" for a Master Developer Partnership to facilitate: 1) design and construction of additional near-term state of good repair projects; 2) develop a long-term investment in lifecycle replacements; and 3) perform ongoing operations and maintenance. The Master Developer's proposal included preliminary concepts for station expansion and commercial development on Amtrak-owned property surrounding Baltimore Penn Station. Designs for critical state of good repair improvements have been completed and prepared for construction.

Gateway Program: Planning and Program Management

Coordinating Agency: Amtrak

Partner Agency: NJ TRANSIT

Type: Improvement

Benefit: Shared

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: The Gateway Program would create four main line tracks between Newark, NJ and New York, NY to address and alleviate the most severe bottleneck on the NEC. Several of the Gateway Program elements are now progressing into design or construction and are carved out for the purposes of the NEC Capital Investment Plan, including the Hudson Tunnel Project, Portal North Bridge, Hudson Yards Concrete Casing, and the Sawtooth Bridge. The investments listed here focus on planning and program management for the rest of the program. Cost estimates for the full program are not yet complete as many project elements remain in early stages of development.

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Budget: $30,181,812

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Schedule:

Conceptual Design: Jan 2015 - Mar 2017

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Explanation of changes from 2017 Plan

N/A

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure $90,900,000

Planned Activities The FY17 project scope will advance planning efforts for discrete project elements in the Gateway Program, including design of Sawtooth Bridge replacement, Penn Station Expansion, and Renewal of the Northeast Corridor "Highline." The scope will also include completing construction on the Hudson Yards Right-of-Way Preservation Program – 11th Avenue Viaduct section, and beginning construction on the replacement of Portal Bridge.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure $26,554,926

Note: Total spending in FY17 was $26.5M and $22.4M corresponds to the Tunnel Box.

(Source: NEC Commission Staff)

FY17 Accomplishments In November 2016, the Gateway Program Development Corporation (GDC) was incorporated as a New Jersey non-profit corporation to advance and deliver the Gateway Program. In January 2017, the GDC entered into Emerging Projects Agreement with USDOT for technical cooperation on low-cost long-term federal loans. In August 2017, the GDC Issued a Request for Information for private sector interest and feedback on the Hudson Tunnel Project financing and delivery structures. Responses were received and reviewed by the GDC in September 2017, followed by meetings with the private sector respondents.

Kingston Track and Platform Capacity Improvements

Coordinating Agency: Amtrak

Partner Agency: RIDOT

Type: Improvement

Benefit: Sole

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: The FY17 project scope is associated with the completion of all remaining construction elements. This project is scheduled for completion in Summer 2017.

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Project Budget: $41,000,000

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Project Schedule:

Construction: Jun 2015 - Aug 2017

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Explanation of changes from 2017 Plan

N/A

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure	$4,000,000
Planned Activities	The FY17 project scope is associated with the completion of all remaining construction elements. This project is scheduled for completion in Summer 2017.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure	$14,865,618
FY17 Accomplishments	Amtrak and Rhode Island DOT completed a capacity expansion project in Kingston, RI. The project completed two high-level platforms at Kingston Station to provide full access to passengers with disabilities and a new third track to expand capacity and reduce train delays in this section of the NEC. This work required the installation of turnouts, crossovers, switches, catenary and electric traction infrastructure, as well as ballast, grading and track work. The project was managed and designed by Amtrak in partnership with RIDOT, and was partially funded by a High-Speed Intercity Passenger Rail (HSIPR) Program grant awarded to RIDOT.

Maryland Section Reliability Improvements

Coordinating Agency: Amtrak

Partner Agency: Maryland DOT

Type: Improvement

Benefit: Shared

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project will upgrade 30 miles of existing Track 1 in Maryland and make associated signal system and track upgrades for higher speed operations on the Washington-to-Baltimore section of the NEC. In addition, a new 1,050 foot side platform will constructed on Track 1 at New Carrollton Station, with associated vertical access and other required modifications to connect to the underground station.

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Budget: $40,200,000

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Schedule:

Construction: Jan 2017 - Aug 2020

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Explanation of changes from 2017 Plan

N/A

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure $1,100,000

Planned Activities Amtrak plans to retain an architectural / engineering firm to begin development of a design package for a new Track 1 side platform at New Carrollton Station. The design work will build on concepts to reduce trip time and enhance rail service. The design drawings will also be used to assess whether an easement or other agreement with WMATA may be needed if the new platform design overlaps or otherwise impacts WMATA`s property.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure $661,284

FY17 Accomplishments The team completed 95% of an analysis and track alignment design of a 30-mile segment between Hanson and Bridge Interlocking. The team commenced quality assurance/ quality control of internal track design through field site visits, and revised cost estimates accordingly. The field surveys shall determine if the existing right-of-way can support the new horizontal alignment or if minor design modifications are needed. The team provided Design of Track 1 alignment for the New Carrollton Station Project.

Moynihan Station

Coordinating Agency: Amtrak

Type: Improvement

Partner Agency: Other, LIRR

Benefit: Shared

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project expands Penn Station New York into the historic James A. Farley Post Office building, which will function as a joint Amtrak and Long Island Rail Road facility. Phase 1, which was completed in FY17, included the expansion and enhancement of the 33rd Street Connector between Penn Station and the West End Concourse; the extension and widening of the West End Concourse to serve nine of Penn Station's eleven platforms; new vertical access points and passenger circulation space; new entrances into the West End Concourse through the 31st and 33rd Street corners of the Farley building; and installation of an emergency ventilation system to improve life safety. Phase 2 (currently underway and associated with the funding and schedule information below) includes the construction of a new train hall occupying a sky-lit atrium section in the Farley building; construction of an emergency platform ventilation system at the perimeter of the Farley building; and improvements to the 33rd Street sub-street corridor connecting Penn Station and Moynihan Station. Moynihan Station Development Corporation (MSDC), the building owner, is coordinating the design of non-train hall work in collaboration with Amtrak and Long Island Rail Road. The project is being managed by the MSDC, a subsidiary of the Empire State Development Corporation, a public benefit corporation of the state of New York and the Port Authority of New York New Jersey, in cooperation with Amtrak and Long Island Rail Road.

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Budget: $1,850,000,000

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Schedule:

Construction: Mar 2016 - Jun 2019

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Explanation of changes from 2017 Plan

N/A

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure $185,192

Planned Activities The FY17 project scope is intended to close out Phase 1 of the project and is being reserved for activities such as project clean up and site demobilization. Phase I on the Moynihan Station Project is scheduled to be completed in October 2016.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure Total: $288,982,600*

- Amtrak: $211,426,316
- LIRR: $77,556,284

*Includes Phase 1 and 2 expenditures

FY17 Accomplishments Phase 1 was completed in FY17. This included: the expansion and enhancement of the 33rd Street Connector between Penn Station and the West End Concourse; the extension and widening of the West End Concourse to serve nine of Penn Station's eleven platforms; new vertical access points and passenger circulation space; new entrances into the West End Concourse through the 31st and 33rd Street corners of the Farley building; installation of an emergency ventilation system to improve life safety.

Phase 2 of Moynihan Station is underway.

New Jersey HSR Improvement Program

Coordinating Agency: Amtrak

Partner Agency: NJ TRANSIT

Type: Improvement

Benefit: Shared

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: With $450 million in funding from the U.S. Department of Transportation, Amtrak is upgrading its rail infrastructure to support more frequent high-speed rail service and to improve the reliability of current service between New York and Washington. This project will upgrade electrical power, signal systems, tracks and overhead catenary wires along a 23-mile section of track between Trenton and New Brunswick, New Jersey. Amtrak is upgrading 24 miles of rail infrastructure to support faster, more reliable and more frequent service for all NEC users. The project will overhaul power supply systems, signal systems, track infrastructure, and overhead catenary wire between Trenton and New Brunswick, NJ. Modern infrastructure will allow Acela services to reach 160 mph, their highest speed anywhere on the NEC.

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Budget: $450,700,000

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Schedule:

Final Design: Aug 2011 - Jun 2012

Construction: Aug 2012 - Aug 2019

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Explanation of changes from 2017 Plan

N/A

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure $45,630,604

Planned Activities The NJ High Speed Rail Improvement Program is scheduled for completion in FY17. The primary focus in FY17 will be the completion of the catenary installation for the project. Remaining aspects of key project components, including signals, bridge structures, and track, will also be completed.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure $59,269,263

FY17 Accomplishments Completed construction, commissioning and placed both Frequency Converter and Step-Up Yard at Metuchen in service. Completed wiring on Track #4 and returned the track to service from a continuous outage. Completed wire renewal on Track #3, installed constant tension catenary system between control point (CP) Clark and Midway and fixed termination between Midway and County during a continuous outage. Tested and commissioned new underground signal power line.

Newark Penn Station Platform Rehabilitation

Coordinating Agency: Amtrak

Partner Agency: NJ TRANSIT

Type: Improvement

Benefit: Shared

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project involves improvements to the condition, appearance and functionality on Platforms A, B, C and D in Newark Penn Station. Both Amtrak and NJ TRANSIT have responsibility to maintain to a state of good repair. To date, work on Platform E has been completed. This scope of this project includes the design and rehabilitation of Platforms A, B, C, and D; their roof/ canopy structures; and any other repairs deemed necessary by the initial structure assessment. The results of the structural assessment, which is planned to begin in FY17, may lead to a revised project scope and cost.

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Budget: $130,303,000

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Schedule:

Feasibility: Jul 2017 - Jan 2018

Conceptual Design: Feb 2018 - Sept 2019

PE: Feb 2018 - Sept 2019

Final Design: Oct 2019 - Sept 2020

Construction: Oct 2020 - Sept 2022

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Explanation of changes from 2017 Plan

N/A

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure $100,000

Planned Activities The FY17 project scope includes completing work on Platform E and closing out the contract by December 2016. Preliminary discussions are currently underway with Amtrak on the scopes of work proposed for the necessary and needed upgrades to Platforms A, B, C and D, as well as any other work or improvements that may be needed to restore the integrity of the platforms.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure $411,000

FY17 Accomplishments Physical construction activities were mostly completed in FY16. Expenditures in FY17 were to close out last and final invoices.

Next Generation High Speed Fleet Infrastructure: Ivy City/ Washington Terminal Yard Facility Improvements

Coordinating Agency: Amtrak

Type: Improvement

Partner Agency:

Benefit: Sole

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project will satisfy the anticipated maintenance requirements of a new High Speed Rail (HSR) fleet and an increase in service operations. The project scope includes the design and construction of infrastructure improvements for Ivy City Maintenance and Coach Yard Facility (also known as the Washington Terminal Yard) to support the Next Generation HSR Trainsets. The project elements funded by the RRIF loan include: (1) A new single-track, 1-story HSR S&I facility attached to the existing HSR S&I building; (2) HSR Train Scanner (an 18' x 28' train diagnostic facility): foundation with support bungalow and electric and telecommunications located before the Car Wash; (3) Three new electrified HSR storage tracks located at the northeast end of the yard and a non-electrified diesel storage track.

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Budget: $95,600,000

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Schedule:

Construction: Mar 2018 - Mar 2020

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Explanation of changes from 2017 Plan

N/A

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure $3,500,000

Planned Activities This project will include the design and construction of an enlarged high-speed rail maintenance facility to accommodate Next Generation High-Speed Rail equipment at Ivy City Yard, Washington D.C. The new and expanded facility will include a new service and inspection (S&I) building and a new set of "Ready Tracks" for staging trainsets, as well as associated demolition, grading and soil disposal, drainage, track, electric traction, communications & signals, pavement, utilities, and miscellaneous structures.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure $2,414,996

FY17 Accomplishments In January 2017, completed 30 percent design submittal and completed 60 percent design submittal in July 2017. In March 2017, collaborated with Transportation, Planning and Mechanical to reduce project scope elements to reduce costs.

Next Generation High Speed Fleet Infrastructure: Sunnyside Yard Facility Improvements

Coordinating Agency: Amtrak

Type: Improvement

Partner Agency:

Benefit: Sole

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: The project scope includes the design and construction of infrastructure improvements for Sunnyside Yard in Queens, NY to support the Next Generation High-Speed Rail (HSR) trainsets. The project elements funded by the RRIF loan include: A new separate two-track, 2-story HSR S&I facility, including welfare space on the second floor; and (3) Three new storage / service ready tracks with a run-through track and improvements to the Eastward Engine Track.

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Budget: $339,900,000

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Schedule:

Construction: Apr 2018 - Nov 2020

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Explanation of changes from 2017 Plan

N/A

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure	$25,000,000
Planned Activities	Work to be undertaken in FY17 includes the completion of design, the beginning of site preparation and early construction work, such as the relocation of Building 8 and 8A near the East Side Access Project portal opening as well as the installation of water, sewer and other necessary utility lines.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure	$16,580,534
FY17 Accomplishments	In early 2017, completed 30 percent design submittal and completed 60 percent design submittal in June 2017.

Paoli Transportation Center - Phase 1 (ADA & Infrastructure)

Coordinating Agency: Amtrak

Partner Agency: SEPTA

Type: Improvement

Benefit: Shared

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project will reconstruct Paoli Intermodal Station on SEPTA's Paoli/Thorndale Regional Rail Line and Amtrak's Keystone Corridor. Phase 1 will make the existing station ADA accessible and include a pedestrian overpass with elevators connecting to parking lots and a new high-level center platform. The outbound parking areas will be reconfigured and pedestrian linkages will be provided throughout the station area such as sidewalks and crosswalks. The project will also include changes to the railroad infrastructure as needed to accommodate the work. The construction cost for Phase 1 is approximately $44.7 million. SEPTA and PennDOT are contributing $30.7 million dollars and Amtrak is providing the balance of funding or $14 million.

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Budget: $52,700,000

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Schedule:

Construction: Jul 2016 - Dec 2018

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Explanation of changes from 2017 Plan

N/A

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure	$16,131,362
Planned Activities	The FY17 project scope is to continue Phase I construction.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure	$10,562,479
FY17 Accomplishments	The rail portion of the project has been completed to allow the building contractor to start construction of the island platform foundations. The contractor has completed the construction of the south tower foundation used to support the steel for the pedestrian overpass.

Philadelphia 30th Street Station District Plan Implementation

Coordinating Agency: Amtrak

Partner Agency: SEPTA

Type: Improvement

Benefit: Shared

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project includes immediate and long-term improvements in passenger and rail facilities and up to 10 million square feet of transit-oriented development over existing rail yards. Immediate work would include design and construction to bring 30th Street Station to a state of good repair and to enhance passenger facilities to alleviate congestion and accommodate future growth. Future work would build off the Philadelphia 30th Street Station District Plan, completed in June 2016. Additional funding is required for design and construction.

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Budget: $6,500,000,000

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Schedule:

Feasibility: Jun 2014 - Jun 2016

Conceptual Design: Oct 2016 - Sept 2020

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Explanation of changes from 2017 Plan

N/A

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure $7,120,000

Planned Activities The FY17 project scope is composed of two work packages. Work Package 1 is for state of disrepair needs and is focused on roof system improvements. Work Package 2 is focused on advancing the master plan concepts that improve the station and rail facilities to accommodate ridership growth and improve the passenger experience; work package 2 includes concourse improvements and expansion, exterior station plaza improvements, and implementation of real estate asset monetization strategies.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure $2,270,747

FY17 Accomplishments The team completed the design for an expanded North Concourse to accommodate projected ridership increases and improve the passenger experience with modern facilities and amenities. The Concept Plan considered space programming, pedestrian circulation, accessibility, ADA requirements, building mechanical systems, emergency egress and life-safety elements. The team completed the design for a new West Underground Concourse concept, which would provide a well-lit, covered, and safe connector between SEPTA's Market-Frankford subway line and Amtrak's 30th St. Station. This concept incorporates SEPTA's plans for an underground connection between its subway/ trolley station and integrates the Station Plaza concept from the 30th Street Station District Plan.

Washington Union Station 2nd Century Plan

Coordinating Agency: Amtrak

Partner Agency: Maryland DOT, VRE

Type: Improvement

Benefit: Shared

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project would build on the 2012 Washington Union Terminal Master Plan which outlined a long-term vision to redevelop the station to address capacity constraints and aging infrastructure as well as coordinate with the air rights project known as Burnham Place. The near-term program consists of modernizing the Claytor Concourse, implementing platform improvements for Tracks 15/16, electrifying Tracks 8/9, rehabilitating Track 22 for revenue service, and fully repairing the subbasement structural components. Two of these near-term projects- -the Claytor Concourse Modernization and Track 22 Rehabilitation--and their associated funding information have been extracted as stand-alone projects within this document. All of these near-term projects are funded for design which is expected to be completed by the end of FY17. Construction funds are needed for the bulk of the track work beginning in FY18. Near-term elements will be advanced in parallel with the preparation of an Environmental Impact Statement (EIS) for long-term improvements such as doubling rail passenger capacity and train capacity by modernizing and expanding station facilities and rail infrastructure. Improvements would also integrate three million square feet of transit-oriented development over the existing rail yard. Additional funding is required for design and construction of these long-term improvements once the EIS is complete in FY19 (tentatively).

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Budget: $10,000,000,000

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Explanation of changes from 2017 Plan

N/A

Source: FY17 Annual Report Update, collected Jan 2018

Project Schedule:

Feasibility: Nov 2013 - Jun 2014

Conceptual Design: Jun 2014 - Nov 2014

PE: Nov 2015 - Apr 2016

Final Design: Apr 2016 - Dec 2017

Construction: Jun 2017 - Jan 2020

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Continued on the next page →

Washington Union Station 2nd Century Plan (continued)

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure $17,000,000

Planned Activities

The Washington Union Station Master Plan Implementation ("2nd Century Plan") project is anticipated to be developed in phases. Phase 1 of the 2nd Century Plan, which is ongoing, will deliver a modernized and reconfigured concourse, address key life safety issues, and advance construction of improvements to tracks, platforms and associated infrastructure adjacent to the station (called the "terminal rail yard").

All of these Phase 1 projects have independent utility to Amtrak. The FY17 project scope also supports the advancement of the Union Station Expansion Project Environmental Impact Statement (EIS) for the long-term redevelopment of the station, in addition to continued project coordination and engagement requirements.

The FY17 project scope will advance construction on the Claytor Concourse Modernization Project. This project will double the passenger spaces in the existing Claytor Concourse, improve egress and safety, provide for better operational practices, and enhance the overall passenger experience at Washington Union Station.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure $11,588,403

FY17 Accomplishments

Long Term Master Plan Program: Through the Terminal Infrastructure program, the team determined a final concept track plan and infrastructure layout for the reconstruction of the tracks, platforms and related infrastructure at Union Station and successfully completed RTC operations modeling on the final concept. The team completed geotechnical testing work to inform constructability information. The team worked with FRA as they advanced the EIS through the alternatives refinement stage.

Near Term Improvements Program: The team completed the design for Electrification of tracks 8 & 9, completed design for Reconstruction of Platform 15/16, advanced design for Satellite Commissary Relocation, awarded a design contract, and advanced this design past the concept phase, for Crew Base Renovation, and launched the procurement process for final design services for Relocation of Substation 25A.

Claytor Concourse Renovation Program: The team continued construction on the HVAC Relocation Project, advanced design on the Amtrak Police Department Relocation, advanced design to 90 percent for the Concourse Modernization Program and launched the procurement process to secure a Construction Manager.

Wilmington Maintenance of Equipment Facility - Complex Replacement

Coordinating Agency: Amtrak

Type: Improvement

Partner Agency:

Benefit: Sole

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project would fully replace the Maintenance of Equipment Repair Shop (Buildings 1 & 2) at the Amtrak Maintenance Complex in Wilmington, DE. The project has completed the 30% design phase, and additional funding is needed to complete design work and construct the facilities.

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Budget: $343,000,000

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Schedule:

Final Design: Oct 2018 - Sept 2019

Construction: 2019 - 2022

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Explanation of changes from 2017 Plan

N/A

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure $3,500,000

Planned Activities Design work for the replacement buildings is largely complete. Contaminated soils have been remediated and the rebar and concrete foundations have been completed. In FY17 underground building utilities will be installed and backfilled. Floor slab will be poured and construction of a new 7,000 sq. ft. building will begin.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure $2,008,960

FY17 Accomplishments The team completed the Paint Shop Upgrade Plan; this was separated out of the overall Plan due to the need to complete this work sooner than the overall project. The team investigated possibilities of a new bridge crane in Car Shop 1. Because the design contract with Burns Engineering, the original design engineer, terminated on 12/31/16, Procurement officially closed this contract and requested all existing work products be sent to the Contracting Officer's Technical Representative (COTR).

Devon Bridge Replacement

Coordinating Agency: Connecticut DOT

Type: Major Backlog

Partner Agency: Amtrak

Benefit: Shared

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project would replace the functionally obsolete 111-year-old Devon Bridge. The bridge, which carries four New Haven Line tracks over the Housatonic River, has experienced serious deterioration, and is the next most critical movable bridge for replacement on the New Haven Line portion of the NEC after the Walk Bridge Program. Additional funding is required for design and construction of a replacement bridge.

Source: FY18-22 Capital Investment Plan, collected Spring 2017

Project Budget: $1,500,000,000

Source: FY18-22 Capital Investment Plan, collected Spring 2017

Project Schedule:

Conceptual Design: End Jan 2017

NEPA: End Jul 2017

PE: End Apr 2018

Final Design: End Apr 2020

Construction: Start Sep 2023

Source: Annual Report Update, collected Jan 2018

Explanation of changes from 2017 Plan

Construction will begin in 2023 following the completion of the WALK Bridge replacement program. NEPA will be delayed 2 years so it does not expire prior to construction.

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure	$3,000,000
Planned Activities	The FY17 project scope includes conceptual design, preliminary engineering, and NEPA.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure	$2,131,847
FY17 Accomplishments	Consultant has begun work on a conceptual design. Conceptual design is due in Spring of 2018. Project is on schedule.

Walk Bridge Program

Coordinating Agency: Connecticut DOT

Type: Major Backlog

Partner Agency: Amtrak

Benefit: Shared

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project will replace the functionally obsolete 120-year-old Walk Bridge which has experienced increasing deterioration of electrical and mechanical components. CTDOT has committed to replace this asset with a combination of federal and state funds. Construction will require an extended continuous outage of two tracks where normally four are operational. This change in track availability could cause changes in schedule, decreases in reliability, or even reductions in service. Two additional capital projects in the vicinity of Walk Bridge will help address these concerns. The construction of CP243 interlocking will shorten the block length between Westport and Norwalk while increasing operational flexibility. Additionally, improvements at Dock Yard including the electrification of the lower Danbury Branch will allow for Metro-North trains to turn at Norwalk without increasing congestion on the main line of the NEC.

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Budget: $1,170,000,000

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Schedule:

NEPA: End Jun 2017

Final Design: End Feb 2019

Construction: June 2019 - Sep 2023

Source: Annual Report Update, collected Jan 2018

Explanation of changes from 2017 Plan

Costs now reflect inclusion of the Danbury Branch electrification and new interlocking breakout projects. Schedule updates based on updated staging requirements and completion of work on breakout projects.

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure	$85,000,000
Planned Activities	The FY17 project scope includes NEPA, preliminary design, final design, and early procurement.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure	$38,928,000
FY17 Accomplishments	NEPA complete, bridge replacement in final design, early procurement and first two breakout projects related to electrification of the Danbury Branch and establishment of a new interlocking started construction.

CT*rail* Hartford Line Rail Program

Coordinating Agency: Connecticut DOT

Type: Improvement

Partner Agency: Amtrak

Benefit: Shared

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: The program is being progressed in phases to rebuild and upgrade infrastructure between New Haven, CT and Springfield, MA. The final phases, not yet funded for construction, include adding a second track between Hartford and Enfield, rehabilitating or replacing many bridges and culverts, and improving stations at Windsor and Windsor Locks. The program also includes costs associated with replacing the elevated track structure through Hartford and the Connecticut River Bridge in Windsor Locks.

Source: FY18-22 Capital Investment Plan, collected Spring 2017

Project Budget: $250,250,000

Source: FY18-22 Capital Investment Plan, collected Spring 2017

Project Schedule:

Final Design: End 2019

Construction: End May 2018

Source: Annual Report Update, collected Jan 2018

Explanation of changes from 2017 Plan

Addition of Phase 3A North work has moved project completion to May 2018. Construction work will allow for the launch of service in May of 2018.

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure	$200,000,000
Planned Activities	The FY17 project scope is to complete construction of Phases 1, 2, and 3A south.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure	$120,257,000
FY17 Accomplishments	Construction of Phases 1 and 2 nearly complete. Phase 3A south is proceeding. New Stations opened in Wallingford and Meriden.

New Haven Line Stations Improvements

Coordinating Agency: Connecticut DOT

Type: Improvement

Partner Agency: Amtrak

Benefit: Shared

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This program will upgrade and repair the Stamford and Noroton Heights Stations to ensure continued safe operation and improve the passenger experience. Work will increase canopy and windscreen coverage, provide additional pedestrian paths, repair and replace platform sections that are failing due to their age, and ensure ADA compliance. The program also includes a parking garage and pedestrian bridge for New Haven Station, the new Barnum Station in Bridgeport, and the installation of real time audio and video systems at all main line stations.

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Budget: $320,000,000

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Schedule:

Construction: End Nov 2018

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Explanation of changes from 2017 Plan

N/A

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure $22,000,000

Planned Activities The FY17 project scope includes construction of improvements at Stamford.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure $3,913,796

FY17 Accomplishments Work occurred at the Stamford Station including construction of additional canopy and windscreens, procurement of replacement escalators and completion of Passenger Information System upgrades. At Noroton Heights, phase 1 of the platform replacement was completed.

New Haven Yard Master Complex Improvements

Coordinating Agency: Connecticut DOT

Type: Improvement

Partner Agency: Amtrak

Benefit: Shared

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project is a multi-year initiative that receives funding on an annual basis to store and maintain the rail fleet and spare parts. Connecticut received $9 million in FTA Emergency Relief funds to install a backup feeder as an alternative power source at New Haven Yard. Additional funding would design and construct other modernization elements, including new facilities to improve efficiency and allow for growth.

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Budget: $750,000,000

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Schedule:

Construction: End Feb 2020

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Explanation of changes from 2017 Plan

No change in budget or schedule.

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure	$41,000,000
Planned Activities	The FY17 project scope includes construction of a maintenance of way building, construction of a parts storage facility, and upgrade of a yard power substation.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure	$29,551,718
FY17 Accomplishments	Construction of the Maintenance of Way Building completed, Parts Storage Building is nearing completion, Yard Power Upgrade is proceeding. Projects are substantially on schedule

Shore Line East Track & Catenary Improvements

Coordinating Agency: Connecticut DOT

Type: Improvement

Partner Agency: Amtrak

Benefit: Shared

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project will install electric catenary along key stretches of track in Old Saybrook, Guilford, and New London. The project will enable the transition of Shore Line East from diesel-powered trains to electric powered equipment and allow for future service expansion.

Source: FY18-22 Capital Investment Plan, collected Spring 2017

Project Budget: $20,000,000

Source: FY18-22 Capital Investment Plan, collected Spring 2017

Project Schedule:

Construction: End Aug 2018

Source: FY18-22 Capital Investment Plan, collected Spring 2017

Explanation of changes from 2017 Plan

No change in budget or schedule.

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure	$8,400,000
Planned Activities	The FY17 project scope includes construction of electric catenary.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure	$573,000
FY17 Accomplishments	Contractor work related to installation of pole foundations nearing completion.

Special Projects: Delaware DOT (Improvements)

Claymont Regional Transportation Center

Coordinating Agency: DelDOT

Type: Improvement

Partner Agency:

Benefit: Sole

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project will replace the existing Claymont, DE train station. The new station will be located north of the current site to the former Evraz Steel Site in Claymont, Delaware. It will meet all current ADA standards, with two high-level platforms and a pedestrian overpass over the NEC. The new station will be a multi-modal transportation center with improved access for bus transit, bicycles, and pedestrians as well as added parking capacity.

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Budget: $45,612,000

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Schedule:

NEPA: Jan 2016 - Mar 2017

Final Design: Apr 2017 - Aug 2018

Construction: July 2019-July 2021

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Explanation of changes from 2017 Plan

Additional work was required to finalize the NEPA document.

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure	$1,700,000
Planned Activities	The FY17 project scope is to advance preliminary engineering up to 30% (NEPA).

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure	$647,117
FY17 Accomplishments	The NEPA document was being finalized for submission to the Federal Transit Administration.

Delaware Third Track Program

Coordinating Agency: DelDOT

Type: Improvement

Partner Agency: Amtrak

Benefit: Shared

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project will increase capacity for intercity and commuter service between Wilmington and Newark, DE by eliminating a current two-track bottleneck and installing a third track throughout most of the state. This joint Amtrak/ Delaware DOT project is funded by a combination of federal and state sources.

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Budget: $49,000,000

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Schedule:

Construction: July 2013-July 2019

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Explanation of changes from 2017 Plan

Additional design work was requested for several components, which modified the construction schedule.

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure $14,747,651

Planned Activities The FY17 project scope is completion of civil and structural preparation and commencement of track construction and electric traction and communication and signals installation.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure $6,766,531

FY17 Accomplishments Construction of the Mill Creek Bridge and track work continued.

Newark (DE) Regional Transportation Center

Coordinating Agency: DelDOT

Type: Improvement

Partner Agency: SEPTA

Benefit: Shared

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project will construct an updated Regional Transportation Center in Newark, DE that will increase capacity and support additional SEPTA service between Newark and Wilmington, DE. The project includes construction of a new station house, a new platform, a new freight track connection, and a new pedestrian bridge so passengers are not forced to cross an active track. The project will make the station ADA-compliant, eliminate conflicts with freight operations, and permit expansion of regional and commuter service. This project is funded by a combination of federal, state, and local sources.

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Budget: $57,000,000

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Schedule:

PE: Jul 2013 - Dec 2015

Final Design: Dec. 2015-Sept. 2018

Construction: Mar. 2017-Dec. 2021

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Explanation of changes from 2017 Plan

N/A

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure $5,000,000

Planned Activities The FY17 project scope includes parking and building construction and 90% design for track work.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure $4,687,557

FY17 Accomplishments Design for the parking lot and access road was completed and construction began in August 2017. Design for the station building was completed and the contract was advertised for bidding in September 2017. Design continued for the remaining contract for Track A realignment and the platform and pedestrian bridge.

Special Projects: Long Island Rail Road (Improvements)

East River Tunnel - Right of Way Infrastructure Improvements

Coordinating Agency: LIRR

Type: Improvement

Partner Agency:

Benefit: Shared

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project includes several initiatives in the East River Tunnels, including: Stray Current Study; Communications antenna replacement in lines 3 and 4; Total track replacement in line 4; and 1st Avenue substation replacement. Work would evaluate and mitigate stray current in the tubes, improve radio system infrastructure in the tunnels and on the platforms at Penn Station New York used by Amtrak and LIRR, renew track and track-bed infrastructure in East River Tunnels 3 & 4, and install a new fully operational AC-DC traction power substation to replace a substation that was damaged by Hurricane Sandy. These projects would improve reliability and reduce delays and maintenance costs by replacing and/or upgrading existing equipment. Some funding for these improvements is available. Additional funding is required for other improvements.

Source: Collected March 2018

Project Budget: $88,500,000

Source: Collected March 2018

Project Schedule:

Construction: Jan 2017 - Dec 2022

Source: Collected March 2018

Explanation of changes from 2017 Plan

No changes in budget. The ERT TTRP will slip its completion from Dec 2018 to Dec 2019 due to zero outages granted in 2017. Antenna installation forecast to begin April, 2018 and be completed June 2020.

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure	$23,200,000
Planned Activities	The FY17 project scope is to complete Total Track Replacement of East River Tunnel Lines 3 and 4; continue First Avenue Substation Renovation; begin Communications Antenna Installation in East River Tunnel Lies 3 and 4 as well as Penn Station Platforms; and to continue the Stray Current Study.

FY17 Actual

Source: Collected March 2018

FY17 Expenditure	$2,879,172
Total Expenditure as of 9/30/17	$26,487,584
FY17 Accomplishments	Due to higher Penn Station priorities regarding track and tunnel outages for the Moynihan and ESA Projects, State of Good Repair and zero-defect maintenance, no outages were granted in 2017 to complete ERT Line 4 Total Track Rehabilitation Project (TTRP), which is 44% complete and is the last tunnel remaining on this project. Line 3 was completed in 2016. The First Avenue Substation achieved Beneficial Use in September 2017, with punch list work ongoing. The Stray Current project successfully restored Stary current containment equipment that was in disrepair. The High Density Signaling study completed a baseline analysis.

Penn Station New York - LIRR Projects

Coordinating Agency: LIRR

Type: Improvement

Partner Agency:

Benefit: Shared

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project will widen and raise the ceiling of the 33rd Street Corridor at Penn Station New York. This project will also repair and improve other assets at Penn Station New York. Work would include replacing elevators and escalators, upgrading customer service facilities, installing new HVAC equipment, improving lighting, and rehabilitating platforms. Elevators and escalators assets have reached the end of their useful life, stairways are in poor condition, and rehabilitation or upgrades are needed to HVAC, platforms, and lighting. Some funding for these improvements is available. Additional funding is required for other improvements.

Source: Collected March 2018

Project Budget: $233,000,000

Source: Collected March 2018

Project Schedule:

Construction: Jan 2017 - Dec 2020

Source: Collected March 2018

Explanation of changes from 2017 Plan

The HVAC Plant Replacement Project Budget was increased from $11M to $14M based on the estimated GC and material cost for the selected HVAC Plant option. The PSCI project was added to the 2015-19 Capital Program as part of the Governor's initiative in 2016 for $170M. The added capital PSCI Project has extended the schedule with a completion date of Dec 2020.

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure	$1,500,000
Planned Activities	The FY17 project scope is platform design and completion of Penn Station critical improvements 30% design.

FY17 Actual

Source: Collected March 2018

FY17 Expenditure	$5,501,444
Total Expenditure as of 9/30/17	$6,745,369
FY17 Accomplishments	The HVAC Plant Replacement Project continued design with 60% achieved in Sept 2017. The Penn Station Critical Improvements Project (PSCI) commenced 30% Preliminary Design in Jan 2017. The Platform and Stairs Renovation Preliminary Design contract was awarded in June 2017 with surveying ongoing. The Elevator & Escalator Refurbishment Contract was awarded in July 2017 with surveying ongoing.

River-to-River Rail Resiliency Projects (R4)

Coordinating Agency: LIRR

Type: Improvement

Partner Agency:

Benefit: Shared

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This program will protect the East River Tunnels and the West Side Yard against flood hazards to ensure connectivity at New York Penn Station for Amtrak, LIRR, and NJ TRANSIT. The program consists of multiple elements, including West Side Yard perimeter protection and drainage improvements, hardening the Queens Portals of the East River Tunnels, resiliency improvements within the East River Tunnels, including the installation of permanent emergency generators, and waterproofing of the entrances and manhole/conduit points of entry to two ventilation facilities.

Source: Collected March 2018

Project Budget: $64,171,912

Source: Collected March 2018

Project Schedule:

Conceptual Design: Sept 2016 - Oct 2018

Construction: Start 2019

Source: Collected March 2018

Explanation of changes from 2017 Plan

The Amtrak portion of the ERT Flood Mitigation scope estimated at $43,837,560 has been subtracted from the original project budget of $108,100,000 pending the transfer of this work from the FTA to the FRA, yet to be transferred. The 30% design has slipped from Oct 2017 to Feb 2018 due to the required soil borings at the Queens portals, yet to be scheduled. He overall project completion has not changed.

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure	$1,500,000
Planned Activities	The FY17 project scope is to advance 30% design and development an RFP for a design/build contract.

FY17 Actual

Source: Collected March 2018

FY17 Expenditure	$1,059,108
Total Expenditure as of 9/30/17	$1,408,454
FY17 Accomplishments	The FY17 project scope is to advance 30% design of the West Side Storage Yard (WSSY) drainage and flood walls, Queens East River Tunnel (ERT) Portal Flood Mitigation, and development of RFP's for design/build contracts. In November 2017, the draft 30% designs were submitted for review except for the ERT Line #2 Portal and ERT Deployable Flood Walls, which required soil borings yet to be performed.

BWI Thurgood Marshall Airport Station Interim Improvements

Coordinating Agency: Maryland DOT

Type: Improvement

Partner Agency: Amtrak

Benefit: Shared

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project will complete renovation of the existing BWI Thurgood Marshall Airport Station building to provide improved customer service, accessibility, and security. The project involves interior station improvements including new ADA-compliant restrooms; updated interior finishes and lighting; exterior station improvements to windows, the roof, and canopies; and a new pedestrian connector bridge between the north garage to the existing pedestrian bridge over the tracks.

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Budget: $9,502,000

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Schedule:

PE: Oct 2013 - Dec 2013

Final Design: Dec 2013 - Oct 2016

NEPA: Nov 2013 - Jan 2014

Construction: May 2017 - Jan 2021

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Explanation of changes from 2017 Plan

No change in budget. Change in schedule is due to no bidders the first time this project was advertised and one high bid the second time was advertised. The project was then readvertised a third time and 3 bidders have responded. The bid opening was completed on November 02, 2017 and Notice to Proceed is scheduled for March 14, 2018.

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure	$4,502,000
Planned Activities	The FY17 project scope is to commence construction. Notice to proceed for construction is scheduled to occur in November 2016. Construction duration is anticipated to last 18 months.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure	$100,288
FY17 Accomplishments	All permits were obtained and construction documents were completed. Notice to Proceed is scheduled for March 14, 2018 and the construction duration is 14 months.

Hanson Interlocking

Coordinating Agency: Maryland DOT

Type: Improvement

Partner Agency: Amtrak

Benefit: Shared

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project would improve operational flexibility at New Carrollton station and reduce delays for Amtrak and MARC service. A new interlocking would allow universal moves and reduce conflicts that occur when trains must pass other trains stopped at New Carrollton. Construction of Hanson Interlocking would also advance a state of good repair by allowing for the retirement of aging Landover Interlocking.

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Budget: $36,600,000

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Schedule:

Conceptual Design: Jun 2007 - Jun 2009

Final Design: Jun 2007 - Jul 2009

Construction: Oct 2011 - Dec 2023

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Explanation of changes from 2017 Plan

No change in budget or schedule.

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure $9,000,000

Planned Activities The FY17 project scope is for Amtrak's contractor to perform civil and structural work, including sheeting and piling, drainage, grading, and paving, to complete an access road.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure $1,062,953

FY17 Accomplishments The contractor was able to complete the conflicting sections of the retaining wall structure. Access road construction and associated drainage is at 60% completion stage. Interlocking Design for Electric Traction, Communications, Signals and Track continued through 30%, with a projected completion in July 2018.

MARC Station Improvements - West Baltimore

Coordinating Agency: Maryland DOT

Type: Improvement

Partner Agency:

Benefit: Sole

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project would reconstruct the West Baltimore MARC Station to add high-level platforms and bring the station into ADA compliance. The West Baltimore MARC Station improvement may be incorporated into the B&P Tunnel Replacement Project because the tunnel's selected Preferred Alternative (Alternative 3B) can incorporate the new MARC station into its alignment. Funding levels here assume the West Baltimore MARC Station project remains a stand-alone project. Conceptual design is completed, but additional funding is required to complete NEPA documentation, project engineering, and construction.

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Budget: $32,000,000

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Schedule:

Conceptual Design: Feb 2010 - Jun 2015

Final Design: Sept 2016 - Jun 2019

Construction: Sept 2019 - Mar 2022

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Explanation of changes from 2017 Plan

No change in budget or schedule.

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure TBD

Planned Activities This project remains on hold given that the timing for funding engineering design and construction of the new tunnel is indeterminate. Further refinement of the B&P Tunnel is anticipated.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure $77,941

FY17 Accomplishments The project remains on hold.

MARC Storage Improvements - Martin Airport

Coordinating Agency: Maryland DOT

Type: Improvement

Partner Agency:

Benefit: Sole

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project will construct additional storage tracks and related infrastructure at the Martin State Airport Facility. MARC trains lack adequate storage along the Penn Line and often are required to run empty trains between Perryville and Baltimore, MD, using up track capacity and increasing operating costs.

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Budget: $16,465,000

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Schedule:

Construction: Jan 2018 - Jan 2021

NEPA: Apr 2016 - Apr 2019

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Explanation of changes from 2017 Plan

No change in budget. Due to right of way issues, the project's advertisement for construction is on hold pending resolution with the land owner. The updated construction is: June, 2018 - December, 2019.

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure	$4,000,000
Planned Activities	The FY17 project scope includes engineering design to 85%. Additionally, 100% design submittals shall commence in FY17.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure	$461,946
FY17 Accomplishments	100% design was completed and the project is on hold pending Right Of Way (ROW) resolution.

Boston South Station

Coordinating Agency: MBTA

Type: Improvement

Partner Agency: Amtrak

Benefit: Shared

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project would expand Boston South Station for future growth. The terminal is currently operating at capacity, in terms of train movements and passengers, creating a significant bottleneck and a major obstacle to service expansion. State funding and a HSIPR grant are funding preliminary engineering and environmental review. Additional funding is required for final design and construction.

Source: FY18-22 Capital Investment Plan, collected Spring 2017

Project Budget: N/A

Source: FY18-22 Capital Investment Plan, collected Spring 2017

Project Schedule:

NEPA: Jul 2012 - Jun 2017

PE: Oct 2015 - Jun 2017

Source: FY18-22 Capital Investment Plan, collected Spring 2017

Explanation of changes from 2017 Plan

N/A

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure $11,607,000

Planned Activities The FY17 project scope includes completion of the Final Environmental Impact Report (FEIR) and Environmental Assessment (EA), and completion of preliminary engineering design for South Station terminal track, station headhouse expansion, USPS demolition, Dorchester Avenue, and layover facilities.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure $252,013

FY17 Accomplishments

- Final EIR
- Final EA and FONSI
- Draft 30% design package for South Station Expansion and layover facilities at Widett Circle and Readville-Yard 2

MBTA Layover Facilities - Pawtucket Layover Facility

Coordinating Agency: MBTA

Type: Improvement

Partner Agency:

Benefit: Sole

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project will implement improvements to the existing Pawtucket Layover Facility, where the MBTA stores and services some trains for the Providence/Stoughton Line. Enhancements will allow MBTA to perform fueling and some light equipment maintenance in Pawtucket, relieving pressure on other MBTA facilities. Phase 1, completed in 2013, included a 700 ft. inspection pit. Phase 2 is to install layover fluid handling equipment and other associated equipment. It includes systems for dispensing of diesel fuel, sanding, anti-freeze, and lube oil, some electrical work, and fencing.

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Budget: $21,985,929

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Schedule:

Final Design: Apr 2016 - Nov 2016

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Explanation of changes from 2017 Plan

N/A

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure $1,900,457

Planned Activities The FY17 project scope is to complete final design by the end of November 2016, incorporating comments from site visits and additional reviews.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure $232,372

FY17 Accomplishments

- Underground utilities
- Dispenser pad
- Electrical building
- Fuel and sand silo tanks installed

MBTA Station Improvements - Mansfield Station

Coordinating Agency: MBTA

Type: Improvement

Partner Agency:

Benefit: Sole

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project will make improvements to heavily used Mansfield Station which currently is not fully accessible. The project includes pedestrian ramps and stairways to make platforms accessible for inbound and outbound passengers, replacement of existing mini-high platforms which are in poor condition with ADA-compliant mini-high platforms, platform repaving, new tactile strips along both platforms, new lighting, guard rails, bollards, signage, curb cuts, and improvements in parking lots for better accessibility.

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Budget: $13,100,000

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Schedule:

Construction: Oct 2016 - Apr 2018

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Explanation of changes from 2017 Plan

N/A

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure $456,250

Planned Activities The FY17 project scope is to issue notice-to-proceed and begin construction activities.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure $497,949

FY17 Accomplishments

- Infiltration system
- Ramps and stairs under construction

MBTA Station Improvements - Ruggles Street Station

Coordinating Agency: MBTA

Type: Improvement

Partner Agency:

Benefit: Sole

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project will construct a new platform and make other improvements at Ruggles Station to enable all inbound and outbound MBTA trains to serve the station and to increase system capacity along this segment of the NEC. The project will improve accessibility by upgrading the existing elevators and adding one new elevator in the lower busway, and make interior and exterior repairs to bring the station to code. A TIGER grant partially funds this project, which is part of a larger initiative to modernize the Ruggles Station which requires additional funding for full construction.

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Budget: $46,000,000

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Schedule:

Final Design: End Sept 2016

Construction: Feb 2017 - Mar 2019

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Explanation of changes from 2017 Plan

N/A

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure $1,028,968

Planned Activities The FY17 project scope is to complete 100% design, advertise to contractors, award contract, and issue notice-to-proceed with construction.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure $1,430,406

FY17 Accomplishments

- Design was complete on 1/9/2017
- Advertised project on 5/15/2017
- Notice to proceed given on 6/30/2017
- The contractor performing the job is LM Heavy Civil with a construction value of $19,667,000.00. They are currently performing the construction

MBTA Station Improvements - South Attleboro Station

Coordinating Agency: MBTA

Type: Improvement

Partner Agency:

Benefit: Sole

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project will improve South Attleboro Station including rehabilitation of stairways, pedestrian walkways, establishment of a new bus stop for RIPTA, accessible parking improvements, pedestrian crossings, and two side-by-side mini-high platforms. Emergency repairs currently are underway, but permanent improvements are needed.

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Budget: $3,900,000

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Schedule:

Final Design: Jul 2016 - Jun 2017

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Explanation of changes from 2017 Plan

N/A

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure $9,861

Planned Activities The FY17 project scope includes evaluation of design options, selection of a preferred alternative, and finding funding for construction.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure $58,639

FY17 Accomplishments

- Station study complete

Special Projects: Metro-North Railroad (Improvements)

Penn Station Access

Coordinating Agency: MNR

Partner Agency: Amtrak

Type: Improvement

Benefit: Shared

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project will open a new Metro-North Railroad link directly into Penn Station New York from the New Haven Line in Westchester and the State of Connecticut. Four new Metro-North stations will be built in the Bronx – near Co-op City, Morris Park, Parkchester/Van Nest, and Hunts Point. The project also includes upgrading the power and signal systems along the Hell Gate Line; adding new interlockings and tracks, and modifying existing ones and curves on a portion of the line; modifying existing over-the-street railroad bridges as necessary; and reinforcing the Bronx River Bridge.

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Budget: $695,000,000

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Schedule: N/A

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Explanation of changes from 2017 Plan

Schedule and budget will be further developed by MTA and MNR. Schedule is not available as Metro-North and MTA Capital Construction continue the technical activities necessary to refine the PSA project scope and operating plan.

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure	$10,000,000
Planned Activities	The FY17 project scope is for MTA Metro-North Railroad and MTA Capital Construction to continue the technical activities necessary to refine the PSA project scope and operating plan and to prepare the development of a federal Environmental Assessment (EA) for the project.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure	$4,000,000
FY17 Accomplishments	Metro-North and MTA Capital Construction continue the technical activities necessary to refine the PSA project scope and operating plan.

Harold Interlocking

Coordinating Agency: MTA Capital Construction

Type: Improvement

Partner Agency: Amtrak

Benefit: Shared

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project will construct new conflict-free train routes through Harold Interlocking, the busiest switch point on the NEC. Located in Queens, NY, this interlocking sorts Amtrak, LIRR, and NJ TRANSIT trains as they travel north and east of Penn Station or access Sunnyside Yard for service and storage. The project, which utilizes HSIPR funds, will greatly improve reliability, on-time performance, and travel time for all rail services.

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Budget: $763,870,448

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Schedule:

Construction: End Jul 2023

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Explanation of changes from 2017 Plan

No change in budget. As the WBBY contractor has been terminated following lack of mining progress, changes to the project schedule are pending.

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure $132,649,510

Planned Activities The FY17 scope of work is comprised of several work elements. The major construction activity will be to complete the construction of the Westbound Bypass Structure including the tunnel section, East and West approaches, pump station and track work within the tunnel section. The advancement of the signal infrastructure within Harold Interlocking will continue to support the planned CIL cutovers in FY2018. Other work includes the installation of catenary structures and foundations, the demolition and removal of the LIRR GO2 Substation, Loop and T interlocking utility infrastructure work, switch and trackwork, third rail and catenary wiring.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure $141,481,222

FY17 Accomplishments At the close of FY17, 87% of the west approach structure of the Westbound Bypass was completed; 65% of the east approach structure of the Westbound Bypass (WBBY) was completed; 36% of the WBBY pump station was completed; and 58 ft of planned 618 ft of the WBBY tunnel section was excavated. Various retaining walls and duct banks were constructed along with Catenary structures and foundations. CIL cutover work progressed.

Special Projects: NJ TRANSIT (Improvements)

County Yard

Coordinating Agency: NJ TRANSIT

Partner Agency: Amtrak

Type: Improvement

Benefit: Sole

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project will expand the existing County Storage Yard from its current footprint to include an unused part of an adjacent rail freight yard. The Delco Lead project, with County Yard improvements, will provide safe storage capacity for up to 444 rail cars in the event of flooding at other locations.

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Budget: $125,000,000

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Schedule:

NEPA: Jan 2013 - May 2016

Final Design: Jun 2013 - Jul 2017

Construction: Mar 2018 - Jun 2022

Source: Annual Report Update, collected Jan 2018

Explanation of changes from 2017 Plan

No changes in budget. No explanation of schedule changes provided.

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure $5,000,000

Planned Activities The project's initial contract is scheduled to be advertised in October 2016 and is anticipated to be awarded by NJ TRANSIT's Board of Directors in March 2017. Thereafter, a notice-to-proceed is expected to be issued to the winning contractor in June 2017.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure $3,838,725

FY17 Accomplishments The project's initial contract was advertised in July 2017, construction bids were opened in November 2017, and the contract is expected to be awarded by NJ TRANSIT's Board of Directors in January 2018. Thereafter, a notice-to-proceed is expected to be issued to the winning contractor in March 2018.

Delco Lead Safe Haven Facility Project

Coordinating Agency: NJ TRANSIT

Type: Improvement

Partner Agency: Amtrak

Benefit: Sole

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project will construct a safe haven storage facility on the NEC south of the New Brunswick station to protect rail rolling stock against damage resulting from a storm surge. A service and inspection facility that is part of the project will facilitate the rapid return of equipment to service following a storm event. This project is supported by FTA Emergency Relief Program funds.

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Budget: $245,992,000

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Schedule:

PE: Oct 2014 - Feb 2016

NEPA: Dec 2014 - Feb 2016

Final Design: Mar 2016 - May 2018

Construction (NTP): February 2019 to April 2022

Source: Annual Report Update, collected Jan 2018

Explanation of changes from 2017 Plan

No changes in budget. No explanation of schedule changes provided.

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure $5,000,000

Planned Activities The 30% design package will be distributed for review by October 2016 so that the review comments can be incorporated into the 100% final design package. The construction management RFP is scheduled to be publicly advertised and awarded by NJ TRANSIT's Board of Directors by the Spring of 2017.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure $4,344,612

FY17 Accomplishments The Project advanced to the 90% level of design completion. Final negotiations concluded with the Construction Management (CM) and Construction Assistance (CA) Services contracts. The CM and CA contracts are anticipated to be awarded by NJ TRANSIT's Board of Directors in January 2018.

Edison Station

Coordinating Agency: NJ TRANSIT

Type: Improvement

Partner Agency:

Benefit: Sole

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project would relocate an existing freight turn-out switch to a location north of Plainfield Avenue by Edison Station and then extend the existing outbound high-level platform by 425 feet for a total platform length of approximately 1,020 feet. Additional funding is required for design and construction.

Source: FY18-22 Capital Investment Plan, collected Spring 2017

Project Budget: $7,072,000

Source: FY18-22 Capital Investment Plan, collected Spring 2017

Project Schedule:

Feasibility: Apr 2006 - Jun 2006

Source: FY18-22 Capital Investment Plan, collected Spring 2017

Explanation of changes from 2017 Plan

No change in budget or schedule.

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure	TBD. This project will proceed with additional design in FY17 only if funding is identified.
Planned Activities	The FY17 project scope may include additional design.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure	$6,723
FY17 Accomplishments	Due to the lack of funding, no material work was performed at Edison Station.

Elizabeth Station

Coordinating Agency: NJ TRANSIT

Type: Improvement

Partner Agency:

Benefit: Sole

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project would reconstruct two side high-level concrete passenger platforms and two station buildings including new elevators, stairs, ticketing offices, operational office spaces, and retail spaces. Additional funding is required for design and construction.

Source: FY18-22 Capital Investment Plan, collected Spring 2017

Project Budget: $55,000,000

Source: FY18-22 Capital Investment Plan, collected Spring 2017

Project Schedule:

PE: Jul 2013 - Sep 2016

Final Design: May 2017 - May 2018

Construction: Jun 2018 - Apr 2022

Source: Annual Report Update, collected Jan 2018

Explanation of changes from 2017 Plan

No changes in budget. No explanation of schedule changes provided.

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure $5,000,000

Planned Activities The FY17 project scope will include advancement of the 30% design package by NJ TRANSIT staff to address and incorporate Amtrak's comments. This will then lead to a completion of a design/ build contract package. Additionally, the pre-qualification process to short-list potential bidders for the design/build package will be completed. The design/ build contract was publicly advertised in May 2016 and the contract is anticipated to be awarded in December 2016. This action will be followed by an issuance of a notice-to-proceed in February 2017 to the winning contractor.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure $616,786

FY17 Accomplishments The bid opening of the 30% Design/ Build Contract package was pushed back due to the need to address additional comments from Amtrak. The 2 parties also continued to work on finalizing the Project Initiation (PI) and Easement Agreements. Addendums were also issued to the construction bid package to address additional questions posed by the bidders.

New Brunswick Station

Coordinating Agency: NJ TRANSIT

Type: Improvement

Partner Agency: Amtrak,

Benefit: Shared

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project would extend the current eastbound platform at New Brunswick Station by approximately 230 feet. Additional funding is required to design and construct an extension of the westbound platform and upgrade customer amenities at the station. The station is slated to undergo significant rehabilitation of its exterior brick façade; installation of new lighting, windows, HVAC system, and escalator; and painting.

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Budget: $9,674,000

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Schedule:

PE: Apr 2013 - Mar 2017

Final Design: Apr 2017 - Mar 2018

Construction: May 2018 - Apr 2020

Source: Annual Report Update, collected Jan 2018

Explanation of changes from 2017 Plan

No changes in budget. No explanation of schedule changes provided.

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure	$2,000,000
Planned Activities	The FY17 project scope is to contract to repair the interior and exterior areas of the station. It is anticipated to be advertised in July 2016 and awarded by NJ TRANSIT's Board of Directors in September 2016.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure	$308,864
FY17 Accomplishments	With regards to the Elevator replacement component of this project, NJ TRANSIT agreed to participate in the USDOT's "On the Job" training program as a substitute for implementing NJT's own DBE Program. The parties also reached an agreement with regards to a 10% Race Neutral Goal as the DOT will take the lead in monitoring the DBE goal for this project. With regards to the Escalator Installation component of the project, NJT continued to work with both USDOT and FHWA to secure authorization for the elevator upgrade work and, to finalize the bid package for the Escalator Replacement work for review and approval

NJ TRANSITGRID

Coordinating Agency: NJ TRANSIT

Type: Improvement

Partner Agency: Amtrak

Benefit: Shared

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project will create a microgrid power generation and distribution system as a backup to the regional power network, allowing transit systems to function during storms or other times when the centralized power grid is compromised. NJ TRANSITGRID will incorporate renewable energy, distribution generation, and other technologies to provide resilient power to key NJ TRANSIT stations, maintenance facilities, bus garages, and other buildings. The project will also provide resilient electric traction power to NJ TRANSIT trains on critical corridors, including portions of the NEC, to continue to operate even when the traditional power grid fails.

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Budget: $557,353,000

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Explanation of changes from 2017 Plan

No changes in budget. No explanation of schedule changes provided.

Source: FY17 Annual Report Update, collected Jan 2018

Project Schedule:

NEPA: Dec 2014 - May 2017

PE: May 2016 - Jan 2017

Final Design: Feb 2017 - Jan 2019

Construction: Mar 2019 - May 2023

Source: Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure $4,000,000

Planned Activities The FY17 project scope is to execute the full contract with Jacobs Engineering for the preliminary (30%) design phase of the central power plant / traction power under Contract 15-031. Additionally, a contract with AECOM will be executed to begin the preliminary (30%) design phase of the distributed generation work under Contract 16-001. The DEIS will be submitted to the FTA covering the central power plant / traction power portion of the project.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure $6,648,500

FY17 Accomplishments For the Central Power Plant component of the project, NJ TRANSIT submitted the revised draft HARBS and Phase IA (Section 106) Archaeological and Historic Resources evaluation to NJSHPO following FTA concurrence. NJT also submitted the revised PDEIS to FTA for its review. The 10% design plans were also completed. With regards to the Distributed Generation (DG) component of the project, the 10% design recommendations for Wayne, Greenville and Meadows Bus Maintenance Facilities were completed. And the review of the 10% design recommendations for Newark Penn, Newark HQ, Secaucus and the Electric Vehicle deployment was initiated. Also commenced the review of the 20% design packages for the DG facilities.

North Elizabeth Station

Coordinating Agency: NJ TRANSIT

Type: Improvement

Partner Agency:

Benefit: Sole

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project would rehabilitate the existing high-level concrete platform and replace the tactile warning edge material on both the eastbound and westbound platforms at North Elizabeth Station. Additional funding is required for construction.

Source: FY18-22 Capital Investment Plan, collected Spring 2017

Project Budget: $2,000,000

Source: FY18-22 Capital Investment Plan, collected Spring 2017

Project Schedule:

Final Design: Nov 2010 - Oct 2011

Construction (TBD): Jul 2018 - Jun 2019

Source: Annual Report Update, collected Jan 2018

Explanation of changes from 2017 Plan

No changes in budget. No explanation of schedule changes provided.

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure $1,000,000

Planned Activities The construction contract is scheduled to be advertised in October 2016 and approved by NJ TRANSIT's Board of Directors in December 2016, with a notice-to-proceed issued to the contractor in March 2017.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure $0

FY17 Accomplishments Due to the unavailability of funding, no work could be performed on the Project during FY17

Penn Station New York - NJ TRANSIT Projects

Coordinating Agency: NJ TRANSIT

Type: Improvement

Partner Agency: Amtrak,

Benefit: Shared

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project would make much needed improvements to Penn Station New York. Among the projects being advanced are extending the existing Central Concourse to allow for more vertical access to existing train platforms, improving the existing Hilton Corridor so it better connects between vertical access points to platforms, and improving signage and wayfinding to facilitate the safe and efficient movement of passengers and visitors. While some funding is programmed for this work, additional funding is needed to make all the necessary improvements.

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Budget: $75,000,000

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Schedule:

Conceptual Design: Nov 2015 - Aug 2016

Final Design: Sept 2016 - May 2018

Construction: Jan 2019 - Jan 2021

Source: Annual Report Update, collected Jan 2018

Explanation of changes from 2017 Plan

No changes in budget. No explanation of schedule changes provided.

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure	$350,000
Planned Activities	The FY17 project scope includes work to improve the NJT waiting area. Hilton Corridor improvements await additional agreements between agencies.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure	$5,501,444
FY17 Accomplishments	Work advanced towards the completion of the 100% Design package which is addresses the relocation of the existing Artwork to facilitate expanding the waiting area for use by commuters. Coordination continued with the NYC Fine Art Appraisers to appraise and identify a new, permanent location for artwork. The planning activities to evaluate improvements to the Hilton Corridor section of the Station were minimal as authorization was being sought from the FTA to reallocate funding to support this initiative.

Princeton Junction Station

Coordinating Agency: NJ TRANSIT

Type: Improvement

Partner Agency: Amtrak

Benefit: Shared

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project will install a tactile edge panel at each of the three platforms where passengers load onto trains bound for Trenton and Newark as well as the local Dinky to Princeton. Interim repairs to the platforms will also be undertaken as needed.

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Budget: $1,000,000

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Schedule:

Final Design: Jul 2011 - Oct 2011

Construction: Apr 2019 - Dec 2019

Source: Annual Report Update, collected Jan 2018

Explanation of changes from 2017 Plan

No changes in budget. No explanation of schedule changes provided.

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure $500,000

Planned Activities The construction contract is anticipated to be publicly advertised in September 2016 and awarded by NJ TRANSIT's Board of Directors in December 2016. This action will then be followed by the issuance of a notice-to- proceed to the winning bidder in January 2017.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure $9,262

FY17 Accomplishments No work advanced on this project due to the unavailability of funds

Special Projects: Pennsylvania DOT (Improvements)

Harrisburg Line Station Improvements

Coordinating Agency: PennDOT

Partner Agency: Amtrak, Other

Type: Improvement

Benefit: Shared

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project will eventually modernize virtually all of the Amtrak stations along the Harrisburg Line. PennDOT is leading construction of four new stations at Middletown, Mount Joy, Coatesville, Parkesburg, and Downingtown. All of the new stations will provide ADA access with high-level boarding platforms, improved/expanded parking, and multimodal connections. These projects will improve the passenger experience and lead to community and economic development. Middletown, Mount Joy, and Coatesville are fully funded while Parkesburg and Downingtown still requires additional funding for construction.

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Budget: $160,000,000

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Schedule:

Construction: End 2025

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Explanation of changes from 2017 Plan

No explanation of changes provided.

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure	$14,000,000
Planned Activities	N/A

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure	$7,277,906
FY17 Accomplishments	Construction initiated for the Mount Joy station. Completed site preparation for the Middletown station. Advancing design at other stations.

Special Projects: Rhode Island DOT (Improvements)

Pawtucket/ Central Falls Station

Coordinating Agency: RIDOT

Partner Agency: MBTA

Type: Improvement

Benefit: Sole

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project will build a new infill commuter rail station along MBTA's Providence Line in Pawtucket, RI with an anticipated opening in 2019/2020. The scope includes station platforms, a pedestrian overpass, and associated pedestrian access points. The project was the recipient of a 2016 USDOT TIGER Award.

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Budget: $40,000,000

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Schedule:

Feasibility: End Jun 2007

NEPA: End Jan 2017

PE: End Dec 2016

Final Design: Sept 2017 - Jul 2018

Construction: Jan 2018 - Jul 2020

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Explanation of changes from 2017 Plan

No changes in budget. The schedule has changed due to the track infrastructure scope exceeding the budget. A revised design/build scope will be solicited and awarded within FFY18 third quarter. Final design will be completed by FFY19 second quarter with construction spanning until FFY21 third quarter.

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure $2,000,000

Planned Activities The PE/NEPA phase will be completed in the first quarter of FFY17. A design/ build procurement is anticipated to be solicited by 12/31/2016. The D/B team will be awarded, and final design will be completed within FFY17.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure $0

FY17 Accomplishments NEPA was completed 1/20/17 with the award of a CE. The project was advertised in the second quarter and it was found to exceed the budget. During fourth quarter RIDOT worked with FTA, FRA, and Amtrak to revise the infrastructure scope.

30th Street to Arsenal Signals and ROW Improvements

Coordinating Agency: SEPTA

Type: Improvement

Partner Agency:

Benefit: Shared

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project will improve SEPTA's Arsenal Interlocking (near University City Station) and add a new interlocking to support operation of the SEPTA's Airport Line through Amtrak's Phil Interlocking. The project includes installation of new track special work, overhead catenary, signals, and switch and lock mechanisms, as well as the addition of new Positive Train Control (PTC) systems. The existing signal block layout will be modified to ensure safe train operations and braking. Design and construction will progress in phases with construction outages scheduled for the summer of 2017, 2018, and 2019. Once the project is complete, SEPTA will assume maintenance responsibility for Amtrak's tracks on a segment where SEPTA is the sole operator.

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Budget: $42,000,000

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Schedule:

PE: Start Oct 2014

Final Design: End Nov 2017

Construction: Mar 2017 - Dec 2019

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Explanation of changes from 2017 Plan

No changes from FY17 Plan.

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure $10,610,834

Planned Activities The FY17 project scope is to complete design and install catenary foundations.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure $7,110,572

FY17 Accomplishments Design and catenary foundation installation was substantially completed in FY17.

30th Street West Catenary Replacement

Coordinating Agency: SEPTA

Type: Improvement

Partner Agency:

Benefit: Sole

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project will replace and modernize the SEPTA overhead catenary system from 30th Street Station westbound to K and Zoo Interlockings, an area that includes SEPTA's Powelton Yard. Work also includes repairs to aging catenary support structures, foundations, retaining walls, tunnels, and site drainage.

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Budget: $77,000,000

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Schedule:

PE: Start Feb 2015

Final Design: End Feb 2018

Construction: Sept 2018 - Jul 2021

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Explanation of changes from 2017 Plan

No changes from FY17 Plan.

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure	$1,942,360
Planned Activities	Design work will continue in FY17 and will be completed in FY18.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure	$1,471,863
FY17 Accomplishments	Design work progressed.

Ardmore Station Improvements - Phase 1

Coordinating Agency: SEPTA

Type: Improvement

Partner Agency: Amtrak, Pennsylvania DOT

Benefit: Shared

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project will make several improvements to Ardmore Station on SEPTA's Paoli/Thorndale Regional Rail Line and Amtrak's Keystone Corridor to make the station fully ADA compliant. Improvements are being advanced in phases. Phase 1 of this project includes a new station building, high-level platforms, modifications to the existing pedestrian tunnel, new canopies and passenger shelters, and site and circulation improvements. Additional funding is required for construction of a parking garage (see Ardmore Station Improvements - Phase 2 in the Northeast Corridor Capital Investment Plan Fiscal Years 2018-2022). SEPTA currently leases this station from Amtrak.

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Budget: $35,300,000

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Schedule:

Final Design: End Dec 2016

Construction: Sept 2018 - Apr 2021

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Explanation of changes from 2017 Plan

Schedule is dependent on the availability of Amtrak to support this project and is subject to change. Project is currently expected to be bid in the fall of 2018 with construction starting in winter/spring 2019.

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure	$2,606,108
Planned Activities	The FY17 project scope is to complete design and begin construction.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure	$126,920
FY17 Accomplishments	Design was finalized and agreed to by Amtrak.

Exton Station Improvements

Coordinating Agency: SEPTA

Type: Improvement

Partner Agency: Pennsylvania DOT, Amtrak

Benefit: Shared

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project will implement overall station improvements to Exton Station on SEPTA's Paoli/Thorndale Regional Rail Line and Amtrak's Keystone Corridor and will provide full-length high-level boarding. Work includes construction of high-level boarding platforms, ramps and stairs, a new station building, new canopies, and shelters. The project will bring the station to a state of good repair and make the station ADA compliant. SEPTA currently leases this station from Amtrak.

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Budget: $23,400,000

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Schedule:

Construction: Jun 2015 - Dec 2018

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Explanation of changes from 2017 Plan

No changes from FY17 Plan.

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure	$7,281,029
Planned Activities	The FY17 project scope is to continue construction to be completed in 2018.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure	$6,188,922
FY17 Accomplishments	Construction continued in 2017 and is anticipated to be complete in 2018.

Frazer Rail Shop and Yard Upgrade

Coordinating Agency: SEPTA

Type: Improvement

Partner Agency:

Benefit: Sole

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project will make significant renovations and expand the Frazer Rail Shop and Yard facilities. SEPTA is in the process of procuring new locomotives and a fleet of multi-level cars for the Regional Rail System and needs these investments to accommodate the increased fleet size. The initial phase will include significant earthwork and stormwater improvements at the 40-acre site to create space for additional yard tracks. Additional phases of work will include extending three existing storage tracks and adding three new storage tracks; major upgrades to the repair shop and equipment, including the wheel truing machine and drop table; construction of a shop extension, new cleaning track, vehicle washer building, and yardmaster building; and utility upgrades. Also, the roof will be upgraded and mechanical equipment and electrical connections will be replaced.

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Budget: $139,000,000

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Schedule:

Construction: Mar 2016 - Sept 2022

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Explanation of changes from 2017 Plan

No changes in the work scheduled in the 2017 Plan. The cashflow expectations for this work was overstated in the 2017 Plan.

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure $52,272,277

Planned Activities The FY17 project scope will complete construction for Phase I. Work for Phase I includes walls, fill, storage, tracks, and storm water management. Phase IIA will be bid in FY17 and construction will begin. Phase IIA includes upgrades to the wheel truing shop, machine shop extension, storage facilities, and track modifications.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure $28,621,121

FY17 Accomplishments Phase I construction was completed. Phase II construction was bid and work began.

Levittown Station Improvements

Coordinating Agency: SEPTA

Partner Agency: Amtrak

Type: Improvement

Benefit: Sole

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project will rebuild Levittown Station on SEPTA's Trenton Regional Rail Line (Northeast Corridor main line) to make the station fully ADA accessible. The project includes station improvements, construction of high-level platforms, elevators, a pedestrian overpass, improved intermodal service connections, and parking expansion. SEPTA currently leases this station from Amtrak.

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Budget: $36,000,000

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Schedule:

Construction: Jul 2015 - Sept 2018

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Explanation of changes from 2017 Plan

No changes from FY17 Plan.

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure	$10,715,616
Planned Activities	The FY17 project scope is to continue construction.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure	$9,892,610
FY17 Accomplishments	Construction continued in FY17.

Villanova Station Improvements

Coordinating Agency: SEPTA

Type: Improvement

Partner Agency:

Benefit: Sole

General Project Information:

Project information was originally listed in the FY17 NEC One-Year Implementation Plan, released October 2016. The information below represents revised/ updated project data collected for NEC reports throughout the following year. See source notes for details.

Project Scope: This project will modernize Villanova Station on SEPTA's Paoli/Thorndale Regional Rail Line. Work includes high-level platforms with canopies, a new pedestrian underpass with ramps and stairs, station building exterior improvements, parking lot modifications, stormwater management, and new signage, lighting, passenger amenities, and landscaping. The improvements will make the station fully ADA accessible. The project will be advanced in phases. Phase 1 activities will improve station accessibility, through the construction of a new pedestrian tunnel with access ramps and stairs, and modify the parking lot to improve stormwater management. Phase 2 will build high-level platforms, canopies, and an improved station building. SEPTA currently leases this station from Amtrak.

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Budget: $32,200,000

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Project Schedule:

Phase 1 Construction: Apr 2016 - Dec 2020

Phase 2 Construction: Jan 2025 - Jun 2028

Source: FY18 One-Year Implementation Plan, collected Fall 2017

Explanation of changes from 2017 Plan

No changes from FY17 Plan.

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Plan v. Actual

FY17 Plan

Source: FY17 One-Year Implementation Plan, collected Fall 2016

Planned Expenditure $11,930,840

Planned Activities The FY17 project scope is to continue Phase I construction and continue Phase II design.

FY17 Actual

Source: FY17 Annual Report Update, collected Jan 2018

FY17 Expenditure $9,516,041

FY17 Accomplishments Phase I construction and Phase II design continued.

Photo Credits

Front cover. New York Penn Station. Courtesy of Amtrak.

Page iv: "Wilmington, Delaware Station" by flickr user The West End, 2017. Used under Creative Commons License Attribution-NonCommercial-NoDerivs 2.0 Generic: https://creativecommons.org/licenses/by-nc-nd/2.0/. Photo available at: https://www.flickr.com/photos/thewestend/35159887033/.

Page 11: "Devon Transfer Station" by flickr user Metropolitan Transportation Authority / Patrick Cashin, 2015. Used under a Creative Commons License Attribution 2.0 Generic: https://creativecommons.org/licenses/by/2.0/ Photo available: https://www.flickr.com/photos/mtaphotos/17146315309/in/album-72157652301677775/.

Page 13: New York Penn Station. Courtesy of Amtrak.

Page 15: Reed, Raimondo Cut Ribbon on Kingston Train Station Upgrades. Courtesy of the Office of U.S. Senator Jack Reed.

Page 15: "Gov. Malloy Announces Opening of New Train Station in Wallingford That Will Serve the Hartford Line" by flickr user Office of Governor Dannel Malloy, 2017. Used under a Creative Commons License Attribution 2.0 Generic: https://creativecommons.org/licenses/by/2.0/. Photo available at: https://www.flickr.com/photos/governordanmalloy/26442594569/.

Page 17: Construction replacing half the bridge span at the Batchelder Road Bridge in Windsor (June 2017). Courtesy of the CT*rail* Hartford Line Program.

Page 17: Baltimore & Potomac Tunnel. Courtesy of Amtrak.

Page 19: New York Penn Station. Courtesy of Amtrak.

Back cover: "Baltimore Penn Station" by flickr user BeyondDC, 2014. Used under a Creative Commons License Attribution-NonCommercial-NoDerivs 2.0 Generic: https://creativecommons.org/licenses/by-nc-nd/2.0/ Photo available: https://www.flickr.com/photos/beyonddc/12684797773/.

Front Cover: New York Penn Station

Back Cover: Baltimore Penn Station

www.nec-commission.com