Northeast Corridor Annual Report: Infrastructure and Operations

Fiscal Year 2024

March 2025

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Fiscal Year 2024

A report by the
Northeast Corridor Commission

In partnership with:

Massachusetts Department of Transportation (MassDOT)

Massachusetts Bay Transportation Authority (MBTA)

Rhode Island Department of Transportation (RIDOT)

Connecticut Department of Transportation (CTDOT)/CT*rail*

Metropolitan Transportation Authority (MTA)

MTA Metro-North Railroad (Metro-North)

MTA Long Island Rail Road (LIRR)

New Jersey Transit (NJ TRANSIT)

Southeastern Pennsylvania Transportation Authority (SEPTA)

Pennsylvania Department of Transportation (PennDOT)

Delaware Department of Transportation (DelDOT)

Maryland Department of Transportation (MDOT) Maryland Transit Administration (MTA) / Maryland Area Regional Commuter (MARC)

District Department of Transportation (DDOT)

Virginia Railway Express (VRE)

Amtrak

U.S. Department of Transportation (USDOT)


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NJTRANSIT
4631
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Exit
10:45 AM Grand Central
Arrived
Stamford, Harlem-125th
Track 3

Letter from the Executive Director

Achieving a strong and dependable Northeast Corridor (NEC) maximizes the region's economic potential and improves the quality of life for everyone traveling throughout the region, whether by rail, air, or highway. Last year, $3.9 billion in local, state, and federal investment was the largest in NEC history, continuing a multi-year process to modernize and renew obsolete assets resulting from decades of underinvestment. This investment creates high-paying construction and manufacturing jobs throughout the country and is critical to rebuilding the NEC's aging infrastructure, including 100-plus-year-old bridges and tunnels. Over time, these investments will bring better, faster, more reliable service to the NEC's nearly 200 million (and growing) riders. Those 200 million trips reflect a 10 percent increase over FY2023, with Amtrak now surpassing its pre-pandemic ridership, demonstrating the strong demand for service between NEC cities. Commuter services have also seen continued ridership recovery with several now exceeding pre-pandemic weekend ridership levels.

Unfortunately, while demand is increasing, we saw reliability decrease, with almost 10 percent of trains late, annulled, or terminated. Amtrak trains were particularly hard hit with 24 percent of trains late, annulled, or terminated, driven in part by reliability issues with Amtrak's aging, and soon to be replaced, Acela train fleet. Infrastructure-related delays continue to be the leading cause of overall train delay, with some of the most impactful incidents due to aging electric power systems between Trenton, NJ and New York, NY. Some of these delays are also related to the tremendous amount of capital work now underway to address the many assets that have aged beyond their useful life and are vulnerable to failure. Just as we are all familiar with how rebuilding our highways often creates congestion and delays, necessary construction along the NEC is creating some short-term disruptions that will provide long-term gains in reliability and capacity.

Commission members understand the importance of these services to the region and how significant delays can infuriate passengers who are repeatedly late for work, gatherings with friends and family, shows, and sporting events. As NEC operators and officials across the political spectrum have noted, NEC passengers deserve better, and we are confident that better service will be achieved by continuing the essential work needed to repair and modernize the corridor.

Fortunately, NEC owners have already begun the hard work of ramping up their workforces and building new internal processes over the past few years to launch the largest coordinated capital investment program in the modern history of the NEC. Approximately $56 billion worth of projects and programs are now underway to replace legacy systems and assets to deliver on the promise of providing world-class train service in the Northeast. The Commission looks forward to continuing to report on its member agencies' collective progress in subsequent NEC annual reports.

Mitch Warren
Executive Director
Northeast Corridor Commission


The Northeast Corridor consists of four right-of-way infrastructure owners (Amtrak, MBTA, Connecticut DOT, and NY MTA Metro-North Railroad) and multiple station owners and service providers.
Boston
MBTA
MA
Springfield
Providence
RI
NY
Hartford
CT
Metro-North Railroad
CTrail
New Haven
Long Island Rail Road
PA
Newark
New York
SEPTA
Trenton
NJ TRANSIT
Harrisburg
Philadelphia
Wilmington
NJ
MARC
Baltimore
Amtrak
MD
DE
DC
Washington
VRE
VA
NEC Main Line
NEC Connecting Corridor
Intercity Rail
Commuter Rail
Massachusetts Bay Transportation Authority
CT rail
Metro-North Railroad
Long Island Rail Road
NJTRANSIT The Way To Go.
SEPTA
MARC
VRE
AMTRAK

1. Introduction

Northeast Corridor-Wide Summary

Federal fiscal year 2024 (FY24) spans October 1, 2023 through September 30, 2024—a period that saw record levels of infrastructure investment and continued ridership recovery from the pandemic.

Background

The Northeast Corridor

The Northeast Corridor—both the NEC main line from Boston, MA to Washington, DC and connecting corridors to Harrisburg, PA; Spuyten Duyvil, NY; and Springfield, MA—hosts the passenger rail operations of eight commuter railroads, Amtrak's intercity services, and six freight railroad services. The NEC, long the nation's busiest passenger railroad, has been a cornerstone of the region's development since tracks were first laid in the 1830s, and continues to be a driver of its economic success. NEC ridership peaked in 2019 with 879,000 average weekday trips.

The 457-mile main line still includes many bridges and tunnels that date back to the period between the Civil War and the New Deal. The NEC's state-of-good-repair (SOGR) backlog must be addressed to ensure continued viability of essential intercity and commuter services and improve service reliability and promote the economic well-being of the Northeast region and the entire nation. The Infrastructure Investment and Jobs Act (IIJA) includes tens of billions of dollars for rail and transit investments. These funds are supporting the replacement of numerous century-old bridges and tunnels, as well as the renewal and replacement of basic infrastructure assets (tracks, signals, electric traction systems, undergrade bridges) throughout the corridor. This work will begin to address the corridor's overall state-of-good-repair backlog and result in better, more reliable service for the passengers who depend on the corridor.


SEPTA
738
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The NEC Commission

The Northeast Corridor Commission was authorized by Congress in 2008 (49 U.S.C. § 24905) to develop coordinated strategies to improve 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, Commission member agencies will achieve a level of success that far exceeds the potential reach of any individual organization.

The Commission is 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. The Commission also includes non-voting representatives from four freight railroads, states with connecting corridors, and several commuter operators in the region.

The NEC Commuter and Intercity Rail Cost Allocation Policy

The Cost Allocation Policy was adopted by the Commission in September 2015 and renewed in December 2024. The Policy outlines a partnership built on three pillars: (1) operator cost sharing; (2) transparency, collaboration, and accountability; and (3) federal partnership.

The key components of the transparency, collaboration, and accountability pillar include NEC planning and reporting processes to develop and update the 15-year CONNECT NEC Program and the five-year Capital Investment Plan (CIP). These processes are intended to enhance coordination on service goals, associated capital investments, and the resources required to implement them. CONNECT NEC identifies long-term service objectives and associated capital investments over the next 15 years, while the annual CIP demonstrates how the Commission and its member agencies plan to advance CONNECT NEC in the near-term.

The Policy also requires the first federal fiscal year of the CIP to be an implementation plan constrained by available funding and resources. The implementation plan is a valuable tool for collaboration, transparency, and accountability among Commission member agencies. The first year of the CIP, as agreed to and approved by the Commission, serves as the baseline for infrastructure delivery reporting and is summarized each year in the NEC Annual Report.

Infrastructure delivery reporting is meant to establish a uniform understanding of capital activities and support greater accountability between all parties.

The NEC Annual Report is called for in the Policy and required by statute. The NEC Annual Report summarizes corridor activity during the prior federal fiscal year, including train operations and performance, ridership and service trends, infrastructure delivery, and progress in assessing and eliminating the NEC state-of-good-repair backlog. The Annual Report may also include recommendations on these subjects, as appropriate.

Figure 1-1. NEC Commission plans and reports

2. Infrastructure

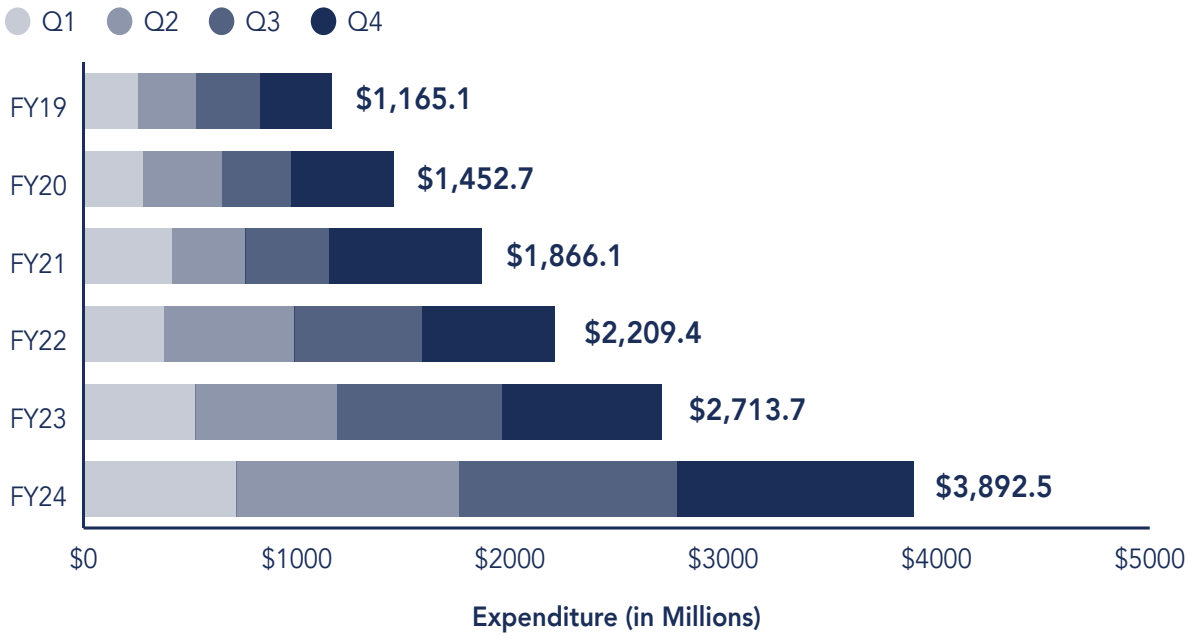
The Commission approved the FY24-28 NEC Capital Investment Plan (CIP) in October 2023, which identified each agency's capital investments planned for federal fiscal year 2024 based on expected available funding. This section summarizes the capital investments made by NEC owners and project sponsors during FY24, including notable progress and accomplishments, as well as investment shortfalls.

Infrastructure Investment Highlights

NEC agencies invested almost $3.9 billion in NEC infrastructure in FY24, the highest annual level of capital investment in NEC history. While investment has been steadily increasing every year, FY24 investment represents a 45% increase over FY23, the highest year-over-year increase ever. This ramp up is due in large part to advance appropriations made through the Infrastructure Investment and Jobs Act (IIJA) to Amtrak's Northeast Corridor Account and the Federal-State Partnership for Intercity Passenger Rail (FSP) Grant Program, as well as funding through the Capital Investment Grant program and local matches.

FY22-23 FSP awards were made in November 2023, and FY24 awards in November 2024. To date, $17.9 billion has been awarded through this program to 40 projects across the NEC, with over $4 billion committed in local match funds.

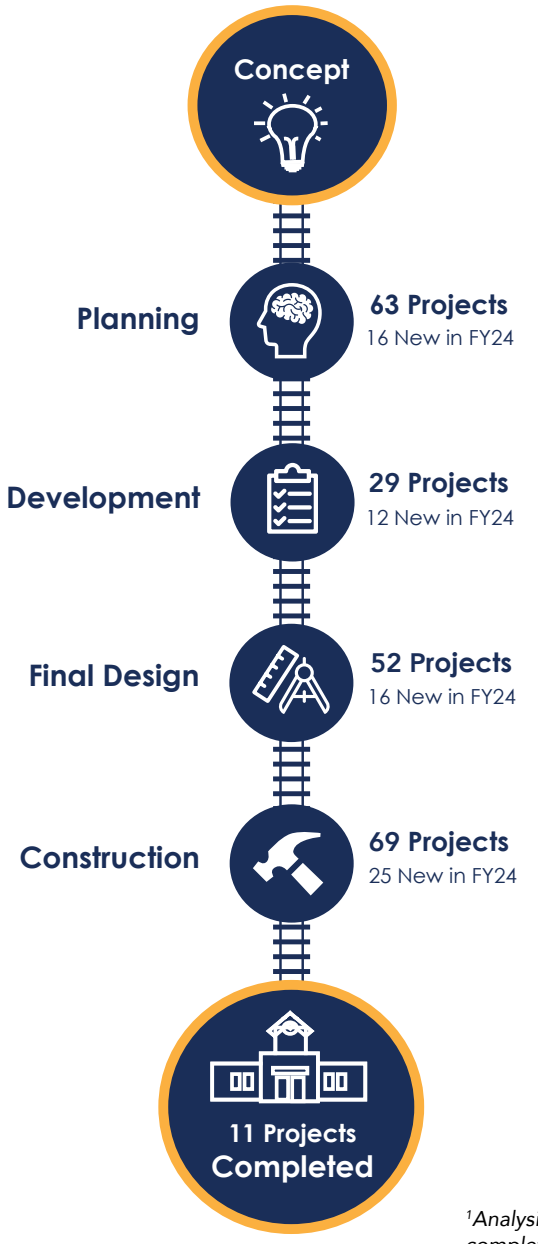
Figure 2-1. FY19-24 actual infrastructure investment by year and quarter (millions)



NEC agencies made historic capital delivery progress during FY24

With this newly available funding, agencies are advancing major projects and delivering essential state-of-good-repair (SOGR) work, while accommodating additional service. Agencies invested over $3 billion in over 250 rail projects during FY24, securing thousands of jobs and addressing aging infrastructure. 69 of those projects started or continued construction activities last year, including four major groundbreakings (see "Spotlight: Major projects moved into construction in FY24" on page 12 for more details).

Figure 2-2. Project schedules[1] at end of FY24



[1]Analysis includes only projects with complete schedule data

Beyond groundbreakings, NEC agencies continued construction on projects up and down the NEC. In the New York area, MTA advanced construction on Penn Station Access—the expansion of Metro-North New Haven Line service to Penn Station, including four new stations in the Bronx and bringing Amtrak's Hell Gate Line to a state of good repair—as well as Harold Interlocking, the overhaul of the busiest switch point in the United States. NJ TRANSIT continued progress on Portal North Bridge, a Gateway program project that will result in a new railroad bridge across the Hackensack River in New Jersey, replacing the existing century-old, unreliable bridge that is beyond its useful life (see page 11 for more details).

Outside of the New York area, MBTA continued construction on Tower 1 Interlocking outside of South Station in Boston, which was originally built in 1899. When complete, this project will improve reliability for Amtrak and MBTA service by bringing track, power, and signal infrastructure to a state of good repair. Amtrak initiated its near- and long-term improvements to passenger rail facilities at William H. Gray III 30th Street Station in Philadelphia, including expanding the concourse capacity to accommodate future ridership growth. Further south, Amtrak continued near-term projects at Washington Union Station, including relocation and renovation of existing crew facilities to support future reconstruction of the subbasement support structure and Track 22 to expand capacity.

Portal North Bridge

2024 Progress

50% project completion, May 2024

In May 2024, the Portal North Bridge project reached its 50% completion milestone, bringing it closer to replacing the 114-year-old swing bridge with a modern, fixed-span structure which will eliminate the need to open and close the bridge while still allowing marine traffic to pass uninterrupted beneath its 50-foot clearance.

Approach structures complete, Summer 2024

In Summer 2024, the project achieved a major milestone with the substantial completion of the approach structures—which connect the main bridge deck to the existing right-of-way on both sides of the Hackensack River—bringing the project closer to completion and closer to enhancing service in the most congested territory along the NEC.

Off-site fabrication of central arch spans complete, September 2024

In September, the project reached a key milestone with the substantial completion of the fabrication of its central arch spans off-site in upstate New York. These spans will not only transform the bridge's appearance but also provide the strength necessary to support Amtrak and NJ TRANSIT trains traveling to and from New York City.

First arch delivered to the bridge site, November 2024

In November, the project site took delivery of its first central arch span, which traveled 30-hours by barge down the Hudson River from upstate New York. Since then, all three arches have arrived in Kearny, NJ—bringing the project one step closer to completion.

Spotlight: Major projects moved into construction in FY24

Thanks to newly available funding through IIJA, NEC agencies made meaningful progress addressing major backlog assets by advancing pre-construction and construction activities during FY24. NEC agencies broke ground on four of these major bridge or tunnel projects last year, creating thousands of construction jobs and awarding billions of dollars in contracts. See "Progress on Eliminating the SOGR backlog" on page 22 for overall summary of progress made on all major backlog projects.

- **Connecticut River Bridge Replacement Project** will replace the 1907 Connecticut River Bridge to improve Amtrak, CTrail, and freight train reliability. In FY24, Amtrak awarded a construction contract, held a pre-construction public meeting, and broke ground in Old Lyme, CT.
- **East River Tunnels Rehabilitation Project** will rehabilitate and modernize two of the four East River Tunnel tubes in New York City, which were severely damaged by Superstorm Sandy in 2012, improving reliability and flexibility for the Long Island Rail Road, Amtrak, and NJ TRANSIT. In FY24, Amtrak awarded a construction contract and began major rehabilitation work.
- **Hudson Tunnel Project** will build a new tunnel and rehabilitate the existing 115-year-old North River Tunnel, a vital link between New York and New Jersey that is nearing the end of its useful life. In FY24, construction began on both sides of the Hudson River, including the Tonnelle Avenue Bridge in New Jersey and the Hudson Yards Concrete Casing – Section 3 in Manhattan.
- **Frederick Douglass Tunnel Program** will replace the over 150-year-old B&P Tunnel with a modern, electrified passenger rail tunnel, as well as improved track and approaches to enhance NEC operations. In FY24, Amtrak selected a contractor to construct the new tunnel, marking a major milestone.

Pre-construction builds a pipeline of construction-ready projects

Agencies also continued to advance 146 projects through pre-construction phases (i.e., planning, environmental, and design work) to build a pipeline of construction-ready projects for years to come. Connecticut DOT advanced design work on its TIME-1 project which will reconstruct bridges, address track alignment, and construct and improve interlockings between Bridgeport and Stratford, CT. Amtrak made progress to address three aging major backlog bridges in Maryland by advancing Susquehanna River Bridge Replacement through final design and kicking off planning for the Bush and Gunpowder River Bridge Replacements. Washington Union Station Expansion Project, the extensive rail capacity, SOGR, and passenger facility overhaul effort scheduled to run through 2040, received environmental clearance last year.

Project completions enable operational efficiency and improve customer experience

NEC agencies closed out 11 projects during FY24. Notable completions include Delaware's new Claymont Transportation Center, now dedicated as the Harris B. McDowell Transportation Center, which features improvements in capacity, safety, and accessibility. The Riverside Yard and Heavy Maintenance Facility in Maryland will improve MARC's operational efficiency. New platforms at Baltimore Penn Station have been added to ease congestion and support future new Acela service.

NEC owners continued essential state-of-good-repair work in FY24

NEC agencies spent $1.2 billion in FY24 on capital renewal investments, or projects and programs that support routine repair and replacement of basic infrastructure on the right of way and at stations. Approximately $850 million of this investment took place through annual cyclical maintenance programs completed by infrastructure owners. Owners use Baseline Capital Charges (BCCs), or capital payments calculated through the Commission's Cost Allocation Model, to fund much of this essential SOGR work. In FY24, three of the four RoW owners spent their annual BCC obligation, with only MBTA falling slightly short of the required spending to address NEC SOGR.

Figure 2-3. Right-of-way owner FY24 BCC obligations and spending (millions)

Table notes: See Appendix for complete details on owners' BCC spending including station owner obligations and BCC-eligible investment.

RoW Owner Territory	FY24 BCC Obligation	FY24 BCC-eligible Investment	Variance
Amtrak	$657.9	$941.5	$283.6
MBTA	$34.9	$32.8	-$2.1
Connecticut DOT	$139.9	$180.7	$40.8
MTA	$21.4	$25.8	$4.4
Total	$854.10	$1,180.80	$326.7

In FY24, Amtrak alone invested over $900 million in capital renewal including installing 819,000 feet of new rail, 189,000 new ties, 58 turnouts, and surfacing 4 million feet of ballast. MTA Metro-North invested $25 million in its territory, including replacing four interlockings. CTDOT invested most heavily in its track renewal program along with bridge design and structures. MBTA invested most heavily in its surfacing program, addressing 100,000 feet of ballast in its territory, as well as the tie/timber program, installing over 2,000 wood ties.

Units delivered in FY24 - All owners

4M feet of ballast surfacing

344K feet of ballast undercutting

819K feet of rail installed

58 turnouts installed

189K ties installed

See Glossary in Appendix for more details on these activities

Innovative track outage approaches increase efficiency and safety

In recent years, demand for track outages on the NEC has increased as agencies began advancing more major capital projects and ramping up capital renewal programs, while continuing to require track time to perform routine maintenance and inspections. This growing demand has put pressure on right-of-way owners to improve resource coordination processes and develop strategies that help keep critical NEC projects on schedule.

In FY24, Amtrak spearheaded the use of expanded track outage windows in some locations to accomplish more infrastructure maintenance and renewal work in a shorter time and worked with its partners to ensure that the targeted work windows minimized impacts to passengers. For example, Amtrak and Pennsylvania DOT implemented expanded weekday outage windows to bring track infrastructure along a 50-mile stretch of the Harrisburg Line to a state of good repair—an investment with a 40-year lifespan. For approximately 7 months, midday Keystone Service trains running between Harrisburg and Lancaster, PA were replaced by bus bridges. With the extended outage windows, Amtrak crews delivered 87 percent more units with its Track Laying System and Undercutter than in a similar time period in FY23 and reduced the average cost of installation per track mile by 35 percent.

Working in coordination with Maryland DOT and MARC, Amtrak expanded its nightly track outage windows by eliminating or altering the schedules of a small number of late night and early morning Amtrak and MARC trains. These schedule modifications, which began in March, provided Amtrak crews with 5 hours of uninterrupted track access to perform critical maintenance and renewal work as compared to 3 hours before the modifications were in place. Contractors advancing capital projects, such as New Carrollton Station SOGR Improvements, also had more track access per night, lowering the risk to Amtrak of costly delay claims. Given the success of these initiatives in FY24 and continued challenges in meeting demand for track outages, Amtrak is engaging other partners across the NEC to identify opportunities to more efficiently complete critical work while protecting service levels as much as possible.

Gateway: Hudson Tunnel Project

The Gateway Development Commission completed the consolidated easement with New York State and advanced the project into construction. This project will construct a new two-track rail tunnel beneath the Hudson River, increasing reliability and flexibility for Amtrak and NJ TRANSIT along the NEC.

Penn Station Access

The MTA completed Track 2 of the Legget Interlocking and erected the southern span of Bronxdale Bridge. This project will provide new Metro-North service to Penn Station while transforming Amtrak's Hell Gate Line from a two-track to four-track railroad and bringing it into a state of good repair.

Gateway: Sawtooth Bridges Replacement Program

Amtrak completed Preliminary Engineering and 30% Design on this project, which will replace two bridges between Newark Penn Station and Secaucus Junction.

Cornwells Heights Station Reconfiguration

SEPTA continued Final Design activities on the project, which will make this station along the SEPTA Trenton line ADA accessible and install new passenger amenities such as shelters and security improvements.

Susquehanna River Bridge Replacement

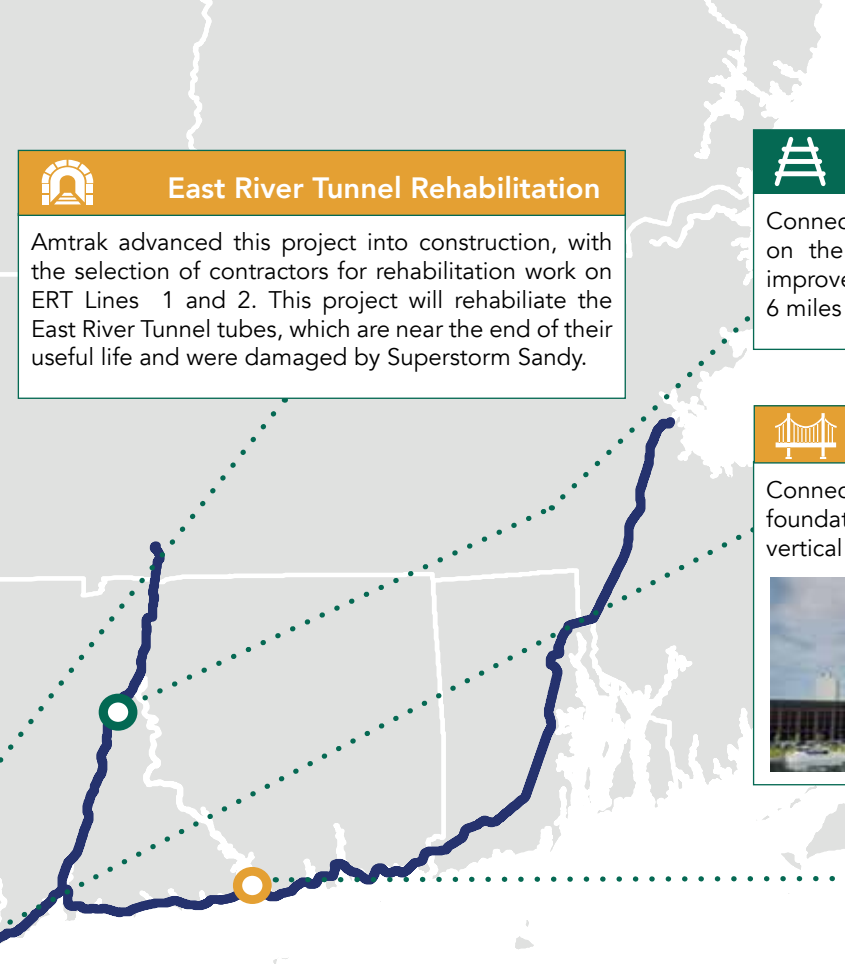
Amtrak completed 90% design and held a project kick-off event in July after years of community outreach. This project will ultimately replace the existing 1917 bridge and add a new two-track bridge across the Susquehanna River.

Bush River Bridge Replacement

Amtrak began pre-construction activities on this project which will replace the existing bridge with a new high-level four-track bridge on a new alignment that increases speed for Acela service.

Frederick Douglass Tunnel Program

Amtrak awarded its first-ever Delivery Partner contract and advanced the project into construction. This project will replace the existing 150-year-old tunnel and will improve frequency and reliability for current and future service between Baltimore and Washington D.C.



East River Tunnel Rehabilitation

Amtrak advanced this project into construction, with the selection of contractors for rehabilitation work on ERT Lines 1 and 2. This project will rehabiliate the East River Tunnel tubes, which are near the end of their useful life and were damaged by Superstorm Sandy.

Hartford Line Double Track Phase 3B

Connecticut DOT continued Final Design activities on the project, which will add double tracking, signal improvements, and grade crossing safety upgrades to over 6 miles of track.

WALK Bridge Replacement

Connecticut DOT continues work on catenary foundations, trestles, and micro-tunnels for a new vertical lift bridge over the Norwalk River.

Connecticut River Bridge Replacement

Amtrak awarded the construction contract in June. A groundbreaking ceremony was held in September 2024, and the project is now under construction. This project will replace the existing bridge with a new two-track bascule bridge over the Connecticut River.

NHL Power Improvement Program

Connecticut DOT continued Final Design activities on the project, which will replace and upgrade traction and a signal power subtations along the New Haven Line.

Newark Penn Station Improvements

NJ TRANSIT continued Development activities on the project, which will include a master plan followed by improvements to the escalators, signage, elevator, and stairwells throughout the entire station.

Gateway: Dock Bridge Rehabilitation

Amtrak continued Final Design activities on the project, which will rehabilitate three vertical lift structures across the Passaic River.

Gunpowder River Bridge Replacement

Amtrak began pre-construction activities on this project, which will replace the existing bridge with a new four-track bridge over the Gunpowder River.

Progress on Fed-State Partnership Awardees in FY24

This map highlights select FY22-23 FSP award recipients and the progress made over the past year since funding announcements were made.

Project Phase at the end of FY24

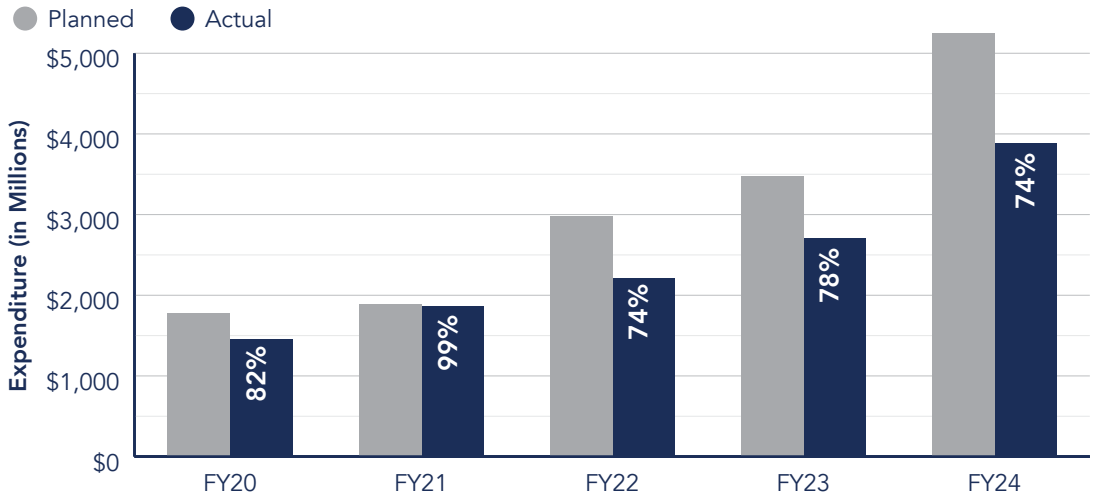
- Pre-Construction
- Construction

FY24 Plan Adherence

Along with the record progress made toward advancing investments during FY24, NEC agencies continue to face challenges developing an accurate plan and delivering investments according to that plan. As in previous years, NEC agencies under-delivered based on expenditure, achieving approximately 74% of the over $5 billion planned expenditure in the CIP. Importantly, the $5 billion planned expenditure from the CIP does not include any planned expenditures for NJ TRANSIT or Delaware DOT projects. If those actuals were included in the CIP planned expenditure, overall plan adherence would be closer to 64%.

As discussed in previous Annual Reports, expenditure is only one way to measure plan adherence, and annual spend variance is not necessarily indicative of a project's overall schedule progress and whether it will be completed on time. For instance, changes in project scope, funding assumptions, and/or delivery strategy that occur during project planning and development stages may impact annual spend variances and life-of-project schedules positively or negatively.

Figure 2-4. FY20-24 total planned and actual expenditures (millions) and adherence to plan (percent)



Notes: FY24 Planned expenditure does not include planned expenditures for NJ TRANSIT and Delaware DOT projects. FY24 actual expenditure for those projects was approximately $800M.

Figure 2-5. Plan adherence by submitting agency expenditure (millions)

Submitting Agency	Total Investments in FY24	FY24 Planned Investment	FY24 YTD Investment	Percent of FY24 Plan Invested
Amtrak	203	$3,035.4	$2,155.0	71%
MBTA	40	$37.0	$36.7	99%
Rhode Island DOT	4	$18.0	$0.9	5%
Connecticut DOT	58	$206.5	$414.1	201%
MTA	15	$1,838.0	$395.1	21%
NJ TRANSIT	13	Not available	$791.5	Not available
SEPTA	12	$44.7	$55.6	124%
Pennsylvania DOT	5	$48.5	$29.2	60%
Delaware DOT	3	Not available	$8.9	Not available
MDOT MTA / MARC	8	$4.8	$5.3	111%
VRE	1	$17.6	$0.1	0%
Total	**362**	**$5,250.5**	**$3,892.4**	**74%**

The FY23 Annual Report reported that, starting in FY24, the Commission would have a new framework for measuring plan adherence using schedule data. The Commission collected life-of-project (LOP) schedule data quarterly throughout FY24 to monitor changes to schedules as well as track and monitor project delays. Based on this standardized schedule data, project sponsors are similarly under-delivering according to plan. While only 17% of major backlog projects are behind schedule as projected in the FY24-28 CIP, 35% of capital renewal projects and 30% of improvement projects are behind per the schedules submitted in the CIP.

Figure 2-6. Plan adherence by investment type per project schedule

Project Type	Total No. of Projects	Schedule behind Plan	Schedule adhered to Plan	Schedule ahead of Plan
Capital Renewal	88	35%	55%	10%
Improvement	54	30%	63%	7%
Stations	68	26%	60%	13%
Major Backlog	18	17%	83%	0%
Planning Studies	8	13%	88%	0%

While overall NEC investment fell over $1 billion short of planned expenditure, not all investment types experienced underspending in FY24. As seen in Figure 2-7 below, capital renewal spending in FY24 was 105% of the planned expenditure, reflecting no notable variance.

Table 2-8 shows the expenditure variance for major NEC projects, along with the explanation of variance from the submitting agency. As in previous years, many of these project-level variances are significant. However, there are some notable exceptions that spent as planned in the FY24-28 CIP, including the Hudson Tunnel Project, the Gateway Program project to construct a new two-track rail tunnel beneath the Hudson River. The most notable project-level variances shown in Figure 2-8 have differing explanations, not all of which point to poor project planning. For example, three of the four largest annual variances resulted from cross-agency coordination challenges with environmental and design approvals as well as resource provision.

Figure 2-7. Plan adherence, by investment type

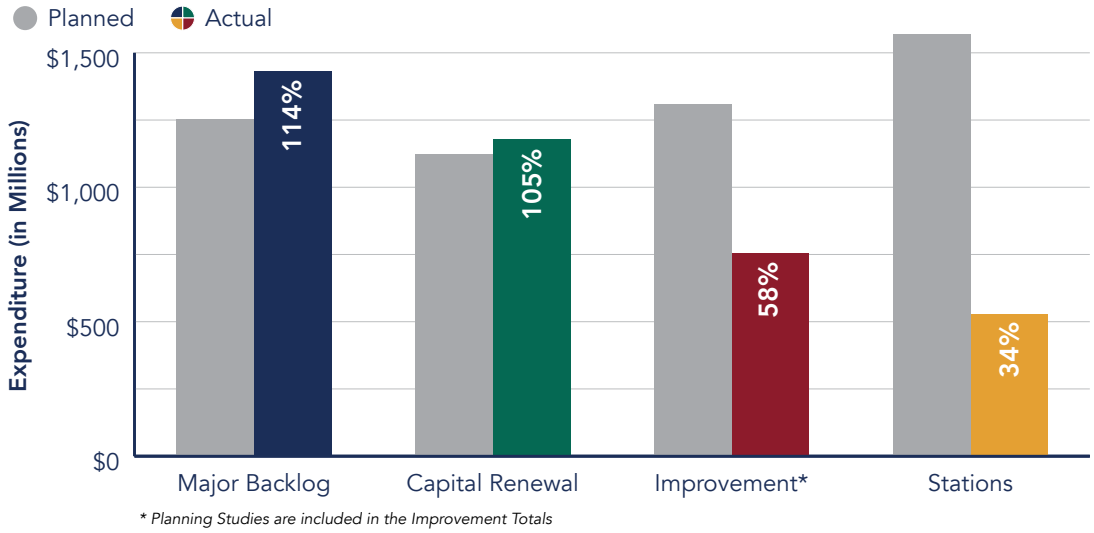


Figure 2-8. Plan adherence, top 10 projects by planned expenditure

Project Name	FY24 Planned Expenditure	FY24 Actual Expenditure	Variance	Explanation of Variance
New York Penn Station Reconstruction	$1,150.6	$36.6	$1,113.9	NEPA initiation is delayed pending further discussions with project partners and FRA.
Penn Station Access	$530.5	$224.8	$305.7	Some planned tasks were deferred due to staffing, design, and construction issues.
Frederick Douglass Tunnel Program	$402.9	$167.2	$235.7	Construction contract award was delayed due to procurement timeline and FRA pre-award authority issues, starting one year later than originally anticipated in the FY24 plan.
East River Tunnel Rehabilitation Project	$312.4	$87.9	$224.5	The ERT project award was delayed from February 2024 to June 2024, causing delays in awarding both the construction and construction management contracts. This, in turn, led to the long-term outage being delayed from August 2024 to December 2024.
Gateway: Hudson Yard Concrete Casing 3	$259.0	$179.3	$79.8	No notable variance, though several activities have been re-organized due to approvals from outside agencies.
Gateway: Hudson Tunnel Project	$253.9	$271.5	-$17.6	No notable variance.
Philadelphia 30th Street District Plan	$119.3	$116.9	$2.4	No notable variance. The minimal unspent contingency money will be rolled into FY25.
Airo Facilities: Penn Coach Yard	$119.0	$50.0	$69.0	An extended procurement process and permitting requirements delayed the construction start.
Harold Interlocking	$110.0	$107.1	$2.9	No notable annual spend variance
Connecticut River Bridge Replacement Project	$91.8	$78.2	$13.6	The variance in project spending is due to unspent contingency & financing budget, which will be rolled into FY25 and beyond to maintain the Life of Project (LOP) budget.

Progress in Eliminating the SOGR backlog

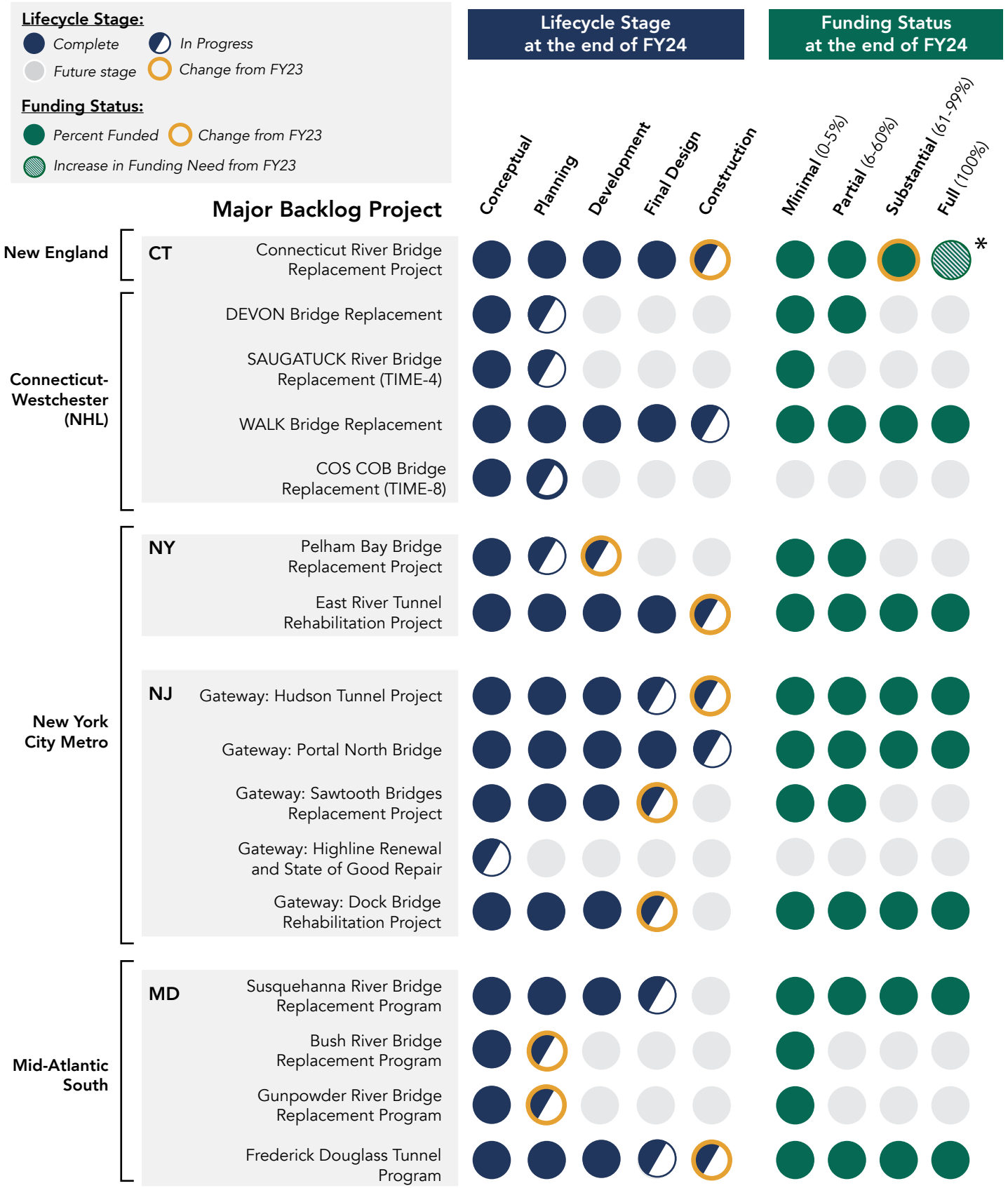
The NEC Cost Allocation Policy requires that the Commission report on the progress in eliminating the NEC SOGR backlog in the Annual Report. The SOGR backlog refers to the population of assets—both large bridges and tunnels (major backlog) and basic infrastructure assets—on the NEC that are no longer within their useful life or are in a condition to perform as designed.

Major Backlog

Figure 2-9 is an updated table from the FY22 and FY23 Annual Reports which shows the progress made over the past year on major backlog projects in terms of percent funded as well as progress through the project lifecycle. As discussed in the spotlight on page 12, four major backlog projects started construction in FY24. In addition to those milestones, the Sawtooth Bridges Replacement and Dock Bridge Replacement Projects started final design, the Pelham Bay Bridge Replacement Project started development, and the Bush and Gunpowder River Bridge Replacement Projects started Planning.

This graphic also shows funding status as of the end of FY24, which does not include the November 2024 FSP funding awards. As such, the only changes in funding status was for Connecticut River Bridge Replacement Project which experienced a cost increase so is no longer considered fully funded.

Figure 2-9. Status of major backlog projects at the end of FY24



* Project no longer fully funded due to cost increases in FY24

Basic Infrastructure Backlog

In the FY22 Annual Report, the Commission identified a proposed approach for setting a baseline of a percent of a certain subset of assets in a SOGR at the beginning of the federal fiscal year, and then reporting the percent in a SOGR at the end of the year. This assessment would be based both on additional assets that aged out of SOGR and new assets that replaced backlog assets during that federal fiscal year.

Since then, the Commission has been working with RoW owners to determine an initial baseline percentage of existing assets in a SOGR for select asset types, with the purpose of tracking percentage of assets addressed each year in the NEC Annual Report.

Figure 2-10 includes the latest asset data from RoW owners, reflecting the count of existing assets, for asset types where that data is available, along with a "SOGR rating" based on percent in SOGR as of the end of FY24 for Amtrak and as of FY25 Q1 for Metro-North. In this table, Amtrak's percent of assets in a SOGR is based on useful life for all assets except for catenary structures, which is based on condition. Amtrak is moving away from age as a proxy for asset condition, and we expect future iterations of this table will include more condition-based SOGR assessments. MNR percent of assets in a SOGR is determined by condition data when available, otherwise useful life is used to calculate the percentage.

As of this report, percent in SOGR estimates are not comparable across iterations in prior Commission documents due to methodology updates. Going forward, the Commission will work with RoW owners to stabilize the asset types included in this exercise as well as age and/or condition data to measure percent in SOGR change year-over-year.

Figure 2-10. Status of programmatic backlog to date

Asset Type	Unit	Asset Count	SOGR Measurement	SOGR Rating
Amtrak (Amtrak and Massachusetts)				
Catenary Structures	each	18,545	Condition	Medium-High
Catenary Wire	miles of catenary	1,467	Age	Medium-Low
Central Instrument House	each	2,241	Age	Medium-High
Concrete Ties	each	3,346,230	Not available	Not available
Culvert	each	737	Not available	Not available
Rail	track miles	1,617	Age	Medium-High
Signals	each (INT)	1,816	Age	High
Signals	each (ABS)	768	Age	High
Substations	each	85	Age	Medium-Low
Switch Machine	each	2,240	Age	Medium-High
Turnouts	each	1,692	Age	Medium-High
Undergrade Bridges	linear feet (track)	271,923	Age	Medium-Low
Wood Ties	each	1,506,669	Not available	Not available
Metro-North (New York only unless noted otherwise)				
Catenary Structures	each	189	Condition	High
Culverts	track feet	198	Condition	Medium-Low
Rail (CT and NY)	rail miles	442	Age	Medium
Substations	each	5	Condition	Medium-Low
Turnouts (CT and NY)	each	267	Age	Medium-High
Undergrade Bridges	track feet	4,660	Condition	High

Note: "Not available" indicates neither age or conditon data were available at the time of publication to calculate the SOGR rating.

Key: SOGR Rating	Percent in SOGR
High	80-100%
Medium-High	60-80%
Medium	40-60%
Medium-Low	20-40%
Low	0-20%

3. Operations

This section summarizes NEC operations during federal fiscal year 2024 using available data for service and ridership, train performance, and major service incidents. Analyzing operations, including trends over time, helps track how well the corridor serves its customers and also helps agencies identify ways to improve service.

Ridership and Service

Ridership Continues to Rebound in FY24

Service and ridership levels continue to increase, ending FY24 with the highest observed annual levels since FY19, with several agencies setting new service and ridership records. 200 million trips were taken on the NEC in FY24, with ridership on the whole increasing by 10% from FY23.

Millions of Americans rely on the corridor every year for travel in the Northeast. This was certainly the story in FY24 as the sustained return of riders to the Northeast Corridor continued. The NEC saw an average of 628,000 weekday riders in FY24 (44,000 on Amtrak, and 584,000 on the commuter railroads), a 9% increase from FY23, and peaked at 680,000 in June. Average weekend ridership in FY24 grew even more, increasing by nearly 13% from FY23 with a high of 377,000 in May. Almost every operator on the NEC experienced an increase in ridership from FY23 with some having notable success stories.

Amtrak, MBTA, NJ TRANSIT, and SEPTA all experienced a year-over-year increase in total ridership of 16% or more, with Amtrak 10% above pre-pandemic total ridership.

Amtrak, for example, recorded a 15.9% year-over-year increase in on-corridor weekday ridership and exceeded pre-pandemic (FY19) weekday ridership by 4.2% with an average of 44,000 weekday riders in FY24. The increase in weekend passengers was even greater, exceeding FY19 weekend ridership by 26.7%. Amtrak's FY24 average daily weekend ridership was equivalent to that of its average weekday ridership.

MBTA saw the strongest recovery and in FY24 recorded the largest year-over-year percentage increase of any operator in average daily weekday and weekend on-corridor ridership, at 21.4% and 22.4%, respectively.

SEPTA recorded the second highest year-over-year increase in on-corridor weekday ridership at 18.9%. NJ TRANSIT was third with a 17.5% increase despite operational difficulties, as outlined in the Train Performance section below.

One of the largest trends over the last few years has been the increase in weekend ridership. In FY24, every operator that provides weekend service saw at least a 5% year-over-year increase in average daily weekend ridership, with MARC experiencing a 32% increase. Compared to FY19, four out of eight operators had greater average weekend daily ridership in FY24 with all but one showing at least 75% of pre-pandemic ridership levels on weekends.

Figure 3-1. FY20-24 average NEC weekday trains and trips by quarter

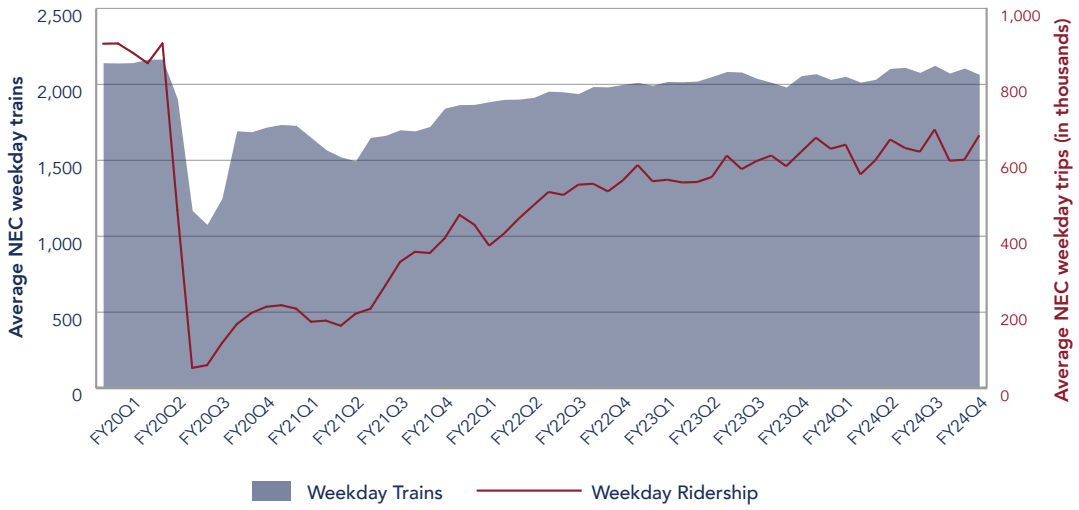


Figure 3-2. FY20-24 average NEC weekend trains and trips by quarter

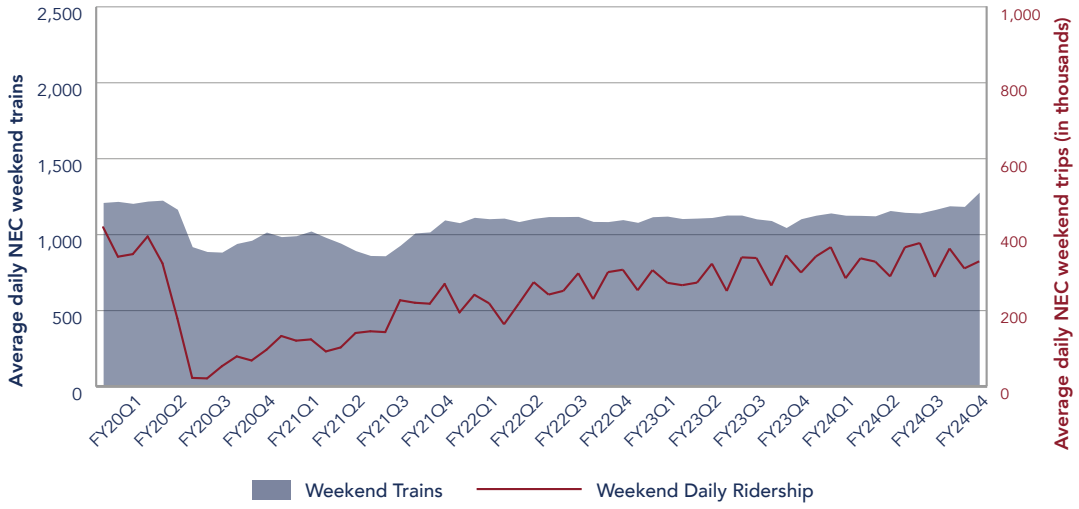


Figure 3-3. F19-FY24 average NEC weekday trains by operator

Operator	Average NEC Weekday Trains							
	FY19	FY20	FY21	FY22	FY23	FY24	Change From FY23	Change From FY19
Amtrak	156	93	78	99	126	**145**	**16%**	**-7%**
MBTA	308	263	272	313	315	**329**	**4%**	**7%**
CT*rail*	46	42	30	39	41	**35**	**-14%**	**-24%**
Metro-North	298	228	198	267	300	**295**	**-2%**	**-1%**
LIRR	451	437	408	421	450	**469**	**4%**	**4%**
NJT	383	351	381	395	400	**400**	**0%**	**4%**
SEPTA	340	251	216	263	267	**271**	**1%**	**-20%**
MARC	96	79	56	97	97	**94**	**-2%**	**-2%**
VRE	32	24	23	31	32	**31**	**-2%**	**-3%**
Total	**2,110**	**1,768**	**1,662**	**1,926**	**2,028**	**2,069**	**2%**	**-2%**

Figure 3-4. FY19-FY24 average NEC weekend trains by operator

Operator	Average NEC Weekend Trains							
	FY19	FY20	FY21	FY22	FY23	FY24	Change From FY23	Change From FY19
Amtrak	110	78	71	87	100	**119**	**19%**	**8%**
MBTA	136	118	110	144	137	**144**	**5%**	**6%**
CT*rail*	33	29	27	28	28	**28**	**-1%**	**-16%**
Metro-North	196	162	146	196	188	**196**	**4%**	**0%**
LIRR	312	307	284	293	290	**302**	**4%**	**-3%**
NJT	201	214	215	217	218	**220**	**1%**	**10%**
SEPTA	210	149	95	120	126	**134**	**6%**	**-36%**
MARC	15	13	15	15	15	**15**	**-1%**	**0%**
VRE	-	-	-	-	-	**-**	**-**	**-**
Total	**1,213**	**1,069**	**964**	**1,099**	**1,101**	**1,157**	**5%**	**-5%**

Figure 3-5. FY19-FY24 average NEC weekday trips by operator

Operator	Average NEC Weekday Trips							
	FY19	FY20	FY21	FY22	FY23	FY24	Change From FY23	Change From FY19
Amtrak	42,168	20,643	14,117	28,146	37,904	**43,944**	**16%**	**4%**
MBTA	65,999	39,068	14,434	33,933	50,367	**61,164**	**21%**	**-7%**
CT*rail*	2,568	1,301	537	936	1,100	**1,146**	**4%**	**-55%**
Metro-North	113,876	64,276	33,452	66,091	84,316	**89,014**	**6%**	**-22%**
LIRR	323,562	180,533	110,662	197,506	216,981	**216,238**	**0%**	**-33%**
NJT	233,340	121,985	61,101	112,115	138,316	**162,549**	**18%**	**-30%**
SEPTA	63,946	32,779	15,858	31,516	34,783	**41,356**	**19%**	**-35%**
MARC	29,687	14,499	3,098	7,591	10,753	**11,035**	**3%**	**-63%**
VRE	4,264	2,001	380	903	1,360	**1,334**	**-2%**	**-69%**
Total	**879,410**	**477,085**	**253,639**	**478,735**	**575,879**	**627,780**	**9%**	**-29%**

Figure 3-6. FY19-FY24 average NEC weekend trips by operator

Operator	Average NEC Weekend Trips							
	FY19	FY20	FY21	FY22	FY23	FY24	Change From FY23	Change From FY19
Amtrak	33,681	17,467	12,586	29,255	36,675	**42,700**	**16%**	**27%**
MBTA	23,934	14,524	7,889	16,013	24,083	**29,473**	**22%**	**23%**
CT*rail*	1,702	965	479	810	954	**998**	**5%**	**-41%**
Metro-North	54,883	28,864	23,908	39,471	56,001	**59,133**	**6%**	**8%**
LIRR	122,395	80,995	74,600	81,200	88,201	**95,594**	**8%**	**-22%**
NJT	72,838	38,256	33,949	62,689	70,703	**83,217**	**18%**	**14%**
SEPTA	18,055	9,300	4,495	10,432	12,078	**13,467**	**12%**	**-25%**
MARC	8,777	4,324	2,445	4,277	4,965	**6,559**	**32%**	**-25%**
VRE	-	-	-	-	-	**-**	**-**	**-**
Total	**336,264**	**194,695**	**160,350**	**244,146**	**293,662**	**331,141**	**13%**	**-2%**

Weekday Service Remains Steady with More Weekend Trains Added

As ridership increases, meeting the resulting demand can be challenging given the corridor's capacity constraints. In FY24, NEC operators collectively increased weekday and weekend service by 2% and 5%, respectively. This is largely due to additional Amtrak service introduced in March 2024 on the Acela, Northeast Regional, Keystone, and Empire Services, providing a 15.6% and 19.0% increase in average weekday and weekend on-corridor services, respectively.

MBTA also increased on-corridor services throughout the year, with 4.3% and 5.1% increases in average daily weekday and weekend trains, respectively. As ridership behavior has evolved, MBTA implemented all-day service with timetable changes providing a greater number of off-peak weekday and weekend trains, particularly on the Fairmount Line, which had 30 minute headways throughout most of the day. Notably, MBTA has recovered 92.7% of FY19 weekday on-corridor ridership and is exceeding pre-pandemic weekend ridership by 23.1%, growth at least partially attributable to increased service spread throughout the day.

Over the course of FY24, SEPTA's average daily service on the NEC remained fairly constant, however there was a large increase in weekend service at the end of the fiscal year in September, from 130 to 176 average daily trains on weekends, as well as an increase in weekday services on the Wilmington/Newark Line.

Similar to ridership, the most pronounced long-term trends are on the weekend. All but two agencies added weekend service and nearly all agencies are at or above their FY19 level of weekend service. NJ TRANSIT and Amtrak most notably provided 110% and 107% of their pre pandemic level weekend service, respectively.

Figure 3-7. FY19-FY24 total annual NEC trips by operator (in millions)

Operator	Total Annual Trips							
	FY19	FY20	FY21	FY22	FY23	FY24	Change From FY23	Change From FY19
Amtrak	14.46	7.20	5.00	10.36	13.67	**15.90**	**16.3%**	**10%**
MBTA	19.68	11.73	4.59	10.51	15.60	**19.01**	**21.9%**	**-3%**
CT*rail*	0.84	0.44	0.19	0.33	0.39	**0.40**	**4.4%**	**-52%**
Metro-North	37.51	19.80	11.22	21.32	27.74	**29.36**	**5.8%**	**-22%**
LIRR	96.98	55.60	36.65	59.83	65.55	**66.32**	**1.2%**	**-32%**
NJT	68.28	35.87	19.48	35.73	43.29	**51.00**	**17.8%**	**-25%**
SEPTA	18.53	9.54	4.62	9.30	10.29	**12.18**	**18.3%**	**-34%**
MARC	8.65	4.24	1.06	2.42	3.31	**3.56**	**7.5%**	**-59%**
VRE	1.11	0.52	0.10	0.24	0.35	**0.35**	**-1.6%**	**-69%**
Total	**266.05**	**144.95**	**82.90**	**150.05**	**180.19**	**198.08**	**9.9%**	**-26%**

Train Performance

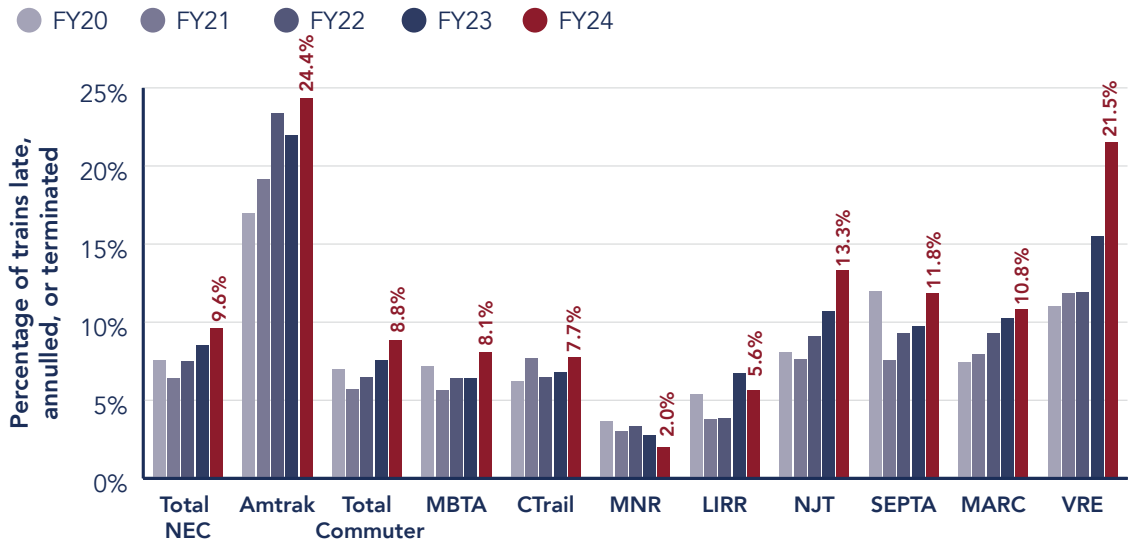
Delays Continue to Trend Upward

While ridership and service increased, the reliability of NEC trains decreased. 9.6% of NEC trains were late, annulled, or terminated in FY24, compared to 8.5% in FY23.

Overall, NEC trains remain more reliable than pre-pandemic services—between FY15 and FY19, the percentage of trains late, annulled, or terminated ranged between 11% and 13%. However, the percentage of trains late has steadily been on the rise for the past three years. This follows the reduction in trains late from lower service levels during the pandemic. Every year since FY22 has seen an approximately 1 percentage point increase in trains late, despite less new service being added every year. While some additional delays, like a 41% increase in transportation issues and a 29% increase in passenger related delays, can be attributed to more service and ridership, increased delay minutes were seen in all other categories as well (see Figure 3-11). This included a 39% increase in infrastructure-related delays, which contains, most notably, a more than doubling in ET-related failures.

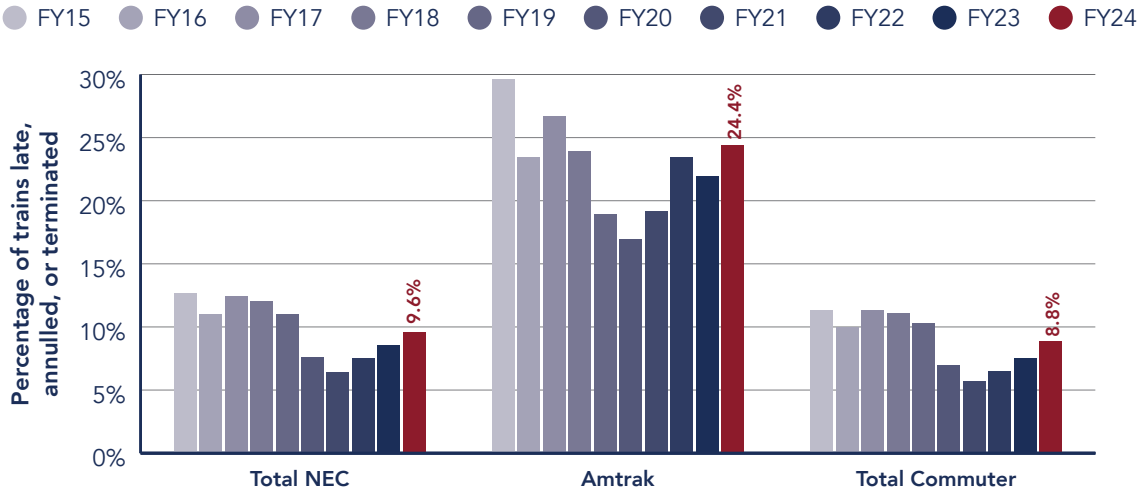
All operators reported an increase from FY23 in on-corridor percent trains late (PTL) except LIRR and MNR. MNR is especially noteworthy as they reported their lowest on-corridor PTL since reporting began in FY15.

Figure 3-8. FY20-24 percent NEC trains late, annulled, or terminated by operator



Amtrak and NJ TRANSIT were particularly impacted by electric traction issues between Trenton and New York Penn Station, with PTL increasing significantly during FY24Q3 and Q4, as detailed in the following section. Other significant impacts included an increase in track, and on the railroad mechanical issues for SEPTA as well as passenger and freight train interference and an increase in heat orders during the summer for VRE, who saw a significant increase in delays.

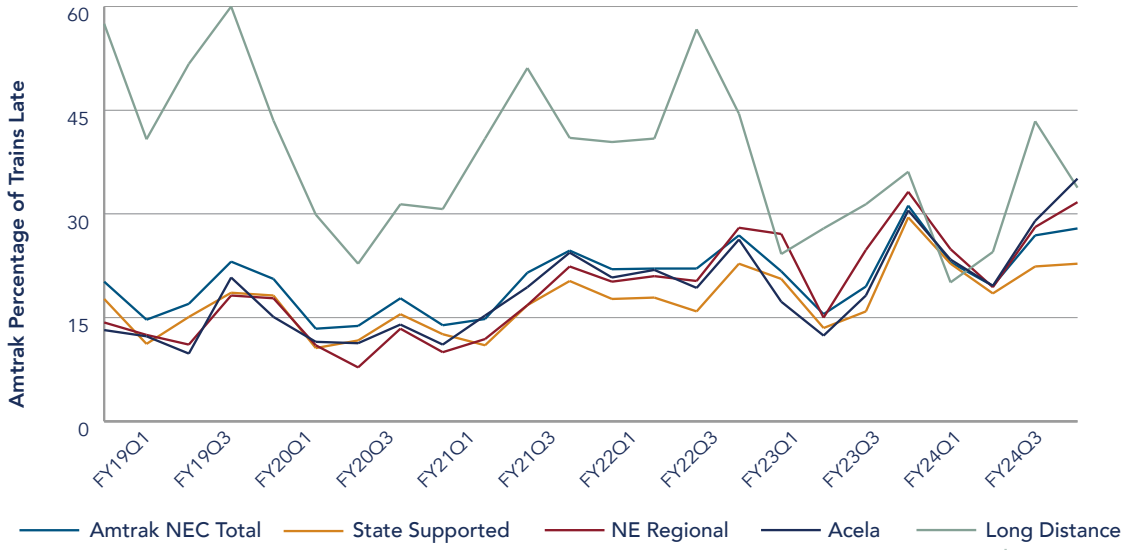
Figure 3-9. FY15-FY24 percent trains late, annulled, or terminated



Overall, operator PTL remained below pre-pandemic averages from FY15-FY19, when PTL for the entire NEC was 11.8% compared to 9.6% in FY24. MBTA, CTrail, MNR, LIRR, and SEPTA all had a lower PTL in FY24 than they did in any year from FY15 to FY19. Even Amtrak, despite PTL increasing over the past five years at a greater rate than the rest of the corridor, had lower PTL in FY24 than it averaged from FY15-FY19.

Amtrak on-corridor performance greatly improved in FY19 with an average PTL of 18.9%, compared to an average of 25.9% in the four years prior. However, since then, the on-corridor PTL of Acela, Northeast Regional, and state supported services have all been steadily increasing. The outlier is long-distance service, which while fairly inconsistent quarter to quarter, has been trending downward since FY19. Given the small amount of on-corridor service provided on long-distance routes relative to the other three, the impact on Amtrak's overall on-corridor PTL is minimal. Acela PTL is especially notable for hitting a record high of 35% in FY24Q4—greater than the PTL of any other intercity or commuter service along the NEC—with long-distance and Northeast Regional services ranking just behind with 34% and 32% PTL, respectively.

Figure 3-10. Amtrak percent NEC trains late by service (FY19-FY24)



Weather events continue to have an impact across the corridor, particularly related to heat. In FY24, there were an average of 1,658 train delay minutes per 1,000 trains for the first 6 months of the year (October – March) and an average of 2,522 for the last six months (April – September), meaning 60% of delays occurred in the warmer months of the year. There are other reasons for this, such as more programmed work and speed restrictions due to increased construction in the summer, but weather is also a contributing factor. While delays directly attributable to weather, such as floods or wind, made up only 7% of total delay minutes in FY24, many delays categorized as infrastructure and mechanical issues can be linked to weather conditions—the heat-induced ET issues in Q3 and Q4, for example.

Figure 3-11. Total Delay Incidents, Train-Delay Minutes, and Notable Major Incidents

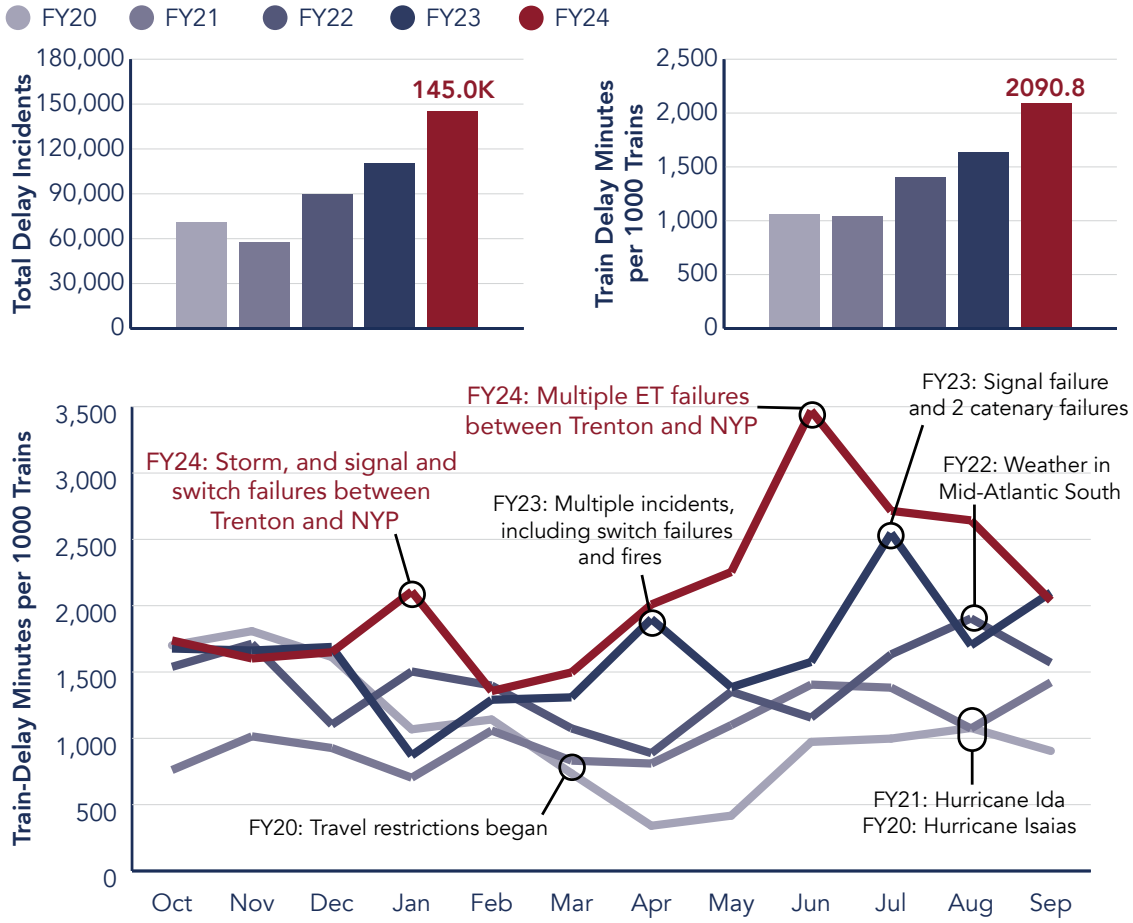
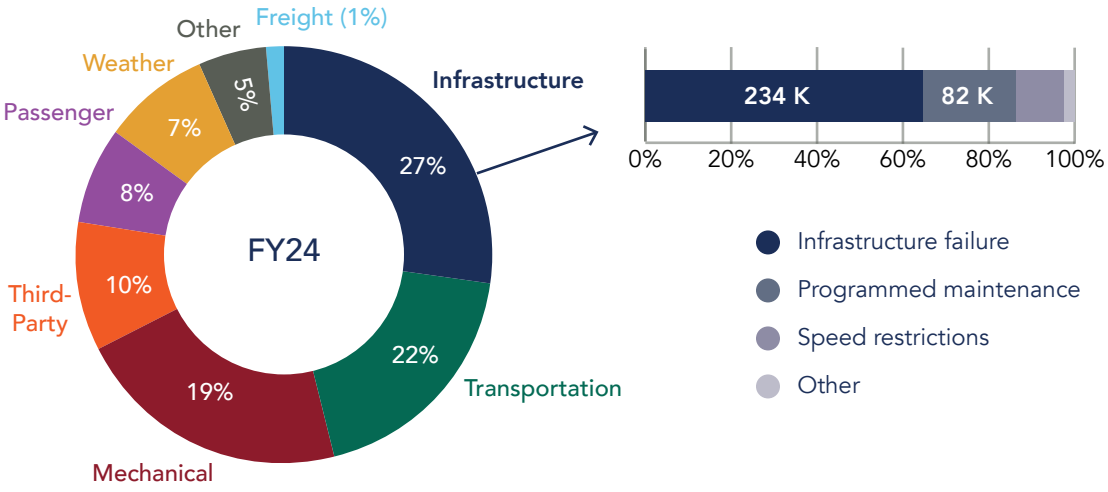
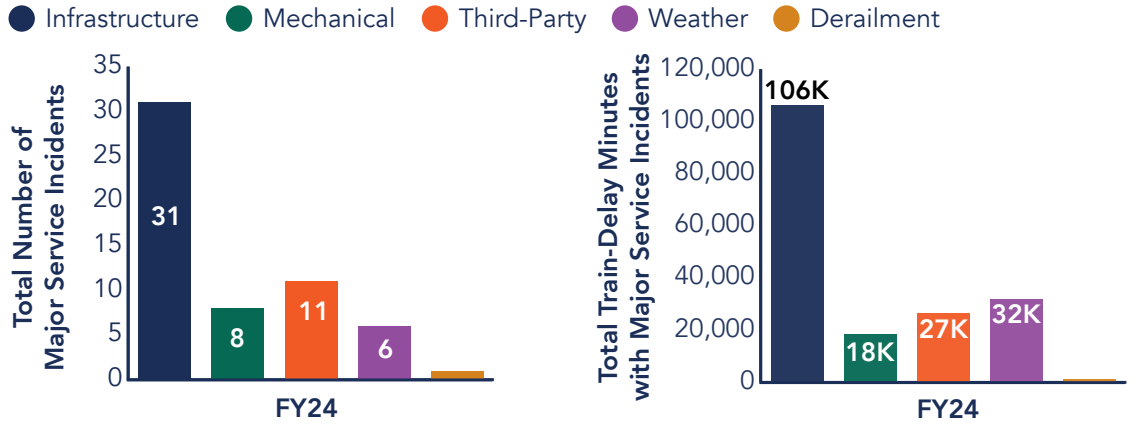


Figure 3-12. Delay Minutes by Cause



Two of the top three major service incidents in FY24 (in terms of train delay minutes) were caused by severe weather impacting the corridor. Weather caused six major service incidents in FY24 leading to 31,900 train delays and the cancellation of nearly 200 trains, a reduction from eight major service incidents in FY23. The most disruptive major service incident of FY24 was a storm on December 18th impacting the corridor from Pennsylvania to Boston. Impacts from the severe rain and wind led to downed trees, signal issues, downed catenary wires, and washed-out track. The storm caused nearly 9,000 train delay minutes and the cancellation of 48 trains. Repairs and cleanup after the storm continued to impact MBTA trains into the following day.

Figure 3-13. Major Service Incidents



Unfortunately, trespasser strikes (included as third-party incidents) continued to be an issue for the corridor. In FY24, there were 11 major service incidents related to trespasser strikes, an increase from 8 in FY23 and more than twice the average of 5 per year between FY20 and FY23. In total, trespasser strikes resulted in 27,000 train delay minutes and 59 cancelled trains in FY24. While any trespasser strike will suspend traffic in both directions to allow investigators and inspectors access to the site, peak hour strikes can be extremely disruptive to corridor operations and cause flow-down effects from lack of crew or equipment availability. In FY24, the NEC experienced 41 trespasser strikes during peak hours, an increase of 8 over FY23.

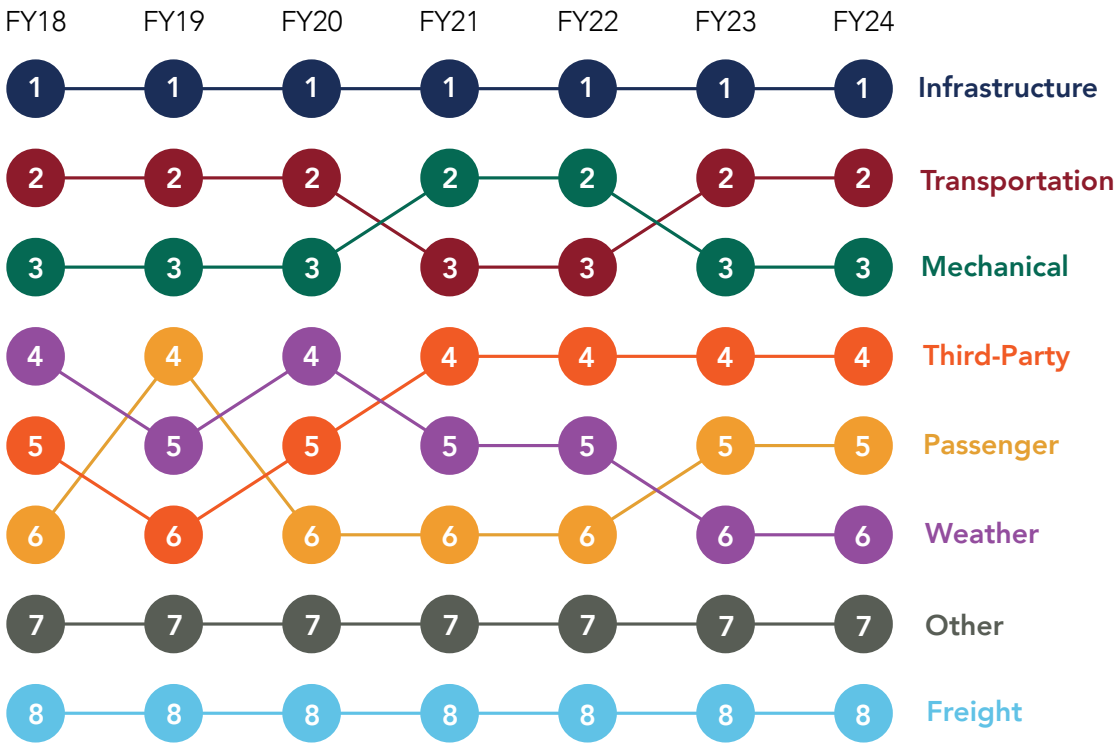
Recognizing the significant risk of trespassers to safety and operations, Amtrak has initiated a project to install security fencing along the NEC right-of-way. Continuing to install this fencing, especially in less urbanized sections where most strikes occur, should remain a high priority for Amtrak and other right-of-way owners to help prevent tragic and unnecessary loss of life and extensive service disruptions.

NEC Commission Cause of Delay Categories

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

- **Infrastructure:** Failure of track, communications and signals, electric traction, and structure assets; programmed maintenance including any late clearings; and speed restrictions.
- **Mechanical:** Locomotive failure; coach failure; and disabled train ahead.
- **Transportation:** Train dispatching and routing; train interference; and crew availability.
- **Third-Party:** Trespassers; police action; bridge openings; debris on tracks; and utility failure.
- **Weather:** Precipitation; wind; excessive cold or heat; slippery rail; and weather-related infrastructure failures.
- **Passenger:** Passenger loading time; passenger behavior or injury; and holding for connections.
- **Other:** No report provided; delay cause unknown; and derailment.
- **Freight:** Freight train interference.

Figure 3-14. FY18-24 annual ranking of train-delay minutes by cause



The 60-mile stretch of the NEC from New York Penn Station to Trenton (NYP-TRE) includes the most intensively used portion of the corridor, with 23% of NEC services traversing the area. Multiple NJ TRANSIT lines merge with the NEC on the approach to New York Penn Station, sharing tracks with Amtrak service, and terminating in New York Penn Station or continuing through to Sunnyside Yard in Queens.

Due to several bottlenecks in this section (such as the North River Tunnel), combined with high train traffic, infrastructure failures can quickly propagate into major service incidents, affecting passengers with significant delays and cancellations.

This section has been responsible for an average of 23% of total NEC train delay minutes between FY19-FY24. This percentage has been steadily increasing, reaching 28% in FY24.

New York Penn Station to Trenton makes up 13% of the total NEC line mileage but was responsible for 51% of NEC major service incidents in FY23, increasing to 65% in FY24.

Northern New Jersey Service Disruptions

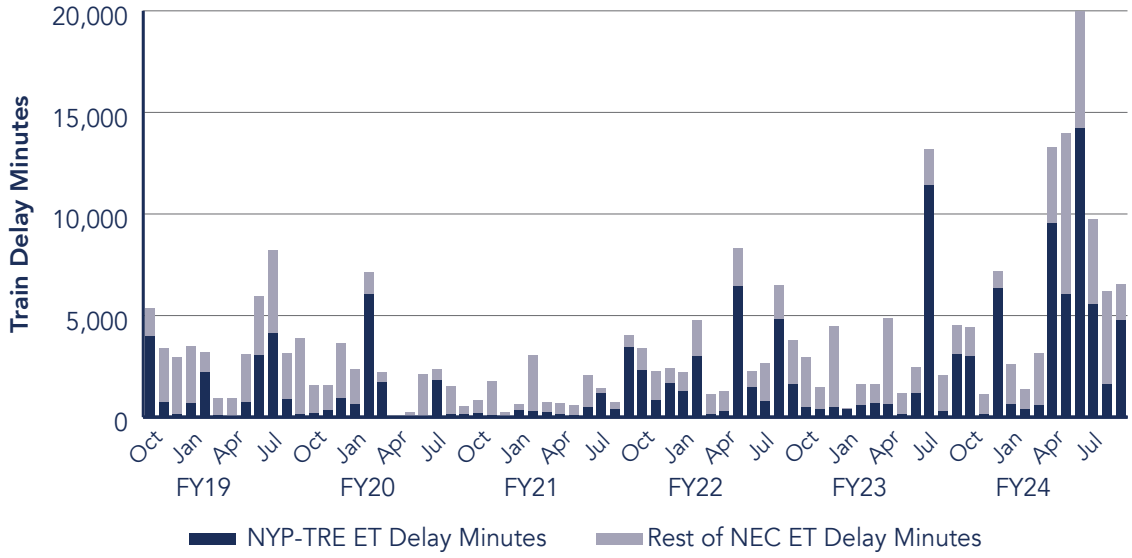
Amtrak and NJ TRANSIT services and passengers experienced several serious on-corridor delays related to electric traction (ET) and mechanical failures between New York Penn Station and Trenton during the spring and summer of 2024. Train delay minutes in the territory reached a combined total of 259,710 for FY24Q3 and FY24Q4, a 103% increase from the same period in FY23. The issues peaked in June with NJ TRANSIT canceling 563 trains running on the NYP-TRE section—5.8% of scheduled trains, more than three times the FY23 annual cancellation rate of 1.9% over the same geography. Additionally, there were 18 major service incidents involving ET issues in FY24 between NYP and TRE, an increase from 4 in FY23 and a previous high of 9 in FY22. Just 10 of these major service incidents during FY24Q3 accounted for 31% of all canceled trains on the NEC during that quarter.

Figure 3-15. ET delay minutes per 1,000 trains

Geography	FY19	FY20	FY21	FY22	FY23	FY24
October to September						
NYP - TRE	108	88	51	176	135	336
Rest of NEC	53	30	26	34	43	72
April to September						
NYP - TRE	111	40	83	215	228	523
Rest of NEC	62	31	19	37	48	109

ET delays peak in summer and winter where there are temperature extremes, however summer peaks tend to be more severe and are spread over multiple months, rather than winter peaks which are more concentrated in the coldest months.

Figure 3-16. ET-related delay minutes, NYP-TRE



In FY24, almost half (49%) of NEC electric traction delay minutes were attributed to the portion of the NEC between New York Penn Station and Trenton. This number has steadily increased from 30% in FY19.

Figure 3-17. Proportion of total NEC ET delay minutes, NYP-TRE

FY19	FY20	FY21	FY22	FY23	FY24
30%	31%	34%	51%	38%	49%

While issues in the NYP-TRE section have been the focus of investigation, it is worth noting that ET issues on other sections of the NEC have also increased, particularly during the summer when temperatures are high. Due to lower service density outside of the NYP-TRE section, these issues are less likely to become major service incidents, however it appears summer ET failures are increasingly becoming an issue outside of this segment as well.

4. Challenges & Recommendations

This NEC Annual Report demonstrates the historic investment levels and tremendous progress agencies have made toward delivering major capital projects in FY24. It also identifies annual plan adherence challenges and describes significant train performance issues due to infrastructure failures, predominantly but not exclusively within the busiest segment of the NEC—from New York Penn Station to Trenton, New Jersey. Taken together, these findings show how NEC agencies are meeting the moment to advance once-in-a-generation infrastructure investments while continuing to grapple with the impacts of aging infrastructure on train operations and overcome long-standing planning and project delivery challenges.

Notably, planning and project delivery challenges reinforce one another, creating an inefficient cycle whereby poor planning reduces the likelihood of resources being available where and when they are needed, and a lack of resources hampers agencies' ability to properly plan and execute existing plans. Emerging from decades of receiving modest and uncertain funding through annual appropriations, Amtrak increased its workforce and is continuing to transform its business practices in response to historic levels of guaranteed, multi-year funding provided through IIJA. With a critical mass of resources and improved planning and project management processes now in place, Amtrak and other NEC agencies are making tremendous tangible progress in advancing critical infrastructure investments at a rapid and historic pace.

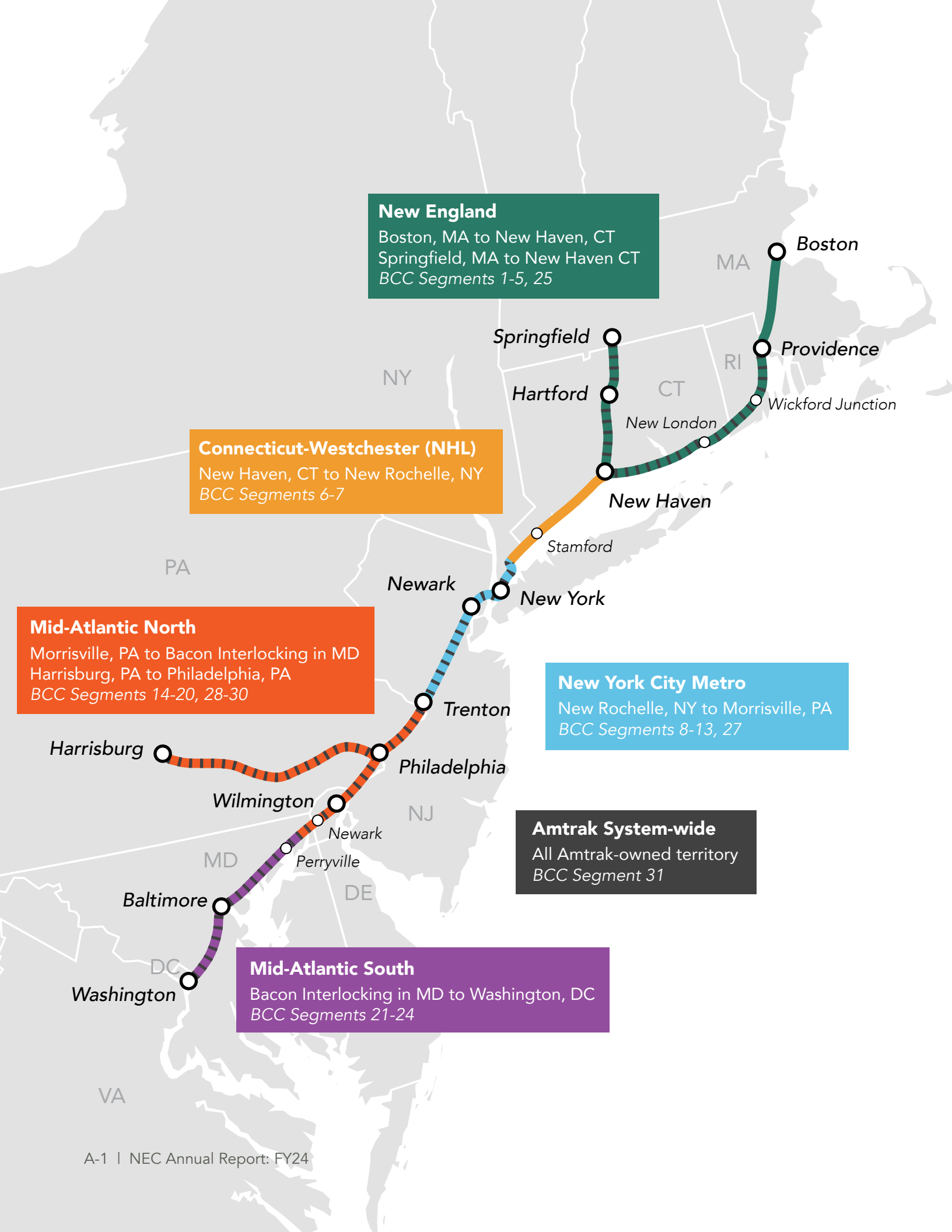
At the same time, the corridor's SOGR investment needs—particularly for capital renewal investments that will reduce the types of infrastructure failures experienced in northern New Jersey—remain extensive and require a sustained focus on continuous improvement by all NEC stakeholders. Specifically, the Commission recommends that its member agencies continue enhancing processes and practices in the following areas to more efficiently plan and deliver NEC infrastructure investments:

1. **SOGR data.** Agencies should work to improve the availability and stability of SOGR data, which are necessary for tracking SOGR backlog elimination, and increase transparency around how they are using these data to effectively and efficiently prioritize the corridor's most critical investment needs.

2. **Pre-construction schedule milestone data.** Agencies should ensure that major pre-construction milestones—e.g., 30%, 60%, and 90% design start and end dates—are captured in all project schedules so that demand for design review resources can be assessed and managed more effectively.

3. **Cost-sharing agreements.** Agencies should strengthen their internal processes that support early, collaborative project planning and development, as called for by the NEC Cost Allocation Policy, to help expedite project-based cost-sharing agreements. Agencies should also continue to collaborate within the Commission forum to develop enhanced, proactive planning processes and cost-sharing guidance.

The Commission also recognizes that consistent and predictable funding will allow NEC agencies to complete investments underway and continue to rebuild and restore assets to a state of good repair in the most efficient and cost-effective manner.


New England
Boston, MA to New Haven, CT
Springfield, MA to New Haven CT
BCC Segments 1-5, 25
Boston
MA
Springfield
Providence
RI
NY
Hartford
CT
Wickford Junction
New London
Connecticut-Westchester (NHL)
New Haven, CT to New Rochelle, NY
BCC Segments 6-7
New Haven
Stamford
PA
Newark
New York
Mid-Atlantic North
Morrisville, PA to Bacon Interlocking in MD
Harrisburg, PA to Philadelphia, PA
BCC Segments 14-20, 28-30
New York City Metro
New Rochelle, NY to Morrisville, PA
BCC Segments 8-13, 27
Trenton
Harrisburg
Philadelphia
Wilmington
NJ
Amtrak System-wide
All Amtrak-owned territory
BCC Segment 31
Newark
MD
Perryville
DE
Baltimore
DC
Mid-Atlantic South
Bacon Interlocking in MD to Washington, DC
BCC Segments 21-24
Washington
VA

Project Information Appendix

Infrastructure Summary

Operations Summary

Infrastructure and Operations Regional Detail

Operators may have service in more than one region listed below, but are profiled in a single region.

Appendix: Infrastructure Summary

Baseline Capital Charges (BCCs)

Figure A-1. BCC obligations by operator and owner territory, FY24 *(millions)*

Capital renewal investments can be funded with Baseline Capital Charges (BCCs) allocated to operators* based on methods described in the NEC Commuter and Intercity Rail Cost Allocation Policy. According to the Policy, right-of-way owners must invest operators' BCCs on eligible assets within the operators' service territories in the year the BCCs are contributed.^ Figure A-1 below shows the FY24 BCC obligations for each service operator by RoW owner territory.

Millions of USD		**Allocated to**												
Operator	**Obligation**	**Amtrak**	**MBTA**	**RIDOT**	**HL**	**SLE**	**CTDOT**	**MNR**	**LIRR**	**NJT**	**SEPTA**	**DelDOT**	**MDOT**	**VRE**
Amtrak	657.9	432.9	3.0	3.3	9.9	7.2	-	-	17.2	110.1	41.6	4.1	26.2	2.2
MBTA	34.9	12.6	22.4	-	-	-	-	-	-	-	-	-	-	-
RIDOT	0.0	0.0	-	-	-	-	-	-	-	-	-	-	-	-
HL	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SLE	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CTDOT	139.9	35.5	-	-	1.0	0.6	102.8	-	-	-	-	-	-	-
MNR	21.4	3.4	-	-	-	-	-	18.0	-	-	-	-	-	-
LIRR	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NJT	4.7	0.8	-	-	-	-	-	-	-	3.7	0.2	-	-	-
SEPTA	0.9	0.2	-	-	-	-	-	-	-	-	0.7	-	-	-
DelDOT	0.1	0.0	-	-	-	-	-	-	-	-	-	0.0	-	-
MDOT	0.1	0.0	-	-	-	-	-	-	-	-	-	-	0.0	-
VRE	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Total	**859.9**	**485.5**	**25.3**	**3.3**	**11.0**	**7.8**	**102.8**	**18.0**	**17.2**	**113.8**	**42.5**	**4.1**	**26.3**	**2.2**

Table notes: (1) LIRR's obligation is subject to revision based on actual expenditures per Amtrak-LIRR agreement. (2) NJ TRANSIT's BCC obligation reflects the NJ TRANSIT-Amtrak BCC variance for Portal North Bridge, approved by the Commission in August 2019.
* The Policy defines "operator" as an entity responsible for, or established to provide, commuter or intercity passenger rail transportation subject to the Policy. This includes Amtrak, the New York Metropolitan Transportation Authority, the Connecticut Department of Transportation, the Delaware Department of Transportation, the Maryland Department of Transportation, the Rhode Island Department of Transportation, the Southeastern Pennsylvania Transportation Authority, New Jersey Transit Corporation, the Massachusetts Bay Transportation Authority, Virginia Railway Express, any successor agencies, and any entity created to operate, or contract for the operation of, commuter or intercity passenger rail service.
^ The Policy (Appendix 1.6.2.1 and Section 3.4.2.2) allows owners, under certain conditions, to invest an operator's BCCs beyond the year they are contributed. The Policy also allows owners to apply operators' BCCs to system-wide projects (investments that span multiple BCC segments and/or are not physically located in their service territory) if certain criteria are met.

Figure A-2. Actual BCC-eligible expenditure by operator and owner territory, FY24 *(millions)*

RoW owners assign service operators' BCCs to fund eligible capital renewal investments. In some cases, RoW owners invest in their territory above the BCC obligated amount. Figure A-2 shows BCC-eligible expenditures by right-of-way owner territory as assigned to each service operator.

Millions of USD		Allocated to												
Operator	**Total Expenditures**	**Amtrak**	**MBTA**	**RIDOT**	**HL**	**SLE**	**CTDOT**	**MNR**	**LIRR**	**NJT**	**SEPTA**	**DelDOT**	**MDOT**	**VRE**
Amtrak	941.5	741.1	3.0	3.3	9.9	7.2	-	-	12.7	90.1	41.6	4.1	26.2	2.2
MBTA	32.8	11.8	21.0	-	-	-	-	-	-	-	-	-	-	-
RIDOT	0.1	0.1	-	-	-	-	-	-	-	-	-	-	-	-
HL	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SLE	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CTDOT	180.7	35.5	-	-	1.0	0.6	143.6	-	-	-	-	-	-	-
MNR	25.8	3.4	-	-	-	-	-	22.4	-	-	-	-	-	-
LIRR	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NJT	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SEPTA	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DelDOT	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MDOT	0.1	0.1	-	-	-	-	-	-	-	-	-	-	0.1	-
VRE	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	**1,181.1**	**791.9**	**24.0**	**3.3**	**11.0**	**7.8**	**143.6**	**22.4**	**12.7**	**90.1**	**41.6**	**4.1**	**26.3**	**2.2**

Figure A-3. Comparison of actual BCC-eligible expenditure and BCC obligation, FY24 *(millions)*

Figure A-3 shows the difference between FY24 BCC-eligible expenditures as assigned to each service operator and the FY24 BCC obligation for each operator. Collectively, right-of-way owners spent an additional $321 million above BCC obligations on BCC-eligible work.

Millions of USD		Allocated to												
Operator	**Variance**	**Amtrak**	**MBTA**	**RIDOT**	**HL**	**SLE**	**CTDOT**	**MNR**	**LIRR**	**NJT**	**SEPTA**	**DelDOT**	**MDOT**	**VRE**
Amtrak	283.6	308.2	-	-	(0.0)	(0.0)	-	-	(4.5)	(20.0)	-	(0.0)	-	(0.0)
MBTA	(2.1)	(0.8)	(1.3)	-	-	-	-	-	-	-	-	-	-	-
RIDOT	0.0	0.0	-	-	-	-	-	-	-	-	-	-	-	-
HL	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SLE	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CTDOT	40.8	0.0	-	-	(0.0)	(0.0)	40.8	-	-	-	-	-	-	-
MNR	4.4	(0.0)	-	-	-	-	-	4.4	-	-	-	-	-	-
LIRR	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NJT	(4.7)	(0.8)	-	-	-	-	-	-	-	(3.7)	(0.2)	-	-	-
SEPTA	(0.9)	(0.2)	-	-	-	-	-	-	-	-	(0.7)	-	-	-
DelDOT	(0.1)	(0.0)	-	-	-	-	-	-	-	-	-	(0.0)	-	-
MDOT	0.0	0.0	-	-	-	-	-	-	-	-	-	-	0.0	-
VRE	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	**321.2**	**306.4**	**(1.3)**	**-**	**(0.0)**	**(0.0)**	**40.8**	**4.4**	**(4.5)**	**(23.7)**	**(0.9)**	**(0.0)**	**0.0**	**(0.0)**

Table notes: (1) LIRR's obligation is subject to revision based on actual expenditures per Amtrak-LIRR agreement. (2) NJ TRANSIT's BCC obligation reflects the NJ TRANSIT-Amtrak BCC variance for Portal North Bridge, approved by the Commission in August 2019.

Figure A-4. Actual capital renewal investment by agency, FY24

BCC Segment	Amtrak BCC	Amtrak (Above BCC)	MBTA BCC	RIDOT BCC	CTDOT BCC (HL)	CTDOT BCC (SLE)	CTDOT BCC (NHL)	CTDOT (Above BCC)	MNR BCC
1	11,806,108	-	21,032,924	-	-	-	-	-	-
2	3,348,804	-	2,955,611	-	-	-	-	-	-
3	2,823,514	-	-	3,349,348	-	-	-	-	-
4	-	15,778,262	-	-	-	-	-	-	-
5	14,384,891	-	-	-	-	7,206,898	-	-	-
6	35,536,968	-	-	-	1,041,912	604,217	102,759,231	40,804,125	-
7	3,390,531	-	-	-	-	-	-	-	18,020,742
8	626,745	4,823,164	-	-	-	-	-	-	-
9	31,359,139	-	-	-	-	-	-	-	-
10	9,756,909	-	-	-	-	-	-	-	-
11	25,818,946	-	-	-	-	-	-	-	-
12	40,294,988	-	-	-	-	-	-	-	-
13	2,237,724	-	-	-	-	-	-	-	-
14	10,654,316	-	-	-	-	-	-	-	-
15	2,152,859	-	-	-	-	-	-	-	-
16	1,618,155	-	-	-	-	-	-	-	-
17	18,545,675	-	-	-	-	-	-	-	-
18	3,928,812	-	-	-	-	-	-	-	-
19	19,447,609	-	-	-	-	-	-	-	-
20	37,433,457	-	-	-	-	-	-	-	-
21	11,832,523	-	-	-	-	-	-	-	-
22	95,297,484	-	-	-	-	-	-	-	-
23	26,416,164	-	-	-	-	-	-	-	-
24	7,312,623	-	-	-	-	-	-	-	-
25	20,547,607	-	-	-	9,917,274	-	-	-	-
26	-		-	-	-	-	-	-	-
27	-	16,007,285	-	-	-	-	-	-	-
28	10,913	-	-	-	-	-	-	-	-
29	36,094,113	-	-	-	-	-	-	-	-
30	11,064,330	165,591,989	-	-	-	-	-	-	-
31	-	105,978,234	-	-	-	-	-	-	-
Total	**483,741,907**	**308,178,935**	**23,988,535**	**3,349,348**	**10,959,186**	**7,811,115**	**102,759,231**	**40,804,125**	**18,020,742**

MNR (Above BCC)	LIRR BCC	NJT BCC	SEPTA BCC	DelDOT BCC	MDOT BCC	MDOT (Above BCC)	VRE BCC	Total	BCC Segment
-	-	-	-	-	-	-	-	32,839,032	1
-	-	-	-	-	-	-	-	6,304,415	2
-	-	-	-	-	-	-	-	6,172,863	3
-	-	-	-	-	-	-	-	15,778,262	4
-	-	-	-	-	-	-	-	21,591,788	5
-	-	-	-	-	-	-	-	180,746,453	6
4,424,893	-	-	-	-	-	-	-	25,836,166	7
-	-	-	-	-	-	-	-	5,449,909	8
-	-	-	-	-	-	-	-	31,359,139	9
-	4,353,889	261,838	-	-	-	-	-	14,372,636	10
-	8,321,012	5,578,692	-	-	-	-	-	39,718,650	11
-	-	84,132,229	-	-	-	-	-	124,427,217	12
-	-	175,431	-	-	-	-	-	2,413,155	13
-	-	-	7,104,040	-	-	-	-	17,758,356	14
-	-	-	1,914,837	-	-	-	-	4,067,696	15
-	-	-	2,614,759	-	-	-	-	4,232,914	16
-	-	-	25,439	-	-	-	-	18,571,115	17
-	-	-	-	-	-	-	-	3,928,812	18
-	-	-	20,604,235	-	-	-	-	40,051,844	19
-	-	-	-	4,098,763	-	-	-	41,532,220	20
-	-	-	-	-	-	-	-	11,832,523	21
-	-	-	-	-	26,285,435	46,438	-	121,629,357	22
-	-	-	-	-	284	-	2,159,467	28,575,915	23
-	-	-	-	-	-	-	53,888	7,366,511	24
-	-	-	-	-	-	-	-	30,464,881	25
-	-	-	-	-	-	-	-	-	26
-	-	-	-	-	-	-	-	16,007,285	27
-	-	-	-	-	-	-	-	10,913	28
-	-	-	9,343,736	-	-	-	-	45,437,848	29
-	-	-	-	-	-	-	-	176,656,319	30
-	-	-	-	-	-	-	-	105,978,234	31
4,424,893	**12,674,901**	**90,148,190**	**41,607,046**	**4,098,763**	**26,285,719**	**46,438**	**2,213,355**	**1,181,112,428**	**Total**

Plan vs. Actual Units

As outlined in the Challenges and Recommendations, Commission member agencies have improved their asset data availablity for purposes of SOGR backlog elimination tracking. However, it remains unclear how asset data are incorporated into capital plans. The tables below show production program planned and actual unit replacements alongside planned and actual expenditure data. Note that CTDOT and MTA Metro-North did not submit any FY24 planned units and limited actual units.

Figure A-5. Amtrak plan vs. actuals units delivered and expenditure, FY24 (Millions)

Program	Plan ($)	YTD ($)	% of Plan Invested	Unit Type	Planned Units for FY	YTD Actual Units	Percent of Units Delivered
Amtrak NEC System Undercutting	$41.8	$58.0	139%	Install Ties	-	298	
				Surface Track (FT)	-	1,560,845	
				Switch Machine (Install)	-	13	
				Undercut Track (FT)	150,398	309,218	206%
Amtrak System Fence Upgrades	$19.9	$10.8	54%	Install RoW Fencing (FT)	15,172	1,200	8%
Amtrak System Rail Replacement	$39.7	$48.0	121%	Install Rail (FT)	206,240	227,684	110%
				Install Ties	-	283	
				Surface Track (FT)	-	65,595	
				Track Panels (Install)	-	100	
Amtrak System Track Rehabilitation	$7.0	$8.3	119%	Install Rail (FT)	-	9,203	
				Install Ties	-	5,095	
				Install Turnoutss	-	1	
				Surface Track (FT)	-	50,465	
				Track Panels (Install)	-	833	
Amtrak System Turnout Renewal	$68.3	$82.1	120%	Install Rail (FT)	-	2,465	
				Install Ties	-	35	
				Install Turnoutss	43	43	100%
				Surface Track (FT)	-	40,447	
				Switch Machine (Install)	-	2	
				Track Panels (Install)	-	3,150	
				Undercut Track (FT)	-	1,333	
Production High Speed Surfacing	$20.9	$28.5	137%	Surface Track (FT)	2,099,706	1,160,420	55%
				Undercut Track (FT)	-	874	

Program	Plan ($)	YTD ($)	% of Plan Invested	Unit Type	Planned Units for FY	YTD Actual Units	Percent of Units Delivered
Production Wood Tie/ Timber Replacement	$2.3	$13.8	608%	Install Rail (FT)	-	945	
				Install Ties	2,500	13,167	527%
				Surface Track (FT)	-	13,972	
TLS Concrete Tie Replacement	$73.2	$103.4	141%	Install Rail (FT)	338,630	518,308	153%
				Install Ties	75,112	131,355	175%
				Rail (Grinding)	-	94	
				Surface Track (FT)	-	113,598	
				Track Panels (Install)	-	2	
Total Track Renewal	$0.0	$0.0	0%				

Figure A-6. MBTA plan vs. actuals units delivered and expenditure, FY24

Program	Plan ($)	YTD ($)	% of Plan Invested	Unit Type	Plan (n)	YTD (n)	% of Plan Delivered
Insulated Joint	$0.8	$0.5	69%	Units	40	13	33%
Interlocking Crossover Replacement	$0.0	$0.0	0%		0	0	0%
Interlocking Steel Replacement	$0.4	$0.6	178%	Each	5	11	220%
Joint Elimination	$0.5	$0.7	134%	Each	100	66	66%
M3 Switch Machine	$0.2	$0.3	160%	Each	5	5	100%
Out Of Face Surfacing	$1.7	$0.0	0%	Surface Track (FT)	64,000	0	0%
RoW Fence Upgrades	$1.1	$0.0	0%	Install RoW Fencing (FT)	3,000	0	0%
Spot Surfacing	$2.5	$3.8	154%	Surface Track (FT)	125,000	110,858	89%
Spot Undercutting	$0.9	$0.4	44%	Undercut Track (FT)	10,000	670	7%
Tie/Timber	$2.4	$3.1	128%	Install Ties	4,500	2,031	45%
Tree Cutting	$0.3	$0.3	119%	Percent	100	55	55%
Turnout Replacement	$4.5	$0.0	0%	Each	3	0	0%

Appendix: Operations Summary

NEC Operating Surplus

NEC Operating Surplus

Federal statute and the NEC Cost Allocation Policy requires Amtrak to provide an accounting of how its NEC operating surplus, if any, was expended. Amtrak staff will report to the NEC Commission for future Annual Reports on how its revenues are reinvested back into the NEC.

Operating surplus on Amtrak's NEC service line was as follows for the last five years:

Fiscal Year	Surplus ($M)
2019	$568.5
2020	($3.9)
2021	($345.1)
2022	($1.6)
2023	$198.7
2024	$237.6

Major Service Incidents

Major service incidents are single events that can generate multiple train delays. Major service incidents on the NEC were identified by analyzing daily train performance data and cross-referencing that data with the contents of NEC operators' rail operations and incident reports. This approach may not capture all significant events in FY24 because it identifies major service incidents based on service impacts, which are dependent on the location and time of day of the incident, not necessarily the severity or significance of the event.

Figure A-7. Major service incidents by date, FY24

Date	Incident	Location	Total trains affected	Total train-delay minutes	Total trains not completed
Quarter 1 Total - 8 Major Service Incidents			**908**	**32,714**	**214**
New England					
11/12/2023	**Bridge Failure**	**Shore Line, CT**	**15**	**2,062**	**0**
Description: Two bridge mechanisms failed in quick succession on the New Haven to Boston main line. In the early afternoon, Shaw's Cove bridge was reported stuck open with no ET power. The bridge was closed by 1:46 PM, however additional work was required to drive the locks and wedges into place and restore ET. The bridge was returned into service by 3:46 PM. At 4:33 PM the Connecticut River Bridge failed to close; the bridge was returned to normal service by 4:47 PM.					
New York City Metro					
10/14/2023	**Catenary Failure**	**Swift Interlocking, NJ**	**32**	**1,923**	**25**
Description: An NJT train reported their pantograph ripped off crossing over switch no. 23 with the wire wrapped around the pantograph. All traffic was immediately stopped and held in Newark, NJ and New York, NY. ET repair crews arrived on scene at 10:31 PM to assist. Repairs were complete at 2:45 AM with all tracks returned to service.					
10/16/2023	**Catenary Failure**	**Lane Interlocking, NJ**	**136**	**4,374**	**37**

Major NEC incidents by date, FY24 continued on the next page >>

Date	Incident	Location	Total trains affected	Total train-delay minutes	Total trains not completed
Description: At 1:56 PM, an NJT train reported a loud bang going through Lane Interlocking and stopped on track 4 with pantograph damage. At 2:03 PM, another NJT train stopped on track 1 with an inverted pantograph and wire hanging at North Elizabeth station. A hold was placed on all tracks between Elmora and Lane interlocking. At 2:47 PM, tracks 2 and 3 were cleared for train movement at restricted speed. Trains were signaled to bypass Elizabeth and North Elizabeth stations in both directions. At 6:41 PM, all stations and tracks returned to service with no restrictions.					
12/29/2023	**Catenary Failure**	**North River Tunnel**	**136**	**5,814**	**37**
Description: At 4:49 PM, an NJT train reported a pantograph missing after arrival into New York Penn. A hold was placed on the North Tube and ET personnel were dispatched for inspection. Missing pieces of the pantograph were recovered, however catenary damage was found over the 4X crossovers requiring the North Tube to be closed for repairs. Trains were single-tracked in and out of NYP until the issue was resolved, causing delays and cancellations for Amtrak and NJT.					
Connecticut-Westchester (NHL)					
10/7/2023	**Weather**	**New Rochelle, NY**	**75**	**2,991**	**14**
Description: At 1:55 PM, a loss of signal power on both tracks was reported on the Amtrak Hell Gate Line between MP 10.2 and CP 216/MP 18.9. The cause of the power loss was found to be a signal wire downed by wet and windy conditions. ET teams restored power to the area at 3:25 PM. All traffic operating through the affected area was delayed. Further delays were reported in New York and Connecticut due to the wet weather.					
10/18/2023	**Trespasser**	**Port Chester, NY**	**58**	**1,060**	**9**
Description: At 6:11 PM, a MNR train reported a trespasser strike near Port Chester on track 3, causing a hold on all tracks. At 6:30 PM, the tracks were released to allow all traffic to move by the area. Held services continued but with 30-to-40-minute delays through the area until the scene was fully cleared at 8:27 PM.					
Systemwide					
12/18/2023	**Storm**	**Pennsylvania to Boston**	**365**	**8,926**	**48**
Description: Severe wind, rain, and weather caused multiple delays, cancellations, and partial annulments, with many through trains to Boston terminated at Providence. The severe weather particularly affected MBTA services, with multiple reports of trees on the line, signal issues, washed out track, and downed ET wires. Issues were progressively resolved by work crews, however residual delays remained throughout the day, and into the next day for some MBTA services.					
12/31/2023	**Communication System Failure**	**Systemwide**	**91**	**5,564**	**44**
Description: At 9:45 PM, a systemwide communications and signal control loss occurred, starting at New York Penn Station. The event then spread and affected the Philadelphia to Harrisburg Line, the Philadelphia to Washington Line, the New York to Philadelphia Line, New York Penn Station to Hell Gate, and all service lines within the Boston CETC Command. Along the railroad, in the vicinity of New York Penn Station, CETC personnel were able to fleet signals which then gave "stop and proceed" indications to trains until the issue was resolved. The cause was initially determined to be two bad front-end processors in New York. While the cause of the failures was discovered, the correlation between the communications and the signal failure was not determined. By 1:17 AM, CETC radio communications had returned to normal however the signal issues persisted, and the issue was not resolved until early the next morning.					
Quarter 2 Total - 9 Major Service Incidents			**972**	**29,281**	**204**
New England					
1/30/2024	**Trespasser**	**Hyde Park, MA**	**42**	**1,498**	**2**
Description: A fatal trespasser strike was reported by an MBTA train near Hyde Park station on the New Haven to Boston main line. Boston Fire Department placed a hold on all tracks going into and out of Boston on the NEC, passengers were transferred onto alternate MBTA trains into Boston via the Dorchester Branch. Track 3 was initially reopened at restricted speed while cleanup operations continued, and tracks 2 and 3 were later reopened with no restrictions. Track 1 was returned to normal service in the late evening.					

Major NEC incidents by date, FY24 continued on the next page >>

Date	Incident	Location	Total trains affected	Total train-delay minutes	Total trains not completed
New York City Metro					
1/6/2024	Trespasser	New York, NY	15	2,211	1
Description: At 12:15 PM, an Amtrak train fatally struck a trespasser on the Hell Gate Line. The strike was confirmed fatal, local EMS, NYFD, APD and a relief crew were dispatched. No injuries were reported to the passengers or crew. FDNY requested AC power removal between Gate and Pelham Bay. At 1:45 PM, overhead power was restored. At 2:11 PM, track 1 was released for restricted speed. The scene at Hell Gate was released at 6:08 PM and traffic returned to normal operations, however residual delays continued to affect the corridor.					
1/16/2024	Switch Failure	Bergen Interlocking, NJ	153	5,426	34
Description: At 6:13 PM, switch no. 32 at Bergen Interlocking failed to lock. The track department was dispatched to troubleshoot the issue. The North Tube of the North River Tunnel was taken out of service so crews could investigate. At 9:02 PM, the North Tube was returned to service with a 30 mph speed restriction. The issue was later fully repaired, and the track restriction was lifted.					
1/30/2024	Signal Failure	Portal Interlocking, NJ	102	4,013	16
Description: At 4:38 PM, a signal and communication failure occurred at Portal Interlocking in New Jersey. All trains westbound on track 2 had to be manually cleared and incurred a 20-30 minute delay. By 6:39 PM, C&S teams were able to work around the issue and establish simultaneous routes for east- and westbound traffic. At 7:07 PM, the issue was resolved.					
2/26/2024	Mechanical Failure	A Interlocking, NY	64	1,811	2
Description: At 8:58 AM, an NJT train became disabled at A Interlocking in the South Tube of the North River Tunnel. All traffic in the South Tube was reversed to Bergen while a rescue locomotive was readied to remove the disabled train. This caused delays to several NJT and Amtrak services. By 9:25am, the disabled train was cleared, and the South Tube returned to normal operation.					
3/7/2024	Bridge Failure	Portal Bridge, NJ	71	2,044	39
Description: Portal Bridge was opened at 10:30 AM for the passage of marine traffic. After the vessel cleared the bridge, the operator reported being unable to close the bridge. Repair crews were on scene for the bridge opening and began troubleshooting to close/lock the bridge. At 12:25 PM, the rail locks were secured, and the bridge successfully closed. Several Amtrak and NJT trains were delayed by the incident.					
3/26/2024	Track Failure	North River Tunnel	60	2,064	13
Description: Due to reports of "rough ride" on both tracks in the North River Tunnel, all traffic was halted in both directions. A track inspector was dispatched to inspect. Defective ties were discovered in the North Tube between MP 1.2 and MP 1.4, resulting in a temporary speed restriction of 30 mph. After inspecting the South Tube, a 30 mph speed restriction was imposed. Several Amtrak and New Jersey Transit trains were delayed.					
Systemwide					
1/12/2024	Signal Failure	New York to Philadelphia	142	3,350	76
Description: At 8:45 AM, communications with signals and switches were lost on the NYP Line between Hudson and Holmes, and on the PW Line to Zoo Interlocking. All Amtrak and NJT trains were held at location or dispatched/routed to a station to hold for system recovery, with service suspended between New York and Philadelphia. Communication issues also affected the ACSES System between CP Ave and Philadelphia on the PW Line. Maintainers were dispatched to many locations to take local control of interlockings and switches. At 11:30 AM, the NYP Line was restored between Newark and Trenton and all westbound trains were released. At 12:30 PM, the PW Line was returned to service between Trenton and Philadelphia.					
1/17/2024	Weather	Pennsylvania to Connecticut	323	6,864	21

Major NEC incidents by date, FY24 continued on the next page >>

Date	Incident	Location	Total trains affected	Total train-delay minutes	Total trains not completed
Description: Cold weather caused multiple issues along the corridor from Pennsylvania to Connecticut affecting SEPTA, NJT, LIRR, MNR, and Amtrak services. There were multiple reports of weather-related infrastructure issues with switches, signals, and catenary. These issues were compounded by slow passenger loading and displaced train crews due to the weather.					
Quarter 3 Total - 22 Major Service Incidents			**2,442**	**73,657**	**658**
New England					
6/14/2024	**Switch Failure**	**Junction Interlocking, MA**	**89**	**4,079**	**12**
Description: At 1:37 PM, a 100Hz power failure at Junction Interlocking caused a switch and signals failure on track 1. The incident occurred after heavy rainfall. By 6:00 PM, switches were manually lined and trains operated on a single track through the area. At 6:19 PM, a similar issue was reported at Holden Interlocking. Trains were held while the issue was resolved. There were multiple Amtrak and MBTA delays. At 8:18 PM, the failures were resolved.					
Connecticut-Westchester (NHL)					
5/20/2024	**Catenary Failure**	**South Norwalk, CT**	**35**	**1,418**	**4**
Description: Service was suspended in both directions between South Norwalk and Green's Farms after a Metro-North train's pantograph became entangled in the overhead wires. Multiple trains were delayed with some cancellations. Overhead wires were repaired, and service was operating close to schedule the following day.					
New York City Metro					
4/15/2024	**Catenary Failure**	**Metropark, NJ**	**115**	**6,182**	**55**
Description: A train reported pantograph damage east of Lincoln Interlocking, followed by another train reporting extensive damage to its pantographs along with wires down on tracks 3 and 4. East- and westbound traffic was held until it was deemed safe to proceed. Track 1 was cleared for operations, allowing passenger transfers and removal of stranded trains. All eastbound traffic was fleeted to New York on track 1 and trains were delayed operating through the area. Power was returned to track 3. Due to late arrivals and crew shortages, further trains were canceled.					
4/25/2024	**Catenary Failure**	**Newark, NJ**	**111**	**1,928**	**2**
Description: An NJT train lost power between Portal and Swift Interlockings and coasted into Newark on Track 3 with an inverted pantograph. Single-tracking was instated from Hudson to Portal while ET engineers investigated. ET was repaired and the hold was removed from all tracks. The cause was determined to be debris in the catenary.					
5/21/2024	**Mechanical Failure**	**North River Tunnel, NY**	**140**	**2,537**	**44**
Description: At 6:46 AM, an NJT train became disabled in the North Tube of the North River Tunnel with pantograph damage. A passenger transfer from the disabled train was completed at 8:08 AM. The disabled train was removed from the tunnel at 8:14 AM, with power and operations through the North Tube restored shortly afterwards.					
5/22/2024	**Catenary Failure**	**Swift Interlocking, NJ**	**227**	**5,233**	**114**
Description: A signal wire came into contact with a catenary wire, blowing out fuses at Swift Interlocking and causing loss of power and signals. Major service disruptions occurred delaying multiple Amtrak and NJT trains on the NEC.					
5/23/2024	**Switch Failure**	**Dock Interlocking, NJ**	**88**	**2,248**	**12**
Description: At 11:15 AM, micro locks at the western end of Dock Interlocking became unable to switch trains through the area. C&S teams responded to the location and were unable to take local control resulting in blocking and spiking switches to move trains east and west. At 12:35 PM, repairs were completed and normal operations were able to continue.					
6/5/2024	**Track Failure**	**Swift Interlocking, NJ**	**122**	**5,061**	**13**
Description: At 4:52 PM, an NJT train reported a rough ride on track 3 at Swift Interlocking. Single-tracking was instated between Swift and Portal Interlockings while awaiting inspection. At 5:40 PM, a track foreman arrived to inspect the affected track. At 6:38 PM, the track was released to scheduled speed and service, with the first train passing at restricted speeds.					
6/7/2024	**Programmed Work**	**Bergen Interlocking, NJ**	**113**	**3,104**	**20**

Major NEC incidents by date, FY24 continued on the next page >>

Date	Incident	Location	Total trains affected	Total train-delay minutes	Total trains not completed
Description: Multiple trains were delayed at Bergen Interlocking due to maintenance of way work on switches, which started late on the previous day and ran into the morning rush hour. Due to the North Tube of the North River Tunnel being out of service, single-tracking in the South Tube was necessary. At 8:05 AM, work was completed and the north tube reopened.					
6/13/2024	**Tie Fire**	**Harrison Station, NJ**	**86**	**1,847**	**1**
Description: At 4:50 PM, a tie fire was reported on track 2 at Harrison station. The fire department arrived on scene at 5:15 PM. A hold was placed on all tracks at 5:39 PM, stopping train traffic both east and west of Newark Penn Station. Once the fire was extinguished and the tracks were inspected, the hold was released at 6:01 PM.					
6/14/2024	**Mechanical Failure**	**Trenton, NJ**	**86**	**1,371**	**7**
Description: An NJT train came to a stop one mile east of Trenton station with a broken pantograph. Due to the disabled train, power was lost on track 4 between Morris and Midway interlockings. This limited track access in Trenton station, causing congestion and delays for all trains traveling through the affected area.					
6/17/2024	**Mechanical Failure**	**Swift Interlocking, NJ**	**112**	**3,128**	**9**
Description: At 11:55 AM, an NJT train stopped at Swift Interlocking with a damaged pantograph. Single-tracking was instated between Hudson & Portal Interlockings. At 12:24 PM, a rescue train cleared Swift Interlocking. Later that day, an NJT train lost power in the North Tube at 5:16 PM. Power was restored at 5:23 PM and the train was able to clear the tunnel. Traffic in the North Tube was temporarily halted while work crews inspected the catenary. At 6:11 PM, normal operations resumed.					
6/18/2024	**Catenary Failure**	**A Interlocking, NY**	**245**	**7,333**	**89**
Description: At 6:20 AM, an NJT train reported pantograph damage at A Interlocking near New York Penn Station. ET forces reported wire damage over the crossovers. The stranded train was removed by 8:15 AM, however tracks 2 and 3 remained out of service while repairs were made. At 3:10 PM, the ET foreman returned all tracks to service with no speed restrictions.					
6/20/2024	**Catenary Failure**	**New York Penn Station, NY**	**193**	**6,629**	**102**
Description: At 1:59 PM, all overhead AC catenary power was lost between Swift Interlocking (east of Newark, NJ) and Gate Interlocking (east of New York, NY), including New York Penn Station, the East River and North River Tunnels, and Sunnyside Yard. All Amtrak services were suspended between Philadelphia, PA and New Haven, CT and NJT services into New York were heavily disrupted. At 5:36 PM, AC catenary power was restored, and all passenger train movement was released. Due to extended equipment servicing/turns and crew swaps, service disruptions continued into the next day.					
6/21/2024	**Mechanical Failure**	**A Interlocking, NY**	**247**	**4,357**	**102**
Description: At 7:11 AM, an NJT train passing through A Interlocking at the western end of New York Penn Station became disabled when the trailing locomotive's pantograph inverted. Movements in and out of New York were severely restricted. Amtrak and NJT personnel responded to the scene and all NJT customers disembarked from the disabled train onto the platform at track 1. Once the damaged pantograph was removed, the disabled NJT equipment was towed from the scene. At 1:07 PM, normal service resumed with some residual congestion/routing related delays.					
6/24/2024	**Catenary Failure**	**Bergen Interlocking, NJ**	**102**	**2,611**	**40**
Description: At 5:32 PM, power issues were reported in the North Tube of the North River Tunnel. Catenary was inspected from the tunnel to Bergen Interlocking. At 6:20 PM, the Power Director placed an AC hold and a speed restriction on track 3 at Bergen. At 7:20 PM, normal service was restored and restrictions were lifted.					
Mid-Atlantic North					
4/9/2024	**Signal Failure**	**Phil Interlocking, PA**	**79**	**1,230**	**10**
Description: At 4:15 PM, a signal power loss was reported between Phil and Hook Interlockings. SEPTA service on the Airport and Wilmington/Newark Lines was suspended. Once maintainers were in place, switches were spiked and wedged for movement into and out of 30th Street Station. At 9:00 PM, all power was restored with SEPTA service resuming at 10:20 PM.					
4/11/2024	**Trespasser**	**Churchman's Crossing, DE**	**34**	**1,472**	**5**

Major NEC incidents by date, FY24 continued on the next page >>

Date	Incident	Location	Total trains affected	Total train-delay minutes	Total trains not completed
Description: At 5:03 PM, an Amtrak train fatally struck a trespasser near Churchman's Crossing, DE. The incident occurred on the right of way, not at a crossing, with the trespasser in the gauge. There were no injuries to the passengers or crew. All tracks were closed to traffic whilst an investigation occurred. At 7:15 PM, track 1 reopened at restricted speeds, allowing trains to pass and recrew to arrive. At 7:53 PM, all tracks were released with no restrictions.					
4/29/2024	**Trespasser**	**Newport, DE**	**50**	**2,620**	**0**
Description: An Amtrak train reported a fatal trespasser strike five miles south of Wilmington on track 2 in Newport, DE. There were no reported injuries to passengers or crew. Local police and fire responded to the scene for an investigation and placed a hold on all tracks. This incident did not occur at a grade crossing. Track 1 was later released with speed restrictions.					
5/13/2024	**Trespasser**	**Holmesburg Junction, PA**	**48**	**2,485**	**8**
Description: At 9:54 AM, an Amtrak train fatally struck a trespasser on track 1 at Holmesburg Junction, 10 miles east of Philadelphia. The incident occurred on the right of way with the trespasser stepping in front of the train. Local authorities responded to the scene for an investigation. All tracks were shut down, with tracks 3 and 4 later released at restricted speed between Holmesburg and Tacony stations. There were no reported injuries to the passengers or the crew. At 1:45 PM, tracks 3 and 4 were returned to normal speed and service.					
5/20/2024	**Catenary Failure**	**Holmes Interlocking, NJ**	**81**	**2,908**	**1**
Description: Service was suspended between Holmes and Lehigh Interlockings due to loss of signal and ET power from a downed overhead wire, resulting in delays to SEPTA and Amtrak services.					
Mid-Atlantic South					
5/15/2024	**Trespasser**	**Washington, DC**	**39**	**3,876**	**8**
Description: A MARC train reported a fatal trespasser strike two miles north of Washington Union Station with no reported injuries to the passengers or crew. A hold was placed on all tracks for an investigation, with MARC trains held at Union Station. Track 2 was later released at restricted speed and a passenger transfer was performed. All tracks were later released.					
Quarter 4 Total - 18 Major Service Incidents			**1,511**	**48,507**	**216**
Connecticut-Westchester (NHL)					
7/18/2024	**Catenary Failure**	**Southport, CT**	**35**	**1,747**	**2**
Description: At approximately 7:00 PM, an Amtrak train reported a possible downed catenary wire on the New Haven Line in Southport, CT, causing all trains in the area to be held at stations. The issue was identified as a deadhead train move that had a metal plate fouling the catenary causing track 3 to lose power. At no time were the wires down and all trains held HEP. At 7:55 PM, train traffic resumed with single-tracking in effect around the affected area.					
New York City Metro					
7/11/2024	**Trespasser**	**Newark Liberty Int'l Airport, NJ**	**88**	**2,563**	**5**
Description: At 4:24 PM, an Amtrak train reported a nonresponsive trespasser in the gauge on track 4, 1 mile west of Newark Liberty International Airport station. A hold was placed on tracks 3 & 4. At 5 PM, a hold was placed on all tracks and the trespasser was removed. At 5:23 PM, the hold on all tracks was released. Multiple trains were delayed.					
7/16/2024	**Mechanical Failure**	**North River Tunnel, NY**	**79**	**1,305**	**5**
Description: At 7:15 AM, an NJT train was reported operating at 1 MPH in the South Tube of the North River Tunnel approaching A Interlocking. Attempts were made to restore motive power. Two NJT trains were reversed at Bergen Interlocking to operate via the North Tube while the South Tube was occupied, and both trains reported no issue with power supply. At 7:53 AM, the train in the South Tube was able to operate under its own power and arrived in New York. This caused several Amtrak and NJT trains to be delayed due to congestion and single-tracking in the North River Tunnel.					

Major NEC incidents by date, FY24 continued on the next page >>

Date	Incident	Location	Total trains affected	Total train-delay minutes	Total trains not completed
7/19/2024	**Mechanical Failure**	**North River Tunnel, NY**	**67**	**1,728**	**11**
Description: At 6:39 PM, a disabled NJT train was reported in the North Tube of the North River Tunnel and unable to draw power or reset its pantograph. A rescue engine was dispatched, however it did not have the correct coupler, requiring the rescue engine to return to NYP to retrieve the proper hoses. At 7:52 PM, the rescue engine was coupled and the NJT train was pulled into NYP at 8:07 PM. There were no reports of passenger issues during this time. Amtrak and NJT trains in and out of New York Penn Station were delayed due to single-tracking through the area.					
7/21/2024	**Catenary Failure**	**Linden, NJ**	**88**	**3,777**	**27**
Description: At 4:04 PM, catenary wires were reported down on all tracks near Linden station, NJ. Train traffic between New York Penn Station and Philadelphia 30th Street Station was suspended. The outage was caused by PSE&G (the local electrical utility) wires falling onto the catenary. At 6:15 PM, Track 1 was released for normal operations. Track 3 was released with a 60 MPH speed restriction at 6:25 PM. Repairs were carried out overnight and were completed by 4:30 AM.					
7/31/2024	**Catenary Failure**	**North River Tunnel, NY**	**37**	**1,000**	**2**
Description: At 7:53 PM, an NJT train became disabled in the North Tube of the North River Tunnel with no catenary power. Power was restored to the catenary, however the train was still unable to draw power. A rescue engine was dispatched to move the train back to New York Penn Station. At 9:34 PM, it was reported that the rescue engine could not pull the NJT train into the station, and it was necessary to couple an electric engine to the rescue engine. The NJT train arrived at NYP at 10:02 PM. All Amtrak and NJT trains in and out of New York Penn Station were delayed due to single-tracking through the area.					
8/13/2024	**Trespasser**	**Princeton Junction, NJ**	**97**	**5,715**	**15**
Description: An NJT train reported striking a trespasser 2.5 miles west of Princeton Junction on track 4. The same trespasser continued in front of an Amtrak train and was fatally struck again on track 2. There were no reported injuries to the passengers or crew. Police and local authorities responded to the scene and placed a hold on all tracks for an investigation. Track 1 was released at restricted speed. At 12:50 PM, the NJT train was released from the scene and continued west, and track 4 was released at restricted speed. At 1:13 PM, the Amtrak train was cleared from the scene. At 1:41 PM, the hold on all tracks was lifted. There were significant residual delays on the NEC for the remainder of the day.					
8/19/2024	**Mechanical Failure**	**North River Tunnel, NY**	**73**	**2,052**	**7**
Description: A westbound NJT train became disabled in the South Tube of the North River Tunnel, unable to make grade in the tunnel. It was reversed for another attempt with greater momentum and failed again. A rescue engine was dispatched from the station to retrieve the train from the tunnel. This incident forced single-tracking operations in the North Tube until the disabled train was cleared.					
8/27/2024	**Track Failure**	**North River Tunnel, NY**	**112**	**2,931**	**2**
Description: Trains were delayed arriving and departing New York Penn Station due to single-tracking in the North River Tunnel. The South Tube was taken out of service to repair a track geometry defect. After the track was repaired and returned to service, an NJT train reported a tie fire in the same location as the geometry defect. The NJT train stopped east of the fire and doused the fire with a fire extinguisher. Single-track operations resumed, and a foreman was dispatched to the scene to investigate. The foreman reported the fire was due to a damaged feeder cable on both rails in the South Tube. The South Tube was returned to scheduled speed and service for catenary power only until an ET team could repair the issue.					
8/29/2024	**Signal Failure**	**North River Tunnel, NY**	**113**	**3,931**	**0**
Description: At 5:30 AM, a Track Occupied Light (TOL) appeared in the South Tube of the North River Tunnel. An Amtrak C&S team responded to the scene and determined 2 plates were bridging under the rail causing the TOL. Multiple trains were delayed in and out of New York due to single-tracking conditions while C&S inspected the area. At 8:09 AM, the South Tube was opened to allow trains to operate until repairs could be made. The South Tube was removed from service at 11:14 AM for repairs, which were completed at 11:25 AM.					

Major NEC incidents by date, FY24 continued on the next page >>

Date	Incident	Location	Total trains affected	Total train-delay minutes	Total trains not completed
9/10/2024	**Catenary Failure**	**New York Penn Station Area, NY**	**80**	**2,436**	**16**
Description: At 9:20 AM, an NJT train reported AC power loss in the South Tube of the North River Tunnel. Several trains also reported loss of overhead power on some tracks in NYP and in Sunnyside Yard. Trains were held at Washington, Philadelphia, Trenton, Newark, Gate Interlocking, Stamford, New Haven and Boston. Power was restored to most tracks at 10:01 AM. Power was restored in the South Tube at 10:51 AM.					
9/24/2024	**Catenary Failure**	**North River Tunnel, NY**	**61**	**1,793**	**3**
Description: At 5:20 PM, a power loss was reported between A Interlocking and Bergen Interlocking, with an NJT train disabled in the tunnel without power. At 5:26 PM, single-tracking was in effect in the North River Tunnel. A rescue engine was dispatched to retrieve the train. At 5:45 PM, AC power was restored with normal operations resuming.					
9/25/2024	**Derailment**	**New York Penn Station, NY**	**66**	**1,315**	**1**
Description: An Amtrak train reported its front truck derailed at A Interlocking in New York Penn Station. The rear car remained on the platform allowing passengers to disembark with no injuries reported. The derailment limited train movements, causing congestion at New York Penn. Several NJT and Amtrak trains were delayed departing New York, while routes were adjusted to operate around the derailed engine. At 8:40 PM, the derailed train was rerailed.					
Mid-Atlantic South					
7/25/2024	**Trespasser**	**New Carrollton, MD**	**30**	**1,673**	**4**
Description: At 5:30 PM, an Amtrak train went into emergency stop and struck a trespasser half a mile south of New Carrollton station. There were no reported injuries to crew or passengers, and no damage to equipment. A hold was put on all tracks while APD and Amtrak personnel responded to the scene. The Amtrak road foreman and APD assessed the scene and released the hold on track 2 at 6:25 PM. The strike was not fatal, and the trespasser was taken from the scene by EMS. The hold was released on all tracks at 6:55 PM.					
9/15/2024	**Trespasser**	**Martin State Airport, MD**	**23**	**1458**	**2**
Description: An Amtrak train fatally struck a pair of trespassers riding an ATV south of Martin State Airport. The incident did not occur at a grade crossing. There were no reported injuries to crew or passengers, and no damage to equipment. All traffic was temporarily halted in the area. The train was released after an investigation was concluded. Multiple trains incurred substantial delays due to the temporary cessation of train movement through the incident scene. C&S performed compliance testing on a switch in the area and operations returned to normal. The following day, trains were late departing Washington and New York due to late turns of equipment.					
Systemwide					
8/3/2024	**Weather**	**New York to New England**	**55**	**2,749**	**11**
Description: Severe weather caused multiple incidents on the north end of the NEC from New York to New England. The weather caused the loss of signal power in the area around Gate Interlocking in New York, a downed tree blocking both tracks near Berlin, CT, and a tree fire which caused overhead power loss and catenary damage between Mansfield station and Boston.					
8/9/2024	**Weather**	**Systemwide**	**323**	**8,121**	**90**
Description: Severe weather impacted the whole NEC causing multiple incidents and delays. Of note was a tree fire near T.F. Green Airport station which caused an overhead power loss, and two large trees leaning on catenary poles: one east of Pelham Bay, and another at Manor Interlocking which caused single-tracking in both areas while the trees were removed.					
8/18/2024	**Floods**	**New Jersey to Connecticut**	**84**	**2213**	**13**
Description: Heavy rainfall impacted the NEC from New Jersey to Connecticut. Water over the rails was reported on all tracks between Hunter Interlocking and Newark Liberty International Airport station. A hold was placed on all tracks until flood waters receded. MNR's Waterbury and Danbury Branch services were suspended, with the Waterbury Branch impacted by a significant mudslide.					
FY24 Total - 57 Major Service Incidents			**5,833**	**184,159**	**1,292**

Region: New England

Infrastructure and Operations Detail

Operators: Amtrak, MBTA, CT*rail*

RoW Owners: MBTA, Amtrak

BCC Segments

1: Boston South Station to MA/RI State Line

2: MA/RI State Line to Providence

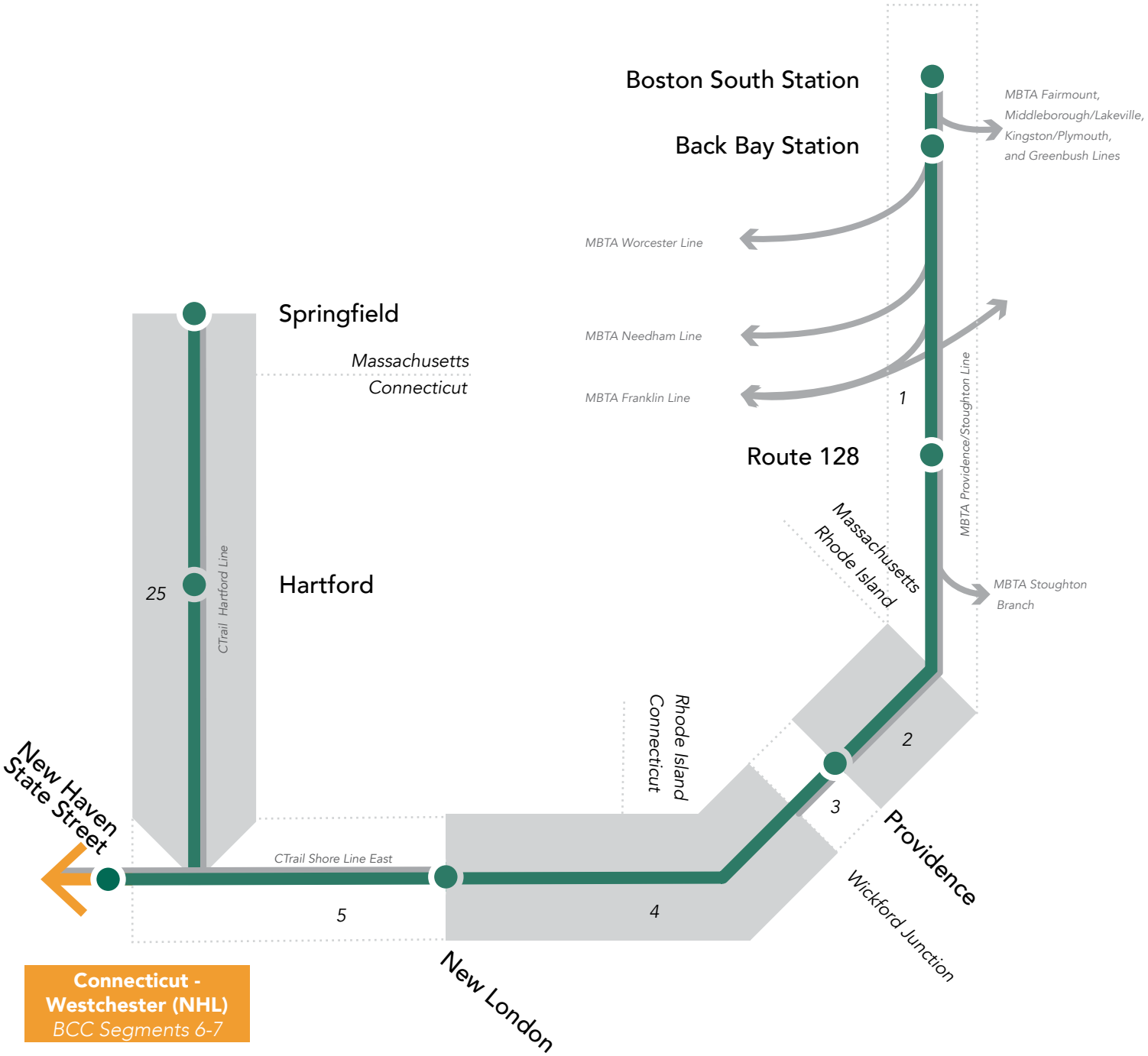
3: Providence to Wickford Junction

4: Wickford Junction to New London

5: New London to New Haven

25: Springfield to New Haven

New England
BCC Segments 1-5; 25



Not all intermediate stations shown.

Infrastructure

$272 million was invested in the New England region in FY24. Year to date, agencies have invested 81% of the planned investement for FY24.

10 largest investments by FY24 planned expenditure, New England *(millions)*

1. Connecticut River Bridge Replacement Project (Amtrak)		
FY24 Planned Expenditure & Scope	$91.8	Obtain all regulatory permits (CTDEEP, USACE and USCG) approvals. Complete procurement of construction contractor. Issue Notice of Award and Notice to Proceed to construction contractor. Construction contractor mobilization and commence construction activities. Force Account to support construction activities and complete preconstruction activities - such as relocation of C&S huts. CM to support contractor activities.
FY24 Actual Expenditure & Accomplishments	$78.2	All environmental mitigation final design documents for the project were completed. A variety of environmental regulatory permits were obtained, with one final permit pending (see variance explanation). The project awarded the construction contract in June and issued a Notice to Proceed in early August. Pre-construction activities began in early September. A groundbreaking ceremony was held on 9/5/2024.
Variance & Explanation	-$13.6	The US Coast Guard Bridge permit was scheduled to be approved in FY24. Permit was approved on November 11, 2024.
2. Airo Facilities: Southampton Street Yard (Amtrak)		
FY24 Planned Expenditure & Scope	$51.5	In the fiscal year 2024, scope includes the completion of the 30% bridging design document, RWP design support, procurement for Design/Build contractor and award.
FY24 Actual Expenditure & Accomplishments	$3.8	The design consultant completed 30% bridging design documents and 100% of track and catenary design. Amtrak selected a qualified Design Build contractor to complete the construction of the project. Notice to Proceed was issued in October 2024.
Variance & Explanation	-$47.7	The procurement phase was longer than planned as a consequence of more-than-expected RFIs from the bidders, additional design required to answer the RFIs and clarifications of the contract by one of the bidders. As a result, the start of the implementation phase was delayed and pushed into FY25. Contractor costs allocated to expenses such as insurance, mobilization, preliminary design, etc. and associated Amtrak and design support as well as construction management costs were also pushed from FY24 to FY25. Therefore, actual FY24 spend was significantly lower than planned.
3. Fitter Interlocking (Amtrak)		
FY24 Planned Expenditure & Scope	$21.0	The scope for FY24 is to complete installation of all catenary wire, installation of both crossovers (during two (2) continuous track outages) and installation, testing and cut over of signal system to place interlocking in service.
FY24 Actual Expenditure & Accomplishments	$25.0	Contractors completed the fabrication and erection of remaining steel platforms for signal huts. They also completed all catenary wire relocation work, power connections, and environmental mitigation. Track one turnouts were installed and crossover wiring was completed. A local control panel was designed and delivered, and signal crews began pre-testing the new system.
Variance & Explanation	$4.3	Original signal cutover date was pushed from June to October due to delays in signal installations and power connections. Cutover was again pushed from October to December due to software completion and positive train control coordination delays.
4. Providence Station Improvements (Rhode Island DOT)		
FY24 Planned Expenditure & Scope	$18.0	Station Interior Construction to west wall, Amtrak police office and restrooms
FY24 Actual Expenditure & Accomplishments	$0.3	The DesignBuild contractor will submit all the required documents such as Project Management plan, Safety Management plan, Utility management plan, baseline schedule, etc, precedent to NTP 2. Amtrak will approve these documents before issuing NTP 2. The contractor will start pre-design investigation such as surveying, geotechnical investigation and 3D scanning of the site and start preliminary design.
Variance & Explanation	-$17.7	The variance in the FY2024 spending reflects the fact that the project construction start was delayed while FRA, RIDOT and Amtrak resolved how to meet the budget gap due to the increase in construction bid price. Once resolved, parties worked to complete a Grant Amendment Request and redesign of the station improvements.

Investment detail including expenditures, accomplishments, and explanation of variances are published as submitted by agencies.

10 largest investments by FY24 planned expenditure, New England (*millions*, cont.)

5. Windsor Locks Railroad Station and Track Improvements (Connecticut DOT)		
FY24 Planned Expenditure & Scope	$10.0	Construction activities
FY24 Actual Expenditure & Accomplishments	$19.1	Concrete pours for all 26 column lines was completed. Concrete work for underground conduit and utilities began. Construction of retaining wall #201 is underway. Signals were installed at Route 159 and Bridge Street. Construction started on the station parking lot.
Variance & Explanation	$9.1	Project activites advanced - higher than expected burn rate
6. Boston South Station: Tower 1 and Cove Interlockings Improvements (MBTA)		
FY24 Planned Expenditure & Scope	$9.5	Install temporary signal trough, wire, undertrack duct banks, SP track work installation.
FY24 Actual Expenditure & Accomplishments	$19.4	12 units of special track work have been installed, 1,000+ ft of intersecting trackwork have been installed over 55 hour weekend work surges; 5,000+ feet of under track ductbank & conduit have been installed for the permanent signal system. Work on final power substation work, commuunications, and security instalations are ongoing.
Variance & Explanation	$9.9	Tower 1 has been optimizing their on-track protection and coordination with Amtrak to gain additional production time.
7. Veltri Interlocking (Amtrak)		
FY24 Planned Expenditure & Scope	$8.8	The scope for FY24 is to issue notice to proceed for contractor construction services (begin work in spring) for catenary structure installation, high level signal platforms, two (2) new culverts and #20 crossover installation.
FY24 Actual Expenditure & Accomplishments	$6.8	Amtrak completed the permitting process with the US Army Corps of Engineers. A contractor was on-boarded for Phase 1 work. Two new culverts were installed, as well as an electrical duct bank. The team began the in-filling of an existing cattle-pass. Electric traction materials were ordered.
Variance & Explanation	-$2.0	Notice to Proceed was delayed due to construction schedule changes at the FITTER interlocking. Funding constraints forced the team to divide the contractor work into two (2) phases, with phase 1 containing work mentioned in the accomplishments row. Phase 2 will consist of contractor work to install catenary and platform foundations, fabricate and erect steel platforms, and perform high-voltage electrical connections, and will resume in FY26.
8. Hartford Line Station Program (Design) (Connecticut DOT)		
FY24 Planned Expenditure & Scope	$6.0	Design activities
FY24 Actual Expenditure & Accomplishments	$5.0	Design spending less than estimated - construction projects advancing under separate projects
Variance & Explanation	-$1.0	Design spending less than estimated - construction projects advancing under separate projects
9. Spring (Springfield, MA) Interlocking Renewal Project (Amtrak)		
FY24 Planned Expenditure & Scope	$3.5	The scope for FY24 is to complete Lancaster Shop CIH Construction of SPRING interlocking, and issue Notice to Proceed for construction demo of SPRING tower, and install signals and turnouts for new tk4 to tk2A crossover.
FY24 Actual Expenditure & Accomplishments	$2.4	A network configuration was signed by all parties, and a preliminary engineering agreement was executed for the schematic as well as signal interface and construction. The #10 crossover was delivered and installed, with point protection. The project team began review of signalization software.
Variance & Explanation	-$1.0	The demolition of the Spring tower has been de-scoped from the project due to unforseen complications with State Historic Preservation Officer clearances. The demolition will take place under a future project.
10. Ruggles Station Accessibility Improvements - Phase 2 (MBTA)		
FY24 Planned Expenditure & Scope	$3.0	NTP of Ruggles Construction Contract
FY24 Actual Expenditure & Accomplishments	$1.5	A procurement package was advertised to contractors.
Variance & Explanation	-$1.5	The unexpected costs was driven by inflation. The project decided to redesign so the project estimate was within budget. The contractor procurement process couldn't be advertised until the project estimate was within budget.

Investment detail including expenditures, accomplishments, and explanation of variances are published as submitted by agencies.

All New England investments by submitting agency *(millions)*

Investment Name	FY24 Planned Expenditure	FY24 Actual Expenditure	Variance
Amtrak			
ADA Compliance Projects (NEC Region)	$0.0	$0.2	$0.2
Airo Facilities: Southampton Street Yard	$51.5	$3.8	-$47.7
Airo Facilities: Southampton Street Yard Digital Technology Upgrades	$0.2	$0.2	-$0.1
Airo Facilities: Springfield	$1.1	$0.0	-$1.1
Airo Facilities: Springfield Digital Technology Upgrades	$0.1	$0.0	-$0.1
Amtrak NEC Concrete Tie Replacement	$8.6	$7.0	-$1.6
Amtrak NEC System Undercutting Program	$0.0	$0.1	$0.1
Amtrak System Fence Upgrades Program	$3.3	$1.6	-$1.7
Amtrak System Production Structures Program	$0.0	$0.4	$0.4
Amtrak System Rail Replacement Program	$11.5	$12.0	$0.6
Amtrak System Track Rehabilitation Program	$2.0	$2.6	$0.6
Amtrak System Turnout Renewal Program	$8.6	$1.2	-$7.4
AS Line MP 59.5 Drainage & Soil Slope Stabilization	$0.2	$0.1	-$0.1
Boston Crew Base Renovation	$0.0	$0.0	$0.0
Boston Metropolitan Lounge Refresh	$0.3	$0.0	-$0.3
Boston Southampton Street Yard APD Facility Upgrade	$0.0	$0.0	$0.0
Bridges & Tunnels Security Enhancements	$0.0	$0.3	$0.3
Cedar Hill Remediation	$0.2	$0.1	$0.0
Connecticut River Bridge Replacement Project	$91.8	$78.2	-$13.6
Fitter Interlocking	$21.0	$25.3	$4.3
Guilford Interlocking Renewal	$0.6	$0.5	-$0.1
INRL FITTER I/L - TRACK INSTALLS	$0.0	$0.0	$0.0
Kingston Improvement Project	$0.1	$0.0	$0.0
Maintenance Facility Security Enhancements	$0.0	$0.0	$0.0
Mystic Station SOGR Platform Replacement	$0.0	$0.0	$0.0
New England Catenary Program	$1.9	$1.1	-$0.9
New England Communications Program	$2.4	$2.0	-$0.4
New England Facilities Program	$7.2	$2.5	-$4.6
New England Signals Program	$3.2	$3.2	$0.0
New England Structures Program	$4.9	$2.5	-$2.3
New England Substations Program	$1.5	$0.3	-$1.2
New England Track Program	$21.7	$25.4	$3.6
New Haven Station Refresh Program	$0.2	$0.0	-$0.1
New London Station Lighting And Canopy Upgrades	$0.2	$0.0	-$0.2
Next Generation Acela Infrastructure Upgrades: Southampton Yard	$1.3	$1.0	-$0.3
Pawcatuck River RI Bridge Replacement Project	$0.8	$0.5	-$0.3

All New England investments by submitting agency (*millions*, cont.)

Investment Name	FY24 Planned Expenditure	FY24 Actual Expenditure	Variance
Production High Speed Surfacing Program	$2.3	$6.3	$4.0
Production Wood Tie/Timber Replacement Program	$0.0	$0.1	$0.1
Rail Grinding Program	$0.5	$2.4	$1.9
Shaws Cove Bridge Fender System Upgrade	$0.6	$0.1	-$0.5
Spring (Springfield, MA) Interlocking Renewal Project	$3.5	$2.4	-$1.0
Spring Interlocking Renewal Project	$0.0	$0.0	$0.0
Springfield Line MP 59.5 Drainage & Soil Slope Stabilization	$0.0	$0.0	$0.0
Springfield Line: Connecticut River Bridge Replacement Project	$0.0	$0.0	$0.0
Springfield MA Canopy Upgrades	$0.2	$0.1	-$0.2
Springfield Station MA Demolition Freight Elevator	$0.1	$0.0	-$0.1
Springfield Station MA Existing Interior Upgrades	$0.1	$0.0	-$0.1
Springfield Station MA New High Level Platform	$0.3	$0.0	-$0.2
State Street Crossing Improvement Project	$0.4	$0.1	-$0.3
Veltri Interlocking	$8.8	$6.8	-$2.0
Vertical Gap Rehabilitation Program	$0.0	$0.1	$0.1
Westerly Station SOGR Platform Replacement	$0.1	$0.0	-$0.1
MBTA			
Attleboro Station Improvements	$1.7	$0.1	-$1.6
Back Bay Station Ventilation Improvements - Phase 3	$0.0	$0.8	$0.8
Battery Charger Upgrades Program	$0.2	$0.1	-$0.1
Boston to Providence - Capacity and Implementation Study	$0.0	$0.3	$0.3
Boston to Providence - Track 3 OCS Installation	$2.8	$0.8	-$1.9
Canton Junction Drainage Improvements	$0.1	$0.4	$0.3
CWR Replacement Program	$0.0	$0.0	$0.0
Gas Hot Air Switch Blower Program	$0.0	$0.0	$0.0
Grade Crossing Replacement Program	$1.0	$0.0	-$1.0
Hawk Hot Box / Dragging Equipment Detector Upgrade Project	$0.0	$0.0	$0.0
Hawk Hot Box and Dragging Equipment Detector Upgrade	$0.2	$0.0	-$0.2
Insulated Joint Program	$0.8	$0.5	-$0.3
Interlocking Crossover Replacement Program	$0.0	$0.0	$0.0
Interlocking Steel Replacement Program	$0.4	$0.6	$0.3
Joint Elimination Program	$0.5	$0.7	$0.2
Junction Interlocking Drainage Improvements	$0.0	$0.0	$0.0
M3 Switch Machine Program	$0.2	$0.3	$0.1
Out Of Face Surfacing Program	$1.7	$0.0	-$1.7
Pawtucket Layover Facility Improvements - Phase 3	$0.0	$0.1	$0.1
RoW Fence Upgrades Program	$1.1	$0.0	-$1.1

All New England investments by submitting agency (*millions*, cont.)

Investment Name	FY24 Planned Expenditure	FY24 Actual Expenditure	Variance
RTU Upgrades Project	$0.0	$0.1	$0.1
Ruggles Station Accessibility Improvements - Phase 2	$3.0	$1.5	-$1.5
South Attleboro Station Accessibility Improvements	$0.3	$0.6	$0.3
Southampton and South Bay Interlocking Upgrades	$0.8	$1.7	$0.9
Southampton Street and South Bay I/L Upgrades Project	$0.0	$0.0	$0.0
South-Side Maintenance and Layover Facility	$1.5	$0.4	-$1.1
Southwest Corridor Emergency Egress Upgrades	$0.1	$0.0	-$0.1
Spot Surfacing Program	$2.5	$3.8	$1.3
Spot Undercutting Program	$0.9	$0.4	-$0.5
Substation 317 Replacement	$0.2	$0.0	-$0.2
Switch Heater Cabinet / Control Program	$0.2	$0.0	-$0.2
Tie/Timber Program	$2.4	$3.1	$0.7
Tower 1 and Cove Interlocking Improvements	$9.5	$19.4	$9.9
Track 3 OCS Upgrades	$0.0	$0.0	$0.0
Track Lead Replacement	$0.2	$0.1	-$0.1
Track Lead Replacement Program	$0.0	$0.0	$0.0
Tree Cutting Program	$0.3	$0.3	$0.0
Turnout Replacement Program	$4.5	$0.0	-$4.5
Undergrade Bridge Retirements	$0.2	$0.0	-$0.2
Widett Layover Facility	$0.0	$0.3	$0.3
Rhode Island DOT			
Kingston Station SOGR	$0.0	$0.0	$0.0
Providence Station Improvements	$18.0	$0.3	-$17.7
Warwick/T.F. Green Airport Station Expansion	$0.0	$0.6	$0.6
Westerly Station SOGR	$0.0	$0.1	$0.1
Connecticut DOT			
Enfield Station	$0.0	$0.0	$0.0
Hartford Line Rail Program: Phase 3B Double Track	$2.0	$5.5	$3.5
Hartford Line Station Program (Design)	$6.0	$5.0	-$1.0
Hartford Station Relocation	$0.0	$0.0	$0.0
Indian River Bridge	$0.0	$0.1	$0.1
New England OTP/Capacity Improvements: Madison Station	$0.8	$1.2	$0.4
Shore Line East Track & Catenary Improvements (FY22)	$1.0	$12.8	$11.8
Windsor Locks Railroad Station and Track Improvements	$10.0	$19.1	$9.1


6705
CT rail

Operations: MBTA

MBTA's train service is comprised of 12 service lines, eight of which access the corridor. The Franklin/Foxboro, Needham, and Providence/Stoughton lines all operate on the NEC spine for a significant portion of their route. The Fairmount, Greenbush, Kingston, Middleborough/Lakeville, and Framingham/Worcester lines all tie into the corridor near Boston's South Station.

NEC Service and Ridership

Average Daily Weekday Trips on the NEC, FY24

61.1K

+21.4% from FY23

Average Daily Weekend Trips on the NEC, FY24

29.5K

+22.4% from FY23

Average Weekday Trains on the NEC, FY24

329

+14 from FY23

Average Weekend Trains on the NEC, FY24

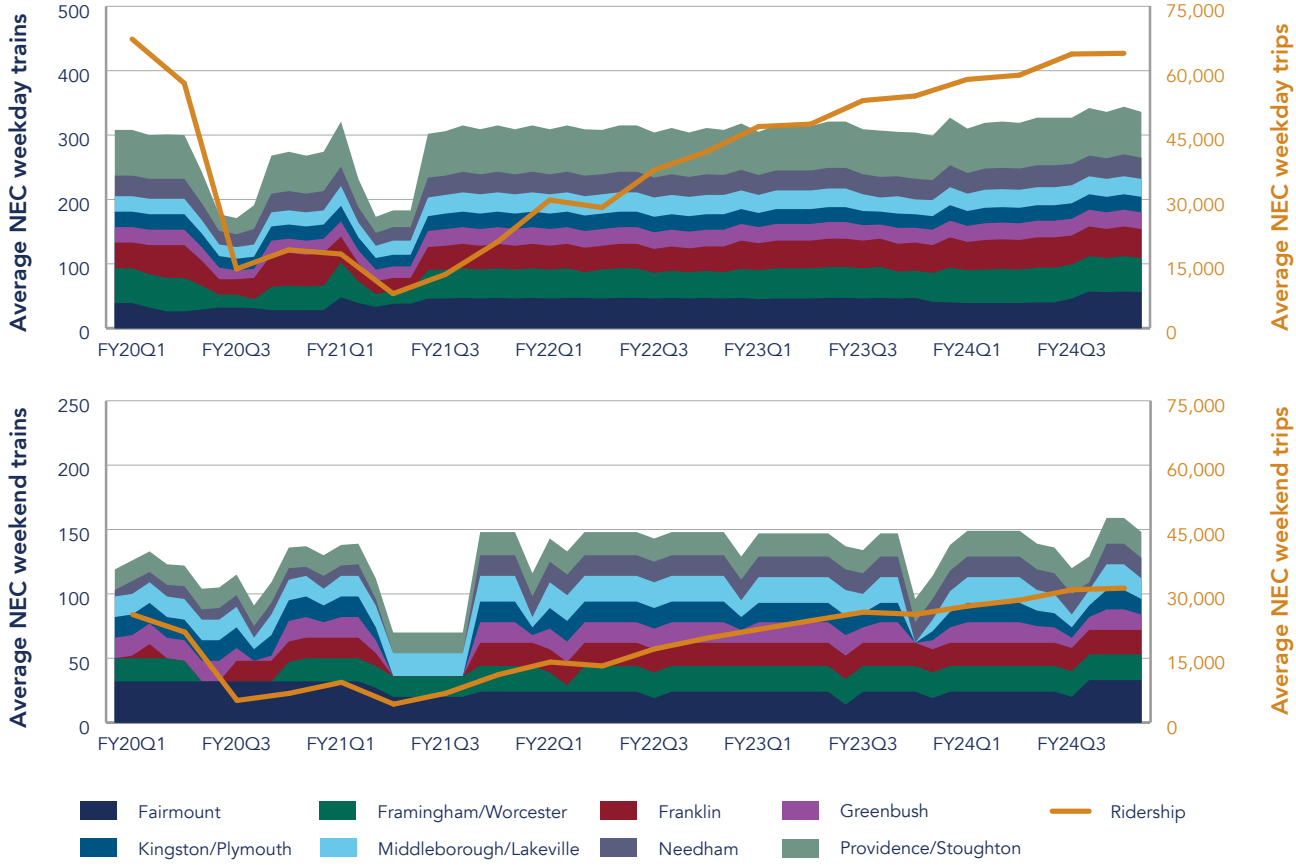
144

+7 from FY23

Average daily weekday and weekend ridership continued to increase throughout FY24 for MBTA, with weekday ridership in June exceeding levels last recorded in 2019. MBTA recorded its highest-ever weekend ridership in FY24, comfortably exceeding passenger numbers reached in FY19.

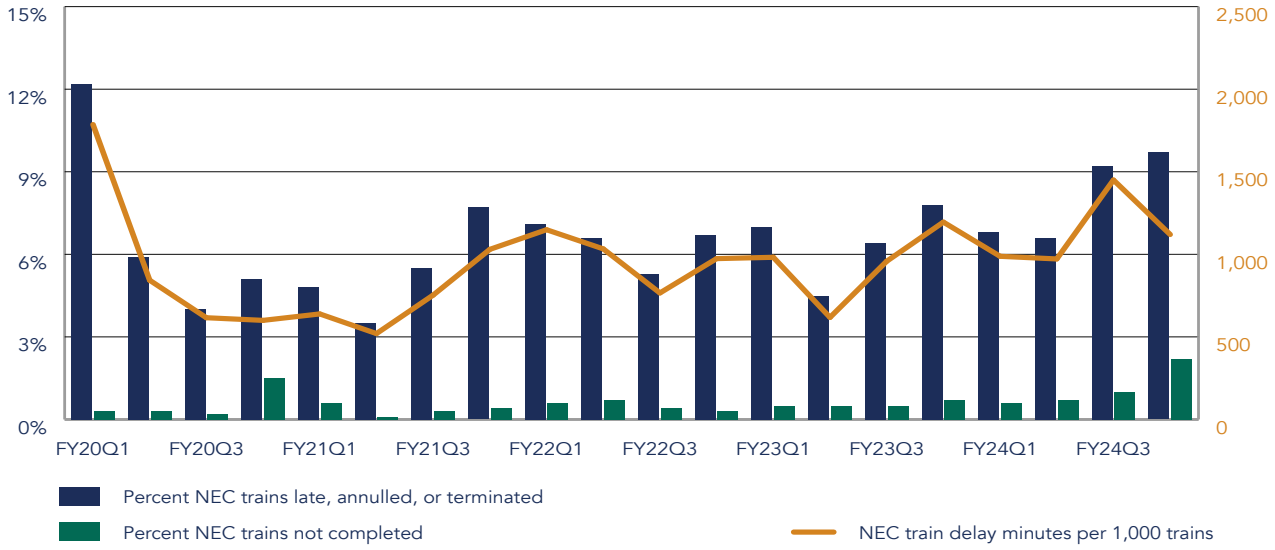
Weekend services decreased during Q2 due to engineering work on 4 lines which resumed during Q3. Services increased in Q4 due to the introduction of new timetable and increased service on the Fairmount Line.

MBTA average NEC daily trains and trips by month



NEC Percent Trains Late

MBTA percent trains late, annulled, or terminated by operator

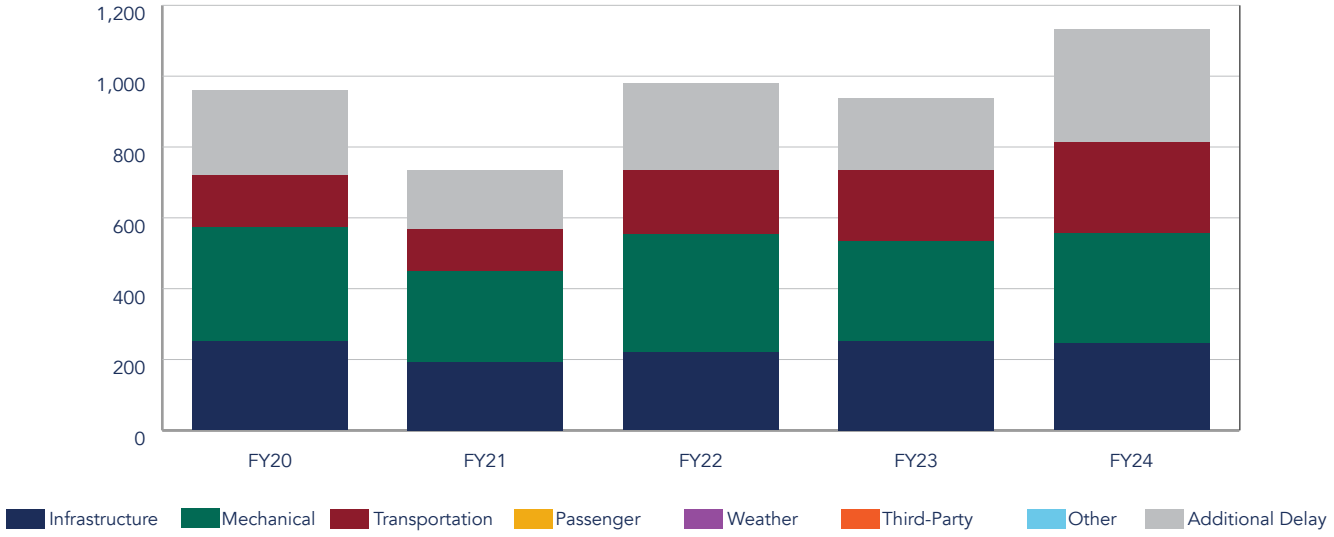


NEC Train Delay

Mechanical issues remained as the leading cause of delay in FY24 for MBTA. Transportation became the second ranked cause of delay moving up from third place in FY23, with infrastructure dropping to the third ranked cause of delay.

MBTA Train Delay Minutes per 1,000 Trains by Cause

Top 3 Annual Causes Highlighted



Operations: CTrail

CTrail's train service operates on two lines, both of which use the NEC. Shore Line East trains operate between New London and New Haven, CT. Hartford Line trains operate between New Haven, CT and Springfield, MA.

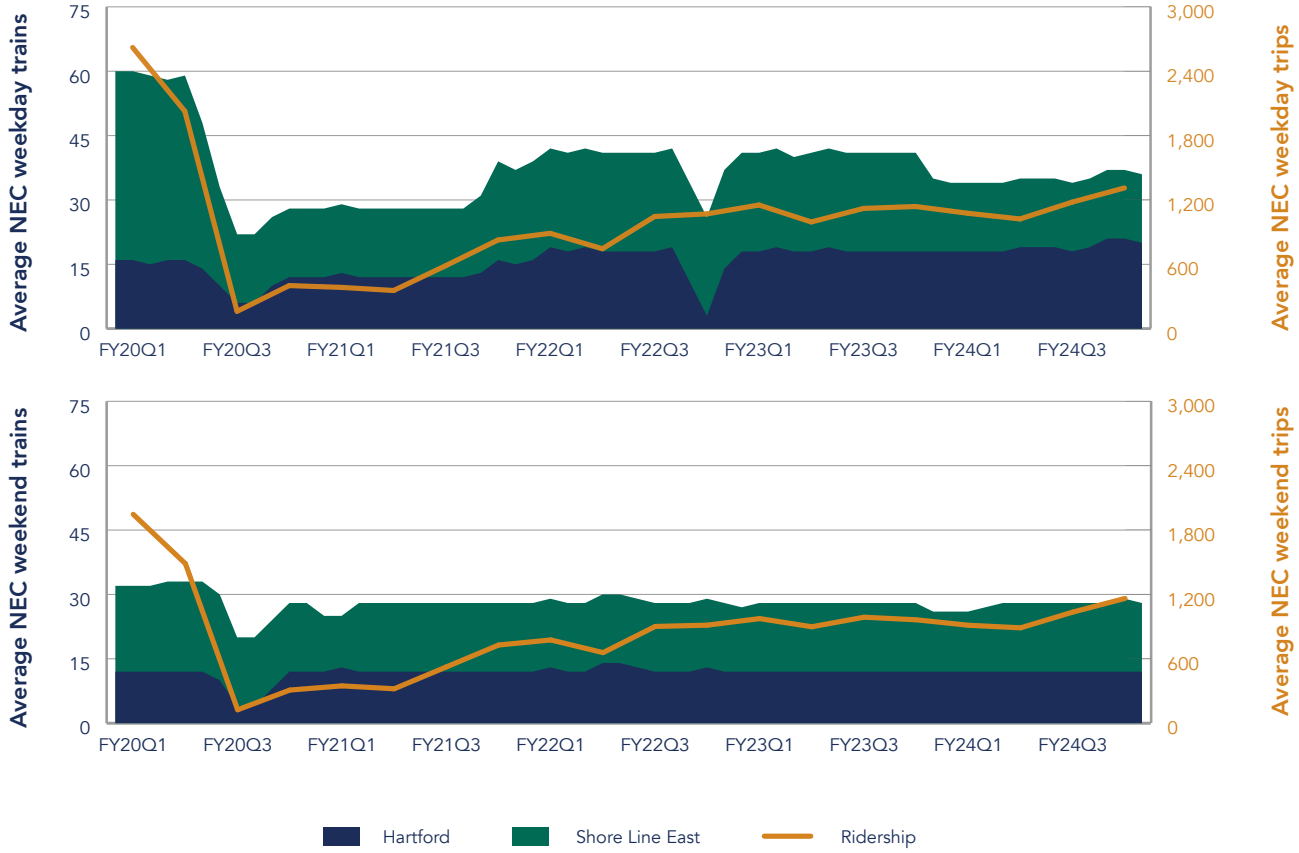
NEC Service and Ridership

Average Daily Weekday Trips on the NEC, FY24	*Average Daily Weekend Trips on the NEC, FY24*	*Average Weekday Trains on the NEC, FY24*	*Average Weekend Trains on the NEC, FY24*
1.1K	**1.0K**	**35**	**28**
+4.1% from FY23	**+4.6%** from FY23	**-6** from FY23	**+0** from FY23

CTrail's average daily weekday and weekend ridership increased during FY24, despite operating fewer weekday trains than in FY23.

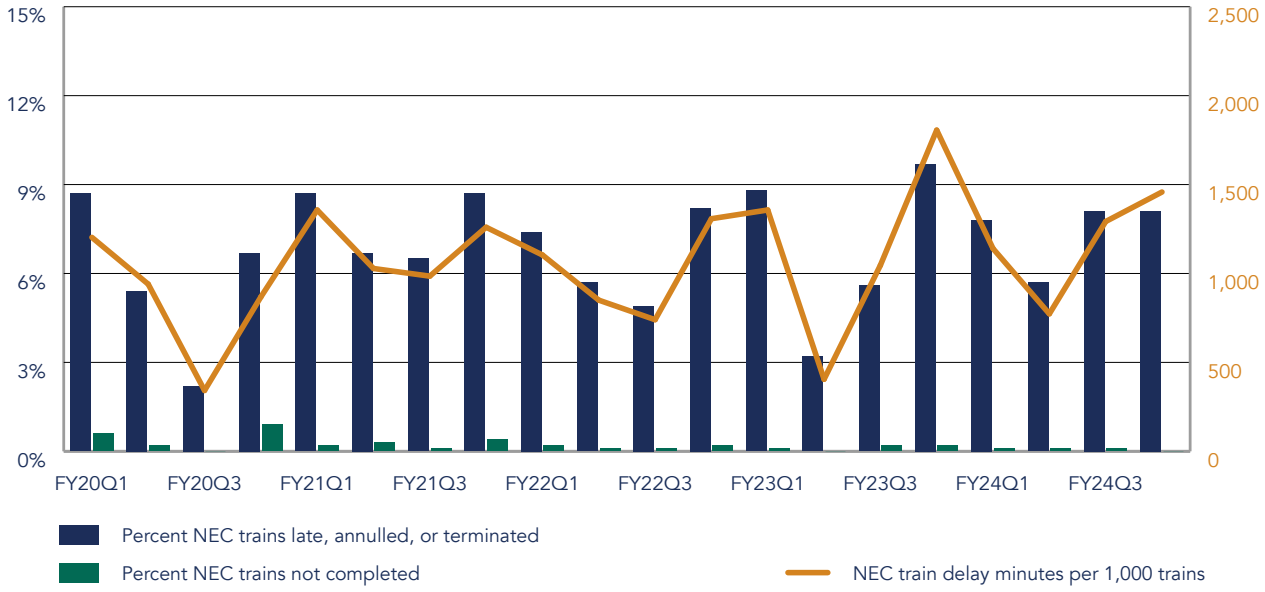
CTrail average weekday services decreased in FY24 following a reduction in service on Shore Line East in September 2023. The overall reduction was partially offset by an increase in services on the Hartford Line in June.

CTrail average NEC daily trains and trips by month



NEC Percent Trains Late

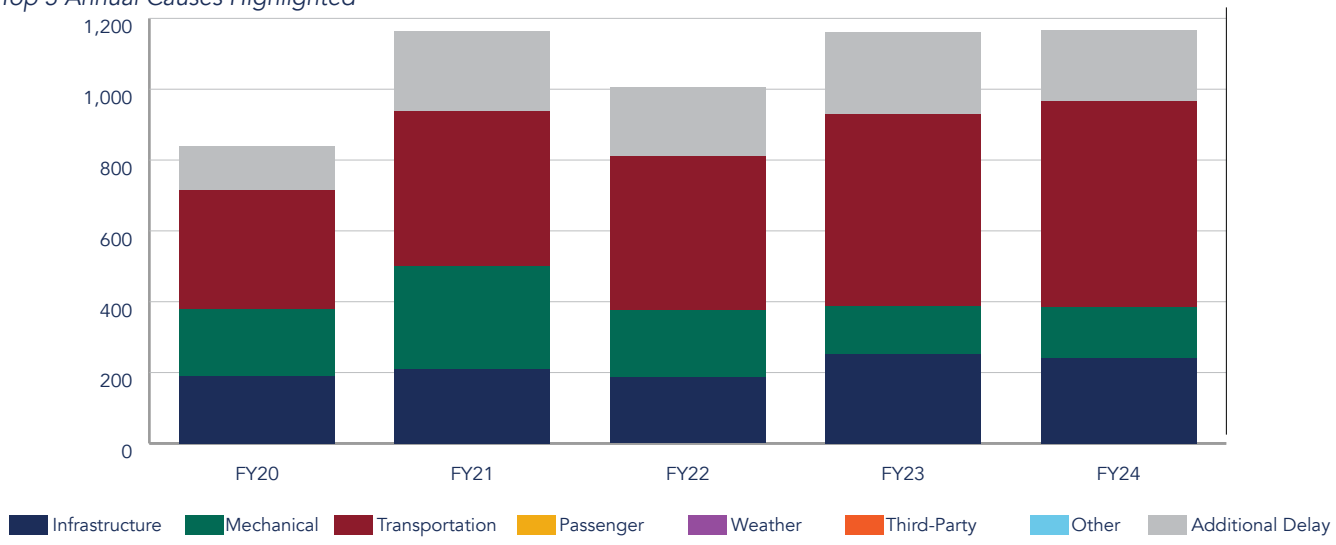
CTrail percent trains late, annulled, or terminated by operator



NEC Train Delay

Transportation issues remained as the leading cause of delay in FY24 for CTrail. Infrastructure remained the second ranked cause of delay after moving up from third place in FY23, with mechanical issues remaining the third ranked cause of delay.

CTrail Train Delay Minutes per 1,000 Trains by Cause
Top 3 Annual Causes Highlighted



Region: Connecticut-Westchester (NHL)

Infrastructure and Operations Detail

Operators: Amtrak, MTA Metro-North Railroad

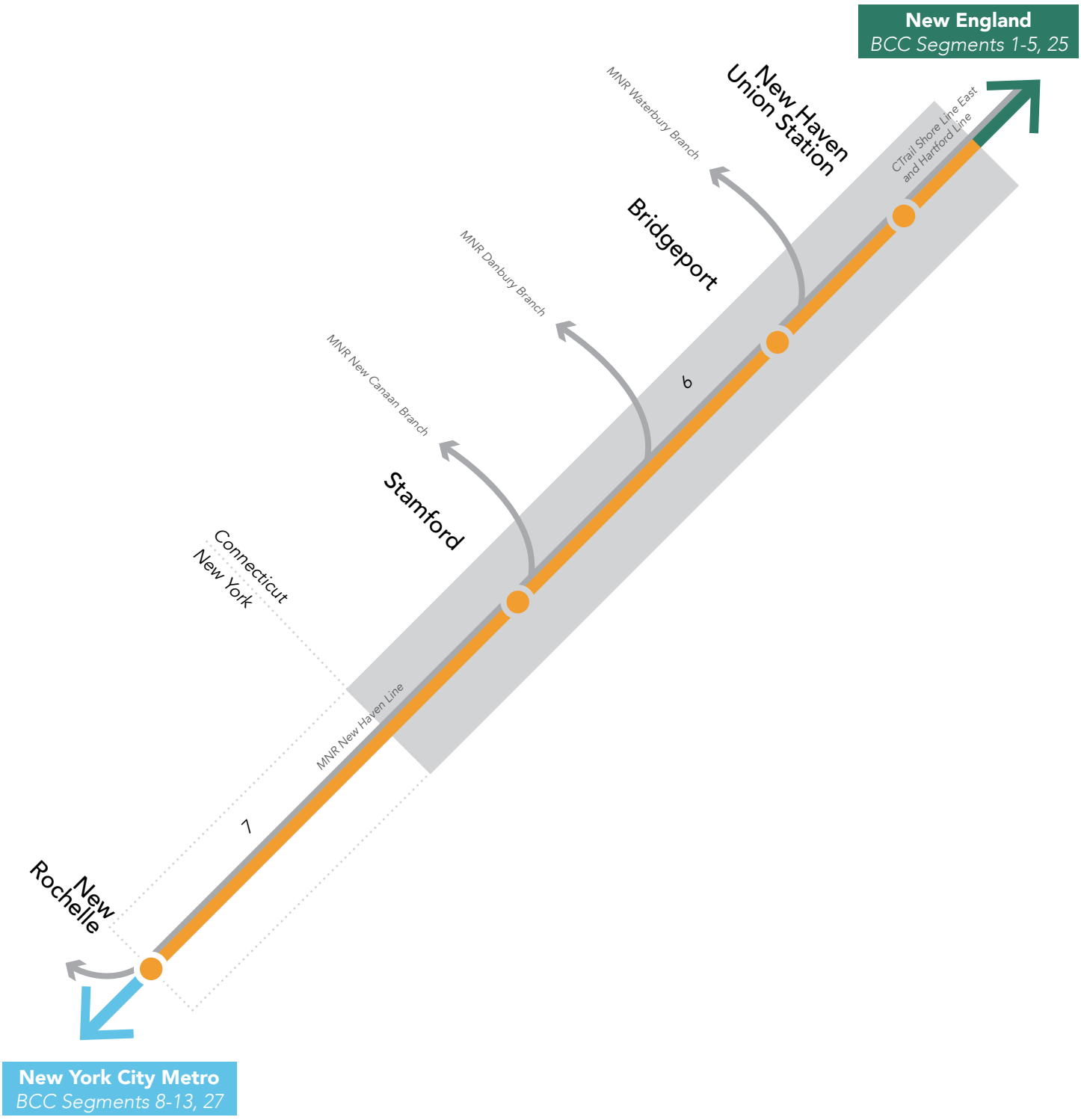
RoW Owners: Connecticut DOT, MTA Metro-North Railroad

BCC Segments

6: New Haven to CT/NY State Line

7: CT/NY State Line to New Rochelle

Connecticut-Westchester (NHL)
BCC Segments 6-7



Not all intermediate stations shown.

Infrastructure

$396 million was invested in the Connecticut-Westchester (NHL) region in FY24. Year to date, agencies have invested 193% of the planned investment for FY24.

10 largest investments by FY24 planned expenditure, Connecticut-Westchester (NHL) (*millions*)

1. WALK Bridge Replacement (Connecticut DOT)		
FY24 Planned Expenditure & Scope	$45.0	Construction activities
FY24 Actual Expenditure & Accomplishments	$135.3	Pricing estimates were finalized for machinery and a procurement package. Wetland mitigation and vessel relocation were completed at Site #2. Work continued on catenary foundations, trestles, and micro-tunnel operations.
Variance & Explanation	$90.3	Project activities advanced - higher than expected burn rate
2. TIME-2 (Connecticut DOT)		
FY24 Planned Expenditure & Scope	$15.0	Begin Construction activities
FY24 Actual Expenditure & Accomplishments	$65.1	Preparatory work was done at Osborne and East Avenue for future demolition work. Existing tracks (1&3) were removed over the bridge. An overheight vehicle detection system was installed. The steel superstructure was removed, and the northside platform of East Norwalk Station was demolished. A temporary platform was constructed, as well as a pedestrian enclosure under the bridge through the work zone.
Variance & Explanation	$50.1	Project activites advanced - higher than expected burn rate
3. Substation 128 and 178 replacement (MTA)		
FY24 Planned Expenditure & Scope	$12.0	Continue design-build project for the replacement of 2 substations on the New Haven Line
FY24 Actual Expenditure & Accomplishments	$15.4	Final design was completed and submitted for review. Caissons and foundations for new substations are under construction.
Variance & Explanation	$3.4	Some project activities were accelerated in an effort to keep the project on schedule.
4. New Haven Line Station Platform Replacement Program (Darien) (Connecticut DOT)		
FY24 Planned Expenditure & Scope	$10.0	Begin Construction activities
FY24 Actual Expenditure & Accomplishments	$10.5	Existing elevators and platforms were demolished. Piers were repaired and new footings were installed for elevators and stairs. Temporary platforms were added. Structural steel and bearings for platforms were installed.
Variance & Explanation	$0.5	Project activites advanced slightly higher than expected burn rate
5. WALK Bridge: Enabling Components (CP243, Danbury Dockyard, East Catenary) (Connecticut DOT)		
FY24 Planned Expenditure & Scope	$8.5	Completing Construction
FY24 Actual Expenditure & Accomplishments	$30.5	Work was continued on catenary structures and tie replacement.
Variance & Explanation	$22.0	Project activites advanced - higher than expected burn rate
6. Stamford Station Improvements: Elevators and Escalators Improvements (Connecticut DOT)		
FY24 Planned Expenditure & Scope	$8.0	Construction activities
FY24 Actual Expenditure & Accomplishments	$13.1	Structural repaired to escalators 1-8 was completed. Escalators 12, 14, 15, and 17 were repaired and returned to service. Elevator 4 was repaired and returned to service. An emergency generator was installed.
Variance & Explanation	$5.1	Project activites advanced - higher than expected burn rate

Investment detail including expenditures, accomplishments, and explanation of variances are published as submitted by agencies.

10 largest investments by FY24 planned expenditure, Connecticut-Westchester (NHL) (*millions*, cont.)

7. Stamford Station Improvements: Parking Garage (Connecticut DOT)		
FY24 Planned Expenditure & Scope	$7.0	Construction activities
FY24 Actual Expenditure & Accomplishments	$9.9	Project complete.
Variance & Explanation	$2.9	Project activites advanced - higher than expected burn rate
8. COS COB Bridge Interim Repairs (Connecticut DOT)		
FY24 Planned Expenditure & Scope	$5.0	MNR Activities
FY24 Actual Expenditure & Accomplishments	$0.7	Work suspended until Aug, re-design efforts required delay and construction restarted in September
Variance & Explanation	-$4.3	Work suspended until Aug, re-design efforts required delay and construction restarted in September
9. New Haven Line Signal System Replacement: Section 1 - Greenwich to Norwalk (Connecticut DOT)		
FY24 Planned Expenditure & Scope	$5.0	Construction activities
FY24 Actual Expenditure & Accomplishments	$7.3	Insulated joints were installed at various points on tracks 1-4. Conduits, circuits, and mounted signals were installed. Work continued on the installation of terminal boards. New power cables were installed.
Variance & Explanation	$2.3	Project activities advanced higher than expected burn rate
10. New Haven Union Station Improvements - West Lot Multimodal Hub (Connecticut DOT)		
FY24 Planned Expenditure & Scope	$5.0	Early construction activities
FY24 Actual Expenditure & Accomplishments	$7.3	Project schedule delayed due to execution of agreements
Variance & Explanation	$2.3	Project schedule delayed due to exectuion of agreements

Investment detail including expenditures, accomplishments, and explanation of variances are published as submitted by agencies.

All Connecticut-Westchester (NHL) investments by submitting agency (*millions*)

Investment Name	FY24 Planned Expenditure	FY24 Actual Expenditure	Variance
Connecticut DOT			
Atlantic Street Bridge Project	$0.0	$4.4	$4.4
Auto-Tension Catenary Replacement Project: Segments C1A, C2	$0.0	$0.0	$0.0
Bridge Design Program	$4.0	$6.8	$2.8
Bridge Replacement/Repair Program	$4.0	$1.6	-$2.4
COS COB Bridge Interim Repairs	$5.0	$0.7	-$4.3
COS COB Bridge Replacement (TIME-8)	$0.0	$0.0	$0.0
CP261 Devon Improvements	$0.0	$0.1	$0.1
DEVON Bridge Interim Repairs	$1.5	$0.3	-$1.2
DEVON Bridge Replacement	$1.5	$1.3	-$0.2
Ethernet Migration Program	$0.0	$2.0	$2.0
New Haven Line Network Infrastructure Upgrade Phase 3	$4.0	$0.4	-$3.6
New Haven Line Network Infrastructure Upgrade Phase 4	$2.9	$1.7	-$1.1
New Haven Line Signal System Replacement: Section 1 - Greenwich to Norwalk	$5.0	$7.3	$2.3
New Haven Line Signal System Replacement: Sections 2 & 3 - Norwalk to New Haven	$0.0	$0.1	$0.1
New Haven Line Station Platform Replacement Program (Darien)	$10.0	$10.5	$0.5
New Haven Line Station Platform Replacement Program (New Haven)	$2.0	$1.7	-$0.3
New Haven Line Yard and Facility Program - Design and Program Management	$2.0	$10.3	$8.3
New Haven Line Yard and Facility Program: Car and Diesel Shop Rehabilitation	$3.0	$0.0	-$3.0
New Haven Line Yard and Facility Program: Wheel Truing Facility Replacement	$1.5	$0.0	-$1.5
New Haven Line Yard and Facility Projects (Nearing Completion)	$0.0	$0.0	$0.0
New Haven Union Station Improvements - Station Interior Improvements	$0.0	$0.0	$0.0
New Haven Union Station Improvements - West Lot Multimodal Hub	$5.0	$0.6	-$4.4
NHL Platform Repair and Replacement Program	$0.0	$0.4	$0.4
NHL Power Improvement Program	$3.0	$1.1	-$1.9
NHL Short Term Speed Improvements	$0.0	$0.0	$0.0
Node House Improvements	$0.0	$0.1	$0.1
Overheight Clearance Program	$0.0	$0.2	$0.2
Positive Train Control Program	$0.0	$1.8	$1.8
Retaining Wall 27 Replacement Project	$0.0	$0.0	$0.0
Retaining Wall Repairs Program	$0.0	$0.3	$0.3
Saga Bridge Interim Repairs	$5.0	$0.6	-$4.4
Saga High Tower Platforms Ladders and Guy Wire Replacement	$0.0	$0.0	$0.0
SAUGATUCK River Bridge Replacement (TIME-4)	$1.4	$0.6	-$0.8
Scour Repair Program	$0.0	$0.3	$0.3
Stamford Catenary Improvements	$2.6	$0.1	-$2.4
Stamford Maintenance of Equipment (MOE) Facility	$1.5	$2.9	$1.4

All Connecticut-Westchester (NHL) investments by submitting agency (*millions*, cont.)

Investment Name	FY24 Planned Expenditure	FY24 Actual Expenditure	Variance
Stamford Station Improvements: Elevators and Escalators Improvements	$8.0	$13.1	$5.1
Stamford Station Improvements: Parking Garage	$7.0	$9.9	$2.9
Stamford Station Improvements: Phase 2	$0.4	$0.3	-$0.1
State Street Platform Replacement Project	$0.0	$0.0	$0.0
Structures (S) Program	$4.0	$3.5	-$0.5
Substation Repairs/Improvements	$0.0	$0.1	$0.1
TIME-1	$5.0	$10.1	$5.1
TIME-2	$15.0	$65.1	$50.1
TIME-5	$0.0	$0.0	$0.0
TIME-6	$0.0	$0.0	$0.0
Track (C) Program	$25.0	$35.6	$10.6
WALK Bridge Replacement	$45.0	$135.3	$90.3
WALK Bridge: Enabling Components (Advanced Utilities)	$4.0	$8.7	$4.7
WALK Bridge: Enabling Components (CP243, Danbury Dockyard, East Catenary)	$8.5	$30.5	$22.0
MTA			
Comms & Signal Program	$0.5	$0.0	-$0.5
Electric Traction Program	$0.0	$0.0	$0.0
Overhead Bridge Rehabilitation Program	$0.3	$0.0	-$0.3
Pelham Substation Replacement	$1.0	$6.7	$5.7
PTC Upgrades and Enhancements	$1.5	$0.0	-$1.5
Structures Program	$1.2	$0.2	-$1.0
Substation 128 and 178 replacement	$12.0	$15.4	$3.4
Systemwide Support Programs	$0.5	$0.3	-$0.2
Track Programs	$2.0	$3.3	$1.3
Undergrade Bridge Rehabilitation Program	$0.0	$0.0	$0.0

Operations: MTA Metro-North Railroad

MTA Metro-North Railroad (Metro-North) operates on the NEC Main Line, south from New Haven, CT into New York through New Rochelle, NY where trains leave the corridor to proceed to Grand Central Station. Branch lines from New Canaan, Danbury, and Waterbury connect with the New Haven Line at Stamford, South Norwalk, and Devon. Metro-North service outside of the state of New York is operated on behalf of Connecticut DOT.

NEC Service and Ridership

Average Daily Weekday Trips on the NEC, FY24

89.0K

+5.6% from FY23

Average Daily Weekend Trips on the NEC, FY24

59.1K

+5.6% from FY23

Average Weekday Trains on the NEC, FY24

295

-5 from FY23

Average Weekend Trains on the NEC, FY24

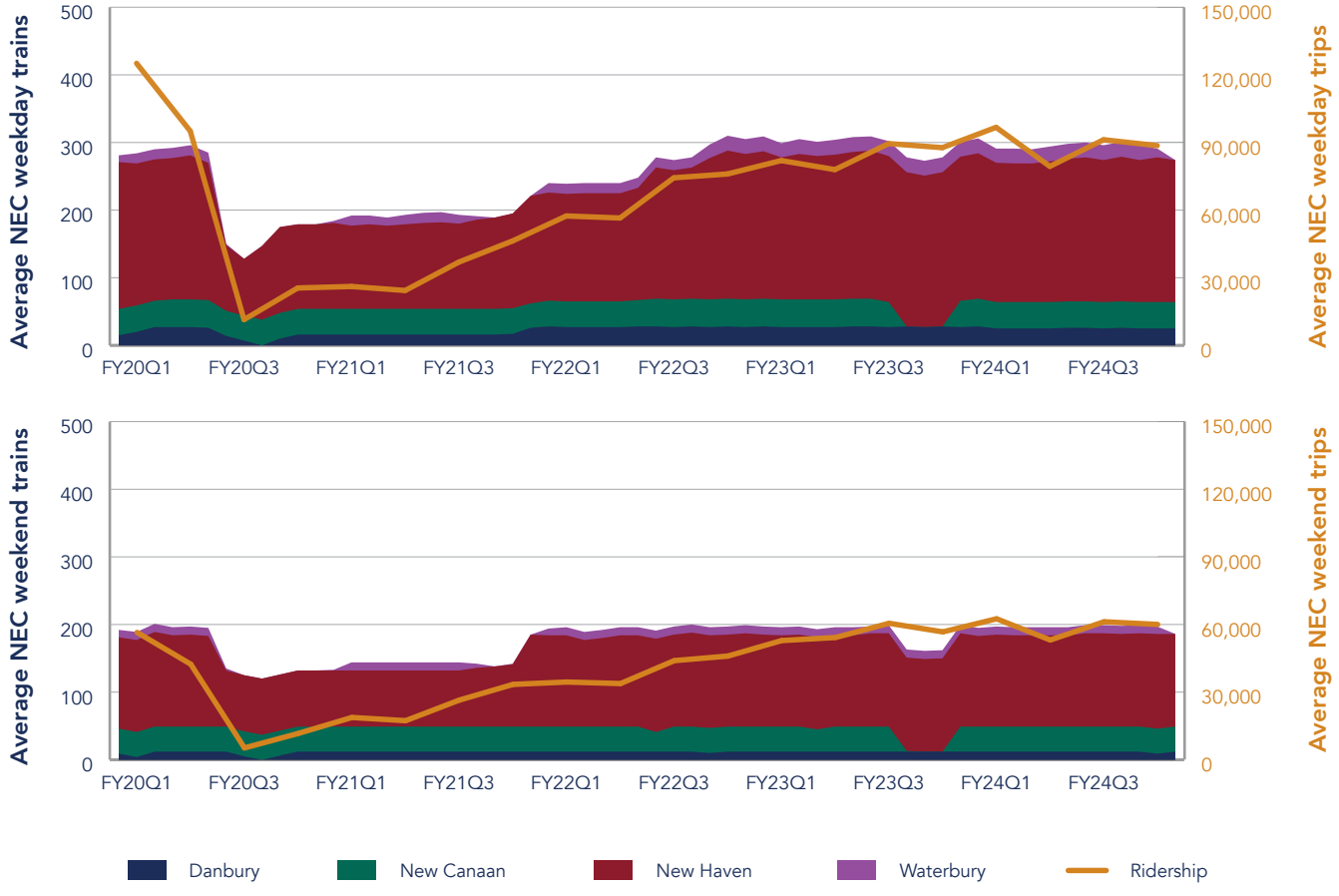
196

+8 from FY23

Average daily weekday and weekend ridership continued to increase throughout FY24 for MNR, with on-corridor weekend ridership now exceeding FY19 passenger numbers by 7.7%.

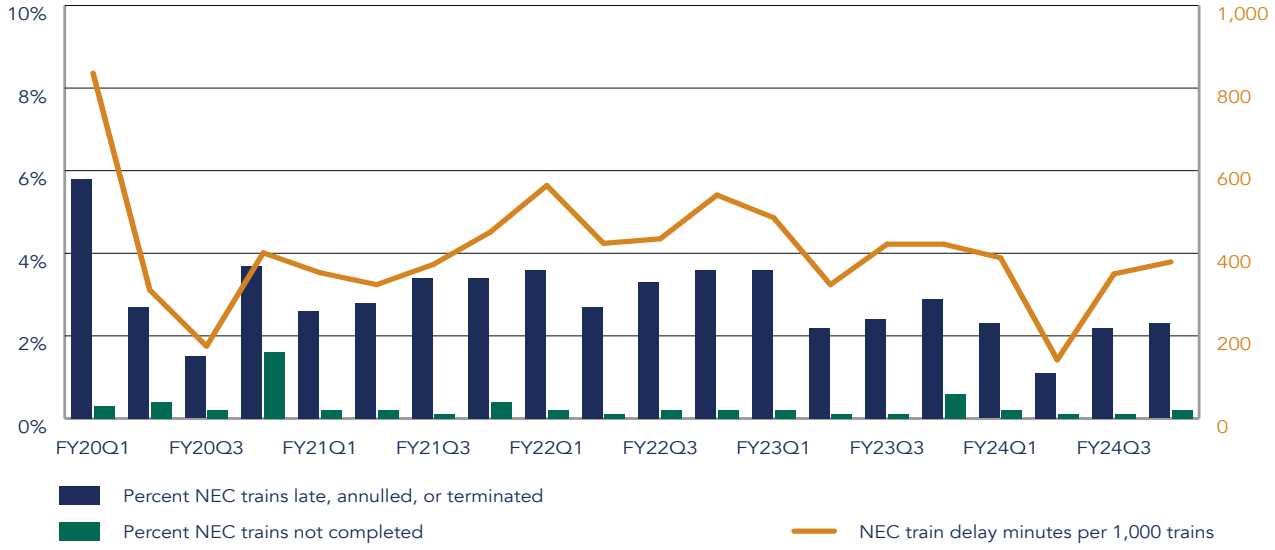
Weekday services decreased overall during FY24 following suspension of services on the Waterbury Line in August and September due to a track washout following heavy rain.

Metro-North average NEC daily trains and trips by month



NEC Percent Trains Late

Metro-North percent trains late, annulled, or terminated by operator

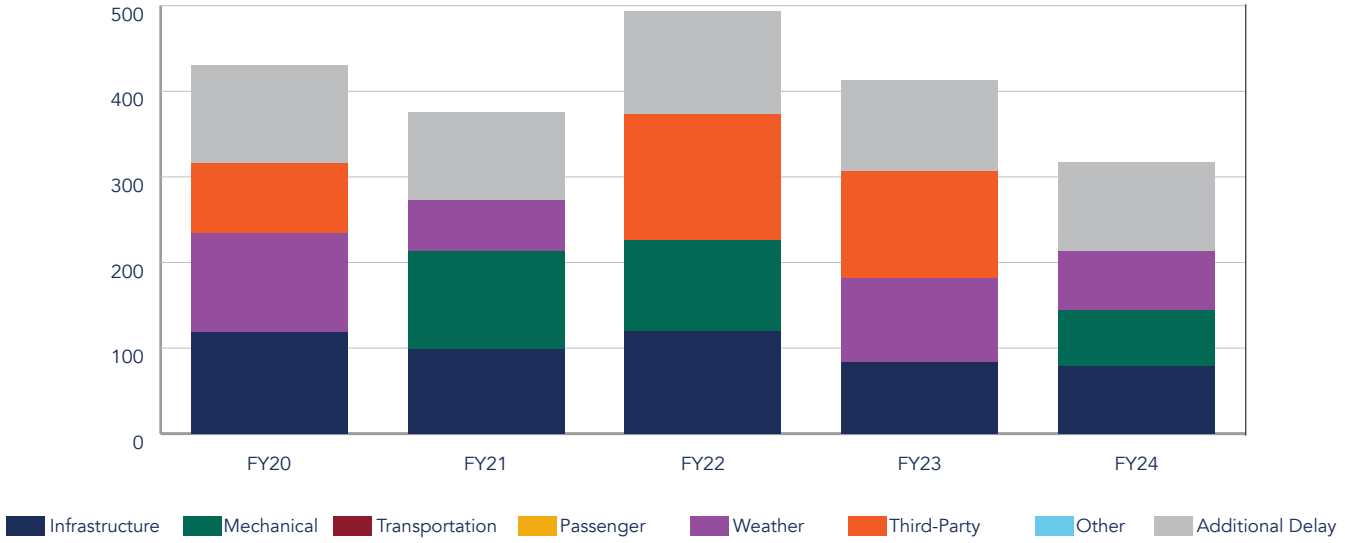


NEC Train Delay

Infrastructure became the leading cause of delay for MNR despite decreasing in FY24 due to reductions in 3rd party and weather delays - with weather remaining as the second ranked cause of delay. Mechanical delays remained similar to FY23 but moved up to the 3rd ranked cause of delay, following a marked reduction in third party delays.

Metro-North Train Delay Minutes per 1,000 Trains by Cause

Top 3 Annual Causes Highlighted



Region: New York City Metro

Infrastructure and Operations Detail

Operators: Amtrak, MTA Long Island Rail Road, NJ TRANSIT, SEPTA

RoW Owners: Amtrak

BCC Segments

8: New Rochelle to Harold

9: Harold to F Interlocking

10: F Interlocking to Penn Station New York

11: Penn Terminal

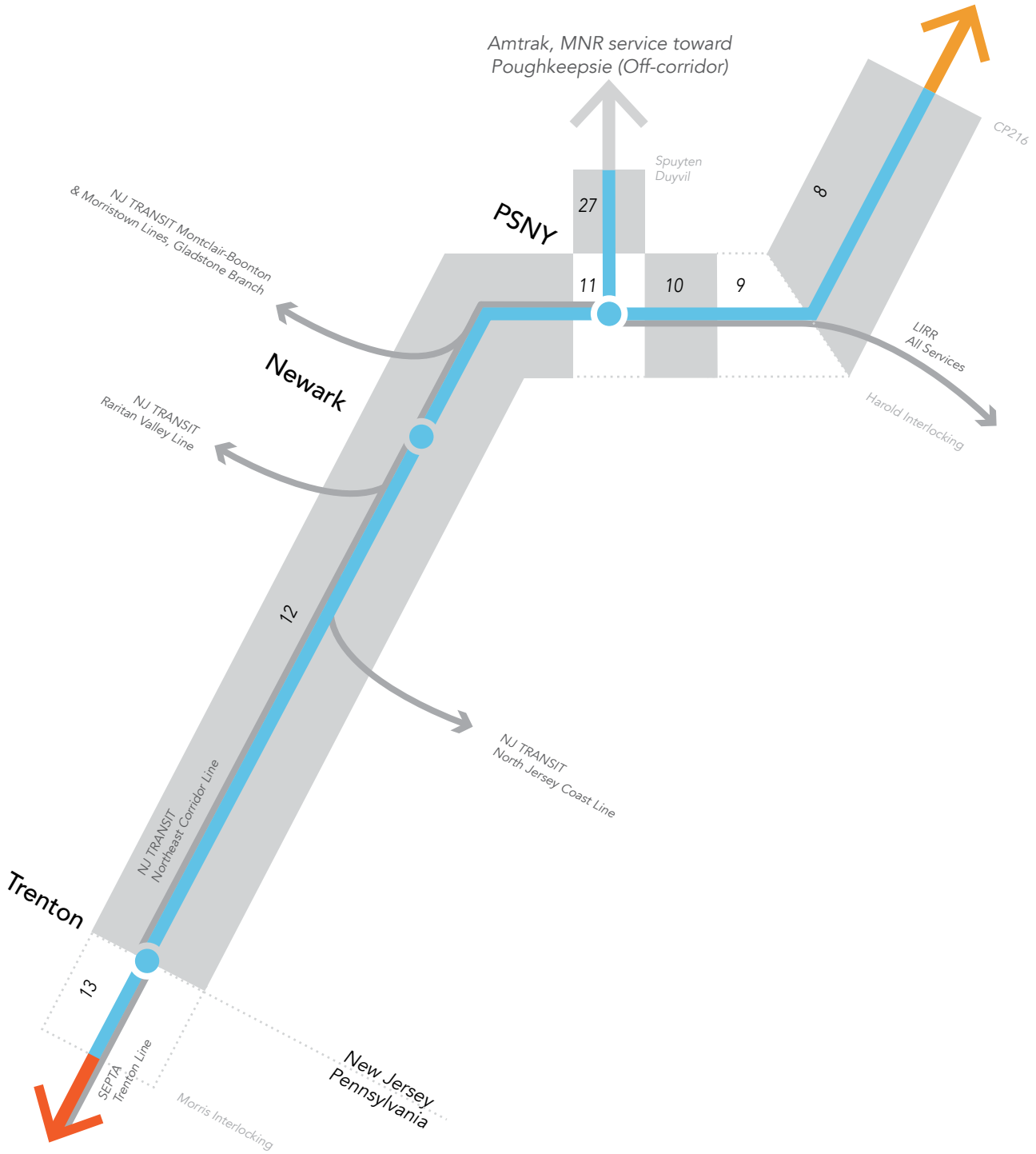
12: Penn Station New York to Trenton

13: Trenton to Morris

27: Spuyten Duyvil to Penn Station New York

New York City Metro
BCC Segments 8-13, 27

Connecticut - Westchester (NHL)
BCC Segments 6-7



Mid-Atlantic North
BCC Segments 14-20, 28-30

Not all intermediate stations shown.

Infrastructure

$2,037 million was invested in the New York City Metro region in FY24. Year to date, agencies have invested 65% of the planned investment for FY24.

10 largest investments by FY24 planned expenditure, New York City Metro *(millions)*

1.New York Penn Station Reconstruction (MTA)		
FY24 Planned Expenditure & Scope	$1,150.6	Preliminary Design and NEPA Environmental work
FY24 Actual Expenditure & Accomplishments	$36.6	Pre-NEPA activities were largely completed including NEPA and Section 106 (historic preservation) initiation packages, as well as a Public and Agency Outreach Plan.
Variance & Explanation	-$1,113.9	NEPA initiation is delayed pending further discussions with project partners and FRA.
2. Penn Station Access (MTA)		
FY24 Planned Expenditure & Scope	$530.5	Continue construction
FY24 Actual Expenditure & Accomplishments	$224.8	Completed Track 2 of Legget Interlocking. Demolished and erected southern span of the Bronxdale Bridge.
Variance & Explanation	-$305.7	Limited track time and Amtrak workforce support has hindered construction, yielding fewer activities and expenditures.
3. East River Tunnel Rehabilitation Project (Amtrak)		
FY24 Planned Expenditure & Scope	$312.4	The scope for FY24 includes complete procurement process for ERT Rehab construction project, select construction contractor, issue NTP and start construction ERT Line 2 Rehab. Complete procurement and select Construction Management consultant for ERT construction. Complete enabling projects: ERT Line 3 Redundant Fiber Installation; S-3 Phase B Line 1 traction power cable relocation; hardening of Line1,3 &4; SSYD Sub 3 to Line 4 and Sub 4 to Line 2 construction and cutovers.
FY24 Actual Expenditure & Accomplishments	$87.9	A construction contractor and a construction management consultant were both selected for the ERT Line 1 and Line 2 Rehab project. The ERT Line 3 Redundant Fiber Conduit contract was completed. Hardening of Line 1, 3 & 4 was advanced.
Variance & Explanation	-$224.5	Hardening of ERT Line 1,3 &4 was extended due to additional repair scope for rail and track damage. Signal construction on Sub 3 toLine 4 has been pushed back due to delays in design and construction completion of track and Overhead Catenary System (OCS) by a peer agency.
4. Gateway: Hudson Yard Concrete Casing 3 (Amtrak)		
FY24 Planned Expenditure & Scope	$259.0	FY24 scope includes: 1) Construction of Support of Excavation Wall 2) Excavation of underground casing structure 3) Construction of Highline Foundation Reinforcement"
FY24 Actual Expenditure & Accomplishments	$179.3	Mobilization is underway. Soil testing and material removal has started. Traffic control and DOT approval are underway, and the demolition of the MTA LIRR Retired Emergency Services building has started. Approximately 75% of secant piles for the project were installed this fiscal year.
Variance & Explanation	-$79.8	No notable variance, though several activities have been re-organized due to approvals from outside agencies.

Investment detail including expenditures, accomplishments, and explanation of variances are published as submitted by agencies.

10 largest investments by FY24 planned expenditure, New York City Metro (*millions*, cont.)

5. Gateway: Hudson Tunnel Project (Amtrak)		
FY24 Planned Expenditure & Scope	$253.9	Design and construction: 1) Commencement of the construction of the Tonnelle Avenue Bridge Project 2) Complete the design of Package 1A – Palisades Tunnel - (Design-Bid-Build contracting methodology) 3) Complete the design of Package 1B – Manhattan Tunnel – (Design-Build contracting methodology) 4) Complete the design of Package 1C – Hudson River Tunnel – (Design-Bid-Build contracting methodology) 5) Commence construction of the Hudson River Ground Stabilization Project - EA1 6) Complete the design of Package 2 – Fit out of Tunnels, Railroad and MEP Systems, Construct 3 Fan Plants 7) Risk Assessment -Phase 2: Engineer-of-Record GTHP will continue its support of Risk Assessment activities in which the Project Partners will work directly with the FTA and FRA to identify and document the risks that might impede the start and completion of the project, as well as to develop risk mitigation strategies. Completion of the Risk Assessment phase is a precursor to prior to entry into the Engineering Phase of the FTA's Capital Investment Grants Program, and the eventual execution of a Full Funding Grant Agreement with the FTA. GDC will bring Delivery Partner in FY24. GDC will complete Financial Plan/Cost assurance activity. Property acquisition: 1) ongoing legal services to support the conclusion of litigation pertaining to the condemnation of Block 675, Lot 1 2) the fee acquisition of the Dykes Lumber site in NJ 3) the Temporary Construction Easement (TCE) with the Hudson River Park Trust (HRPT) for the upland parcel 4) the permanent sub-surface easement with HRPT for the upland and in water parcels. 5) the purchase of Saw Mill Pilot Mitigation Bank Credits
FY24 Actual Expenditure & Accomplishments	$271.5	The consolidated easement with New York State was completed. Litigation pertaining to the condemnation of Block 675, Lot 1 was settled. A temporary work permit with the Hudson River Park Trust for the upland parcel was acquired. Dykes Lumber site in NJ was acquired. Permanent sub-surface easement consent was received from the Hudson River Park Trust for the upland and in water parcels.
Variance & Explanation	$17.6	No notable variance.
6. Harold Interlocking (MTA)		
FY24 Planned Expenditure & Scope	$110.0	Initiate Westbound Bypass Remaining Work and continuation of Eastbound Reroute.
FY24 Actual Expenditure & Accomplishments	$107.1	Construction of the Eastbound Reroute and Harold Catenary work progressed.
Variance & Explanation	-$2.9	No notable annual spend variance
7. Gateway: Sawtooth Bridges Replacement Project (Amtrak)		
FY24 Planned Expenditure & Scope	$51.2	The current year scope will include the following: Progression of 30% design documents and completion of Preliminary Engineering; Commencement of Final Design including issuance of NTP to the design consultant for Final Design Services.; 100% design submission for the Early Enabling Component activities; Issuance of NTPs for PM/CM Services and CMAR; and the purchasing of Conrail property and wetland credits.
FY24 Actual Expenditure & Accomplishments	$15.8	The project completed Preliminary Engineering and received FRA approval the 30% design documents, along with authorization to proceed to Final Design. A notice to proceed was issued to the design consultant for final design services, and the final design phase of the project has commenced.
Variance & Explanation	-$35.3	The notices to proceed for PM/CM and CMAR services, the purchase of Conrail property and wetland credits, and the 100% design submission for Early Enabling Components were also initially planned to be accomplished in FY 2024. These activities have now been shifted to be accomplished in FY2025.

Investment detail including expenditures, accomplishments, and explanation of variances are published as submitted by agencies.

10 largest investments by FY24 planned expenditure, New York City Metro (*millions*, cont.)

8. Gateway: New York Penn Station Expansion (Amtrak)		
FY24 Planned Expenditure & Scope	$44.5	FY 2024 Scope includes the continuation of the preliminary engineering consultant contract, including: 1) Completing alternatives analysis, including coordinating with adjacent projects to refine design and future construction decisions. 2) Completing 10% design and entering the 30% design phase, progressing design concurrent with NEPA process. 3) Proceeding into the NEPA process after Notice of Intent and supporting the NEPA consultant in their evaluation of the reasonable alternatives. Participating in public and stakeholder outreach, both as required by NEPA and to gather community input."
FY24 Actual Expenditure & Accomplishments	$24.5	Project team embarked on additional alternatives evaluation (Additional Concepts Study [ACS]) to refine concepts originally received in draft 10% package issued in October 2023. This included (1) providing written direction to begin additional work in early FY24, followed by (2) Limited Notice to Proceed in March 2024, and finally (3) official contract modification in April 2024. Additionally, the project began its pre-NEPA outreach (4) in August 2024 with its first public meeting discussing 1 of the alternatives, gearing up for the beginning of the official NEPA process in Spring 2025 as currently planned.
Variance & Explanation	-$20.1	10% design required additional time to develop new concepts that better addressed Amtrak's needs. Additionally, conversations with the FRA and FTA revealed the need for additional pre-NEPA outreach and concept evaluation, pushing the anticipated start of the NEPA process until FY25. The additional design development and additional time needed to arrive at the selection of a preferred alternative This pushed 30% design back to early FY26.
9. Airo Facilities: Sunnyside Yard (Amtrak)		
FY24 Planned Expenditure & Scope	$32.0	The scope for FY24 scope includes track improvements on lines the AG, AE, and AN and other locations in the New York Division. Work to be performed includes the following; surfacing, insulated joint replacements, joint eliminations, interlocking steel replacements, spot rail replacements, tie/timber replacement at Grundy and the AE, AG, and AN lines, concrete ties replacement, concrete timbers replacement at Iselin, drainage upgrades at Lincoln and the AE, AG, and AN lines, surfacing, vac train, rail replacement at Menlo, starting construction on layover equipment, rail lubrication upgrades, track panel replacement at North Tube, bridge timber/ties replacement at Dock and Portal Bridge, body track replacement at SSYD, paving at Adams, and F and Q Interlocking Renewal.
FY24 Actual Expenditure & Accomplishments	$4.1	Major highlights include replacement of panels in the North Tube, F&Q Interlocking renewal, and SSYD Track 16 body track replacement.
Variance & Explanation	-$28.0	No notable variances.
10. NJ TRANSITGRID (NJ TRANSIT)		
FY24 Planned Expenditure & Scope	$20.3	Amtrak track department to install tracks for the new platforms. Amtrak ET to install all catenary improvements for the platforms. Amtrak C&S to install all communication devices for operations on the new platforms. 3rd party contractor to install phase 1B watermain work. As-built and final documentation delivered to Amtrak PM. Project closeout by the PM.
FY24 Actual Expenditure & Accomplishments	$37.7	FY24 accomplishments include the installation of the watermain (excluding the final tie-in at the Queens Blvd stair tower), the completion of the Honeywell stair tower; finalization of the plan to adjust the track layout in western end to permit the Queens Blvd Stair tower to stay in place; near completion of the new platform; completion of catenary structures; completion of service and inspection (S&I) modification structural package; and completion of the Procurement process for Sand hoses, Nose cone platforms, split rail cart, and drop table shims.
Variance & Explanation	$17.4	The project did not complete in FY24 and has shifted into FY25. Significant issues were experienced in obtaining Amtrak protection and labor to enable contractor work. Amtrak force account priority was perpetually lowered due to other projects' priorities. Procurement for all auxiliary items began in March and April 2024, but the nose cone platforms vendor only received Notice-to-Proceed in October, FY25. Issues with resolving the terms and conditions between the supplier and contractor was resolved on 12/22.

Investment detail including expenditures, accomplishments, and explanation of variances are published as submitted by agencies.

All New York City Metro investments by submitting agency *(millions)*

Investment Name	FY24 Planned Expenditure	FY24 Actual Expenditure	Variance
Amtrak			
1st Avenue Ventilation Fan Attenuator Upgrade	$1.6	$1.7	$0.2
ADA Compliance Projects (NEC Region)	$0.0	$0.8	$0.8
AEI Tag Reader Wayside Defect Detection	$0.0	$0.0	$0.0
Airo Facilities: Sunnyside Yard	$32.0	$4.1	-$28.0
Airo Facilities: Sunnyside Yard Digital Technology Upgrades	$0.9	$0.2	-$0.7
Amtrak Owned Positive Train CTRL (PTC) Installation Program	$0.0	$0.0	$0.0
Amtrak System Comm System Upgrs Program	$1.6	$1.1	-$0.5
Amtrak System Fence Upgrades Program	$1.0	$1.0	-$0.1
Amtrak System Production Structures Program	$30.6	$28.0	-$2.6
Amtrak System Rail Replacement Program	$0.0	$0.5	$0.5
Amtrak System Track Rehabilitation Program	$0.0	$0.0	$0.0
Amtrak System Turnout Renewal Program	$15.8	$27.2	$11.4
Bridge Replacement South St. Station, Newark NJ AN MP 9.65	$1.8	$0.8	-$1.0
Bridges & Tunnels Security Enhancements	$0.0	$0.0	$0.0
Clark to Ham Constant Tension Upgrade Project	$17.1	$5.5	-$11.6
County-Newark Catenary Upgrades	$0.6	$0.5	-$0.1
East River Tunnel Rehabilitation Project	$312.4	$87.9	-$224.5
Emergency Portal Bridge Fender Strike April 16, 2022	$0.2	$0.1	-$0.1
Empire Line Lighting Upgrade Project	$4.3	$2.9	-$1.4
Gateway: Dock Bridge Rehabilitation Project	$6.2	$2.4	-$3.8
Gateway: Harrison Fourth Track	$2.5	$1.5	-$1.0
Gateway: Hudson Tunnel Project	$253.9	$271.5	$17.6
Gateway: Hudson Yard Concrete Casing 3	$259.0	$179.3	-$79.8
Gateway: New York Penn Station Expansion	$44.5	$24.5	-$20.1
Gateway: Sawtooth Bridges Replacement Project	$51.2	$15.8	-$35.3
Ham Interlocking Renewal Project	$12.8	$8.4	-$4.4
Kearny Sub 41 Relocation Design and Construction	$1.6	$1.8	$0.2
Kearny to Waverly Transmission Tower Upgrade Project	$5.0	$10.6	$5.6
Mainline Scanners	$16.9	$8.3	-$8.6
Maintenance Facility Security Enhancements	$0.0	$5.9	$5.9
Moynihan Station Infrastructure Improvement	$0.3	$0.1	-$0.2
NEC Trip Time Reduction	$0.3	$0.0	-$0.3
New Brunswick Commuter Yard Remediation	$0.1	-$0.2	-$0.2
New Hackensack Substation 42 Control House Project	$7.5	$8.2	$0.7
New Jersey Bridge Replacement - Main Street, Inman Ave, Lehigh Valley RR	$0.8	$0.0	-$0.8
New York Catenary Program	$1.4	$5.4	$4.0

All New York City Metro investments by submitting agency (*millions*, cont.)

Investment Name	FY24 Planned Expenditure	FY24 Actual Expenditure	Variance
New York Facilities Program	$10.6	$4.2	-$6.4
New York Metro Signal System Upgrades to 562 Program Phase 1: County to Elmora	$6.5	$1.0	-$5.5
New York Penn Station Escalator Replacement	$3.4	$0.2	-$3.2
New York Penn Station Track Remediation	$1.4	-$15.2	-$16.6
New York PSCC - Building Renovations	$3.0	$0.0	-$3.0
New York Signals Program	$3.8	$2.2	-$1.6
New York Structures Program	$13.3	$8.8	-$4.5
New York Substations Program	$5.2	$5.3	$0.0
New York Track Program	$48.6	$58.5	$9.9
Newark Penn Station: Platform Rehabilitation (A, B, C)	$7.2	$1.9	-$5.3
Next Generation Acela Infrastructure Upgrades: Sunnyside Yard	$20.3	$37.7	$17.4
NYP 7th And 32nd Entrance Renovation	$5.5	$0.0	-$5.5
NYP Crew Base Renovation	$7.6	$0.0	-$7.6
NYP East Block Security Bollards	$0.9	$0.0	-$0.9
Pelham Bay Bridge Replacement Project	$4.7	$1.5	-$3.2
Penn Station NY - Infrastructure Renewal	$24.6	$21.0	-$3.5
Penn Station NY Customer NOW Refresh Program	$0.2	$0.3	$0.0
Production High Speed Surfacing Program	$9.4	$3.2	-$6.2
Production Wood Tie/Timber Replacement Program	$1.5	$4.1	$2.6
PSCC NY 400 Building Backup Generator Replacement	$1.3	$0.2	-$1.1
PSNY Fire Protection Improvements	$1.6	$0.0	-$1.6
Q Interlocking C&S Equipment Replacement Project	$4.3	$5.3	$1.0
Rail Grinding Program	$0.9	$2.1	$1.2
River-to-River Rail (R4) Resiliency: ERT Tunnel Power Upgrades & Flood Mitigation	$4.5	$0.3	-$4.2
Security Enhancements	$0.0	$0.1	$0.1
Spuyten Duyvil Submarine Cable Replacement Project	$6.8	$7.1	$0.3
Station Security Enhancements	$0.0	$0.1	$0.1
Sunnyside Yard - Service Platform Upgrades	$3.3	$0.2	-$3.1
Sunnyside Yard Crew Base Facility Complex	$12.0	$0.7	-$11.3
Sunnyside Yard Frequency Converter Upgrade Project	$14.3	$15.0	$0.7
Sunnyside Yard Oil/PCB Remediation	$0.3	$0.1	-$0.2
Sunnyside Yard Watermain Upgrades	$4.3	$0.2	-$4.1
TLS Concrete Tie Replacement Program	$0.0	$0.6	$0.6
Trenton NJ - Commuter Yard Remediation	$0.0	$3.2	$3.2
Vertical Gap Rehabilitation Program	$0.0	$0.0	$0.0
Washington St Bridge Replacement	$1.6	$0.9	-$0.8

All New York City Metro investments by submitting agency (*millions*, cont.)

Investment Name	FY24 Planned Expenditure	FY24 Actual Expenditure	Variance
MTA			
Harold Interlocking	$110.0	$107.1	-$2.9
New York Penn Station Reconstruction	$1,150.6	$36.6	-$1,113.9
Penn Station Access	$530.5	$224.8	-$305.7
River-to-River Rail (R4) Resiliency: Queens Portal	$8.0	$0.0	-$8.0
River-to-River Rail (R4) Resiliency: West Side Yard	$20.0	$0.7	-$19.3
NJ TRANSIT			
Delco Lead	$0.0	$8.6	$8.6
Elizabeth Station Improvements	$0.0	$5.4	$5.4
Gateway: NJ TRANSIT Gateway Storage Yard	$0.0	$0.1	$0.1
Gateway: Portal North Bridge	$0.0	$612.0	$612.0
Gateway: Portal South Bridge	$0.0	$0.0	$0.0
New Brunswick Station Improvements	$0.0	$2.9	$2.9
Newark Penn Station 2.0: Master Plan and Reimagined Icon	$0.0	$79.0	$79.0
Newark Penn Station: Platform Rehabilitation	$0.0	$8.2	$8.2
Newark Penn Station: State of Good Repair Rehabilitation	$0.0	$68.3	$68.3
NJ TRANSITGRID	$0.0	$5.2	$5.2
North Brunswick Station	$0.0	$1.5	$1.5
North Elizabeth Station Improvements	$0.0	$0.1	$0.1
Trenton Transit Center: State of Good Repair Program	$0.0	$0.3	$0.3

Operations: MTA Long Island Rail Road

MTA Long Island Rail Road (LIRR) operates eleven branch lines, ten of which connect to the NEC at Harold Interlocking in Queens to serve either New York Penn Station or Grand Central Madison. Passengers on the Oyster Bay branch heading to Penn Station must transfer at Jamaica Station. Passengers on the Far Rockaway, Hempstead, and West Hempstead branches must frequently make this transfer as well. Trains to and from the newly-opened Grand Central Madison terminal also briefly operate on the NEC while traversing Harold Interlocking.

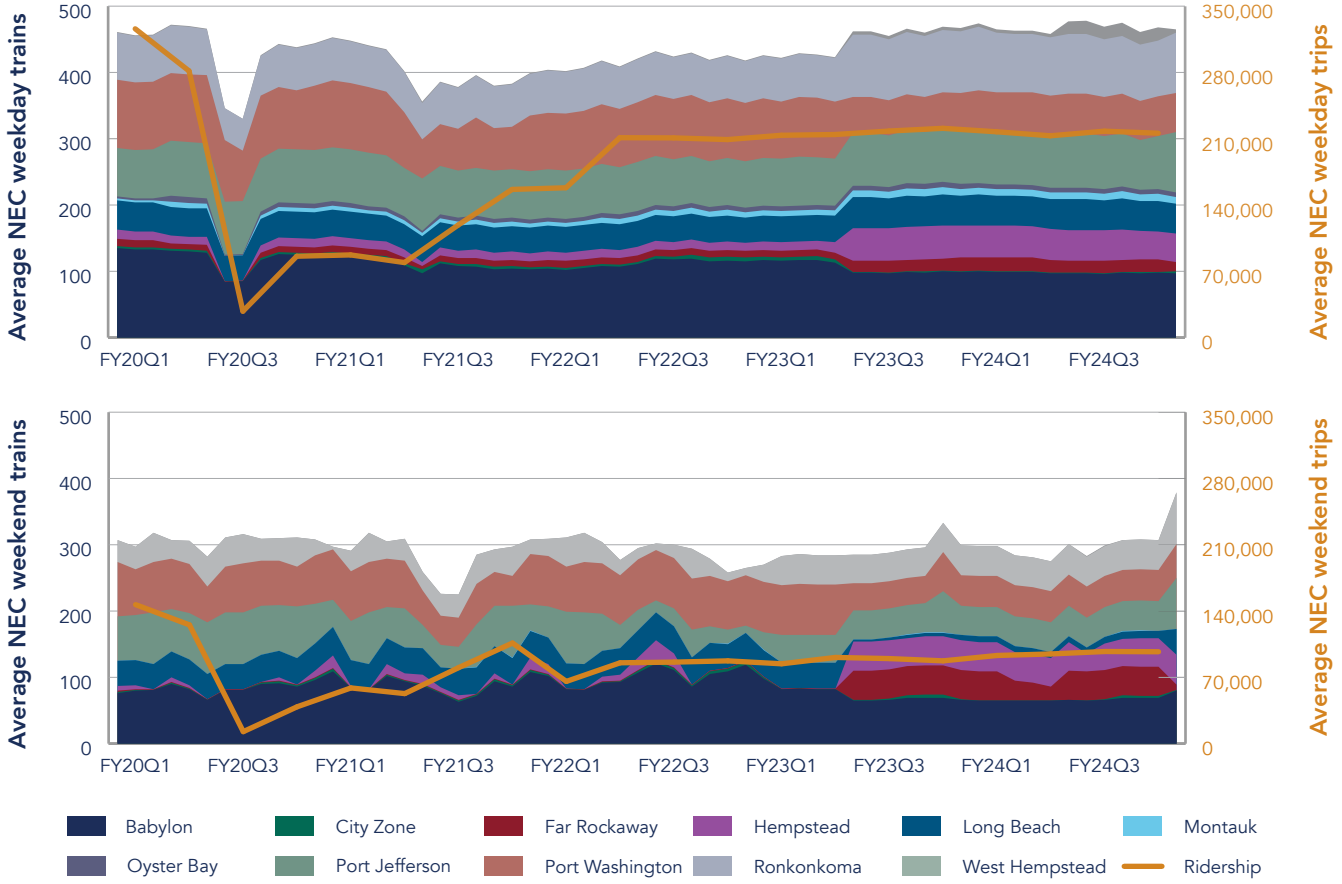
NEC Service and Ridership

Average Daily Weekday Trips on the NEC, FY24	*Average Daily Weekend Trips on the NEC, FY24*	*Average Weekday Trains on the NEC, FY24*	*Average Weekend Trains on the NEC, FY24*
216.2K	**95.6K**	**469**	**302**
-0.3% from FY23	**+8.4%** from FY23	**+19** from FY23	**+12** from FY23

On-corridor average daily weekday ridership declined marginally for LIRR in FY24, however weekend ridership grew strongly reaching 78% of FY19 ridership.

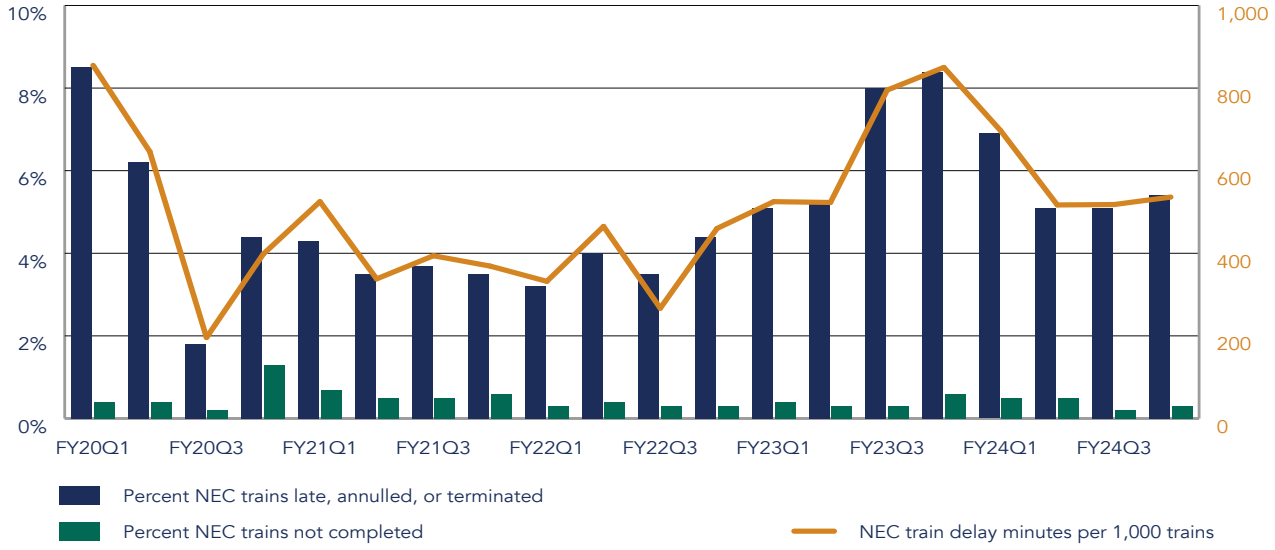
Weekday and weekend services increased over FY24. A timetable change in September increased weekend and weekday services into New York Penn Station.

LIRR average NEC daily trains and trips by month



NEC Percent Trains Late

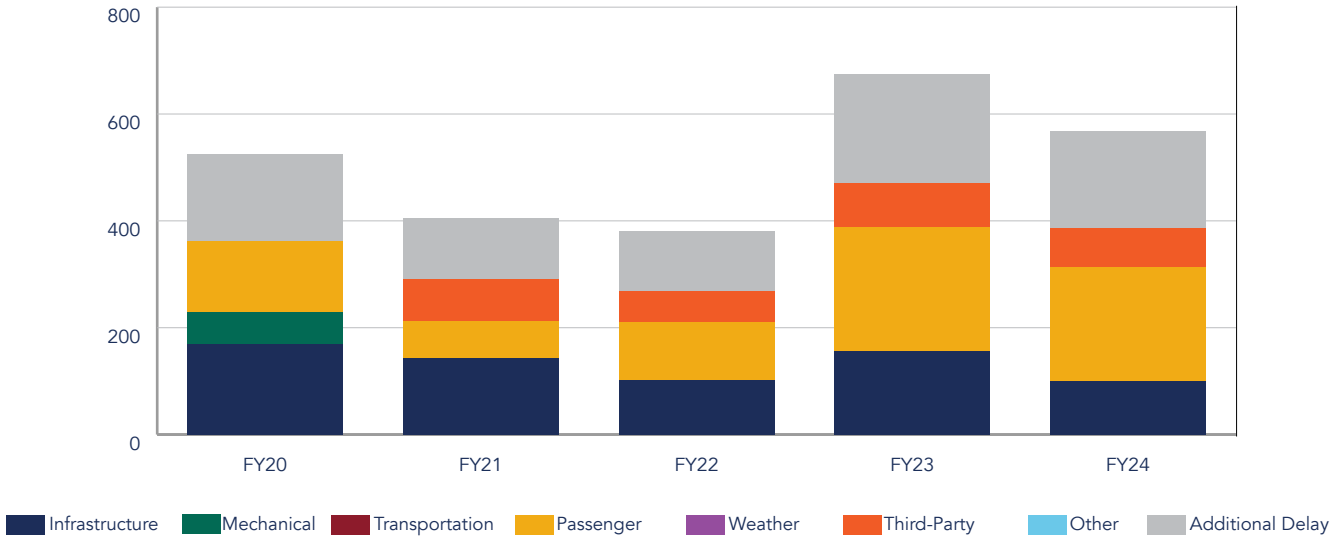
LIRR percent trains late, annulled, or terminated by operator



NEC Train Delay

Passenger delays remained the leading cause of delay in FY24 for LIRR. Infrastructure remained the second ranked cause of delay, followed by third party delays.

LIRR Train Delay Minutes per 1,000 Trains by Cause
Top 3 Annual Causes Highlighted



Operations: New Jersey Transit

New Jersey Transit (NJ TRANSIT/NJT) operates its Northeast Corridor Line service on the NEC Main Line between New York Penn Station and Trenton, NJ. The North Jersey Coast, Midtown Direct, and Raritan Valley Lines to/from New York Penn Station also operate partially on the NEC. The Atlantic City Line operates between Philadelphia 30th Street Station and Atlantic City, NJ, partially on the NEC.

NEC Service and Ridership

Average Daily Weekday Trips on the NEC, FY24

162.5K

+17.5% from FY23

Average Daily Weekend Trips on the NEC, FY24

83.2K

+17.7% from FY23

Average Weekday Trains on the NEC, FY24

400

+0 from FY23

Average Weekend Trains on the NEC, FY24

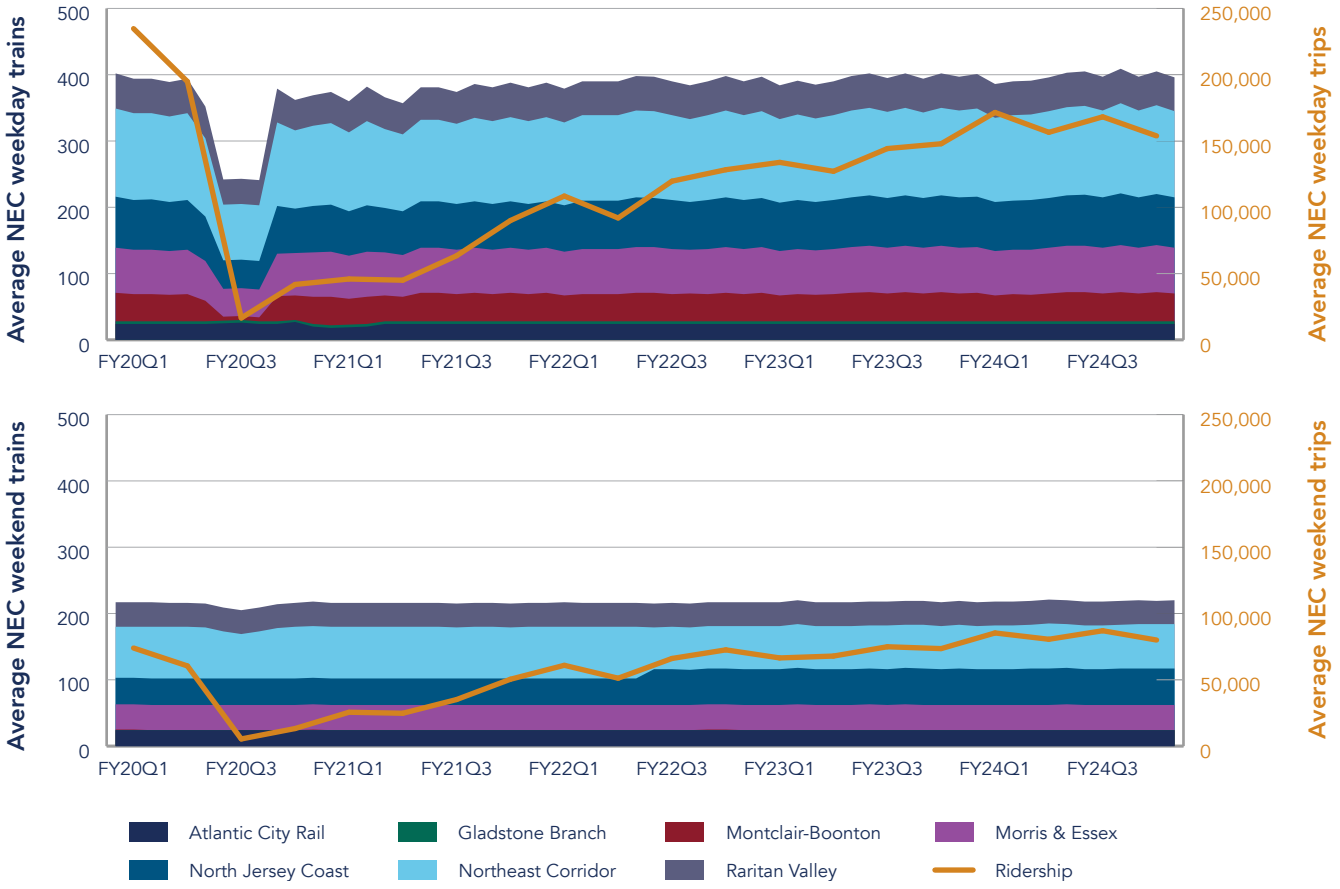
220

+2 from FY23

Average daily weekday and weekend ridership grew strongly throughout FY24 despite operational difficulties due to ET issues. Continued ridership growth now means on-corridor weekend ridership now exceeds FY19 passenger numbers by 14.2%.

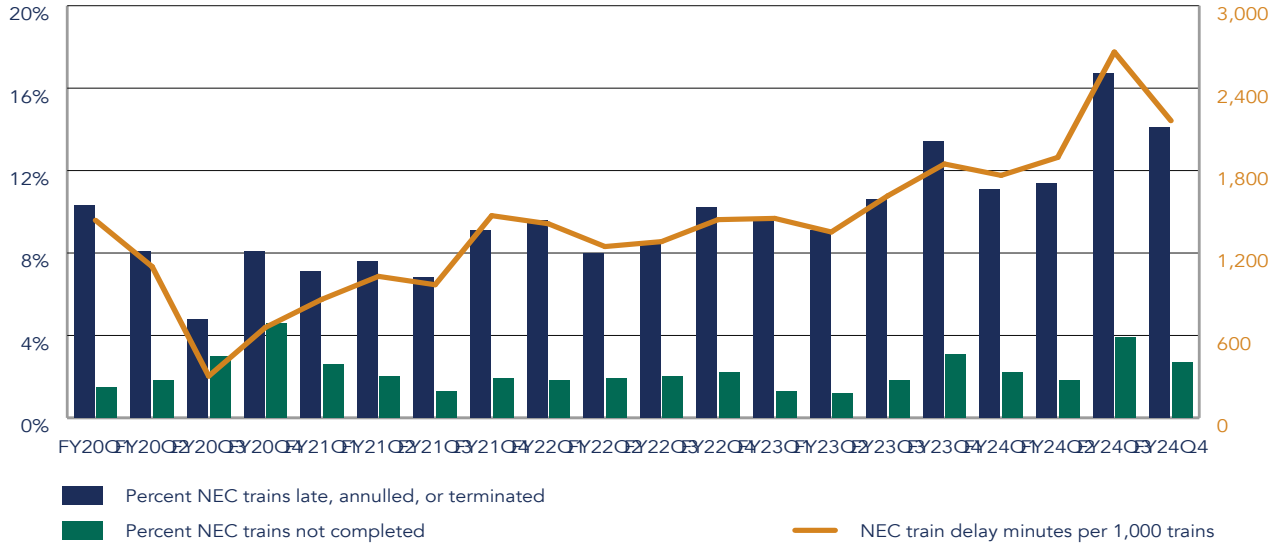
Weekday services remained consistent with the previous year throughout FY24, with additional weekend services being added to the Northeast Corridor and North Jersey Coast Line.

NJT average NEC daily trains and trips by month



NEC Percent Trains Late

NJT percent trains late, annulled, or terminated by operator

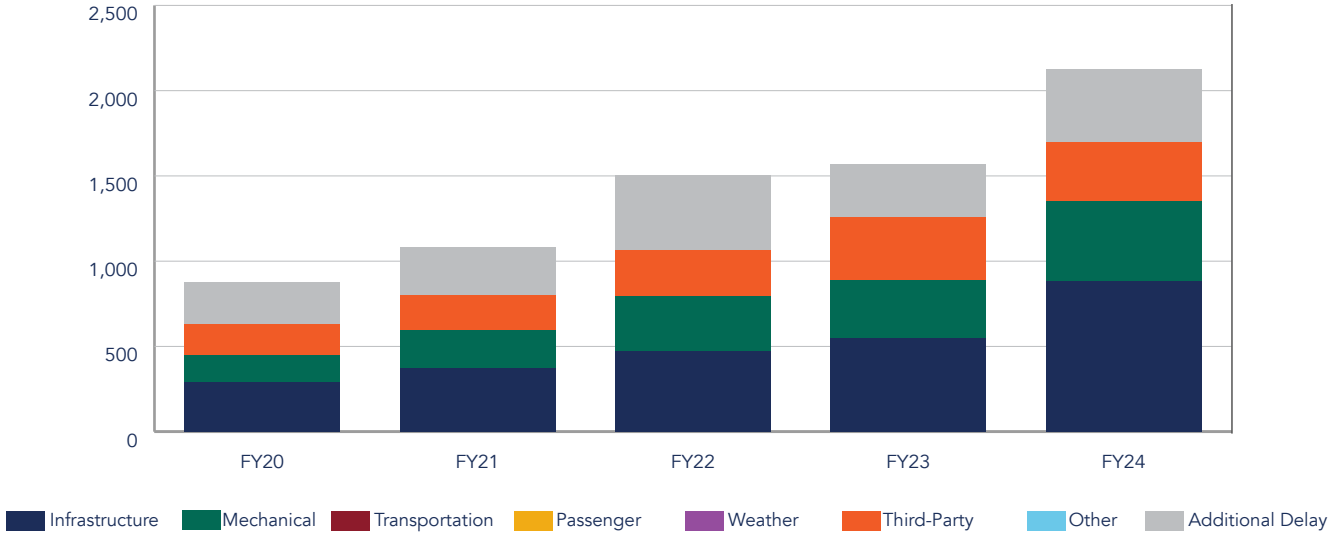


NEC Train Delay

Infrastructure remained as the leading cause of on-corridor delay in FY24 for NJT. Mechanical issues became the second ranked cause of delay moving up from third place in FY23, with third party dropping to the third ranked cause of delay.

NJT Train Delay Minutes per 1,000 Trains by Cause

Top 3 Annual Causes Highlighted



Region: Mid-Atlantic North

Infrastructure and Operations Detail

Operators: Amtrak, NJ TRANSIT, SEPTA

RoW Owner: Amtrak

BCC Segments

14: Morris to Holmes

15: Holmes to Shore

16: Shore to Girard

17: Girard to Philadelphia 30th Street

18: Philadelphia 30th Street to Arsenal

19: Arsenal to Marcus Hook

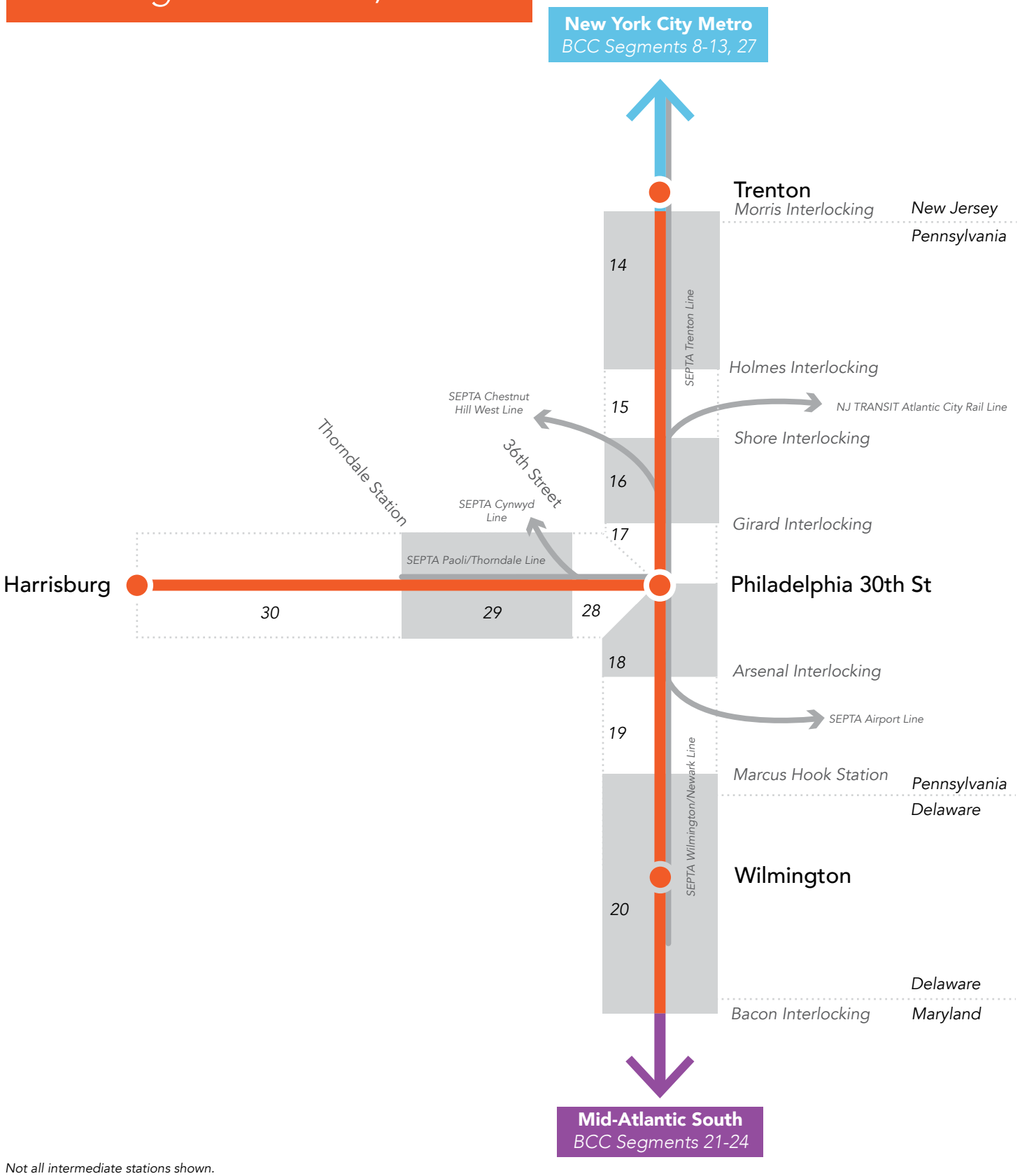
20: Marcus Hook to Bacon

28: Philadelphia 30th Street to 36th St

29: 36th Street to Thorndale

30: Thorndale to Harrisburg

Mid-Atlantic North
BCC Segments 14-20, 28-30



Not all intermediate stations shown.

Infrastructure

$604 million was invested in the Mid-Atlantic North region in FY24. Year to date, agencies have invested 98% of the planned investment for FY24.

10 largest investments by FY24 planned expenditure, Mid-Atlantic North *(millions)*

1. Philadelphia 30th Street District Plan (Amtrak)		
FY24 Planned Expenditure & Scope	$119.3	FY 24 Scope: 1.) Decommission South tower, concourse and valet garage. 2.) South Concourse Construction Start 3.) 100% Design Document Set Complete
FY24 Actual Expenditure & Accomplishments	$116.9	Construction commenced on vertical circulation to platforms, the South Tower, and the South Concourse. Restoration started in the main concourse including installing scaffolding on both the east and west sides of the concourse. Elevator construction work in the offices was completed, and inspections were conducted.
Variance & Explanation	-$2.4	The variance in project spending is due to unspent contigency money, which will be rolled into FY25 and beyond to maintain the Life of Project (LOP) budget.
2. Airo Facilities: Penn Coach Yard (Amtrak)		
FY24 Planned Expenditure & Scope	$119.0	In fiscal year 2024 the project will start the Design/Build effort, this will include finalizing design and initiating construction. Additionally, it includes the existing yard facility relocation requiring RWP and Force Account support.
FY24 Actual Expenditure & Accomplishments	$50.0	A design/build contract was awarded in Febuary. A groundbreaking event occurred in October 2024. Underground site and utility exploration started. Design and permits were completed and obtained for retaining walls. Construction began on the East Loop water main.
Variance & Explanation	-$69.0	The project award was delayed due to an extensive procurement process to drive best value initiative and cost savings. Permitting requirement have restricted construction start but the project team has identified available paths to expedite.
3. Frazer Rail Shop and Yard Expansion (Phase 3) (SEPTA)		
FY24 Planned Expenditure & Scope	$25.0	The GC is working on utility and building foundation installations. The EC is working on conduit installations throughout the facility and duct bank/lighting installations on the site. The MC is demolishing existing duct work and heating/ventilation units. Replacement of the existing shop roof is underway.
FY24 Actual Expenditure & Accomplishments	$29.9	Completed items are: -2nd Floor Shop Operations Management Office and locker room renovations -Employee parking lot and rain garden -OCS reconfigurations -The new track in the new consist maintenance building has been installed -Installation of new consist building mechanical systems (i.e. compressed air and fire suppression piping) -Erection of the train washer control building -Installation of the train wash track area foundations and underground electrical conduits -EC is working on conduit installations throughout the new consist facility and duct bank installations on the site
Variance & Explanation	$4.9	The project expenditures were under the estimated $4.9M due to longer than anticipated lead time for several expensive pieces of equipment for the new train washer system. The material has since been acquired and should be reflected in next quarter's expenditures.
4. Coatesville Station Improvements (Pennsylvania DOT)		
FY24 Planned Expenditure & Scope	$21.0	Construction of the station will continue
FY24 Actual Expenditure & Accomplishments	$22.6	Construction on the south side included completion of platform foundations, completion of the retaining wall, and near completion of installing the platform panels. On the north side, a water line was relocated, platform foundations were completed, and support of excavation started. Amtrak completed installation of the freight bypass track/signals and placed the track into service.
Variance & Explanation	$1.6	Change orders and parking redesign added costs to project

Investment detail including expenditures, accomplishments, and explanation of variances are published as submitted by agencies.

10 largest investments by FY24 planned expenditure, Mid-Atlantic North (*millions*, cont.)

5. Mid-Atlantic OCS Replacement Program Phase 1: Zoo to Paoli (Amtrak)		
FY24 Planned Expenditure & Scope	$17.3	The scope for FY24 are to complete procurement on 3rd Party Contractor for Bryn Mawr Substation and Bryn Mawr to Paoli Transmission work, Start Construction of Bryn Mawr Substation, and Start Final Design of the OCS Wire replacement.
FY24 Actual Expenditure & Accomplishments	$7.3	Completed procurement and awarded contract for Bryn Mawr Substation Construction. Additional scope change order was completed for starting Final Design of the OCS Wire Replacement and the design was at 60% at FY24 end. Started procurement of project/construction management support contract for Bryn Mawr to Paoli and Bryn Mawr Substation. Submitted an FSP Grant Application to fund Phases 1&3 of the project, and drafted a community outreach plan which includes hosting community meetings, launched a project website, and created a project inquiry email.
Variance & Explanation	-$10.0	Scope not completed but progressed includes starting procurement of construction contractor for mainline work. We have progressed obtaining a labor clearance for Paoli to Bryn Mawr Transmission Line, which is currently with the Labor Relations Team for settlement.
6. Downingtown Station Improvement (Pennsylvania DOT)		
FY24 Planned Expenditure & Scope	$12.0	Construction to start on utility relocation and DOWNS interlocking retirement as part of early action project. Final design of bridge and station will continue to completion.
FY24 Actual Expenditure & Accomplishments	$2.0	NEPA clearance was obtained on the project. 100% design for the Early Action project was completed, and a construction agreement with Amtrak was executed. 90% design plans were submitted and comments were received for the bridge and station project.
Variance & Explanation	-$10.0	The start of construction of the Early Action project was shifted from mid-2024 to early 2025.
7. Ardmore Transportation Center on the Paoli/Thorndale Line (Phase 1 ADA Improvements) (SEPTA)		
FY24 Planned Expenditure & Scope	$11.6	Complete construction.
FY24 Actual Expenditure & Accomplishments	$10.0	The following activities were constructed by Sept. 30,2024: Inbound canopy wood decking, Station Building framing, remaining outbound high level platform erected, inbound seat wall constructed and existing stone masonry rehabilitation. The following activities remain to be completed after Sept. 30, 2024: Outbound canopy wood decking, Both inbound and outbound canopy roof system, Station building exterior and interior finishes, tunnel rehabilitation and Basin 1 installation and outbound underground utility installation.
Variance & Explanation	-$1.5	The general contractor's limited manpower has slowed the project. Various items had a cost increase.
8. Lancaster Station Improvements (Pennsylvania DOT)		
FY24 Planned Expenditure & Scope	$7.5	Construction will be completed on the Keller Ave Parking Lot. Construction will start on the ped bridge project.
FY24 Actual Expenditure & Accomplishments	$1.4	Keller Avenue parking lot is complete but is not open to the public as it is being used as a construction staging area for the pedestrian bridge.
Variance & Explanation	-$6.1	Not available
9. Conestoga Substation Improvements Project (Amtrak)		
FY24 Planned Expenditure & Scope	$6.7	FY24 scope includes complete procurement of contractor and proceed with construction and crossover activities, as well as the purchasing of long lead items and mobilizing onsite post NTP.
FY24 Actual Expenditure & Accomplishments	$4.0	Contract negotiation was completed. Permitting, submittals, and easements are underway.
Variance & Explanation	-$2.7	Submittal process was delayed due to parallel permitting submissions taking longer than expected.
10. Harrisburg Line Signal Upgrade: Park to Zoo (Amtrak)		
FY24 Planned Expenditure & Scope	$5.2	The FY24 scope is to start and substantially complete AMTEC Interface to Thorn, Glen and Frazer, start and substantially complete ACESE and I-ETMS modifications from Thorn to Frazer, substantially complete Genrakode Software and complete ABS Harrisburg LN Park to Zoo Signal System Upgrade to 562 AH Line 33.7-Downs-5.
FY24 Actual Expenditure & Accomplishments	$5.7	A funding agreement was executed with SEPTA. The project construction restarted in May 2024.
Variance & Explanation	$0.5	The delay was due to lack of a funding agreement with SEPTA. The design software was delayed which in turn delayed the cutover from Glen to Thorn. The project is absorbing the scope from the Harrisburg Line Thorn-Glen Track and Signal Improvements project.

Investment detail including expenditures, accomplishments, and explanation of variances are published as submitted by agencies.

All Mid-Atlantic North investments by submitting agency *(millions)*

Investment Name	FY24 Planned Expenditure	FY24 Actual Expenditure	Variance
Amtrak			
52nd Street PA Undergrade Bridge Upgrades	$0.8	$1.0	$0.2
ADA Compliance Projects (NEC Region)	$0.0	$1.0	$1.0
AIRO FACILITIES PHL PCY Track Dept Labor	$0.0	$0.0	$0.0
Airo Facilities: Penn Coach Yard	$119.0	$50.0	-$69.0
Airo Facilities: Penn Coach Yard Digital Technology Upgrades	$3.2	$0.1	-$3.1
Amtrak NEC System Undercutting Program	$32.0	$49.9	$17.9
Amtrak System - Ride Quality Improvement Program	$5.6	$4.8	-$0.7
Amtrak System Fence Upgrades Program	$0.0	$0.1	$0.1
Amtrak System Production Structures Program	$16.2	$22.3	$6.2
Amtrak System Rail Replacement Program	$0.4	$6.2	$5.8
Amtrak System Track Rehabilitation Program	$2.6	$2.8	$0.2
Amtrak System Turnout Renewal Program	$10.9	$17.6	$6.7
Conestoga Substation Improvements Project	$6.7	$4.0	-$2.7
Harrisburg Line Signal Upgrade: Park to Zoo	$5.2	$5.7	$0.5
Harrisburg Line: Conestoga to Royalton ET Supply Transmission Line Replacement	$1.1	$0.8	-$0.3
Harrisburg PA Train Shed Improvements	$2.3	$8.4	$6.1
Lancaster APD Relocation	$0.0	$0.0	$0.0
Lancaster PA Platform & Roof Replacement	$2.3	$20.7	$18.4
Maintenance Facility Security Enhancements	$0.0	$0.7	$0.7
Mid-Atlantic Catenary Program	$5.8	$4.3	-$1.5
Mid-Atlantic Facilities Program	$1.5	$1.4	-$0.1
Mid-Atlantic OCS Replacement Program Phase 1: Zoo to Paoli	$17.3	$7.3	-$10.0
Mid-Atlantic Signals Program	$2.9	$5.2	$2.4
Mid-Atlantic Structures Program	$4.4	$5.6	$1.2
Mid-Atlantic Substations Program	$5.4	$5.4	$0.0
Mid-Atlantic Track Program	$64.6	$50.9	-$13.7
NEC Trip Time Reduction	$0.5	$0.0	-$0.5
New York Catenary Program	$0.1	$0.3	$0.3
New York Facilities Program	$0.1	$0.0	-$0.1
New York Signals Program	$0.2	$0.7	$0.5
New York Structures Program	$0.4	$0.3	-$0.2
New York Substations Program	$1.6	$0.6	-$1.0
New York Track Program	$3.3	$4.9	$1.6
Penn Coach Yard Paving Improvements Project	$1.3	$0.1	-$1.1
Penn Coach Yard Water Main Replacement Project	$5.1	$0.7	-$4.5
Philadelphia 30th Street District Plan	$119.3	$116.9	-$2.4
Philadelphia 30th Street Station Platform PCB Remediation	$0.5	$0.5	-$0.1

All Mid-Atlantic North investments by submitting agency (*millions*, cont.)

Investment Name	FY24 Planned Expenditure	FY24 Actual Expenditure	Variance
Philadelphia 30th Street Station Platform Refresh	$0.3	$0.1	-$0.2
Production High Speed Surfacing Program	$6.0	$8.6	$2.6
Production Wood Tie/Timber Replacement Program	$0.0	$0.0	$0.0
Rail Grinding Program	$3.3	$0.0	-$3.3
TLS Concrete Tie Replacement Program	$67.4	$97.3	$29.8
Total Track Renewal Program	$0.0	$0.0	$0.0
Vertical Gap Rehabilitation Program	$0.0	$0.1	$0.1
Wilmington DE Station Refresh Program	$0.6	$0.1	-$0.6
Wilmington DE Training Center Upgrades	$0.3	$0.6	$0.3
Wilmington DE Vertical Transportation Program	$0.0	-$0.2	-$0.2
Wilmington Platform Upgrades	$0.2	$0.0	-$0.2
Wilmington Station Water Infiltration & HVAC Improvements	$1.0	$0.0	-$1.0
Wilmington Training Center Parking Access Improvements Project	$0.4	$0.2	-$0.2
Wilmington West Yard	$0.1	$0.2	$0.1
Wilmington, DE - MOFE Facility PCB Remediation	$1.0	$1.9	$0.9
SEPTA			
30th Street West Catenary Replacement	$3.6	$0.4	-$3.2
Ardmore Transportation Center on the Paoli/Thorndale Line (Phase 1 ADA Improvements)	$11.6	$10.0	-$1.5
Bristol Station on the Trenton Line	$2.0	$0.3	-$1.7
Cornwells Heights Station Reconfiguration on the Trenton Line	$0.0	$0.2	$0.2
Frazer Rail Shop and Yard Expansion (Phase 3)	$25.0	$29.9	$4.9
Harrisburg Line Capacity Improvements – Track 2	$0.0	$13.5	$13.5
Harrisburg Line Capacity Improvements: Bidirectional Signaling - Paoli to Overbrook	$0.0	$0.0	$0.0
Malvern Station on the Paoli/Thorndale Line	$0.5	$0.1	-$0.4
Marcus Hook Station on the Wilmington Line	$1.0	$0.1	-$0.9
Regional Rail Master Plan Implementation	$0.5	$0.2	-$0.3
Southwest Connection Improvement Project	$0.0	$0.9	$0.9
"Villanova Station on the Paoli/Thorndale Regional Rail Line (Phase 2 ADA Improvements)"	$0.5	$0.0	-$0.5
Pennsylvania DOT			
Coatesville Station Improvements	$21.0	$22.6	$1.6
Downingtown Station Improvements	$12.0	$2.0	-$10.0
Harrisburg Line Interlocking Improvements: Zoo - Phase 1 (Early Action)	$5.0	$2.8	-$2.2
Lancaster Station Improvements	$7.5	$1.4	-$6.1
Parkesburg Station Improvements	$3.0	$0.3	-$2.7
Delaware DOT			
Churchman's Crossing Improvements	$0.0	$1.0	$1.0
Claymont Transportation Center	$0.0	$7.3	$7.3
Thomas R. Carper Newark Station	$0.0	$0.6	$0.6

Operations: SEPTA

SEPTA operates on the NEC Main Line between Trenton, NJ and Newark, DE and on an NEC Branch Line between Philadelphia 30th Street Station and Thorndale, PA. Three additional SEPTA lines operate partially on the NEC and all SEPTA lines are accessible via Philadelphia 30th Street. SEPTA service in Delaware is operated on behalf of Delaware DOT.

NEC Service and Ridership

Average Daily Weekday Trips on the NEC, FY24

41.4K

+18.9% from FY23

Average Daily Weekend Trips on the NEC, FY24

13.5K

+11.5% from FY23

Average Weekday Trains on the NEC, FY24

271

+4 from FY23

Average Weekend Trains on the NEC, FY24

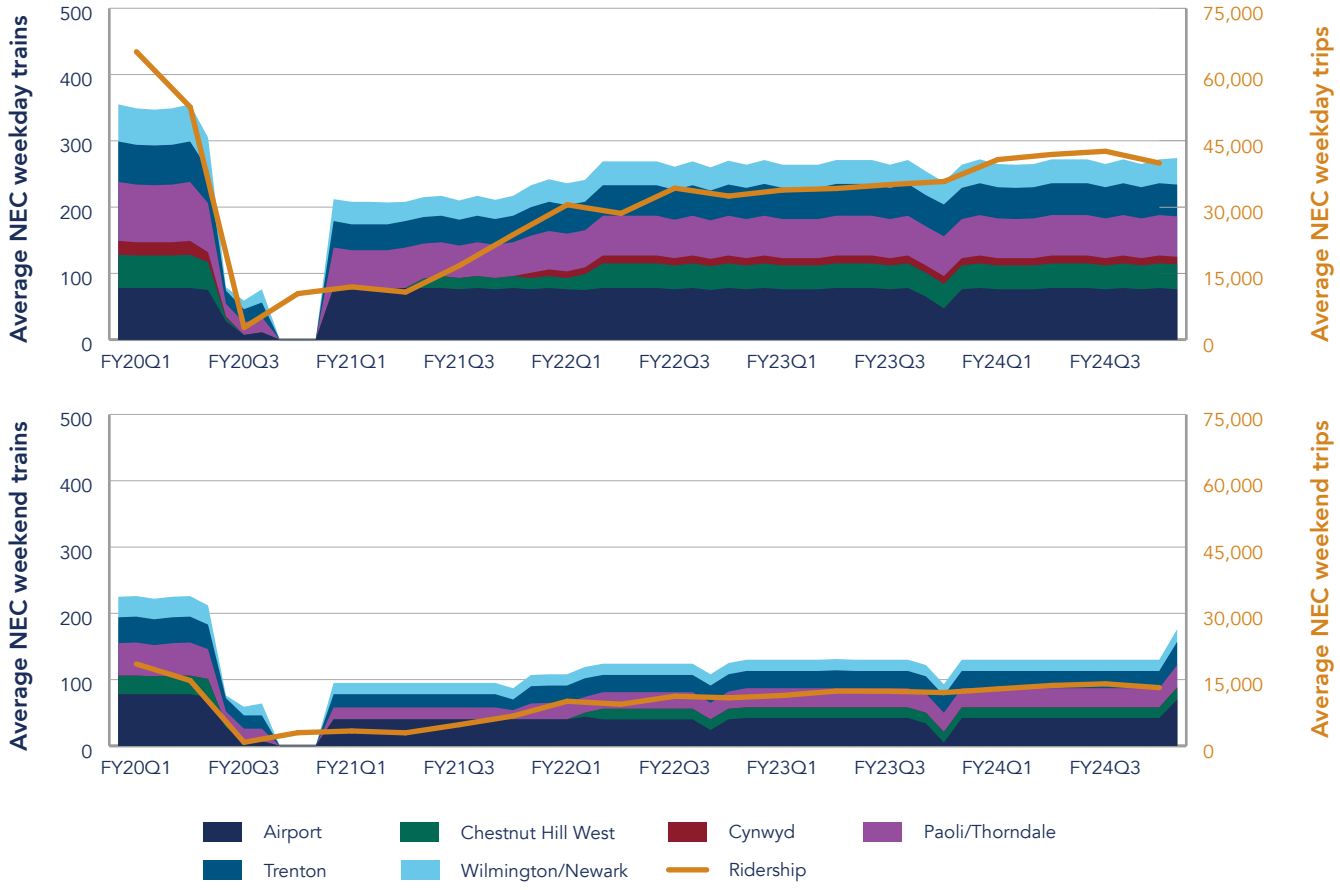
134

+8 from FY23

Average daily weekday and weekend ridership continued to increase throughout FY24, with SEPTA recording the second-highest increase in on-corridor weekday ridership.

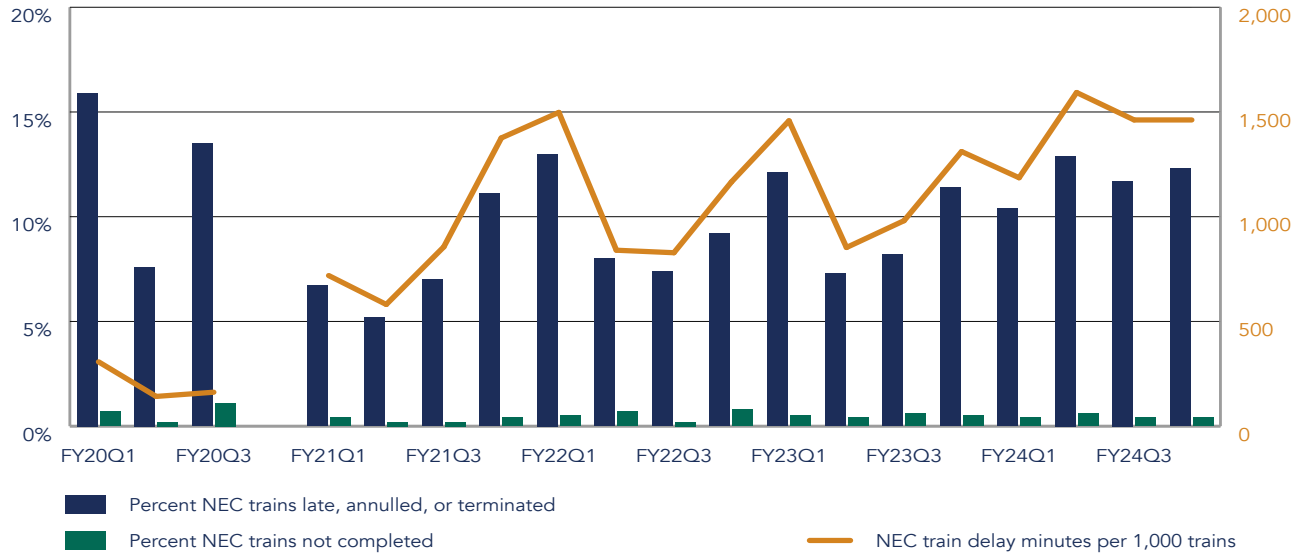
Over the course of FY24 SEPTA average daily service remained fairly consistent, however there was a large increase in weekend service at the end of the fiscal year in September, going from 130 to 176 average daily weekend on-corridor trains, well as an increase in weekday services on the Wilmington/Newark Line. Note that information for services and delays in FY20 is incomplete due to a cyberattack in FY20Q4.

SEPTA average NEC daily trains and trips by month



NEC Percent Trains Late

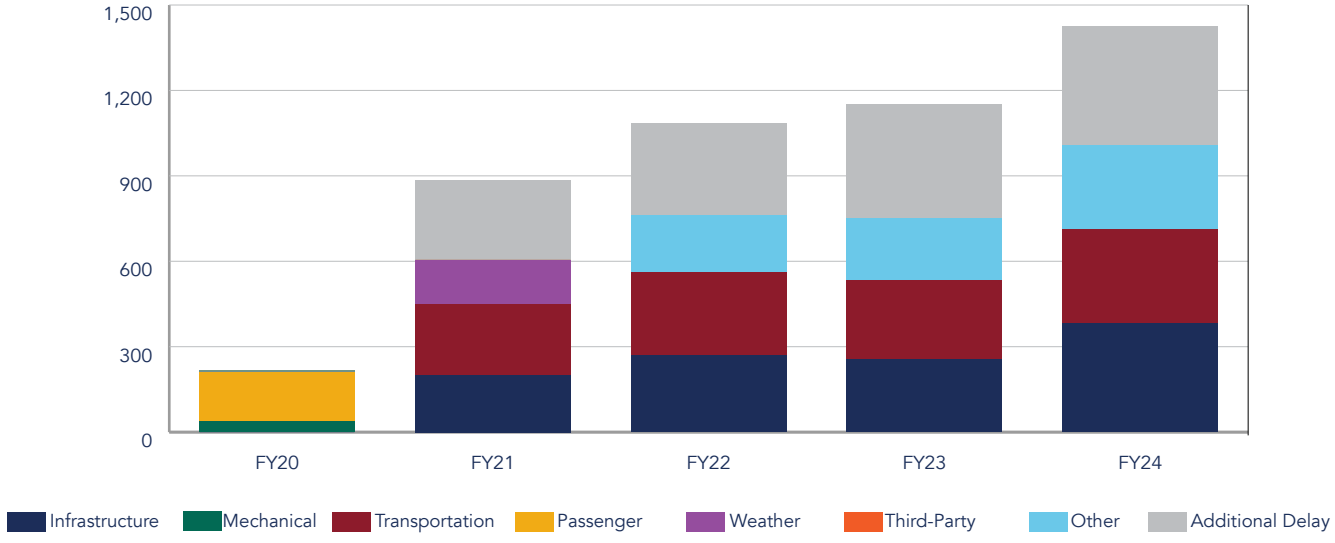
SEPTA percent trains late, annulled, or terminated by operator



NEC Train Delay

Infrastructure became the leading cause of delay for SEPTA in FY24, with transportation issues becoming the second ranked cause of delay. Other - meaning unclassified delays remained the third ranked cause of delay. Note that information for delays in FY20 is incomplete due to a cyberattack in FY20Q4.

SEPTA Train Delay Minutes per 1,000 Trains by Cause
Top 3 Annual Causes Highlighted



Region: Mid-Atlantic South

Infrastructure and Operations Detail

Operators: Amtrak, MARC, VRE

RoW Owner: Amtrak

BCC Segments

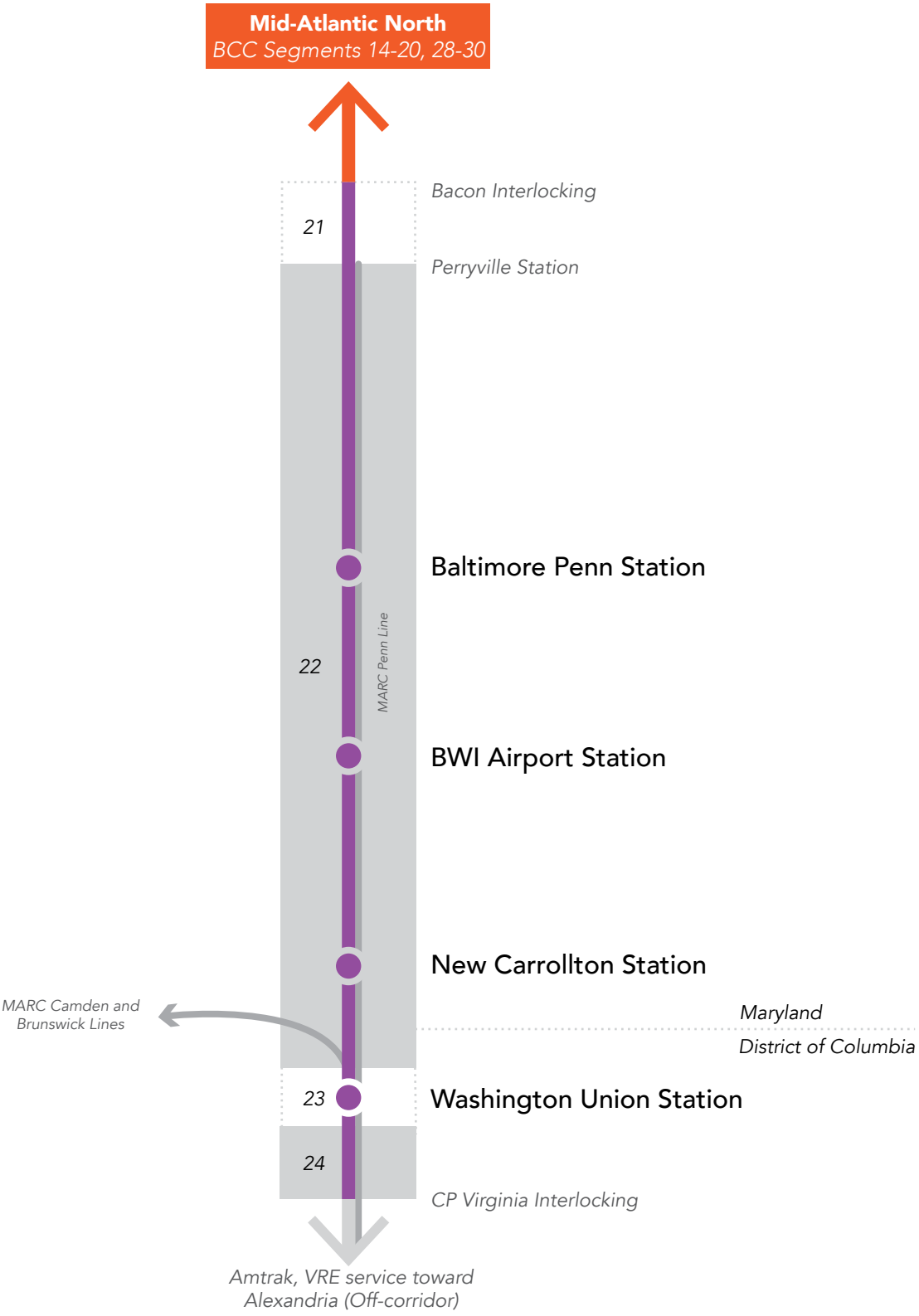
21: Bacon to Perryville

22: Perryville to Washington Union Station

23: Washington Union Terminal

24: Washington Union Station to CP Virginia

Mid-Atlantic South
BCC Segments 21-24



Not all intermediate stations shown.

Infrastructure

$467 million was invested in the Mid-Atlantic South region in FY24. Year to date, agencies have invested 60% of the planned investment for FY24.

10 largest investments by FY24 planned expenditure, Mid-Atlantic South (*millions*)

1. Frederick Douglass Tunnel Program (Amtrak)		
FY24 Planned Exenditure & Scope	$402.9	Design: The FY24 scope includes the continued advancement of final design and the completion of numerous design packages. The design contractor and Amtrak Engineering will support construction efforts as they get underway Program Management: The FY24 scope includes the award of the delivery partner contract, continued update of the program management components (including updates to the baseline scope, integrated master schedule and cost estimates), continuing stakeholder engagement components including coordination with Baltimore City DOT, advancing and completing critical third-party agreements including historic salvage, and support for NEPA re-evaluations. Property Acquisition: The FY24 scope includes finalizing the ROD surface acquisitions and relocations and roll out offers on all subsurface tunnel acquisitions. Tunnel Construction: The scope for FY24 includes award of the Package A CMAR Contractor and begin negotiation on final construction pricing. Complete demolition at the intermediate ventilation facility. Finalize construction agreement with BG&E for relocation at intermediate ventilation facility. Track A Upgrade: The FY24 scope will include minimal activities as initial track upgrades will conclude in FY24 and the program will await long-lead materials. Completing the 100% design for Track A upgrade, and enabling activities to advance future phases of the project at Winans Interlocking. Southern Approach Construction: The FY24 scope includes initiation of CMAR Package B construction, building demolition, utility and roadway relocations. Finalize GMP for early works with CMAR Package B Contractor. Initiate historic salvage at acquired properties. Initiate community investment award process and start award process. Wilkens Interlocking: The FY24 scope includes the continued support and finalization of the long lead procurement list for Wilkens Interlocking and coordination with the buyers within the procurement team to begin the process of procuring these items. Additionally, the scope includes the continued effort of coordinating force account support, outage logistics and scheduling, and project phasing optimization.
FY24 Actual Expenditure & Accomplishments	$167.2	Design Progress: Achieved 100% completion on some major design packages, including utility relocations and bridge reconstruction. -Received NEPA Re-evaluation #3 approval. -Program Management Progress: Awarded first ever in Amtrak's history, Program Delivery Partner contract. Established Program governance framework and implemented a Project Management Information System. -Construction Package A (Tunnels) Progress: Awarded CMAR Contractor for Package A. Initiated preconstruction and early works and coordination with various key external stakeholders including MTA, City of Baltimore, and BG&E. -Construction Package B Progress (Southern Approach and New West Baltimore MARC Station): Preconstruction activities advanced and GMP #1 (Major utility relocation work) NTP issued. -Community Outreach: Amtrak hosted quarterly outreach meetings, both in-person and virtual to enhance engagement with members of the community and issued a press release on the FDT Community Investment Program. -Demolition Activities: Executed residential and commercial demolition contracts and issued task orders to start demolition work. -Historic Preservation: Awarded historic salvage contract and commenced salvage activities.
Variance & Explanation	-$235.7	There were no deviations from the Frederick Douglass Tunnel Program's overall scope.
2. Susquehanna River Bridge Replacement Program (Amtrak)		
FY24 Planned Exenditure & Scope	$79.9	The FY24 scope is to submit 90% design to review status. Continue work to prepare for a full Joint Permit Application. Continue on-going utility and ROW activities. Procure a CMAR contractor and begin pre-construction services. Procure and bring on board a PM/CM firm to supplement Amtrak staff. Procure a third party contractor to perform the remnant pier removal.
FY24 Actual Expenditure & Accomplishments	$56.3	The demolition of Remnant Pier is 95% complete. An external project/construction management team was hired. 90% design was submitted. A project/construction management team was procured.
Variance & Explanation	-$23.6	No notable variance.

Investment detail including expenditures, accomplishments, and explanation of variances are published as submitted by agencies.

10 largest investments by FY23 planned expenditure, Mid-Atlantic South (*millions*, cont.)

3. Baltimore Penn Station: Master Plan (Amtrak)		
FY24 Planned Exenditure & Scope	$41.2	GDC will bring Delivery Partner in FY24. GDC will complete Financial Plan/Cost assurance activity.
FY24 Actual Expenditure & Accomplishments	$20.7	The project has gained NEPA and Section 106 (historic preservation) approval. Substantial completion of the exterior envelope has been accomplished, while design work continues on other parts of the project. A notice to proceed for limited scope from the remaining phases have been issued while project team is working with the developer in advancing the full remaining construction phases
Variance & Explanation	-$20.5	Stop Work Notice was issued to PSP in April as a result of the budget exceeding the board-approved LOP. Measures were taken to mitigate costs, and the project is currently in the negotiation phase with the developer to lower project cost and amend the commercial agreement.
4. Next Generation Acela Infrastructure Upgrades: New Carrollton Station (Amtrak)		
FY24 Planned Exenditure & Scope	$31.4	The FY24 plan is to focus on continuing Construction Phase 1.B - Advance Foundation Construction and Temporary Ticket Counter / Office Installation. During Phase 1.B: 1. The contractor will continue installation of new platform by provide the temporary shoring and bracing over the existing station, continue installing platform foundation, construct the platform cap beams, and start installing the new platform planks. 2. The contractor will also install track sub-grade drainage and installation of water retention swell. 3. The contractor will build temporary access to the platform and station to reduce Amtrak RWP support requirements. Installing the temporary stairs allows the contractor for accessing construction site without fouling any live tracks. 4. Amtrak ET will install 6 new catenary poles, 3 new k-beams, and transfer trolley and Amtrak transmission lines. Amtrak ET will remove the old catenary poles and k-beams. PEPCO will transfer their power distribution lines to the new catenary poles. The PEPCO power lines will have the required electrical clearance above the new headhouse and canopy. 5. Contractor will complete the installation of the temporary ticket and employee offices. Amtrak Communication will complete network wiring for the temporary ticket and employee offices. Amtrak IT and Communications will relocate computer servers into the temporary office server room. 6. Contractor will complete the demo of the existing ticket office.
FY24 Actual Expenditure & Accomplishments	$12.1	FY24 accomplishments include temporary shoring and bracing over the existing station; continued installation of platform foundations; installation of track sub-grade drainage and water retention swell; continued network wiring for the temporary ticket and employee offices; continued demolition of the existing ticket office; installation of catenary foundations; execution of the Ardwick Siding lease; and completion of Ardwick Siding grub and tree clearing.
Variance & Explanation	-$19.3	A variety of activities were pushed to FY25 due to issues with lease negotiations and steel fabrication
5. VRE Midday Storage Facility (VRE)		
FY24 Planned Exenditure & Scope	$17.6	Property acquisition and final design
FY24 Actual Expenditure & Accomplishments	$0.1	Minimal progress
Variance & Explanation	-$17.5	Not available

Investment detail including expenditures, accomplishments, and explanation of variances are published as submitted by agencies.

10 largest investments by FY23 planned expenditure, Mid-Atlantic South (*millions*, cont.)

6. Washington Union Station: Near Term Rail Program (Amtrak)		
FY24 Planned Expenditure & Scope	$10.1	The Near-Term Rail program provides the design and construction of critical rail and infrastructure projects needed to enhance the current operational flexibility of the Washington Union Station rail terminal and to provide for the phasing and capacity expansion of the 2nd Century Plan. Projects currently include the Renovation of the Crew Base, Relocation of the Satellite Commissary, Relocation/Replacement of Substation 25A, construction of the Patrol Building, and construction of a fire pump. In addition, DT Communications is a central hub for all telecom devices and infrastructure projects in the terminal. Completing Satellite Commissary enables more efficient access and routing of Commissary items to trains. Substation 25A upgrade will provide more reliable and efficient power within the station rail limits. In FY24, Substation 25A and the West Terminal Facilities (Crew Base, Sat Comm, Fire Pump, APD Patrol, IT Hub) will continue through preconstruction activities and advance into construction. Additional infrastructure projects necessary for current and future railroad operations will begin preliminary design.These projects have been identified as critical near-term projects that need to happen at Union Station to provide better operations before the Station Expansion project's advancement or upgrade aging infrastructure such as Substation 25A. The projects in the Near-Term Rail Program will need considerable Engineering resources, contractor protection, and transportation coordination.
FY24 Actual Expenditure & Accomplishments	$2.7	Digital Technology Communication Hut (DT COMM) progressed through bridging documents to near completion (will complete in 01-FY25). A Fed State Partnership & CRISI grant application was submitted components of the project. Satellite Commissary and Fire Pump construction procurement was completed with a Notice to Proceed to construction in June 2025.
Variance & Explanation	-$7.5	Bridging documents took longer than expected due to additional effort to ensure the bridging document to meet the DT and Industrial standard for DT Communication Hut. Substation 25A NEPA process is ongoing and will continue into FY25. Crew Base Renovation and the Amtrak Police Facility construction were de-scoped from the fiscal year plan due to the court ruling in favor of Amtrak of possession of Washington Union Station. Additionally, they were removed during the construction procurement that led to a delay in the Satellite Commissary and Fire Pump Notice to Proceed being issued as revised bids were submitted. Amtrak will work to find a location within the station for Crew Base and Amtrak Police Facility to eliminate a future conflict with Station Expansion Project
7. Airo Facilities: Ivy City Yard (Amtrak)		
FY24 Planned Expenditure & Scope	$9.4	FY24 scope includes completion of final design (30% bridging documents), beginning procurement for design/build construction services, and issuing a Notice-To-Proceed to the selected design/build contractor.
FY24 Actual Expenditure & Accomplishments	$3.0	A notice of award to a design build contractor was issued on 9/30/2024.
Variance & Explanation	-$6.4	The primary driver for variance explanation is that the original FY24 plan assumed D/B activities, OCIP payment, & Stipends payment in FY24. The Procurement effort took longer than originally planned due to introduction of ATC's and other cost reducing strategies during the Procurement effort. As a result, the project start of Implementation was later than originally planned. The LOP has not changed.
8. Next Generation Acela Infrastructure Upgrades: Baltimore Penn Station (Amtrak)		
FY24 Planned Expenditure & Scope	$9.4	Completion of platforms 2 and platform 5. Installation of the PID's. Receive as-built plans from contractor. Project closeout.
FY24 Actual Expenditure & Accomplishments	$18.8	FY24 accomplishments include: completion of platform 2; installation of masonry walls around the electrical communications and elevator machine rooms; the removal of the demolition steel and installation of canopy steel; installation of the egress ramp at the south end; completion of platform 5 and turn over to Stations in July 2024; and completion of track realignment for tracks F and 3.
Variance & Explanation	$9.4	Various factors regarding the steel canopy caused delay. Additionally, track realignment work was needed to support revenue service.
9.Baltimore Station Canopy Restoration (Amtrak)		
FY24 Planned Expenditure & Scope	$8.6	FY24 scope includes GC submittal review, delivery of canopy material, and starting restoration.
FY24 Actual Expenditure & Accomplishments	$2.3	Canopy State of Good Repair (SOGR) started in August 2024. Construction services contracts were ratified. Work began on lead paint abatement for Platform 3.
Variance & Explanation	-$6.3	Deviation due to late start of the project in FY24 caused by multiple factors such as the non-availability of the outages due to other competing projects in Baltimore, delay in construction phases services contract ratification and contractors delay in mobilization.

Investment detail including expenditures, accomplishments, and explanation of variances are published as submitted by agencies.

10 largest investments by FY23 planned expenditure, Mid-Atlantic South (*millions*, cont.)

10. Washington Union Station: Station Expansion Project (Amtrak)		
FY24 Planned Expenditure & Scope	$7.1	Completion of Supplemental Draft Environmental Impact Statement (SDEIS) to reflect the Federal Railroad Administration's (FRA) revised preferred alternative. Advance overall program management and governance strategy for the Station Expansion Project. H Street Bridge utility relocation work. All strategy, legal and portfolio management activities to support the full WAS 2nd Century portfolio Identify interim terminal infrastructure needs and emerging projects that aide in the transition of the terminal from existing conditions to interim, and ultimately future build conditions. This includes an inventory of existing facilities that contribute to the operation of the station, and which systems will be impacted during construction. The effort will identify projects and proposed sequencing of these projects for implementation. Support DDOT H Street Bridge project using Amtrak technical resources to validate bridge design in relation to existing conditions and future build conditions as defied by the Terminal Infrastructure Plan, and Station Expansion Project. AECOM will develop 30 and 60% track plans between A and K interlockings, and 30 and 60% C&S design in the area around the H Street Bridge
FY24 Actual Expenditure & Accomplishments	$0.5	The NEPA process was completed in March. A study was released in April outlining the project governance structure through 30% design.In support of the SEP Project Sponsor (USRC), Amtrak and Akridge initiated a sturdy to identify alternative implementation strategies to reduce construction costs and schedule of the SEP. Amtrak also applied for, and was awarded $24M in Federal State Partnership discretionary grant funding for FY '24. This funding will support early Preliminary Engineering activities for the SEP.
Variance & Explanation	-$6.6	No notable variance.

Investment detail including expenditures, accomplishments, and explanation of variances are published as submitted by agencies.

All Mid-Atlantic South investments by submitting agency (*millions*)

Investment Name	FY24 Planned Expenditure	FY24 Actual Expenditure	Variance
Amtrak			
1st Street Tunnel Ventilation Upgrades	$0.6	$0.4	-$0.2
Aberdeen Station SOGR	$0.1	$0.0	-$0.1
Aberdeen, MD High Level Platforms Project	$1.5	$2.8	$1.3
ADA Compliance Projects (NEC Region)	$0.0	$0.3	$0.3
Airo Facilities: Ivy City Yard	$9.4	$3.0	-$6.4
Airo Facilities: Ivy City Yard Digital Technology Upgrades	$0.2	$0.2	-$0.1
Amtrak NEC System Undercutting Program	$2.7	$1.7	-$1.0
Amtrak System Fence Upgrades Program	$0.3	$0.1	-$0.1
Amtrak System Production Structures Program	$3.2	$1.1	-$2.1
Amtrak System Rail Replacement Program	$22.9	$25.0	$2.2
Amtrak System Reference Surfacing Program	$0.0	$0.0	$0.0
Amtrak System Track Rehabilitation Program	$1.9	$2.7	$0.8
Amtrak System Turnout Renewal Program	$25.7	$30.7	$5.0
Baltimore Penn Station: Master Plan	$41.2	$20.7	-$20.5
Baltimore Station Canopy Restoration	$8.6	$2.3	-$6.3
Bridge To Burgos Catenary Renewal	$0.4	$0.3	-$0.1
Burgos Interlocking	$5.6	$10.5	$4.8
Bush River Bridge Replacement Program	$0.6	$0.5	-$0.1
BWI 4th Track Phase 1	$0.4	$0.2	-$0.2

All Mid-Atlantic South investments by submitting agency (*millions*, cont.)

Investment Name	FY24 Planned Expenditure	FY24 Actual Expenditure	Variance
BWI Station Md - Station Improvements	$0.1	$0.0	-$0.1
Frederick Douglass Tunnel Program	$402.9	$167.2	-$235.7
Gunpow Substation 18 New Prefabricated Control House	$0.4	$0.2	-$0.2
Gunpowder River Bridge Replacement Program	$0.6	$0.5	-$0.1
Ivy City Potable Water System Replacement Project	$0.0	$0.0	$0.0
Ivy City Yard WAShington DC-Remediation	$0.1	$0.0	$0.0
Jericho Park Frequency Converter Replacement	$0.8	$0.7	-$0.1
Maintenance Facility Security Enhancements	$0.0	$0.3	$0.3
Mid-Atlantic Catenary Program	$4.9	$7.7	$2.8
Mid-Atlantic Facilities Program	$2.4	$2.3	-$0.1
Mid-Atlantic Signals Program	$1.6	$3.1	$1.5
Mid-Atlantic South Signal System Upgrades to 562 Project	$4.6	$3.0	-$1.6
Mid-Atlantic Structures Program	$4.8	$5.1	$0.3
Mid-Atlantic Substations Program	$2.4	$2.2	-$0.2
Mid-Atlantic Track Program	$39.3	$47.3	$8.0
NEC Trip Time Reduction	$0.0	$0.0	$0.0
New C&S Facility - Middle River, MD	$1.5	$0.0	-$1.5
New C&S Facility - Perryville, MD	$2.6	$0.0	-$2.6
New Carrollton Station: State of Good Repair Improvements	$2.6	$3.8	$1.2
Next Generation Acela Infrastructure Upgrades: Baltimore Penn Station	$9.4	$18.8	$9.4
Next Generation Acela Infrastructure Upgrades: Ivy City Yard	$1.3	$0.9	-$0.3
Next Generation Acela Infrastructure Upgrades: New Carrollton Station	$31.4	$12.1	-$19.3
Production High Speed Surfacing Program	$1.5	$6.4	$4.9
Production Wood Tie/Timber Replacement Program	$0.0	$8.4	$8.4
Rail Grinding Program	$0.7	$1.8	$1.0
Security Enhancements	$0.0	$0.0	$0.0
Station Security Enhancements	$0.0	$0.3	$0.3
Susquehanna River Bridge Replacement Program	$79.9	$56.3	-$23.6
TLS Concrete Tie Replacement Program	$0.0	$0.0	$0.0
Trenton NJ - Commuter Yard Remediation	$3.5	$0.0	-$3.5
Vertical Gap Rehabilitation Program	$0.0	$0.1	$0.1
WAS DC Escalator Enclosures North Hangar	$0.1	$0.1	$0.0
WAS DC Handrail And Station Improvements	$0.4	$0.0	-$0.4
WAS DC Platform 16/17 Refresh	$0.1	$0.4	$0.3
WAS DC Platform 17/18 Structural Improvements	$0.1	$0.0	$0.0
Washington DC Canopy Improvements	$0.4	$1.4	$1.0
Washington DC Customer NOW Station Refresh Program	$9.5	$1.1	-$8.4

All Mid-Atlantic South investments by submitting agency (*millions*, cont.)

Investment Name	FY24 Planned Expenditure	FY24 Actual Expenditure	Variance
Washington First Street Tunnel Project	$0.2	$0.5	$0.3
Washington Terminal & Ivy City Facility Electrical Upgrades Project	$0.2	$0.0	-$0.2
Washington Terminal Complex Train Control System Renewal	$0.4	$0.5	$0.1
Washington Union Station: Claytor Concourse Modernization Program	$2.8	$1.0	-$1.9
Washington Union Station: Near Term Rail Program	$10.1	$2.7	-$7.5
Washington Union Station: Station Expansion Project	$7.1	$0.5	-$6.6
Washington Union Station: Subbasement Program	$5.5	$2.8	-$2.7
WUT DC Metropolitan Lounge Refresh	$0.1	$0.0	-$0.1
MDOT MTA / MARC			
BWI Station, UpGrade Automatic Door Operators and Air Curtain	$0.1	$0.1	$0.0
MARC Bayview InFill Station	$1.3	$1.1	-$0.2
MARC NEC Train Storage Preservation Project	$0.0	$0.4	$0.4
MARC Station: Elkton, 30% Design	$1.1	$0.4	-$0.8
Martin Airport Station Accessibility Improvements	$0.0	$0.2	$0.2
Martin's Yard NEC Switch Modernization Project	$0.6	$0.0	-$0.6
Penn-Camden Connector, Planning, NEPA, & 30% Design	$1.7	$1.0	-$0.7
Riverside Yard Heavy Maintenance Building	$0.0	$2.2	$2.2
VRE			
VRE Midday Storage Facility	$12.0	$0.0	-$12.0

Operations: MARC

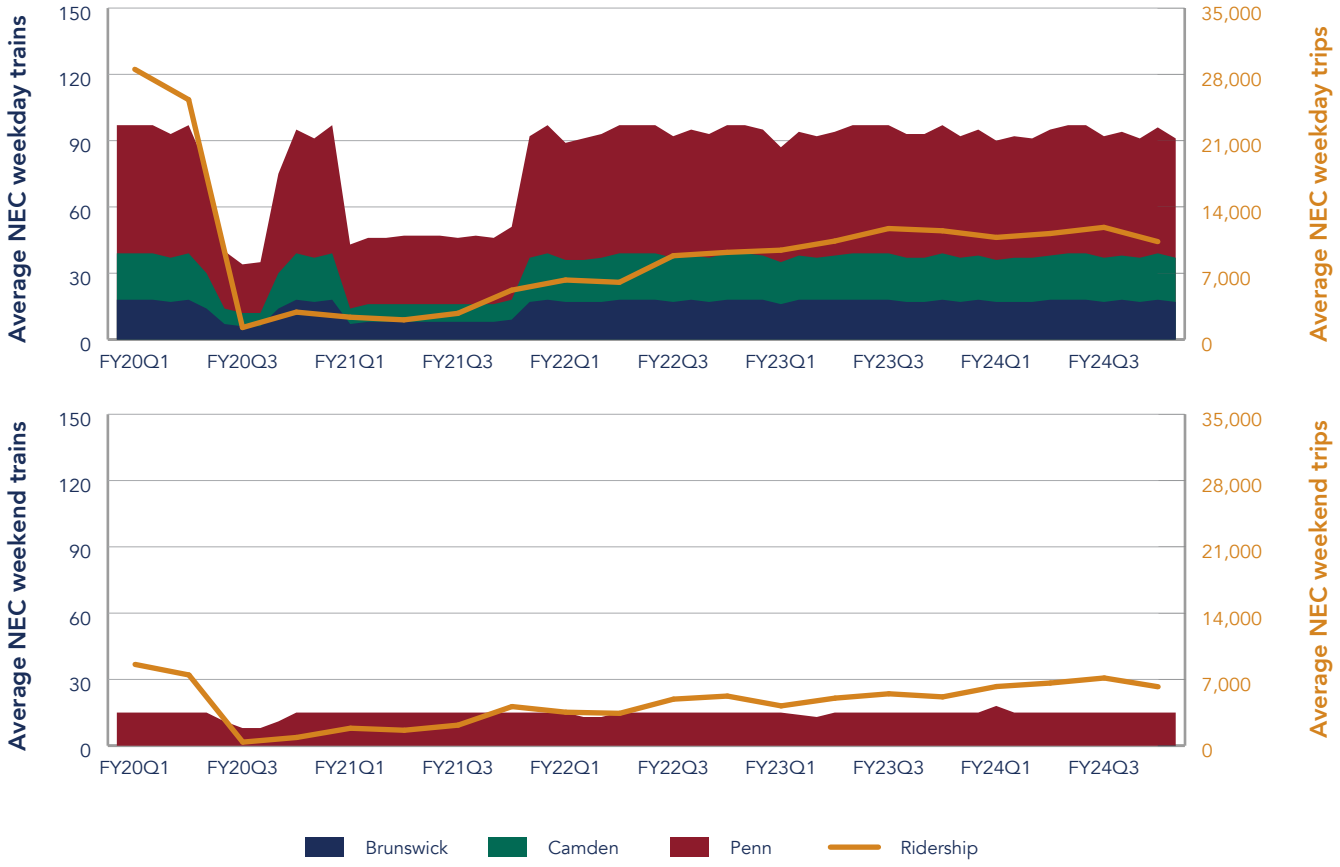
MARC's Penn Line service operates entirely on the NEC Main Line between Perryville, MD and Washington Union Station, while the Camden and Brunswick Line services operate on CSX lines that connect to the NEC at "C" Interlocking, just north of Washington Union Station.

NEC Service and Ridership

Average Daily Weekday Trips on the NEC, FY24	*Average Daily Weekend Trips on the NEC, FY24*	*Average Weekday Trains on the NEC, FY24*	*Average Weekend Trains on the NEC, FY24*
11.0K	**6.6K**	**94**	**15**
+2.6% from FY23	**+32.1%** from FY23	**-3** from FY23	**+0** from FY23

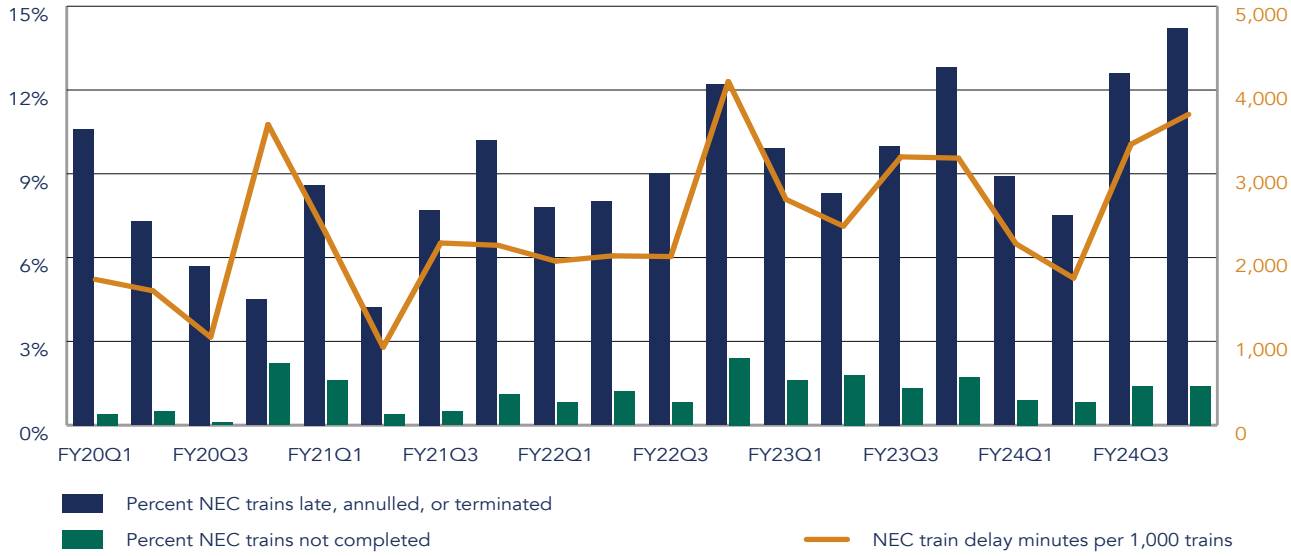
Average daily weekday and weekend ridership continued to increase throughout FY24, with MARC recording the highest percentage increase in weekend ridership of any operator. The growth in Weekend ridership is all the more impressive considering weekend services have remained constant throughout the year, in line with FY23 services.

MARC average NEC daily trains and trips by month



NEC Percent Trains Late

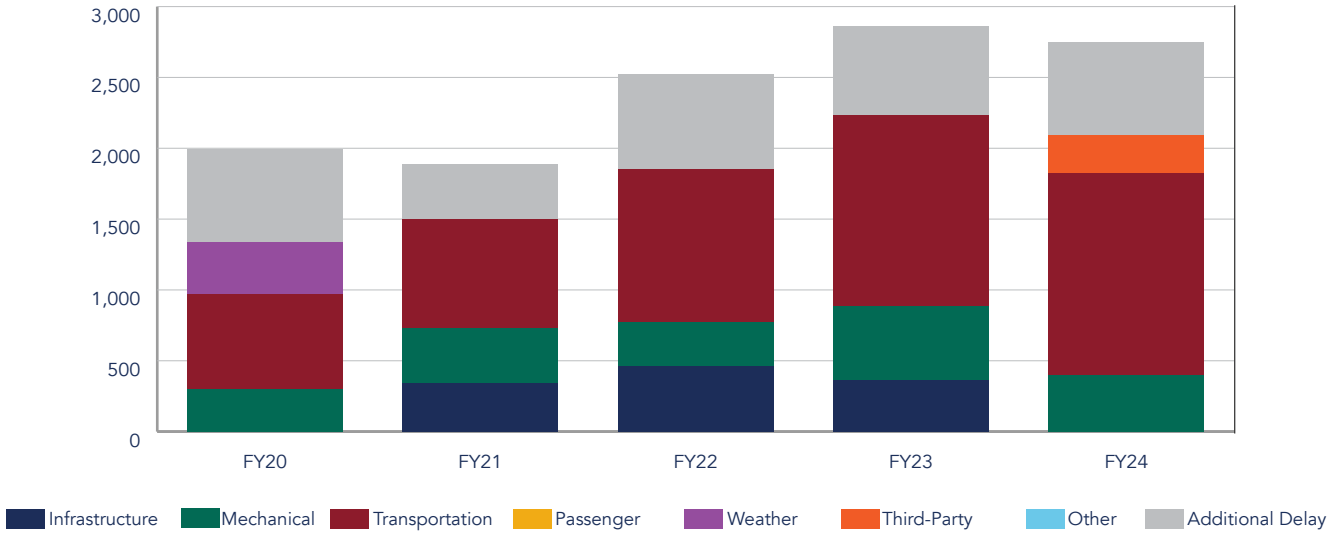
MARC percent trains late, annulled, or terminated by operator



NEC Train Delay

Transportation and mechanical issues remained the 1st and 2nd ranked cause of delay respectively for MARC in FY24. Third party issues became the 3rd ranked cause of delay following a decrease in infrastructure issues over the fiscal year.

MARC Train Delay Minutes per 1,000 Trains by Cause
Top 3 Annual Causes Highlighted



Operations: VRE

VRE operates two commuter lines out of Washington Union Station: the Manassas line over NS track and the Fredericksburg line over CSX track. Both lines operate on a segment of the NEC Main Line just south of Washington Union Station.

NEC Service and Ridership

Average Daily Weekday Trips on the NEC, FY24

1.3K

-1.9% from FY23

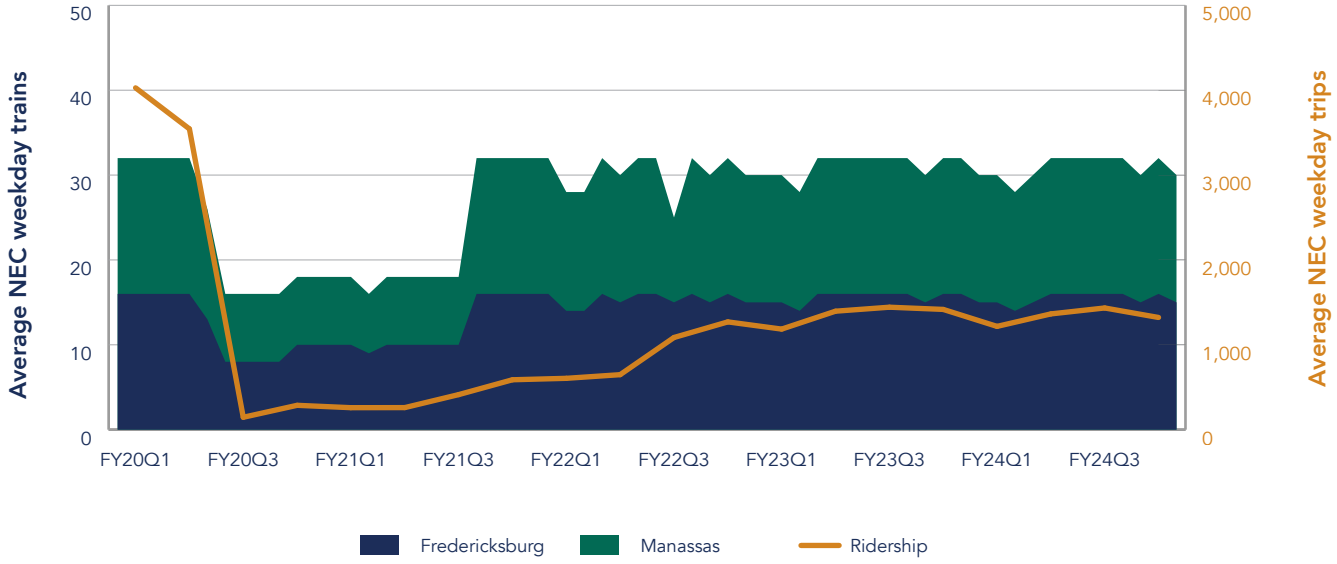
Average Weekday Trains on the NEC, FY24

31

-1 from FY23

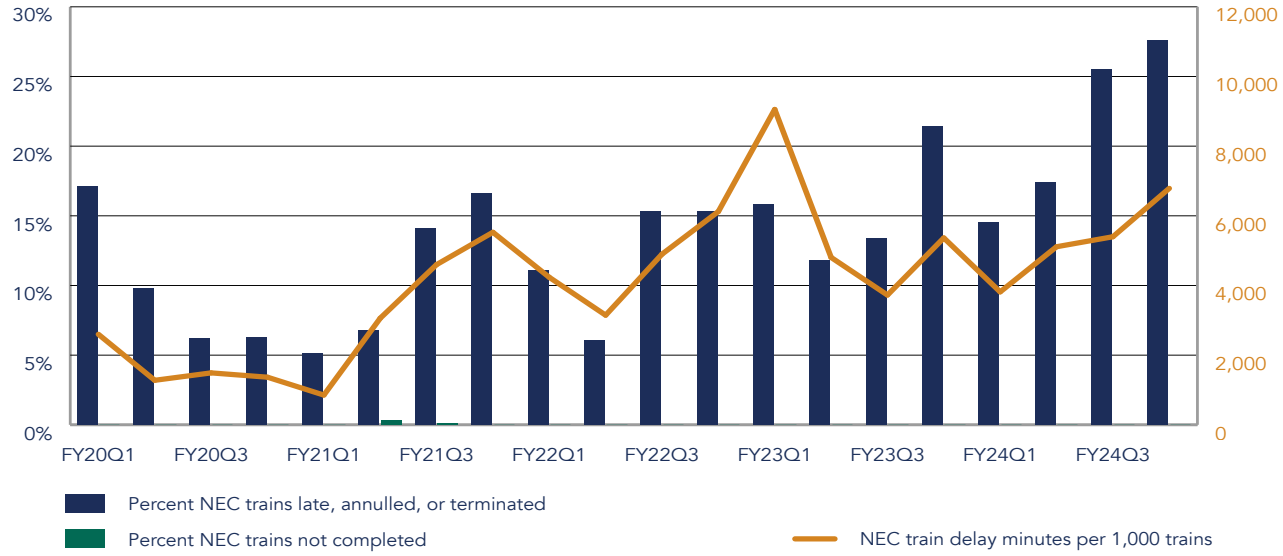
On-corridor average weekday ridership reduced slightly for VRE over FY24, with levels comparable to FY23. Weekday services remained stable although over the fiscal year a slight reduction in average trains was recorded. VRE do not currently offer weekend services, however there are plans to introduce a Saturday service in 2025

VRE average NEC daily trains and trips by month



NEC Percent Trains Late

VRE percent trains late, annulled, or terminated by operator

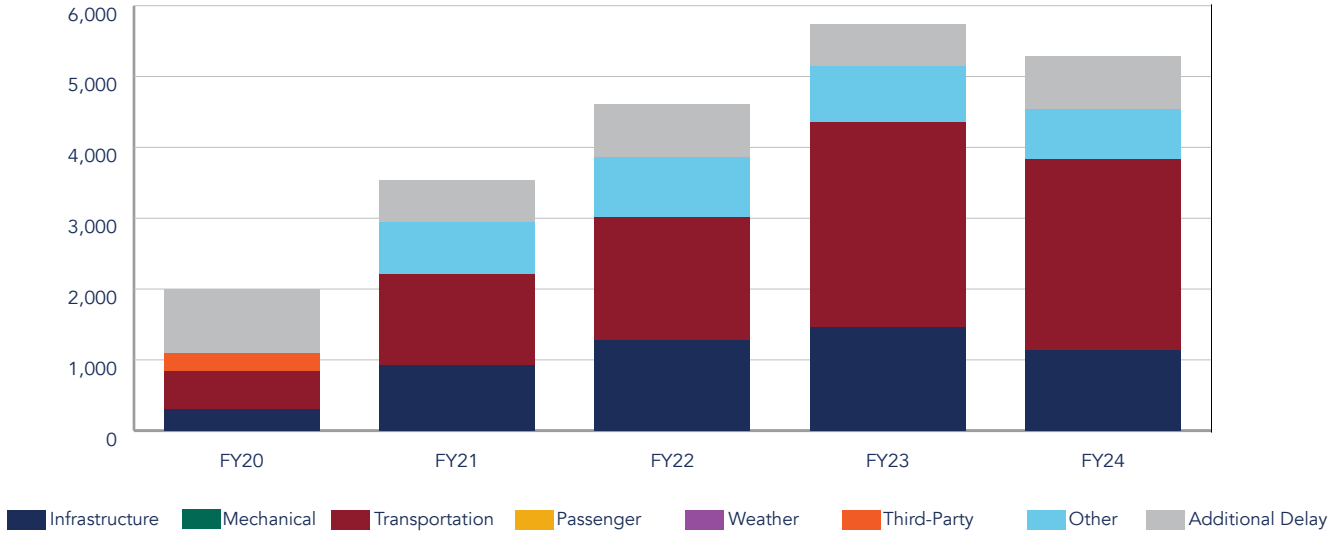


NEC Train Delay

Transportation issues remained as the leading cause of delay in FY24 for VRE. Infrastructure and freight train interference delays reduced compared to FY23 while remaining as the 2nd and 3rd ranked cause of delay respectively.

VRE Train Delay Minutes per 1,000 Trains by Cause

Top 3 Annual Causes Highlighted



Region: Amtrak System-wide

Infrastructure and Operations Detail

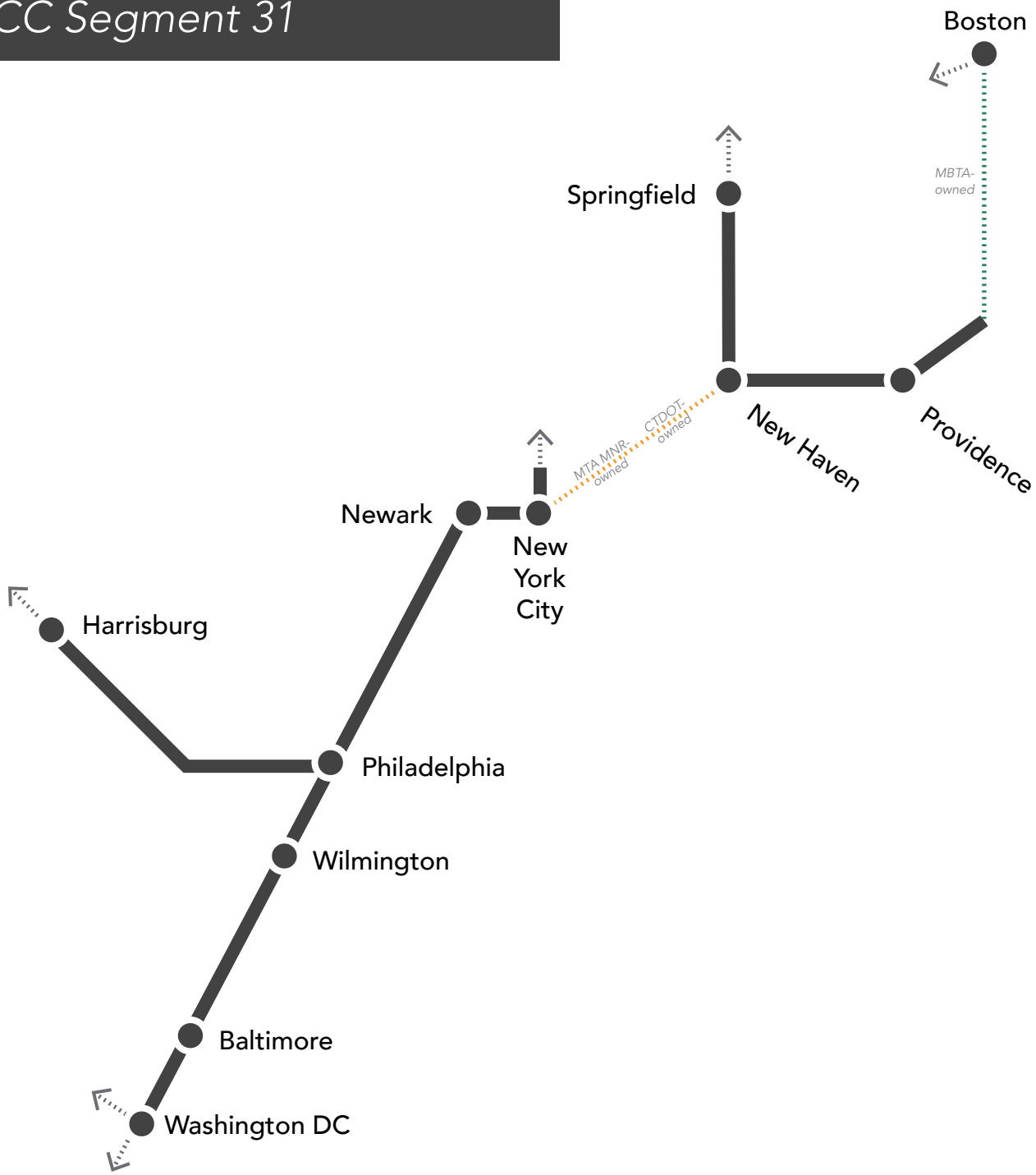
Operators: Amtrak

RoW Owner: Amtrak

BCC Segments

31: Amtrak System-wide

Amtrak System-wide
BCC Segment 31



Not all intermediate stations shown.

Segment 31 comprises of capital renewal investments that cannot be tied to a specific location and have benefits throughout the Amtrak-owned portion of the NEC.

Amtrak-owned
Non Amtrak-owned
Non-NEC Connecting Corridors

Infrastructure

$116 million was invested in the Amtrak System-wide region in FY24. Year to date, agencies have invested 68% of the planned investment for FY24.

10 largest investments by FY24 planned expenditure, Amtrak System-wide (*millions*)

1. Radio Infrastructure Upgrades Project (Amtrak)		
FY24 Planned Expenditure & Scope	$17.6	The scope of this project is to upgrade all wayside and office radio equipment to modernize Amtrak's voice radio systems and bring all systems to a state of good repair for the entire NEC from Boston to Washington, Harrisburg Line, Empire Line, Springfield Line, Chicago and Michigan. This will include, but may not be limited to, replacement of or addition to base station radio equipment, radio equipment shelters, radio antenna systems, radio antenna towers/ poles, network equipment utilized directly in support of radio systems, radio console hardware and/or software, power systems and any other ancillary support equipment deemed necessary by a fully developed and approved design. This work will occur over multiple years.
FY24 Actual Expenditure & Accomplishments	$5.9	Phase 2A 90% Design received 5/3/24 Phase 2A West 60% Design received 2/14/24 Phase2B 60% Design received 4/4/24
Variance & Explanation	-$11.7	A second PCR was initiated to reduce the AOP to $6.1 million but was not processed fully due to the length of time it took the first PCR to be fully approved. The project design packages were put on hold until NEPA approval could be completed. Additionally, the project was not a recipient of two discretionary grants that were applied for. The design hold reduced the amount of design funds that could be spent within the FY.
2.System Fence Upgrades Program (Amtrak)		
FY24 Planned Expenditure & Scope	$15.3	The scope of this program is to establish and maintain a State of Good Repair (SOGR), and ensure efficient and safe operations by securing Amtrak Infrastructure Assets to maintain compliance with current regulations and standards. Under this program high security fencing and gates are installed to property adjacent to Amtrak's critical infrastructure assets such as track right of way, bridges, tunnels and MOFW / MOFE yards and facilities which are susceptible to pedestrian and vehicular trespassers and acts of vandalism. This work will be performed on a routine or annual basis.
FY24 Actual Expenditure & Accomplishments	$7.9	Amtrak System-wide work includes all fence upgrades that cannot be assigned to a geographic segment. The Amtrak System-wide was work necessary to ensure that the Fence Upgrades Program on the NEC functioned properly including work project management, comprehensive surveys, security fence installations and NEPA evaluation support.
Variance & Explanation	-$7.4	In FY24, the comprehensive survey cost decreased from a budget of $10.9M to $6.6M due to field survey segments could not proceed as planned due to limitations with Amtrak Labors Forces (RWP) in those MP ranges. There was also a decrease in the budget for NEPA Corridor- programmatic from $1.8M to $300,419 due to delays with assembling the NEPA team per the FRA's requirements with specifications per the project, and the PROV MOW Fencing installation being put on hold until the completion of RIDOT bridge crossing in February 2025.
3.Owned Positive Train CTRL (PTC) Installation Program (Amtrak)		
FY24 Planned Expenditure & Scope	$11.4	Positive Train Control is a mandatory safety measure that has been mandated by the federal government for train operations which is used for collision avoidance, civil speed restrictions enforcement, temporary speed restrictions, and rail worker wayside safety. Positive train control includes track infrastructure, electronic equipment and software, on board computers and back office computers that must constantly be upgraded and maintained for the system to function properly and safely, and the on-board NEC ACSES (Advanced Civil Speed Enforcement System) which covers the new ACSES Display Unit (ADU) to be installed on all NEC trains. This work includes upgrades to communications systems, transponder upgrades and replacements, WIU upgrades and replacements and on-board computer upgrades and replacements. This work is done on a continuous or annual basis.
FY24 Actual Expenditure & Accomplishments	$13.2	Software updates and testing for all planned ACSES PTC equipment locations including on vehicles, within tracks, wayside and communication equipment has been achieved. Additionally, On Board Vehicle Software updates for new Acela and Revenue Fleets advanced along with the delivery of two prototype Next Gen ACSES radios.
Variance & Explanation	$1.8	For this program we completed a project change request to increase our AOP to $12,615,081, which was within 4.2% of the actual spend of $13,161,766 referenced below. Program costs increased due to the advancement of the Next Gen Radios project.

Investment detail including expenditures, accomplishments, and explanation of variances are published as submitted by agencies.

10 largest investments by FY23 planned expenditure, Amtrak System-wide (*millions*, cont.)

4. System Communicated System Upgrades Program (Amtrak)		
FY24 Planned Expenditure & Scope	$9.2	The scope of this program is to establish and maintain a State of Good Repair (SOGR), efficient and safe operations for Amtrak's Systemwide Communication Network to maintain compliance with current regulations and standards. The work performed under this program includes providing upgrades to the communication and signals network equipment to support the increased demands of both communications and data usage. This work will be performed on a routine or annual basis.
FY24 Actual Expenditure & Accomplishments	$6.6	A significant amount of network hardware and software equipment (modems repeaters etc.), were bought and installed in multiple control center locations (Boston, Wilmington, Philadelphia, New York, D.C.) along the NEC. 60% design plans were submitted for the wayside fiber replacement between NY and DC. The fiber optic transport (FOTS) upgrades project (NEC wide), contractor portion was substantially completed.
Variance & Explanation	-$2.5	The missed goals for FY24 were completing installation of all the material associated with the FOTS program and buying a substantial amount of material related to network upgrades. Both tasks got pushed into FY25 and contributed to a significant underspend for this program.
5. Next Generation Acela Infrastructure Upgrades: Tier III Waiver Gates (Amtrak)		
FY24 Planned Expenditure & Scope	$8.6	Complete Installation of Phase 2 Gates and Access Control in the Mid-Atlantic Division of the NEC between Mileposts 75 and 135 on the AP line pursuant to the Tier III (New Acela Program) Safety Waiver Section 8(b).
FY24 Actual Expenditure & Accomplishments	$6.9	FY24 Accomplishments include the installation of 157 vehicle access gates and associated access control in the high-speed sections of the right-of- way in the New York and Mid-Atlantic Divisions between Philadelphia and Washington D.C. (approximately 160 miles); access control installation of solar panels and technology kits for cellular communications built on a custom sled; and installation of technology kits and access control in challenge areas to complete Phase 1 installations (3 in New England and 1 in Mid-Atlantic).
Variance & Explanation	-$1.7	No deviation.
6. Next Generation Acela Infrastructure Upgrades: Safety Mitigation (Amtrak)		
FY24 Planned Expenditure & Scope	$8.3	RRIF: PTSO: Positive Train Stop Override System The PTSO design work is expected to be completed in FY23. There are two remaining work activities needed to complete this phase of the project listed below: (1) Purchase PTSO material for installation all new Acela Trainsets. (2) Complete the PTSO installation and PTSO System Testing on all New Acela Trainsets. FED Funding Scope: MOW LCCAS: Maintenance of Way Equipment Limits Compliance and Collision Avoidance System (3) Rubber Tire Phase 2.1 – Complete the retrofitting 342 of the MOW on track Rubber Tire fleet with the LCCAS system. (4) Portable Kits Phase 2.2: Complete the installation, testing and training for 65 portable kits with a 24-hour battery life to support LCCAS for MOW work groups mobile units. (5) Wayside UWB Anchors Phase 2.3: Complete surveying and design and Installation of the Ultra-Wideband (UWB) radios anchors on the wayside at tunnels and overbuilds for redundant navigation will be performed. The Ultra-Wideband (UWB) radios anchors back-office integration with the Limits compliance will also be completed. (6) Software Enhancements Phase 2.4: Complete development, testing, and deployment of software enhancement requested LCCAS functions by Field Personnel. These enhancements include (a) Front / Back Proximity on operator display, (b) transition between Form D's, (c) Stop Signals, (d) Supervisor approval via the system, (e) Maximum separation distance between equipment input, (f) Notification message sent for stopped equipment.
FY24 Actual Expenditure & Accomplishments	$1.2	FY24 accomplishments include: PTSO development was completed and tested; the Maintenance of Way (MOW) fleet was fully outfitted with LCCAS system with 100+ Rubber Tire vehicles outfitted; Ultra Wide Band (UWB) devices were installed at 30th St Station, Zoo Interlocking, East Haven Tunnel, Boston Back Bay, and Old/New Union Tunnels, and 30th St Station, Zoo Interlocking, and East Haven were completed and commissioned; Boston Back Bay and Old/New Union Tunnels installations continued.
Variance & Explanation	-$7.1	Conditional Acceptance of the trains are delaying the purchase and install of the PTSO system. Rubber Tire fleet expereinced delays to allow prioritization for outfitting new MOW vehicles to allow them to enter production.
7. Engineering Advanced Technology Track Inspection Program (Amtrak)		
FY24 Planned Expenditure & Scope	$7.3	The scope of this program is to provide for compliance with current regulations and the Tier III operation waiver for the Acela 2 (new Acela) trainsets. This work includes two projects which are 1) construction of a track geometry car and 2) the development of a computer-based visual inspection system to improve effectiveness of high speed track inspections. This work will be performed over multiple years.

Investment detail including expenditures, accomplishments, and explanation of variances are published as submitted by agencies.

10 largest investments by FY24 actual expenditure, Amtrak System-wide (*millions*, cont.)

FY24 Actual Expenditure & Accomplishments	$5.7	• Continuing the construction of the 10006 Geometry Car • Demolition of the TGC GRMS • Completed the tie inspection on Springfield and Empire Lines with LTI • Upgraded LRAIL system with real-time processing • Purchased the provisioned new hi-rail truck for the LRAIL system • Investigated new inspection technologies and identified structured light scanners • Tested ground-coupled GPR and verified the technology can be used to inspect concrete tie thickness • Developed a Machine Learning algorithm for rail type classification and rail wear prediction which is now being used for rail replacement planning • Initiation of the Track Degradation Modeling with the goal of estimating the input parameters of Surfacing Score algorithm 12 months ahead
Variance & Explanation	-$1.6	The variance is due to procurement and design delays. The design related issues with the contractor delayed the construction of the 10006 Geometry Car that is currently still under construction. The estimated completion date is April 2025. The delays also impacted the schedule for the TGC and Gauge Restraint Measuring System (GRMS). The GRMS was completely torn down in FY24, however the construction will start this year in FY25 and had significant money allocated in FY24.
8. System Turnout Renewal Program (Amtrak)		
FY24 Planned Expenditure & Scope	$7.2	The scope of this program is to establish and maintain a State of Good Repair (SOGR), efficient and safe operation for turnout and crossover assets to maintain compliance with current regulations and standards. This work includes replacement of turnouts and crossovers that are approaching the end of their useful life and are susceptible to failures. This program for the renewal of turnouts and crossovers will take place on the AP, AH, AN, AR, AZ, and AB lines. This work will be performed on a routine or annual basis.
FY24 Actual Expenditure & Accomplishments	$5.4	FY24 accomplishments include: maintaining the State of Good Repair (SOGR), efficient and safe operation for turnout and crossover assets to maintain compliance with current regulations and standards. This work included replacement of turnouts and crossovers that are approaching the end of their useful life and are susceptible to failures. Turnouts installed throughout the North East Corridor.
Variance & Explanation	-$1.9	Turnout install locations were changed a few time throughout the year for multiple reason including, weather delays, transportation schedule conflicts, and equipment availability. These changes allowed for the productions crew to be productive but added cost for remobilization and job prep.
9. NEC System Undercutting Program (Amtrak)		
FY24 Planned Expenditure & Scope	$7.1	This program will move the railroad toward a state of good repair (SOGR) by eliminating component failures and reducing maintenance costs. Undercutting will reduce slow orders occurring where the track geometry has a rapid degradation, thereby decreasing service delays. In addition, the life of the rail and ties will be preserved, reducing costly spot replacements. This work will be performed on a routine or annual basis to ensure compliance.
FY24 Actual Expenditure & Accomplishments	$6.4	Amtrak System-wide work includes all Undercutting Program costs related to work that cannot be assigned to a geographic segment. The Amtrak System-wide was work necessary to ensure that the Undercutting Program which cleaned the ballast on the Harrisburg Line and on the NEC in Delaware functioned properly including work like project management, equipment maintenance, equipment rentals, and contractor services.
Variance & Explanation	-$0.8	While the overall Undercutter Program budget increased by 20% in FY24, the undercutter maintenance costs increased from a budget of $450k to $3.3M primarily due to mechanical issues with the RM 95 undercutter such as a series of motor problems, line problems, mechanical arm, and shaker box issues. Contractor services decreased from $3.2M to $1.5M due to the contractor reducing their charges for several months in FY24 because the information need for FY24, and part of FY 25 was already collected and processed. Since the undercut (RM 95) was having mechanical problems and not working properly, it was decided not to get to far ahead of the schedule when collecting Ground Penetrating Radar (GPR) data. Finally, all contingency is put as Amtrak System-wide for the plan, but throughout the year contingency is removed, and some related costs would be in geographic segments.
10.New York Track Program (Amtrak)		
FY24 Planned Expenditure & Scope	$6.3	Establish and maintain a State of Good Repair (SOGR), efficient and safe operation for track assets to maintain compliance with current regulations and standards. Track assets include all components related to tracking infrastructure (rail, ties, ballast), track roadbed, and the longitudinal right of way. Work includes drainage and roadbed improvements, right of way clean-up, rail lubricator upgrades and replacement, right of way crossing upgrades and replacement, insulated joint replacement, interlocking steel renewal, rail joint elimination, wayside detector replacements, ride quality improvements, wood and concrete tie/timber replacement, tie hardware renewal, spot surfacing, and spot undercutting. Other work may be included in the track program as necessary. This work will be performed on a routine or annual basis.
FY24 Actual Expenditure & Accomplishments	$2.7	In FY24, as of Sept 2024, the New York track program installed 17,929 linear feet of rail, 3,709 wood ties 584 concrete ties as well as 143,977 linear feet surfacing, 2 turnout replacements and a body track renewal - Track 18 in Sunny Side Yard in NY

Investment detail including expenditures, accomplishments, and explanation of variances are published as submitted by agencies.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Variance & Explanation	-$3.6	In July 2024, directive was issued to re-assign labor destined to core activity to capital projects. The New York Portfolio identified 60 heads, to be split between programs and projects. 40 heads for the Track Program and 20 to other NY projects. However, all 60 heads were ultimately assigned to Track Program with an additional 20 extra heads, leading to a total increase of 80 heads none of which were anticipated. This deviation arose primarily because the original plan to allocate these heads to projects proved unfeasible. The lack of sufficient Track Foremen, especially to cover the Ham Interlocking Track 5 renewal, prioritized maintenance over project work. Furthermore, delays in the Ready Track (SSYD) construction led to the reallocation of these heads to Track Program.

All Amtrak System-wide investments (*millions*)

Investment Name	FY24 Planned Expenditure	FY24 Actual Expenditure	Variance
Amtrak			
ADA Compliance Projects (NEC Region)	$3.1	$4.4	$1.3
Amtrak NEC Concrete Tie Replacement	$1.2	$0.2	-$1.0
Amtrak NEC System Undercutting Program	$7.1	$6.4	-$0.8
Amtrak Owned Positive Train CTRL (PTC) Installation Program	$11.4	$13.2	$1.8
Amtrak System - Ride Quality Improvement Program	$0.6	$0.1	-$0.5
Amtrak System Comm System Upgrs Program	$9.2	$6.6	-$2.5
Amtrak System Fence Upgrades Program	$15.3	$7.9	-$7.4
Amtrak System Production Structures Program	$0.8	$1.5	$0.7
Amtrak System Rail Replacement Program	$5.0	$4.3	-$0.7
Amtrak System Reference Surfacing Program	$5.3	$3.1	-$2.2
Amtrak System Track Rehabilitation Program	$0.4	$0.2	-$0.2
Amtrak System Turnout Renewal Program	$7.2	$5.4	-$1.9
Boston MA Station Refresh Program	$0.2	$0.2	$0.0
Bridges & Tunnels Security Enhancements	$0.7	$0.1	-$0.5
CETC NY SCADA Phase II	$1.6	$1.7	$0.1
Electric Traction System Aerial System Assessment Project	$3.6	$3.1	-$0.5
Eng Employee Arc Flash Protect	$0.2	$0.0	-$0.2
Engineering Advanced Technology Track Inspection Program	$7.3	$5.7	-$1.6
ET Linear Assets Research and Development Program	$0.6	$0.6	-$0.1
High Speed Adjacent Track Signage	$0.8	$0.1	-$0.6
Infrastructure Renewal and Speed Improvement Program	$3.8	$0.5	-$3.2
Maintenance Facility Security Enhancements	$1.0	$0.0	-$1.0
Mid-Atlantic AMTEC Upgrades	$1.9	$2.3	$0.4
Mid-Atlantic Catenary Program	$2.2	$0.6	-$1.7
Mid-Atlantic Facilities Program	$0.5	$0.4	-$0.2
Mid-Atlantic OCS Replacement Program Phase 2: Brill to Landlith	$2.0	$1.8	-$0.2
Mid-Atlantic Signals Program	$0.5	$0.6	$0.1
Mid-Atlantic Structures Program	$0.8	$0.3	-$0.5
Mid-Atlantic Substations Program	$0.6	$0.3	-$0.3
Mid-Atlantic Track Program	$5.5	$3.9	-$1.5

Investment Name	FY24 Planned Expenditure	FY24 Actual Expenditure	Variance
NEC Trip Time Reduction	$0.7	$1.2	$0.5
New England Catenary Program	$0.4	$0.8	$0.5
New England Communications Program	$0.8	$0.9	$0.1
New England Facilities Program	$0.8	$0.8	$0.0
New England Signals Program	$0.5	$0.2	-$0.4
New England Structures Program	$1.2	$0.4	-$0.8
New England Substations Program	$1.5	$1.6	$0.1
New England Track Program	$1.7	$1.2	-$0.5
New Haven - Providence Capacity Planning Study	$2.0	$0.0	-$2.0
New York Catenary Program	$0.2	$0.2	$0.0
New York Facilities Program	$0.7	$0.5	-$0.2
New York Signals Program	$0.7	$0.5	-$0.2
New York Structures Program	$0.9	$0.3	-$0.6
New York Substations Program	$0.5	$0.2	-$0.3
New York Track Program	$6.3	$2.7	-$3.6
Next Generation Acela Infrastructure Upgrades: Ride Quality Improvement	$2.4	$3.4	$0.9
Next Generation Acela Infrastructure Upgrades: Safety Mitigation	$8.3	$1.2	-$7.1
Next Generation Acela Infrastructure Upgrades: Tier III Waiver Gates	$8.6	$6.9	-$1.7
Production High Speed Surfacing Program	$1.7	$4.0	$2.3
Production Wood Tie/Timber Replacement Program	$0.8	$1.2	$0.4
Radio Infrastructure Upgrades Project	$17.6	$5.9	-$11.7
Rail Grinding Program	$0.4	$0.2	-$0.2
Route 128 Station Construction Upgrades	$0.3	$0.0	-$0.2
Route 128 Station HVAC Upgrades	$0.4	$0.3	-$0.1
Security Enhancements	$0.6	$0.0	-$0.6
Station Security Enhancements	$4.4	$0.2	-$4.2
TLS Concrete Tie Replacement Program	$5.7	$5.6	-$0.2
Total Track Renewal Program	$0.0	$0.0	$0.0
Vertical Gap Rehabilitation Program	$0.0	$0.3	$0.3
West Class Yard Access Improvements	$0.5	$0.2	-$0.4

Operations: Amtrak

Amtrak operates intercity service on along the NEC Main Line between Boston, MA and Washington, DC and on the three NEC Branch Lines to Springfield, MA, Spuyten Duyvil, NY, and Harrisburg, PA. Amtrak's Northeast Regional, Acela, Hartford Line, and Keystone Services routes operate entirely on the NEC main and branch lines and several state-supported and long distance routes operate on sections of the NEC.

NEC Service and Ridership

Average Daily Weekday Trips on the NEC, FY24

43.9K

+15.9% from FY23

Average Daily Weekend Trips on the NEC, FY24

42.7K

+16.4% from FY23

Average Weekday Trains on the NEC, FY24

145

+19 from FY23

Average Weekend Trains on the NEC, FY24

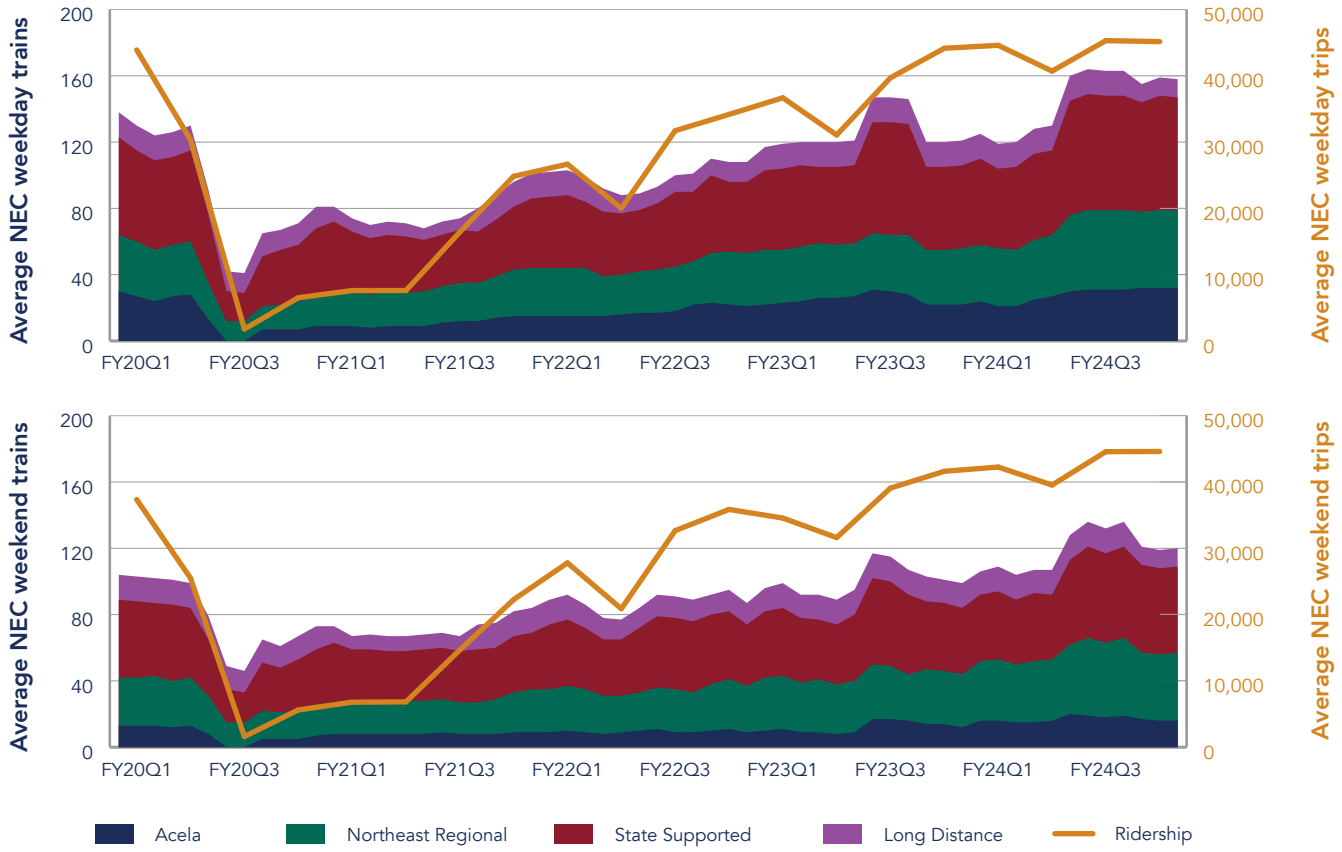
119

+19 from FY23

Average daily weekday and weekend ridership continued to increase strongly throughout FY24 for Amtrak. On-corridor ridership now exceeds pre-pandemic (FY19) ridership by 4.2% on weekdays and 26.7% on weekends.

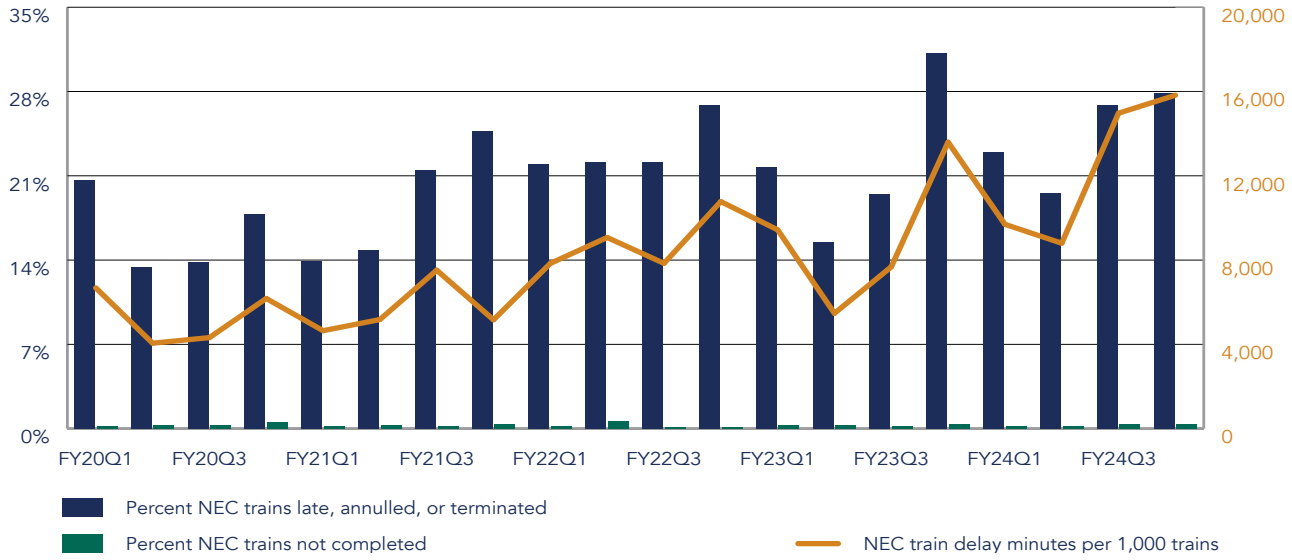
Additional Amtrak Acela, Northeast Regional, Keystone, and Empire line services were introduced in March 2024, providing a 15.6% and 19.0% increase in average weekday and weekend on-corridor services respectively.

Amtrak average NEC daily trains and trips by month



NEC Percent Trains Late

Amtrak percent trains late, annulled, or terminated by operator

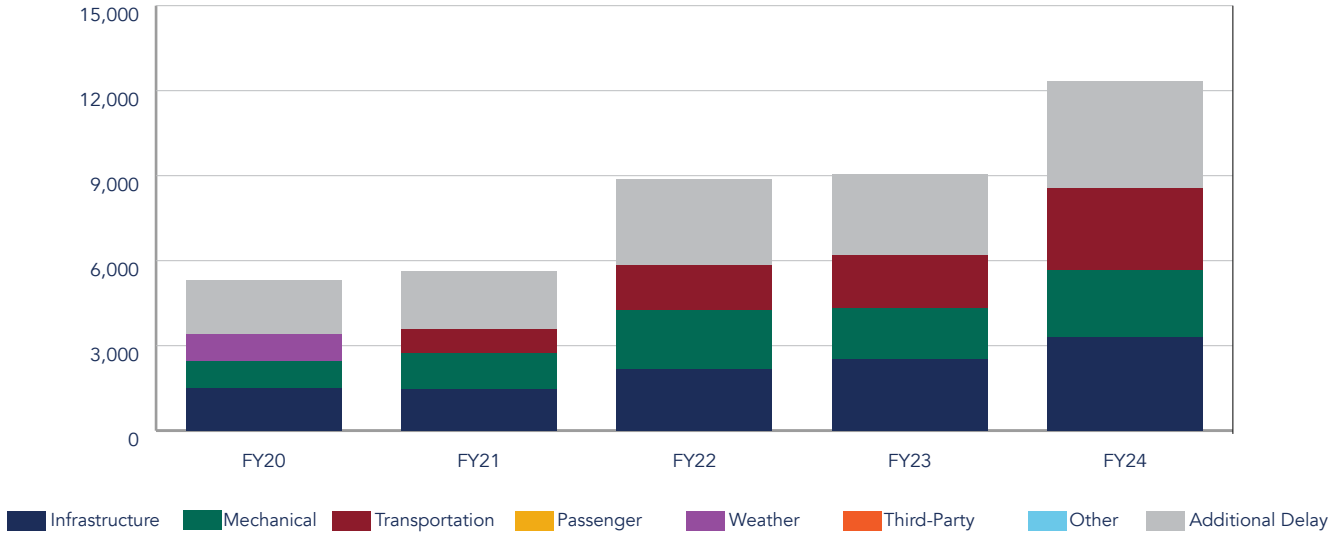


NEC Train Delay

Infrastructure issues remained as the leading cause of delay in FY24 for Amtrak. Transportation and mechanical issues remained the second and third ranked cause of delay respectively. Amtrak delays increased in FY24 partially due to improved delay recording methodology, as well as operational issues.

Amtrak Train Delay Minutes per 1,000 Trains by Cause

Top 3 Annual Causes Highlighted



Reference Materials

Glossary

Active Investments: Investments with preconstruction or construction activity in the first year of the plan. Active projects must have secured funding for at least the phase underway in the upcoming year. However, active projects may not yet be fully funded, and many require additional funding.

Backlog: Northeast Corridor infrastructure assets that are no longer functioning as designed and/or are in service beyond their expected useful life. The NEC backlog is composed of both basic infrastructure assets and major backlog as defined by the Northeast Corridor Commuter and Intercity Rail Cost Allocation Policy.

Baseline Capital Charge (BCC): The capital charge assigned to each Operator determined as a percentage of the corridor's Normalized Replacement Amount by applying the prospective fiscal year's allocation statistics to the normalized replacement amounts calculated for each asset category and segment combination. The sum of an Operator's allocated share of applicable normalized replacement amounts equals that Operator's BCC, or annual capital obligation.

Capital Renewal: The routine repair or replacement of existing basic infrastructure assets.

Commission: Means the body of the Commission, composed of voting members—1 member from each of the States (including the District of Columbia) that constitute the Northeast Corridor as defined in Section 24102, designated by, and serving at the pleasure of, the chief executive officer thereof; members representing the Department of Transportation; members representing Amtrak; and any non-voting representatives.

Fiscal Year: Refers to the federal fiscal year, beginning on October 1 and ending September 30.

Future Investments: Investments with project activity starting in years in two through five of the CIP are categorized as "future projects". These projects typically have received no funding, or have only received funding for work that has already been completed and now the project is on hold. These projects could advance in the next five years with additional funding.

Improvement: The replacement of existing assets with markedly superior ones or the introduction of new assets above and beyond existing NEC infrastructure, facilities, and equipment to improve reliability, increase capacity, reduce travel time, or improve the customer experience.

Major Backlog: projects necessary for achieving a state of good repair, but are not undertaken on a routine basis, such as rehabilitation or replacement of major bridges and tunnels. Major Backlog projects on the NEC are:

1. Frederick Douglass Tunnel Program
2. Bush River Bridge Replacement Program
3. Connecticut River Bridge Replacement Project
4. East River Tunnel Rehabilitation Project
5. Gunpowder River Bridge Replacement Program
6. Pelham Bay Bridge Replacement Project
7. Susquehanna River Bridge Replacement Program
8. COS COB Bridge Replacement (TIME-8)
9. DEVON Bridge Replacement
10. SAUGATUCK River Bridge Replacement (TIME-4)
11. WALK Bridge Program
12. Gateway: Hudson Tunnel Project
13. Gateway: Sawtooth Bridges Replacement Project
14. Gateway: Portal North Bridge
15. Gateway: Highline Renewal and State of Good Repair
16. Gateway: Dock Bridge Rehabilitation Project

These projects may include capital renewal components and some include improvement components such as increased capacity.

Normalized Replacement Amount: A concept used in the calculation of Baseline Capital Charges that estimates the annual cost of sustaining basic infrastructure assets in a state of good repair and is based on (1) the population of each asset type, (2) the average useful life of each asset type, and (3) the unit cost for each asset type.

Non-Owner Operator: Means an entity responsible for, or established to provide, commuter or intercity passenger rail transportation subject to the Policy, but in the context used is not the right-of-way, station, or infrastructure owner.

Operator: Means an entity responsible for, or established to provide, commuter or intercity passenger rail transportation subject to the Policy. This includes Amtrak, the New York Metropolitan Transportation Authority, the Connecticut Department of Transportation, the Delaware Department of Transportation, the Maryland Department of Transportation, the Rhode Island Department of Transportation, the Southeastern Pennsylvania Transportation Authority, New Jersey Transit Corporation, the Massachusetts Bay Transportation Authority, Virginia Railway Express, any successor agencies, and any entity created to operate, or contract for the operation of, commuter or intercity passenger rail service.

Owner: Means an entity required to implement the Policy that owns NEC right of way, an NEC station, or other NEC infrastructure. See also Right-of-Way Owner and Station Owner.

Planning Studies: Projects that include only planning activities and have no associated construction in current form.

Programs: Investments that are typically cyclical in nature, may include both planned and reactive work, and sometimes cross multiple locations.

Projects: Investments that typically focus on one location or asset with a discrete start and end date.

Project Sponsor: Means an entity required to implement the Policy responsible for the delivery of a capital project or program. A Project Sponsor may or may not be the same as the Owner and is not necessarily the same as the FTA or FRA project sponsor.

Repair: Fixing or mending a damaged or aged existing asset which remains in place.

Replacement: The installation of upgraded or modernized assets that generally serve the same purpose, provide the same basic functionality, and/or reside within the same footprint as the existing assets.

Right-of-Way Basic Infrastructure: Means the infrastructure components that require annual renewal to keep the NEC's structures and systems functioning properly and in a state of good repair for safe train operations. It includes rails, ties, ballast, communication systems, electric traction power systems, under-grade bridges and other similar items.

- **Ballast**: Selected material placed on the roadbed to hold track in line. Ballast preferably consists of hard particles (commonly crushed bluestone) easily handled in tamping, which distributes the load, drains well, and resists plant growth.
- **Ballast Surfacing:** Lifting tracks and tamping ballast when ties are replaced, to remove soft spots.
- **Ballast Undercutting:** Removing worn ballast to improve drainage and strengthen the track substructure.
- **Interlockings:** An arrangement of signals and switches "interlocked" in such a way that their movements must succeed each other in a predetermined order so that a clear indication cannot be given simultaneously on conflicting routes.
- **Rail:** A horizontal bar of steel, supported by cross ties, designed to carry railroad cars and locomotives. Two parallel steel rails form a track. A standard section of rail is 39' long.

- **Turnouts:** A connection between two lines of track to permit cars or trains to pass from one track to the other track
- **Tie:** A rectangular support for rails in a railway track, generally made of wood or concrete. Ties transfer loads to ballast and subgrade while helping to maintain track gauge.

Right-of-Way Owner (RoW Owner): Means an entity required to implement the Policy that owns NEC right of way. NEC Right-of-Way Owners include the Massachusetts Bay Transportation Authority, the Connecticut Department of Transportation, the New York Metropolitan Transportation Authority, and Amtrak.

State of Good Repair (SOGR): The conditions in which existing physical assets, individually and as a system, a) are functioning as designed within their expected useful lives; and b) are sustained through regular maintenance and normalized replacement programs.

Stations: Projects to repair, replace, modernize, or improve an existing station, occurring primarily within the boundaries of the station property, or projects to construct an expanded, new, or replacement station.

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Page iv: NJ TRANSIT train in Harrison, NJ, courtesy of Bill Lipfert.

Page vi: Metro-North train at Bridgeport station, courtesy of Bill Lipfert.

Page 4: SEPTA train near 30th Street Station, courtesy of Bill Lipfert.

Page 7: Amtrak, MARC, and VRE trains near Washington Union Station, courtesy of Bill Lipfert.

Page 10: Amtrak train passing Penn Station Access construction, courtesy of the Metropolitan Transportation Authority.

Page 11: MBTA train passing Tower 1 Interlocking construction, courtesy of the Massachusetts Bay Transportation Authority.

Page 12: Connecticut River Bridge Replacement groundbreaking, courtesy of Amtrak.

Page 13: Washington Union Station, courtesy of the Northeast Corridor Commission.

Page 13: Claymont Transportation Center, courtesy of the Delaware Department of Transportation.

Page 13: Bush River Bridge, courtesy of Amtrak.

Page 13: Ribbon-cutting for new platforms at Baltimore Penn Station, courtesy of Amtrak.

Page 15: Harrisburg Line renewal construction, courtesy of Amtrak.

Page 22: MARC train exiting the Baltimore and Potomac Tunnel, courtesy of Amtrak.

Page 24: Harrisburg Line renewal construction, courtesy of Amtrak.

Page 33: MBTA passengers disembarking at Attleboro station, courtesy of Bill Lipfert.

Page 37: Catenary inspection car in Trenton, N.J, courtesy of Amtrak, 2024.

Page A-24: Hartford Line train at New Haven, courtesy of Bill Lipfert.

Page A-31: Metro-North train at New Haven, courtesy of Bill Lipfert.

Page A-44: LIRR train at New York Penn Station, courtesy of the Northeast Corridor Commission.

Page A-63: MARC and Amtrak at Washington Union Station, courtesy of Bill Lipfert.

Page A-74: Amtrak Regional train, courtesy of Bill Lipfert.

Back cover: Amtrak trains passing the Rhode Island State House, courtesy Bill Lipfert.

Front Cover: Norwalk, CT
Back Cover: Providence, RI

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