

APPENDIX

**Testimony to the New Jersey Assembly  
Transportation and Independent Authorities Committee  
Thursday, November 14, 2024 at 10 a.m.**

- Good morning, **Chair Calabrese, Vice Chair Carter**, and members of the Committee.
- Thank you for inviting me to discuss the NJ TRANSIT rail customer experience on Amtrak's Northeast Corridor, as well as what we are doing to foster greater cooperation and collaboration between NJ TRANSIT and Amtrak.
- I'll be speaking today both as co-chair of the Northeast Corridor Commission, in addition to my role as President & CEO of NJ TRANSIT, the largest statewide transit system in the country, and the third largest overall.
- I am also a co-founder of the **Commuter Rail Coalition** – an association of 25 commuter rail agencies from across the country acting together to engage and educate stakeholders on the value commuter railroads bring to the communities they serve.

**(PAUSE)**

- I'll begin with some background information for those on the committee who may not be familiar with the relationship between NJ TRANSIT and Amtrak.
- NJ TRANSIT is a tenant on Amtrak's Northeast Corridor – the most heavily traveled rail corridor in the country – which I'll refer to as the NEC.
- Prior to the recent Bipartisan Infrastructure Law signed by President Biden, the NEC faced chronic underinvestment for the last 50 years, when Amtrak inherited it from the ashes of the bankrupt Pennsylvania Railroad.

- For our part, NJ TRANSIT pays Amtrak more than \$200 million annually – approximately **\$50 million** for operations, **\$66 million** for maintenance, and **\$90 million** for smaller-scale routine capital improvements on the segment of the NEC we use between Trenton and New York.
- Amtrak, as the NEC owner, is responsible for operating and maintaining all of the infrastructure, including critical components such as overhead wires – known as catenary – signal systems, track, switches, and substations, which deliver power to the catenary system, among many others.
- What we all saw during the approximately seven-week period between mid-May and the end of June was the perfect illustration of what occurs after many decades of disinvestment – and it's our customers who bear the brunt of that failure to invest in transit.
- This is why your decision to provide a predictable, sufficient and stable source of operating funding through the Corporate Transit Fee, or CTF, was so significant – as we've seen some of the effects that the last four decades of under-investment in NJ TRANSIT has had in areas of our own system.

### (PAUSE)

- Getting back to this past summer, while there have been references to the interaction between Amtrak's catenary and NJ TRANSIT equipment, which was responsible for approximately 35 percent of the 19 incidents in May and June, I want to be crystal clear – these challenges extend well beyond overhead wires.
- Signals, switches, power substations and systems – all the critical infrastructure between Trenton and New York that has been underfunded for decades, has also contributed to the incidents impacting customers this past summer.

- With the Bipartisan Infrastructure Law that I mentioned earlier, there is now an opportunity to replace and modernize NEC infrastructure, to restore the reliability customers expect and deserve.
- This requires Amtrak to develop a plan to accelerate this work by prioritizing the most vulnerable infrastructure along the NEC.
- Following the spike in disruptions this summer, largely isolated between Newark and New York, **Governor Murphy** called an urgent meeting on June 27<sup>th</sup> – bringing together key decision-makers including Amtrak Chairman **Tony Coscia**, Amtrak CEO **Stephen Gardner**, myself, and senior staff from both NJ TRANSIT and Amtrak.
- We discussed the severe impact the events had on both NJ TRANSIT and Amtrak customers, and reinforced our commitment to continue to work jointly, by taking concrete actions to restore reliability as quickly as possible.
- This effort included the development of a comprehensive joint plan, and multiple meetings per week between our agencies.
- As a result of these efforts, Amtrak and NJ TRANSIT implemented this plan, increasing examination, inspection, maintenance, and improvement activities involving various infrastructure and fleet systems.
- As just one example, to Amtrak's credit, they have already repaired or replaced more than 2,000 components along the catenary system between Trenton and New York, and they have inspected all 240 track miles between Trenton and NYC.
- To speak more broadly to our joint efforts:
- NJ TRANSIT management continues to undertake daily reviews of all NJ TRANSIT delays of six minutes or more, and meets with

Amtrak at least twice per week to review joint operations and advance potential solutions.

- Amtrak identified numerous short-term projects to improve its catenary system without significantly impacting service.
- These include immediate structural repairs and redesigning catenary components to minimize issues on adjacent tracks.
- Amtrak and NJ TRANSIT are evaluating methods to expand overnight work windows using service adjustments to accelerate infrastructure renewal and repairs.
- Together, we completed joint inspections of NJ TRANSIT infrastructure at key interchange locations.
- And, NJ TRANSIT installed high-resolution camera systems on an ALP-46 locomotive and an Arrow III railcar to gather video footage of the interaction between Amtrak catenary systems and NJ TRANSIT equipment.
- NJ TRANSIT personnel are also deployed at key stations along the NEC and on NJ TRANSIT-maintained rail lines to perform additional visual inspections.
- Overall, in the nearly five months since the plan's implementation, it has become clear that our collaborative approach is working, as we have seen a significant reduction in major incidents.
- NJ TRANSIT's overall on-time performance has also improved from 83.2% in June, up to over 91% in both September and October.

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**Future Investment Opportunities**

- We are also actively exploring additional federal funding opportunities to address key areas of NEC infrastructure in need of modernization.
- With NJ TRANSIT's support, Amtrak submitted project grant applications to the Federal Railroad Administration's Fed-State Partnership for Intercity Passenger Rail Program.
- We are very optimistic about some good news we're expecting to hear rather imminently, specifically regarding the following four projects:
  - Amtrak signal system upgrades between New Brunswick and Elizabeth;
  - Design and environmental review for catenary replacement from New Brunswick to Newark;
  - The Amtrak Sawtooth Bridges Replacement Project, which includes updated track, signals, catenary, and other infrastructure in that territory;
  - The Amtrak Substation 41 Renewal Project, which will update a key point on Amtrak's electric traction system;
- In addition, there are major capital projects currently underway, such as the Portal North Bridge and the Hudson Tunnel Project, which includes the replacement of approximately 13 track miles of antiquated catenary.
- Amtrak will replace this catenary with modern, constant-tension catenary, which maintains consistent wire tension under extreme heat conditions in the summer, as seen in summer months on NJ TRANSIT electrified territory, where we have already installed constant-tension catenary.

- All told, approximately 94 track miles of ancient, 1930's-era catenary will be replaced with modern, constant-tension catenary.

**(PAUSE)**

- To be clear: This is incredibly important work, and the stakes are high.
- It's almost impossible to overstate the importance of the Northeast Corridor – not only to the millions of commuters and intercity rail customers who rely on it every year, but to our national economy.
- As one of the largest economic markets in the world, the Northeast is key to our country's international competitiveness, connecting global centers of finance and government.
- Every year, the region served by the NEC supports more than 24 million jobs and produces about 20 percent of the nation's GDP.
- Unfortunately, as I mentioned earlier, this critical stretch of infrastructure has been drastically underfunded for many decades.
- To highlight these infrastructure challenges firsthand, last month Stephen and I joined members of New Jersey's Congressional Delegation for a rail tour of the NEC, between New Brunswick and New York.
- The tour, hosted by Amtrak, highlighted the urgent need for upgrades – and federal funding – along this critical corridor.

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- I'll conclude this morning by noting that NJ TRANSIT remains 100 percent committed to continuing to support Amtrak's efforts to accelerate all the necessary infrastructure improvements that will deliver the best possible experience for rail customers who depend on the NEC.

- Thank you **Chair Calabrese, Vice Chair Carter**, and all the committee members for giving me the opportunity to testify before you today.
- Now, I'd be happy to answer any questions you may have.

*Testimony*

**Stephen Gardner**

Chief Executive Officer

National Railroad Passenger Corporation



*For the*

New Jersey State Legislature

Assembly Transportation and Independent Authorities Committee

**Amtrak and New Jersey Transit Cooperation to improve the  
Passenger Rail Experience**

Thursday November 14, 2024 10:00 am

Amtrak

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Good morning, Chairman Calabrese, Vice Chair Carter and Members of the Committee. My name is Stephen Gardner, and I am the Chief Executive Officer of Amtrak. Thank you for inviting me to appear before you today to talk about Amtrak, the Northeast Corridor, and our relationship with the state of New Jersey and New Jersey Transit (NJ TRANSIT) – one of our most important commuter partners.

In partnership with Kevin and his staff, we provide key infrastructure and services on a non-profit basis for the operation of hundreds of daily NJ TRANSIT trains full of New Jersey residents – your constituents – who support billions of dollars-worth of economic activity in the heart of the nation’s largest regional economy. As a federally-chartered corporation, we service as the primary owners of the bridges, tunnels, track, power and other systems that support the 457-mile Northeast Corridor (NEC) between Washington, DC and Boston, and are primarily responsible for their upkeep, maintenance, and readiness for the future. Amtrak obviously operates our own trains over this route but also host 12 different tenant commuter and freight rail tenants as well, accommodating some 2,000 trains and hundreds of thousands of riders per day. Amtrak inherited these assets in a state of extreme decay from the bankrupt private railroads of the era in 1976 and has worked hard over the past nearly 50 years to bring them into the modern era, improve reliability, speeds and capacity when federal funding allowed. Tenant partners like NJ TRANSIT initially contributed only modest amounts to the ongoing operation and capital costs of these assets but following a change in federal law in 2008, became true funding partners, which has allowed us to, collectively, dramatically increase investment in the railroad and gain larger and reliable investments from Congress who sees that New Jersey has real skin the game relative to the Northeast Corridor.

Now, with the support of our state and commuter partners here in the Northeast, including the State of New Jersey and NJ TRANSIT, Amtrak has been investing at unprecedented levels to modernize the network and expand service for a better future. In our just-completed Fiscal Year 2024, with funding from the Bipartisan Infrastructure Law (BIL) and significant local match commitments and user payments from NJ TRANSIT for NEC projects in their territory, Amtrak executed our largest capital program in company history – \$4.5 billion – with significant investments made here in New Jersey.

For the first time in Amtrak's 53-year history, the BIL is allowing us and partners like NJ TRANSIT to address years of backlogged major infrastructure projects and to modernize the basic infrastructure necessary to reliably operate service, some of which is roughly 100 years old. This \$66 billion dollar investment provided over 5 years – with \$22 billion directly to Amtrak and \$44B in discretionary grants led by the Federal Railroad Administration, including up to \$24B for NEC projects – will have fundamental impacts on the future of the NEC in New Jersey, allowing us to replace the Corridor's most critical infrastructure with 21<sup>st</sup> century assets capable of meeting the needs of the railroads and the expectations of our customers.

For instance, the Hudson Tunnel Project, Penn Station Capacity Expansion, Portal North Bridge, and other transformative infrastructure investments that are part of the Gateway Program will double capacity between Newark and New York City, and will allow passengers on the Raritan Valley Line and other NJ TRANSIT branch lines who must currently change trains to reach New York City to enjoy one-seat rides directly into New York Penn Station.

By increasing from two to four tracks, Gateway also provides the capacity to more efficiently maintain the century-old system built by the Pennsylvania Railroad in 1910.

While the new sources of Federal funding have enabled us to progress long-in-planning programs such as Gateway and other NEC bridge and tunnel projects, we have also advanced critical state of good repair projects to improve the resiliency of the track, overhead power and signal systems infrastructure in New Jersey.

In May and June, we are all painfully aware that Amtrak and NJ TRANSIT suffered through an unusually high number of incidents that upended service – around 20 over two months. Several of the incidents were associated with unusual but significant failures of Amtrak electrical infrastructure which shut down all service that occurred at key times of day. Others involved interactions between NJ TRANSIT equipment and the overhead power, or catenary, wires. Yet others were anomalies like obstructions in the overhead wires that impacted our railroad operations.

To give you a sense of how these play out, we experienced a power failure on May 22, shortly after 5 pm – the height of the rush hour, when power was lost to the NEC signal system near

Kearny. It turns out a broken signal power line fell and made contact with a 12,000 volt (12kV) "feeder" line, resulting in a high voltage spike across five miles of territory. Without signal power, signals and switches could not route trains through the area without special operating procedures, resulting in significant delays to all NJ TRANSIT and Amtrak trains. Our teams mobilized and Amtrak forces worked through the night to make repairs and restore full service in time for the next day's rush hour.

While I am proud and eternally grateful for the hard work of the men and women who helped restore the railroad during this and the other incidents, the disruption our failures caused to the people of New Jersey is not acceptable to us at Amtrak and we are committed to doing better.

Following this spike in service issues in May and June, Amtrak and NJ TRANSIT took immediate steps to increase equipment inspections, accelerate maintenance, investigate root causes, and improve agency coordination. Among the emergency steps were:

- Helicopter inspections of the entire NEC overhead catenary system between Trenton and the North River Tunnel;
- Photo inspection via special hi-rail vehicle of tunnels and tracks within New York Penn Station;
- Identification and remediated of electric traction components and replacement of overhead wire to ensure that reliability Increased equipment inspections by NJ TRANSIT and Amtrak and use of high-definition video on top of locomotives to document the interaction of NJ TRANSIT equipment with Amtrak wires.

When these service disruptions occur, both agencies prioritize a safe resolution that gets passengers on their way as quickly as possible. We are keenly aware of the impacts these disruptions have on people's lives and work together every day to get the roughly 400 trains a day in and out of Penn Station and to New Jersey on time, despite relay on ancient infrastructure and capacity that is frankly grossly inadequate for the volume of trains we operate over what is the business mainline railroad segment in all of North America between Newark and New York .

Even with these challenges and the summer incidents that garnered so much attention, Amtrak still maintained an average OTP of 84.31% on the NEC for FY24 for our own trains and as a Host railroad for NJ TRANSIT service, we delivered an average OTP of 91.39%, meaning that less than 10% of all of NJ TRANSIT's trains were late because of Amtrak-caused issues. Over the last five years, that OTP related to Amtrak-responsible delays has averaged from 91.39% to a high of 97.5%.

This type of performance is what we all want to reliably return to and Amtrak is committed to being a strong partner as NJ TRANSIT's host railroad. In particular, we appreciate how our relationship as partners has grown in recent years under the strong leadership of Kevin Corbett.

Following these incidents this summer, we've managed to stabilize performance at levels consistent with our historic norms, including seeing a cessation of the spate of pantograph-catenary issues we saw. That on-time-performance is partially a result of the focused, 24-hour attention Amtrak and NJ TRANSIT teams are giving to OTP and we look forward to continuing that collaboration.

The long-term solution is to fully modernize this railroad for the needs of today – basic things like upgrade ancient substations, replacing the 1930's era overhead power system Amtrak inherited from our Pennsylvania Railroad predecessors, and improving our signaling systems to handle the train volumes today that dwarf what this railroad was originally designed for. Additionally, many of the larger infrastructure projects we are advancing in and around Penn Station are working toward that goal and include new track and catenary systems as part of their scope.

Because we don't have the luxury of time, however, we accelerated and augmented Amtrak FY24 spend for electric traction in New York and New Jersey to \$45.2 million. And for FY25, which we just began in October, our spend in this area, provided Congress and the Administration provide us sufficient annual funding, more than doubles to nearly \$92 million.

And we are eager to hear the results of our pending joint grant applications to the Federal Railroad Administration, our key U.S. DOT funding partner, that include several projects which will provide benefit to NJ TRANSIT passengers, totaling just shy of \$3 Billion:

- Substation 41 in Kearny NJ (\$120M)
- Sawtooth Bridges – the new spans will have all new catenary systems (\$2.1B)
- Newark to New Brunswick Catenary Upgrades (\$630M)
- Elizabeth to New Brunswick Signal Upgrades (\$110M)

In addition, NJ TRANSIT projects and funding efforts include a new Hunter Flyover, the Delco Lead and improved County Yard. And of course, the NJ TRANSIT led Portal North Bridge replacement project which is nearly 75% complete will provide two and a half miles of new catenary infrastructure for all users of this vital railroad structure in NJ that funnels traffic into New York City. In fact, in about a week and a half, the first bridge spans will float down the Hudson River and arrive at the project site, a special moment many are eager to witness.

These investments and future funding opportunities rely on non-Federal sources of funding as “local match” to unlock potentially huge buckets of federal dollars. Amtrak and NJ TRANSIT need the state of New Jersey to continue working to prioritize funding for passenger and commuter rail projects, so we can continue to deliver value for more people throughout the state.

Amtrak and NJ TRANSIT face many challenges and opportunities as we implement the funding entrusted to us to build for the future while taking care of our customers along the heaviest traveled railroad corridor in the world. We value the support of the NJ state and federal delegations and will strive to work collaboratively to bring the projects in on time and on budget. One critical component of our future success is creating sufficient time on the railroad to undertake the improvement and modernization work that is necessary. Much of this work simply cannot be efficiently accomplished while running service exactly at today’s levels. In particular, Amtrak will require longer work periods overnight where there are no trains operating and extending periods where individual tracks will be out of service which impacts both NJT and Amtrak service levels and schedules. We ask for strong support for these

measures because, while there will be short term pain, the long-term gain here is absolutely vital.

Also to this end and notwithstanding our recent election which will bring changes in key committee leadership, it is vitally important that Congress continue to fund Amtrak's annual appropriations at the maximum authorized level. Amtrak continues to work toward securing a stable funding mechanism that does not rely on annual appropriations. Your help in voicing the importance of Amtrak in your communities to your federal delegation is a crucial piece that helps continue our important work for New Jersey and the entire Northeast Corridor.

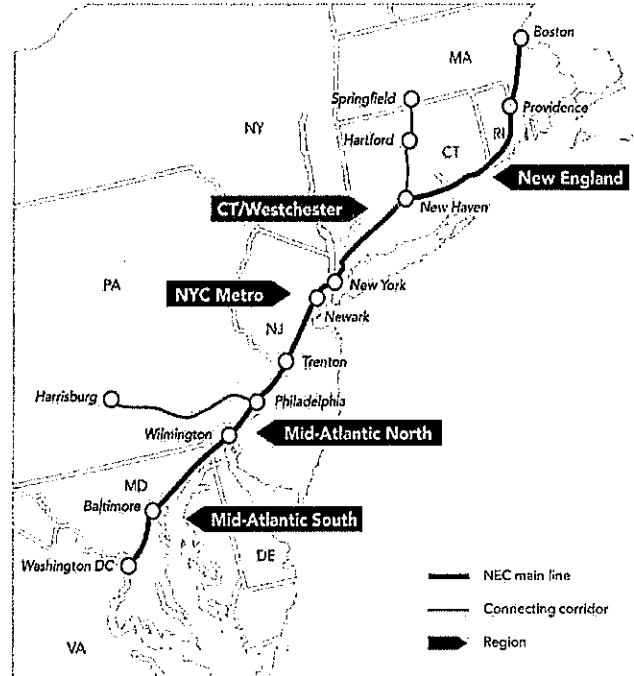
Thank you for your time – I look forward to answering your questions.

## The Northeast Corridor in New Jersey

The Northeast Corridor (NEC) is a 457-mile electrified rail corridor connecting metro areas in the Northeast between Boston, New York, and Washington.

The NEC carries Amtrak intercity trains (including flagship Acela), many non-Amtrak commuter trains (including NJ TRANSIT trains) & some freight trains.

Amtrak is the principal infrastructure owner/maintainer and dispatcher, and sole end-to-end operator.



The Congressionally-created NEC Commission oversees allocation of infrastructure and other costs to all NEC users; these user investments only cover a portion of the NEC's capital needs.

### NEC Commuter Partners

- Mass Bay Transportation Authority (MBTA)
- CT Shore Line East
- Metro-North Railroad (MNRR)
- Long Island Rail Road (LIRR)
- New Jersey Transit (NJT)
- Southeastern Pennsylvania Transportation Authority (SEPTA)
- Maryland Area Rail Commuter (MARC)
- Virginia Railway Express (VRE)

### The NEC: A Regional Corridor with National Impact

- Up to 2,000 passenger trains operate per day (Amtrak & commuter)
- 600,000+ passengers on a typical weekday

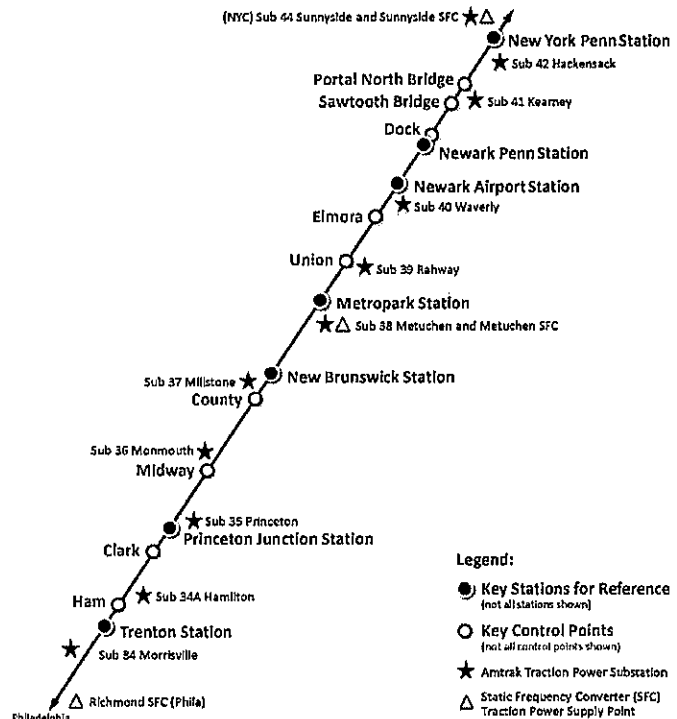
- NEC passengers (Amtrak and commuter) contribute tens of billions of dollars annually to the U.S. economy.
- Due to the density of service, even very brief service disruptions can be costly, with far-reaching effects.
- According to the Northeast Corridor Commission, 7 million jobs are located within 5 miles of an NEC rail station, and workers who ride Northeast Corridor services contribute some \$50 Billion to the U.S. economy.

**Powering the NEC: A Complex Corridor**

There are 240 miles of track between Trenton and NYC (more than one track) that Amtrak owns and maintains and over which Amtrak and NJ TRANSIT trains operate.

There are 13 substations between Trenton and NYC, and dozens of high-speed interlockings, control points, signal structures, and other rail infrastructure.

This territory also includes 2,700+ catenary (overhead power system) structures and approximately 370 miles of overhead wire that powers trains on the NEC.



Power Directors receive, dispatch, and manage electrical load from commercial providers (PSE&G, ConEd, PECO, etc.) and distribute.

Three static frequency converters between New York and Trenton convert standard 60 Hz power to proprietary 25 Hz distribution network – a unique legacy of the Pennsylvania Railroad.

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Investment Opportunities to Modernize the NEC

Amtrak and NJ TRANSIT have jointly applied for federal funding for the following projects:

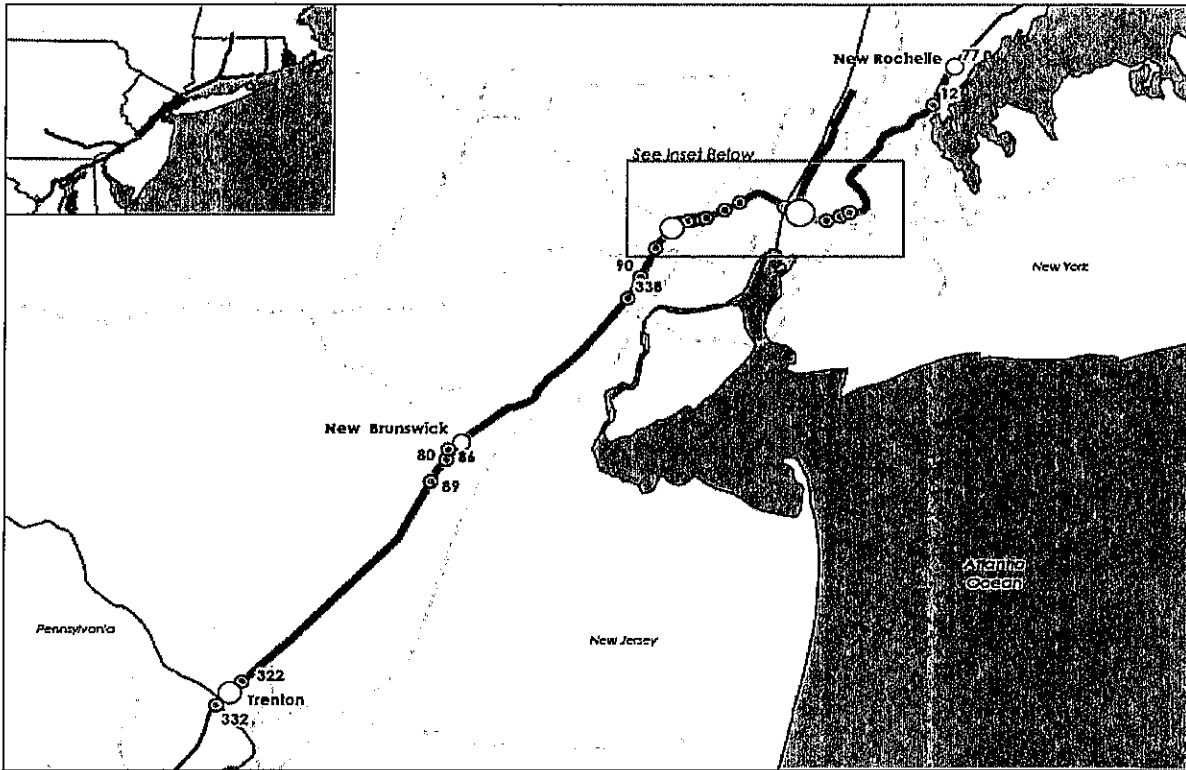
- Signal system upgrades between New Brunswick and Elizabeth
- Amtrak catenary upgrades from New Brunswick to Newark
- Sawtooth Bridges Replacement Project (including updated track, signals, catenary, and other infrastructure)
- Substation 41 Renewal Project (to update a key point on Amtrak's electric traction (ET) system)

Major capital projects, such as Portal North Bridge, the Hudson Tunnel Project and Dock Bridge Rehabilitation, will include 13.8 miles of catenary renewal in those project areas.

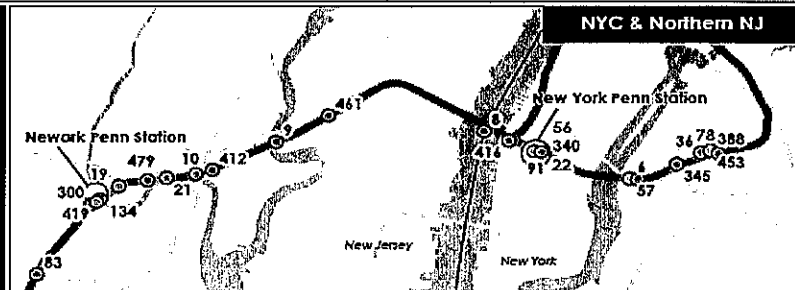
Pending future grants, projects currently in design include catenary renewal of 93.7 track miles in project areas between New Brunswick and New York.



# Northeast Corridor Commission Capital Investment Plan (FY25-29)



**New York City Metro**  
**Active Projects over \$50 Million**  
 FY25-29 CIP



- |  |  |
|--|--|
| 77 Penn Station Access   | 412 Kearny Sub 41 Relocation Design and Construction                               |
| 12 Pelham Bay Bridge Replacement Project                         | 10 Gateway: Sawtooth Bridges Replacement Project                                   |
| 388 Sunnyside Yard Frequency Converter Upgrade Project           | 21 Gateway: NJ TRANSIT Gateway Storage Yard  |
| 453 Sunnyside Yard Crew Base Facility Complex                    | 479 Kearny Transmission Upgrades Project   |
| 36 Next Generation Acela Infrastructure Upgrades: Sunnyside Yard | 19 Gateway: Harrison Fourth Track  |
| 78 Harold Interlocking   | 134 Gateway: Dock Bridge Rehabilitation Project                                    |
| 345 Airo Facilities: Sunnyside Yard                              | 419 County-Newark Catenary Upgrades  |
| 6 East River Tunnel Rehabilitation Project                       | 300 Newark Penn Station 2.0: Master Plan and Reimagined Icon                       |
| 57 River-to-River Rail (R4) Resiliency: West Side Yard           | 83 Hunter Flyover  |
| 22 Gateway: New York Penn Station Expansion                      | 90 North Elizabeth Station Improvements  |
| 56 New York Penn Station Reconstruction                          | 338 New York Metro Signal System Upgrades to 562 Program Phase 1: County to Elmora |
| 340 New York Penn Station: Central Concourse                     | 80 Delco Lead  |
| 91 New York Penn Station: NJ TRANSIT Near-Term Improvements      | 86 Midline Loop  |
| 416 Gateway: Hudson Yard Concrete Casing 3                       | 89 North Brunswick Station   |
| 8 Gateway: Hudson Tunnel Project                                 | 322 Clark to Ham Constant Tension Upgrade Project                                  |
| 461 Mainline Scanners  | 332 Washington St Bridge Replacement   |
| 9 Gateway: Portal North Bridge                                   |  |

This map displays a subset of all investments within the region. Refer to FY25-29 CIP Web Appendix for a complete list.

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