Amtrak – NJ **TRANSIT** Joint Update

April 15, 2025

Readiness for Reliable Service in Summer 2025 and Beyond

4630 NTRANSIT RUTGERS-NEW BRUNSWICK Center for Advanced Infrastructure and Transportation School of Engineering

Jointly Prepared By:



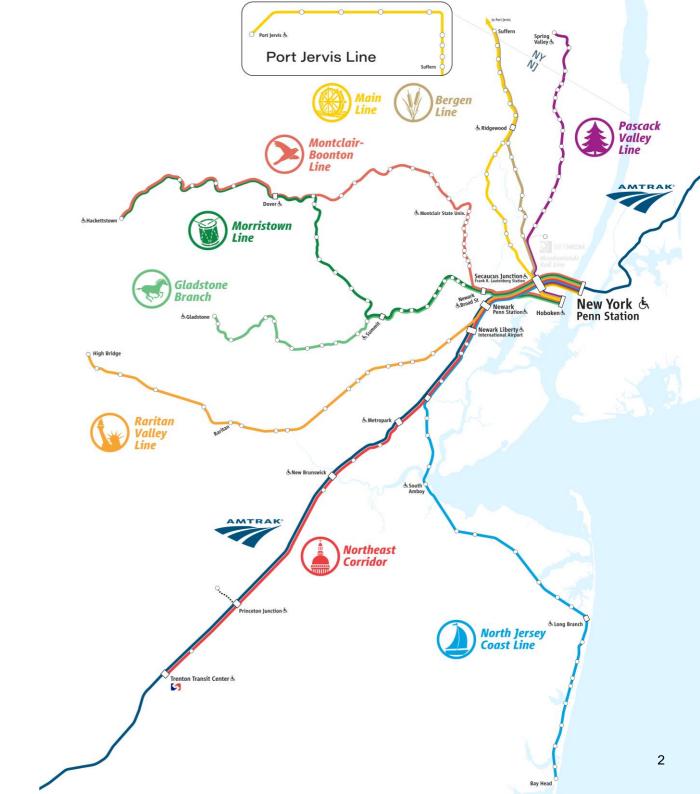


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Executive Summary

- The Northeast Corridor (NEC) represents the busiest rail line in the Western Hemisphere. NJ TRANSIT and Amtrak trains serve millions of customers annually
- **Ridership is rapidly rebounding** from the pandemic, with over 450 trains and 200,000 average weekday trips combined across Amtrak and NJ TRANSIT on the NEC alone
- The NJ territory of the NEC is the busiest in the nation. The complexity and age of this region present challenges and require coordination
- Summer 2024 represented a significant spike in delays affecting passengers due to infrastructure and equipment issues
- Amtrak and NJ TRANSIT rapidly responded with enhanced inspections, maintenance, repairs, and capital investments
- These infrastructure and operational improvements and investments have increased and continued as part of a program to ensure readiness for summer 2025 and beyond



Immediate Summer Response

Immediately after the spike in summer 2024, both Amtrak and NJ TRANSIT took rapid action to address issues

Immediate Amtrak and NJT Responses, June 2024 – March 2025 Performed an enhanced, Increased equipment Technical updates to highmore comprehensive \bigcirc inspections and HD video speed catenary inspection inspection of all 240 track capture car miles between Trenton and NY Penn Station More frequent and 52 route miles photointensive inspections of Substation upgrades and graphed from helicopter catenary and Amtrak and Investments NJ TRANSIT pantographs Completed more than 1,000 catenary structures 9,500 hardware Signal and track captured via helicopter replacements; installed 3.5 investments

miles of new catenary wire

Ongoing Investments: Near-Term

Amtrak and NJ TRANSIT continue to make significant investments that will impact travelers before summer 2025

Catenary Repair on the NEC

Since June 2024, Amtrak completed roughly 9,500 additional hardware replacements (up from 2,000, from the last report). Both Amtrak and NJ TRANSIT have agreed to service outages over the 12 weeks leading up to summer 2025. Commenced several major Electric Traction capital projects in NJ that will be completed this year.

Fiberglass Chip Protectors

NJ TRANSIT installation of chip protectors to better protect pantographs from catenary defects and impacts, enhancing equipment resiliency. Installation is now complete on all trains in the NJ TRANSIT fleet.

Increased Inspections

Increased NJ TRANSIT and Amtrak visual pantograph inspections and continued training for engineers on inspection. Second, more comprehensive round of helicopter inspections of catenary, signal systems, track, and other structures is planned to start in April. NJ is the highest priority in this program.

Substation Improvements

Amtrak repair, replacement, and upgrades of substations, with 3 completed to date and work at 8 others planned throughout the year.

Signal System Upgrades

Major Amtrak improvements to NEC signaling systems are complete for New Brunswick-Trenton segments and planned for northern segments of NEC.

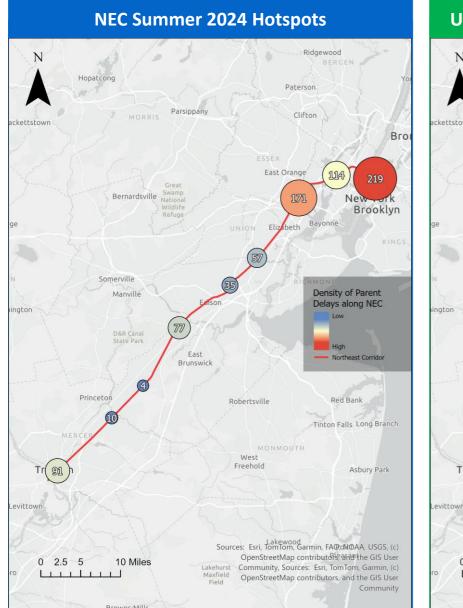
Joint Carbon Strip Testing

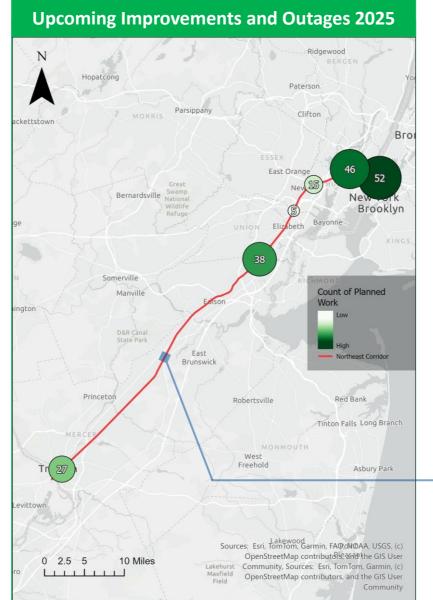
Rutgers University undergoing testing of both Amtrak and NJ TRANSIT carbon strips, using international protocols agreed to by both Amtrak and NJ TRANSIT, with active participation of the FRA.



Ongoing Investments: Near-Term

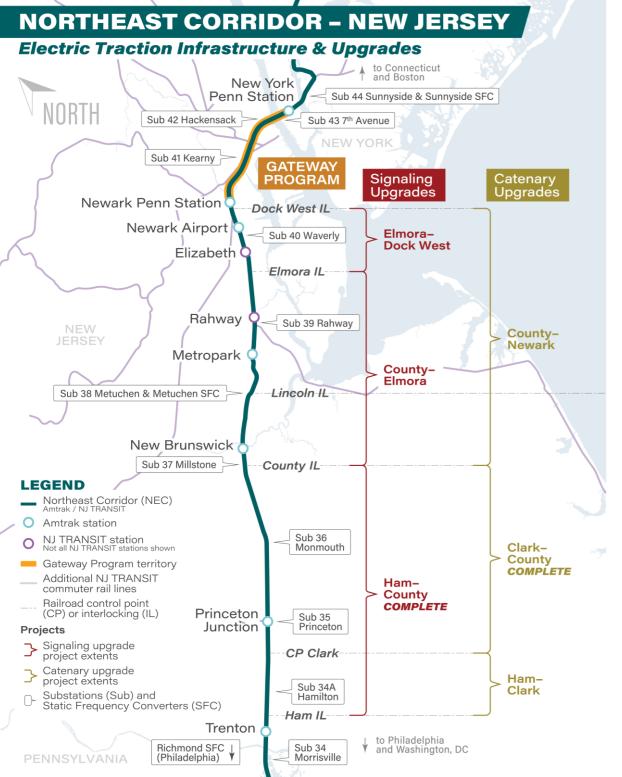
Upcoming work is closely aligned with geographic hotspots; Amtrak and NJ TRANSIT are investing in planned outages to achieve this





- Upcoming Amtrak work is prioritized based on asset condition and usage. Correspond with key "hot spots" from summer 2024, particularly in high usage areas between Secaucus and NY Penn Station
- Both Amtrak and NJ TRANSIT are planning for significant track outages and advanced service adjustments to facilitate work prior to summer 2025
- This requires significant collaboration, coordination and investment to minimize impacts to passengers and maximize the impact of the investments

Significant remediation work previously completed Jun '24 – Mar '25 in this region and the whole route to NY Penn Station, based on incidents and inspections by helicopter and catenary car. Green circles only reflect upcoming work and planned outages.



Ongoing Investments: Near-Term

Additionally, Amtrak has secured significant funding to continue major capital projects during FY25, particularly targeting electric traction

- After completing more than \$12 million worth of work across this territory in FY24, Amtrak is planning to invest more than \$40 million in this territory in FY25
- Prioritized based on inspection and lifecycle analysis
- Completion prior to Summer:
 - 1 Significant catenary wire replacement between Rahway and Elizabeth and at Dock Interlocking East of Newark completed in April with all tracks to be complete by September
 - 2 Replacement of 12 breakers, up from 3 annually in prior years, Breaker replacement expected to have significant impact prior to June; work will continue throughout full year
 - Ongoing commissioning of new control house for Substation 42 in Hackensack, with final completion by September
- Future investments in catenary replacement include NJ TRANSIT Coast Line connection at Rahway, and Union Interlocking in Rahway

Ongoing Investments: Long-Term

Over the next three years, both NJ TRANSIT and Amtrak have significant investments planned to address aging infrastructure and fleets

NJ TRANSIT: Fleet Upgrades

Introduction of 174 new "Multilevel III" vehicles to replace oldest existing vehicles, increasing mechanical reliability. Arrival begins in late 2025. \$1B+ invested.*

New Multi-Level III vehicles will be equipped with Auto Drop Devices (ADD). Additionally, NJ TRANSIT is exploring engineering solutions with Alstom to retrofit some of the existing fleet with ADDs.



Amtrak: Fleet Upgrades

NextGen Acela fleet slated to enter service on the NEC in spring of 2025, upgrading experience for millions of passengers.

Amtrak Airo trains slated to debut in 2027 in the NEC, improving service for regional rail customers. All trains will have Auto Drop Devices.



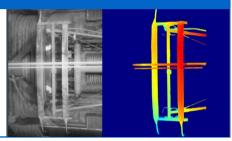
Gateway Program

One of the largest and the most urgent capital programs in the nation. Phase I Includes construction of Hudson Tunnel Project and Portal North Bridge. New catenary and signal systems will be constructed as part of the Program.



Amtrak: Secaucus Digital Inspection Super Site

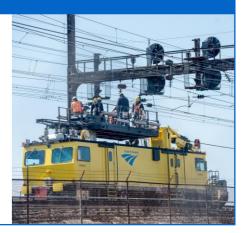
Initial deployment of high-speed vehicle scanner technology at Secaucus to modernize inspections. After initial development of this program in 2019, inspection of Amtrak vehicles will begin by early 2026. Will enable real-time data collection and support more efficient, predictive maintenance.

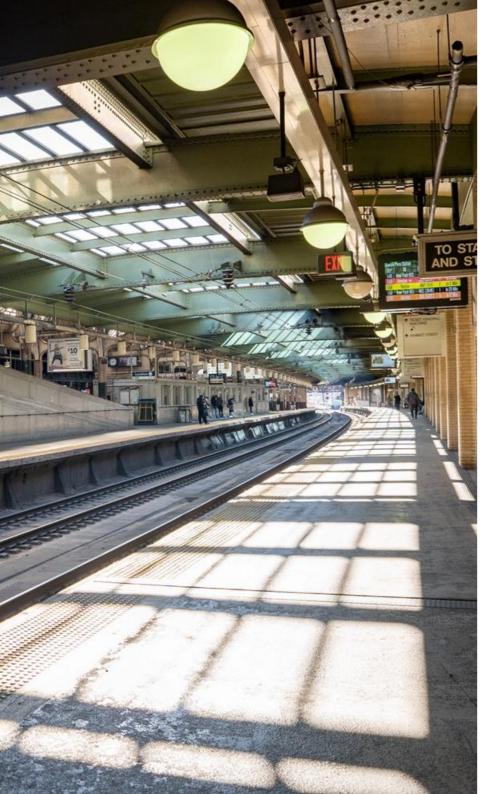


Amtrak: State of Good Repair Strategy

Transition to a data-driven approach to asset management, executing on an enhanced action plan to test, inspect and prepare our assets for summer by end of May of this year and every year going forward. NJ areas are high priority.

Summer readiness preparation protocols call for 11 preemptive activities to be complete before May 31, incorporating data, Amtrak past practices, and international best practices to mitigate against common heat failures.





Incident Response Preparation

Significant investments will have a meaningful impact; both agencies have robust response plans in place

- Summer Preparation: Robust NJ TRANSIT summer preparation in progress, including comprehensive mechanical inspections and presummer preventive maintenance; introduction of specialized firefighting equipment to mitigate heat-related fires; and protect crews prepositioned to rapidly address issues
- Response Plans: Enhanced NJ TRANSIT and Amtrak contingency response plans in the event of heat situations, including strategic placement of protect crews and heat-triggered catenary inspections
- Customer Service: Continued investment in customer service, including improved real-time station and app announcements and deployment of NJ TRANSIT customer care teams at Newark Penn Station and NY Penn Station during peak periods
- Dispatching Enhancements: NJ TRANSIT senior management personnel located in Penn Station Control Center to support coordination in dispatching and priorities during complex events and in support of ontime performance

Thank You