Now Arriving: PATH Improvement Plan

Adding Capacity  
Reducing Delays  
Enhancing Customer Experience  

Thursday, June 20, 2019  

THE PORT AUTHORITY OF NY & NJ
PATH Improvement Plan

Three Core Components

1. Add Capacity
2. Reduce Delays
3. Enhance Customer Experience
Add Capacity

PATH Is Experiencing Record Ridership driven by unprecedented growth in communities it serves

*2017 Ridership excluding impact of NJT summer cross-honoring*
Add Capacity

Goal: Increase Capacity During Rush Hours

September 2019
Rush Hour Increase (6-10AM & 4-8PM)

- 10% Increase
  - NWK-WTC
  - JSQ-33rd

4th Quarter 2022
Rush Hour Increase (6-10AM & 4-8PM)

- 40% Increase NWK-WTC
  - ~18,000 Additional Passengers/Rush
- 20% Increase For Remaining Lines
Add Capacity: Phase 1

September 2019: **10% Increase**

New Signal System Allows Trains to Run Closer Together
- Old System: Minimum of 4 minutes between trains
- New System: As few as **3 minutes** between trains
- Constraint: Number of rail cars in system

The 10% Increase Will Be Achieved By
- Adding two train sets from existing fleet into service during the AM/PM rush
- Additions on the two busiest lines (NWK-WTC & JSQ-33rd)
Add Capacity: Phase 2

4th Quarter 2022: $1 Billion Investment

New Signal System
- $752.6M Investment (*previously approved by board*)
- Ongoing implementation will be fully complete in 2022

72 New Rail Cars
- $215.7M Investment (*previously approved by board*)
- Delivery Complete in 2022

Station Modifications to Grove St. & Exchange Place to Enable 9-Car Trains on NWK-WTC Line
- $80M in Capital Construction (*new recommendation to board*)
- Complete in 2022
Add Capacity: Phase 2

4th Quarter 2022: 40% Increase on NWK-WTC

Every Train on NWK-WTC Will Be a 9-Car Train

3-Minute Headways During Busiest Times Will Be Maximized

Trains Will Run More Frequently Than Ever Before

Increased Service Will Phase-in Beginning in 2 Years – Mid-2021 – as New Rail Cars are Delivered
Add Capacity: Phase 2

Enabling 9-Car Operations – Grove Street
- Expand & Extend the Platform at the Marin Street End

Before

After

Enabling 9-Car Operations – Exchange Place
- Additional Cross-Corridors Creating New Exit Routes
Add Capacity: Phase 2

4th Quarter 2022: 20% Increase on Other Lines

20% Average Increase During Rush Hours for Rest of System
• JSQ-33rd
• HOB-WTC
• HOB-33rd

New Signal System + New Rail Cars
• Signal System Enables Shorter Time Between Trains
• New Cars Deployed Across System
• Together Enable More Trains to Run During Rush Hours
Add Capacity: Additional Plans

As we phase in capacity increases, we also are funding the planning of 10-car trains to be positioned to expedite implementation in the future.
Reduce Delays

Highly-Focused Plan Targeting Root Causes of Delays

- Early Impact Within Next 12-18 Months
- Full Impact Next 30 Months

- Signal Issues
- Switch Failures
- Sick Passengers
- Unattended Bags
- Car Equipment Failures
- Track Conditions
Reduce Delays

Signal Issues

- Repair Track Bed Conditions That Compromise Signal Equipment
- Continue Upgrades & Enhancements of Signal Software
- Enhanced Maintenance Procedures

Switch Failures

- New Holistic Preventive Maintenance on Switch & Surrounding Environment Targeting Most Frequent Failures
- Cross-Disciplinary Inspections at an Increased Frequency
- Total Replacement of 43 Critical Switch Machines
Reduce Delays

Car Equipment Failures

• Five Immediate Priority Initiatives to Address Root Causes of Disproportionate Amount of Delays
  - Coupler pins, dust filters, compressed air lines, doors, HVAC
• Car Overhaul Program
  - 40% of fleet will be overhauled within 30 months
  - Entire fleet will complete overhaul by 2024
• Enhanced Data Analysis to Develop Additional Maintenance Initiatives Targeted on Preventing Most Frequent Failures
Reduce Delays

Track Conditions

• Intensified Track & Structural Inspection Program
• Put into Service New State-Of-The-Art Ultrasonic Inspection Vehicle Within 90 Days
  Full analysis of every rail segment on quarterly basis
  Identify internal/external rail defects undetectable by visual inspection
  Examine track geometry to maintain track alignment, reducing adverse stress
  Use infrared technology to identify “hot” joints, cables, and connections
• Ensure Daily Visual Evaluations of Track and Track Bed Condition by Inspectors Walking the Track
• Create New Cross-Disciplinary Repair Teams to Promptly Respond to Issues Identified by Inspections
Reduce Delays

Sick Passengers

• Twin Goals: Get Help to Passengers More Rapidly & Keep Trains Moving
• New Protocols for PATH, PAPD & EMS Personnel During Peak Periods
• PSA Campaign Aimed at Passengers Not Feeling Well – Stay on Platform Where Help is Readily Available

Unattended Bags

• Must Be Cleared by Bomb-Sniffing PAPD K-9 Units
• Improve Protocols & Increase Availability of K-9 Units During AM Peak as Initial Pilot
• More Rapid Response Times
Reduce Delays

Data-Driven Maintenance

• Advanced Digital Systems Tracking of All Equipment Failures
• Focused Follow-Up to Identify Root Causes
• Real-Time Revisions of Maintenance Practices to Prevent Future Reoccurrence of Failure
Reduce Delays

PATH is Committed to Meaningful & Measurable Improvement

Developing Improvement Metrics & Will Begin Quarterly Publication in September
Enhance Customer Experience

Crowding

- Active Platform Management
- Clear Protocols for Number of Passengers That Can Safely be on Platforms
- Visual Markers to Assist Monitoring
- Pilot Automated Crowd Counting Technology at Grove Street Station – 4Q 2019
- Platform Controllers at Busiest Stations During AM Rush
- Limit Passengers Passing Thru Turnstiles When Numerical Limit Reached Until Next Train Has Loaded to Ensure Platforms Remain Safe
- Modifying JSQ Turnstiles to Reduce Fare Zone Crowding
Enhance Customer Experience

New Fare Payment System: 2021/2022

- Capital Investment to Upgrade Fare Payment System
- Adopt MTA OMNY Technology
  - PATH becomes an “affiliate”
    - Financial, technical, and back office processing agreement with the MTA
    - Technology agreement with Cubic
    - Retrofit all PATH turnstiles
- Enable Mobile & Contactless Credit Cards Fare Payment
- Eliminate Need For Multiple Fare Cards
- SmartLink & Metrocard Remain Until 2023
Enhance Customer Experience

Elevate CX Function
• Place CX on Equal Footing as Operations & Capital Projects
• Establish Assistant Director of Passenger Communications & CX to Serve as Customer Advocate

Provide Transparent, Timely & Actionable Information
• Improve In-Station and On-Train Announcements
• Revise PATHAlerts
• Revamp PATH Website & Continue to Enhance RidePATH App
• Display Real-Time Next Train Arrival Info on Every PATHVision Screen
• Digital Information Kiosks at Every Station
PATH Improvement Plan

Multi-Year Capital Investment to Enhance Capacity = $1B

Reliability & CX Initiatives Total Investment Over Next 30 Months = $50M
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