



CAPITAL 
TRANSFORMATION
A Division of Capital Programs

Red Line and Orange Line Transformation Update

Angel Peña, Chief of Capital Transformation

September 29, 2022

Draft for Discussion & Policy Purposes Only

Capital Transformation | *A Holistic Approach*



Our transformation program uses an activist management approach to holistically deliver a portfolio of projects that will measurably improve the quality of service for riders. We achieve this by finding synergy and efficiency through strategic sequencing of activities, amplifying the impact of construction windows.



Green Line Transformation



Orange Line Transformation



Red Line Transformation



Future Transformation Programs >>

Levels of Transformation



Level 0



Improved Safety and State of Good Repair

Safety begins with making sure assets and infrastructure are brought to a state of good repair and kept in that condition while reducing the risk of major disruptions



Level 1



Enhanced Accessibility

Accessibility means creating an experience that all riders can equally enjoy, which includes making sure the stations and vehicles are ADA-compliant, equitable, and fully accessible.



Level 2



Replacement of Legacy Fleets

This includes the design and procurement of new vehicles and the infrastructure needed to support them



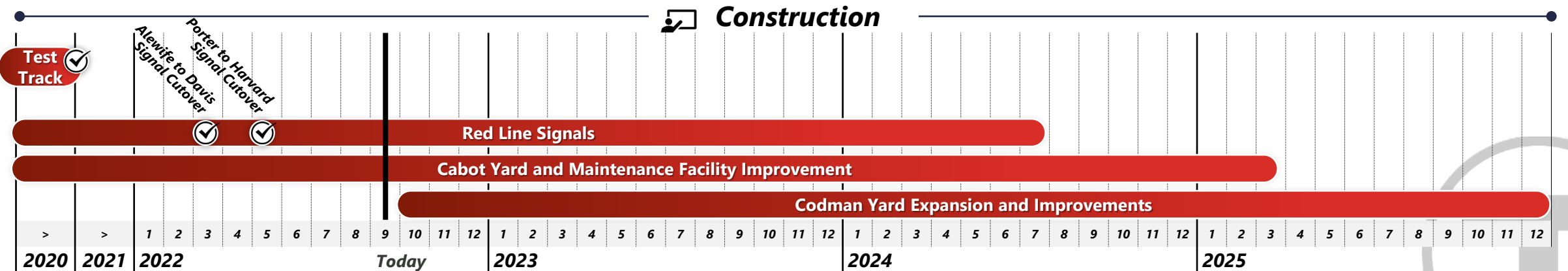
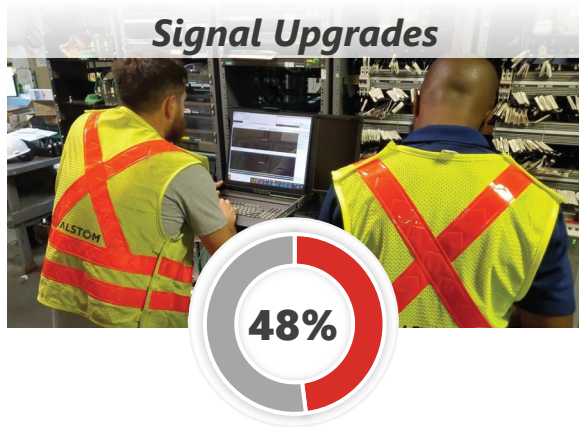
Level 3



Increased Passenger Capacity

Increasing capacity to meet future ridership requires implementing systems to provide the reliable service our riders deserve

Red Line Transformation



Orange Line Transformation



Steve Moore



Andres Achury



Ashlee Faul



Rob Craffey



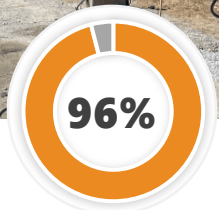
Meaghan Welch



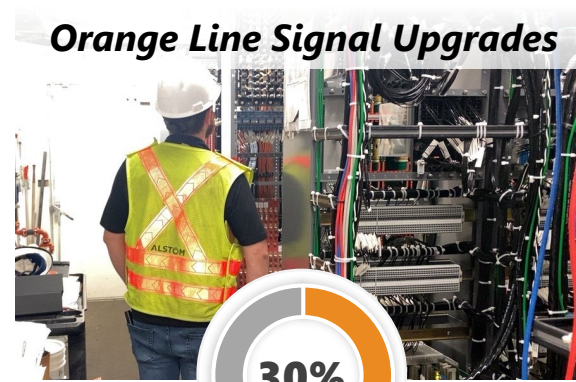
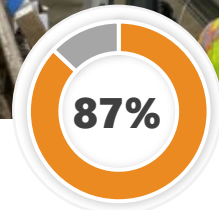
Leyla Rizkallah



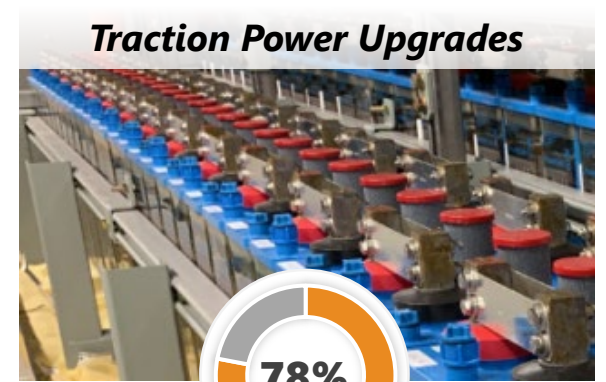
Wellington Yard



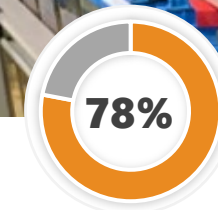
Wellington Maintenance Facility



Orange Line Signal Upgrades



Traction Power Upgrades



Construction



Orange Line Surge | by the Numbers

The entire Orange Line was closed at 9 PM on Friday, Aug. 19, 2022, to the start of service Monday, Sept. 19, 2022. The MBTA was able to complete a series of essential infrastructure projects.



14 PRIORITY PROJECTS



27 OPPORTUNITY PROJECTS



14,000 LINEAR FEET OF RAIL REPLACED



3,500 TRACK FEET REPLACED



400 COLOGNE EGGS



20 UNITS OF SPECIAL TRACKWORK

Working together within the Agency

- ✓ Bus Operations
- ✓ Capital Delivery
- ✓ Capital Support
- ✓ Capital Transformation
- ✓ The Office of the Chief Engineer
- ✓ Commuter Rail
- ✓ Construction Logistics
- ✓ Customer Experience
- ✓ Customer Technology
- ✓ Finance
- ✓ Heavy Rail Operations
- ✓ Light Rail Operations
- ✓ Maintenance of Way
- ✓ Planning, Scheduling, and Strategy
- ✓ Policy and Transit Planning
- ✓ Power
- ✓ Public Affairs
- ✓ Revenue (Parking)
- ✓ The RIDE
- ✓ Safety
- ✓ Security and Emergency Management
- ✓ Signals
- ✓ System-Wide Accessibility
- ✓ Transit Facilities Maintenance
- ✓ Transit-Oriented Development
- ✓ Transit Police
- ✓ Vehicle Engineering
- ✓ Vehicle Maintenance



11 SENIOR MANAGEMENT MEETINGS PRE-SURGE



67 SENIOR MANAGEMENT MEETINGS DURING THE SURGE



10 STAKEHOLDER FOCUS GROUPS



58 CONTRACTOR CHECK-INS



Orange Line Surge | Lessons Learned



Daily coordination and collaboration across many MBTA departments ensured transparency and allowed for quick and effective responses to challenges



Departments puts safety, quality assurance, and quality control first in order to reliably deliver work



Documents including the Surge Management Plan, Surge Playbook, and Reactivation Guide kept activities on track



Transparency and trust with internal and external stakeholders, and encouraged accountability by clearly recording and reporting progress

Next Steps | Levels of Transformation

Delivery

Improved Safety and State of Good Repair

- Orange Line Surge
- Traction Power

Increased Passenger Capacity

- Wellington Yard
- Wellington Maintenance Facilities
- Orange Line Signals

Planning

Improved Safety and State of Good Repair

- Orange Line SCADA
- Southwest Corridor Right of Way Upgrades
- Orange Line Maintenance Work
- Future Transformation Projects

Increased Passenger Capacity

- Future Transformation Projects

Vision



Improved Safety and State of Good Repair

- Red Line Signals
- Traction Power

Increased Passenger Capacity

- Codman Yard Expansion and Improvements
- Cabot Yard and Maintenance Facility Improvement

Improved Safety and State of Good Repair

- Trackwork (Alewife Crossover, Floating Slabs)
- Braintree Line Right of Way Renewal
- Red Line Core Right of Way Renewal
- Future Transformation Projects

Increased Passenger Capacity

- Ashmont
- Future Transformation Projects



Supporting Transformation



MBTA Capital Funding

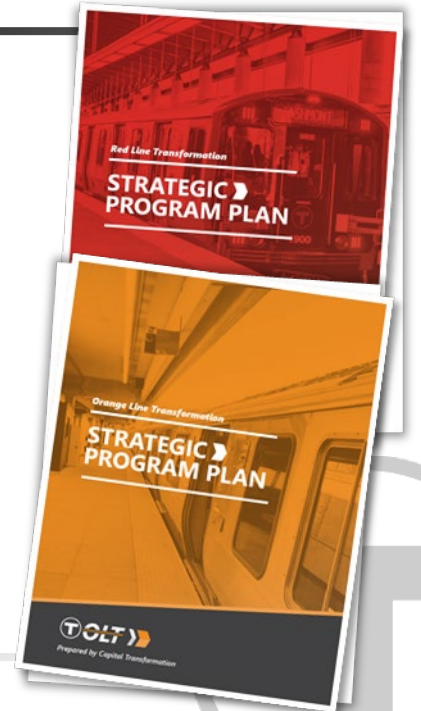
- Understanding current needs
- Preparing capital requests
- Participating in CIP process

Other Funding Programs

- Federal programs
- State programs
- Other funding

Transformation Planning

- Build on recent successes
- Unconstrained look-ahead at Red and Orange Line Transformation needs
- Includes:
 - Current funded projects
 - Future transformation projects
- Two separate plans for Red Line and Orange Line, available spring 2023





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