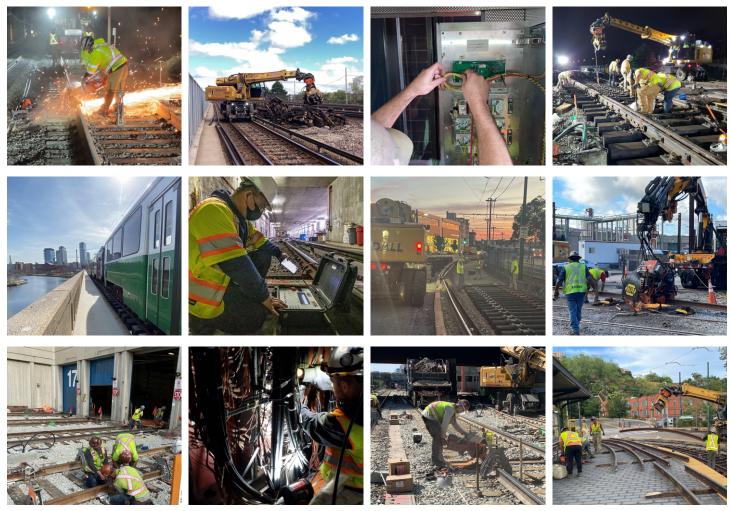


CAPITAL TRANSFORMATION
A Division of Capital Programs

2022 Year in Review





As 2022 comes to an end, we're looking back at the accomplishments the **Green Line**, **Orange Line**, and **Red Line Transformation** teams reached this year. Our teams worked diligently to progress and complete several design and construction projects.

We appreciate the cooperation and understanding of our riders and the communities we serve as we continue to work to improve the service of the Green, Orange, and Red Lines.

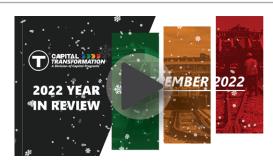
Jump to a section below







Watch a video recap of 2022







Green Line Track and Intersection Upgrades (2022)

Status: Complete

Over the summer, the GLT team completed 12-day full access closures on the **B** and **C Branches** and a 16-day full access closure on the **E Branch** to install equipment for the Green Line Train Protection System (GLTPS) and upgrade track. This fall, the team conducted 25 days of full access on the **D Branch**, separated into three separate closures, for GLTPS equipment installation and track upgrades. Throughout these closures, crews replaced over 14,000 feet of track, 10 pedestrian crossings, and installed over 200 components of GLTPS wayside equipment across all four Green Line branches.

Learn More about the Green Line Track Upgrades (2022)



Lechmere Viaduct Rehabilitation

Status: Complete

Crews rehabilitated and replaced track on the historic **Lechmere Viaduct**, which carries Green Line trains across the Charles River and into downtown Boston. These upgrades strengthened the structure of the viaduct while preserving its facade and improving the service reliability. In May 2020, the bridge was closed to support work on both the Lechmere Viaduct Rehabilitation and the **Green Line Extension (GLX)** project. Service between Science Park and Lechmere stations resumed in March, along with the opening of the GLX Union Square branch. The Medford/ Tufts branch opened for service in December.

Learn more about the Lechmere Viaduct Rehabilitation



Brookline Hills Station Accessibility Improvements

Status: Complete

In January, Brookline Hills Station reopened after the MBTA completed accessibility improvements. The team implemented these upgrades in coordination with the Town of Brookline and the **Brookline High School Expansion** project. The improvements made at Brookline Hills further progressed the overall accessibility of the D Branch and the upgrades are similar to what riders can expect from the **D Branch Station Accessibility Improvements**. Crews raised platform heights, constructed accessible crosswalks and pedestrian pathways, and improved customer experience through upgraded lighting, signage, and security measures.

<u>Learn more about the Brookline Hills Station Accessibility</u> <u>Improvements</u>





D Branch Station Accessibility Improvements

Status: In Progress

This year, the GLT team reached the 75% design milestone for the D Branch Station Accessibility Improvements project and is approaching completion of the design.

This June, the project team held a <u>virtual public meeting</u> to share the design progress for these improvements. The team continued to advance the design through the fall. A pre-construction public meeting will be held in next year to provide the public with more information on the planned improvements, the construction schedule, and mitigation strategies.

Construction on <u>Waban</u>, <u>Eliot</u>, <u>Chestnut Hill</u>, and <u>Beaconsfield</u> Stations is scheduled to begin next year. These improvements will make the D Branch the first fully accessible branch on the Green Line.

Learn more about the D Branch Station Accessibility Improvements



Newton Highlands Station Accessibility Improvements

Status: In Progress

The Newton Highlands Station Accessibility Improvements project approached design completion. Our team has continued to coordinate with the City of Newton, the Newton Commission on Disability, and the Newton Historical Commission to progress the design plans.

The project team will hold a public meeting next year to present the design to the community and to discuss the next steps moving forward as we approach construction.



Symphony Station Accessibility Improvements

Status: In Progress

This year, the GLT team approached completion of the design for the Symphony Station Accessibility Improvements project and began preparations for utility relocation work.

In 2023, utility relocation work will begin as the area is prepared for future construction of the elevators that will provide access to Symphony Station.

Learn more about Symphony Station Accessibility Improvements























Orange Line 30 Day Surge

Status: Completed

From August 19 to September 18, service shut down from Oak Grove to Forest Hills to give crews full access to complete critical safety and infrastructure upgrades across the entire Orange Line and address several safety directives brought forth by the Federal Transit Administration (FTA).

Over the course of these 30 days, teams were able to **complete five years of work**, improving track and signal infrastructure, station amenities, and new vehicle readiness. Throughout the surge, crews replaced over 3,500 feet of track, 14,000 feet of rail, 20 units of special trackwork, 48,000 feet of signal cable, and installed Cologne Eggs near Tufts Medical Center Station. Teams were able to complete two successful cutovers from the old signal system to the new system and Oak Grove and Malden Center. Additionally, service returned with all new Orange Line vehicles.

Learn more about the Orange Line 30-Day Surge



14,000 Linear Feet of Rail Replaced



3,500 Feet of Track Replaced



20 Units of Special Trackwork Renewed



Signal System Upgrades
Oak Grove & Malden



72 New Orange Line Trains Ready



400 Cologne Egg Rail Fasteners Replaced



2,836 Railroad Ties Replaced



48,000 Linear Feet of Signal Cable Placed



27 Additional projects were advanced during the Orange Line Surge







Wellington Yard and Maintenance Facility

Status: Substantially Complete

Upgrades to Wellington Yard and Maintenance Facility continue to increase service capacity, replace infrastructure, enhance safety, and deliver safer, cleaner operations to all riders.

Crews have substantially completed the trackwork in the yard and have addressed all final punch list items. In the maintenance facility, crews have completed track replacement and modernized the vehicle facility to improve vehicle maintenance and reduce downtime.

Learn more about Wellington Yard and Maintenance Facility



Orange Line Traction Power Substation Upgrades

Status: In Progress

Crews are currently working at Oak Grove to upgrade the traction power substation with new facilities and equipment, improving remote operation of the substation.

Crews are installing a new communication circuit, and engineers began testing new software for the substations. The new software will integrate with the MBTA's existing communications system, and the new circuit will allow engineers to perform live testing of this software.

Learn more about Orange Line Traction Power Substation Upgrades



Orange Line Signal Upgrades

Status: In Progress

The signal system is being modernized and replaced with new, digital infrastructure that will improve the service reliability, renew the lifespan for the entire system, increasing capacity through reduced headways and resulting in a more efficient communications system.

This year, crews completed two successful cutovers to the new system at Oak Grove and Malden Center Stations. These cutovers were completed during the <u>30-day Orange Line Surge</u>.

Crews are continuing to install and test new signal infrastructure at Sullivan Square and Community College.

Learn more about Orange Line Signal Upgrades







Red Line Signal Upgrades

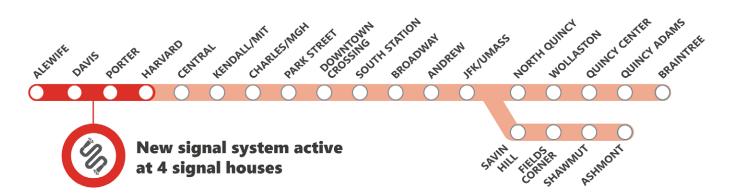
Status: In Progress

The signal system is being modernized and replaced with new, digital infrastructure that will improve the service reliability, renew the lifespan for the entire system, increase capacity through reduced headways, and result in a more efficient communications system.

This year, crews completed four successful system installation, testing, and cutovers to the new system at Alewife, Davis, Porter, and Harvard stations.

Crews are actively testing signal infrastructure at Central, Park, Downtown Crossing, Quincy Adams, Davis, Porter, and Ashmont Stations.

Learn more about Red Line Signal Upgrades









Cabot Yard and Maintenance Facility

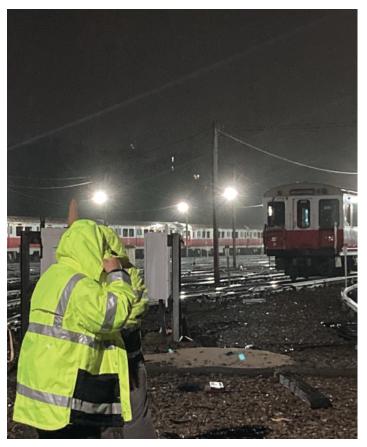
Status: In Progress

Updates continue at the Cabot Yard and Vehicle Maintenance Facility as well to improve safety, reliability, and service capacity by enhancing our maintenance operations.

At Cabot Yard, crews are working on drainage and duct banks, and are returning upgraded tracks to regular operation. To allow continued operation of the yard, only two tracks are taken out of service at a time.

At the Cabot Maintenance Facility, crews continue work on the installation of HVAC, electrical, and roofing upgrades in preparation for winter weather.

Learn more about Cabot Yard and Maintenance Facility



Codman Yard Expansion and Improvements

Status: In Progress

This past spring, the RLT team completed the final design for the Codman Yard Expansion and Improvements and the team held two public meetings: one in March to discuss the final design plans, and one pre-construction meeting in October to discuss the construction plans and project schedule. We have met with several community groups in the area throughout this process and will continue to do so as the project progresses.

The improvements made to Codman Yard will benefit all Red Line riders and the members of the surrounding community. The project team was given the notice to proceed in November. Mobilization has commenced and construction is scheduled to begin in early 2023.

<u>Learn more about Codman Yard Expansion and Improvements</u>

