

# Orange Line 30-Day Surge

## Week 3 Progress Update

August 19 - September 18, 2022

Prepared by Capital Transformation (CT)

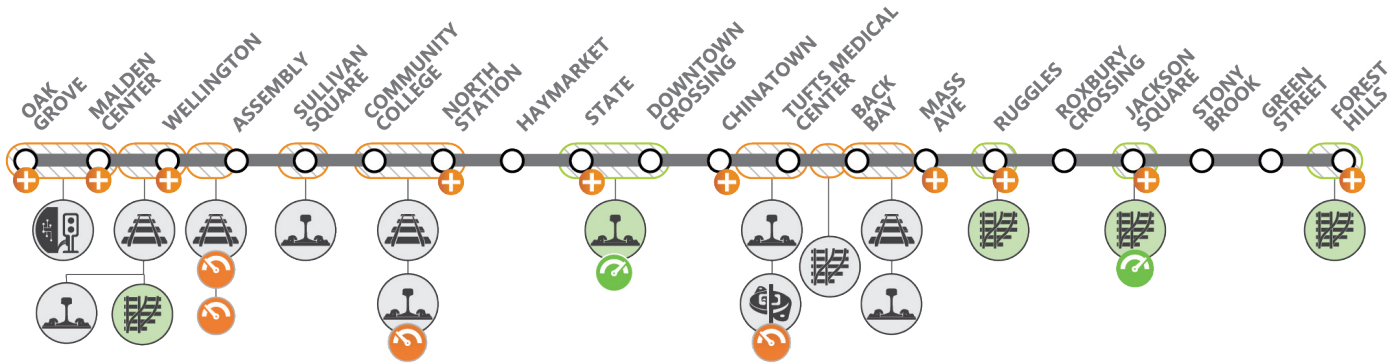


On-Schedule | Friday, September 9, 2022



### After Week 3, we are on schedule to resume service on September 19

The MBTA has completed the third week of the Orange Line Surge, a collaborative effort that focuses on important safety, service, and reliability upgrades across the entire line. These upgrades, as well as their on-time completion, wouldn't be possible without the exemplary efforts by all teams working diligently to drive progress. The work we've done during this Surge will provide riders with improvements that lay the groundwork for further upgrades to elevate service to the high level that our riders deserve



Trackwork: New Rail, Ballast & Ties	New Rail Replacement	Special Trackwork: Turnout Renewal*	Cologne Egg Rail Fasteners	Signal System Upgrades	Work Activity to Address Slow Zone	Amplifying Results
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**Orange Line Surge:** Accelerating important reliability upgrades during a 30-day surge of the entire line from 9 PM on August 19 through September 18. The surge work focuses on track, rail, and signal system upgrades that will address slow zones across the Orange Line

- This Week |** Work that addressed a second slow zone was completed at the Jackson Square Crossover. Crews also made progress on rail and tie replacement near Back Bay and Assembly Stations, and on tie replacements near Community College. Signals work advanced at Oak Grove and Malden Center, including testing with one of the new Orange Line trains yesterday

\*Schedule subject to change with weather conditions and in accordance with public health directives  
Project percentages represent the value of the installed work

14,000 Linear Feet of Rail Replacement



52% Completed

19 Units of Special Track Renewal\*



98% Completed

Removal of 6 Slow Zones



2 of 6 Completed

3,500 Feet of Track Replacement



77% Completed

\*Includes both total replacement and partial component replacement



Trackwork Jackson Square



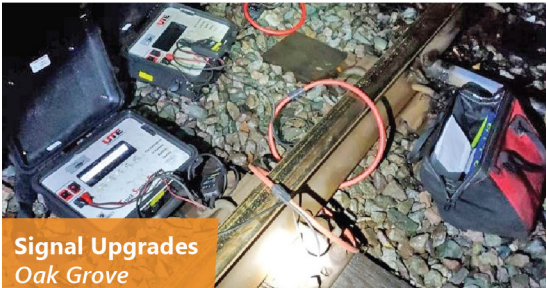
Railwork Wellington



Railwork Sullivan

**This Week:**

- At Wellington, crews completed special trackwork, including switch installation, started making final track adjustments including welding and grinding, installed much of the third rail, which provides electric power to Orange Line trains, and continued installation of signal components



Signal Upgrades Oak Grove



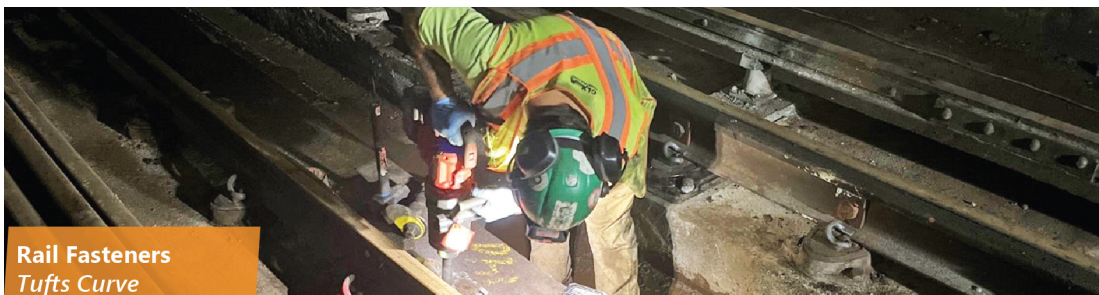
Test Train Malden Station

Signal Upgrades Oak Grove & Malden



69% Completed

- Tie replacement continued across Dana Bridge and through Assembly and Sullivan areas. Crews have replaced over 1,800 ties and continued toward the North Station portal
- Cologne egg hardware installations and removals at Tufts Curve were ongoing on the northbound and southbound tracks



Rail Fasteners Tufts Curve

Replacing Cologne Egg Rail Fasteners



60% Completed

- **Lookahead** | Near Wellington, crews will make final adjustments on track and signal installation and perform signal testing, inspection, and cleanup. Near Tufts, crews will advance Cologne egg hardware installations and removals. Tie installation, track surfacing, track alignment, and tamping will continue from Dana Bridge to the Sullivan Flyover, which carries the Orange Line over the Commuter Rail tracks. Near Sullivan and North Station, track and rail installation will begin. Signal work continues at Oak Grove and Malden including signal test trains, interface testing, and final testing prior to return to service



**Did you know?**

Strings of rail are welded together to create a single long ribbon of rail and reduce the number of individual rail joints. A string of continuous welded rail (CWR) can be as long as 1,600 feet. This CWR results in reduced maintenance and a smoother ride. De-stressing is the act of heating up CWR during installation to prevent track buckling in hot summer temperatures

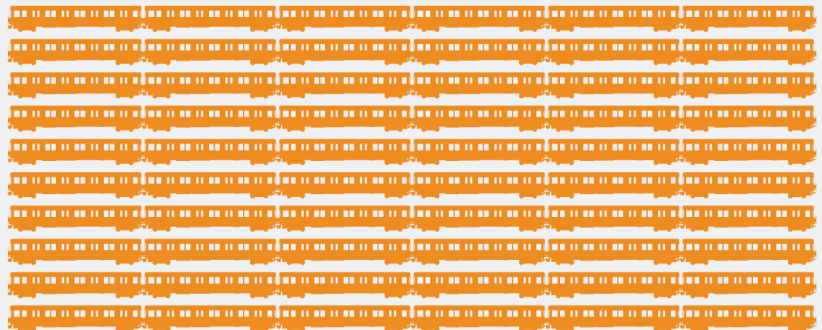


**New Orange Line Trains Readiness**

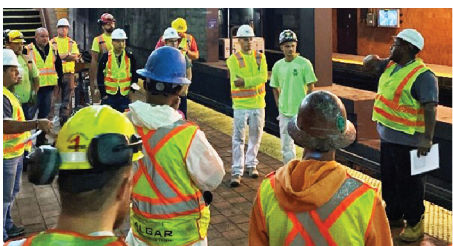
During the Surge, 60 new Orange Line cars are being prepped for when Orange Line service is restored. Riders will experience better service on an Orange Line fleet that is predominately new cars. This week, mechanics and engineers completed vehicle readiness of 60 cars (six cars make up a train), enough to cover peak morning and afternoon service



**60 of 60  
Cars Ready**



**Safety First**










**Daily safety briefings continue to be held at every shift** change multiple times a day at work sites across the Orange Line, providing each crew member with crucial, up-to-date safety information every time they enter a work zone

*\*Schedule subject to change with weather conditions and in accordance with public health directives  
Project percentages represent the value of the installed work*

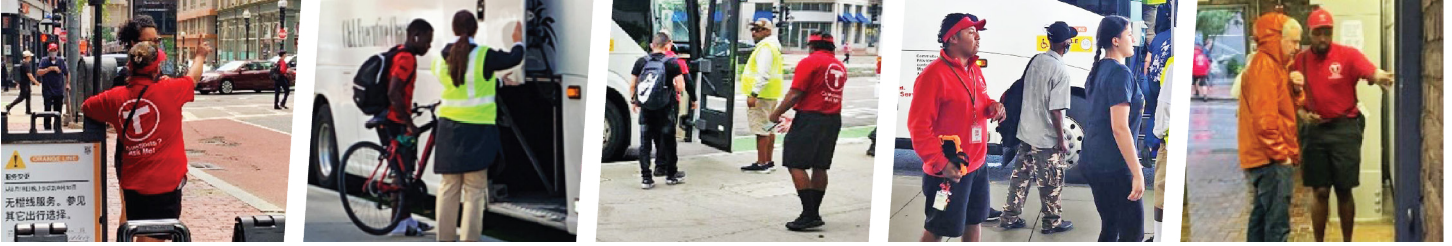
## Amplifying Results



The MBTA is leveraging work windows that do not impede the priority work to achieve other planned repairs and upgrades. Learn about other work we completed to amplify results in our progress updates from [Week 1](#) and [Week 2](#). This week, the following efforts were completed:

-  **Wellington Power Vault:** Workers installed new ductbanks and a new traction power box for third rail power, allowing the power cables to be relocated to a more resilient underground routing so vehicle power is delivered more reliably in the Wellington area
-  **Massachusetts Avenue to Forest Hills Retaining Wall Inspections:** These inspections of retaining walls' structural condition are completed for system safety and to provide information to help develop plans and engineering solutions to facilitate future repairs
-  **North Station to State Conduit Inspection:** This inspection confirmed the feasibility of installing new electrical cables to provide emergency power improvements in support of planned upgrades at North Station
-  **Ruggles Ductbank Inspection:** In support of [Ruggles Station Improvements](#) Phase II work, ground penetrating radar was utilized and additional utility inspections performed to inform design
-  **Jackson Square Expansion Joint Inspection:** Work included performing an inspection of the location and extent of leakage taking place at the tunnel at the station, providing information in order to further develop plans and engineering solutions to repair the leaks in the future
-  **Ruggles to Forest Hills Transit Bridge Inspections:** These inspections examined the structural condition of transit bridges from Ruggles to Forest Hills. These were completed for system safety and will provide information in order to further develop plans and engineering solutions to facilitate necessary repairs in the future
-  **Sullivan Square Station Canopies:** The existing roof over the canopies was removed and the roof replaced, including the roof drainage, flashing, and roof accessories, protecting riders from the elements

## Rider Experience



**Over the third week of the Surge**, we have listened to our riders, learned from their experiences, and made necessary wayfinding and service adjustments to our alternative service

- **Signage has been placed in and around stations to guide passengers** on how to get to these new stops and continues to be placed each morning to make sure riders can see where to go. Signage in foreign languages has been placed in key locations
- **Check out [mbta.com/bbt2022](https://www.mbta.com/bbt2022)** for more information on what to expect throughout the closure and how to navigate the service diversions
- **The MBTA has created the Rider's Guide to Planning Ahead**, a tool to provide riders with available travel options and information to inform travel decisions. You can use the trip planner for more personalized route options to get you where you need to go. Download the [Rider's Guide to Planning Ahead](#) in your preferred language: [English](#), [Español](#), [Português](#), [漢語](#), [Français](#), [Kreyòl Ayisyen](#), [Af Soomali](#)

## Alternative Service



**Alternative service options include free**, accessible shuttle bus service and enhanced Commuter Rail service, including additional service added this week on the Franklin and Providence Lines at Forest Hills. As students have returned to school, we've also worked with municipalities to provide increased services to meet increased ridership

- **For more information**, connect with the T on Twitter [@MBTA](#), #TAccess, #RideSafer, #BuildingABetterT, Facebook [/TheMBTA](#), or Instagram [@theMBTA](#). You can also submit questions and comments to [OLT@mbta.com](mailto:OLT@mbta.com)

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**Orange Line  
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**Red Line  
Transformation**