



Track Improvement Program Update

Jan. 25, 2024

- Ryan Jordan, Deputy Chief, Construction Field Services
- Erica Baker, Sr. Dir. CEX
- Katy Zazzera, Dep. Dir. CEX



Track Improvement Program 2023-2024 | Timeline

Alternative Service Limits	Speed Restrictions	Modeled Time Savings (mins)	Diversion Duration (days)	2023		2024												
				NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
A	Harvard to Central	<input checked="" type="checkbox"/>	1	1.7	Wknd													
B	JFK/UMass to Park St	<input checked="" type="checkbox"/>	6	2.7	EA/Wknd													
A	Oak Grove to North Station	<input checked="" type="checkbox"/>	2	1.9	EA/Wknd													
A	North Station to Kenmore, Heath, Babcock	<input checked="" type="checkbox"/>	10	4.3	9													
B	Riverside to Kenmore	<input checked="" type="checkbox"/>	20	9.2	10													
1	North Station to Lechmere		2	1.8	14													
2	North Station to Kenmore, Heath, Babcock		15	8.7	21													
3	Copley to St. Mary's, Babcock, Brookline Hills		9	4.2	18													
4	Boston College to Kenmore		7	1.7	10													
5	Cleveland Circle to St. Mary's		1	0.1	6													
1	Oak Grove to North Station		13	1.7	6													
2	Wellington to North Station		5	4.3	9													
3	Sullivan to Back Bay		6	2.3	10													
4	Haymarket to Jackson Sq		2	1.3	4													
5	Back Bay to Forest Hills		15	4.8	11													
1	Alewife to Harvard		9	6.5	9													
2	Alewife to Kendall		9	4.0	16													
3	Harvard to Park		3	0.8	6													
4	Kendall/MIT to Broadway		8	3.7	6													
5	Park to JFK/UMass		8	2.6	8													
6	Broadway to North Quincy		4	2.7	6													
7	JFK/UMass to Braintree		22	9.1	16													
1	Airport to Wonderland		12	5.3	12													
2	Bowdoin to Airport		2	0.7	Night Orders													

191 restrictions Lifted
86.1 minutes saved
207 days of work

Today Jan 25

Data as of December 11, 2023

Track Improvement Program | Completed Work (Surge)

Green Line: Riverside to Kenmore, Dec. 11-20

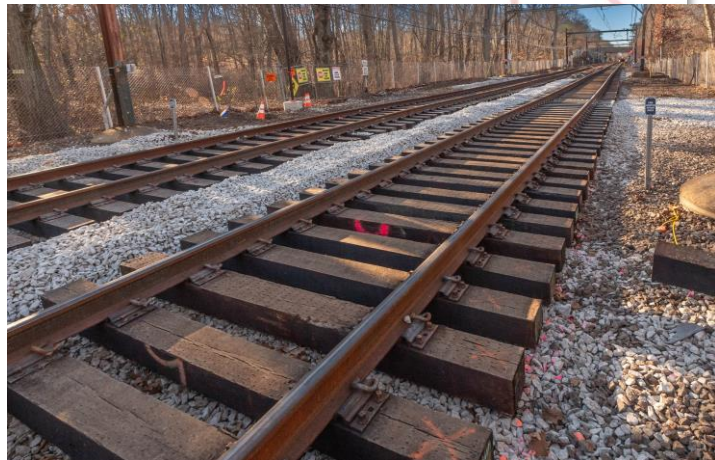


Metrics

- ✓ 22 Speed Restrictions cleared (20 planned).
- ✓ ~4 min travel time improved.
- ✓ 2,767 ties replaced.
- ✓ 4,757 ft rail replaced.
- ✓ 600 ft full depth track repairs
- ✓ 48,840 ft track resurfaced & tamped - smoother ride.
- ✓ 8,918 ft rail thermal adjustment.
- ✓ 36 thermite welds.

Piggyback Work

- ✓ Removed speed restrictions and resumed line speed on Lechmere Viaduct between Science Park & Lechmere, both directions.
- ✓ Dozens of switch certifications completed, four switch heaters repaired, 11 ground tests performed, 50 track circuits replaced.
- ✓ Catenary EB & WB replaced near Fenway Station.
- ✓ Riverside operators' roof replaced.

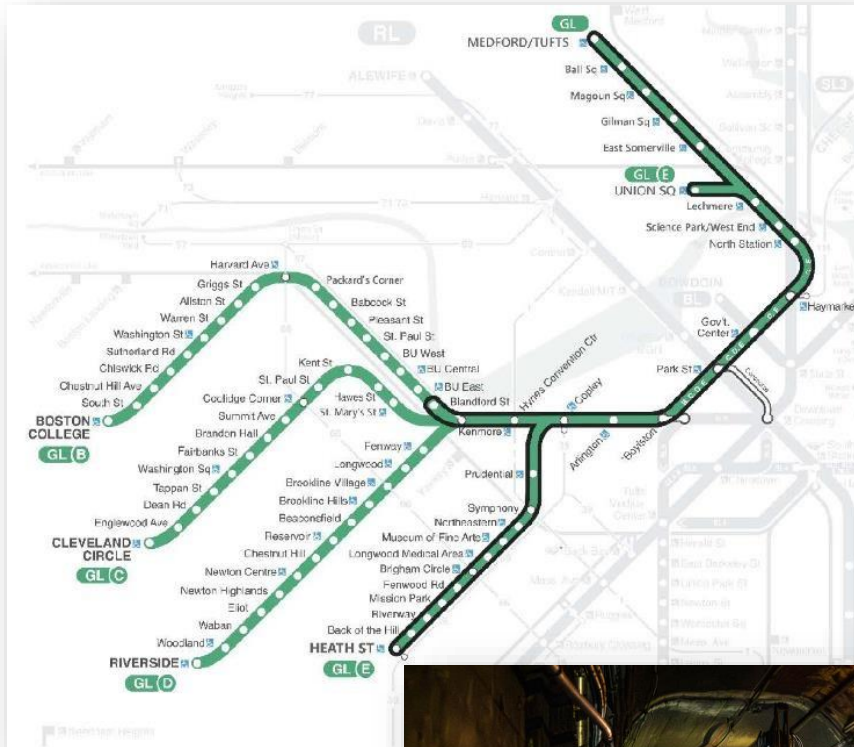


GL D Branch 12.12.2023



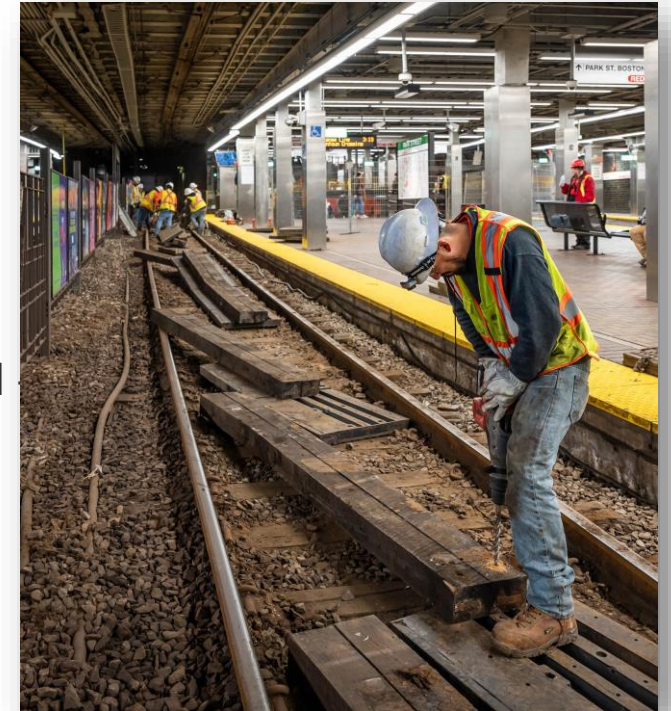
Track Improvement Program | Completed Work (1st portion of January Surge)

GL Central Tunnel, and B North Stn - Babcock Street, E North Stn - Heath Street, C & D North Stn - Kenmore Stn, Jan 3-12, 2024

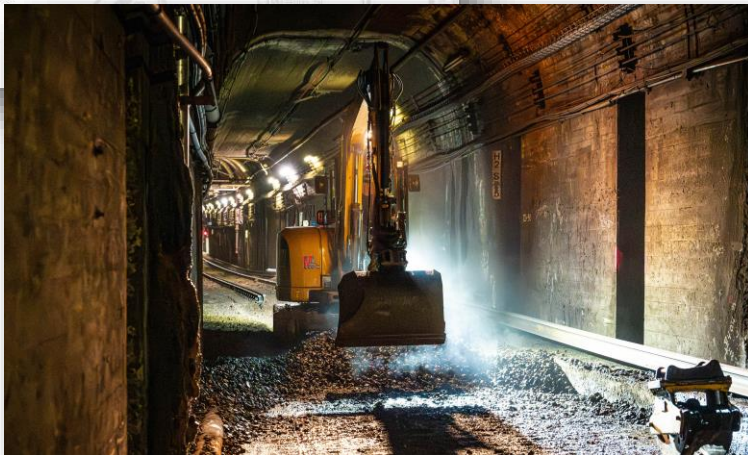


Metrics

- ✓ 4 Speed Restrictions cleared.
- ✓ NA travel time improved.
- ✓ 387 ties replaced.
- ✓ 3,047 ft rail replaced.
- ✓ 400 ft full depth track repairs
- ✓ 1330 ft track resurfaced & tamped smoother ride.
- ✓ 2 Switch Replacements/Rehabilitations
- ✓ 15 thermite welds.



Boylston to Park 01.03.2024



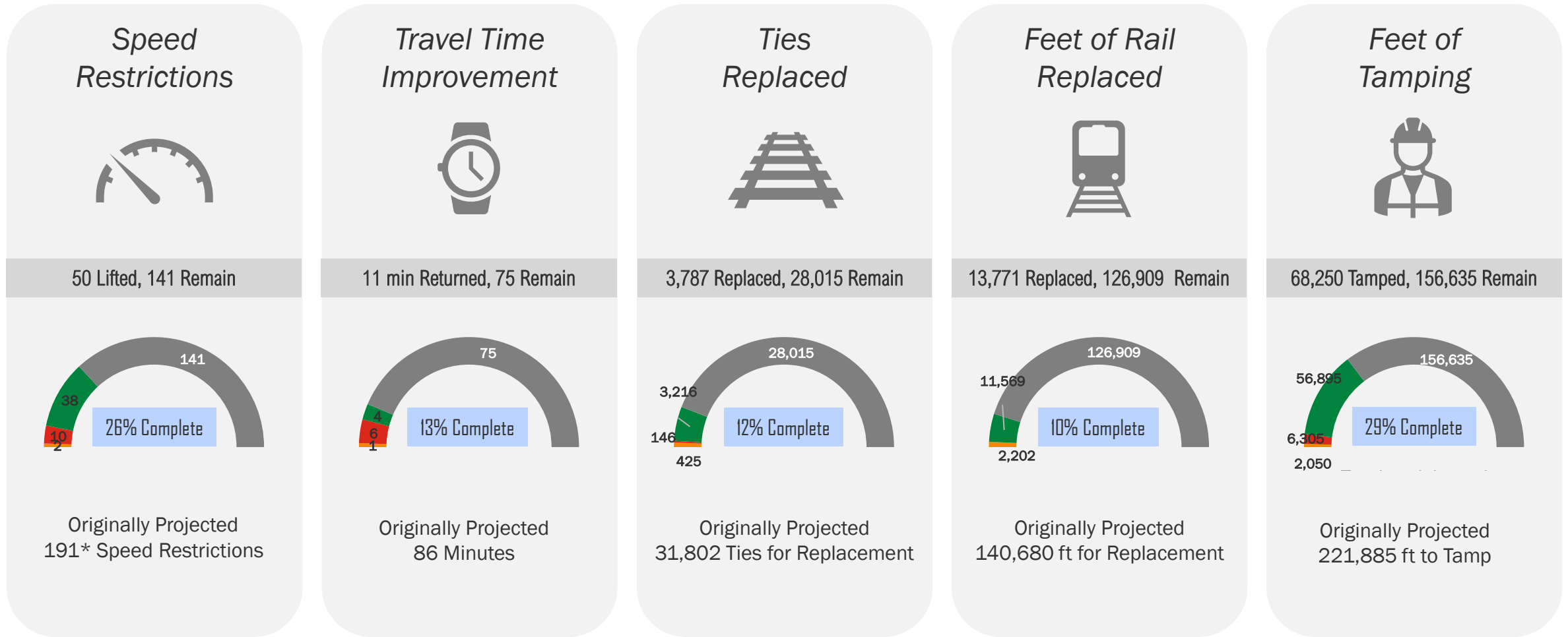
Boylston to Park 01.04.2024

Piggyback Work

- ✓ Boylston & Copley roof structural repairs
- ✓ Haymarket to North Stn tunnel inspections
- ✓ Hynes stair repairs and replacements and handrails/benches restored
- ✓ New Arlington elevator sump pump installed



Progress Metrics



Projections as of Nov. 6, 2023, Track Improvement Plan

■ Orange Line
 ■ Red Line
 ■ Blue Line
 ■ Green Line
 ■ Remaining

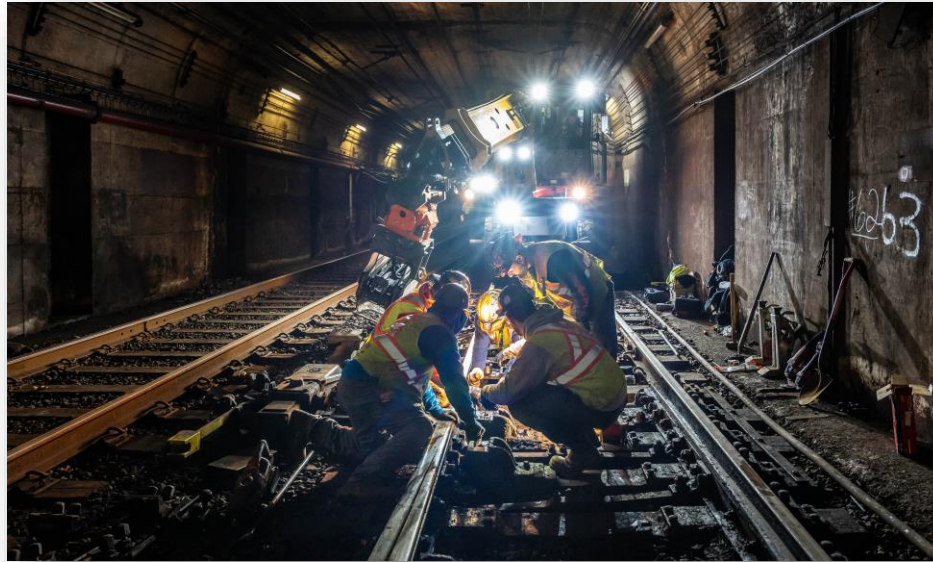
Data date: January 19, 2024

Track Improvement Program | Current Work (2nd portion of January Surge)

GL Central Tunnel & B North Stn - Babcock Street, E North Stn - Heath Street, C & D North Stn - Kenmore Stn, Jan 16-28, 2024

Planned Work:

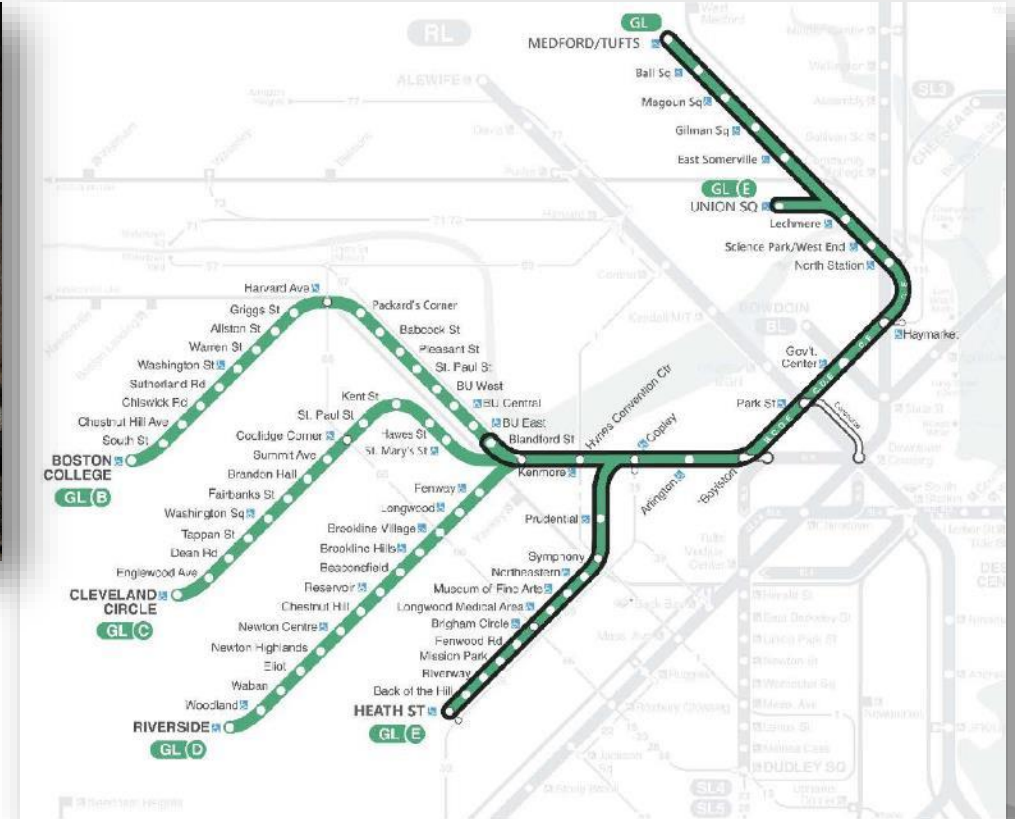
Address 12 speed restrictions due to narrow/variable gauge, alignment, sidewear, deflection, bad ties, worn stock, cologue egg condition - including spot repairs, tie replacements, rail replacement, and ballast replacement.



Copley Square 01.18.2024

Proposed Piggyback Work:

Tunnel & bridge inspection, substation maintenance/electrical repairs, floor replacement, stair repairs, tunnel leak repairs, station cleaning/painting, signal upgrades, chipping/routing conduit, critical power system repairs, Park St comm room improvements.



Track Improvement Program | *Upcoming Work*

RL Alewife to Harvard, Feb. 5 – 14, 2024

Planned Work:

- Address 8 speed restrictions and approximate time savings of 6.5 minutes.
- Replace special trackwork, ~1 mile of track, 6500 new brackets/spacers, 28 primary floating slabs, 60 secondary slabs, and tamping and aligning over a mile of track.
- The signal system will receive critical software upgrades to all AF track circuit modules and perform necessary testing.

Piggyback Work Proposed:

- Alewife, Davis, and Porter stations, maintenance and repairs will be performed such as paint, bench repairs, concrete, repairs, floor repairs, hand-rail replacement, ceiling panel removals, waste receptacle replacement, plumbing & HVAC maintenance and inspection activities.

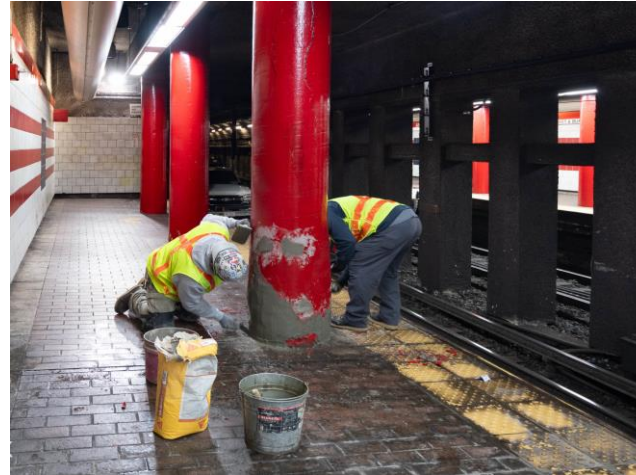
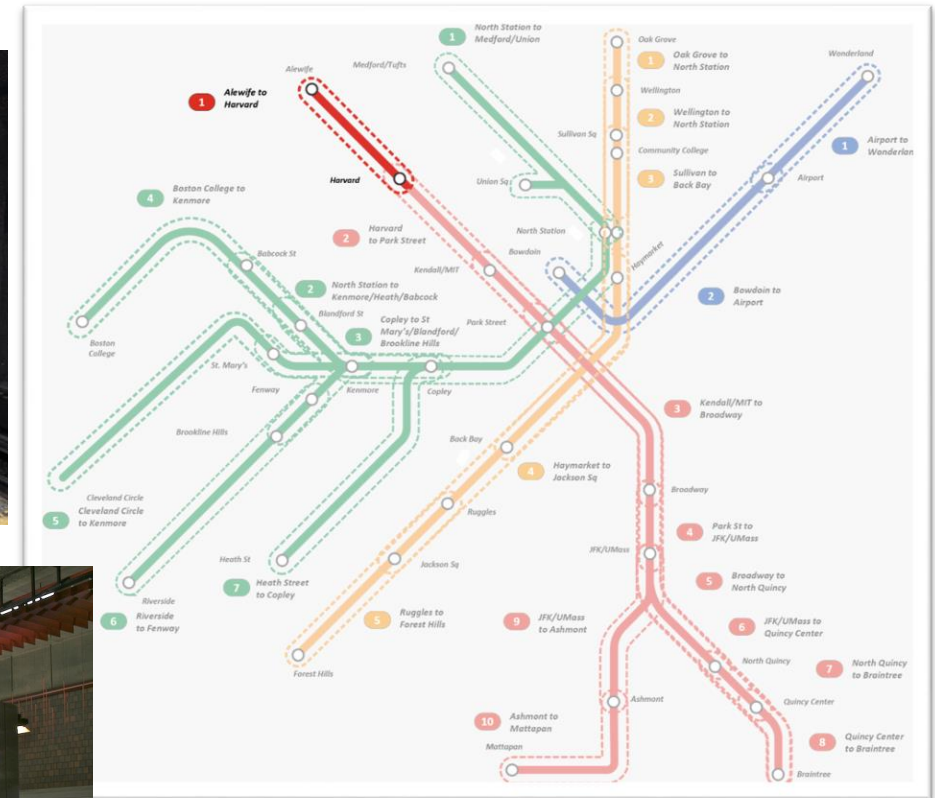


Photo courtesy of Jeremiah Cox/SubwayNut.com



Track Improvement Program | Upcoming Work

GL Copley to Babcock, Cleveland Circle and Brookline Hills, Feb. 20 – Mar 8, 2024

Planned Work:

- Address 11 speed restrictions and approximate time savings of 4 minutes.
- Replace special trackwork, more than 1 mile of track, ~1200 ties, and tamping and aligning about 2 miles of track.

Piggyback Work Proposed:

- At the stations, maintenance and repairs will be performed such as paint, bench repairs, concrete, repairs, floor repairs, stair tread replacement, hand-rail replacement, ceiling panel removals, waste receptacle replacement, plumbing & HVAC maintenance and inspection activities.

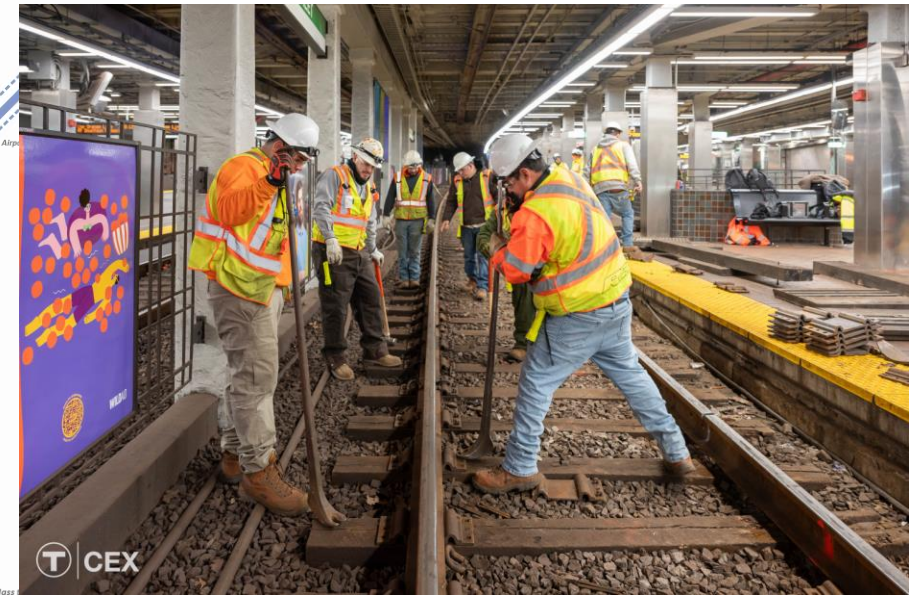
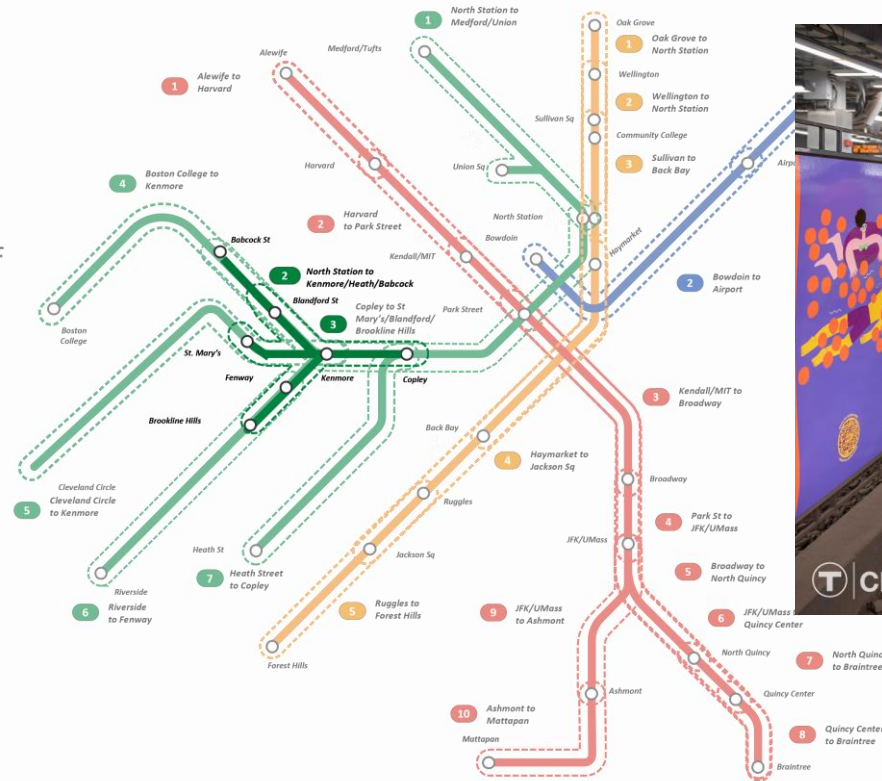


Photo courtesy of Jeremiah Cox/SubwayNut.com





The cover page for the Track Improvement Program 2023-2024 features a large photograph of construction workers in a tunnel. The workers are wearing safety gear and are working on the tracks. The text on the page includes the MBTA logo (RL, OL, BL, GL, ML), the title "Track Improvement Program 2023-2024", and the names of the GM & CEO (Phil Eng) and Chief Engineer (Sam Zhou). A small MBTA logo is also present in the bottom right corner of the image area.

1

Draft for Discussion & Policy Purposes Only

<https://www.mbta.com/trackprogram>

<https://www.mbta.com/performance-metrics/speed-restrictions>



Upcoming Community Engagement Events | *Calendar*

Open Houses

Thu., 1/25/2024, 6 – 7:30pm, Cristo Rey High School

Wed., 2/21/2024, 6:30 – 8pm, Zoom

Thu., 3/7/2024, 6:30 – 8pm, Zoom

Thu., 4/11/2024, 6 – 7:30pm, Boston Public Library

Tue., 5/14/2024, 6 – 7:30pm, Mattapan Public Library

Mon., 8/19/2024, 6 – 7:30pm, English High School

Tue., 9/17/2024, 6:30 – 8pm, Zoom

Station Pop-ups

Friday, 2/2/2024, 6:30 – 8pm, Alewife

Saturday, 3/2/2024, 6:30 – 8pm, Airport Station

Monday, 6/24/2024, 6:30 – 8pm, Davis Square Station

Tuesday, 7/23/2024, 6:30 – 8pm, Malden Center Station

Interpretation services will be made available in American Sign Language, Haitian Creole, Spanish, Vietnamese, Chinese, and Cape Verdean Creole. Additional languages are available upon request.



Erica Baker

Senior Director Customer Marketing, Customer and Employee Experience

Kathryn Zazzera

Deputy Director Capital Coordination, Customer and Employee Experience

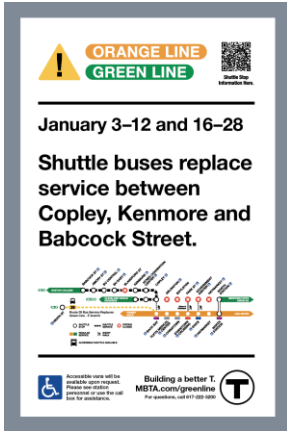


- **T alerts email digest**
- **Physical and digital in-station signage**
- **Riders' guides**
- **Transit Ambassadors**
- **Social media content**
- **In-station and on-vehicle audio announcements**

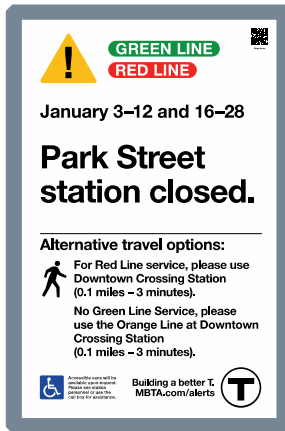


MBTA Diversion Communications | Communicating to Riders in Transit

Station Advisory



Alternative Service



Shuttle Directional Sign



Pre-fare screens in-station



E-ink



Information kiosks outside of stations



Triptychs In-station

DUP screens outside of stations



Countdown clocks




MBTA Diversion Communications | Improvements to Navigation

Permanent breadcrumbs.




MBTA Diversion Communications | Communicating GL Surge to Riders



ORANGE LINE


GREEN LINE




Shuttle Stop Information Here.

January 3–12 and 16–28


Orange Line replaces Green Line service between North Station and Copley/Back Bay.






Accessible vans will be available upon request. Please see station personnel or use the call box for assistance.

Building a better T.
MBTA.com/greenline
 For questions, call 617-222-3200






MBTA @MBTA · Jan 14

From January 16-28, we're diverting sections of the Green Line for #BuildingABetterT. We'll keep riders moving with alternate service options, like:


- Free accessible shuttles
- Orange Line
- Bus routes
- @MBTA_CR

Plan ahead and find your route: mbta.com/GreenLine




Service Change
Shuttles to Back Bay via Kenmore

BOARD HERE





GREEN LINE




January 3–12 and 16–28

Copley Station Closed.


Alternative travel options:


-  Shuttle Bus Service
-  Orange Line Back Bay Station (0.3 miles – 7 minute walk)



Accessible vans will be available upon request. Please see station personnel or use the call box for assistance.


Building a better T.
MBTA.com/greenline
 For questions, call 617-222-3200






ORANGE LINE


GREEN LINE



January 3–12 and 16–28


Bus route 39 replaces service between Prudential/Back Bay and Heath Street.






Accessible vans will be available upon request. Please see station personnel or use the call box for assistance.

Building a better T.
MBTA.com/greenline
 For questions, call 617-222-3200





INTERNAL USE ONLY

GREEN LINE

Central Tunnel Work: No Service North Station to Babcock Street (B), Kenmore (C,D), and Heath Street (E).

To accommodate tunnel work as well as track repair, the following service changes will occur from January 3–12 and 16–28. There will be normal service for MLK weekend.




Shuttles will replace service between Copley, Hynes Convention Center, Kenmore, and Babcock Street. Shuttles will use the following stop locations:

	EASTBOUND DIRECTION	WESTBOUND DIRECTION
Babcock St	1010 Commonwealth Ave (Commonwealth Ave @ Babcock St)	
Amory St	940 Commonwealth Ave (Commonwealth Ave @ Pleasant St)	899 Commonwealth Ave (Commonwealth Ave @ Back St)
BU Central	728 Commonwealth Ave (Commonwealth Ave @ St. Mary's St)	728 Commonwealth Ave (Commonwealth Ave @ St. Mary's St)
BU East	610 Commonwealth Ave	675 Commonwealth Ave (Commonwealth Ave @ Granby St)
Blandford	CLOSED	CLOSED
Kenmore	512 Commonwealth Ave	497 Commonwealth Ave (Commonwealth Ave @ Kenmore St)
Hynes Convention	382 Commonwealth Ave (Commonwealth Ave @ Massachusetts Ave)	355 Commonwealth Ave (Commonwealth Ave @ Massachusetts Ave)
Copley/Back Bay	Shuart St @ Trinity Place	Shuart St @ Dartmouth St


Green Line Extension Work: No Service Medford/Tufts and Union Sq to North Station


January 6–7 (all weekend), 8–11 (nights starting at 8:45), 16–18 (nights starting at 8:45), 20–21 (all weekend), and 22–25 (nights starting at 8:45)




Shuttles will replace service between Medford/Tufts and North Station. There will be no service to Union Square. Shuttles will use the following locations:

	NORTHBOUND DIRECTION	SOUTHBOUND DIRECTION
Medford/Tufts		(College Ave @ Boston Ave)
Ball Sq	Ball Square Station (Boston Ave @ Broadway)	Ball Square Station (Boston Ave @ Broadway)
Magoun Sq	525 Medford St (Medford St @ Broadway)	532 Medford St (Medford St @ Broadway)
Gilman Sq	Medford St @ School St	Medford St @ School St
East Somerville	McGrath Hwy @ Alton St	Medford St @ Washington St
Lechmere	Lechmere Station Busway	Lechmere Station Busway
Science Park/West End	200 Nashua St (Nashua St @ Leverett Cir)	(Marth Rd @ Amy Ct)
North Station	(Nashua St @ Red Auerbach Way)	

Building a better T. 



RED LINE








Shuttle Stop Information Here.


February 5–14, 2024

Shuttle buses replace Red Line service all day between Alewife and Harvard.


Shuttle service will extend to Park St after 8:45 PM.



 SHUTTLE STOP
  SHUTTLE SERVICE
  SHUTTLE SERVICE AFTER 8:45 PM
  REGULAR SERVICE

 Accessible vans will be available upon request. Please see station personnel or use the call box for assistance.

Building a better T.
[MBTA.com/redline](https://www.mbta.com/redline)
 For questions, call 617-222-3200




T

INTERNAL USE ONLY

To accommodate track repair and additional work, the following service changes will occur **February 5 to 14.**

RED LINE
 Free shuttles will replace service between **Alewife to Harvard.**
 After 8:45 PM, the shuttle will extend to **Park St.**




○ SHUTTLE STOP ■ SHUTTLE SERVICE - - - SHUTTLE SERVICE AFTER 8:45 PM ■ REGULAR SERVICE

Shuttles will use the following stops:

	Northbound Direction	Southbound Direction
Alewife	–	Alewife Station
Davis Square	Davis Station Busway	Holland St @ Dover St
Porter Square	Mass Ave @ Porter Station (1879 Mass Ave)	Mass Ave @ Upland Rd (1876 Mass Ave)
Harvard	Mass Ave @ Holyoke St (-1279 Mass Ave)	After 8:45 PM - Brattle St @ Palmer St (13 Brattle St)
Central	Mass Ave @ Essex St (625 Mass Ave)	Mass Ave @ Pearl St (598 Mass Ave)
Kendall/MIT	Main St @ Kendall Station (309 Main St)	Main St @ Hayward St (292 Main St)
Charles/MGH	325 Cambridge St	Cambridge St @ Lindall Place (326 Cambridge St)
Park Street	Tremont St @ Hamilton Pl (113 Tremont St)	–

Alternative service options include the commuter rail, which will be free between Porter and North Station.

Building a better T.





- **TSTOP and TCOMMS**
- **Transit Ambassadors**
- **Call Center**
- **Bi-weekly coordination call**



Questions

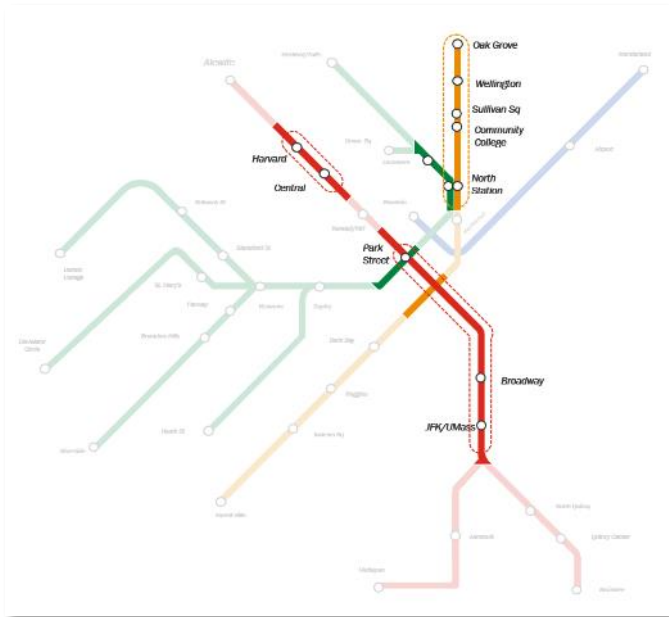


Previous Board TIP Updates



Red Line & Orange Line Weekend & Early Access

- Harvard to Central: Nov 4 – 5
- Oak Grove to North Station: Nov 7 – 12
- JFK/UMass to Park St: Nov 14 – 19



Metrics

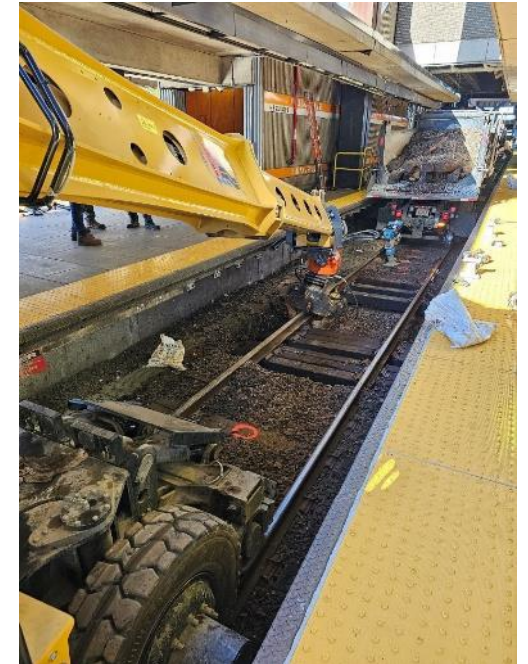
Red Line

- ✓ 10 Speed Restrictions cleared (7 planned)
- ✓ ~6 minutes travel time improved
- ✓ 146 ties replaced
- ✓ 2,202 feet rail replaced
- ✓ 6,305 feet of tamping

Orange Line

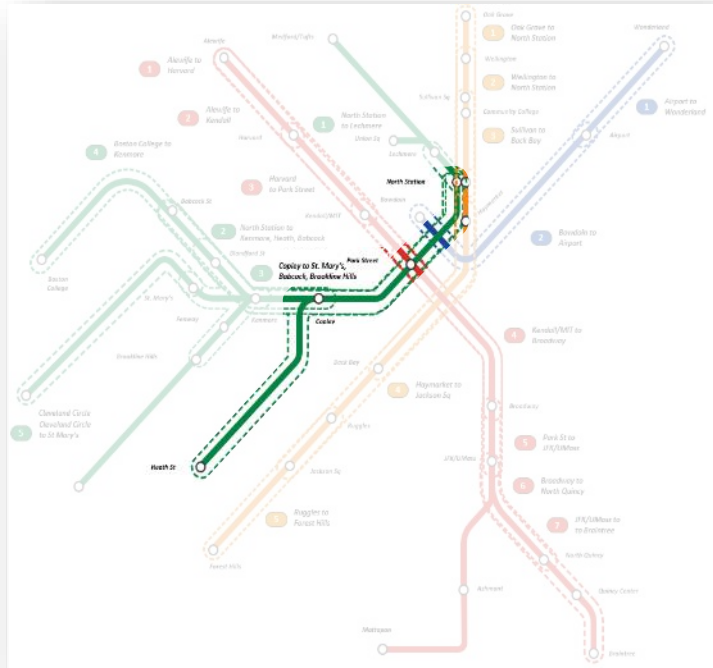
- ✓ 2 Speed Restrictions cleared
- ✓ ~1 minute travel time improved, NB
- ✓ 425 ties replaced
- ✓ 2,050 feet of tamping

OL Oak Grove to North Station



RL Park to JFK/UMass

Green Line Surge: North Station to Kenmore, Heath, Babcock, Nov. 27 – Dec.5

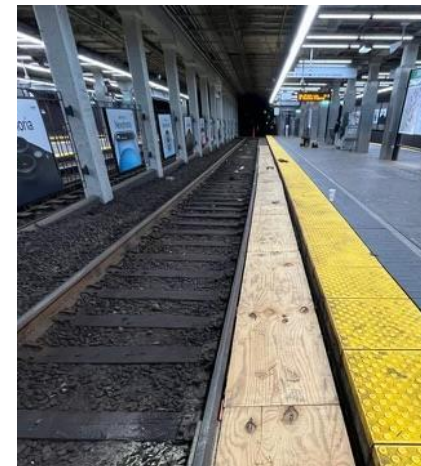


Metrics

- ✓ 12 Speed Restrictions cleared (10 planned)
- ✓ 530 feet full depth track reconstruction
- ✓ 3765 feet rail replaced
- ✓ 6725 feet rail tamping
- ✓ 62 Ties replaced
- ✓ 785 Plates swapped & regauged

Piggyback Work

- Critical tunnel structural repairs
- Hynes floor & stairs repaired
- Replaced some catenary sections
- Installed add'l E-ink signs
- Conducted tunnel inspections
- Inspected station overhead locations and stairs.
- Completed signal system cable, switches & junction boxes work
- Lechmere Viaduct Early Access



Station Upgrades

