



Massachusetts Bay Transportation Authority

GM Report

Jeffrey Gonneville, MBTA Interim General Manager

February 24, 2023



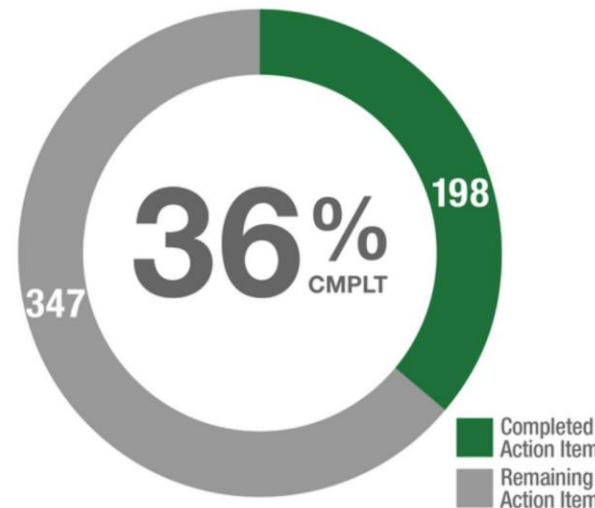
FTA SMI CAP Status & Response Progress Dashboard

MBTA'S NEW FTA SMI RESPONSE WEBPAGE GOES *LIVE* TODAY!

- ✓ Dashboard promotes transparency
- ✓ A roadmap of MBTA's progress on FTA findings.
- ✓ 1-stop resource to track and monitor implementation of FTA's SMI Special Directives.
- ✓ Updated monthly; new features will be added.
- ✓ A multi-year process as we fulfill the corrective action plans (CAPs).
- ✓ Supports **safety as a core value** that will allow us to move forward and benefit our riders and the T.

FTA Safety Management Inspection Response

Overall Progress Corrective Action Plan (CAP)



Data for this and all progress graphics on this page are current as of February 2023.

Quality, Compliance & Oversight Office (QCO)

The QCO was established to implement the MBTA's response to the FTA's 2022 Safety Management Inspection report.

[Learn more](#)

Speed Restrictions Report

The [MBTA Monthly Speed Restrictions Report \(January 2023\)](#) details active speed restrictions as of January 31, 2023. This report details our corrective action plans (CAPs) to address FTA Special Directive 22-04: Maintenance & PPE.



Speed Restrictions Report

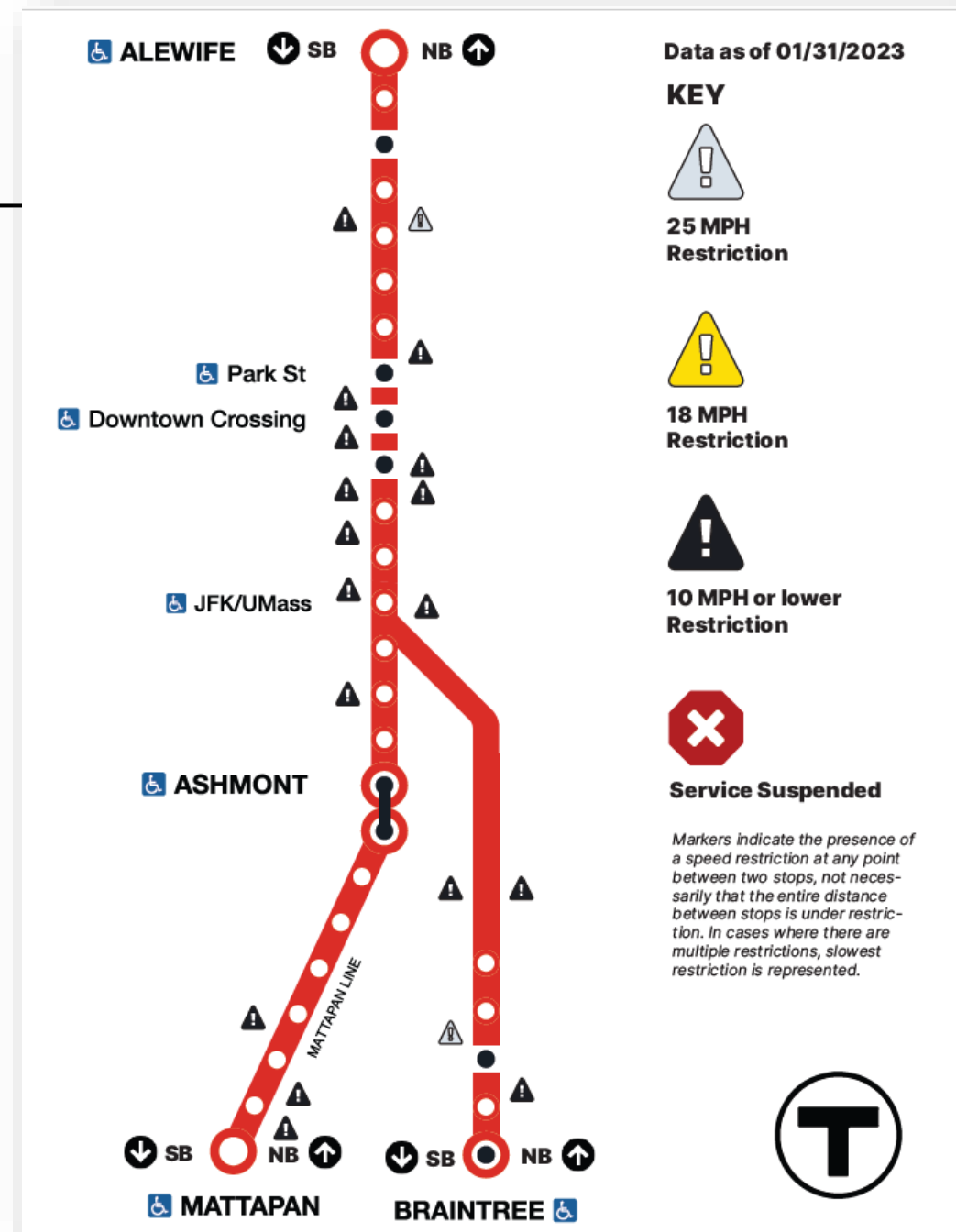
Now available **for all transit lines** on mbta.com, a monthly report summarizing speed restriction information.

Report provides information about:

- Location.
- Reduced speed limit.
- Date reported.
- Distance covered.

Coming soon: *interactive* Speed Restriction Dashboard.

(The report is an interim step as we build out a fully-functioning dashboard for our riders.)



Rapid Transit Dispatching

Kat Benesh, Kim Dwarika



Overview | What is good service?

The MBTA is committed to safely providing higher levels of service.

While the T is budgeted for pre-COVID quantities of service, future service patterns will look different than pre-COVID due to fundamental shifts in how people travel.

Four major components of **attractive and reliable rail service**:

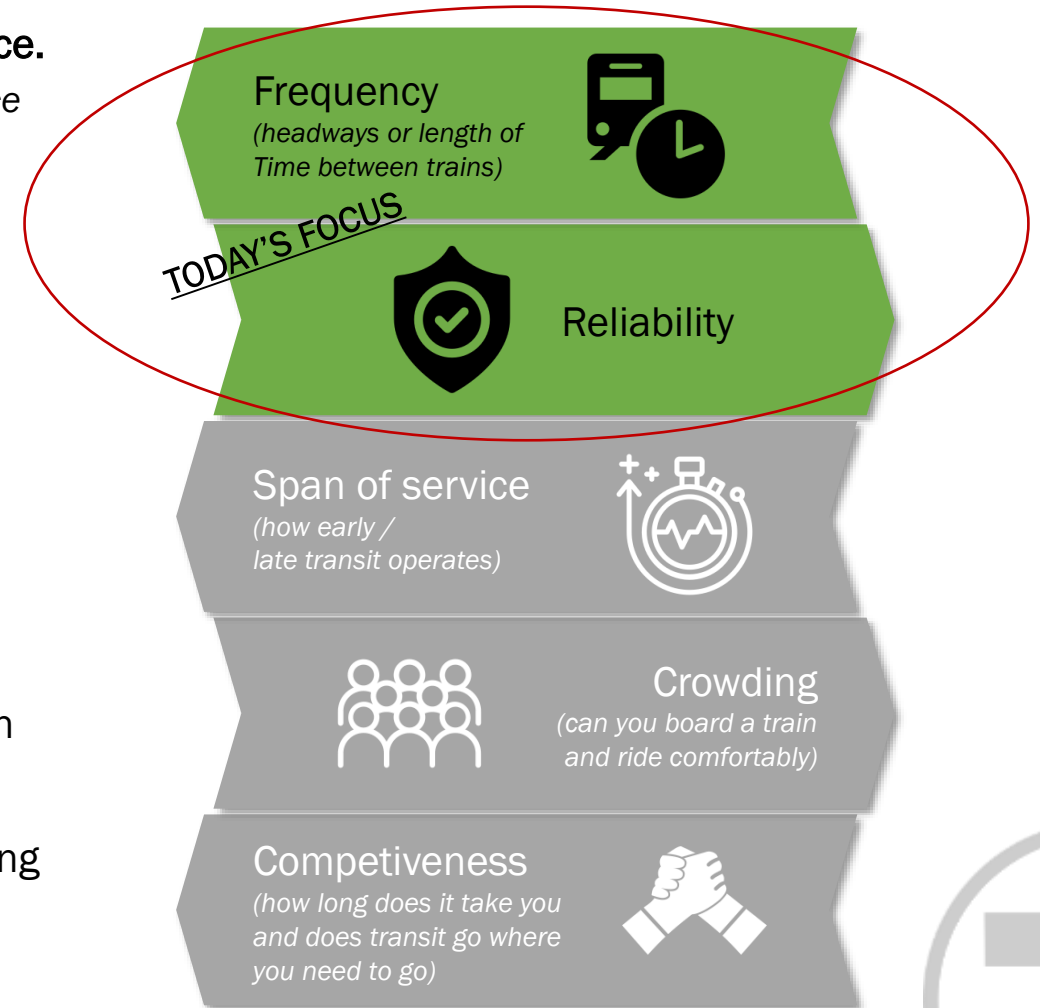


The MBTA's limited rapid transit dispatcher capacity resulted in reduced service levels (June 2022) in order to decrease dispatcher workload.

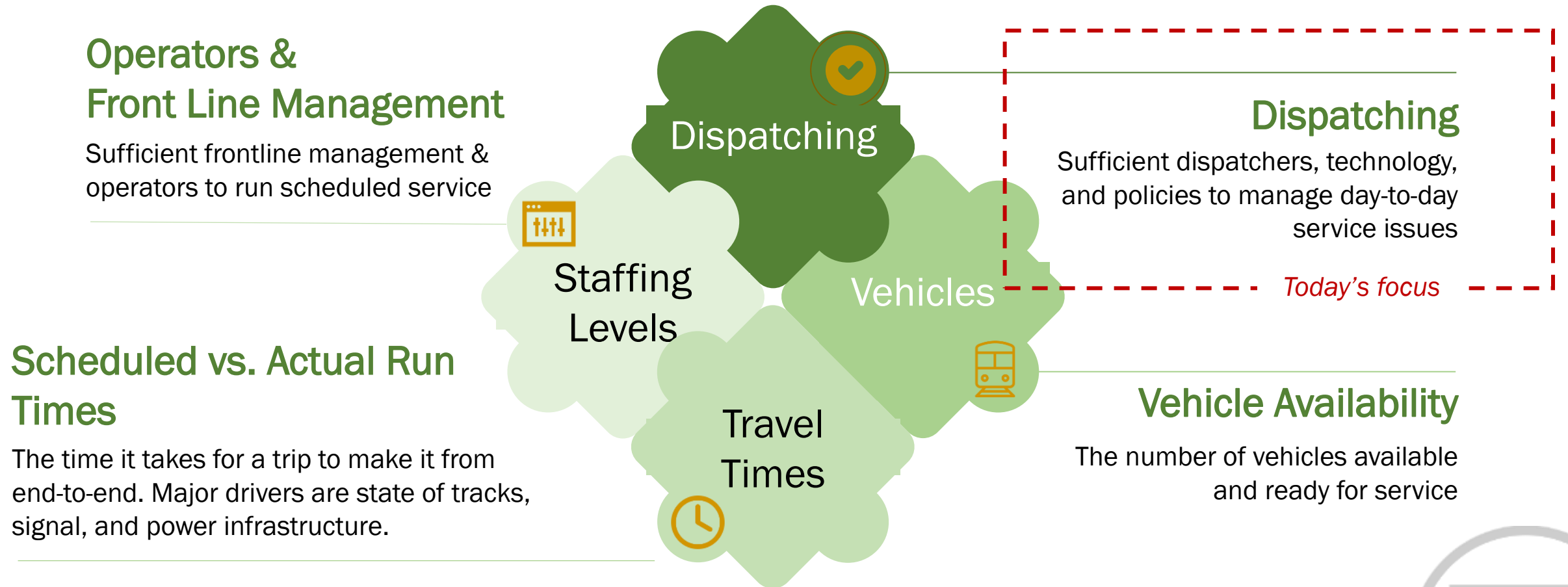
Since June, the T has **successfully pursued an aggressive hiring campaign** and other initiatives to increase dispatcher capacity in the short-term and improve dispatcher quality of life.

At this time, ability to increase rapid transit service is transitioning to **vehicle availability** and **motorperson staffing**.

Key Rider "Care-Abouts"



Critical components of frequent and reliable service



Rapid Transit Dispatchers

Dispatchers are **responsible for the expeditious movement of trains and the security and safety of MBTA's passengers and employees on 24/7 basis:**

- ✓ Train movement and monitoring (incl. managing headways and throwing powered switches).
- ✓ Managing ROW access and overnight activities (e.g. maintenance during non-revenue hours).
- ✓ Managing and centralizing communications and notifications to departments and customers.
- ✓ Maintaining electronic logs of all activity.

Historically, MBTA dispatcher staffing levels have been based on **rail line size, ridership, and service levels**. Budgeted for 18 (16 permanent, 2 spare) rapid transit dispatchers.

With only 15 Rapid Transit dispatchers (June 2022), fatigue, overwork, and low morale developed in Operations Control Center, as identified in FTA SMI 22-6.

MBTA **reduced rapid transit service** in June 2022 to decrease workload on dispatchers while simultaneously pursuing aggressive campaign to increase staffing



Successes since June 2022

Analyzed **staffing levels** based on activity levels and needs to safely manage service. Identified need for **current best-in-class staffing of 32 dispatchers (27 permanent with 5 spare)**. Also improves ability to complete overnight maintenance activities.

- Minimum target coverage is 24 dispatchers, but additional dispatchers increase ‘resiliency’ of operations and ability to manage staffing fluctuations

Ongoing aggressive hiring campaign, including \$10K bonus, personal outreach and open houses

- Created **substitute role**, allowing for motorpersons to “try out” dispatching before committing to job change.

Increased **dispatching capacity in short-term**:

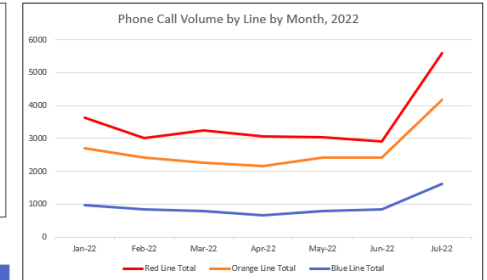
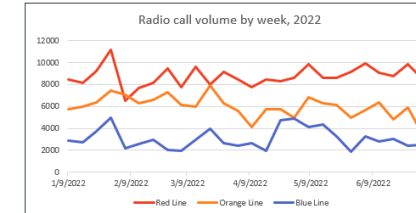
- Identified and re-trained existing MBTA employees who have previously held an RTL dispatching role.
- Re-hired retirees on short-term basis.
- Additional senior managers in room to assist during rush hours.

Improved **quality of life**:

- Limit of 14 hours worked per day with at least 10 hours off between shifts
- Provide break every shift.

Takeaway: Currently at 21 long-term dispatchers, with additional 5 “on loan” for **total of 26**. 3 additional dispatchers in training.

Radio and Phone Call Volume



Average daily call volume for RTL Dispatchers:

	Radio	Phone
Red Line	1,250	104
Orange Line	857	79
Blue Line	439	27

- Each radio call is ~4-6 seconds
- Each phone call is ~30-60 seconds

You've moved a train.
Now, move the system.

Heavy Rail Dispatcher's Move the T and your colleagues want you on their team. The T is hiring for **permanent Heavy Rail Dispatchers**, not a spare.

Dispatchers are the people who give trains their orders. They are the people responsible for ensuring trains move safely and efficiently across our network.



Wednesday, August 10, 2022
Operations Control Center
45 High Street
6th Floor Conference Room
11:00 a.m.–1:30 p.m.

RSVP TODAY

Operations Control Center

Level up your career and your impact



Coming Next | Service Management

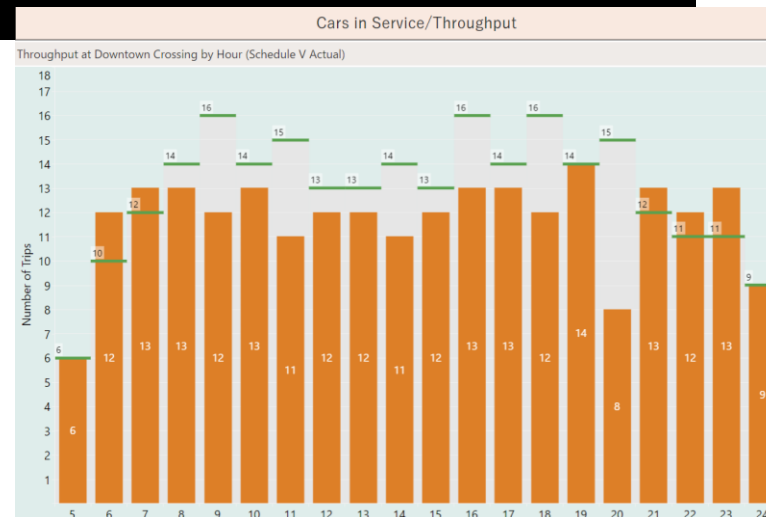
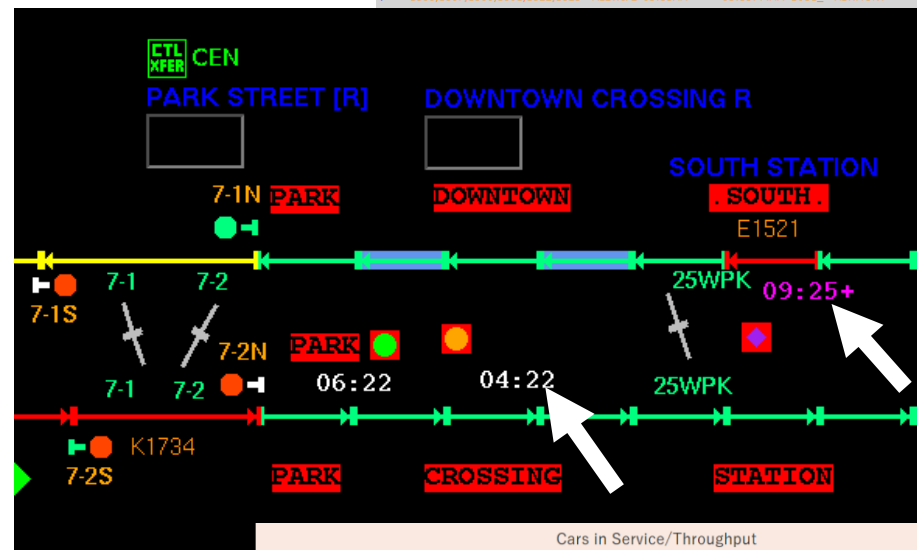
Over past few years, implemented tools to help dispatchers and supervisors manage headways and incidents:

- Identifying and highlighting potential service issue (before they start impacting service), and project service impacts.
- Providing real-time situational awareness on headways – countdown clock tracks time since last train served station, highlighting delays.
- Reviewing (“lessons learned”) of recent issues as relate to quality of service vs. schedules for Rail Ops, OCC & Vehicle Maintenance.

Especially with new OCC Dispatchers, we are investing in training and additional standardizations to manage service and respond quickly to incidents:

- Developing **more formal OCC training program**, including hiring new specialized OCC instructors (part of FTA SMI 22-6).
 - Implemented **new formal training for headway management** and ensuring accurate real-time info on countdown clocks.
- Reviewing all Standard Operating Procedures (SOPs) and ensuring up-to-date.
- Established weekly Rail Ops and OCC coordination meeting on service performance.

Train Sheet for RED LINE		ALEWIFE	Throughput by Station									
Find Train												
PREV	CONSIST	ORIGIN	SCHED	ACTUAL	ROUTE	DESTINATION	SCHED	ACTUAL	STATUS	SEC	DETAILS	NEXT
<--	1815,1814,1854,1855,1865,1864	ALEWIFE	05:16AM	05:18:27AM	S931	ASHMONT	06:00AM	06:06:26AM	BEHIND	386	DETAILS	-->
<--	1908,1909,1905,1904,1901,1900	ALEWIFE	05:24AM	05:25:16AM	S933	BRAINTREE	06:18AM	06:40:25AM	BEHIND	1345	DETAILS	-->
<--	1866,1867,1800,1801,1822,1823	ALEWIFE	05:33AM	05:33:44AM	S931	ASHMONT	06:17AM	06:22:00AM	ON TIME	300	DETAILS	-->
							06:35AM	06:54:43AM	BEHIND	1183	DETAILS	-->
							06:34AM	06:37:54AM	ON TIME	234	DETAILS	-->



Coming Next | Hiring

- Although not yet at target staffing levels, we are transitioning to a point where increasing Red, Orange and Blue line service levels is not solely dependent on heavy rail dispatchers: Additional considerations are **vehicle availability** and **staffing of operators and front-line management**.
- However, we continue to **focus on hiring**, as well as for Light Rail and Bus dispatchers, OCC supervisors, and Public Information Officers to ensure all of OCC is appropriately staffed.
- **Upcoming Heavy Rail Dispatcher hiring efforts** (not exhaustive):
 - Extended \$10K hiring bonus to March 31.
 - Conducting weekly “What’s It Like?” Wednesdays.
 - Finalizing upcoming outreach for March.
- Reviewing **potential of hiring dispatchers externally** (like other transit agencies) and training needs for external hires (part of FTA SMI 22-6)



**Join the Team
that Moves People.**

Operations Control Center
Where we need you the most.

Heavy Rail Dispatchers Move the T and your colleagues want you on their team. The T is hiring for **permanent Heavy Rail Dispatchers**, *not a spare*. Dispatchers are the people who give trains their orders. They are the people responsible for ensuring trains move safely and efficiently across our network.

We will be at the following locations from 10 am to 2pm with a member from both recruiting and dispatcher teams to answer any questions you may have about furthering your career.

October 4th Red Line Braintree	October 25th Red Line Ashmont	November 15th Orange Line Wellington
October 11th Blue Line Orient Heights	November 1st Red Line Ashmont	November 29th Red Line Alewife
October 18th Orange Line Forest Hills	November 8th Blue Line Wonderland	

 Scan here for more internal job postings

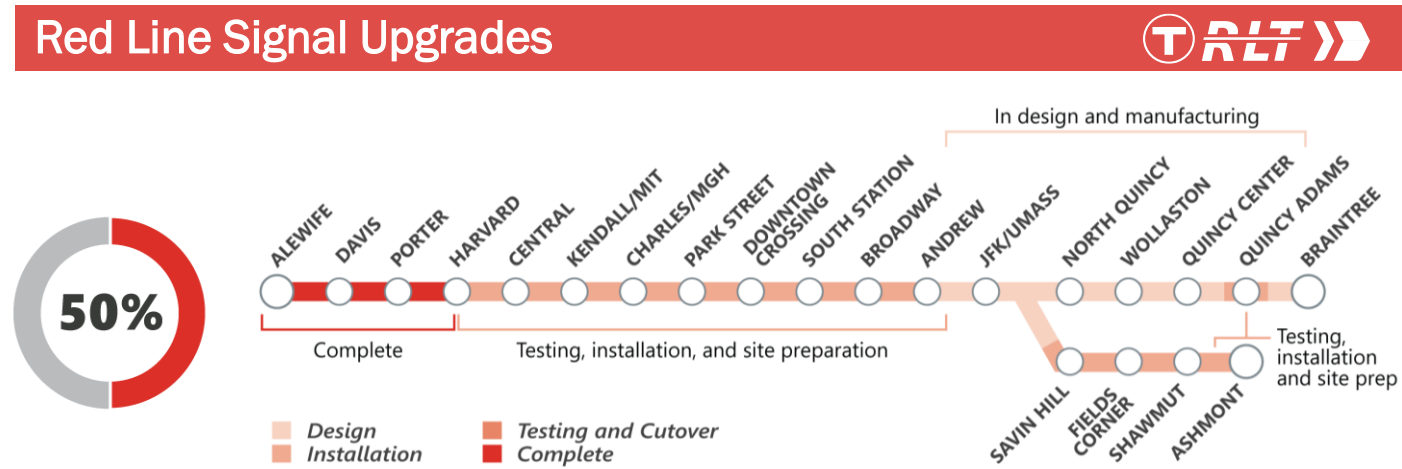
Building a better 

Red and Orange Line Signal Upgrades

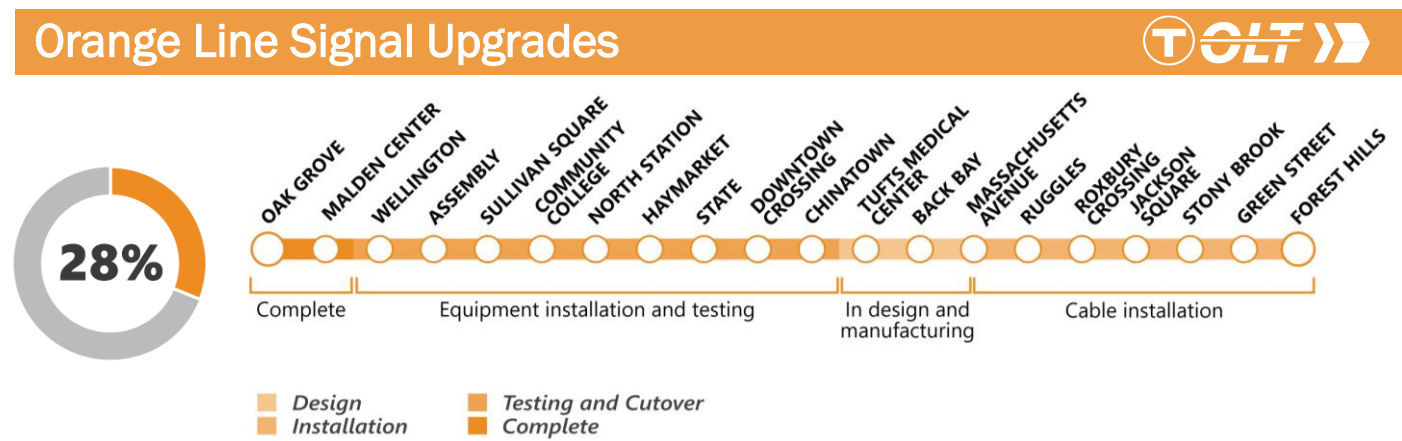
Angel Peña



Red and Orange Line Signal Upgrades | Current Status



- ### BENEFITS OF THE NEW SIGNAL SYSTEM
- Modernizes the system and brings it to a State of Good Repair
 - Improves reliability.
 - Reduces maintenance.
 - Provides more efficient communications about system diagnostics.



Red Line Signal Upgrades | March Diversions

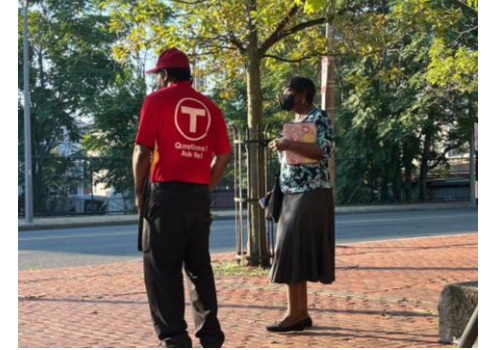
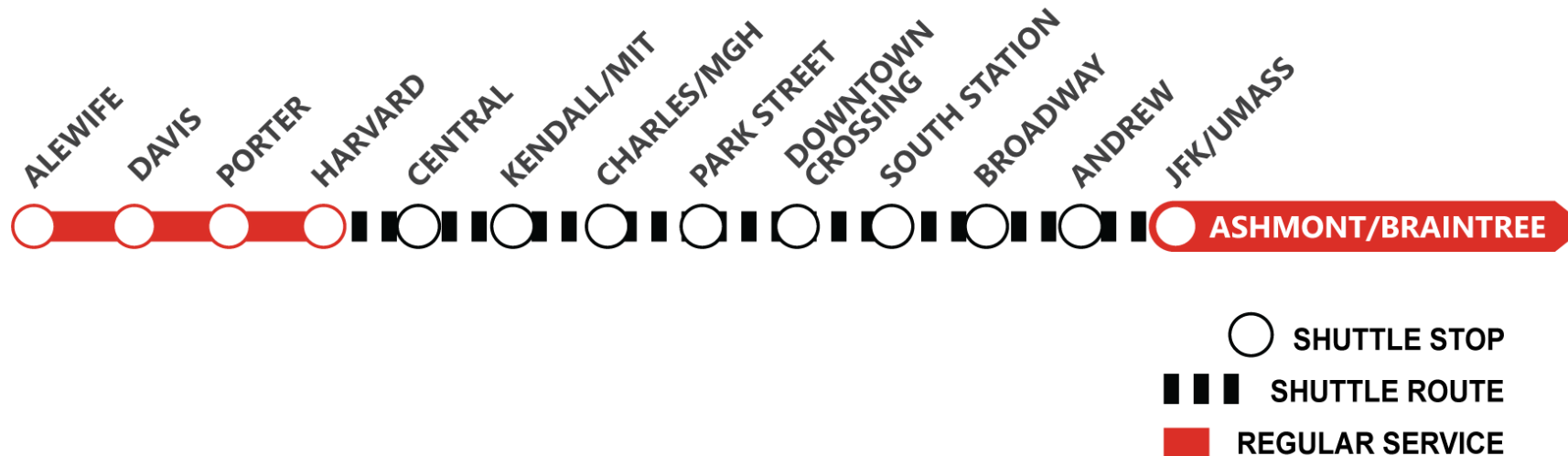
Weekend diversions **between Harvard and JFK/UMass:**

March 4-5

- Pre-testing the new signal system at Central, Park Street, and Downtown Crossing.

March 25-26

- Final cutover to new signal system at Central, Park Street, and Downtown Crossing.



Kendall/MIT Inbound | New Headhouse Opened Feb. 11



- Improvements constructed by MIT as a transit-oriented development project.
- Modernized headhouses, pre-fare gate lobby, and street-level plaza.
- Improved station accessibility and enhanced customer and staff amenities.
- Upgraded safety systems.
- Temporary headhouse demolition scheduled to be completed late Spring/early Summer 2023.



Kendall Outbound:

Headhouse renovation by Boston Properties as part of the Google offices expected to begin Spring 2023. A temporary accessible path will provide access to the station during construction.



Alewife Incident

Summary of service recovery to date



Alewife Incident | Service Recovery Timeline

Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
<p><u>02.04. 2023</u></p> <p>At ~1:33 pm Saturday an automobile on the 5th floor of the Alewife parking garage crashed head on, at a high rate of speed, into the side of the garage.</p> <p>The impact caused a precast concrete spandrel beam, weighing ~5 tons, to separate from the structure and fall ~30 feet onto the roof of the main Alewife Station headhouse below.</p> <p>MBTA Operations immediately closed the station and inner busway and implemented a bus diversion between Davis and Alewife.</p>	<p><u>02.05, 02.06, 02.07</u></p> <p>At ~12:56 am on Sunday, the concrete beam was safely removed from the roof of the station, less than 12 hours after the incident.</p> <p>Engineers inspected and assessed the concrete beam taking detailed measurements and photographs as part of their investigation into the incident</p> <p>Contractors and engineers worked around the clock Sunday night into Monday morning to remove damaged material and stabilize the structure.</p> <p>By Monday afternoon, engineers deemed the roof stable and the facility safe for crews enter and begin cleaning up debris from the mezzanine area.</p>			<p><u>02.08, 02.09</u></p> <p>By 1:15 am on Wednesday, carpenters completed sheathing installation, replacing damaged skylight windows, so roofers could begin installing waterproofing.</p> <p>Roofers wasted no time mobilizing earliest Wednesday morning, taking advantage of a window of good weather, and installed waterproofing membrane to the temporary repair areas.</p> <p>Wednesday, Feb. 8: The MBTA reopens parking garage levels G, 2, 3, & 4 to drivers. Level 5 remained closed to implement L-T repairs.</p>		<p><u>02.10</u></p> <p>For the week of Feb 4-10, engineers worked with MBTA Operations, State Building Officials, and the City of Cambridge Fire Department to prep a plan for partially reopening the station.</p> <p>Just 6 days after the incident, Friday, Feb 10, the MBTA reopened Alewife Station at the start of service through the Russel Field Headhouse.</p>
Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
<p><u>02.11, 02.12, 02.13, 02.14</u></p> <p>By the end of the day on Tuesday, roofers completed exterior waterproofing across the entire section of roof containing damage.</p>				<p><u>02.15</u></p> <p>Crews continue to perform interior roof repairs in preparation for installation of shoring towers.</p>	<p><u>02.16</u></p> <p>At the start of service Thursday (Feb 16), the inner busway is retuned to Bus Operations for full ridership beneficial use.</p>	<p><u>02.17</u></p> <p>Crews anticipate localized repairs will be complete and inspections completed.</p> <p>Shoring tower design is on-going and anticipate completion by the end of next week.</p>

Alewife Incident | Crews Dispatched Immediately

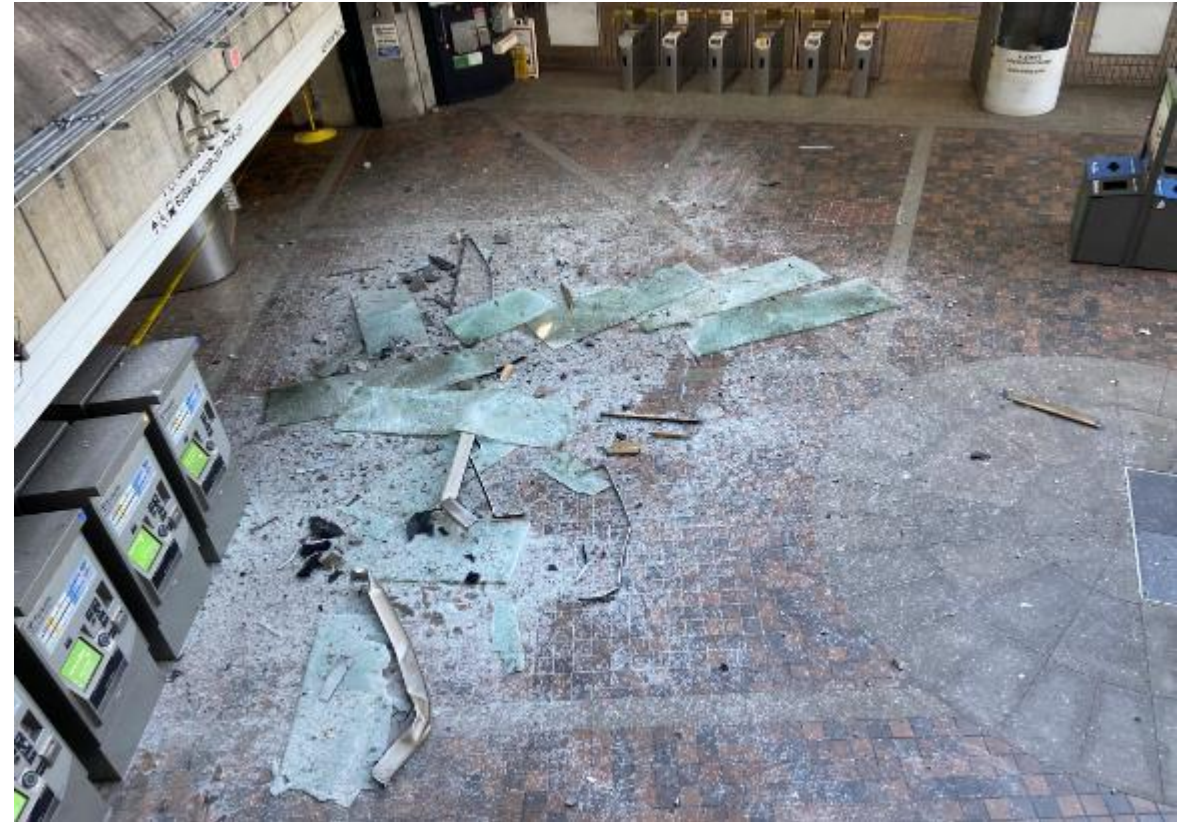


Feb. 4: City of Cambridge Emergency Responders safely extracted the unconscious driver and removed the vehicle from the edge of the garage.

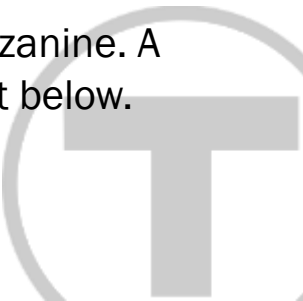


Feb. 4: MBTA maintenance crews, engineers, and on-call contractors were immediately dispatched to secure the area, assess the damage, and determine how to safely remove the concrete beam from the roof of the station.

Alewife Incident | Top-level Perspective of Damage



Feb. 4: The precast concrete spandrel beam came to rest on top of the headhouse roof, suspended over the station mezzanine. A large area of the roof's glass skylights were destroyed by the impact, falling to the floor of the station mezzanine ~30-feet below.



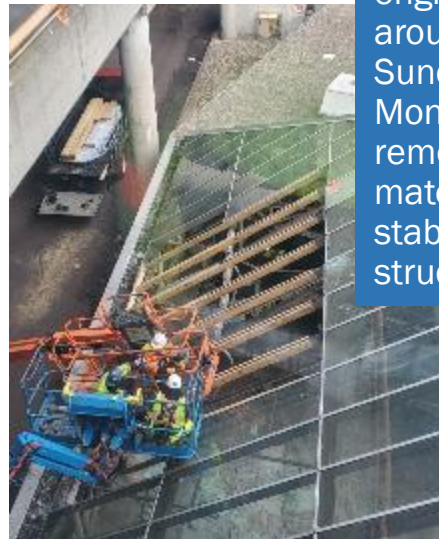
Alewife Incident | Crews Worked Around the Clock



Sunday: Engineers inspected and assessed the concrete beam taking detailed measurements and photographs as part of their investigation into the incident.



Contractors and engineers worked around the clock Sunday night into Monday morning to remove damaged material and stabilize the structure.

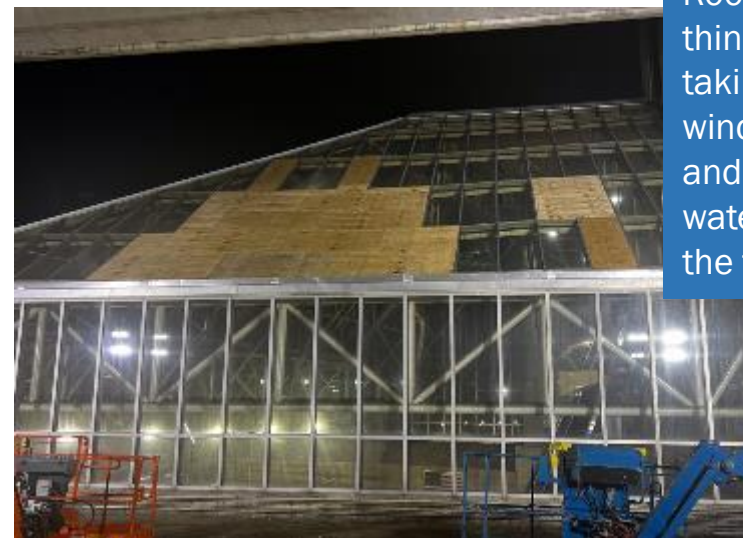


By Monday afternoon, engineers concluded the roof stable and the facility safe for crews enter and begin cleaning up debris from the mezzanine area.

Alewife Incident | Roof Sheathing Installed



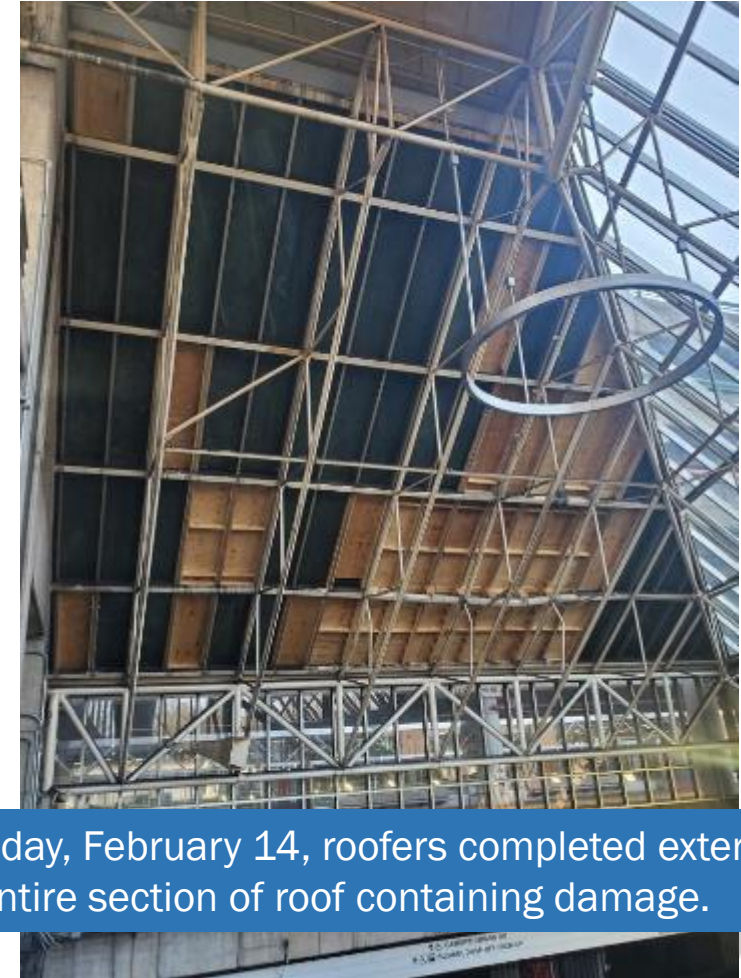
By 1:15 am, Wednesday, February 8, carpenters completed sheathing installation, replacing the damaged skylight windows and giving roofers the green light to begin installation of waterproofing.



Roofers mobilized first thing Wednesday morning, taking advantage of a window of good weather, and began installing waterproofing membrane to the temporary repair areas.



Alewife Incident | Waterproofing Membrane Installed



By the end of the day, Tuesday, February 14, roofers completed exterior waterproofing across the entire section of roof containing damage.

Alewife Incident | Busway Returns to Operation

At the start of service Thursday, February 16, Capital Delivery turned over the inner busway back to Bus Operations for full beneficial use for our riders.

Alewife Incident | Visible Headhouse Roof Damage

Crews performing interior localized repairs to the steel trusses in preparation for the installation of shoring towers.

This week finalized interim repairs to the trusses.

Finalizing Shoring Tower design.

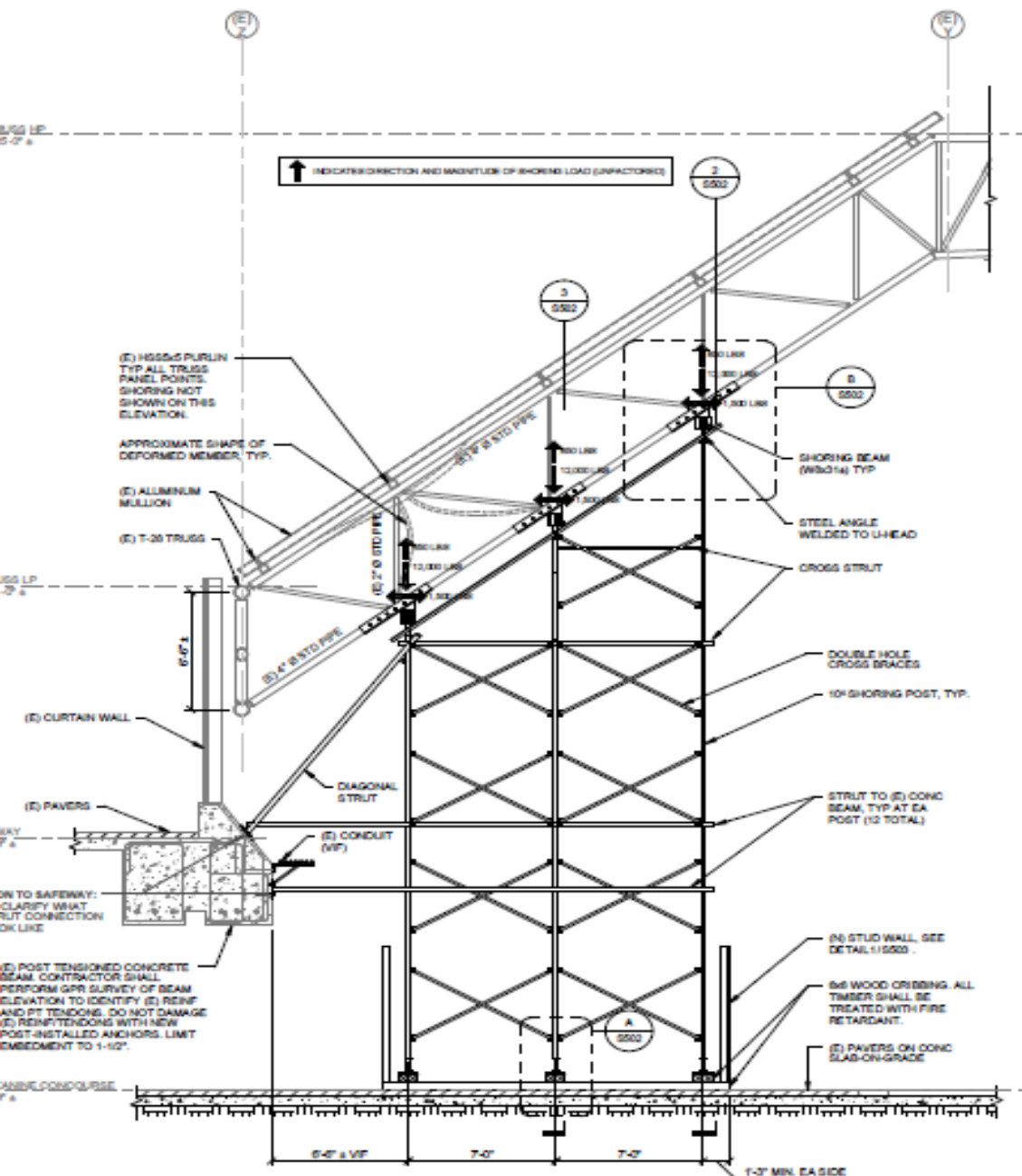
Intend to install shoring tower next week.

After installation, can evaluate partial or full opening of the Alewife headhouse.



Alewife Incident | Design for Future Reopening

- A team of engineers are preparing design details for temporary roof repairs and for temporarily shoring damaged roof trusses.
- The MBTA continues to coordinate internally and with State Building Officials to reopen the main headhouse at Alewife Station – targeted for end of March.
- While planning and design of permanent repairs are underway, the temporary repairs will be in place for several months, due to ongoing investigative work and subsequent fabrication and installation of a permanent structural system.



SHORING TOWER ELEVATION AT T-23

1/4" = 1'-0"



CRRC Update

Red Line Carshell Deliveries

- Carshell deliveries from China will resume in March.
 - 6 carshells (3 married pairs) will ship from China mid-March and 6 additional carshells will ship by end-March/early-April.
- Beginning May, CRRC will ship 4-6 carshells (2-3 married pairs alternating) from China each month.
- *This is a Red Line update because all Orange Line carshells have been completed and delivered to the US.*

Springfield Deliveries

- 6 Orange Line Cars have been placed into service since the January 2023 Board update.
- 2 Orange Line cars (1 married pair) shipped from Springfield to Wellington carhouse last week.
- 2 additional Orange Line cars shipped from Springfield to Wellington carhouse earlier this week.

Title VI Policies & Public Engagement

Lynsey Heffernan



Title VI Policies & Public Engagement



The MBTA is [seeking public comment on proposed changes](#) to our Disparate Impact & Disproportionate Burden Policy* (DI/DB) and Public Engagement Plan* (PEP). MBTA is announcing today multiple ways that the public can share feedback on these draft policies. Final policies will be brought to the Board for approval in April.

Proposed changes to the DI/DB Policy:



- ✓ Account for network-wide effects.
- ✓ Clarify when service changes and disruptions do not require a service equity analysis.
- ✓ Improve service equity analysis methodology to have more reliable results.

Proposed changes to the PEP:

- ✓ Address an FTA corrective action to be clearer about the public comment process for major service reductions and fare changes.



Submit feedback: during our public events, and by postal mail, phone, and email through Friday, April 14, 2023.
mbta.com/draftpolicies



Public Meetings
March 2023



TUESDAY, MARCH 21, 6 P.M.
Location: State Transportation
Building (hybrid)



WEDNESDAY, MARCH 22, 6 P.M.
Location: QARI, 275 Hancock St,
Suite 202, Quincy, Mass. 02171



TUESDAY, MARCH 28, 6 P.M.
Location: La Collaborativa, 318
Broadway, Chelsea, Mass. 02150

** These policies are part of the MBTA's compliance with Title VI of the 1964 Civil Rights Act, which prohibits the T from discriminating based on race, color, or national origin, including limited English proficiency.*

Draft for Discussion & Policy Purposes Only



Thank You, John Dalton!

Best Wishes in Your Future.

The MBTA is grateful to John Dalton who brought the Green Line Extension to completion.

After many years of hard work, GLX was brought back on track and completed, bringing rail service to thousands of riders living, working, and going to school in Somerville, Cambridge and Medford.

John delivered on a major public infrastructure project for the Commonwealth of Massachusetts.

It took John's leadership and expertise leading major construction projects to bring GLX to fruition.

Many of the project management best practices he brought to the MBTA will be used in future projects to bring new infrastructure to the transit system.

The MBTA is thankful for John's service, dedication and leadership and we wish him well in his next assignment!

PROJECT COST

\$2.28B

TRACK FT LAID

49.6K

LABORERS

~650

TRANSPORTATION BLDG

1

PUMP STATIONS

3

TRACTION POWER SUBSTATIONS

3

PROJECT
TIMELINE

5 Years

BRAND NEW
STATIONS

7

BRIDGES
MODIFIED/REPLACED

9

SIGNAL
BUNGALOWS

9

VEHICLE MAINT.
FACILITY SQFT

54.7K

Thank you.

