MBTA Safety, Service, and Staffing *Snapshot*

MAY 2023

Safe and reliable public transit service is essential to the economic vitality of the region—and to reaching our climate, equity, and mobility goals. To meet the current and future needs of our riders and our economy, the Massachusetts Bay Transportation Authority (MBTA) must address major safety, service, and staffing challenges. As the MTBA works to address these challenges, it is imperative to track key performance metrics and data trends. As such, this short report aims to provide a periodic, user-friendly snapshot of these metrics, using publicly available data. Please contact Caitlin Allen-Connelly, Senior Advisor on Transportation, with questions or feedback.

MBTA Ridership

The MBTA updates subway ridership on a weekly basis—and ridership on the MBTA across all subway lines continues to be well below pre-pandemic levels. The last comprehensive ridership update from the MBTA at a Board of Directors meeting was in December 2022. Table 1 below shows recent weekday (May 8-12, 2023) subway ridership levels as published by the MBTA. Ridership levels on the Blue and Green Line were higher than in 2022, with a marked difference in the number of Blue Line riders that was due to closures on that line last year. Orange and Red Line ridership numbers were almost level with ridership in 2022.

Table 1: MBTA Subway Ridership Levels

Mode	May 8-12 2023	May 9-13 2022	May 6-10 2019	% of Pre-pandemic
Blue Line	180,998	56,071	250,385	72%
Green Line	221,254	187,566	389,324	57%
Orange Line	371,701	379,429	790,904	47%
Red Line	436,231	468,565	994,941	44%

Source: https://massdot.app.box.com/s/21j0q5di9ewzl0abt6kdh5x8j8ok9964?sortColumn=date&sortDirection=DESC

Note: The Blue Line was shut down between April 25 and May 8, 2022 (Airport and Bowdoin stations) due to harbor tunnel repair work and service was suspended between May 12-29, 2022 (Wonderland and the Orient Heights stops) for "critical repair work" takes place on the Suffolk Downs pedestrian bridge.

According to APTA, nationwide ridership recovery (Table 2) during the same week (May 7-13, 2023) was reported at 73% as compared to pre-pandemic levels with recovery across five peer agencies ranging from 65% (CTA and WMATA) to 82% (LA Metro). The MBTA ranks 3rd out of five peer agencies with 69% recovery.

Table 2: Ridership Recovery and Ridership Numbers Peer Agencies

Agency	% of Pre-pandemic	# Riders
National (US)	73%	143.5M
LA Metro	82%	6.1M
NY MTA	77%	53.8M
MBTA	69%	5.1M
SEPTA	68%	4.1M
WMATA	65%	4.7M
CTA	65%	5.8M

Source: https://transitapp.com/apta (Accessed 5/24/2023 for week of May 7-13, 2023)

Commuter Rail Ridership by Line

Commuter Rail ridership data is published once a month reporting ridership for the previous month. Ridership on the Commuter Rail rebounded slowly post-pandemic and was sensitive to upticks in COVID, including Omicron in January 2022. For consistency with other modes, Table 3 below shows average daily weekday ridership for one week. Ridership the week of April 24-28, 2023, was 90,142 or 76% of pre-pandemic ridership. This is an encouraging trend for fare revenue recovery and potential "return to the office" habits being established. Table 3 shows Tuesday, Wednesday, and Thursday as the highest ridership days reaching 79%-80% of pre-pandemic ridership on those days.

Table 3: MBTA Commuter Rail Ridership (4/24/23 to 4/28/23)

Line	Monday	Tuesday	Wednesday	Thursday	Friday	Total	Average Daily
Fairmount	2,395	2,339	2,559	2,432	2,620	12,345	2,469
Fitchburg	5,102	5,281	5,431	5,317	4,459	25,590	5,118
Framingham/Worcester	10,691	12,158	12,109	11,926	10,047	56,931	11,386
Franklin/Foxboro	7,724	8,652	9,234	9,020	6,731	41,361	8,272
Greenbush	3,996	4,256	4,527	4,384	3,924	21,087	4,217
Haverhill	5,136	5,426	5,446	5,670	4,942	26,620	5,324
Kingston	5,981	6,708	5,279	6,410	5,531	29,909	5,981
Lowell	6,346	6,829	7,291	6,650	6,108	33,224	6,644
Middleborough/Lakeville	6,310	7,796	7,671	6,518	5,775	34,070	6,814
Needham	5,158	6,373	5,915	6,260	5,224	28,930	5,786
Newburyport/Rockport	8,783	9,682	9,256	9,139	8,624	45,484	9,096
Providence/Stoughton	18,082	19,626	19,744	20,375	17,332	95,159	19,031
Total	85,704	95,126	94,462	94,101	81,317	450,710	90,142

Source: https://mbta-massdot.opendata.arcgis.com/datasets/MassDOT::mbta-commuter-rail-ridership-by-service-date-and-line/explore

Note: Keolis reported average weekday daily ridership pre-pandemic at 119,354.

MBTA Service Levels & Reliability and Performance Standards

Given the workforce challenges the MBTA faces, including a shortage of operations control center dispatchers and bus operators, as well as the speed restrictions in place, the MBTA has not restored pre-pandemic service. This impacts the quality of service the T provides the region in terms of frequency, reliability, and travel times.

MBTA Service Levels

As of May 2023, the systemwide service delivery by the MBTA was at 88% of pre-pandemic weekday service. Table 4 shows that service delivery on the subway varied by line from 100% of pre-pandemic trains per hour on the Blue Line at 8 AM to 48% of pre-pandemic trains per hour on the Red Line at 8 AM. These numbers change slightly when you look at daily weekday service levels as illustrated below for May 11, 2023.

Table 4: MBTA Service Levels

Subway Line	Pre-pandemic (Trains per Hour / 8AM)	Actual (Trains per Hour / 8AM)	% of Pre-pandemic (Trains per Hour / 8AM	Service Levels (5/11/2023) % of Pre-pandemic
Blue Line	12	12	100%	96%
Green Line	42	30.5	73%	85%
Orange Line	10	5.5	55%	63%
Red Line	14.5	7	48%	53%

Source: https://recovery.transitmatters.org/ accessed 5/24/2023

Note: The service level calculations show data through 5/17/2023

MBTA Reliability and Performance Standards

The MBTA has reliability standards and performance targets for all modes, which provide an indication of the quality of MBTA service. The 2021 MBTA Service Delivery Policy states that "*Reliability standards vary by mode and provide tools to evaluate the on-time performance of individual MBTA lines and routes. Reliability standards also vary based on frequency of service; passengers using high-frequency services generally are more interested in regular vehicle arrivals than in strict adherence to published timetables, whereas passengers who use less-frequent services expect arrivals/departures to occur as published.*"

As shown in the 2021 MBTA Service Delivery Policy, the T has minimum reliability targets for Bus (70%) and Commuter Rail (92% adjusted per contract) with penalties applied to Commuter Rail and Ferry for canceled service but has no minimum targets for subway. The MBTA uses different metrics for each mode to measure reliability. For the subway, the T determines reliability by measuring the percentage of riders who waited less than or equal to the amount of time scheduled between trains.

Table 5 provides the published departure frequencies by subway line and Figures 1 and 2 show the reliability by mode and by subway line as reported by the MBTA. The actual frequencies as shown on the MBTA website are, at times, significantly longer than what is indicated in Table 5 and do not comply with the published 2021 MBTA Service Delivery Policy. Based on the headways riders are currently

experiencing, reliability is probably lower than reported. It is therefore unclear what schedule the MBTA is using to determine subway reliability.

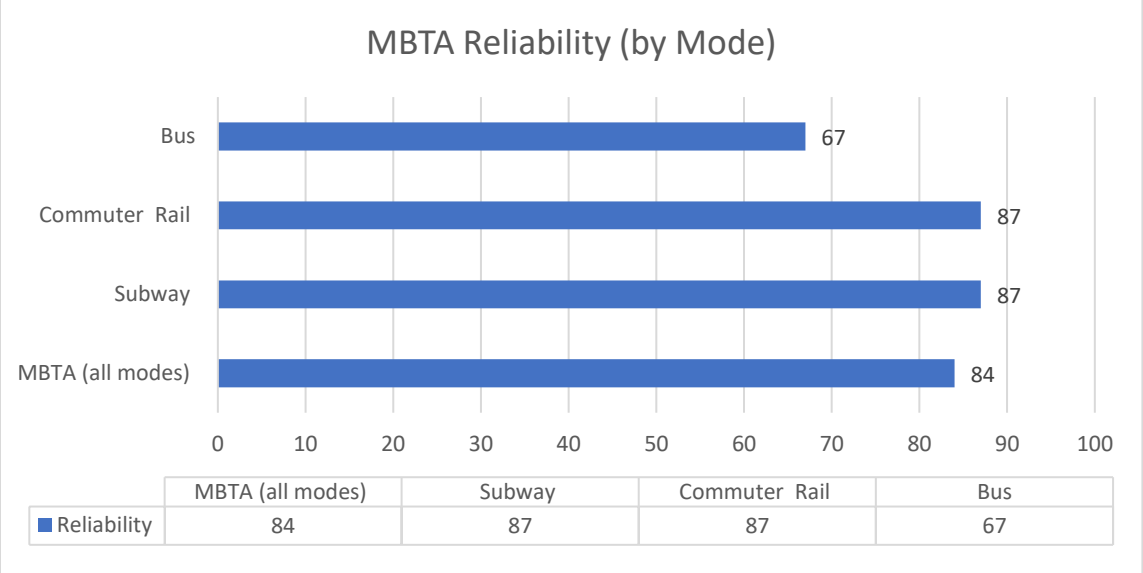
Table 5: Current MBTA Subway Departure Frequency (by Line)

Subway Line	Departure Frequency (Weekday Schedule)
Blue Line	7 – 9 minutes
Green Line	
B Line	6 – 12 minutes
C Line	6 – 12 minutes
D Line	6 – 12 minutes
E Line	6 – 12 minutes
Orange Line	7-12 minutes
Red Line	8-15 minutes

Source: Blue Line: https://www.mbta.com/schedules/Blue/line; Green Line: Not reported on MBTA Green Line page – Directed to published schedule https://cdn.mbta.com/sites/default/files/media/route_pdfs/batch_6375/RL-OL-GL-BL-SL-S2-P4.pdf; Orange Line: Not reported on MBTA Orange Line page – Directed to published schedule https://cdn.mbta.com/sites/default/files/media/route_pdfs/batch_6375/RL-OL-GL-BL-SL-S2-P4.pdf; Red Line: https://www.mbta.com/schedules/Red/line

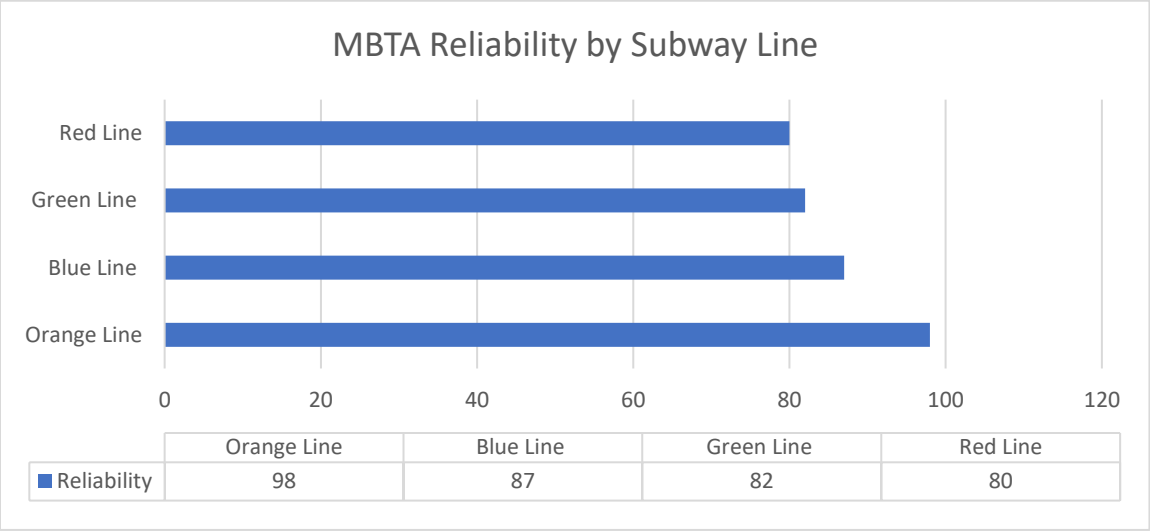
Note: MBTA 2021 Service Delivery Policy, Rapid Transit (subway), AM/PM Peak every 10 minutes; All other periods every 15 minutes; Saturday and Sunday every 15 minutes.

Figure 1: MBTA Reliability (May 7, 2023) by Mode



Source: https://www.mbta.com/performance-metrics/service-reliability

Figure 2: MBTA Reliability (May 7, 2023) by Subway Line



Source: https://www.mbta.com/performance-metrics/service-reliability

Note: To determine subway reliability, the MBTA measures the percentage of riders who waited less than or equal to the amount of time scheduled between trains.

MBTA Speed Restrictions, Diversions & Alternative Service Plans

The MBTA is currently doing work across most modes to address safety challenges and capital improvements. The T is required to put in place alternative service options to mitigate the impact of the work on riders and ensure continuity of service. The following sections provide an update on the status of the speed restrictions put in place in March 2023 as well as the scheduled, monthly diversions ahead.

MBTA Speed Restrictions

On March 6, 2023, the Department of Public Utilities (DPU), which provides safety oversight for the MBTA, conducted a visit on the Red Line between Ashmont and Savin Hill stations. On March 8, 2023, DPU requested documentation from the MBTA following geometry testing to check the condition of the tracks, which when provided by the MBTA had discrepancies. On March 9, 2023, global speed restrictions were put in place on all subway lines. Table xx shows speed restrictions across all subway modes as of May 24, 2023.

Table 6: MBTA Subway Speed Restrictions by Line

Mode	Speed Restriction	Distance	% of Line
Blue Line	16	4.0	32
Orange Line	34	3.9	17
Red Line	94	10.4	22
Green Line	66	9.7	18

Source: https://www.mbta.com/performance-metrics/speed-restrictions (Accessed 5/24/2023)

MBTA Work and Alternative Service Plans

Table 7 below provides a high-level overview of planned MBTA diversions on the subway and Commuter Rail by month. This information is announced by the MBTA monthly in a press release. A Better City tracks the upcoming diversions and advocates, when necessary, to improve mitigation plans and reduce the burden on MBTA riders, in particular transit-dependent riders.

Table 7: MBTA Diversion Schedule (May-June 2023)

Mode	May	June
Subway		
Blue Line	X	
Orange Line	X	X
Red Line	X	X
Green Line	X	X
Commuter Rail		
Greenbush	X	X
Kingston/Plymouth		X
Middleborough/Lakeville	X	X
Rockport	X	
Haverhill	X	
Lowell		X
Fairmount		X

Source: https://www.mbta.com/news/2023-04-24/may-service-changes-will-allow-crews-continue-track-improvement-work-across-mbta and https://www.mbta.com/news/2023-05-25/june-service-changes-will-allow-crews-continue-track-improvement-work-across-mbta

MBTA Federal Transit Administration Corrective Action Plans

In May 2022, the FTA voiced concern about ongoing safety issues at the MBTA. It launched a Safety Management Inspection in June to review the T's processes, procedures, and resources for safety decision-making as well as the role of the DPU in overseeing the MBTA's safety performance. A final report was issued in August 2022 with eight Special Directives with required actions for the MBTA to address and resource appropriately. The MBTA submitted initial Corrective Action Plans (CAPs) to the FTA for approval. Some of the CAPS required revisions while others were approved without changes. Each of the CAPs has a set of specific actions that must be completed within a certain timeframe. The MBTA continues to work with the FTA to review progress, inspect ongoing work, and identify areas that require additional work.

To track progress on implementation, the MBTA launched a publicly facing dashboard that is updated monthly. Table 8 below provides the status of MBTA FTA CAP implementation as of 5/24/2023. The T updated the dashboard's format recently to provide additional information as follows: submissions accepted, resubmittal required, under FTA review, and not yet submitted. These changes will be reflected in June. The FTA also updates any new CAPs on its website and tracks MBTA and DPU progress on its website.

Table 8: Update on Status of MBTA FTA CAPs

MBTA FTA CAPS	Total Progress	Total Actions	Completed Action Items	Remaining Action Items	Completion Timeline (%)
Overall progress	44%	519	228	291	26%
SD 22-04: Track Maintenance & PPE	59%	69	41	28	42%
SD 22-05: Vehicle Securement	95%	60	57	3	56%
SD 22-06: Operations Control Center	70%	27	19	8	42%
SD 22-07: Lapsed Certifications	40%	15	6	9	37%
SD 22-09: Workforce	45%	47	21	26	31%
SD 22-10: Safety Information & SMS	28%	101	28	73	30%
SD 22-11: Safety Communication	31%	42	13	29	46%
SD 22-12: Policies, Procedures, & Training	27%	158	43	115	26%

Source: https://www.mbta.com/quality-compliance-oversight/fta-safety-management-inspection-response (accessed 5/24/2023)

MBTA Operator Hire Levels

The MBTA is facing severe workforce challenges that are impacting safety and service delivery. On the service delivery side, the T is struggling to fill bus operator vacancies to provide minimum service delivery. The MBTA is also having a difficult time filling Operation Control Center (OCC) supervisor and dispatcher positions. Table 9 provides an overview of staffing requirements, actual headcounts, and vacancies for bus operator and OCC positions.

Table 9: MBTA Bus Operator and OCC Dispatcher Hire Level Updates (May 2023)

Position	Budgeted/FTA Required	Actual	Delta
Bus Operator	1823	1622	201
OCC Dispatcher	32	23	9

Source: https://cdn.mbta.com/sites/default/files/2023-05/HR%20PWDC%20May%202023.pdf

Note: In March 2023, the MBTA reported 365 bus operator vacancies. This estimate did not include bus operators in training or inactive employees. In May 2023, the MBTA reported 201 bus operator vacancies by changing the reporting methodology to include inactive employees; therefore, the estimated vacancy number may not be accurate. To increase applicant eligibility, on April 10th, a new requisition went into place to reduce the Minimum Entry Requirements (MERs) for OCC Heavy Rail dispatchers to three years with the Authority and one year of heavy rail experience.