

Fall 2024 Service Delivery Policy Annual Report

Report prepared by The Office of Performance Management and Innovation in Spring 2025



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Introduction

The MBTA's <u>Service Delivery Policy (SDP)</u> defines how the MBTA evaluates the quality of its transit service relative to the needs of the Massachusetts Bay region. The SDP states the MBTA *service objectives*, which articulate our vision for a high-quality transit system.

Each service objective has one or more standards, or metrics, that provide a framework for measuring how well the MBTA meets this vision. The table below shows the SDP service objectives as defined and ordered in the SDP and evaluated in this report, along with their respective standards.

The purpose of this report is to share the results of the MBTA's evaluation of its service against the SDP with the public and increase accountability and transparency. This report evaluates MBTA service during the Fall 2024 season, which spanned from August 25, 2024 to December 14, 2024. The Fall season has traditionally been selected for evaluation because this is the time of year when ridership is generally consistent and when schools are in session.

This evaluation period falls just before the implementation of Phase 1 of the MBTA's Bus Network Redesign (BNR), meaning that this report does not reflect any of the service changes introduced by BNR.

Service Objective	SDP Standard
	Span of Service
Service Availability	Frequency of Service
	Coverage
	Station Accessibility
	Bus Stop Accessibility
Accesibility	Ferry Dock Accessibility
Accessibility	Elevator Uptime
	Platform Accessibility
	Vehicle Accessibility
Deliebility	System Reliability
Reliability Comfort	Service Operated
	Passenger Comfort

Table 1 Service Objectives and Standards

How to Use This Report

The main body of this report presents the performance results for each standard. Performance reporting varies by standard but, generally, each section opens with topline weekday results for each service mode (Rapid Transit, Bus, Regional Rail, and Ferry) and more detailed visualizations follow showing both weekday and weekend results. These visualizations include both overall scores and "equity checks" showing the performance of services provided to low-income riders and riders of color.

Within each detailed result visualization, symbols are used to denote whether scores met the minimum or target levels of performance that are set in the SDP, as indicated in the legend below. In cases where no targets have been set, no symbols are used.



Does Not Meet Target



Our performance meets or exceeds the target.

Our performance is below the target, but not below any minimum.

Our performance is below the minimum.

When applicable, results from earlier SDP reports are included on data tables. Where our standards or calculation methods for a given metric have changed, symbols are used to indicate where past scores are not directly comparable to present performance, as indicated in the legend below. In the case of standards or methods that changed due to the new 2024 SDP, information on how Fall 2023 performance would have been scored if the new metrics were used is available on the <u>OPMI Data Blog</u>.



Performance score calculated using up-to-date standards.



Performance score calculated using standards that are no longer in use.

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MBTA Service and Ridership in Fall 2024

Ridership is central to the SDP reporting process and to the MBTA more generally. Changes in rider behavior influence agency decisions about how to allocate service, and at the same time, changes in service quality influence how many people choose to ride.

Impacts from the COVID-19 pandemic continue to affect both rider demand and the MBTA's service provision, with overall ridership and overall service levels both remaining below pre-pandemic levels. However, rapid transit ridership grew in 2024, in part thanks to improved runtimes made possible by the Track Improvement Program, and ridership is expected to continue growing in 2025 and beyond in response to planned service improvements through programs like the Bus Network Redesign, whose implementation began in winter 2025.

Figure 1 shows average weekday ridership by mode as a percentage of pre-pandemic levels from August 2023 to December 2024. From Fall 2023 to Fall 2024, ridership grew on all modes.



Figure 1 - Ridership as a Percent of 2019

While ridership at off-peak and weekend times has had some of the fastest growth for MBTA services, a substantial portion (30% - 40%) of weekday MBTA ridership continues to occur during the AM Peak and PM Peak hours (7:00 - 9:00 a.m. and 4:00 - 6:30 p.m., respectively, constituting approximately 22% of the service day), as shown in Figure 2 for the MBTA's Blue, Orange, Red, and Green lines.



Figure 2 - Distribution of Weekday Subway Ridership by Time Period

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Methodology

To help represent MBTA performance in terms of how riders experience the delivery of transit services, many of the standards are weighted by average ridership. For these standards, passing or failing service at times and places with high ridership is counted more heavily toward the overall score than passing or failing service at lower-ridership times and places.

In this report, ridership-weighted metrics are calculated using average ridership numbers for the Fall 2024 season that exclude major service diversions, to better reflect "typical" ridership patterns when weighting the popularity of a given route or stop. In general, planned service diversion days are excluded from the scope of current SDP metric calculations.

One drawback of ridership weighting is that people who do not use MBTA services due to poor service performance are not counted. This means that ridership-weighted metrics

This is the first annual report based on the new 2024 Service Delivery Policy. The new definitions and standards associated with this policy result in changes to the Span, Frequency, Coverage, Reliability, and Platform Accessibility calculations, which are denoted on charts by discontinuous lines and in the text using callout boxes like this one. For more detail on how the new policy changed the calculation methods and results for SDP metrics, an explainer is available on the OPMI Data Blog. tend to understate the size of a given failure when considering service quality in terms of potential riders, not just actual riders. Several performance standards in this report therefore include both unweighted and weighted results to provide additional context.

Note that because reliable ridership data are not available for the Mattapan High Speed Line, the line is excluded from the Rapid Transit results for ridership-weighted standards like Span, Frequency, and Reliability. However, data collection

improvements mean that the Mattapan Line is included in the Light Rail results for Service Operated, from which it was previously excluded.

Equity checks are reported for each standard where data are available to do so. Equity checks measure performance when only considering low-income riders and riders of color. These checks are designed to help identify instances where poor performance is concentrated on routes or stops predominantly serving these populations. The definitions of low-income and riders of color are aligned with those in the <u>MBTA Service and Fare</u> <u>Change Equity Policy</u>. The data used to determine income and race/ethnicity come from the most recent <u>MBTA System-Wide Passenger Survey</u> at the time of analysis, representing the 2023 cycle.¹

Note that due to sampling limitations, demographic data for ferry services were only available for the entire ferry mode rather than for individual routes, and surveys were only collected for year-round ferry routes. This report therefore excludes equity checks for ferry services, since differences in Ferry performance for routes serving more low-income riders and riders of color cannot be gleaned from these data.

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Each standard is defined in detail in the SDP. Within the SDP definitions, the Office of Performance Management and Innovation (OPMI) periodically updates measurements or calculations to better reflect real-world rider experience in the metrics. This year's evaluation contains several new and changed metrics compared to previous reports. Additionally, the SDP itself is updated periodically to reflect the evolving goals and values of the agency as well as improvements in data and evaluation techniques. The policy was updated in late 2024, resulting in many revised metrics and targets.

Finally, it should be noted that not all SDP standards are designed to measure the service that is actually experienced by riders. Standards of service availability (Span, Frequency, and Coverage) measure whether the MBTA's promised service levels, as represented by service schedules, achieve the MBTA's vision for a high-quality transit system. Consequently, this report uses the language of "scheduled service" to describe performance scores for those standards. Conversely, SDP standards that measure actually-operated service include Reliability, Service Operated, Passenger Comfort, Elevator Uptime, and Platform Accessibility.



Span of Service

The new policy revises how Span scores are calculated for each route. This change is aimed at making Span a more intuitive metric, with expected start and end times reflecting the start and end of any service rather than the timing of the first and last trips to and from downtown termini. This methodology, using "outside bounds," measures the first departure of the first trip and the last arrival of the last trip. The previous "inside bounds" methodology evaluated most services based on their timing in the city center only.

(Data Tables)

Riders expect that services will be available throughout the day to serve all their types of trips and work/life schedules. **Span of Service measures the percentage of riders on routes that were scheduled to meet or surpass their expected hours of operation.** This measure refers to the hours during which service is available relative to standards set in the <u>Service Delivery</u> <u>Policy</u> for each mode and day (see Table 3 on pages 8-9 of the policy).

All Rapid Transit, Regional Rail, and Ferry² services continued to meet

their expected hours of operation on both weekdays and weekends in Fall 2024.

The bus routes that failed their span tests in Fall 2024 were mostly shorter routes (under 30 minutes scheduled travel time from end to end) that either started slightly late or ended slightly early relative to the new policy's expected hours of operation for those routes.

Span Weekday Performance by Mode





Figure 3 - Span Weekday Performance

(Also see Table A1)

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Figure 4 - Span Saturday Performance

(Also see Table A2)



9

Figure 5 - Span Sunday Performance

(Also see Table A3)



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Frequency of Service

(Data Tables)

Riders rely on MBTA services to be available often enough to reasonably complete their journeys throughout the day. Frequency of Service measures the percentage of riders on routes that were scheduled to meet or surpass their expected frequencies throughout the day. This measure refers to the effective wait times of different services relative to standards in the <u>Service Delivery Policy</u> (see Table 4 on pages 10-11 of the policy).

In Fall 2024, Rapid Transit weekday frequencies improved to 100%, but Local Bus frequencies slipped somewhat, with more routes seeing decreased metric performance than increases, particularly at peak hours and on routes operating from Quincy Garage. Weekday frequency scores for Frequent Bus service held steady, as did weekend scores for most bus routes.

The new policy streamlines the Frequency expectations for Frequent Bus services, setting an expectation that they will operate with 15 minutes between buses all day, every day, including weekends. Previously, frequencies on these routes were expected to be 20 minutes on weekends and evenings, 15 minutes during weekday middays, and 10 minutes during weekday peak hours. The more ambitious Frequency standard for Frequent Bus service yielded lower scores for these routes on weekends, as schedules have not yet adapted to this new standard. Preliminary analyses of Winter 2025 performance show improvements of 5-6 percentage points in weekend Bus Frequency thanks in part to the implementation of Phase 1 of the Bus Network Redesign (BNR). The ongoing implementation of BNR is expected to further improve

Bus Frequency performance as schedules, infrastructure upgrades, and increased hiring improve the MBTA's ability to deliver this new, higher standard.

Regional Rail service remained just below 100% for weekday frequency due to the

Greenbush Line not meeting its expectation of 4 outbound trips during the PM Peak period, but Regional Rail scored 100% for weekend frequencies. As for Ferry, the only routes that did not meet their frequency expectations were the Lynn and Winthrop/Quincy Ferries. On weekdays, the Winthrop/Quincy Ferry operated only 2 peak trips per peak direction in Fall 2024 rather than the required 3. The schedule for the 2025 season has already addressed this issue by separating service into two independent routes with 3 trips to each dock in the peak time and direction. Weekend service fails the frequency standard for both Lynn and Winthrop/Quincy because of a midday gap in service greater than 3 hours, which allows appropriate breaks and compliance with regulations while utilizing a single crew shift.



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Frequency Weekday Performance by Mode





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Figure 7 - Frequency Saturday Performance

(Also see Table A5)

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Figure 8 - Frequency Sunday Performance

(Also see Table A6)

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Coverage

(Data Tables)

(Also see Table A7)

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The Coverage standard measures the degree to which MBTA transit services are geographically accessible to residents of the MBTA service area, considering all residents of the service area rather than people who already ride MBTA services. Coverage is measured in two ways: Base Coverage and Frequent Service Coverage. Both measurements cover the MBTA core service area, excluding municipalities that are members of a Regional Transit Authority (RTA). Coverage metrics inherently do not include non-residents who ride the MBTA, including tourists and riders who reside outside the service area.

Base Coverage

Residents of the region expect the MBTA to provide a basic level of coverage throughout the service area. Base Coverage measures the percent of the population in the MBTA service area that lives within a half mile of any MBTA service. The Base Coverage measure thus assesses the geographic extent of all MBTA services, regardless of their frequency or availability throughout the day.

Access to weekday transit service remains above the minimum, with at least 75% of all residents living within walking distance of MBTA service, including more than 80% each of low-income households and residents of color. Base coverage scores remained essentially flat from 2023 to 2024.



Figure 9 - Base Coverage Performance

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Frequent Coverage

The new policy streamlines the definition of frequent service for the Frequent Coverage metric so that stops and stations with effective frequencies of 15 minutes or better every day are evaluated. Previously, stops and stations were considered to have frequent service if their effective frequencies were 15 minutes or better on weekdays and 20 minutes or better on weekends. Beyond a basic level of transit service throughout the service area, there are urban areas with high population and employment densities where frequent service (as defined in the Coverage section of the <u>Service Delivery Policy</u>, pages 11-13) is expected. Frequent Service Coverage measures the percent of the population that lives within half a mile of frequent MBTA service in areas that either have high combined population and

employment densities or have moderately high combined population and employment densities along with above-average proportions of low-income and low-vehicle households.

Results on this metric are mixed. On weekdays, access to high-frequency service in the high-density portions of the MBTA service area rebounded somewhat from 2023 to 2024 as service was added. That said, more than one third of households in denser or more transit-dependent parts of the MBTA service area remain unserved by frequent transit, putting frequent coverage well below the MBTA's target of 70%. The shift to a 15-minute frequency standard in the new policy results in lower weekend scores for Frequent Coverage, though this appears to be a function of the change in the standard rather than a change in service. When evaluating 2023 coverage using current standards, weekend Frequent Coverage was effectively flat in 2024 (see the <u>OPMI Data Blog</u> for details on 2023 performance using the new standards).

As noted earlier, Bus Network Redesign Phase 1 was launched just after the period covered by this report. Preliminary analyses show improvements in Frequent Coverage by 3-5 percentage points depending on time of week.

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Figure 10 - Frequent Coverage Performance

(Also see Table A8)



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Accessibility

The MBTA works to ensure that people of all abilities have access to MBTA services. The accessibility standards in the SDP measure the accessibility of the MBTA system as it relates to the Americans with Disabilities Act (ADA), the <u>Daniels-Finegold Settlement Agreement</u>, and other state and federal regulations. More detail on the specific mobility constraints which are addressed by each accessibility standard can be found on pages 13-16 of the SDP.

Station Accessibility

The ability for all customers to reach a subway, Silver Line, or Regional Rail platform depends on whether stations are designed to be accessible. Subway stations are typically accessible using elevators, while accessible Regional Rail stations may include elevators or ramps in combination with high or mini-high platforms for level boarding. Surface stops on the Mattapan, Green, and Silver Lines have different accessibility requirements involving the geometry of the street, curb, or platform. **Station Accessibility measures the percentage of MBTA stations that are ADA-accessible.**

Station Accessibility slightly increased since Fall 2023, with 81.2% of stations (229 out of 282 stations) accessible as of Fall 2024, following <u>accessibility improvements</u> made to several Green Line and Regional Rail stations in 2024.

(Also see Table A9) 2024 Overall Overall 100% 100% Station 81.2% 76% Accessibility 50% 100% **Bus Stop** 93% Accessibility 50% 100% Ferry Dock 56.3% Accessibility 50% 22 23 24

Figure 11 - Unweighted Station and Dock Accessibility

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(Data Tables)

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Figure 12 - Ridership-Weighted Station and Dock Accessibility (Also see Table A9)

Bus Stop Accessibility

Bus Stop Accessibility is a newly introduced metric in the 2024 SDP. Due to the lack of more comprehensive bus stop accessibility data, this metric currently relies on data from the MBTA's Plan for Accessible Transit Infrastructure (PATI) program. The system-wide survey that was conducted as a part of the PATI program evaluates bus stops as Critical, High, Medium, Low priority, or Compliant based on the severity and quantity of accessibility barriers. While the PATI survey collected extensive information on MBTA bus stops, that information does not cover all of the access criteria defined in the <u>SDP</u> (page 14).³ Given the number of stops identified in this process as critically inaccessible or with high-priority accessibility needs, project prioritization is focused on addressing these stops, while acknowledging that stops with medium- or low-priority barriers remain inaccessible to some members of the public.

In line with this prioritization, **Bus Stop Accessibility measures the percentage of MBTA bus stops that do not have Critical or High-priority accessibility barriers.** If better data become available, we expect to more accurately measure the share of bus stops that are more broadly ADA compliant. Because additional criteria can also only be used to identify further deficiencies in a stop, it is expected that better data collection will reduce the number of stops considered to have succeeded in these criteria. Thus, despite being the best numbers the MBTA presently has, the current number is an overestimation.

For Fall 2024, 93.0% of MBTA bus stops did not have Critical or High-priority accessibility barriers, with 97.9% of riders being served by bus stops without such barriers.⁴

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Ferry Dock Accessibility

Access to ferry services is measured by docks rather than by terminals/stations since, outside of extreme circumstances, each dock serves specific routes, serviced by a subset of boats compatible with that dock. Ferry Dock Accessibility measures the percentage of MBTA ferry docks that are ADA-accessible.

As of Fall 2024, 56.3% (9 out of 16) of ferry docks served by the MBTA are fully ADA-accessible; this number is unchanged from Fall 2023. For the other docks, in some weather and tidal conditions, the slope on the ramp to vessels exceeds ADA requirements, though they are generally usable with the existing accommodations and most common weather and tidal conditions. Capital improvements to Ferry docks, including access improvements, are ongoing and will be reflected in future SDP Annual Reports. Ridership-weighted dock accessibility declined slightly from 30.5% to 29.3% because several of the MBTA's inaccessible docks have relatively high and growing ridership.

Elevator Uptime

Many stations require elevators to be accessible for riders, meaning that elevator maintenance or unplanned outages can prohibit riders from accessing these stations. **Elevator Uptime measures the percentage of total "elevator-hours" in which elevators are operational.** Elevator-hours are calculated as the total number of elevators at each station multiplied by the total number of hours during which service is offered at each station.

Elevator Uptime was 99.5% in Fall 2024, rebounding from Fall 2023 and surpassing the MBTA's minimum, which is also committed to the public via the <u>Amended MBTA/BCIL</u> <u>Settlement Agreement</u> (page 56).⁵ While the SDP Elevator Uptime metric is not identical to the one in the settlement (see endnote), the threshold remains meaningful to the Agency and to riders.

Despite the overall systemwide improvement, some elevators at the Courthouse, Fields Corner, Haymarket, and World Trade Center stations had cumulative downtimes of more than 7 days (non-continuously) during the Fall 2024 season, indicating areas where further work remains necessary.

Platform Accessibility

Elevator outages due to maintenance or equipment failure have less of an impact when there is redundancy through other working elevators or other accessible means by which riders can reach a given platform. Conversely, it is also possible for a single elevator outage to impact access to multiple platforms. **Platform Accessibility is an alternative measure of Elevator Uptime that evaluates access to platforms, measuring the percentage of total**

The new policy tightens and clarifies the Platform Accessibility standard. Under the previous policy, elevator outages during which accessible shuttle alternatives were provided as a mitigation measure were considered accessible platformhours. However, accessible shuttle alternatives often don't provide the same quality of service that riders would get with a working elevator, so the new policy considers all elevator outages to be inaccessible for the purposes of this calculation by default. In addition to this change in standard, the calculation methods were overhauled to pull from updated data sources, improving overall accuracy.

"platform-hours" that are ADAaccessible at platforms for which access depends on elevators. Platform-hours are calculated by multiplying the number of platforms (boarding locations) at each station for which access depends on elevators by the total number of hours when service is offered at each platform.

Platform accessibility was just shy of 99% in 2024, with the results of the updated calculation falling below the minimum performance of 99.4%. Platform accessibility was particularly impacted by several elevator outages at Ruggles which affected access to multiple platforms at once.

Vehicle Accessibility

Even from an accessible platform, customers can encounter barriers boarding some transit vehicles. Vehicle Accessibility measures the percentage of trips that the MBTA provides with at least one ADA-compliant vehicle. This measure is currently only calculated for the Green Line, as data for Regional Rail Vehicle Accessibility and Ferry Boat Accessibility are not yet available, and all MBTA heavy rail (Blue Line, Orange Line, and Red Line) vehicles and buses are accessible.

The accessibility of Green Line vehicles in Fall 2024 achieved the minimum of 100%.

Figure 13 - Accessibility Performance

(Also see Table A9)



Reliability of Service

(Data Tables)

The new policy overhauls service reliability standards to better reflect rider experiences. The previous on-time performance (OTP) metric primarily measured passenger wait times prior to boarding a vehicle, without also considering delays in vehicle travel time or factoring in the impacts of cancelled or bunched service. The new Excess Trip Time (ETT) methodology considers the predictability of complete trip times instead of only measuring passenger wait times. In this report, ETT is used for Heavy Rail Reliability, and future reports will expand the use of ETT to other modes as improved data sources become available. More on ETT can be found in this blog post.

Whereas ETT accounts for the travel time impacts of last-minute trip cancellations by default, the updated bus reliability calculations used in this year's and last year's reports use a modified version of the previous OTP metric which penalizes runs that were cancelled, rather than only considering trips that ran. Riders expect that the total time they spend on each transit journey will be predictable and consistent. Reliability standards provide tools to evaluate the travel time performance of MBTA services. Standards vary by mode and by the frequency of service, as described on pages 16-20 of the SDP. Passengers using high-frequency services generally expect regular vehicle arrivals rather than strict adherence to published timetables, whereas passengers who use less frequent services expect arrivals and departures to occur as published. Reliability measures the percentage of passengers on routes that pass travel time performance tests.

The new, more stringent reliability standards for Heavy Rail resulted in lower scores for 2024, but comparisons using consistent metrics show that reliability improved substantially from 2023 to 2024, thanks in large part to faster runtimes from the Track Improvement Program. Weekday Heavy Rail performance in 2023

using the ETT standard would have been 27.3%, compared to 2024's 82.8%, since prevalent speed restrictions in 2023 were still slowing down a large portion of trips. Figure 14 compares how recent trends in Red Line reliability would be evaluated by our current ETT metric compared to our previous OTP metric.

Bus reliability saw mixed changes in 2024. Weekday reliability improved for all categories of bus, helped by lower rates of cancelled service, but it remained below its minimum of 70%. On weekends, reliability declined somewhat for Local Bus service on Saturdays, while Sunday bus reliability was effectively flat from 2023 to 2024.

Finally, Regional Rail and Ferry reliability both saw decreases in 2024. The Regional Rail decrease was more widespread, with weekday on-time performance decreasing on ten routes and increasing on only two routes from 2023 to 2024, whereas the small decline in Ferry reliability was more localized, mainly driven by unusually low September on-time performance for the Winthrop Ferry.

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Note: Excess Trip Time results are not yet available for the Green Line and the data source for the legacy on-time performance metric has been decommissioned. OPMI is in the process of ingesting the new data source as well as calibrating the appropriate baseline for the calculation. When ETT results are available, it is anticipated that OPMI will publish those results on the <u>OPMI Data Blog</u> and/or in an addendum to this document on the <u>SDP</u> <u>Website</u>.

Reliability Weekday Performance by Mode



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Figure 15 - Reliability Weekday Performance

(Also see Table A10)



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Figure 16 - Reliability Saturday Performance

(Also see Table A11)



= 26 =

Figure 17 - Reliability Sunday Performance

(Also see Table A12)



= 27 =

(Data Tables)

Service Operated

Riders depend on transit services running as scheduled, but factors like equipment failure, lack of personnel, and emergencies can sometimes prevent the MBTA from operating scheduled service. Service Operated measures the percentage of scheduled service that was actually provided for each mode.

Service operated scores for bus, light rail, and weekend heavy rail saw meaningful improvement from 2023 to 2024, with service being cancelled at lower rates even as total scheduled service levels either held steady or increased. Weekend bus service surpassed the 99.5% target for service operated, meaning that fewer than 1 hour of service was cancelled for every 200 hours of service scheduled.

While heavy rail saw a slight decrease in the percentage of scheduled weekday trips that were operated, this came in the context of more than 25% growth in the overall quantity of operated service from Fall 2023 to Fall 2024, with the typical number of daily scheduled weekday heavy rail trips rising from 842 to 1,104. This substantial boost was made possible by improved staffing, increased vehicle availability, and the lifting of speed restrictions through the Track Improvement Program. Regional Rail and ferry service, meanwhile, each provided more than 99% of scheduled trips, with rates of cancelled service remaining effectively flat from 2023 to 2024.



Figure 18 - Daily Scheduled Trips for Typical Fall MBTA Service, 2021-2024

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Service Operated Weekday Performance by Mode



Figure 19 - Service Operated Weekday Performance

2024 Weekday 99.5% 100% 96.2% Heavy Rail 90% 99.5% 100% Light Rail 95.5% 90% 99.5% 100% Bus 99.0% 90% 22 23 24

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(Also see Table A13)



Figure 20 - Service Operated Weekend Performance

(Also see Table A13)

Figure 21 - Service Operated Performance

(Also see Table A13)



Passenger Comfort

(Data Tables)

The MBTA strives to not just enable riders to get onto a bus or train, but to provide sufficient space to allow for reasonable comfort while enroute. Passenger Comfort is influenced by the number of people on a vehicle and whether sufficient space is available to each rider for all or most of the trip. **Comfort measures the percentage of passenger travel time experienced in comfortable conditions.** Standards for comfort vary by transport mode and time of day, with Appendix B on pages 34-35 of the <u>SDP</u> defining a maximum number of passengers per vehicle that provide a safe and comfortable ride.

Crowding conditions improved in Fall 2024 for both bus and heavy rail, even as overall ridership increased. Although passenger comfort scores for bus (at 95.8%) remain below the 96% target, fewer dropped trips in 2024 may have contributed to a slight improvement compared to 2023. Heavy rail experienced an improvement as well, with a passenger comfort score of 99.0%, which can be attributed to an increase in total scheduled service. Note that due to limitations in the granularity of data about the loading of each car on a heavy rail train, comfort metrics assume passengers are evenly dispersed across the train. Actual comfort varies within each train.



Figure 22 - Passenger Comfort Performance (Also see

(Also see Table A14)

Paratransit Service Standards

The MBTA's paratransit program, The RIDE, provides door-to-door, public shared-ride transportation to eligible passengers as mandated under the ADA. The RIDE provides service that goes beyond ADA requirements, offering trips throughout the service area at a higher fare rate in addition to offering trips starting or ending within the ADA-required three-quarter miles of a fixed-route service. The RIDE uses the performance metrics stated in Appendix C of the <u>SDP</u> to monitor how well its contractors provide their contracted service and to inform staffing and planning decisions.



Productivity

Productivity measures the efficiency of the RIDE system and is measured as the ratio of the number of trips that The RIDE completes to the number of hours it takes The RIDE to provide these trips (trips per service hour). Productivity held steady at 1.06 trips per service hour in Fall 2024, remaining below the medium-term target of 1.15 trips per service hour. However, this came as ridership grew by 20% from Fall 2023 to Fall 2024, with the number of service hours operated to provide those trips increasing slightly more, by 22%.

Excessively Late Pick-Ups & Drop-Offs

Excessively late pick-ups are broken out into two groups:

- Trips occurring between 61 and 120 minutes late
 - Trips occurring over 120 minutes late

Excessively late drop-offs are broken out into two groups:

- Trips occurring between 31 and 60 minutes late
- Trips occurring over 60 minutes late

Each of the excessively late metrics decreased in Fall 2024 compared to Fall 2023, all falling below 1 per 1000 trips and coming close to the medium-term target of 0. The largest decrease occurred for excessively late pick-ups that were between 1 and 2 hours late.

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Table 2 Paratransit Performance

			Fall Performance				
SDP Standard	Minimum	Target	2022	2023	2024		
Productivity		1.15	1.01	1.07	1.06		
Excessively late pick-ups, 61-120 minutes, per 1,000 trips		0	5.6	3.4	0.3		
Excessively late pick-ups, greater than 120 minutes, per 1,000 trips		0	1.7	0.3	0.02		
Excessively late drop-offs, 31 – 60 minutes, per 1,000 trips		0	6.0	1.8	0.9		
Excessively late drop-offs, greater than 60 minutes, per 1,000 trips		0	2.1	0.2	0.1		

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Conclusion

Delivering safe, reliable, and accessible public transit to riders is the MBTA's top priority, and the SDP metrics offer a high-level overview of the availability and delivery of service during Fall 2024. Recent changes in performance can be summarized in terms of changes in service and service conditions, ridership, and operator availability.

Ridership continued to rise closer to pre-pandemic levels in 2024, particularly on Rapid Transit, Ferry, and paratransit services, as most indicators of service performance improved relative to 2023. Increased service hours and more ambitious schedules in 2024 corresponded with more reliable and less crowded service, as well increased frequent coverage. The MBTA also made gains in accessibility and in reducing service cancellation rates. However, a few performance measures declined in 2024, such as Regional Rail reliability, and others remain below their minimums or targets despite improvements.

The MBTA uses these metrics and many more on a daily, weekly, and monthly basis to make priorities for service adjustments while also planning for larger improvements. The MBTA is investing in initiatives to improve bus service by modernizing bus facilities, implementing transit priority, and continuing the roll out of the Bus Network Redesign, which began with Phase 1 in December 2024 and will progress with additional changes over the next five years. In 2024, the MBTA also completed the removal of subway speed restrictions and made some progress with increased bus operator hiring, improved rapid transit and bus frequencies, and continued accessibility improvements. The MBTA will continue to monitor and refine these metrics to help determine how to best allocate resources to improve rider service into the future.



Endnotes

Select the endnote number to return to the relevant report section

1. Due to the varying timelines in preparation and publication of content to mbta.com, it is likely that 2024 rider census data may be public before this document is published; however, it was not yet available when analysis was conducted.

2. A slight adjustment has been made for Ferry spans on infrequent services. For example, the final Weekend Lynn Ferry trip arrives at Lynn at 8:25pm whereas the SDP calls for service to run until 8:30pm. In this scenario, the span standard could be met by delaying departure from Boston by 5 minutes or slowing the Ferry over the course of its journey, but this would yield no rider benefit (and could potentially reduce the quality of service). Thus, for Ferry services, a 15-minute grace period has been introduced around the span edges. OPMI will continue to evaluate and refine this metric across modes for infrequent / scheduled services in coming years to best reflect rider experience.

3. The most current inventory of stops includes the following SDP Bus Stop Accessibility criteria:

- A landing area onto which a ramp can be deployed
- An accessible path from the bus stop to the nearest crossing
- No other major barriers

The most current inventory of stops does not include the following SDP Bus Stop Accessibility criteria:

- Landing pads are level and at least 5 feet wide by 8 feet deep
- An accessible path from the bus stop to reciprocal curb cuts
- A curb ramp within 100 feet if a crosswalk is present

4. This number may also be an overestimate. If riders who cannot access one stop instead use another stop, they are accounted for in this metric. If, however, they use another mode or choose not to travel at all. this metric does not reflect that.

5. While the concepts are similar and the targets are the same, numbers presented in this Annual Report should not be taken as a specific declaration of "compliance" according to the settlement. The MBTA reports this metric using similar terms as the settlement as a statement of intention on elevator uptime as well as to provide a general sense of the agency in meeting that intention; the numbers, however, are not directly comparable. The settlement defines noncompliance as when "overall 'uptime' drops below 99.40% for more than 3 consecutive months". The SDP Annual Report does not report on monthly uptime (it covers the complete Fall Rating in a single number), and the Rating is not a period of 3 calendar months.

Appendix

Table A1 Span Performance Detail - Weekday Service

Return to Report

				Overall		Low-	Income R	iders	Riders of Color			
Mode	Minimum	Target	2022	2023	2024	2022	2023	2024	2022	2023	2024	
Rapid Transit		100%	*93.7%	*100%	100%	*93.8%	*100%	100%	*94.1%	*100%	100%	
Bus	90%	95%	*95.1%	*95.1%	92.0%	*94.8%	*94.9%	92.7%	*95.1%	*95.0%	92.7%	
Frequent Bus			*100%	*100%	93.2%	*100%	*100%	95.2%	*100%	*100%	95.0%	
Local Bus			*91.4%	*90.9%	91.1%	*90.9%	*90.6%	90.5%	*91.0%	*90.3%	90.8%	
Commuter Bus			*92.1%	*94.0%	89.0%	*92.4%	*94.1%	87.3%	*93.4%	*94.8%	87.2%	
Regional Rail		100%	*100%	*100%	100%	*100%	*100%	100%	*100%	*100%	100%	
Ferry		100%	*100%	*100%	100%	*100%	*100%	100%	*100%	*100%	100%	

*Span scores for 2022-2023 are not comparable with scores for 2024 because of a 2024 change in metric definition and a corresponding revision in expected span hours.

Table A2 Span Performance Detail - Saturday Service

Return to Report

				Overall		Low-	Income R	iders	Riders of Color			
Mode	Minimum	Target	2022	2023	2024	2022	2023	2024	2022	2023	2024	
Rapid Transit			*91.9%	*100%	100%	*92.1%	*100%	100%	*92.3%	*100%	100%	
Bus			*97.7%	*98.4%	98.2%	*97.7%	*98.3%	98.3%	*97.6%	*98.5%	98.2%	
Frequent Bus			*100%	*100%	100%	*100%	*100%	100%	*100%	*100%	100%	
Local Bus			*95.3%	*96.6%	96.3%	*95.3%	*96.5%	96.3%	*94.9%	*96.6%	96.2%	
Commuter Bus												
Regional Rail			*100%	*100%	100%	*100%	*100%	100%	*100%	*100%	100%	
Ferry					100%			100%			100%	

*Span scores for 2022-2023 are not comparable with scores for 2024 because of a 2024 change in metric definition and a corresponding revision in expected span hours.

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Table A3 Span Performance Detail - Sunday Service

Return to Report

				Overall		Low-	Income R	iders	Riders of Color			
Mode	Minimum	Target	2022	2023	2024	2022	2023	2024	2022	2023	2024	
Rapid Transit			*100%	*100%	100%	*100%	*100%	100%	*100%	*100%	100%	
Bus			*97.3%	*97.9%	93.4%	*97.2%	*97.9%	93.9%	*97.6%	*98.1%	93.6%	
Frequent Bus			*100%	*100%	96.6%	*100%	*100%	97.7%	*100%	*100%	97.2%	
Local Bus			*93.5%	*94.9%	88.7%	*93.2%	*94.8%	88.0%	*93.8%	*95.0%	88.3%	
Commuter Bus												
Regional Rail					100%			100%			100%	
Ferry					100%			100%			100%	

*Span scores for 2022-2023 are not comparable with scores for 2024 because of a 2024 change in metric definition and a corresponding revision in expected span hours.

Table A4 Frequency Performance Detail - Weekday Service

Return to Report

				Overall		Low-	Income R	iders	Riders of Color			
Mode	Minimum	Target	2022	2023	2024	2022	2023	2024	2022	2023	2024	
Rapid Transit		100%	100%	95.9%	100%	100%	96.0%	100%	100%	95.9%	100%	
Bus	90%	95%	*89.6%	*88.9%	89.9%	*89.2%	*88.7%	89.6%	*89.8%	*89.3%	90.1%	
Frequent Bus			*92.3%	*91.4%	95.4%	*92.0%	*91.5%	95.3%	*92.5%	*92.1%	95.5%	
Local Bus			87.1%	86.3%	84.3%	86.6%	85.9%	83.9%	86.9%	86.3%	84.4%	
Commuter Bus			91.6%	94.1%	93.3%	89.6%	93.5%	93.4%	90.2%	93.8%	93.5%	
Regional Rail			100%	98.9%	98.1%	100%	99.0%	98.3%	100%	99.1%	98.5%	
Ferry		100%	100%	100%	94.3%	100%	100%		100%	100%		

*Frequent Bus scores for 2022-2023 are not comparable with scores for 2024 because of the 2024 change in standard to require 15-minute headways at all times.

Table A5 Frequency Performance Detail - Saturday Service

Return to Report

				Overall		Low-	Income R	iders	Riders of Color			
Mode	Minimum	Target	2022	2023	2024	2022	2023	2024	2022	2023	2024	
Rapid Transit			100%	100%	100%	100%	100%	100%	100%	100%	100%	
Bus			*94.3%	*93.8%	80.2%	*94.2%	*93.7%	80.3%	*94.7%	*94.4%	81.5%	
Frequent Bus			*100%	*100%	74.6%	*100%	*100%	74.9%	*100%	*100%	76.8%	
Local Bus			88.3%	86.9%	86.5%	88.2%	86.7%	86.3%	88.7%	87.6%	87.2%	
Commuter Bus												
Regional Rail			100%	100%	100%	100%	100%	100%	100%	100%	100%	
Ferry					90.0%							

*Frequent Bus scores for 2022-2023 are not comparable with scores for 2024 because of the 2024 change in standard to require 15-minute headways at all times.

Table A6 Frequency Performance Detail - Sunday Service

Return to Report

				Overall		Low-	Income R	iders	Riders of Color			
Mode	Minimum	Target	2022	2023	2024	2022	2023	2024	2022	2023	2024	
Rapid Transit			100%	100%	100%	100%	100%	100%	100%	100%	100%	
Bus			*88.7%	*88.9%	62.5%	*88.1%	*88.6%	61.1%	*89.6%	*89.7%	61.7%	
Frequent Bus			*100%	*100%	55.5%	*100%	*100%	53.4%	*100%	*100%	54.0%	
Local Bus			72.6%	72.7%	72.7%	71.5%	72.2%	72.2%	73.6%	73.8%	73.6%	
Commuter Bus												
Regional Rail					100%			100%			100%	
Ferry					89.0%							

*Frequent Bus scores for 2022-2023 are not comparable with scores for 2024 because of the 2024 change in standard to require 15-minute headways at all times.

Table A7 Base Coverage Performance Detail

Return to Report

				Overall		Low-Inc	ome Hou	seholds	Residents of Color			
Day Type	Minimum	Target	2022	2023	2024	2022	2023	2024	2022	2023	2024	
Weekday	75%		78.2%	78.7%	78.6%	84.8%	84.5%	84.6%	88.5%	88.5%	88.1%	
Saturday			75.2%	74.9%	75.3%	82.5%	81.5%	81.9%	86.5%	86.1%	85.8%	
Sunday			69.6%	70.1%	70.1%	78.0%	77.3%	77.2%	82.3%	82.2%	81.7%	

Table A8 Frequent Coverage Performance Detail

Return to Report

				Overall		Low-Inc	ome Hou	seholds	Residents of Color			
Day Type	Minimum	Target	2022	2023	2024	2022	2023	2024	2022	2023	2024	
Weekday		70%	61.6%	61.6%	62.5%	61.0%	60.1%	61.4%	64.6%	62.6%	63.8%	
Saturday			*68.6%	*67.8%	58.0%	*67.0%	*66.6%	56.9%	*70.1%	*68.6%	60.4%	
Sunday			*59.5%	*59.8%	49.3%	*59.3%	*59.0%	48.9%	*63.3%	*62.3%	51.0%	

*Frequent Coverage weekend scores for 2022-2023 are not comparable with 2024 weekend scores because of the 2024 change in standard to define frequent service as 15-minute headways at all times.

Table A9 Accessibility Performance Detail

Return to Report

			Overall			Low-	Income R	iders	Riders of Color		
SDP Standard	Minimum	Target	2022	2023	2024	2022	2023	2024	2022	2023	2024
Station Accessibility (Unweighted)	76%	100%	78.9%	79.2%	81.2%						
Station Accessibility (Ridership-weighted)	94%	100%	94.5%	94.3%	94.9%	94.1%	94.0%	94.7%	95.1%	94.6%	95.3%
Bus Stop Accessibility (Unweighted)					93.0%						
Bus Stop Accessibility (Ridership-weighted)					97.9%			97.9%			98.0%
Ferry Dock Accessibility (Unweighted)				56.3%	56.3%						
Ferry Dock Accessibility (Ridership-weighted)				30.5%	29.3%						
Elevator Uptime	99.4%	100%	98.1%	99.0%	99.5%						
Platform Accessibility	99.4%	100%	*98.8%	*99.4%	98.9%						
Vehicle Accessibility (Green Line)	100%	100%	100%	100%	100%						

*Platform Accessibility scores for 2022-2023 are not comparable with scores for 2024 because of a 2024 change in standard regarding temporary shuttling.

Table A10 Reliability Performance Detail - Weekday Service

Return to Report

			Overall			Low-Income Riders			Riders of Color			
Mode	Minimum	Target	2022	2023	2024	2022	2023	2024	2022	2023	2024	
Rapid Transit		90%	*86.0%	*88.8%	82.8%	*86.1%	*88.8%	83.0%	*86.3%	*89.2%	82.7%	
Bus	70%	75%	^68.8%	64.2%	66.7%	^68.7%	64.1%	66.4%	^69.1%	64.3%	66.5%	
Frequent Bus			^76.7%	70.6%	72.9%	^76.7%	70.5%	72.7%	^76.8%	70.5%	72.6%	
Local Bus			^62.9%	59.1%	61.6%	^62.7%	59.0%	61.3%	^62.8%	58.9%	61.1%	
Commuter Bus			^57.4%	51.4%	56.3%	^58.0%	51.8%	56.6%	^57.6%	52.1%	56.7%	
Regional Rail		92%	90.0%	92.3%	89.4%	90.2%	92.3%	89.5%	90.7%	92.3%	89.6%	
Ferry		99%	99.7%	99.6%	98.9%							
The RIDE		90%	87.7%	86.6%	92.5%							

*Rapid Transit reliability scores for 2022-2023 are not comparable with scores for 2024 because of the 2024 change to calculate reliability using Excess Trip Time.

^Bus reliability scores for 2022 are not comparable with scores for 2023-2024 because of the 2023 change in calculation methodology to penalize dropped trips.

Table A11 Reliability Performance Detail - Saturday Service

Return to Report

			Overall			Low-	Income R	iders	Riders of Color			
Mode	Minimum	Target	2022	2023	2024	2022	2023	2024	2022	2023	2024	
Rapid Transit			*83.7%	*90.0%	87.3%	*83.9%	*90.0%	87.6%	*84.1%	*90.4%	87.4%	
Bus			^70.2%	69.2%	67.6%	^70.3%	69.1%	67.5%	^70.6%	69.4%	67.8%	
Frequent Bus			^75.7%	73.2%	73.7%	^75.8%	73.1%	73.6%	^75.9%	73.1%	73.7%	
Local Bus			^64.5%	64.8%	60.8%	^64.6%	64.8%	60.7%	^64.6%	65.0%	60.9%	
Commuter Bus												
Regional Rail			91.0%	92.8%	88.5%	90.8%	92.8%	88.5%	91.8%	92.7%	88.3%	
Ferry												

*Rapid Transit reliability scores for 2022-2023 are not comparable with scores for 2024 because of the 2024 change to calculate reliability using Excess Trip Time.

^Bus reliability scores for 2022 are not comparable with scores for 2023-2024 because of the 2023 change in calculation methodology to penalize dropped trips.

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Table A12 Reliability Performance Detail - Sunday Service

Return to Report

			Overall			Low-Income Riders			Riders of Color			
Mode	Minimum	Target	2022	2023	2024	2022	2023	2024	2022	2023	2024	
Rapid Transit			*85.7%	*89.7%	89.6%	*85.9%	*89.8%	89.8%	*86.2%	*90.1%	89.5%	
Bus			^72.9%	69.7%	69.6%	^72.9%	69.7%	69.4%	^73.3%	69.8%	69.7%	
Frequent Bus			^77.0%	73.0%	73.9%	^76.9%	73.0%	73.7%	^77.1%	73.0%	73.7%	
Local Bus			^67.0%	64.9%	63.2%	^67.2%	65.0%	63.1%	^67.5%	65.0%	63.2%	
Commuter Bus												
Regional Rail			91.6%	92.5%	89.7%	91.5%	92.6%	89.6%	91.9%	92.8%	89.2%	
Ferry												

*Rapid Transit reliability scores for 2022-2023 are not comparable with scores for 2024 because of the 2024 change to calculate reliability using Excess Trip Time.

^Bus reliability scores for 2022 are not comparable with scores for 2023-2024 because of the 2023 change in calculation methodology to penalize dropped trips.

Table A13Service Operated Performance Detail

Weekday Saturday Sunday Mode Minimum Target 2023 2022 2023 2023 2024 2022 2024 2024 2022 Heavy Rail 99.5% 96.0% 97.8% 96.2% 96.0% 98.3% 98.7% 95.9% 98.3% 99.5% --Light Rail 99.5% 95.3% 94.2% 95.5% 93.3% 93.1% 94.8% 94.3% 94.6% 97.7% --Bus --99.5% 96.7% 97.3% 99.0% 96.9% 97.2% 99.5% 97.0% 98.6% 99.8%

Mada		T	Overall					
Mode	Minimum	Target	2022	2023	2024			
Regional Rail			99.7%	99.5%	99.4%			
Ferry			100%	99.8%	99.9%			

Table A14 Passenger Comfort Performance Detail

Return to Report

			Overall			Low-Income Riders			Riders of Color		
Mode	Minimum	Target	2022	2023	2024	2022	2023	2024	2022	2023	2024
Bus	92%	96%	96.8%	95.5%	95.8%	96.8%	95.7%	95.8%	96.8%	95.7%	95.9%
Heavy Rail				98.8%	99.0%		98.8%	99.0%		98.8%	99.0%

Return to Report

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