Summary of Proposed Updates to the MBTA's Service Delivery Policy
Fall 2024

The MBTA's Service Delivery Policy ("SDP", available at https://www.mbta.com/policies/service-delivery-policy) sets how the MBTA evaluates service quality and allocates transit service to meet the needs of riders and regional travel demand. This policy is meant to be updated regularly as service priorities change and the MBTA expands its ability to collect and analyze data, build out metrics, and define service parameters and targets. The SDP was last updated in June 2021. The MBTA is now proposing the following set of updates to the SDP, to take effect in late 2024/early 2025. These updates include minor to moderate changes in both form and substance, and will be used to evaluate 2024 service delivery.[1]

Minor Changes

Minor changes to the policy include restructuring some existing content to simplify the policy and make it easier to read, to update terminology for consistency and accuracy, and to include reference to diversion service standards adopted since the last policy update. Specific changes include:

- New executive summary to replace repetitive introductory text
- Replacing long glossary with embedded definitions
- Re-ordering some sections to describe services and objectives in a more logical way
- Updated terminology: "Key Bus Routes" are now "Frequent Routes"; "Commuter Rail" referred to as "Regional Rail"; "Community" routes are now "Coverage"
- Updates to various route and fleet descriptions, including newer ferry services, updated fleet listings (relevant for vehicle load and crowding standards) and revision of bus route designations[2]
- Added description of Diversion Service Standards, which were adopted in Fall 2023 to govern alternative service planning during pre-planned rapid transit diversions

Substantive Changes

More substantive changes include the following updates to how the MBTA will measure service availability, accessibility, reliability, and comfort (aka crowding). Illustrative examples using 2023 performance data can be made available.

[1] As part of the SDP, the MBTA publishes an Annual Service Report to measure mode and network performance under the policy standards. These Annual Service Reports are posted on the SDP website. The 2023 Annual Service Report will be published in fall 2024. It will primarily evaluate service delivery under the standards of the 2021 SDP, which were in effect during the performance period, although the report also contains analysis using new metrics for dock accessibility, heavy rail comfort, and inclusion of dropped bus trips.

[2] Bus route updates include eliminating reference to Crosstown Routes with limited stops. There are only two of these, and they are both eliminated in the redesigned bus network. Additional bus network changes may be incorporated as they are implemented.

Service Availability

1. Span of Service: Changes definition from "inside bounds" to "outside bounds".

Past versions of the SDP have defined span of service based on the "inside bounds", that is the time between the arrival of the first trip of the day and the departure of the last trip. The 2024 update will recalibrate span of service based on the "outside bounds", that is the start of service through the end of the last trip of the day.

This update will not have an impact on schedules, but will better align the analysis with riders' expectations as riders of frequent service are typically concerned with how early or late they can access service, rather than the precise time when the vehicle reaches or leave the terminus. This move to measuring the outside bounds of service span will more accurately reflect the full scope of the service day and also aligns with the approach taken by other agencies in defining span.

2. Frequency of Service: Frequent Bus Routes (formerly Key Bus Routes) minimum frequency streamlined to 15 minutes.

Specifically, for Frequent Routes:

- Weekday minimum frequency standard changing from 10 minutes at AM/PM peak, 15 minutes at early morning and mid-day, and 20 minutes for evenings, to every 15 minutes all day
- Saturday and Sunday minimum frequency standard changing from every 20 minutes to every 15 minutes

This change does not dictate any change in scheduled service, but provides a more accurate description of service as it is delivered and is more approachable and intuitive for riders who can now rely on a consistent frequency rather than a standard that changes based on time of day. The frequency change is reflected on new bus stop signs.

Accessibility

3. Bus Stops: New definition for bus stop accessibility.

"Bus stops are considered accessible if they have: a level landing area measuring at least 5 feet wide by 8 feet deep onto which a ramp can be deployed; an accessible path from the bus stop to the nearest crossing and the reciprocal curb cuts; a curb ramp within 100 feet if a crosswalk is present; and no other major barriers present.

"The MBTA is continuously working to improve the quality of information available about each of its bus stops. A project to analyze accessible paths to each nearest crossing is ongoing. The annual Service Delivery Report will indicate which data points the MBTA relied on in its assessment of bus stop accessibility for that report, and will incorporate more detailed bus stop attributes as that information becomes dependable and available.

The MBTA will measure the:

- *Percent of MBTA bus stops that are accessible.*
- *Percent of riders boarding or alighting at MBTA bus stops that are accessible.*
- *Percent of riders with low-income and the percent of riders of color boarding or alighting at MBTA bus stops that are accessible."*

The benefit of this new metric, for which data collection is ongoing, will be to enable a more systematic analysis of bus accessibility to support efforts to improve and maintain accessibility across the network.

4. Ferries: new standard establishing accessibility criteria for docks and vessels.

"Dock Accessibility

"The MBTA considers a dock to be accessible if it is designed in such a way to mitigate excessive slopes caused by changing tides and provides for an accessible transition onto or off of the vessel via a bridge plate or gangway level to the vessel.

"The MBTA will measure the:

- *Percent of MBTA docks that are accessible.*
- *Percent of riders boarding or alighting at MBTA docks that are accessible.*
- *Percent of riders with low-income and the percent of riders of color boarding or alighting at MBTA docks that are accessible.*

"The MBTA measures the accessibility of all docks where it provides ferry service, including those owned by third-party vendors and municipalities."

"Ferry Vessel Accessibility

"A ferry vessel is accessible when the entryways meet or exceed the minimum width requirements established by the ADA and the Massachusetts Architectural Access Board ("MAAB"), have an accessible restroom, and deploy an audio/visual announcement system."

Incorporating definitions for vessel and dock accessibility into the SDP will allow for a more systematic analysis of ferry accessibility and will support efforts to improve and maintain access to ferry service. The MBTA is able to measure dock accessibility now under the new metric. The agency is still gathering data on vessels.

5. Elevator Uptime and Platform Accessibility: Incorporated language from *Daniels-Finegold* settlement agreement to exclude specific elevator outages from the uptime/accessibility calculations.

This revision clarifies more precisely how elevator outages are factored in to the elevator uptime and platform accessibility measures. It removes the distinction between outages that have accessible shuttle alternatives and those that don't, and replaces it with language from the *Daniels-Finegold* settlement

agreement concerning systemwide accessibility. Under the revised policy, rather than treating elevator outages as "accessible" if accessible shuttles are provided, those outages due specifically to elevator replacement projects, acts of God (e.g. severe weather), or stations closures for safety/security are excluded from the calculation entirely. All other elevator outages are counted as outages.

6. The RIDE Call Center: Removed call center customer service data from the policy.

The 2021 SDP included a measure of customer complaint response time, however performance under this metric is not reported in the annual service delivery report, nor do the SDP or annual report contain customer service metrics for any other mode. For consistency, and because customer call response time is not a measure of service delivery, this section has been removed from the 2024 SDP. Customer satisfaction data across all modes is instead captured in the rider opinion panel and reported at https://www.mbta.com/performance-metrics/customer-satisfaction.

Reliability

7. Heavy Rail Reliability: Changes standard to use Trip Time Performance, also called Excess Trip Time (ETT) to better capture riders' overall experience of reliability.

New language:

> **"Trip Time Performance/ Excess Trip Time**
>
> "For heavy rail, the MBTA will measure total trip time (defined as travel plus wait time) to ensure that the trip time remains within expected ranges. This allows customers to have a better understanding of their expected time waiting and in transit. The trip time standard measures trip time against a benchmark to determine excess passenger minutes of wait and travel. The excess trip time standard is:
>
> > *Percent of passenger trips where trip time is within 5 minutes of benchmark trip time, calculated as the actual trip time minus benchmark trip time, summed for all passengers.*
>
> "The data to measure Excess Trip Time is currently only available for heavy rail trips."

This new Excess Trip Time standard considers wait times, dwell times and travel times for passenger trips, thus better capturing passengers' overall experience of reliability. In comparison, the previous metric only evaluated wait times based on headway performance.

Trip Time Performance/Excess Trip Time will be evaluated in the 2024 annual service report (to be published in 2025). At this time, it is available for heavy rail only.

8. **Light rail reliability: Amends Light Rail reliability standard by changing standard for Green Line trunk headways.**
   On the Green Line trunk, the expected headway for each trip will be either the scheduled headway or 3 minutes, whichever is longer. This is a change from the prior policy, under which the expected headway was set at 3 minutes for all GL trunk stops. This metric will remain in place until the MBTA has sufficient data available to move to the excess trip time metric for light rail.

   From the revised policy:

   "Light Rail Reliability

   "Passenger Wait Time

   "As with frequent bus services, passengers on light rail do not rely on printed schedules; rather, they expect trains to arrive at consistent headways. Therefore, one test of schedule adherence for light rail is measured based on the proportion of a line's passengers who wait the scheduled headway, or less, for a train to arrive. For people traveling in the trunk section of the Green Line, which typically averages headways of 90 – 100 seconds, the headway for purposes of wait time is defined as 3 minutes or the scheduled headway, whichever is larger.

   "The passenger wait time standard is measured based on the:

   Percent of passengers traveling in each time period that wait the scheduled headway, or less, at each station."

9. **Bus Reliability: Standard updated to penalize dropped trips.**

   Under the 2021 SDP, dropped trips are simply omitted from the bus reliability calculation, thus yielding an inflated measure of bus reliability. Using improved data sources, the revised policy will put dropped trips back into the calculation. While performance will appear worse at first, this revised metric will better capture and help the MBTA to improve the riders' experience.

   Old language:

   "The MBTA does not currently track dropped bus trips on a trip-by-trip basis. If the reliability data for a trip is not available, the MBTA excludes the trip from the calculation—the trip is removed from the total number of timepoints that are on time (or not on time) and from the total number of timepoints. In the case of the frequent service test, this means that the MBTA excludes headways preceding and following a trip with missing data from the calculation.

   In the future, when the MBTA is able to track dropped trips on a trip-by-trip basis:

   - In the scheduled-departure test, dropped trips will count as failures for all timepoint crossings.
   - In the frequent service test, a dropped trip does not count towards the number of timepoint crossings, and the headway of the next operated trip, following the dropped trip(s), is measured from the previous operated trip."

New language:

"Dropped trips are tracked on a trip-by-trip basis:

- In the scheduled-departure test, dropped trips will count as failures for all timepoint crossings.

- In the frequent service test, a dropped trip will count towards the number of timepoint crossings, and will count as failures for all timepoint crossings. The headway of the next operated trip following the dropped trip(s) is measured from the previous operated trip."

To illustrate the effect of adding dropped drips back into the calculation of bus reliability, compare Fall 2023 bus performance under the prior version of the metric and the proposed update:

	Fall 2023 without dropped trips	Fall 2023 including dropped trips
Weekday	66.7%	64.2%
Saturday	70.8%	69.2%
Sunday	71.5%	69.7%

Comfort/Crowding

10. Comfort/Crowding: Calculated for Heavy Rail for the first time.

Historically, comfort as a measure of crowding has only been calculated for bus service. The 2024 SDP adds a comfort measure for Heavy Rail as follows:

"Subway

"The MBTA will measure the passenger hours of subway travel in comfortable conditions during each time period. The maximum comfortable load for subway is determined by combining the number of seats on a given subway car with the number of passengers who can comfortably stand, based on the car's floor area and thresholds for the average floor area needed per standing passenger.

"During high-volume travel periods, the minimum comfortable floor area per standing passenger is 3 square feet. During low-volume travel periods, the minimum comfortable floor area per standing passenger is 10 square feet. No passengers on a given train are considered comfortable when the average floor area per standing passenger falls below these thresholds.

"The MBTA will measure the:

Percent of passenger travel time experienced in comfortable conditions."

Until heavy and light rail vehicles with Automatic Passenger Counters (APCs) are procured, the MBTA lacks the data to accurately measure passenger loads on light rail vehicles, and the per-car passenger loads for heavy rail cars used in the heavy rail comfort calculation are proxied rather than directly measured."