Massachusetts Bay Transportation Authority

Service Delivery Policy

Annual Report | Fall 2021

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CONTENTS

Introduction	1
What Does the Service Delivery Policy Measure and How is it Used?	2
MBTA Service and Ridership in Fall 2021	3
Fall 2021 Performance	4
Span of Service	5
Frequency of Service	.6
Coverage	7
Base Coverage	7
Frequent Service Coverage	.8
Accessibility	9
Station Accessibility	9
Elevator Uptime	10
Platform Accessibility	10
Vehicle Accessibility	11
Reliability	.11
Service Operated	.12
Comfort	.13
Conclusion	.14
Appendix A: Route Types	.15
Appendix B: Paratransit Service Standards	.21
Appendix C: Service Standard Performance	.22
Span of Service	.22
Frequency of Service	.24
Coverage	25
Accessibility	.26
Comfort	26
Reliability	27
Service Operated	.27

INTRODUCTION

The MBTA's <u>Service Delivery Policy</u> (SDP) is a public document that states the MBTA's objectives for delivering quality transit service to riders and sets standards for how success in this is measured. This Service Delivery Policy Annual Report is a newly developed document that contains an evaluation of the service the MBTA delivered to its riders in the Fall of 2021. The purpose of this report is to share the results of the SDP evaluation with the public and strengthen the MBTA's accountability and transparency with its riders.

The MBTA considers several key aspects of service in this evaluation, including:

- when transit service is available,
- how often it comes,
- what geographic areas have access to service,
- whether stations and service are accessible,
- how reliable the service is, and
- how crowded service is.

The SDP is a rider-focused document, and each service objective is evaluated from the rider perspective for all modes, including subway (Red Line, Blue Line, Orange Line, Green Line), bus, Commuter Rail, ferry, and the RIDE.

In 2021, MBTA staff completed a minor update to the SDP that refined some of the technical aspects of how the standards are calculated and added equity checks. In practice, equity checks evaluate whether the MBTA met its service standards for all riders, for riders of color, and for low-income riders. The demographic data used for this evaluation comes from the 2015-17 MBTA Systemwide Passenger Survey. The update also began to introduce new measures developed for the MBTA's Bus Network. Redesign project that measure network quality (i.e., does the MBTA provide convenient service to places riders want to go?). These measures will be formally added to the SDP when the new bus network is finalized and implementation begins.

This report features the results of the evaluation of the Fall 2021 transit rating. The Fall rating is used to represent typical service throughout the year—this is the time when ridership is generally consistent, schools are in session, and service is operating on its most regular schedule. This is the timeframe that has been used to evaluate service in the past, and given the conditions of the pandemic, it represents the most 'normal' point of service and ridership before the Omicron variant led to acute staffing shortages and disrupted travel patterns in early 2022.

WHAT DOES THE SERVICE DELIVERY POLICY *MEASURE* AND HOW IS IT USED?

The SDP measures the important characteristics of a high-quality transit system, including measures on the transit service that was scheduled (Span, Frequency, Coverage) and the transit service that was delivered (Reliability and Comfort), as well as measures on the accessibility of MBTA service and stations to riders.

Most metrics have a minimum level of acceptable service and a medium-term target for service improvement. Each metric is used to set priorities when service planning requires trade-offs between standards. For example, if the MBTA wanted to increase Frequency on a route, we would want to maintain our minimum standards for other measures, such as Span and Coverage. Conversely, if the MBTA finds that we are not meeting our minimum standards for a metric, then we will determine whether to reallocate resources or increase resources on a given route to meet the standards.

The SDP informs MBTA service and projects in both planning and implementation by quantifying potential improvements for transit service provided to riders. For example, the SDP measures and standards are used in the service planning process, resulting in the schedule changes that occur for the Winter, Spring, Summer, and Fall ratings. The SDP measures and standards are also used in the Bus Network Redesign process to examine how a new network would affect service availability metrics like Frequency and Coverage and to manage trade-offs. Additionally, the new network quality metrics are used to assess how well our network meets the travel needs of the region.

MBTA SERVICE AND RIDERSHIP IN *FALL 2021*

The MBTA experienced a precipitous drop in ridership early in the pandemic (see Figure 1 and Figure 2) which severely impacted its budget, and these changes coincided with pandemic impacts to operator availability and hiring. To align service more closely with travel demand, the MBTA went through several iterations of service changes while ensuring continued access and quality of service to our most transit-critical riders (see Forging Ahead). As of April 2021, the MBTA received an infusion of Federal funding and began a process to restore service back to 100% of pre-pandemic levels, though service continues to be impacted by operator shortages.

Overall system ridership in Fall 2021 was 56% of ridership in Fall 2019, but there were significant differences between modes and even between different bus routes and subway lines. The bus system retained 66% of its ridership, the subway system 53%, and Commuter Rail 45%. Within the bus network, some lines retained over 80% of their pre-pandemic ridership volumes (particularly those serving high numbers of passengers without car access and who work in-person), while others, even Key Bus routes, were below 50%. Peak travel (particularly during the "peak of the peak" on weekdays at around 8 AM and 5 PM) dropped significantly, while relatively more passengers traveled in the early morning and mid-day, as well as on weekends.



Figure 1. MBTA Monthly Ridership by Mode



Figure 2. MBTA Ridership (UPT) by Mode as a Percent of the Same Month in 2019

While overall service levels in Fall 2021 were closer to pre-pandemic levels, MBTA service does not look the same as it did before the pandemic. The MBTA continues to adjust service to meet the changing transportation needs of the region—offering more service throughout the day (instead of focusing on peak service) while also continuing to provide robust service on essential routes where ridership has remained high during the pandemic.

FALL 2021 PERFORMANCE

Service Delivery Policy measure performance is shown for Fall 2021 weekdays when specified—weekend performance can be found in the Appendix. The Fall 2021 results are compared to pre-pandemic conditions in Fall 2019. Fall 2020 results are not included due to low ridership caused by the pandemic and ongoing changes to the level of transit service being provided to riders.



Figure 3. The MBTA's SDP measures evaluate key components of a transit trip



SPAN OF SERVICE

Riders expect that services will be available throughout the day as indicated on transit schedules. The Span of Service measure refers to the hours during which service is available relative to established standards that define the expected hours that any given service will operate. The MBTA strives to exceed standards when resources allow, but the standards dictate the minimum levels of service that riders can expect.

Span of Service measures the percent of riders on routes that were scheduled to meet or surpass their expected hours of operation.

Span of Service performance on weekdays in Fall 2021 was 94% for bus, 100% for rapid transit, 100% for Commuter Rail, and 100% for ferry. While overall bus performance decreased by 1% from Fall 2019, Key Bus span remained at 100% and Local Bus span improved by 1%, to 92%. The primary difference between ratings was found in Commuter Bus routes, for which service was reduced during the pandemic due to low ridership. Commuter Bus span performance was 44% in Fall 2021, a significant decrease from 85% in Fall 2019. However, because most bus trips are on Key or Local Bus, impact on the overall measure was relatively small.

Span of Service for riders in equity groups was equal to or higher than overall performance, with bus performance at 94% for riders of color and 95% for low-income riders, and rapid transit and Commuter Rail at 100% for both groups.

RAPID TRANSIT: 100% COMMUTER RAIL: 100%

BUS: 94% FERRY: 100%



FREQUENCY OF SERVICE

Riders rely on MBTA services to be available within reasonable waiting times throughout the day. The Frequency of Service measure refers to the effective wait times of different services relative to established standards; these standards define the expected frequencies of services using either headway (minutes between trips) or frequency (trips per time period). **Frequency of Service measures the percent of rid-**

ers on routes that were scheduled to meet or surpass their expected frequencies throughout the day.

Frequency of Service performance on weekdays in Fall 2021 was 92% for bus, 100% for rapid transit, 100% for Commuter Rail, and 100% for ferry. Overall bus performance stayed the same in Fall 2021 from Fall 2019—Commuter Bus performance decreased to 92% from 98%, but because most bus trips are on Key or Local Bus, impact on the overall measure was relatively small. Local Bus performance remained at 88%. Some local buses saw a decrease in frequency performance particularly during the peaks, such as routes 43, 201, 202, and 214, reflecting the changing patterns in pandemic travel. Meanwhile, other local bus routes saw an increase in frequency in reaction to pandemic travel, such as routes 75 and 76. Commuter Rail performance improved from 95% in Fall 2019 to 100% in Fall 2021, due in part to a shift in a regional rail schedule with more trips spread throughout the day. Frequency performance for riders in equity groups was equal to or higher than overall performance, with bus performance at 93% for both riders of color and low-income riders, and rapid transit and Commuter Rail at 100% for both groups.

RAPID TRANSIT: 100% COMMUTER RAIL: 100% BUS: 92% FERRY: 100%



SYSTEM COVERAGE

The Coverage standard measures geographic access to transit for residents across the MBTA service area. Coverage is measured in two ways: Base Coverage, which evaluates access to any transit service, and Frequent Service Coverage, which evaluates access to frequent transit service. Base Coverage allows the MBTA to assess basic transit access against a minimum for the region while Frequent Coverage informs

the prioritization of frequent service for the residents most likely to use and rely on it.

BASE COVERAGE

Residents of the region expect the MBTA to provide a basic level of coverage throughout the service area. The Base Coverage measure assesses the geographic extent of all MBTA services, some of which may be relatively infrequent for some or all of the service day. **Base Coverage measures the percent of the population that lives within a half-mile of any MBTA service in the MBTA service area**, excluding municipalities that are members of a regional transit authority (RTA).

Base Coverage on weekdays was 78% in Fall 2021, 1% lower than Fall 2019 but still above the 75% minimum. The change is due primarily to the suspension of some routes in suburban communities due to budget challenges and operator shortages during the COVID-19 pandemic. Weekday Base Coverage for low-income residents and residents of color also decreased by 1%, but these results remained substantially higher than overall, at 85% and 89% respectively.

BASE COVERAGE ON WEEKDAYS: 78%

FREQUENT SERVICE COVERAGE

Beyond a basic level of transit service throughout the service area, there are urban areas with high population and employment densities where frequent service is expected. Frequent service is also prioritized for areas with high proportions of people more

¹ Coverage numbers are slightly lower than published in the 2021 Service Delivery Policy for two reasons. Methodology changes were implemented in 2022 to improve measure accuracy that resulted in minor decreases in overall percentages. Subsidized service routes (supported in part but not operated by the MBTA) were also not included in base coverage calculations for Fall 2019 and Fall 2021, resulting in additional decreases from the 2021 SDP, and will not be included in future calculations.

likely to use or rely on transit. Frequent Service Coverage measures the percent of the population that lives within a half-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. This is also measured for the MBTA service area excluding municipalities that are members of an RTA.

Frequent Coverage on weekdays was 61% in Fall 2021, with no change from Fall 2019 and below the target of 70%. Frequencies did change slightly during the pandemic, with some increases for routes with high ridership and some decreases for routes with lower ridership, but the overall percentage of residents with frequent service did not change. Frequent Service Coverage did not change for low-income residents, remaining at 61%, but it did increase by 1% for residents of color to 64%, above the overall percentage.

Elevator Uptime Reliability How often are station ON TIME elevators operational? How often is service on time? Station Accessibility What stations are ADA-accessible by desian? Vehicle Accessibility How often are trains ADA-accessible? Platform Accessibility How often are station platforms ADA-accessible via elevators?

FREQUENT SERVICE COVERAGE ON WEEKDAYS: 61%

Figure 4. Additional measures from the MBTA's SDP evaluation are shown above.

ACCESSIBILITY

The MBTA works to ensure that people of all abilities have access to MBTA services. The Accessibility standards in the Service Delivery Policy measure the accessibility of the MBTA system as it relates to the Americans with Disabilities Act (ADA).



STATION ACCESSIBILITY

The ability for all customers to reach a subway, Commuter Rail, or Silver Line platform depends on whether stations are designed to be accessible. Subway stations are typically accessible using elevators, while accessible Commuter 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 percent of MBTA stations that are ADA-accessible.**²

Station Accessibility was 77% in Fall 2021, 1% higher than in Fall 2019, due to the addition of three newly accessible stations. In November 2021, the Green Line B Branch Station Consolidation replaced four inaccessible Green Line stops with two newly accessible stations, Amory Street and Babcock Street, and a new, fully accessible Chelsea Commuter Rail station opened to replace the existing inaccessible station. Three inaccessible Commuter Rail stations that were temporarily closed during the pandemic were also closed indefinitely in April 2021.

STATION ACCESSIBILITY: 77%

Station Accessibility is also evaluated using ridership weighting, thereby prioritizing the accessibility of stations with high ridership. **The ridership-weighted version measures the percent of riders boarding at MBTA stations that are** ADA-accessible.

Ridership-weighted Station Accessibility was 95% in Fall 2021, also 1% higher than in Fall 2019 due to the three newly accessible stations. Ridership-weighted Station Accessibility was 95% for low-income riders and 96% for riders of color, indicating that riders in equity groups experience accessibility equal to or better than overall performance.

2 Station Accessibility calculations exclude Commuter Rail stations in Rhode Island due to differences in demographic data sources.

The significant difference between unweighted Station Accessibility (77%) and ridershipweighted Station Accessibility (95%) means that higher-ridership stations are more likely to be accessible than lower-ridership stations, extending the accessibility benefit to more riders. Importantly, the Station Accessibility measure does not account for MBTA trips that may not have been taken at all due to inaccessible station design.

RIDERSHIP-WEIGHTED STATION ACCESSIBILITY: 95%



ELEVATOR UPTIME

Many stations require elevators to be accessible for riders, meaning that elevator maintenance and unplanned outages can affect the abilities of people to access MBTA services. **Elevator Uptime measures the percent of total elevatorhours in which elevators are operational.**

Elevator Uptime was 99.5% in Fall 2021, no change from

Fiscal Year 2020 (the previous calculated data period for this measure) and above the minimum of 99.4%.

ELEVATOR UPTIME: 99.5%



PLATFORM ACCESSIBILITY

Riders should also be able to access the platforms in accessible stations at all times service is offered. **Platform Accessibility is an alternative measure of Elevator Uptime that evaluates access to platforms, measuring the percent of total platform-hours that are ADA-accessible via elevators.**

Platform Accessibility was 99.5% in Fall 2021, 0.1% higher than it

was in Fiscal Year 2020 (the previous calculated data period for this measure) and above the minimum of 99.4%.

PLATFORM ACCESSIBILITY: 99.5%



VEHICLE ACCESSIBILITY

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

Vehicle Accessibility for the Green Line was 100% in Fall 2021, no change from Fall 2020 (the previous calculated data period for this measure) and meeting the minimum and target of 100%.

VEHICLE ACCESSIBILITY FOR THE GREEN LINE: 100%



SYSTEM RELIABILITY

Reliability standards vary by mode and provide tools to evaluate the on-time performance of MBTA services. Reliability standards also vary based on frequency of service; 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/departures to occur as

published. **Reliability measures the percent of passengers on routes that pass their on-time performance tests.**

RAPID TRANSIT: 89% COMMUTER RAIL: 91% THE RIDE 89% BUS: 70% FERRY: 98% These include timepoint tests for bus routes, passenger wait time for heavy and light rail, and destination arrivals for Commuter Rail and ferry. Reliability for weekdays in Fall 2021 was 70% for bus, 89% for rapid transit, 91% for Commuter Rail, 98% for ferry, and 89% for the RIDE. Reliability for bus improved by 2% over Fall 2019, meeting the target of 70%, possibly due in part to reduced road congestion during peak periods. Local Bus experienced the biggest improvement within the mode, increasing from 61% to 66% in Fall 2021. Rapid transit saw no change in Reliability from Fall 2019 to 2021, and Commuter Rail performance decreased by 3%.

Reliability for low-income riders and riders of color was equal to or better than overall performance in Fall 2021, at 70% for bus, 90% for rapid transit, and 91% for Commuter Rail. Reliability on weekends was higher than weekdays for bus at 72% on Saturdays and 73% on Sundays, but it was lower for rapid transit at 83% on Saturdays and 86% on Sundays.



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 percent of scheduled trips that are actually provided for each mode of service.**

Service Operated for weekdays in Fall 2021 was 95.7% for bus, 99.3% for heavy rail, and 96.4% for light rail. For all day types, Service Operated was 99.6% for Commuter Rail and 100.0% for ferry (with one missed trip in the rating, not including trips canceled due to weather). Performance for bus decreased from 98.5% in Fall 2019 to 95.7% in Fall 2021, likely due in part to bus operator shortages. Service Operated data for heavy rail and light rail is subject to change with improvements in data collection methodologies.

LIGHT RAIL: 96.4% HEAVY RAIL: 99.3% COMMUTER RAIL: 99.6% BUS: 95.7% FERRY: 100%



PASSENGER COMFORT

Passenger comfort is influenced by the number of people on a vehicle and whether a seat is available to each rider for all or most of the trip. Passenger Comfort standards, which vary by mode and time of day, establish the maximum number of passengers per vehicle to provide a safe and comfortable ride. **Comfort measures the percent of passenger travel time experienced in comfortable conditions.**

Comfort on weekdays in Fall 2021 was 99% for bus, an increase from 92% in Fall 2019 and above the target of 96%. The increase in Comfort performance can be attributed to lower ridership during the pandemic, resulting in less crowded bus conditions. Temporary COVID-19 crowding standards were implemented in March 2020, and pre-pandemic crowding standards went back into effect in June 2021. Comfort for both low-income riders and riders of color was equal to overall performance at 99%.

COMFORT FOR BUS PASSENGERS: 99%

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 how service was scheduled and delivered during Fall 2021. Differences in performance from Fall 2019 to Fall 2021 were primarily due to changes in service and service conditions, ridership, and operator availability during the pandemic. Span and Frequency decreased for low-ridership Commuter Buses, Base Coverage decreased with the suspension of some low-ridership suburban routes, and Service Operated for bus decreased due to operator shortages. Meanwhile, Frequency improved for Commuter Rail with the new regional rail schedule, Reliability for bus improved with decreased peak congestion, and Comfort for bus passengers improved with lower ridership. Station Accessibility also improved with the completion of Green Line and Commuter Rail accessibility projects. All SDP measures in Fall 2021 demonstrated equal or better performance for low-income riders and riders of color compared to overall ridership.

Notably, bus performance for all mode-specific SDP measures is consistently lower than rapid transit, Commuter Rail, and ferry performance. Lack of dedicated right-of-way for most buses makes Reliability differences more expected (though current and future transit priority investments can help mitigate this), but the performance gap also applies to scheduled service measures (e.g., Span and Frequency). Bus operator shortages during the pandemic may partially account for these differences, but the multi-year trend points to a need for increased investment in bus service relative to other modes.

The MBTA is investing in initiatives to improve bus service in several ways through the Bus Network Redesign, modernizing bus facilities, and implementing transit priority. The MBTA uses these metrics and many more on a daily, weekly, and monthly basis to make continuous upgrades to enhance performance while also planning for larger improvements. These metrics help the MBTA ensure service is meeting the standards set out in the SDP and help in conversations about how to best allocate resources to improve rider service into the future.

APPENDIX A: ROUTE TYPES

TABLE A1: LOCAL BUS ROUTES

7	City Point - Otis and Summer Streets
8	Harbor Point/U Mass - Kenmore Station
9	City Point - Copley Square via Broadway Station
10	City Point - Copley Square Via BU Med Center
11	City Point - Downtown
14	Roslindale Square - Heath Street Loop
16	Forest Hills Station - U Mass. Or Andrew Station
17	Fields Corner Station - Andrew Station
19	Fields Corner Station - Ruggles or Kenmore Station
21	Ashmont Station - Forest Hills Station
24	Wakefield Ave Mattapan Station or Ashmont
26	Ashmont Station - Norfolk and Morton Belt Line
29	Mattapan Station - Jackson Square or Ruggles
30	Mattapan Station - Forest Hills Station
31	Mattapan Station - Forest Hills Station
33	River and Milton Streets - Mattapan Station
34/34E	Walpole Center or Dedham Line - Forest Hills Station
35	Dedham Mall - Forest Hills Station
36	VA Hospital - Forest Hills Station Via Chas. River Loop
37	Baker and Vermont Streets - Forest Hills Station
38	Wren Street - Forest Hills Station
40	Georgetowne - Forest Hills Station
41	Centre and Eliot Streets - JFK U Mass Station
42	Forest Hills Station - Dudley or Ruggles Station
43	Ruggles Station - Park and Tremont Streets
44	Jackson Square Station - Ruggles Station
45	Franklin Park - Ruggles Station
47	Central Square Cambridge Broadway Station
50	Cleary Square - Forest Hills Station Via Metropolitan
51	Reservoir - Forest Hills Station
52	Dedham Mall - Watertown Yard
59	Needham Junction - Watertown Square
60	Chestnut Hill Station - Kenmore Station
61	North Waltham - Waltham Center
62	
02	Bedford V.A. Hospital - Alewife Station

65	Brighton Center - Kenmore Station
68	Harvard Square - Kendall MIT Station
69	Harvard Square - Lechmere Station
70	Market Place Drive or Waltham Center - University Park
74	Belmont Center - Harvard Station via Concord Ave
75	Belmont Center - Harvard Station via Fresh Pond Pkwy
76	Hanscom Air Force Base - Alewife Station
78	Arlmont Village - Harvard Station
80	Arlington Center - Lechmere Station
83	Rindge Avenue - Central Square, Cambridge
86	Sullivan Station - Reservoir Station
87	Arlington Center or Clarendon Hill - Lechmere Station via Somerville Avenue
88	Clarendon Hill - Lechmere Station via Highland Avenue
89	Clarendon Hill or Davis Square - Sullivan Station via Broadway
90	Davis Square Station - Wellington Station
91	Sullivan Station - Central Square, Cambridge
92	Assembly Square Mall - Downtown Via Main Street
93	Sullivan Station - Downtown Via Bunker Hill
94	Medford Square - Davis Square Station
95	West Medford - Sullivan Station
96	Medford Square - Harvard Station
97	Malden Station - Wellington Station
99	Boston Reg. Med Center Stoneham - Wellington Station
100	Elm Street - Wellington Station
101	Malden Station - Sullivan Station Via Medford Square
104	Malden Station - Sullivan Station Via Ferry Street
106	Franklin Square or Lebanon Street Loop - Wellington Station
108	Linden Square - Wellington Station
109	Linden Square - Sullivan Station
110	Wonderland Station - Wellington Station
112	Wellington Station - Wood Island Station
119	Northgate Shopping Center - Beachmont Station
120	Orient Heights Station - Maverick Station
132	Redstone Shopping Center - Malden Station
134	North Woburn - Wellington Station
137	Reading Depot - Malden Center Station via North Avenue
201/202	Fields Corner Station - Fields Corner Station
210	Quincy Center Station - No. Quincy Station or Fields Corner Station
211	Quincy Center Station - Squantum
214	Quincy Center Station - Germantown
215	Quincy Center Station - Ashmont Station

216	Quincy Center Station - Houghs Neck
220	Quincy Center Station - Hingham
222	Quincy Center Station - East Weymouth
225	Quincy Center Station - Weymouth Landing or Columbian Square
226	Columbian Square - Braintree
230	Quincy Center Station - Montello Station
236	Quincy Center Station - South Shore Plaza
238	Quincy Center Station - Holbrook/Randolph Comm. Rail St
240	Avon Line - Ashmont Station
245	Quincy Center Station - Mattapan Station
350	North Burlington - Alewife Station
411	Malden Station - Revere/Jack Satter House
426	Central Square Lynn - Haymarket or Wonderland Station Via Cliftondale Square (Partially Express)
429	Northgate Shopping Center - Central Square Lynn
430	Malden Center Station - Saugus Center via Square One Mall
435	Liberty Tree Mall - Central Square Lynn
436	Liberty Tree Mall - Central Square Lynn
441/442	Marblehead - Haymarket or Wonderland Station via Paradise Rd. or Humphry St.
450	Salem Depot - Haymarket or Wonderland Station via Western Ave (Partially Ex- press)
455	Salem Depot - Wonderland Station
553	Roberts - Downtown Boston (Partially Express)
554	Waverley Square - Downtown Boston (Partially Express)
712/713	Point Shirley, Winthrop - Orient Heights
CT2 (747)	Sullivan Station - Ruggles Station via Union Square Kendall/MIT and Longwood Medical Area
CT3 (708)	Beth Israel Deaconess or B.U. Medical Campus - Andrew Station

TABLE A2: KEY BUS ROUTES

1	Harvard Square - Dudley Station via Mass. Ave.
15	Kane Square or Fields Corner - Ruggles Station
22	Ashmont Station - Ruggles Station Via Talbot Ave
23	Ashmont Station - Ruggles Station via Washington Street
28	Mattapan Station - Ruggles Station
32	Wolcott Square or Cleary Square - Forest Hills Station
39	Forest Hills Station - Back Bay Station
57/57A	Watertown Yard - Kenmore Station
66	Harvard Square - Dudley Station via Brookline
71	Watertown Square - Harvard Station
73	Waverley Square - Harvard Station
77	Arlington Heights - Harvard Station
111	Woodlawn or Byway and Park - Haymarket Station
114/116/117	Wonderland Station/Bellingham Square - Maverick Station
SL1 (741)	Logan Airport - South Station
SL2 (742)	Boston Design Center - South Station
SL3 (743)	Chelsea - Silver Line Way
SL4 (751)	Dudley Station - South Station
SL5 (749)	Dudley Station - Downtown

TABLE A3: COMMUTER BUS ROUTES

4	North Station - Tide Street
67	Turkey Hill - Alewife Station
85	Spring Hill - Kendall MIT Station
121	Wood Island Station - Maverick Station
131	Melrose Highlands - Malden Station
351	EMD Serono/Bedford Woods - Alewife Station (Express)
354	North Burlington - State Street (Express)
424	Eastern and Essex - Haymarket or Wonderland (Express)
428	Oaklandvale - Haymarket Station via Granada Highlands
451	North Beverly - Salem Depot
501	Brighton Center - Downtown Boston (Express)
504	Watertown Yard - Downtown Boston (Express)
505	Waltham Center - Downtown Boston (Express)
556	Waltham Highlands - Downtown Boston (Express)
558	Auburndale - Downtown Boston (Express)

TABLE A4: COMMUNIITY BUS ROUTES

18	Ashmont Station - Andrew Station
55	Queensberry Street - Park and Tremont Streets
456	Salem Depot - Central Square Lynn
714	Pemberton Pt., Hull - Station St., Hingham
716	Cobbs Corner - Mattapan Station via Canton Center

TABLE A5: SUPPLEMENTAL BUS ROUTES

171	Dudley Station - Logan Airport via Andrew Station
217	Quincy Center Station - Ashmont Station
439	Bass Point Nahant - Central Square Lynn

APPENDIX B: PARATRANSIT SERVICE STANDARDS

TABLE B1: PARATRANSIT SERVICE STANDADRDS

SDP Standard	Minimum	Target	Fall 2019 Performance	Fall 2021 Performance	
On-Time Performance	—	90%	91%	88%	
Productivity	—	1.15	1.11	1.01	
Excessively Late Pick-Ups (61-120 minutes) (Per 1,000 trips)	_	0	2.2	5.6	
Excessively Late Pick-Ups (Greater than 120 minutes) (Per 1,000 trips)	_	0	0.2	1.7	
Excessively Late Drop-Offs (31 – 60 minutes) (Per 1,000 trips)	_	0	3.9	6	
Excessively Late Drop-Offs (Greater than 60 minutes) (Per 1,000 trips)	_	0	0.9	2.1	
Customer Satisfaction					
Complaints (Per 1,000 trips)		_	_	9.3	
TRAC	_	1	1.5	8.4	
DSPs	—	1.2	1.2	0.9	
Complaint Response Time (Per 1,000 trips)	_	0	0.3	1.5	
TRAC		—	—	1.4	
DSPs		_	—	0.1	
Call Center – Reservations (Percent of calls answered within 90 seconds)	_	80%	81%	15%	
Call Center – Dispatch (Percent of calls answered within 45 seconds)		80%	79%	22%	

APPENDIX C: ROUTE TYPES

SPAN OF SERVICE

TABLE C1: FALL WEEKDAY SPAN OF SERVICE PERFORMANCE

Mode	Minimum	Target	Overall		Low Income Riders		Riders of Color	
			2019	2021	2019	2021	2019	2021
Bus	90%	95%	95%	94%	94%	95%	94%	94%
Key Bus	—	—	100%	100%	100%	100%	100%	100%
Local Bus	—	—	91%	92%	90%	91%	90%	90%
Commuter Bus	—	_	85%	44%	73%	34%	80%	44%
Rapid Transit	_	100%	100%	100%	100%	100%	100%	100%
Commuter Rail	_	100%	100%	100%	100%	100%	100%	100%
Ferry	_	100%	100%	100%	100%	100%	100%	100%

TABLE C2: FALL SATURDAY SPAN OF SERVICE PERFORMANCE

Mode	Minimum	Target	Overall		Low Income Riders		Riders of Color	
			2019	2021	2019	2021	2019	2021
Bus	—	—	_	98%	_	98%	—	98%
Key Bus	—	—	_	100%	_	100%	—	100%
Local Bus	—	—	_	96%	—	95%	—	95%
Commuter Bus	—	—	_	—	—	—	—	_
Rapid Transit	_	—	_	100%	—	100%	—	100%
Commuter Rail	_	_	_	100%	_	100%	_	100%
Ferry	_	_	_	_		_	_	_

Mode	Minimum	Target	Overall		Low Income Riders		Riders of Color	
			2019	2021	2019	2021	2019	2021
Bus	—	-	—	92%	_	89%	—	88%
Key Bus	-	-	_	89%	—	85%	_	82%
Local Bus	—	-	_	95%	—	95%	—	95%
Commuter Bus	—	-	_	-	—	—	—	_
Rapid Transit	-	-	_	100%	—	100%	_	100%
Commuter Rail	_	-	_	_	_	_	_	_
Ferry	_	—	_	_	_	—	_	_

TABLE C3: FALL SUNDAY SPAN OF SERVICE PERFORMANCE

FREQUENCY OF SERVICE

TABLE C4: WEEKDAY FREQUENCY OF SERVICE PERFORMANCE

Mode	Minimum	Target	Overall		Low Income Riders		Riders of Color	
			2019	2021	2019	2021	2019	2021
Bus	90%	95%	92%	92%	91%	93%	91%	93%
Key Bus	—	—	95%	98%	94%	99%	94%	99%
Local Bus	—	—	88%	88%	87%	87%	88%	88%
Commuter Bus	—	—	98%	92%	96%	87%	98%	89%
Rapid Transit	—	100%	100%	100%	100%	100%	100%	100%
Commuter Rail	_	100%	95%	100%	93%	100%	89%	100%
Ferry	_	100%	100%	100%	100%	100%	100%	100%

TABLE C5: SATURDAY FREQUENCY OF SERVICE PERFORMANCE

Mode	Minimum	Target	Ove	erall	Low Income Riders		Riders of Color	
			2019	2021	2019	2021	2019	2021
Bus	—	_	_	94%	_	94%	—	95%
Key Bus	—	—	_	100%	—	100%	_	100%
Local Bus	—	—	_	89%	—	89%	—	90%
Commuter Bus	—	—	—	—	—	—	—	_
Rapid Transit	_	—	_	100%	—	100%	_	100%
Commuter Rail	_	_	_	100%	_	100%	_	100%
Ferry	_	—	_	_		—	_	_

TABLE C6: SUNDAY FREQUENCY OF SERVICE PERFORMANCE

Mode	Minimum	Target	Ove	erall	Low Income Riders		Riders of Color	
			2019	2021	2019	2021	2019	2021
Bus	—	-	_	90%	_	90%	—	91%
Key Bus	—	-	_	100%	—	100%	—	100%
Local Bus	—	-	_	79%	—	78%	—	80%
Commuter Bus	_	-	_	_	—	—	_	_
Rapid Transit	_	-	_	100%	—	100%	_	100%
Commuter Rail	_	_	_	_	_	_	_	_
Ferry	_	—	_	-	_	_	_	_

COVERAGE

TABLE C7: FALL BASE COVERAGE PERFORMANCE

Day Type Minimum	Minimum	Target	Overall		Low Income Households		Residents of Color	
			2019	2021	2019	2021	2019	2021
Weekday	75%	—	79%	78%	86%	85%	90%	89%
Saturday	—	—	73%	73%	81%	81%	85%	85%
Sunday	—	—	68%	68%	76%	76%	81%	81%

TABLE C8: FALL FREQUENT COVERAGE PERFORMANCE

Day Type Minimum	Minimum	Target	Overall		Low Income Households		Residents of Color	
	larget	2019	2021	2019	2021	2019	2021	
Weekday	—	70%	61%	61%	61%	61%	64%	65%
Saturday	—	—	70%	69%	68%	68%	71%	71%
Sunday	_	_	60%	60%	61%	60%	64%	65%

ACCESSIBILITY

TABLE C9: ACCESSIBILITY STANDARD PERFORMANCE

Measure	Minimum	Target	Fall 2019	Fall 2021
Station Accessibility (Unweighted)	Station Accessibility Unweighted)76%100%76%		76%	77%
Station Accessibility (Ridership Weighted)	94%	94% 95 Low Income Riders: Low Income 94% 95 Riders of Color: Riders of 95% 96		95% Low Income Riders: 95% Riders of Color: 96%
Elevator Uptime	99.4%	100%	99.5%	99.5%
Platform Accessibility	99.4%	100%	99.4%	99.5%
Vehicle Accessibility (Green Line)	100%	100%	100%	99.5%

COMFORT

TABLE C10: BUS PASSENGER COMFORT PERFORMANCE

Mode	Minimum	Target	Overall		Low Income Riders		Riders of Color	
			2019	2021	2019	2021	2019	2021
Bus Passenger Minutes in Comfortable Conditions	92%	96%	92%	99%	92%	99%	93%	99%

RELIABILITY

Mode	Minimum	Target	Overall		Low Income Riders		Riders of Color	
			2019	2021	2019	2021	2019	2021
Bus	70%	75%	68%	70%	68%	70%	68%	70%
Key Bus	—	_	77%	76%	76%	76%	76%	76%
Local Bus	—	-	61%	66%	61%	65%	61%	65%
Commuter Bus	—	—	61%	64%	63%	63%	62%	64%
Rapid Transit	—	90%	89%	89%	89%	90%	89%	90%
Commuter Rail	_	92%	94%	91%	85%	91%	85%	91%
Ferry	_	99%	97%	98%	98%	_	97%	_

TABLE C11: WEEKDAY RELIABILITY PERFORMANCE

TABLE C12: SATURDAY RELIABILITY PERFORMANCE

Mode	Minimum	Target	Ove	erall	Low Income Riders		Riders of Color	
			2019	2021	2019	2021	2019	2021
Bus	—	—	—	72%	—	72%	_	73%
Key Bus	—	—	—	77%	—	78%	_	78%
Local Bus	—	—	_	67%	—	67%	_	68%
Commuter Bus	—	—	_	_	—	—	—	—
Rapid Transit	—	—	_	83%	—	84%	_	84%
Commuter Rail	_	—	_	91%		90%	_	92%
Ferry	_	—	_	_	_	—	_	_

Mode	Minimum	Target	Overall		Low Income Riders		Riders of Color	
			2019	2021	2019	2021	2019	2021
Bus	—	—	_	73%	—	74%	—	74%
Key Bus	—	—	_	78%	—	78%	_	78%
Local Bus	—	—	_	69%	—	69%	—	70%
Commuter Bus	_	—	_	_	—	—	_	_
Rapid Transit	_	—	_	86%	—	86%	_	87%
Commuter Rail	_	_	_	92%	_	92%	_	93%
Ferry	_	_	_	_	_	_	_	_

TABLE C13: SATURDAY RELIABILITY PERFORMANCE

SERVICE OPERATED

TABLE C14: SERVICE OPERATED PERFORMANCE (BUS + SUBWAY)

Mode	Minimum	Target	Weekday Overall		Saturday Overall		Sunday Overall	
			2019	2021	2019	2021	2019	2021
Bus	—	99.5%	98.5%	95.7%	98.9%	94.6%	98.9%	94.4%
Heavy Rail	—	99.5%	98.9%	99.3%	98.8%	98.9%	98.5%	99.6%
Light Rail	_	99.5%	95.1%	96.4%	95.6%	95.3%	95.0%	95.3%

TABLE C15: SERVICE OPERATED PERFORMANCE(COMMUTER RAIL + FERRY)

Mode	Minimum	Target	Fall 2019	Fall 2021
Commuter Rail	Contract Sets Fine	s for Canceled Service	99.6%	99.6%
Ferry	Contract Sets Fine	s for Canceled Service	99.9%	100.0%*

*One missed trip in the rating.