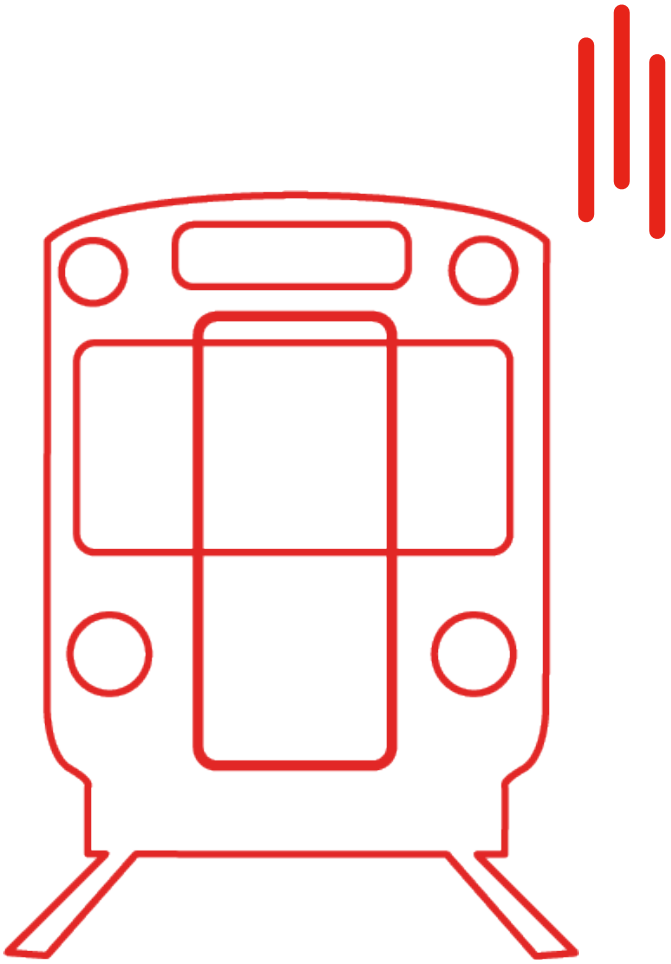


MBTA
Title VI Program

REVISED MAY 2025



MBTA Title VI Program

MBTA Project Managers

Tiffany Garcia
Gregory Sobczynski

Project Manager

Bradley Putnam

Project Principal

Paul Christner

Data Analysts

Blake Acton
Emily Domanico
Sophie Fox
Heyne Kim
Bradley Putnam

Graphics and Cover Design

Kim DeLauri
Ken Dumas

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June 2023

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Individuals who believe they have been discriminated against may file a complaint with MassDOT/MBTA at:

MassDOT/MBTA Title VI Specialists

Office of Diversity and Civil Rights – Title VI Unit
10 Park Plaza, Suite 3800
Boston, MA 02116

Phone: (857) 368-8580 or 7-1-1 for Relay Service

Email: MassDOT.CivilRights@state.ma.us or MBTAcivilrights@mbta.com

Complaints may also be filed directly with the United States Department of Transportation at:

U.S. Department of Transportation

Office of Civil Rights
1200 New Jersey Avenue, SE
Washington, DC 20590

Website: civilrights.justice.gov/

For additional information, language service requests, or reasonable accommodations visit mass.gov/nondiscrimination-in-transportation-program or mbta.com/titlevi.

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Chapter 1
Introduction

TITLE VI OF THE CIVIL RIGHTS ACT OF 1964

Title VI of the Civil Rights Act of 1964 requires that "no person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity receiving federal financial assistance." Title VI protections also prohibit discrimination on the basis of English proficiency.

Moreover, Title VI requires that public funds not be "spent in any fashion which encourages, entrenches, subsidizes, or results in racial discrimination."[1] The United States Department of Justice (USDOJ) is authorized to apply the provisions of Title VI to each program or activity by issuing applicable rules, regulations, or requirements in order to accomplish the purpose and spirit of Title VI. Under this authority, USDOT has delegated responsibility to its operating and administrative agencies, including the FTA, to effectuate the provisions of Title VI and issue guidance for recipients, including the MBTA, to ensure compliance with this civil rights requirement.[2]

A Note on Terminology

FTA's Title VI compliance requirements are detailed in Circular 4702.1B. The document relies on particular terminology to distinguish between demographic groups. This terminology may not be consistent with today's standards. For example, FTA relies on the terms "minority" and "non-minority" to distinguish between demographic groups on the basis of race and ethnicity. This triennial program utilizes this terminology when necessary to reflect compliance with federal laws and regulations. However, the MBTA recognizes that there are other contexts where more updated and inclusive terminology should be used to discuss underlying concepts of equity and nondiscrimination. For example, in the MBTA's Service and Fare Change Equity Analysis policy, demographic groups are identified as "protected populations based on race and ethnicity" without invoking the "minority" "non-minority" terms. The MBTA is committed to the concepts of equity, diversity, inclusivity, and accessibility and strives to communicate in a way that considers the diverse perspectives of our riders and the general public.

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1 See H.R. Misc. Doc. No. 124, 88th Cong., 1st Sess. 3, 12 (1963) (A message from President Kennedy on Civil Rights and Job Opportunities, June 19, 1963).

2 49 CFR part 21.1.

PURPOSE OF THE TITLE VI PROGRAM

This Title VI Program has been prepared by the Massachusetts Bay Transportation Authority (MBTA) in compliance with the United States Department of Transportation (USDOT) Title VI regulations—Title 49, Section 21.9 (b), of the Code of Federal Regulations (49 CFR § 21.9 [b])—and with Federal Transit Administration (FTA) Circular 4702.1B guidelines, titled *Title VI Requirements and Guidelines for Federal Transit Administration Recipients*, which were issued October 1, 2012.

The purpose of this program is to demonstrate the MBTA's commitment to respecting the rights of individuals and communities reached by Title VI and environmental justice protections, which it demonstrates by actively monitoring, evaluating, and applying solutions to eliminate the risk of discrimination in its programs, services, and activities. The policies, practices, and analyses presented in this document show how the MBTA meets its civil rights obligations and complies with Title VI of the Civil Rights Act of 1964, 42 USC § 2000d et seq., and related federal and state laws and regulations.

This document constitutes the MBTA's Title VI Program, adopted with the approval of the general manager and the MBTA Board of Directors. (See Appendix 1A for a copy of the board's approval.) It has been prepared in accordance with FTA Circular 4702.1B and incorporates the reporting requirements set forth therein.

The MBTA developed this program with technical support for data collection and analysis from the Central Transportation Planning Staff (CTPS) of the Boston Region Metropolitan Planning Organization. CTPS was also responsible for the production of the document.

Any questions or comments about the content of this program can be addressed to the MassDOT and MBTA Office of Diversity and Civil Rights, Title VI Unit, 10 Park Plaza, Boston, MA 02116 (US Mail); 857-368-8580 (phone); or MBTAcivilrights@mbta.com (email).

ABOUT THE MBTA

The MBTA is one of the oldest and largest public transportation systems in the United States, providing a variety of transit services and more than 700,000 trips on an average weekday. The MBTA maintains and operates 151 bus routes, including five bus rapid transit lines; three heavy rail lines (Red, Orange, and Blue Line); five branches of light rail service (Green Line B, C, D, and E, and Mattapan–Ashmont); 12 commuter rail lines; and three ferry routes.

The MBTA is overseen by its own Board of Directors. The MBTA general manager, as chief executive officer, has overall responsibility for providing assurance to the FTA of the MBTA's commitment to comply with Title VI, which includes this triennial program submission. The MassDOT/MBTA Office of Diversity and Civil Rights (ODCR) has the delegated responsibility of coordinating Title VI program procedures, overseeing implementation, and monitoring and reporting on how the MBTA is meeting its Title VI

compliance obligation. The Title VI requirements apply to all MBTA operations, and all MBTA managers, supervisors, employees, and contractors share the responsibility for conducting all programs, services, and activities in a nondiscriminatory manner. During the lookback period of this report the MBTA did not have any subrecipients, and therefore no specific subrecipient compliance obligations.

RELATED FEDERAL AND STATE NONDISCRIMINATION REQUIREMENTS

In addition to Title VI, the MBTA complies with and incorporates related federal and state nondiscrimination requirements into its policies and practices. The additional federal prohibitions respected by the MBTA include those against discrimination based on sex, age, and disability. On the state level, the MBTA incorporates standards under the Massachusetts Public Accommodation Law—Massachusetts General Law, Chapter 272, Sections 92a, 98, 98a—and Massachusetts Governor's Executive Order 526, Section 4, which require that access to programs, services, and benefits be provided without regard to religion, creed, sexual orientation, gender identity or expression, veteran's status, and/or ancestry.

ADDITIONAL PROTECTIONS

In addition to the Title VI protections, and those provided by related federal and state laws and regulations, the MBTA also complies with two presidential executive orders designed to remove obstacles for and harmful effects to persons who are low-income, minority, and/or limited English proficient. In 1994, President Bill Clinton signed Executive Order 12898 to address adverse health and environmental effects on minority and low-income populations, and to provide minority and low-income communities access to public information and public participation opportunities. Protections under this executive order refer to ensuring *environmental justice*. Although low-income populations are not designated a protected class of individuals under Title VI, FTA guidance requires that transit providers evaluate whether a major service or fare change will have a disproportionate or adverse impact on low-income communities.

In 2000, President Bill Clinton signed Executive Order 13166, requiring federal agencies and recipients of federal financial assistance to provide meaningful access to persons who have limited English proficiency. To help government agencies meet this requirement and to avoid the risk of discrimination on the basis of national origin under Title VI, the USDOJ issued guidance for federal agencies and recipients of federal funds to take reasonable steps to provide meaningful access to vital information, programs, services, and activities. The connection between national origin discrimination under Title VI and limited English proficiency stems from the decision of the United States Supreme Court in the case of *Lau v. Nichols, 414 U.S. 563 (1974)*, which determined that the failure to address a language barrier in a public education context was a violation of national origin discrimination prohibitions under Title VI.

VIOLATION OF TITLE VI NONDISCRIMINATION REQUIREMENTS

Title VI prohibits discrimination, which can manifest in two ways—by actions resulting in *disparate treatment or disparate impact*. The MBTA actively monitors all activities to identify, address or avoid both intentional and unintentional discrimination. In addition, the FTA requires that the elements of this program be implemented as a way of further demonstrating compliance with the nondiscrimination requirements detailed in Circular 4702.1B.

Disparate treatment occurs when a policy or practice denies an opportunity to or otherwise adversely affects a person within a protected class (including race, color, or national origin) because of their protected characteristic. Disparate impact occurs when an otherwise facially neutral policy or decision, i.e., one that on its surface does not make a discriminatory distinction, results in a discriminatory effect on a protected class.

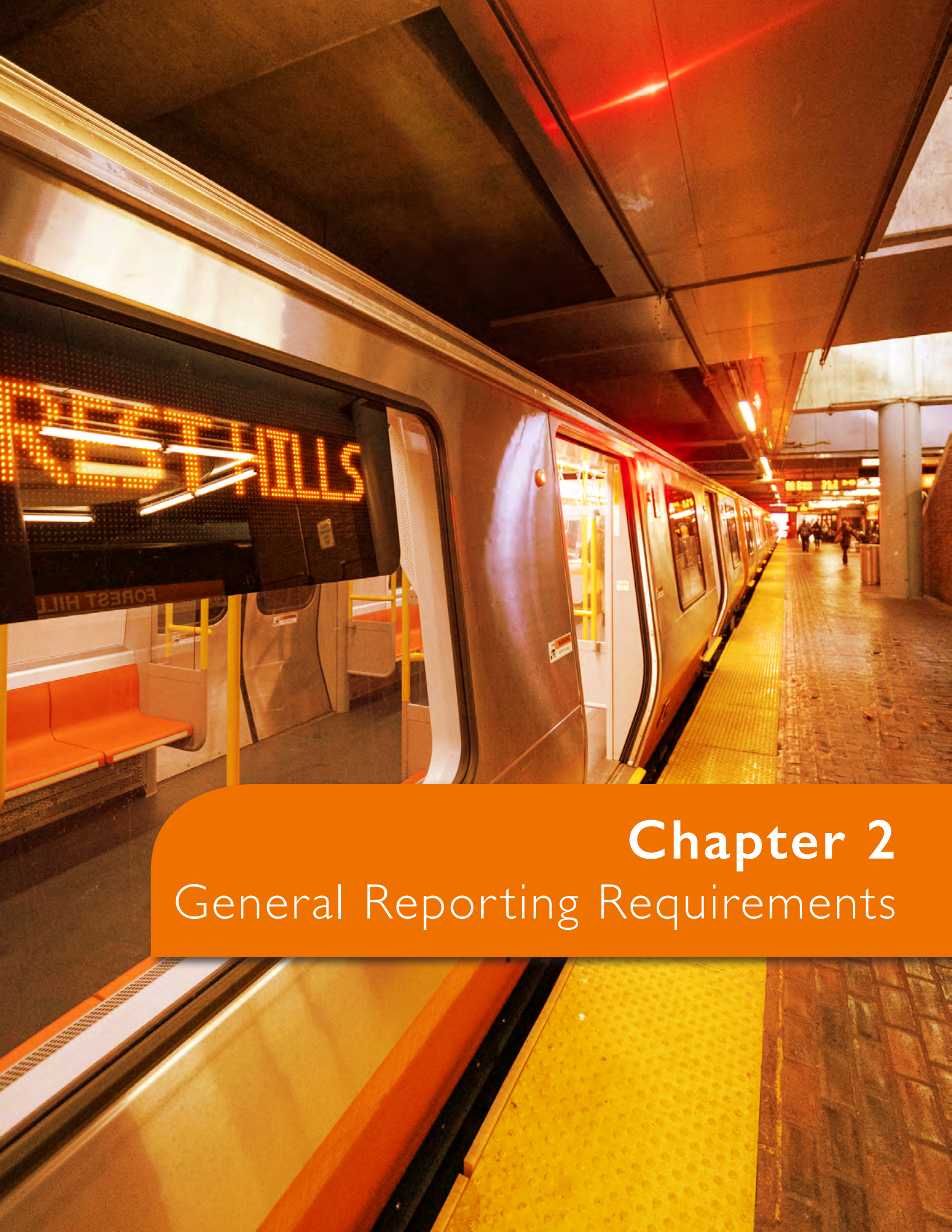
An analytical approach is often required to determine if a disparate impact occurs as a result of a facially neutral policy or decision. Such analysis compares the benefits or burdens received by those who are members of a protected class to the benefits or burdens received by those who are not members of the protected class. This type of analytical approach is applied when determining the impacts of a fare change or major transit service change, and when monitoring transit performance relative to a transit agency's systemwide service standards and policies.

However, a decision or policy that is considered to result in a disparate impact can be determined nondiscriminatory if there is a substantial legitimate, nondiscriminatory justification or reason for the decision or policy, and if no alternative means of achieving the legitimate policy objective exist. If there is an alternative means of achieving the policy objective that would reduce the degree of disparate impacts, that alternative should be adopted.

PROGRAM SUMMARY

Chapter 2 addresses the MBTA's general reporting requirements. Chapter 2 includes a summary of the MBTA's notice to the public regarding protection under Title VI and a description of the locations where the notice is posted; a description of the MBTA's procedures for filing civil rights complaints; a list of Title VI investigations, complaints, and lawsuits; a summary of the MBTA's Public Engagement Plan; and a narrative description of the MBTA's efforts to ensure that subrecipients are complying with Title VI. The appendices to Chapter 2 include the notice to the public regarding protection under Title VI; the Title VI complaint form; the MBTA's Public Engagement Plan; the MBTA's Language Assistance Plan; and the MBTA's subrecipient monitoring review procedures.

Chapters 3 through 7 address the MBTA's requirements as a fixed-route transit provider. Chapter 3 includes maps that show the MBTA's extensive transit-service network and the locations of minority and low-income populations, along with tables that summarize this information. Chapter 4 presents passenger survey data regarding customer demographics and travel patterns. Chapter 5 describes the service policies and standards under which the MBTA operates to ensure high-quality and safe service to the public. Chapter 6 analyzes the extent to which the MBTA has met its service standards, and it compares the levels and quality of service provided to the various communities served by the MBTA. Finally, Chapter 7 presents the service and fare equity analyses that have been conducted by the MBTA since the last Title VI submission.



Chapter 2
General Reporting Requirements

This chapter presents the MBTA's Title VI general reporting requirements, defined in the Federal Transit Administration (FTA) Circular 4702.1B, III, including the following:

- Title VI Notice to the Public
- Title VI Complaint Form and Procedures
- List of Title VI Investigations, Complaints, and Lawsuits
- Public Engagement Plan
- Language Assistance Plan
- Minority Representation on Planning and Advisory Boards
- Providing Assistance to Subrecipients
- Monitoring of Subrecipients and Contractors
- Equity Analyses for Locations of Constructed Facilities

TITLE VI NOTICE TO THE PUBLIC (FTA C 4702.1B, III-4.A.(1))

The MBTA takes proactive steps to inform members of the public about their rights under Title VI. The goal is to ensure that customers are aware of their legal protections and that they know how to request information about the MBTA's nondiscrimination obligations and how they can file a complaint alleging discrimination.

The MBTA disseminates its Title VI Notice to its customers in multiple ways. Each version of the notice is designed to include the following elements:

- A statement that the MBTA operates its programs without regard to race, color, or national origin.
- A description of the steps members of the public can take to request additional information about the MBTA's Title VI obligations.
- A description of the steps members of the public can take to file a Title VI discrimination complaint relating to the programs, services, and activities managed by the MBTA.

During the reporting period, the MBTA updated its Title VI Notice, which includes details on civil rights protections for customers and complaint filing procedures.

Consistent with the MBTA Language Assistance Plan, the updated notice was translated from English into the eleven languages most commonly spoken in the MBTA service area. Although full translations are available, the English version also includes the following statement in the eleven languages:

> *Discrimination is prohibited at MassDOT/MBTA. If you believe discrimination has occurred you have the right to file a complaint. For translations of this notice, visit mass.gov/service-details/title-vi-rights-and-protections or mbta.com/titlevi.*

Space restrictions and limitations, particularly at posting locations at stations, occasionally result in the need to develop more condensed versions of the notice. In these cases, efforts are made to include at minimum a nondiscrimination statement and contact information for filing a complaint or requesting additional information.

The Title VI Notice reads as follows:

The Massachusetts Department of Transportation (MassDOT) and the Massachusetts Bay Transportation Authority (MBTA) comply with Title VI of the Civil Rights Act of 1964, which prohibits discrimination on the basis of race, color, or national origin (including limited English proficiency). Related federal and state nondiscrimination laws prohibit discrimination on the basis of age, sex, disability, and additional protected characteristics. MassDOT and the MBTA are committed to nondiscrimination in all activities.

Individuals who believe they have been discriminated against may file a complaint with MassDOT/MBTA at:

MassDOT/MBTA Title VI Specialists

Office of Diversity and Civil Rights – Title VI Unit
10 Park Plaza, Suite 3800
Boston, MA 02116

Phone: (857) 368-8580 or 7-1-1 for Relay Service

Email: MassDOT.CivilRights@state.ma.us or MBTAcivilrights@mbta.com

Complaints may also be filed directly with the United States Department of Transportation at:

U.S. Department of Transportation

Office of Civil Rights
1200 New Jersey Avenue, SE
Washington, DC 20590

Website: civilrights.justice.gov/

For additional information, language service requests, or reasonable accommodations visit mass.gov/nondiscrimination-in-transportation-program or mbta.com/titlevi

The MBTA's Title VI/Nondiscrimination Notice, including all translated versions, is presented in Appendix 2A.

Locations of Notice Postings

The MBTA's strategy for disseminating the Title VI Notice includes posting it in the following locations:

- MBTA website (https://www.mbta.com/policies/title-vi)
- Transit stations (subject to space and infrastructure limitations at surface rapid transit stations)
- Ferry vessels, docks, and ticketing offices
- Public-facing offices at the MBTA, including the Office of Diversity and Civil Rights, Human Resources, and the Office of the Secretary of Transportation

The MBTA's Title VI Notice is currently posted in stations serving all transit modes, where practicable, including all gated rail rapid transit stations. Until recently, notices were only posted at surface stations on the Green Line where the physical infrastructure exists for such postings. Currently, a notice is posted at most Green Line stops with the exception of a few, particularly on the E Branch where many stops are located in the middle of the road. The Office of Diversity and Civil Rights (ODCR) has initiated conversations with the Office of Performance Management and Innovation to explore the possibility of conducting a review of current Title VI Notice postings at stations to determine the customer reach. Findings from this analysis will inform future updates to the MBTA's Title VI Notice posting strategy. In the meantime, ODCR continues to explore options for expanding the reach of the Title VI Notice posting at stations.

Bus passengers are reached by posting the Title VI Notice in bus transfer stations, where feasible. This offers a degree of certainty that the majority of riders will have ample opportunity to see the notice based upon common trips taken on the MBTA system. Similarly, ferry passengers can view the Title VI Notice at all ferry docks in the network. Lastly, commuter rail passengers can find the Keolis-branded Title VI Notice (which mirrors the MBTA's full notice) at all platforms and stations throughout the network.

The Title VI Notice is also disseminated electronically on the MBTA's website, included with major publications, posted at public meetings (including virtual meetings), and incorporated into system maps and other printed materials.

A complete list of transit stations where the notice is posted is included in Appendix 2B.

MBTA TITLE VI COMPLAINT FORM (FTA C 4702.1B, III-4.A.(2))

The MBTA's Title VI Complaint Form is available on the MBTA website. Consistent with the MBTA Language Assistance Plan, the complaint form is available in the eleven languages most commonly spoken in the MBTA service area. Copies are included as Appendix 2C.

MBTA TITLE VI COMPLAINT PROCEDURES (FTA C 4702.1B, III-4.A.(2))

This section details the MBTA's procedures for processing Title VI discrimination complaints (on the basis of race, color, or national origin, including limited English proficiency). Federal law and regulations governing Title VI places the overall coordination authority for the investigation of civil rights complaints with the United States Department of Justice (USDOJ), which works collaboratively with federal agencies that carry out this responsibility. In the transportation sector, this investigative authority rests with the United States Department of Transportation (USDOT) and its agencies that oversee the different modes of transportation, including FTA. In accordance with USDOT requirements, FTA has established regulations and guidance that require recipients and subrecipients of financial assistance provided through FTA to establish procedures for processing Title VI complaints.

The Complaint Process

The procedures described below, modeled on recommended complaint procedures promulgated by the USDOJ, are designed to provide a fair opportunity for addressing complaints that respect due process for both complainants and respondents. In addition to the formal complaint resolution process detailed here, the MBTA takes affirmative steps to pursue informal resolution of all Title VI complaints, when possible.

These procedures were updated during the reporting period and translated into the eleven most commonly spoken languages in the MBTA service area. It should be noted that the complaint procedures apply to both the MBTA and the Massachusetts Department of Transportation and were developed by staff in the ODCR, a shared service office that oversees Title VI compliance for both agencies.

Copies of the full procedures, including all translated versions are included as Appendix 2D.

Who can file a complaint?

Any member of the public, along with all MassDOT/MBTA customers, applicants, contractors, or subrecipients who believe that they themselves, a third party, or a class of persons were mistreated or treated unfairly because of their race, color, or national origin (including limited English proficiency) in violation of Title VI of the Civil Rights Act of 1964, related federal and state laws and executive orders, or the MBTA's Anti-Discrimination Harassment Prevention (ADHP) Policy. Retaliation against a member of the public on the basis of race, color, or national origin is also prohibited under Title VI and the ADHP policy.

Where do I file a complaint?

Customers may file a complaint by contacting the MassDOT/MBTA's Title VI Specialists, calling the MBTA's Customer Call Center, or writing to the USDOT directly. The contact information is as follows:

MassDOT/MBTA Title VI Specialists

Office of Diversity and Civil Rights – Title VI Unit
10 Park Plaza, Suite 3800
Boston, MA 02116

Phone: (857) 368-8580 or 7-1-1 for Relay Service

Email: MBTACivilRights@mbta.com or MassDOT.CivilRights@state.ma.us

MassDOT/MBTA, Assistant Secretary and Chief Diversity Officer

Office of Diversity and Civil Rights – Investigations Unit
10 Park Plaza, Suite 3800
Boston, MA 02116

Phone: (857) 368-8580 or 7-1-1 for Relay Service

Email: odcrcomplaints@dot.state.ma.us

The MBTA Customer Call Center: (617) 222-3200

The Call Center staff will seek to obtain basic information about the matter from the caller, and details of the call will be forwarded to the Office of Diversity and Civil Rights for processing according to these procedures.

U.S. Department of Transportation

Office of Civil Rights
1200 New Jersey Avenue, SE
Washington, DC 20590

Please note: When FTA receives a Title VI complaint regarding the MBTA, a subrecipient, or a contractor, the FTA may request that the MBTA investigate the matter.

What do I need to include in a complaint?

A complaint form is available electronically on the MassDOT Title VI website or the MBTA Title VI website, or in hardcopy from the MassDOT/MBTA Office of Diversity and Civil Rights, whose contact information is listed above.

Alternatively, a complainant may submit correspondence in an alternative format that should include the following:

- Name, signature and, current contact information (i.e., telephone number, email address, and postal mailing address)
- The name and badge number (if known and applicable) of the alleged perpetrator
- A description of how, when, and where the alleged prohibited conduct occurred
- A detailed description of why you believe you were treated differently
- Names and contact information of any witnesses
- Any other information you believe is relevant to your complaint

In cases where the complainant is unable to provide a written statement, a verbal complaint may be made to the ODCR. Complainants will be interviewed by a Civil Rights Investigator (CRI). If necessary, the CRI will assist the person in converting the verbal complaint to writing. All complaints should be signed by the complainant.

Anonymous complaints may be filed in the same manner. Anonymous complaints shall be investigated in the same manner as any other complaint.

Complaints are accepted in any recognized language. Multilingual complaint forms are available.

How long do I have to file a complaint?

A complaint alleging violation of Title VI and/or the MassDOT/MBTA's ADHP policy must be filed no later than 180 days from the date of the alleged violation. Complaints alleging violations of state or federal law must be filed within the time frames established by statute, regulation, or case law.

How will my complaint be handled?

When a complaint is received, it is assigned to a CRI. The CRI will take the following steps:

1. **Determine jurisdiction.**

   ODCR has jurisdiction if the complaint involves a statement or conduct that violates

   - MassDOT's/MBTA's legal obligation and commitment to prevent discrimination, harassment, or retaliation on the basis of a protected characteristic with regard to any aspect of the Agency's service to the public; or
   - the commitment made by subrecipients and contractors working with the MassDOT/MBTA to adhere to MassDOT/MBTA policies.

     AND

     The complaint was filed within 180 days of the alleged violation.

2. **Acknowledge receipt of the complaint and provide jurisdictional determination within ten (10) business days of receipt of the complaint.**

   If the CRI determines that any complaint does not have the potential to establish a civil rights violation, then the CRI shall notify the complainant and Title VI Specialist in writing of its finding and the matter shall be closed.

3. **Conduct a thorough investigation of the allegations contained in the complaint in accordance with the MassDOT/MBTA Internal Complaint Procedures.**

What happens after the investigation?

At the conclusion of the investigation, the CRI will transmit to the complainant and the respondent one of the following three letters based on the findings:

- Letter of resolution that explains the steps the respondent has taken or will take to comply with Title VI.
- Letter of finding issued when the respondent is found to be in compliance with Title VI. This letter will include an explanation of why the respondent was found to be in compliance and which provides notification of the complainant's appeal rights.
- Letter of finding issued when the respondent is found to be in noncompliance.

This letter will include each violation referenced as to the applicable regulations, a brief description of findings/recommendations, the consequences of failure to achieve voluntary compliance, and an offer of assistance in devising a remedial plan for compliance, if appropriate.

Can I appeal a finding?

If a complainant or respondent does not agree with the findings of the CRI, then she/he/they may appeal to the Assistant Secretary and Chief Diversity Officer. The appealing party must provide any new information that was not readily available during the course of the original investigation that would lead the MassDOT/MBTA to reconsider its determinations.

The request for an appeal and any new information must be submitted within 30 days of the date the letter of the finding was transmitted.

After reviewing this information, MassDOT/MBTA will respond either by issuing a revised letter of resolution or by informing the appealing party that the original letter of resolution or finding remains in force.

To file a request for an appeal, the complainant must contact the MBTA's Office of Diversity and Civil Rights at the following address:

Massachusetts Bay Transportation Authority

Office of Diversity and Civil Rights
Attention: Assistant Secretary for Civil Rights
10 Park Plaza, Suite 3800, Boston, MA 02116

Phone: (857) 368-8580 or 7-1-1 for Relay Service

Email: MBTACivilRights@mbta.com

Definitions

The terms relevant to the complaint process are defined as follows:

Complainant—A person who files a complaint with the MassDOT/MBTA alleging a violation of Title VI, the Anti-Discrimination Harassment Prevention Policy, or a related nondiscrimination obligation.

Complaint—Written, verbal, or electronic statement concerning an allegation of discrimination based on race, color, or national origin (including limited English proficiency). Where a person with a disability or a person with limited English proficiency files a complaint, the term *complaint* encompasses alternative formats and languages other than English.

Discrimination—An act or inaction, which can be either intentional or unintentional, through which a person or group of persons has been subjected to unequal treatment or disparate impact on the basis of race, color, or national origin (including limited English proficiency).

Respondent—The person, agency, institution, or organization alleged to have engaged in behavior that violates Title VI, the ADHP Policy, or related nondiscrimination obligations.

TITLE VI INVESTIGATIONS, COMPLAINTS, AND LAWSUITS (FTA C 4702.1B, III-4.A.(3))

Title VI complaints are investigated by the ODCR Investigations Unit. The investigator assigned to a complaint determines whether or not there is sufficient evidence to find that there is a violation of Title VI. All Title VI complaints that are investigated will result in a finding of either "Cause" or "No Cause." At the conclusion of the investigation, regardless of outcome, the decision (or finding) is referred to the appropriate MBTA Area for remedial or corrective action. The MBTA Area the decision is referred to depends upon the garage, transportation line, repair shop, or department where the respondent works.

If further investigation is conducted by the Area, it will only relate to "non-civil rights" issues raised in the complaint or during the investigation. These issues could include customer service concerns, courtesy rule violations, or safety issues. In some instances, Title VI complaints with "No Cause" findings result in discipline to the employee for non-civil rights rules and policy violations. In some cases, the Area works in consultation with Labor Relations, Human Resources, or ODCR's Training and Mediation Unit.

While the investigations unit is responsible for looking into individual allegations of discrimination, the Title VI Unit can and does provide supplemental information on systemic issues that may be alleged or implied from the underlying complaint. For example, while an individual complaint may be concerned with on time performance at a particular stop, the Title VI unit would investigate this more broadly by examining on time performance data for minority vs. non-minority stops.

The investigations unit maintains a log of all complaints, lawsuits, and investigations. While the complaint log presented in this program reports the date of receipt, an internal process is underway to update the fields to include the date the investigation was closed. A list of Title VI complaints, lawsuits, and investigations that occurred during this triennial reporting period is presented in Appendix 2E.

MBTA PUBLIC ENGAGEMENT PLAN (FTA C 4702.1B, III-4.A.(4))

The MBTA's Public Engagement Plan (PEP) is a document that provides instruction to all MBTA staff, project partners, subrecipients, and contractors on the MBTA's public engagement goals and methods to elicit diverse participation and feedback regarding the MBTA's programs, services, activities, and decisions. This document is designed to satisfy FTA Title VI requirements for public engagement on service and fare changes and Section 5307 requirements for public engagement and comment regarding major service reductions and fare increases. The PEP also incorporates information about engagement on capital projects and policy development. The document outlines several guiding principles around which all engagement at the MBTA is centered.

Through its public engagement activities, the MBTA seeks to ensure early, continuous, and meaningful opportunities for the public to provide input on agency activities as well as allowing the agency to effectively communicate critical information to the public. The specific strategies utilized by the MBTA are consistent with Title VI and are designed to effectively communicate with protected populations, including minority populations, limited English proficient populations, and others. As a public entity serving the needs of the public, the MBTA has a responsibility to be transparent about decisions that impact the public, create multiple channels through which members of the public can provide input, and weigh this input as part of its decision-making process. The MBTA recognizes that this input can lead to the delivery of service and projects that align with the interests of the riding public – a benefit for the Authority and riders in the long-run – which is why the MBTA emphasizes communicating with diverse riders and communities within the MBTA service area.

Outreach and Engagement with Minority Populations

The MBTA uses an equity first and community informed approach to ensure inclusive public involvement. This allows the MBTA to meaningfully connect and communicate with diverse populations, including minority individuals and communities and limited English proficient individuals and communities, as required under Title VI. The MBTA strives to understand the full range of a community's needs in order to create responsive and innovative transportation plans, projects, and policies. This entails learning about the community from the community and understanding their relationship to transportation and the project in question. By consistently interacting with diverse community members and leaders, the MBTA gains insight into the reasons why community members may agree or disagree with proposed plans or projects. Outreach to traditionally underserved groups, such as minority demographic groups, helps ensure that all riders have opportunities to affect the MBTA. MBTA public outreach efforts are designed to accommodate the needs of populations protected on the basis of race or ethnicity including minority populations, low-income communities, persons with limited English proficiency, people with disabilities, and other traditionally underserved people throughout all phases of any public engagement process.

To effectively reach minority individuals and communities, the MBTA utilizes the following steps and strategies when conducting public engagement activities:

- **Identifying local demographics** – The MBTA begins strategizing public outreach campaigns by identifying the demographics of local residents, riders, and the public in impacted locations. This includes querying primary data sources such as Census data and passenger survey data. Identifying local demographics allows the MBTA to understand the presence and concentration of minority populations and this information in useful in planning for public engagement (such as clarifying which community organizations representing which constituencies to reach out to) as well as in evaluating the effectiveness of public engagement (by evaluating whether attendance/input reflects community demographics and whether minority populations were represented).

- **Coordination with community advocates and organizations** – The MBTA endeavors to maintain relationships with local community based organizations, including organizations representing minority populations. These organizations provide the MBTA with input, feedback, and perspectives from across their diverse membership. The MBTA actively solicits their participation when seeking public input and asks them to share the notice of opportunities for input among their membership to help increase the reach of agency outreach campaigns.
- **Coordination with local partners** – There are a number of local agencies involved in public transportation throughout the MBTA service area and throughout the Commonwealth, including municipalities, metropolitan planning organizations, regional planning agencies, and regional transit agencies. Each of these organizations maintains their own relationships with local communities, including minority populations. The MBTA seeks their assistance with public outreach and engagement by informing them of upcoming engagement opportunities and requesting that they share this information with their stakeholders and contacts.
- **Coordination with community leaders** – Similar to our efforts to maintain relationships with community organizations, the MBTA also seeks out and maintains relationships with community leaders, including local leaders that represent minority populations. This includes local elected officials, leaders of advocacy organizations, local business leaders, local religious leaders, and others. The MBTA's public outreach efforts include steps to coordinate with these individuals through formal means such as legislative briefings as well as informal means such as information sharing and meetings. The MBTA also seeks guidance from this constituency on how best to reach the individuals and populations they represent.
- **Information sharing with diverse media outlets** – The MBTA's list of stakeholders includes local media outlets that focus on different communities and demographics, including minority communities. By communicating important information through this variety of media outlets, the MBTA seeks to more effectively connect with minority populations that may be consuming information from a locally favored media source.
- **Staying up-to-date on current events** – The MBTA recognizes that it is important to be aware of demographic shifts that impact local populations and communities before those shifts are necessarily reflected in Census data and/or passenger surveys. For example, there have been instances of natural disasters elsewhere in the world creating an influx of relocatees to the MBTA service area, reflecting diverse racial and ethnic demographics. By staying current on such events, the MBTA is able to structure its outreach and engagement strategies to be mindful of incorporating these populations.

- **Surveys** – A frequent method utilized by the MBTA to connect with minority populations is direct surveying. The MBTA utilizes in-person and online surveying to solicit feedback on specific initiatives, to gain insights into the needs of local residents, to identify minority demographics of respondents, to understand travel patterns, and to gauge rider experience.
- **Participating in events directly in the community** – The MBTA has embraced the engagement principle of meeting people where they are. Rather than expecting the public to attend MBTA hosted events, the MBTA seeks out opportunities to visit with community. By hosting pop-up events, by joining existing community meetings, by bringing information into the field and taking back feedback and input from those we connected with, the MBTA is able to facilitate strong relationships, including with local minority populations.

For more information regarding MBTA's public engagement strategies and to learn more about specific opportunities to engage, please visit: https://www.mbta.com/policies/public-engagement.

Updating the Public Engagement Plan

The Public Engagement Plan (PEP) incorporated into this triennial Title VI Program reflects an important effort that took place during this 2020–23 reporting period. The MBTA updated the 2020 PEP to reflect the MBTA's current goals and strategies regarding public engagement, and in response to a Section 5307 Program finding identified during the 2022 FTA Triennial Review.

Key revisions to the PEP include the following:

- Updating the "Background on the MBTA" section with current information on the MBTA's governing Board of Directors.
- Clarifying guiding principles in the "Guiding Principles for Public Engagement" section, such as specifying "equity" in engagement strategies to reach diverse members of the community.
- Adding "Community Meetings" as a common type of engagement in the "Community Events and Engagement" section.
- Expanding the "Virtual Public Engagement" section with details on the MBTA's increased use of virtual public engagement strategies following the COVID-19 pandemic.
- Adding clearer language for collecting and considering public comments prior to a fare increase (see section on "Public Engagement Regarding Fare Changes") or major service reductions (see section on "Public Engagement Regarding Service Planning and Service Changes").

To ensure alignment between the MBTA and the public regarding these principles for engagement, the MBTA released the draft PEP for public comment over an approximately 45-day public review period. The MBTA conducted an extensive public engagement effort for setting these policies, including:

- Three public meetings:
    - March 21, 2023: Hybrid meeting, held in person at the State Transportation Building and virtually via Zoom. Chinese, Spanish, and ASL interpretation services were provided at this meeting.
    - March 22, 2023: In person meeting held at Quincy Asian Resources Inc. (QARI), in Quincy, MA. Chinese interpretation services were provided at this meeting.
    - March 28, 2023: In person meeting held at La Colaborativa in Chelsea, MA. Spanish interpretation services were provided at this meeting.
- Two additional presentations at MBTA events:
    - March 30, 2023: Riders' Transportation Access Group (R-TAG) Meeting.
    - April 4, 2023: Capital Investment Plan (CIP) in-person public meeting held at the State Transportation Building.
- A dedicated MBTA webpage providing a draft updated PEP, background information, a summary of proposed changes, and information about how to submit comments online, via email, U.S. mail and voicemail. The updated draft of the PEP and summary of proposed changes were available in Simplified Chinese, Haitian Creole, Portuguese, Spanish, and Vietnamese.
- Press release providing details for public comment, including the list of scheduled public meetings.
- Public meeting flyers emailed to approximately 2,500 contacts from the MBTA Master Contact List.
- Public Meeting Flyers were shared with members of the Policy Development Working Group, an external group of transit advocates representing 17 organizations around the MBTA service area including:
    - A Better City
    - Alternatives for Community and Environment (ACE)
    - ACLU of Massachusetts
    - Allston Brighton Health Collaborative
    - Conservation Law Foundation
    - Executive Office of Health and Human Services (EOHHS)
    - Fenway CDC

- Green Roots Chelsea
- Lawyers for Civil Rights
- Livable Streets
- Mass Budget
- Mass Community Labor United
- Mass Senior Action Council
- Mattapan Food and Fitness Coalition
- Metropolitan Area Planning Council
- Transit Matters
- Transportation for Massachusetts

- For all public meetings, additional accessibility accommodations and language services were available upon request and contact information for requesting services was included in all meeting announcements.
- Meeting announcements, the availability of the draft PEP, and the opportunity for public comment were published in both English and non-English newspapers including:
  - Chelsea Record (English and Spanish)
  - Quincy Patriot Ledger (English and Chinese)
  - Bay State Banner (English)
  - Boston Herald (English)
  - Boston Globe (English)
- A follow-up email was sent to those who expressed interest in the PEP update by attending a public meeting. The email included a reminder on the various ways and deadline to submit comments, a link to the public feedback survey, and links to the dedicated webpage and events page where the presentation and hybrid public meeting recording are available.

Once all comments were received, they were summarized into key themes and presented to the MBTA's Board of Directors, with the presentation posted online for riders to review. The final draft of the PEP was also provided, alongside a redline version, so that riders could see how feedback was incorporated into the document. The full text of the final MBTA PEP can be found in Appendix 2F and on the MBTA website at www.mbta.com/public-engagement.

Implementing The Public Engagement Plan

Final revisions to the PEP were completed in April 2023, so the MBTA has turned its focus to implementation activities. These activities include informing all departmental leadership about the contents of the final PEP and specifically creating internal guidelines to ensure staff are supported in following the MBTA's public engagement principles. A multidisciplinary team of staff are responsible for managing the PEP, including staff from the General Manager's Office, Public Engagement, System-Wide Accessibility, ODCR, Customer Experience, and others. This team will be available to provide training and technical assistance to those responsible for operationalizing the PEP's engagement methods.

Monitoring Effectiveness

The new 2023 MBTA PEP will be monitored for effectiveness in the following ways:

- Staff feedback regarding empirical or anecdotal indicators that engagement strategies in the PEP elicited diverse and robust participation.
- External stakeholder feedback regarding the effectiveness of MBTA's outreach activities.
- Data metrics, where available, such as social media statistics, website visits, document downloads, and form submissions.
- The ability to achieve outreach and feedback benchmarks built into initiatives.
- The number and nature of complaints regarding outreach strategies as envisioned in the PEP.
- The ability of the PEP to adapt to new outreach practices and technologies, where appropriate. Based on the results of these monitoring activities, the MBTA will consider future revisions, updates, or other modifications to the PEP.

Monitoring activities performed throughout the reporting period prompted changes in the MBTA public engagement process. Public feedback survey responses showed that notice of public meetings or hearings are not generally received through newspaper postings, but by notification and information sharing from external stakeholders and community partners. In response to this finding the MBTA is making additional efforts to reach out to external stakeholders and encourage information sharing within their networks. Consequently, as meeting participants are being notified about public meetings through their own networks, the MBTA discovered that translating the formal meeting notice is not as effective as translating the flyer because the meeting flyer seems to be shared more broadly.

Additionally, the MBTA is committed to offering feedback mechanisms that are not limited to electronic submission, but that allow for in-person submission opportunities. These methods include hosting more in-person meetings, providing the opportunity to submit

written comments via postal mail, and providing the public with telephone numbers where they can call in with comments. Even when the MBTA hosts a virtual public meeting, a telephone number is provided where members of the public can call in and participate with a cell phone or landline.

On March 29, 2023, Governor Healey signed into law a supplemental budget bill which, among other things, extends the temporary provisions pertaining to the Open Meeting Law to March 31, 2025. Specifically, this further extension allows public bodies to continue holding meetings remotely without a quorum of the public body physically present at a meeting location, and to provide "adequate, alternative" access to remote meetings.[1]

The MBTA will continue monitoring the implementation of the new PEP over the coming months and years to ensure public voices are heard in the MBTA's processes and decision-making.

Summary of Department-Level Public Engagement Activities

The following section outlines key efforts among MBTA departments that had significant public engagement activities during this triennial cycle, including approaches to reach diverse communities. A list of public meetings that the MBTA held during this triennial reporting period is provided in Appendix 2G.

Agency-Wide Outreach Highlights

Several outreach enhancements were instituted over the past year that impact all program areas responsible for public engagement.

As of mid-March 2022, the MBTA's Office of Community Engagement proactively provides language interpretation services during public meetings for projects with systemwide impacts. Meeting notices of public informational meetings and hearings continue to provide the public with instructions and contact information for requesting additional language assistance services if needed. Additionally, to make sure the MBTA is reaching the most vulnerable riders, a recently instituted agency-wide policy requires outreach to local independent living centers, disability commissions and councils on aging.

The Office of Community Engagement is in the process of restructuring how the MBTA approaches engagement. The office has hired a Deputy Director of Community Engagement, as well as Community Liaisons who are responsible for conducting outreach activities when there are projects, policy updates, or service impacts in regions impacted by MBTA service. Community Liaisons co-develop events, and programs with external offices within the MBTA service area and attend additional outreach events in collaboration with internal offices at the MBTA.

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1 https://www.mass.gov/the-open-meeting-law

Through this new approach, liaisons maintain continuous contact with community partners and organizations while building trust and familiarity with riders. Moreover, it offers a more effective way of identifying and addressing community needs.

All MBTA employees responsible for conducting outreach have access to the Engage platform. The platform hosts a suite of tools to assist outreach staff in identifying community demographics, accessible meeting locations, and community contacts. Major updates to the platform are underway and are informed by feedback from current and potential users. In October 2022, a team of MassDOT and MBTA employees hosted a series of brainstorming workshops with internal and external stakeholders whose primary responsibility is community engagement. These sessions included interactive exercises designed to identify how the tools are currently being used, and updates needed to make them more effective. A review of the findings is still underway, but at a minimum we anticipate an update to data layers and new opportunities for long-term reporting goals.

Forging Ahead

In response to service level impacts from the COVID-19 pandemic, MBTA planned the Forging Ahead program to preserve access and quality of service available to transit-critical customers. The Community Liaison team reached out to 266 community organizations in the MBTA service area and collected 179 comments from 30 community meetings. Reaching riders with limited English proficiency was a vital component to this program. Among these, three meetings were held in Chinese and two in Spanish.



Bus Network Redesign

The Bus Network Redesign project is a complete reimagining of the MBTA's bus network to reflect the travel needs of the region.

MBTA outreach staff have hosted focus groups in English, Spanish, Mandarin, and Cantonese. During each focus group community liaisons led conversations where participants shared their transit experiences and suggested areas for improvement. The feedback collected during focus groups was shared with project planning staff. MBTA outreach staff presented project maps demonstrating how comments collected during the focus groups were considered in the bus network redesign.

Throughout the project, outreach efforts have been robust and included a variety of both in-person and virtual participation opportunities, including but not limited to the following:

- 10 station open houses, with locations based on ridership
- one-to-one briefings with stakeholders (advocates, community groups, municipal planning staff, etc.)
- seven virtual meetings (one systemwide; six geographically based)
- one virtual public hearing
- one in-person open house, and one in-person public hearing

The availability of translated materials and adherence to the MBTA Language Assistance Plan was important to the project teams. Materials for public outreach included the following resources that were made available in print and online in nine languages:

- Neighborhood Booklets
- Table of Route Changes
- Route Profiles
- Feedback Form

Starting in October 2021, the MBTA began hosting informational meetings to present the public with the approach and principles that MassDOT and the MBTA are using to propose this transformation of the region's bus system. These design principles helped shape the draft network map, which was released on May 16, 2022, with a public comment period from May 16 to July 31, 2022. MBTA staff conducted extensive outreach to solicit feedback and address questions on the draft network, resulting in the collection of over 20,000 comments. Meeting flyers, detailing the availability of language assistance services and announcing the presence of a Spanish interpreter, were prepared and posted in Spanish, Portuguese, Vietnamese, Simplified and Traditional Chinese, and Haitian Creole.

Fare Transformation

The Fare Transformation initiative consists of a host of updates to the MBTA fare collection system over several years. The overarching goal is to make paying for transit easier and more convenient by allowing passengers to use a single card on all MBTA modes, in addition to new payment methods such as mobile wallets and contactless credit and debit cards.

The project team held three public meetings about the Sales Network in March 2021; three public meetings about Proof of Payment in April 2021; and two about Fare Rules in May 2021. Information about the availability of language assistance and how to request services was included in meeting notices in English, Spanish, Simplified and Traditional Chinese, Portuguese and French. Additionally, the project team held twenty-nine supplemental community meetings; ten of the meetings were in Chinese and one was in Spanish.

Orange Line Closure

The FTA conducted a months-long inspection brought on by a series of safety incidents. On August 31, 2022, the FTA issued a 90-page final report with 53 findings for the MBTA and the Department of Public Utilities. To address the safety actions, the MBTA shut down Orange Line train service from August 19 to September 18, 2022, to complete five years' worth of track and signal replacement and maintenance work, as well as other projects, and bring the line into a state of good repair in an unprecedented 30-day timeframe. Inclusive and effective outreach was crucial, and efforts were robust prior to and during the closure, and upon reopening of the line. Detailed below are a few highlights of the outreach strategy:

- Frequent outreach to community leaders and external stakeholders allowed for information sharing, and meetings were held to solicit feedback on the impacts of the closure.
- Beyond in-person engagement, the MBTA sought additional avenues for public participation, such as through webinars, websites, mobile applications (e.g., MBTA mTicket) and social media.
- The MBTA collected information on non-English language media, including important information for publication, such as creative deadlines and contact information, to prepare for publishing information in an expeditious manner.
- The MBTA provided written translations for certain materials such as Riders Guides, flyers, one-pagers, and digital and A-frame signage at all stops along the Orange Line. The languages selected for translation of the Rider's Guide reflect commitments made in the MBTA Language Access Plan to provide vital information in the most commonly spoken languages in the service area, as well as responses to specific requests for additional language support.

A detailed report of outreach efforts can be found in Appendix 2H.

Partnership with Rhode Island Department of Transportation (RIDOT)

MBTA and RIDOT recognize the importance of a strong partnership between the two agencies, particularly on matters related to commuter rail service where the service extends beyond Massachusetts state lines. During the reporting period MBTA civil rights staff and RIDOT staff agreed to participate in quarterly meetings with the goal of facilitating better information sharing with the public on commuter rail services. These meetings also offered the opportunity to share best practices for the implementation of civil rights programs and inclusive outreach efforts.

Service and Fare Change Equity Policy

The Service and Fare Change Equity Policy, formerly known as the Disparate Impact/Disproportionate (DI/DB) Policy, incorporated into this triennial Title VI Program reflects work that took place during this 2020–23 reporting period. The MBTA conducted public engagement on the proposed updates to the Service and Fare Change Equity Policy in tandem with updates to the PEP, as described above, and in Chapter 7.

LANGUAGE ASSISTANCE PLAN (FTA C 4702.1B, III-4.A.(5))

The MBTA's Language Assistance Plan is provided in Appendix 2I.

MINORITY REPRESENTATION ON PLANNING AND ADVISORY BODIES (FTA C 4702.1B, III-4.A.(6))

During this reporting period, three advisory groups were active to assist with policy development and service improvement considerations. When reaching out and soliciting participation from these groups, the MBTA was purposeful in assembling a diverse group of external stakeholders and organizations that not only reflected diverse membership but also represented diverse communities and viewpoints from throughout the service area. Each of these organizations had full discretion to select members to send to any particular meeting of the advisory body, based on their subject matter expertise and the topics to be discussed during any given meeting.

A voluntary demographic survey was shared with committee members to give them the opportunity to report membership demographics. A 33 percent response rate was achieved, and of these responses 45 percent identified as minority and 55 percent identified as nonminority. While this response rate does not represent statistical significance, it exceeds the MBTA service area's minority population percentage (37.8 percent in the core service area, and 32.7 percent in the commuter rail service area).

For details of the efforts to ensure diverse participation among these advisory bodies, please see the following sections.

Bus Network Redesign External Task Force

The Bus Network Redesign project requires the project team to engage with current and potential future riders. As part of this process, the MBTA created a Bus Network Redesign External Task Force to represent different perspectives and inform the development of goals, metrics, and bus network alternatives. The task force consists of a broad range of stakeholders, including municipalities, business groups, transit advocates, social service providers, public health and housing officials, and organizations that represent minority populations. The task force includes representatives from the following organizations:

- A Better City
- Alliance for Business Leadership
- Allston Brighton Health Collaborative
- Alternatives for Community and Environment
- Barr Foundation
- Boston Business Chamber
- Chinese Progressive Association
- City of Boston
- City of Cambridge
- City of Chelsea
- City of Everett
- City of Medford
- City of Somerville
- Fairmount Indigo Network
- GreenRoots Chelsea
- Institute for Transportation and Development Policy – Boston
- Kendall Now
- Livable Streets
- Madison Park Community Development Corporation
- Massachusetts Community Labor United
- Massachusetts Department of Public Health
- Massachusetts Executive Office of Housing and Economic Development
- Massachusetts House of Representatives
- Mattapan ABCD
- Mattapan Food and Fitness Coalition

- MBTA Advisory Board
- Medical Academic and Scientific Community Organization (MASCO)
- Metropolitan Area Planning Council
- Neighbor to Neighbor
- New Lynn Coalition
- Office of Boston City Councilor Andrea Campbell
- Powerful Pathways
- Project Right
- Quincy Asian Resources
- Riders' Transportation Access Group
- Seaport Transportation Management Association
- Transit Matters
- Transportation for Massachusetts
- Transportation, Resources, Information, Planning and Partnership for Seniors
- The Urban Labs

Policy Development Working Group

As the MBTA develops policy, it has created the Policy Development Working Group as a mechanism to engage local transit advocates directly on the MBTA's customer-facing policies. While membership in this working group is open to the public, local advocates have been specifically encouraged to participate. The purposes of the Policy Development Working Group are to (1) identify specific user communities or organizations for future engagement, (2) brainstorm solutions to identified policy issues, and (3) react to proposed MBTA policies. This group also will help to explore how specific policy decisions may impact different users within the system. The Policy Development Working Group is made up of multiple organizations that represent underserved and/or marginalized populations and other advocacy groups, including the following:

- A Better City
- Allston Brighton Health Collaborative
- Alternative for Community and Environment (ACE)
- The ACLU of Massachusetts
- Conservation Law Foundation
- EOHHS Human Service Transportation Office

- Fenway CDC
- GreenRoots Chelsea
- Lawyers for Civil Rights
- Livable Streets
- Metropolitan Area Planning Council
- Mass Budget
- Mass Community Labor United
- Massachusetts Senior Action Council
- Mattapan Food and Fitness Coalition
- Transit Matters
- Transportation for Massachusetts (T4MA)

Fare Verification Advocates Advisory Group

The Fare Verification Advocates Advisory Group discusses and provides feedback to the MBTA on policies and procedures to support a successful proof-of-payment program for the MBTA. The group includes representatives of a diverse set of organizations, particularly those representing constituencies most vulnerable to potential adverse outcomes from a proof-of-payment system.

The advisory group met monthly throughout the winter and spring of 2022 and bi-monthly beginning in late 2022. The Policy team stewards this advisory group. Additionally, Policy representatives act as a bridge between advisory group participants and additional stakeholders within the MBTA.

The group branched out from the Policy Development Working Group to address the need to have more in-depth and regular conversations focused on proof-of-payment policy. All Policy Development Working Group members as of January of 2022 were invited and encouraged to participate. These organizations were informed that the group was open to any organization that would be interested in engaging in these questions with the MBTA and were encouraged to identify additional organizations and coalitions to invite. This invitation remains open. Furthermore, MBTA staff identified and reached out to additional groups that represented demographics not currently engaged in the Policy Development Working Group—namely homeless individuals and youth.

Confirmed participants (and the areas the organizations focus on) are as follows:

- Pine Street Inn (homeless individuals)
- PAIR (immigrant rights)
- Greater Boston Legal Services (GBLS)
- Conservation Law Foundation
- MBTA's Diversity, Equity, and Inclusion Working Group
- Riders Transportation Access Group (RTAG) (seniors and individuals with disabilities)
- Livable Streets
- ABHC (health and community)
- GreenRoots (environmental justice and The City of Chelsea)
- ACLU

The following groups were invited but are not choosing to participate at this time:

- CLU (labor coalition)
- ACE (environmental justice)
- I Have A Future (coalition of youth advocacy organizations)
- BAGLY (The Boston Alliance of LGBTQ+ Youth)
- Mass Senior Action (seniors)
- Rosie's Place (homeless individuals)
- Lawyers for Civil Rights

MONITORING AND PROVIDING ASSISTANCE TO SUBRECIPIENTS (FTA C 4702.1B, III-11)

During the lookback period, the MBTA did not have any subrecipients. In the event of any active subrecipient, ODCR provides assistance to subrecipients through training offerings, document template sharing, and responding to inquiries. Active subrecipients are kept informed of updates to vital documents, including recent updates to the MBTA Title VI Notice to the Public and Complaint Procedures. ODCR staff responds to requests for guidance on effective language assistance measures, community engagement tactics, and demographic data collection. Resources, such as the Engage Platform discussed earlier in this chapter, are shared with our business partners and feedback is often solicited to identify ways the MBTA can provide more effective support to strengthen civil rights program implementation.

The MBTA's Title VI Subrecipient Monitoring Procedure is included in Appendix 2J.

RESULTS OF CONTRACTOR MONITORING (FTA C 4702.1B, III-4.A.(7))

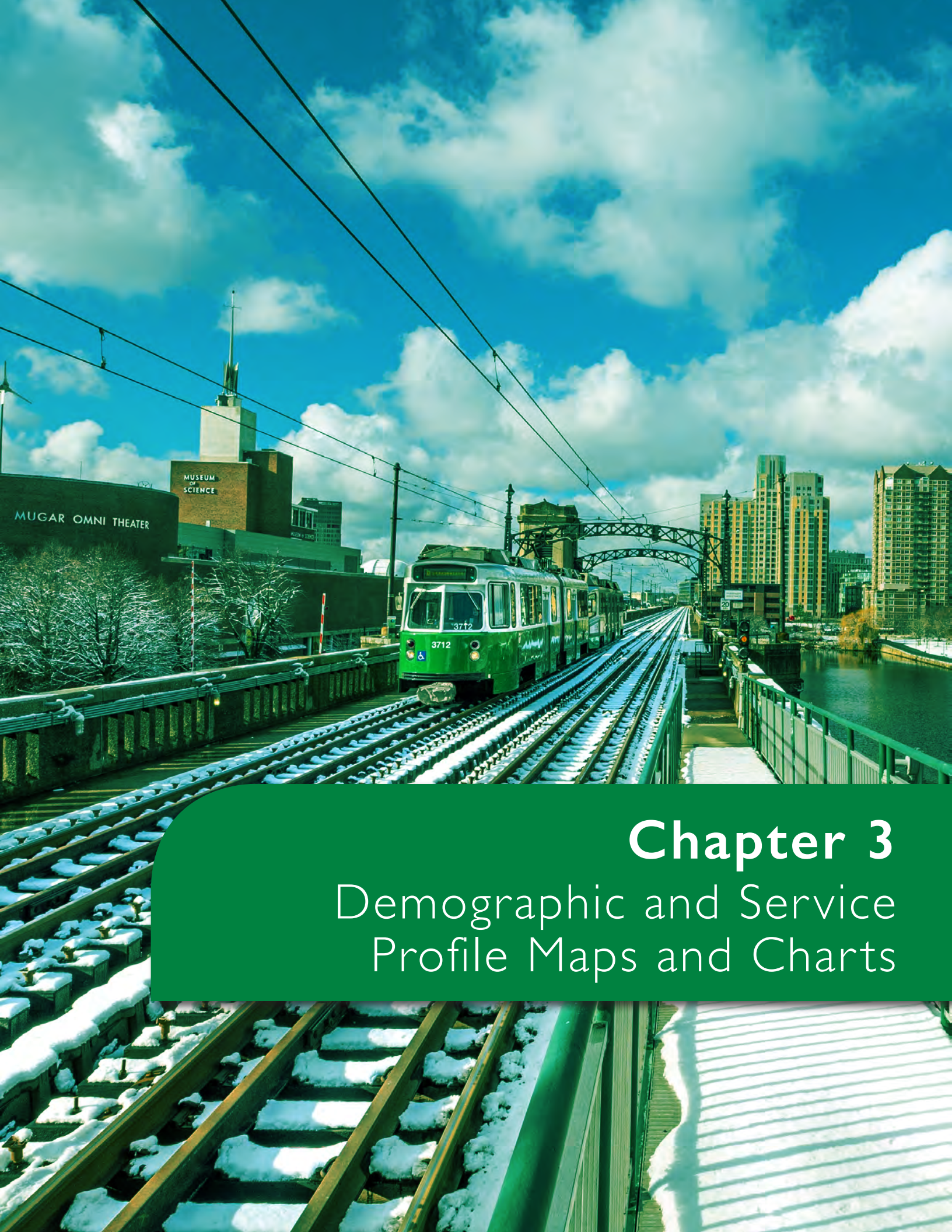
As part of its Title VI compliance activities, the MBTA is responsible for ensuring contractors are adhering to the MBTA's Title VI Program and complying with Title VI when providing services on the MBTA's behalf. The Title VI Circular describes the applicability of these requirements to contractors: *Contractors and subcontractors are responsible for complying with the Title VI Program of the recipient with whom they are contracting*.

During this triennial lookback period, in August 2022, ODCR initiated contact with all active contractors to confirm awareness of their obligations under Title VI when providing contracted services on behalf of the MBTA. To facilitate this process, ODCR developed a questionnaire designed to capture details on each organization's process for meeting Title VI requirements, specifically asking questions related to language assistance and staff training.

Upon receipt of the completed questionnaire, submissions were reviewed, and a letter was issued to all contractors highlighting minimum compliance requirements and announcing the future availability of the 2023 MBTA Title VI Triennial Program submission. Contractors were encouraged to review the Triennial Program once it becomes available and assess their programs for compliance with the active Triennial Program. Areas of focus for future monitoring activities by ODCR staff were also highlighted. Finally, contractors were notified that technical assistance is available upon request, and announcements will be provided when additional resource documents and training opportunities become available.

TITLE VI EQUITY ANALYSIS FOR DETERMINATION OF LOCATION OF CONSTRUCTED FACILITIES (FTA C 4702.1B, III-4.A.(8))

During this reporting period, one facility was constructed of the type that would require an equity analysis of the determination of the siting location. The Quincy Bus Maintenance Facility Equity Analysis is included in Appendix 2K.



Chapter 3
Demographic and Service Profile Maps and Charts

For each Title VI triennial program update, the Massachusetts Bay Transportation Authority (MBTA) provides maps and charts depicting the demographics of the service area as required by Federal Transit Administration (FTA) Circular 4702.1B, IV-7, 5a. This demographic profile reflects the most recently available American Community Survey (ACS) data that includes a decennial census. These materials are used to identify neighborhoods and municipalities that have high concentrations of minority and low-income populations and their spatial relationship in reference to the location of the MBTA's transit services, transit facilities, major transit trip generators, and planned system improvements.

The MBTA follows FTA Title VI guidelines for defining a minority person as one who identifies as American Indian or Alaska Native, Asian, Black or African American, Hispanic or Latino, or Native Hawaiian or Other Pacific Islander.[1]

As encouraged by FTA's Title VI guidelines, the MBTA uses a locally developed threshold for defining a low-income individual. For the purposes of generating the demographic profile in this chapter, the MBTA defines a low-income individual as someone who lives in a household that earns less than 80 percent of the median household income of the MBTA's service area. The MBTA has consistently applied a locally developed threshold to account for the high cost of living within the MBTA service area, and the average income of service area residents. Consistent with FTA Title VI circular, this threshold is more inclusive than FTA's guidance and considers more riders with low-income.

To identify neighborhoods that have high concentrations of minority or low-income populations, the FTA requires transit operators to shade in census tracts on each demographic map where the percentage of the minority or low-income population exceeds the average minority or low-income percentage of the population for the service area as a whole. Since the MBTA provides different modes of service that primarily serve distinct geographic areas with different demographics, the MBTA has defined two separate service areas: 1) the urban fixed-route transit, or core, service area, and 2) the commuter rail service area:

- **Core service area:** The core service area comprises the 59 municipalities that have access to the MBTA's bus and rapid transit services.[2] According to data from the 2017–21 ACS five-year estimates, 37.8 percent of the population in the core service area was composed of members of minority groups. A minority census tract was defined as one in which the minority percentage of the population exceeds 37.8 percent. According to 2017–21 ACS data, the median household income in the core service area was $99,071. A low-income census tract was defined as one in which the median household income was less than 80 percent of the area median income, or $79,257.

1 Definitions of these groups can be found in FTA Circular 4702.1B, I-4.q.

2 The 59-municipality core service area includes cities and towns served by The RIDE. For example, the town of Concord has no fixed-route MBTA bus service but is served by The RIDE, so it is included in the core service area. Municipalities that are part of a regional transit authority (RTA) are excluded from the 59-municipality core service area because the RTAs provide their fixed-route or paratransit service.

- **Commuter rail service area:** The commuter rail service area is composed of the 176 municipalities that have access to the MBTA's commuter rail service. According to data from the 2017–21 ACS five-year estimates, 32.7 percent of the population in the commuter rail service area was composed of members of minority groups. A minority census tract was defined as one in which the minority percentage of the population exceeds 32.7 percent. According to 2017–21 ACS data, the median household income in the commuter rail service area was $97,081. A low-income census tract was defined as one in which the median household income was less than 80 percent of the area median income, or $77,665.[3]

This chapter contains a series of demographic maps that show the location of the MBTA's transit services, transit facilities, major transit trip generators, major streets and highways, and planned system improvements. The text in this chapter provides descriptions of the distribution of items that are depicted on each map. All maps are at the end of the chapter.

Table 3-1 summarizes the distribution of commuter rail and ferry stations and commuter rail and ferry parking lots across minority and low-income census tracts in the commuter rail service area.

Table 3-1
Distribution of Commuter Rail and Ferry Transit Facilities: Number and Percentage of Facilities by Tract Classification

Facility	Total Number of Facilities	Number of Facilities in Minority Tracts	Number of Facilities in Low-Income Tracts	Percentage of Facilities in Minority Tracts	Percentage of Facilities in Low-Income Tracts
Commuter rail/ ferry station	137	39	27	28%	20%
Commuter rail/ ferry parking	115	25	18	22%	16%

Note: The data pertain to census tracts in the MBTA's commuter rail service area.
Sources: CTPS and US Census Bureau.

3 There were some census tracts for which there were insufficient data to assign a minority or low-income classification. Those tracts are indicated on the maps. Many of them cover nonresidential areas such as Franklin Park or Logan Airport.

Table 3-2 summarizes the distribution of bus shelters, rapid transit stations, and rapid transit parking lots across minority and low-income census tracts in the core service area.

Table 3-2
Distribution of Bus and Rapid Transit Facilities: Number and Percentage of Facilities by Tract Classification

Facility	Total Number of Facilities	Number of Facilities in Minority Tracts	Number of Facilities in Low-Income Tracts	Percentage of Facilities in Minority Tracts	Percentage of Facilities in Low-Income Tracts
Bus shelter	596	374	294	63%	49%
Rapid transit station	125	56	40	45%	32%
Rapid transit parking	29	14	7	48%	24%

Note: The data pertain to census tracts in the MBTA's core service area.
Sources: CTPS and US Census Bureau.

Table 3-3 summarizes the distribution of commuter rail layover facilities and maintenance facilities across minority and low-income census tracts in the commuter rail service area.

Table 3-3
Distribution of Commuter Rail Operational Facilities: Number and Percentage of Facilities by Tract Classification

Facility	Total Number of Facilities	Number of Facilities in Minority Tracts	Number of Facilities in Low-Income Tracts	Percentage of Facilities in Minority Tracts	Percentage of Facilities in Low-Income Tracts
Layover facility	11	2	9	18%	82%
Maintenance facility	5	3	0	60%	0%

Note: The data pertain to census tracts in the MBTA's commuter rail service area.
Sources: CTPS and US Census Bureau.

Table 3-4 summarizes the distribution of the MBTA's offices, and bus and rapid transit garages, yards, and shops across minority and low-income census tracts in the core service area.

Table 3-4
Distribution of Bus and Rapid Transit Operational Facilities: Number and Percentage of Facilities by Tract Classification

Facility	Total Number of Facilities	Number of Facilities in Minority Tracts	Number of Facilities in Low-Income Tracts	Percentage of Facilities in Minority Tracts	Percentage of Facilities in Low-Income Tracts
MBTA office	7	4	5	57%	71%
Garage, yard, or shop	34	16	7	47%	21%

Note: The data pertain to census tracts in the MBTA's core service area.
Sources: CTPS and US Census Bureau.

Table 3-5 summarizes the distribution of commuter rail and ferry line improvement projects and station and facility improvement projects across minority and low-income census tracts in the commuter rail service area.

Table 3-5
Distribution of Commuter Rail and Ferry Improvements: Number and Percentage of Projects by Tract Classification

Improvement Type	Total Number of Projects	Number of Projects Serving Minority Tracts	Number of Projects Serving Low-Income Tracts	Percentage of Projects Serving Minority Tracts	Percentage of Projects Serving Low-Income Tracts
Line	14	9	7	64%	50%
Station or facility	59	29	19	49%	32%

Note: The data pertain to census tracts in the MBTA's commuter rail service area. Line improvements were assigned to the census tracts in which stations along the improved segment are located.
Sources: MBTA and US Census Bureau.

Table 3-6 summarizes the distribution of rapid transit line and station improvement projects and bus and rapid transit facility improvement projects across minority and low-income census tracts in the core service area.

Table 3-6
Distribution of Bus and Rapid Transit Improvements: Number and Percentage of Projects by Tract Classification

Improvement Type	Total Number of Projects	Number of Projects Serving Minority Tracts	Number of Projects Serving Low-Income Tracts	Percentage of Projects Serving Minority Tracts	Percentage of Projects Serving Low-Income Tracts
Line	29	26	21	90%	72%
Station or facility	86	53	37	62%	43%

Note: The data pertain to census tracts in the MBTA's core service area. Line improvements were assigned to the census tracts in which stations along the improved segment are located.
Sources: MBTA and US Census Bureau.



The maps in figures 3-1a, 3-1b, and 3-1c show the MBTA's services and fixed transit facilities (parking lots; transit routes, lines, and stations; and bus shelters) in relation to the minority and low-income populations in each of the MBTA's service areas.

Figure 3-1a shows that most census tracts served by the MBTA's commuter rail outside of the core service area are neither minority nor low-income. However, most of the minority or low-income tracts outside of the core are either directly served by or near commuter rail service.

Figures 3-1b and 3-1c show that many of the tracts in the core service area are classified as minority or low income. Figure 3-1b shows that more bus routes and shelters are located in minority or low-income tracts than are not, and Figure 3-1c shows that more rapid transit lines and stations are located in minority or low-income tracts than are not.

Figures 3-2a and 3-2b show the MBTA's operational facilities (maintenance facilities, remote layover facilities, garages, yards, shops, and offices) in relation to the minority and low-income populations in each of the MBTA's service areas.

Figure 3-2a shows that many of the tracts served by the MBTA's commuter rail outside of the core service area are neither minority nor low-income, and most remote layover facilities are located at or near the ends of commuter rail lines in census tracts that are neither minority nor low-income.

Figure 3-2b shows that many of the tracts in the core service area are classified as minority or low-income, and that more of the MBTA's offices and bus and rapid transit operational facilities are located in census tracts that are minority or low-income than are not. There are clusters of facilities both north and south of downtown Boston in non-residential areas. The rapid transit facilities are generally located at or near the ends of the lines, and the bus facilities are distributed throughout the core service area. All of the MBTA's offices are located in the city of Boston.

Figures 3-3a and 3-3b show major transit trip generators (colleges and universities, high schools, hospitals, libraries, and city and town halls) in relation to the minority and low-income populations in each of the MBTA's service areas.

Figure 3-3a shows that while the majority of census tracts served by the MBTA's commuter rail outside of the core service area are neither minority nor low-income, most of the minority or low-income areas outside of the core are either directly served by or near commuter rail service. While the major trip generators are spread throughout the commuter rail service area, many of the locations with higher concentrations of transit trip generators are located in urban areas that are served by commuter rail. In many areas where commuter rail service is not offered, regional transit authorities and local transit services provide access to the trip generators.

Figure 3-3b shows that many of the tracts in the core service area are classified as minority or low-income, and that the major transit trip generators are located throughout the entire core service area near the MBTA's bus and rapid transit lines.

Figures 3-4a and 3-4b show the major streets and highways in relation to the MBTA's rail, rapid transit, and bus networks and the minority and low-income populations in each of the MBTA's service areas.

Figure 3-4a shows that while the majority of census tracts served by the MBTA's commuter rail outside of the core service area are neither minority nor low-income, most of the minority or low-income tracts outside of the core are either directly served by or near commuter rail service. Also, the commuter rail service provides similar access to and from Boston as the access provided by the region's highway system.

Figure 3-4b shows that many tracts in the core service area are classified as minority or low-income, and that most of the tracts in the core service area that are classified as minority or low-income are served by the bus and rapid transit network, which provides similar access across the metropolitan area to that of the major street and highway network.

Figures 3-5a, 3-5b, and 3-5c show recently completed projects and projects from the MBTA's Capital Improvement Plan (2023–27) in relation to the minority and low-income populations in each of the MBTA's service areas.

Figure 3-5a shows that while most of the census tracts served by the MBTA's commuter rail outside of the core service area are neither minority nor low-income, many projects are improvements along rail lines that serve minority and low-income tracts.

Figure 3-5b shows that many of the tracts in the core service area are classified as minority or low-income, and that most of the MBTA's bus projects are located in census tracts that are classified as minority or low-income.

Figure 3-5c shows that many of the tracts in the core service area are classified as minority or low-income, and that many of the MBTA's rapid transit projects are located in census tracts that are classified as minority or low-income.

Figure 3-1a
MBTA Fixed Transit Facilities: Commuter Rail Service Area

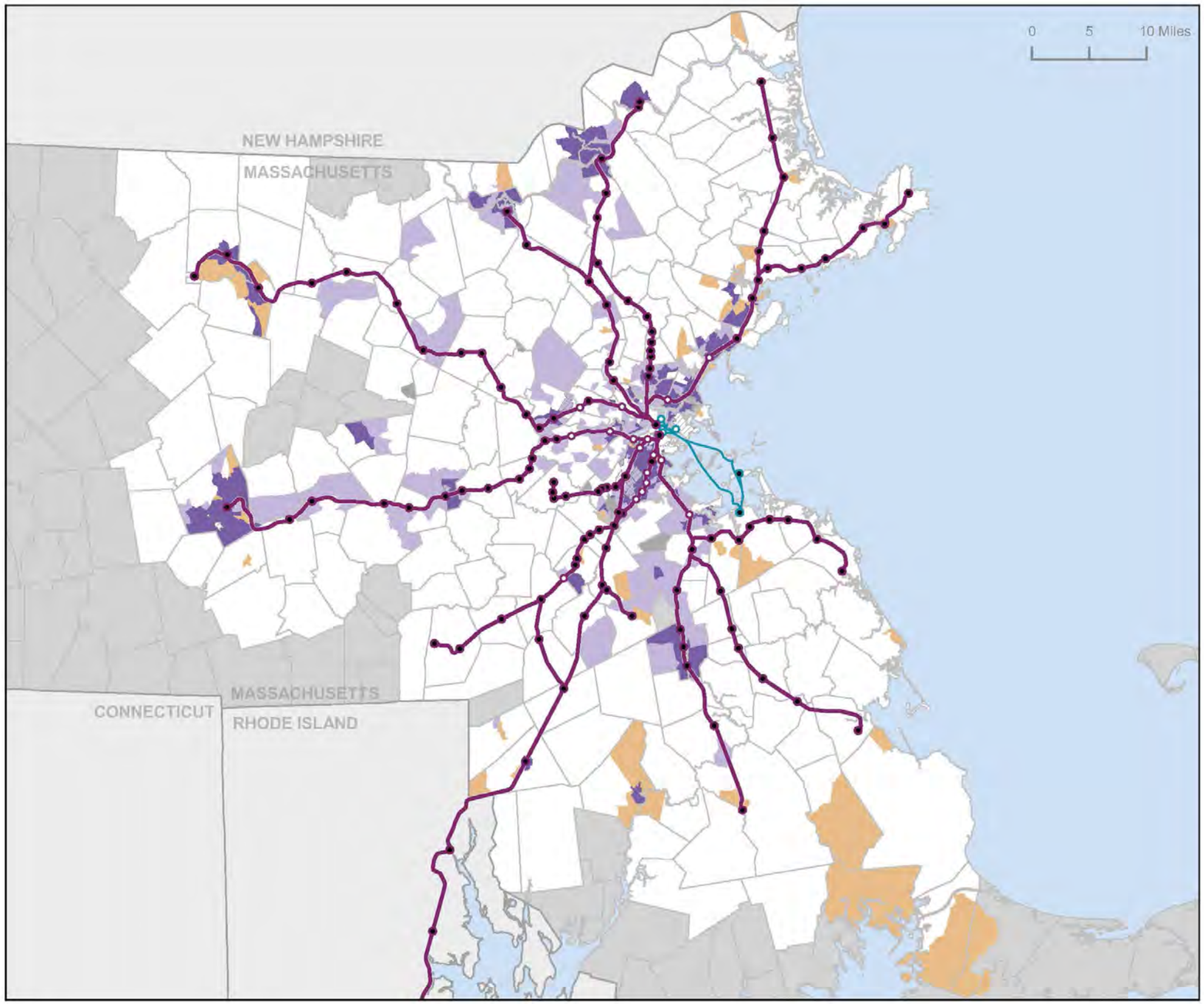


FIGURE 3-1a
MBTA 2023 Title VI Program

MBTA Fixed Transit Facilities: Commuter Rail Service Area

MBTA Transit Facility
- Ferry station with parking
- Ferry station without parking
- Commuter rail station with parking
- Commuter rail station without parking
- Commuter rail line
- Ferry route

Minority and Low-Income Classification
- Minority and low-income tract
- Minority tract
- Low-income tract
- Nonminority, non-low-income tract
- Unable to determine income status
- No income or minority status
- Outside of MBTA commuter rail service area

In the 176 municipalities of the MBTA commuter rail service area, 32.7 percent of the residents were members of minority groups in 2021. A minority census tract is defined as one in which the minority percentage exceeds 32.7 percent.

In the 176 municipalities of the MBTA commuter rail service area, the median household income in 2021 was $97,081. A low-income census tract is defined as one in which the median household income is less than 80 percent of the area median household income, or $77,665.

Figure 3-1b
MBTA Fixed Transit Facilities: Core Service Area, Bus

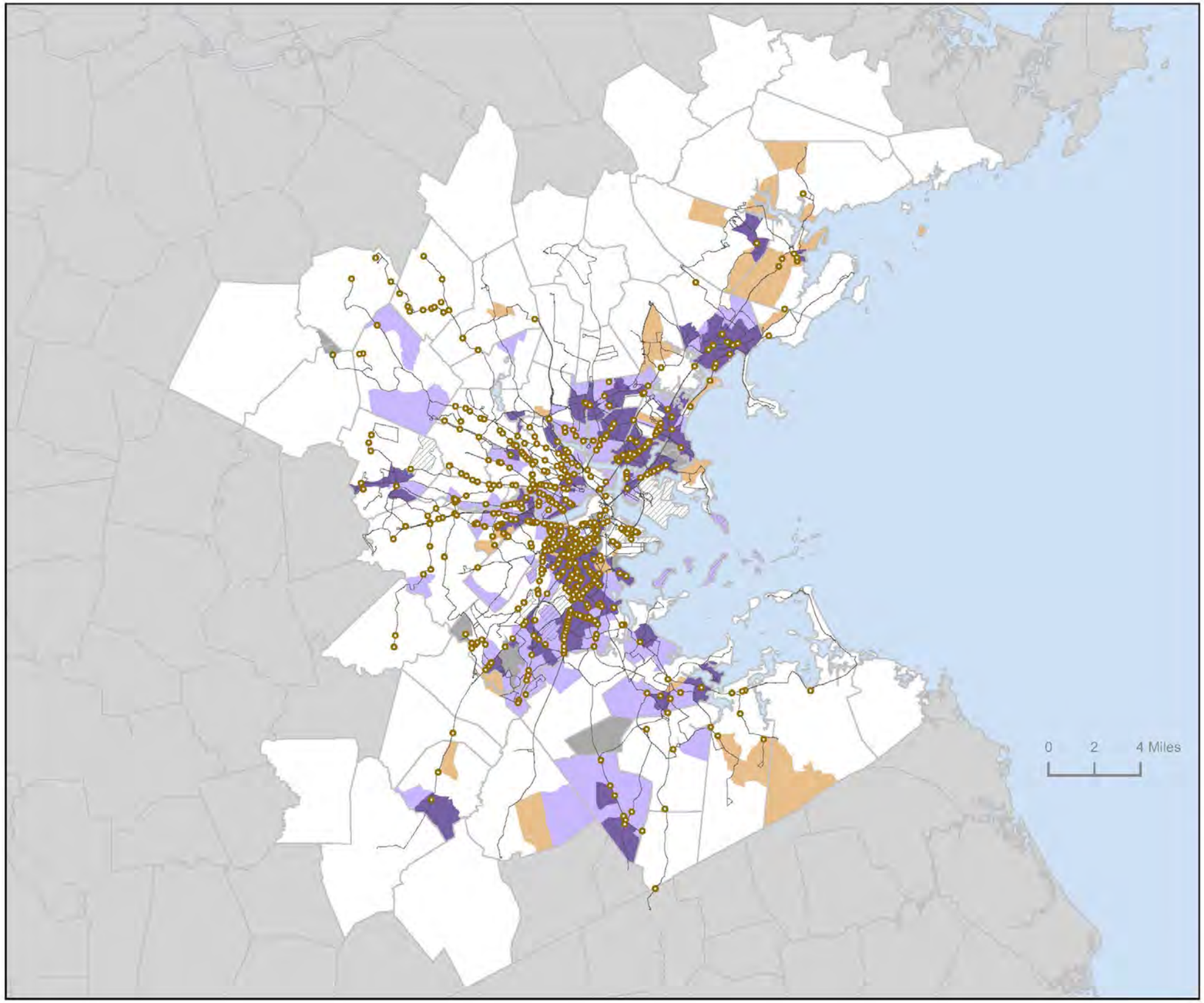


FIGURE 3-1b
MBTA 2023 Title VI Program

MBTA Fixed Transit Facilities: Core Service Area, Bus

MBTA Transit Facility
- Bus shelter
- Bus route

Minority and Low-Income Classification
- Minority and low-income tract
- Minority tract
- Low-income tract
- Nonminority, non-low-income tract
- Unable to determine income status
- No income or minority status
- Outside of MBTA core service area

In the 59 municipalities of the MBTA core service area, 37.8 percent of the residents were members of minority groups in 2021. A minority census tract is defined as one in which the minority percentage exceeds 37.8 percent.

In the 59 municipalities of the MBTA core service area, the median household income in 2021 was $99,071. A low-income census tract is defined as one in which the median household income is less than 80 percent of the area median household income, or $79,257.

Figure 3-1c
MBTA Fixed Transit Facilities: Core Service Area, Rapid Transit

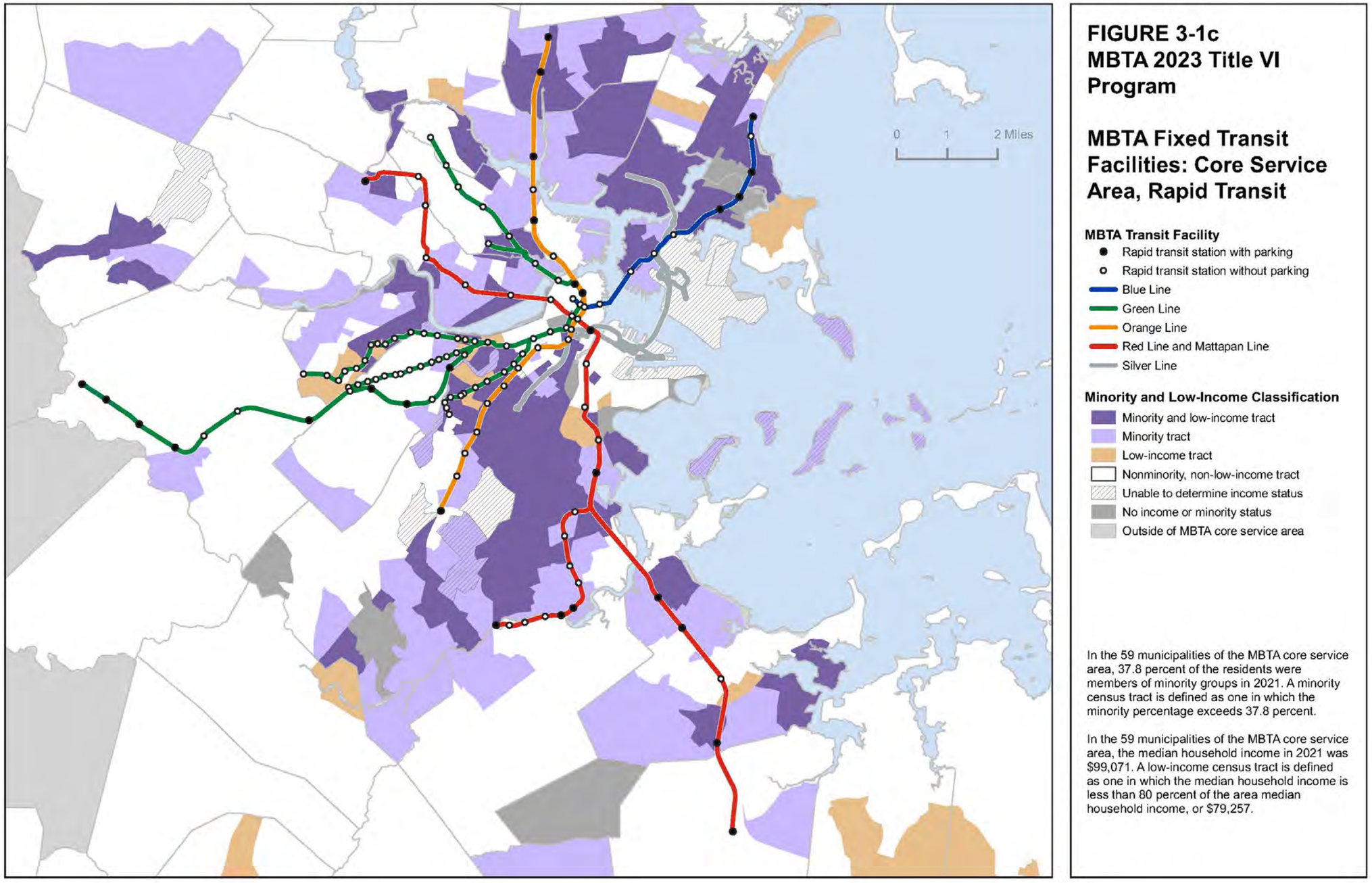


FIGURE 3-1c
MBTA 2023 Title VI Program

MBTA Fixed Transit Facilities: Core Service Area, Rapid Transit

MBTA Transit Facility
- Rapid transit station with parking
- Rapid transit station without parking
- Blue Line
- Green Line
- Orange Line
- Red Line and Mattapan Line
- Silver Line

Minority and Low-Income Classification
- Minority and low-income tract
- Minority tract
- Low-income tract
- Nonminority, non-low-income tract
- Unable to determine income status
- No income or minority status
- Outside of MBTA core service area

In the 59 municipalities of the MBTA core service area, 37.8 percent of the residents were members of minority groups in 2021. A minority census tract is defined as one in which the minority percentage exceeds 37.8 percent.

In the 59 municipalities of the MBTA core service area, the median household income in 2021 was $99,071. A low-income census tract is defined as one in which the median household income is less than 80 percent of the area median household income, or $79,257.

Figure 3-2a
MBTA Commuter Rail Operational Facilities

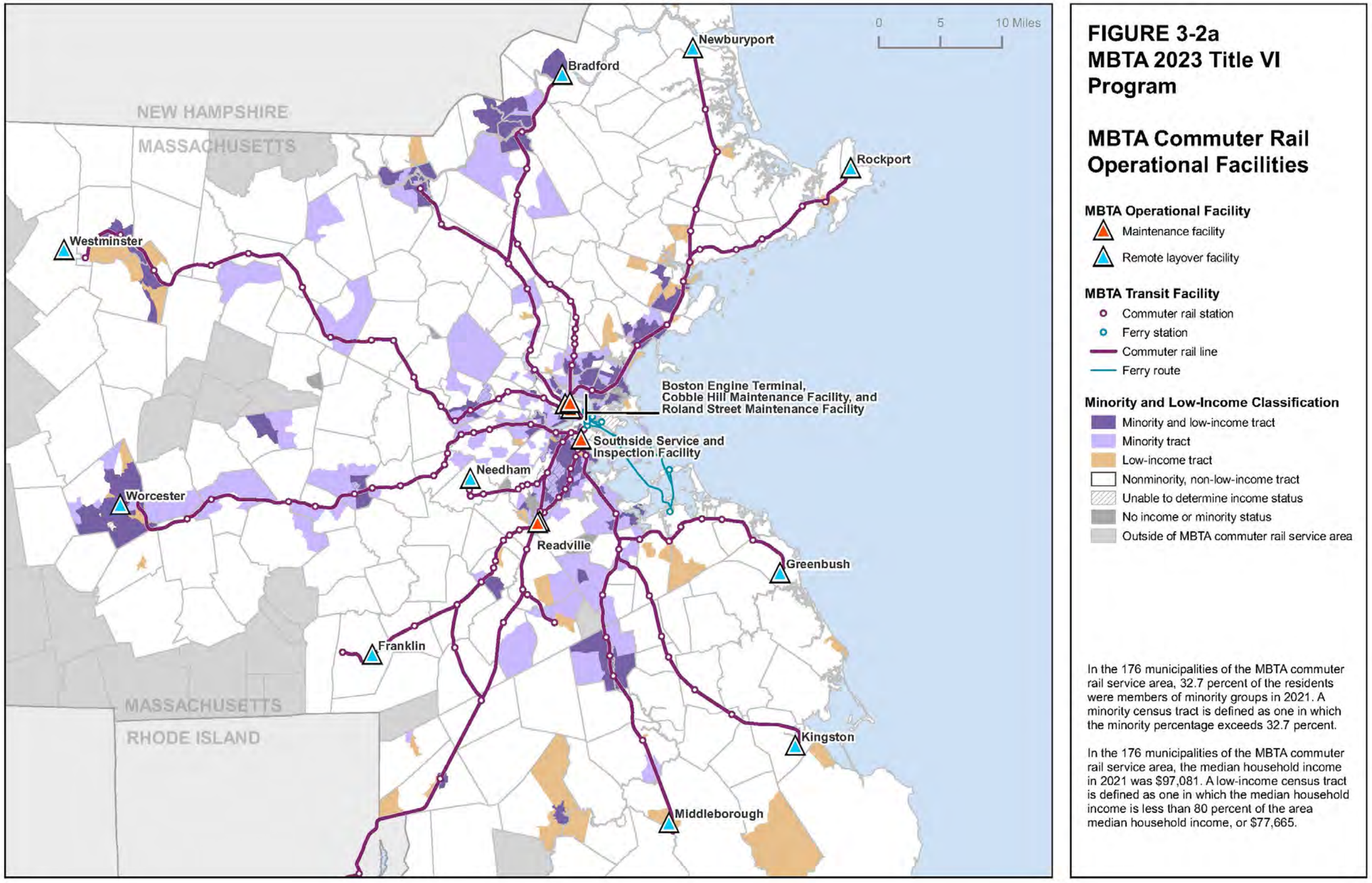


FIGURE 3-2a
MBTA 2023 Title VI Program

MBTA Commuter Rail Operational Facilities

MBTA Operational Facility
- Maintenance facility
- Remote layover facility

MBTA Transit Facility
- Commuter rail station
- Ferry station
- Commuter rail line
- Ferry route

Minority and Low-Income Classification
- Minority and low-income tract
- Minority tract
- Low-income tract
- Nonminority, non-low-income tract
- Unable to determine income status
- No income or minority status
- Outside of MBTA commuter rail service area

In the 176 municipalities of the MBTA commuter rail service area, 32.7 percent of the residents were members of minority groups in 2021. A minority census tract is defined as one in which the minority percentage exceeds 32.7 percent.

In the 176 municipalities of the MBTA commuter rail service area, the median household income in 2021 was $97,081. A low-income census tract is defined as one in which the median household income is less than 80 percent of the area median household income, or $77,665.

Figure 3-2b
MBTA Bus and Rapid Transit Operational Facilities

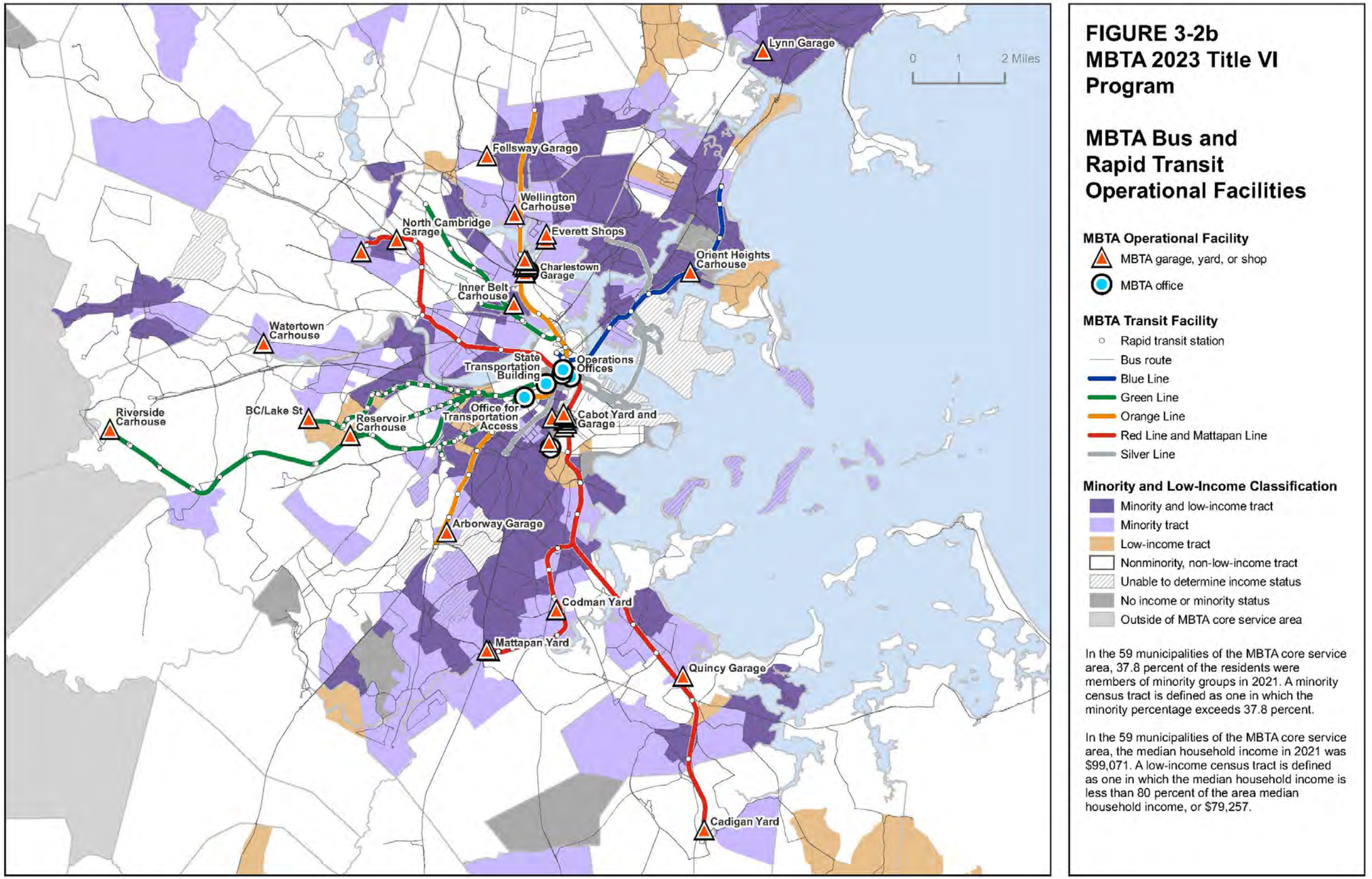


FIGURE 3-2b
MBTA 2023 Title VI Program

MBTA Bus and Rapid Transit Operational Facilities

MBTA Operational Facility
- MBTA garage, yard, or shop
- MBTA office

MBTA Transit Facility
- Rapid transit station
- Bus route
- Blue Line
- Green Line
- Orange Line
- Red Line and Mattapan Line
- Silver Line

Minority and Low-Income Classification
- Minority and low-income tract
- Minority tract
- Low-income tract
- Nonminority, non-low-income tract
- Unable to determine income status
- No income or minority status
- Outside of MBTA core service area

In the 59 municipalities of the MBTA core service area, 37.8 percent of the residents were members of minority groups in 2021. A minority census tract is defined as one in which the minority percentage exceeds 37.8 percent.

In the 59 municipalities of the MBTA core service area, the median household income in 2021 was $99,071. A low-income census tract is defined as one in which the median household income is less than 80 percent of the area median household income, or $79,257.

Figure 3-3a
Major Transit Trip Generators: Commuter Rail Service Area

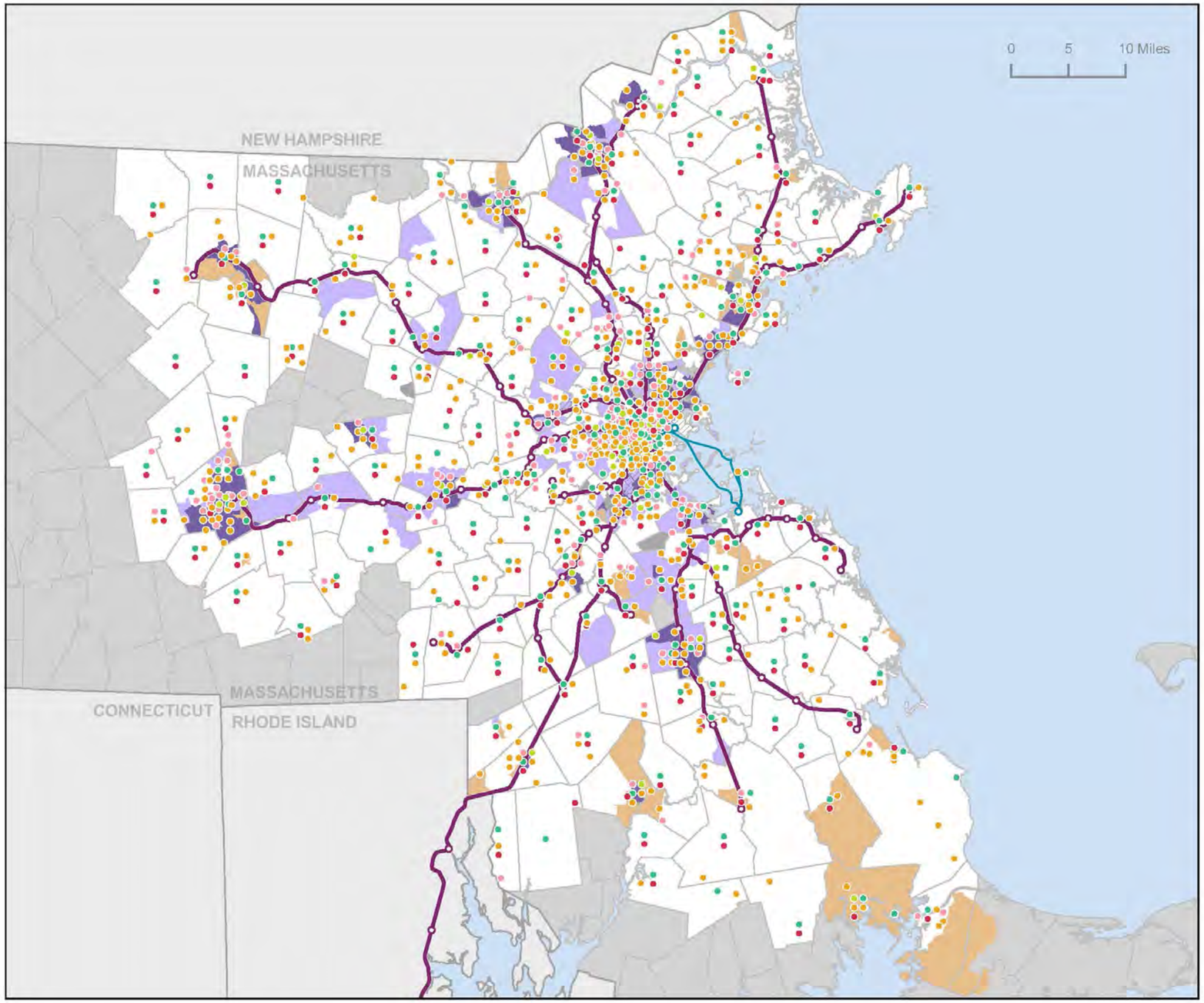


FIGURE 3-3a
MBTA 2023 Title VI Program

Major Transit Trip Generators: Commuter Rail Service Area

Trip Generator
- College or university
- City or town hall
- High school
- Hospital
- Library

MBTA Transit Facility
- Commuter rail station
- Ferry station
- Commuter rail line
- Ferry route

Minority and Low-Income Classification
- Minority and low-income tract
- Minority tract
- Low-income tract
- Nonminority, non-low-income tract
- Unable to determine income status
- No income or minority status
- Outside of MBTA commuter rail service area

In the 176 municipalities of the MBTA commuter rail service area, 32.7 percent of the residents were members of minority groups in 2021. A minority census tract is defined as one in which the minority percentage exceeds 32.7 percent.

In the 176 municipalities of the MBTA commuter rail service area, the median household income in 2021 was $97,081. A low-income census tract is defined as one in which the median household income is less than 80 percent of the area median household income, or $77,665.

Figure 3-3b
Major Transit Trip Generators: Core Service Area

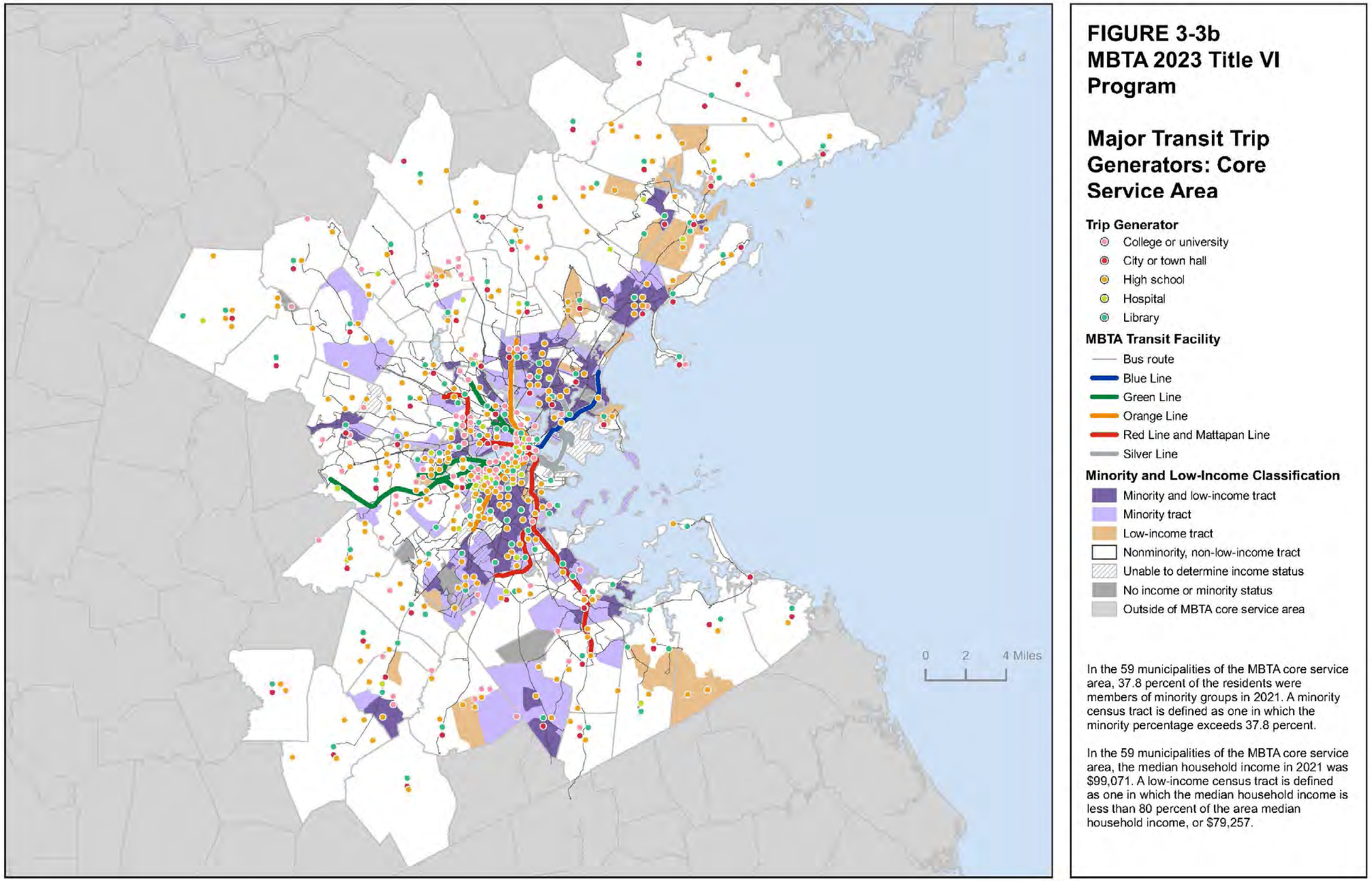


FIGURE 3-3b
MBTA 2023 Title VI Program

Major Transit Trip Generators: Core Service Area

Trip Generator
- College or university
- City or town hall
- High school
- Hospital
- Library

MBTA Transit Facility
- Bus route
- Blue Line
- Green Line
- Orange Line
- Red Line and Mattapan Line
- Silver Line

Minority and Low-Income Classification
- Minority and low-income tract
- Minority tract
- Low-income tract
- Nonminority, non-low-income tract
- Unable to determine income status
- No income or minority status
- Outside of MBTA core service area

In the 59 municipalities of the MBTA core service area, 37.8 percent of the residents were members of minority groups in 2021. A minority census tract is defined as one in which the minority percentage exceeds 37.8 percent.

In the 59 municipalities of the MBTA core service area, the median household income in 2021 was $99,071. A low-income census tract is defined as one in which the median household income is less than 80 percent of the area median household income, or $79,257.

Figure 3-4a
Major Streets and Highways: Commuter Rail Service Area

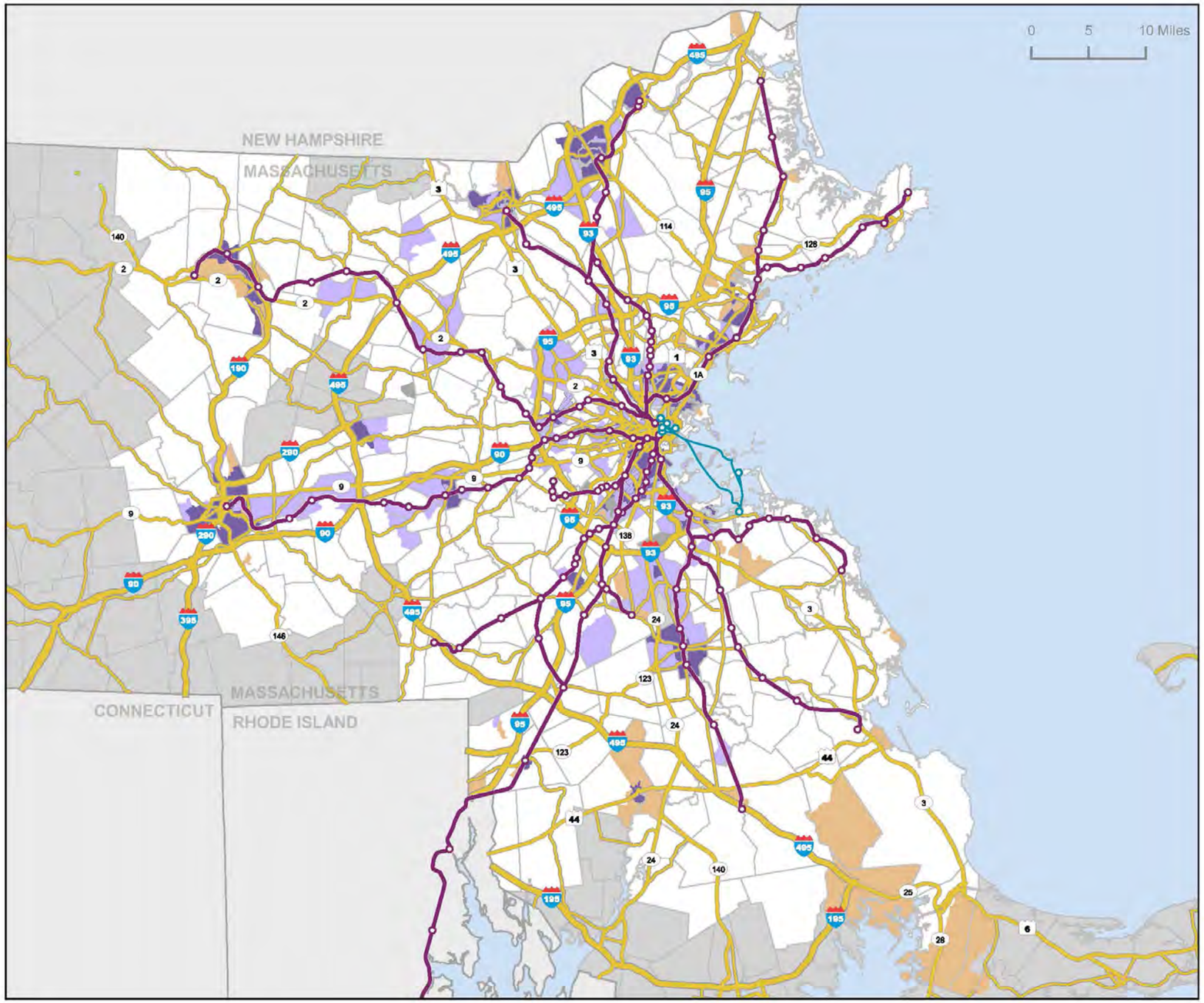


FIGURE 3-4a
MBTA 2023 Title VI Program

Major Streets and Highways: Commuter Rail Service Area

Road Network
- Interstate
- Principal arterial
- Other arterial

MBTA Transit Facility
- Commuter rail station
- Ferry station
- Commuter rail line
- Ferry route

Minority and Low-Income Classification
- Minority and low-income tract
- Minority tract
- Low-income tract
- Nonminority, non-low-income tract
- Unable to determine income status
- No income or minority status
- Outside of MBTA commuter rail service area

In the 176 municipalities of the MBTA commuter rail service area, 32.7 percent of the residents were members of minority groups in 2021. A minority census tract is defined as one in which the minority percentage exceeds 32.7 percent.

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Figure 3-4b
Major Streets and Highways: Core Service Area

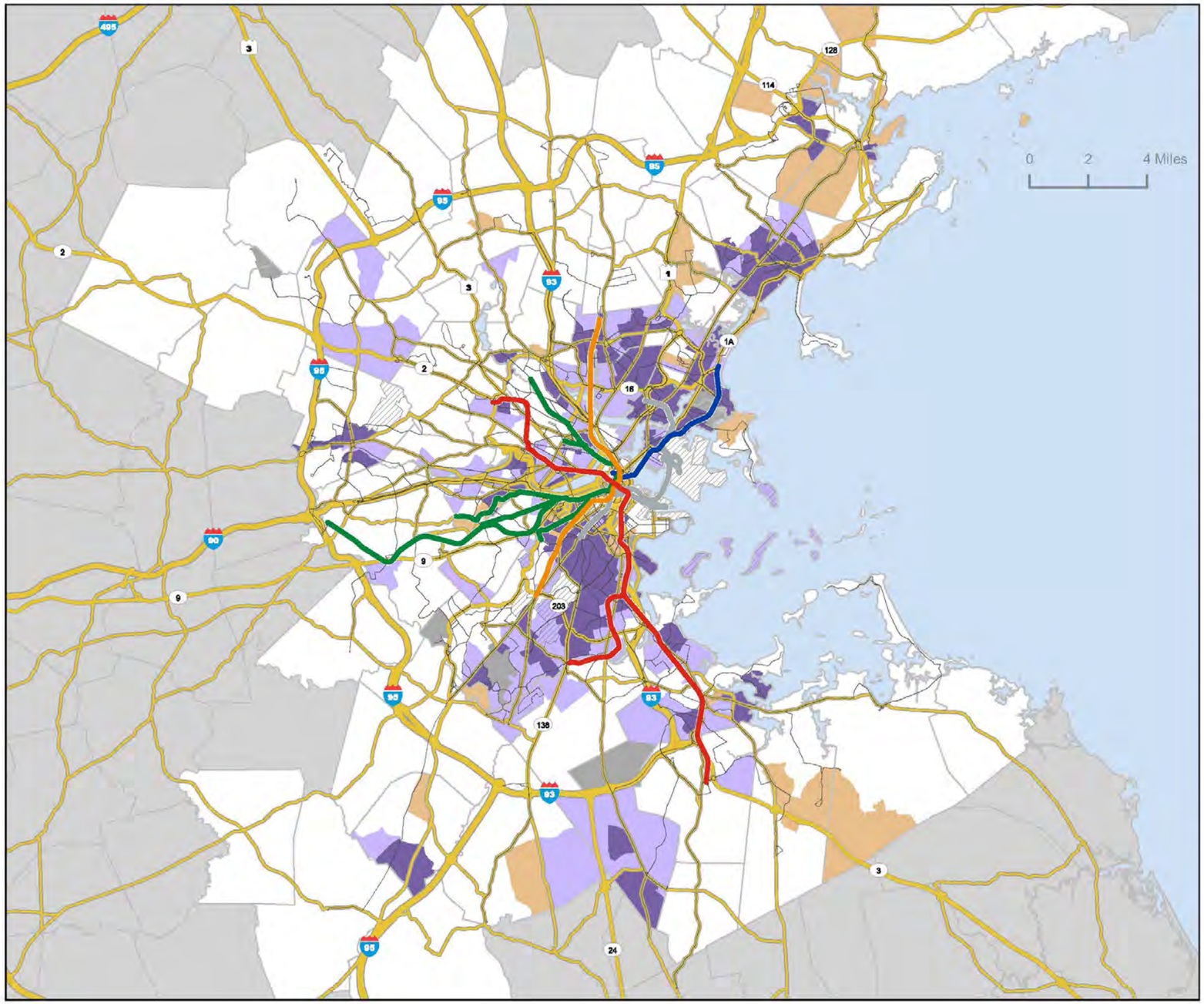


FIGURE 3-4b
MBTA 2023 Title VI Program

Major Streets and Highways: Core Service Area

Road Network
- Interstate
- Principal arterial
- Other arterial

MBTA Transit Facility
- Bus route
- Blue Line
- Green Line
- Orange Line
- Red Line and Mattapan Line
- Silver Line

Minority and Low-Income Classification
- Minority and low-income tract
- Minority tract
- Low-income tract
- Nonminority, non-low-income tract
- Unable to determine income status
- No income or minority status
- Outside of MBTA core service area

In the 59 municipalities of the MBTA core service area, 37.8 percent of the residents were members of minority groups in 2021. A minority census tract is defined as one in which the minority percentage exceeds 37.8 percent.

In the 59 municipalities of the MBTA core service area, the median household income in 2021 was $99,071. A low-income census tract is defined as one in which the median household income is less than 80 percent of the area median household income, or $79,257.

Figure 3-5a
MBTA Capital Improvements: Commuter Rail and Ferry

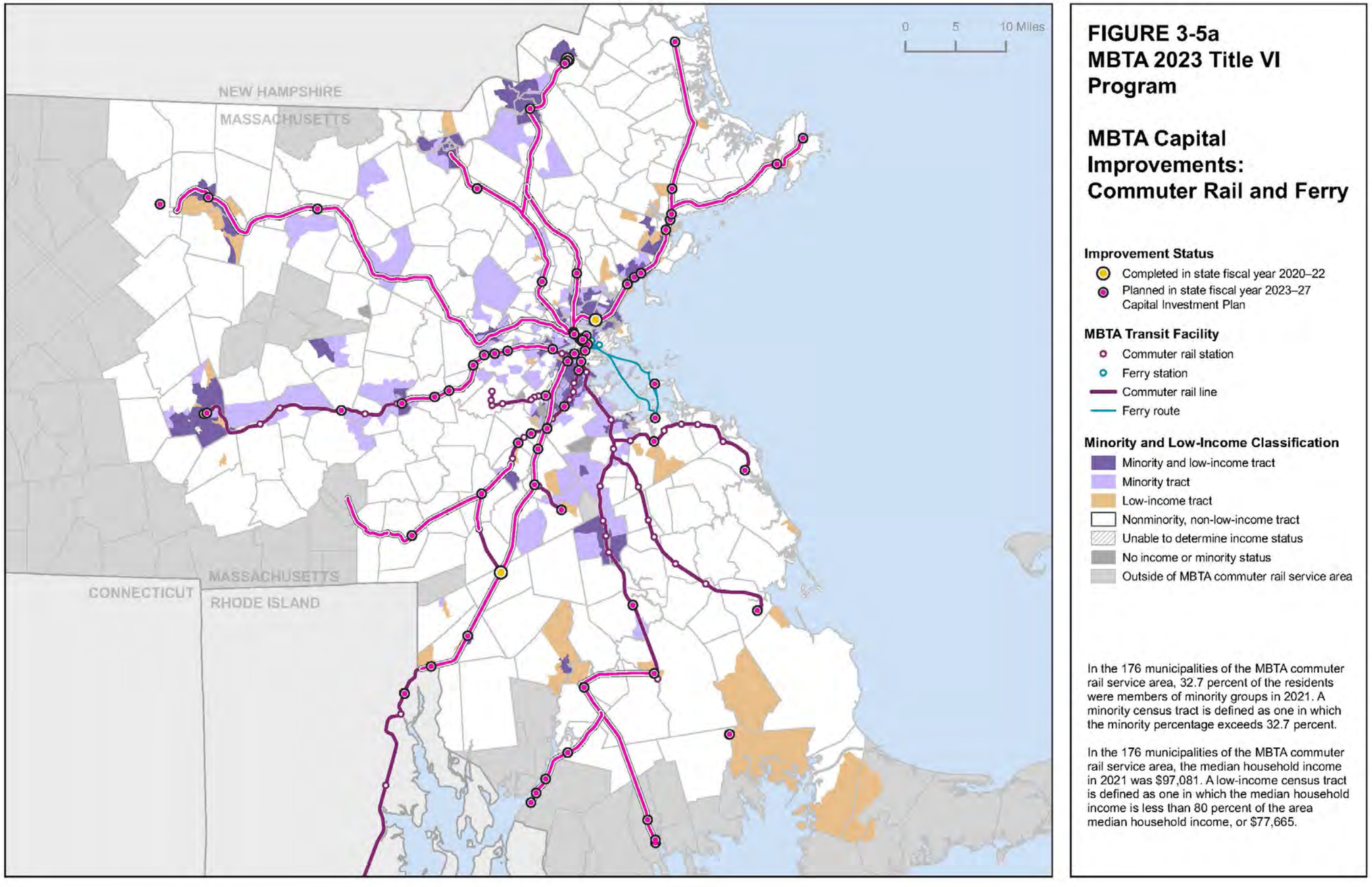


FIGURE 3-5a
MBTA 2023 Title VI Program

MBTA Capital Improvements: Commuter Rail and Ferry

Improvement Status
- Completed in state fiscal year 2020–22
- Planned in state fiscal year 2023–27 Capital Investment Plan

MBTA Transit Facility
- Commuter rail station
- Ferry station
- Commuter rail line
- Ferry route

Minority and Low-Income Classification
- Minority and low-income tract
- Minority tract
- Low-income tract
- Nonminority, non-low-income tract
- Unable to determine income status
- No income or minority status
- Outside of MBTA commuter rail service area

In the 176 municipalities of the MBTA commuter rail service area, 32.7 percent of the residents were members of minority groups in 2021. A minority census tract is defined as one in which the minority percentage exceeds 32.7 percent.

In the 176 municipalities of the MBTA commuter rail service area, the median household income in 2021 was $97,081. A low-income census tract is defined as one in which the median household income is less than 80 percent of the area median household income, or $77,665.

Figure 3-5b
MBTA Capital Improvements: Bus

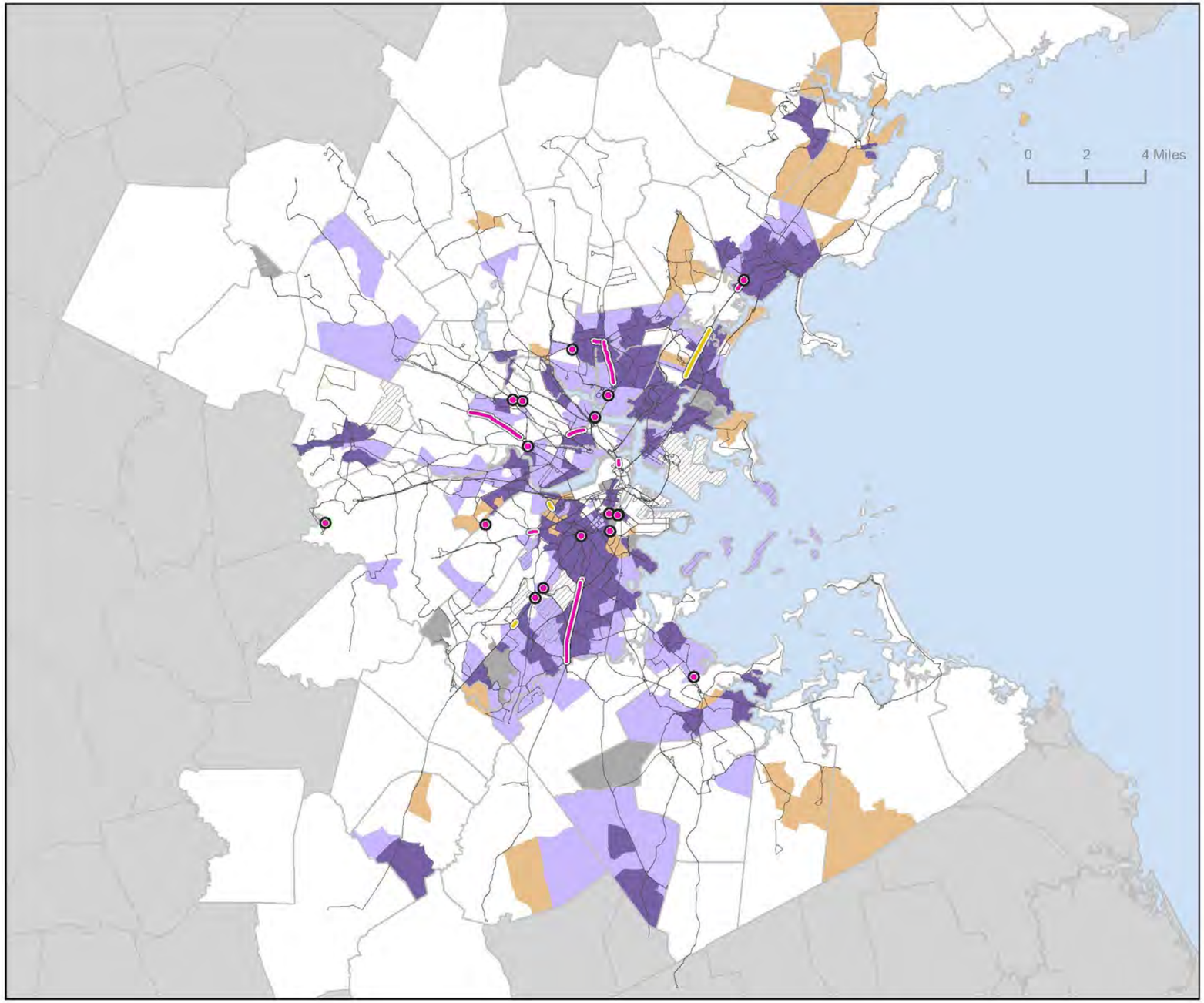


FIGURE 3-5b
MBTA 2023 Title VI Program

MBTA Capital Improvements: Bus

Improvement Status
- Completed in state fiscal year 2020–22
- Planned in state fiscal year 2023–27 Capital Investment Plan

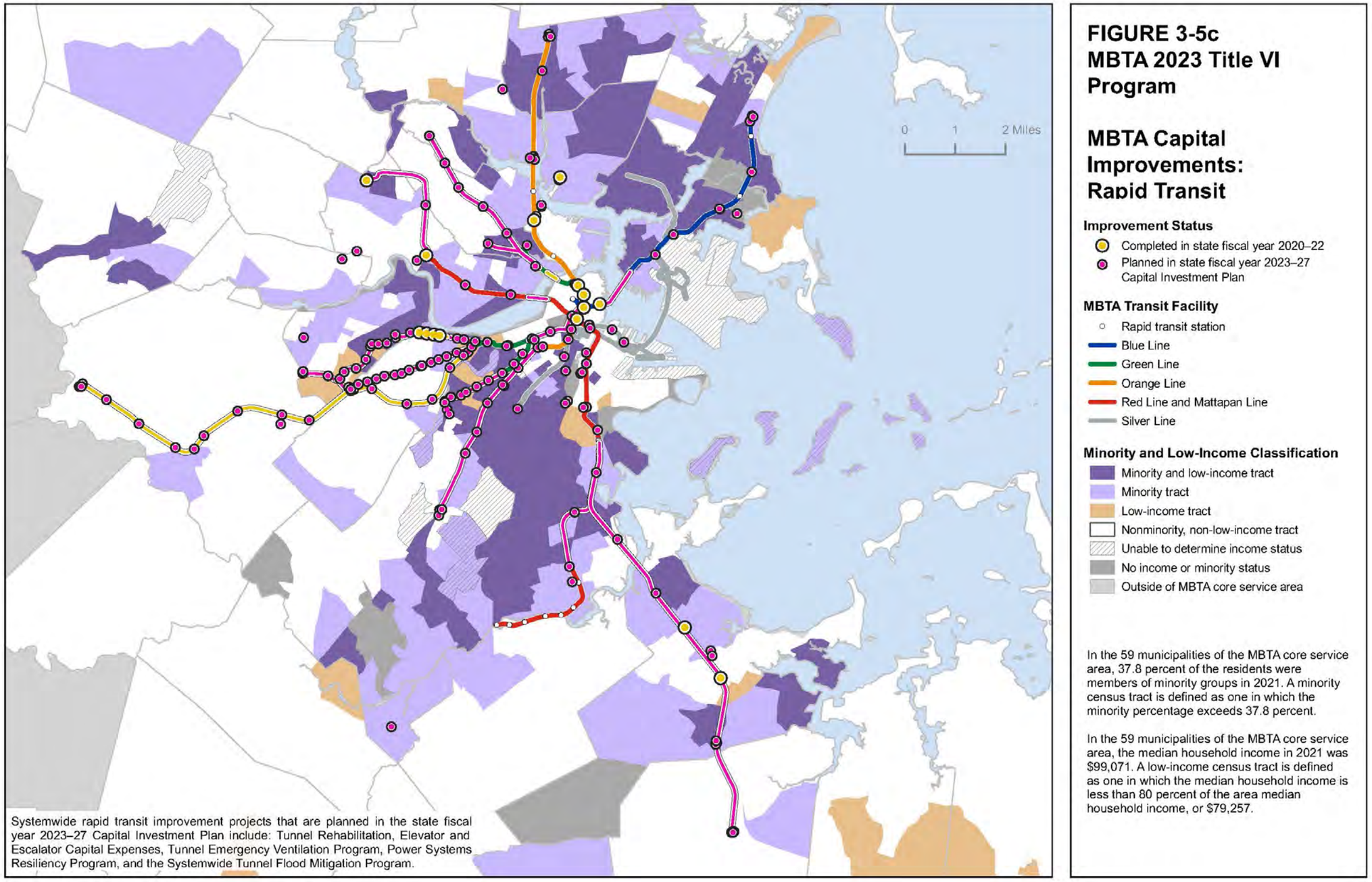
MBTA Transit Facility
- Bus route

Minority and Low-Income Classification
- Minority and low-income tract
- Minority tract
- Low-income tract
- Nonminority, non-low-income tract
- Unable to determine income status
- No income or minority status
- Outside of MBTA core service area

In the 59 municipalities of the MBTA core service area, 37.8 percent of the residents were members of minority groups in 2021. A minority census tract is defined as one in which the minority percentage exceeds 37.8 percent.

In the 59 municipalities of the MBTA core service area, the median household income in 2021 was $99,071. A low-income census tract is defined as one in which the median household income is less than 80 percent of the area median household income, or $79,257.

Figure 3-5c
MBTA Capital Improvements: Rapid Transit

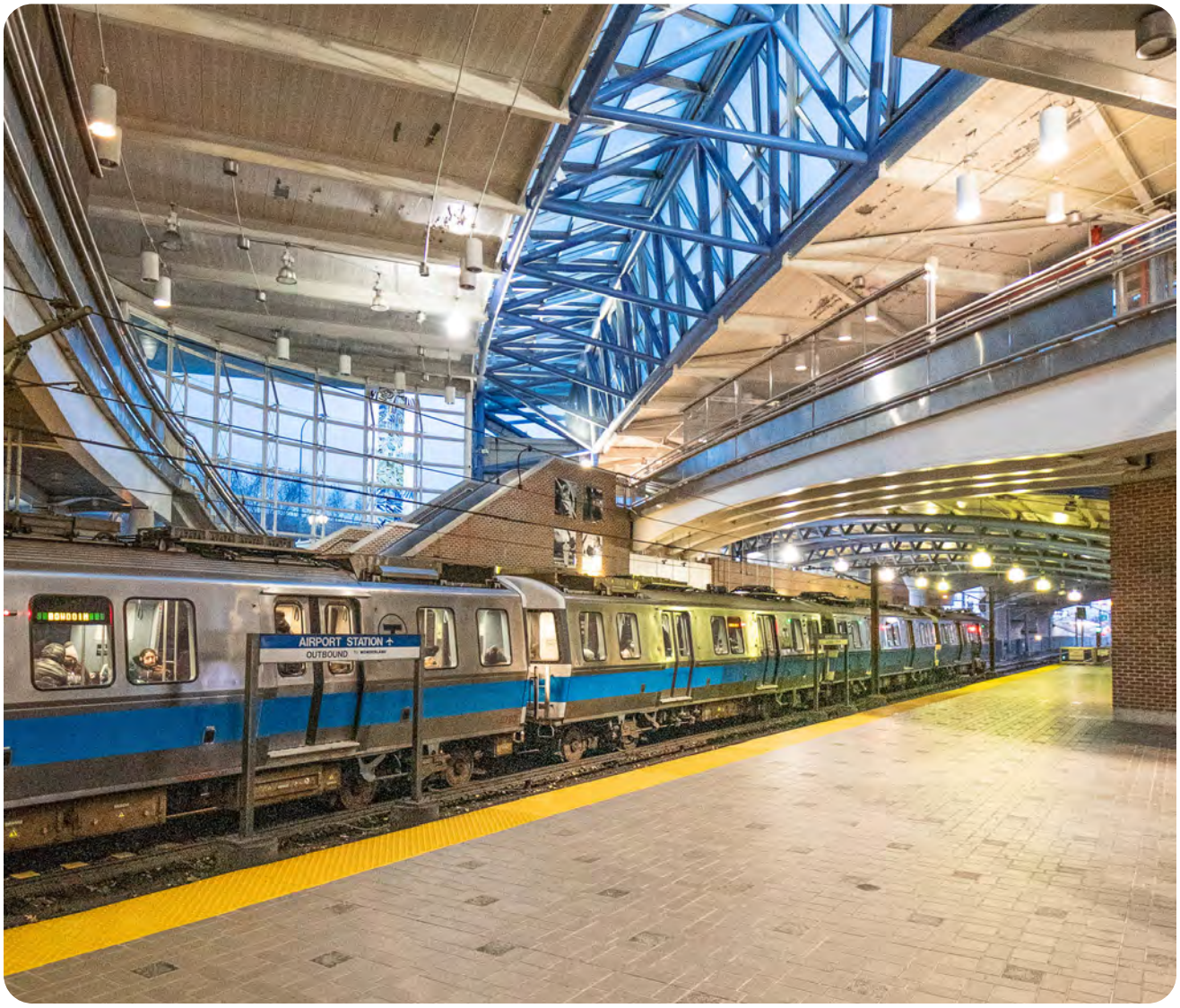




Chapter 4
Demographic Ridership and Travel Patterns

The Federal Transit Administration (FTA) requires the Massachusetts Bay Transportation Authority (MBTA) to create demographic profiles, based on customer surveys, to compare minority and nonminority riders' trips and fare usage by fare type (as indicated in FTA Circular 4702.1B, IV-5.b). The FTA also requires a profile of fare use by fare type for minority and/or low-income riders. The MBTA Systemwide Passenger Survey conducted between fall 2021 and spring 2022 was used to create the profiles in this chapter, which are presented by mode.[1]

The systemwide survey elicited responses from riders on all the MBTA's public transit fixed-route modes: bus, rapid transit (heavy rail, light rail, and bus rapid transit), commuter rail, and ferry. Table 4-1 reports the number of responses, by mode.



1 The MBTA systemwide surveys were distributed on all modes. The surveys included questions about each respondent's most recent one-way MBTA trip. The results were tabulated for each mode used in each reported trip.

Table 4-1
Systemwide Survey Responses

Mode	Count
Subway or Light Rail	5986
Bus	3015
Subway or Light Rail and Bus	2707
Commuter Rail	1271
Subway or Light Rail and Commuter Rail	645
Subway or Light Rail and Silver Line	303
Silver Line	228
Ferry	122
Bus and Silver Line	118
Commuter Rail and Silver Line	87
Bus and Commuter Rail	81
Subway or Light Rail, Bus, and Silver Line	68
Subway or Light Rail, Bus, and Commuter Rail	45
Subway or Light Rail and Ferry	20
Subway or Light Rail, Commuter Rail, and Silver Line	7
Bus and Ferry	4
Bus, Commuter Rail, and Silver Line	3
Commuter Rail and Ferry	2
Subway or Light Rail, Commuter Rail, Silver Line, and Ferry	2
Subway or Light Rail, Silver Line, and Ferry	1

Source: MBTA.

This chapter includes analyses comparing the following characteristics of minority and nonminority riders on bus, rapid transit, and commuter rail:[2]

- Modal use
- Fare usage by fare type
- Frequency of use
- Transfer rates
- Estimation of transit dependency as represented by household vehicle ownership

This chapter also includes an analysis of fare usage by fare type for minority and nonminority riders and low-income and non-low-income riders, as required by the FTA for fare equity analyses. The chapter concludes with a description of survey methodology and an analysis comparing the languages in which the survey was taken and the languages in which survey respondents prefer to receive information about the MBTA.

MODAL USE

An analysis of the survey data shows that the proportion of minority riders varied by mode. The percentage of minority survey respondents was greater than the percentage of nonminority respondents for bus and rapid transit; conversely, for commuter rail, the percentage of nonminority respondents exceeded the percentage of minority respondents. Figure 4-1 and Table 4-2 show the use of each mode by minority status.

2 Results for the ferry mode were not included in the analyses since none of the ferry routes are classified as minority routes. In the survey, 15 percent of ferry riders identified themselves as minority, which is below the systemwide average.

Figure 4-1
Modal Use by Minority Status

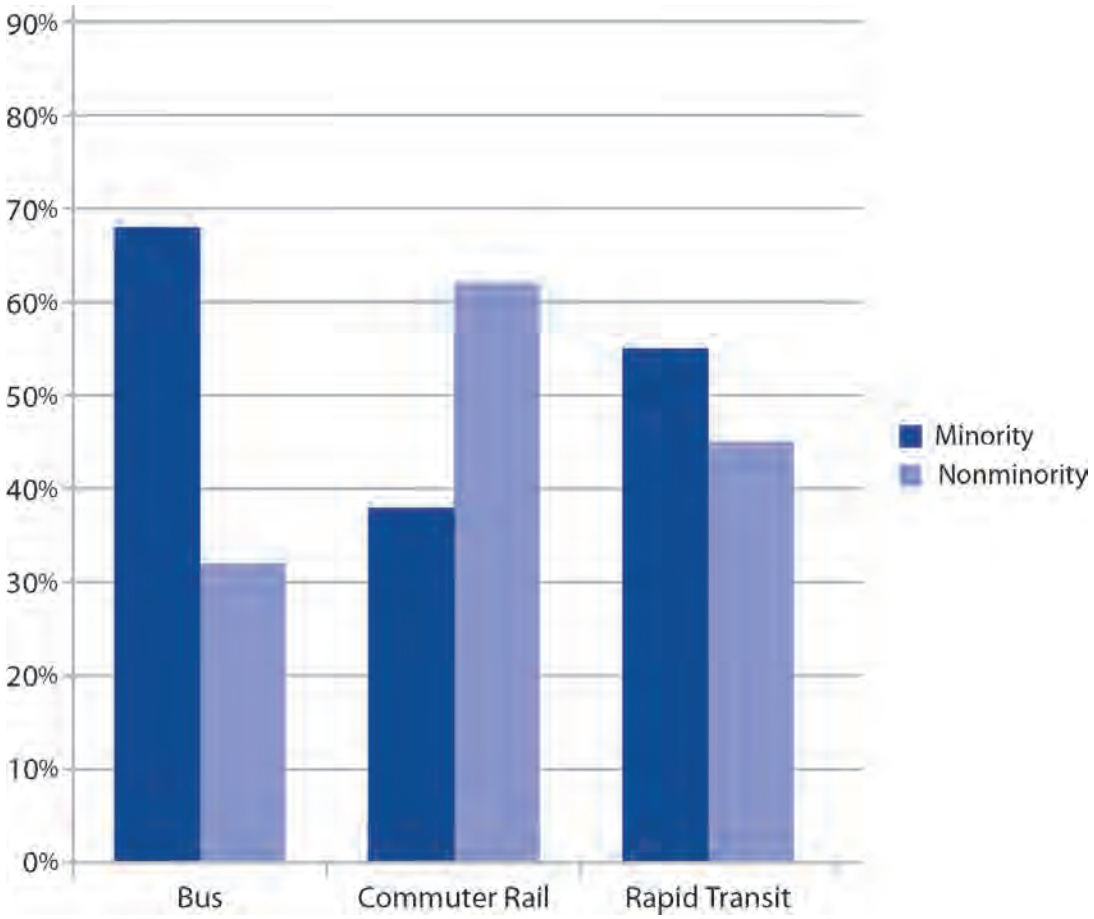


Table 4-2
Modal Use by Minority Status

Mode	Minority	Nonminority
Bus	68%	32%
Commuter Rail	38%	62%
Rapid Transit	55%	45%

Source: 2022 MBTA Systemwide Passenger Survey.

FARE TYPE USAGE

Figure 4-2 and Table 4-3 show the results of the analysis of fare usage according to fare type by mode for minority and nonminority riders. Figure 4-3 and Table 44 show the results for low-income and non-low-income riders. Monthly passes accounted for the majority of fare product use for all riders on bus and rapid transit, while the pay-as-you-go option was more popular among commuter rail users.

As shown in Figure 4-2 and Table 4-3, nonminority riders were more likely than minority riders to use the pay-as-you-go option on all modes. Minority riders, on the other hand, were more likely than nonminority riders to use adult monthly passes on commuter rail and rapid transit. Minority riders were also more likely than nonminority riders to use student passes on bus and rapid transit.

Figure 4-2
Fare Type by Mode and Minority Status

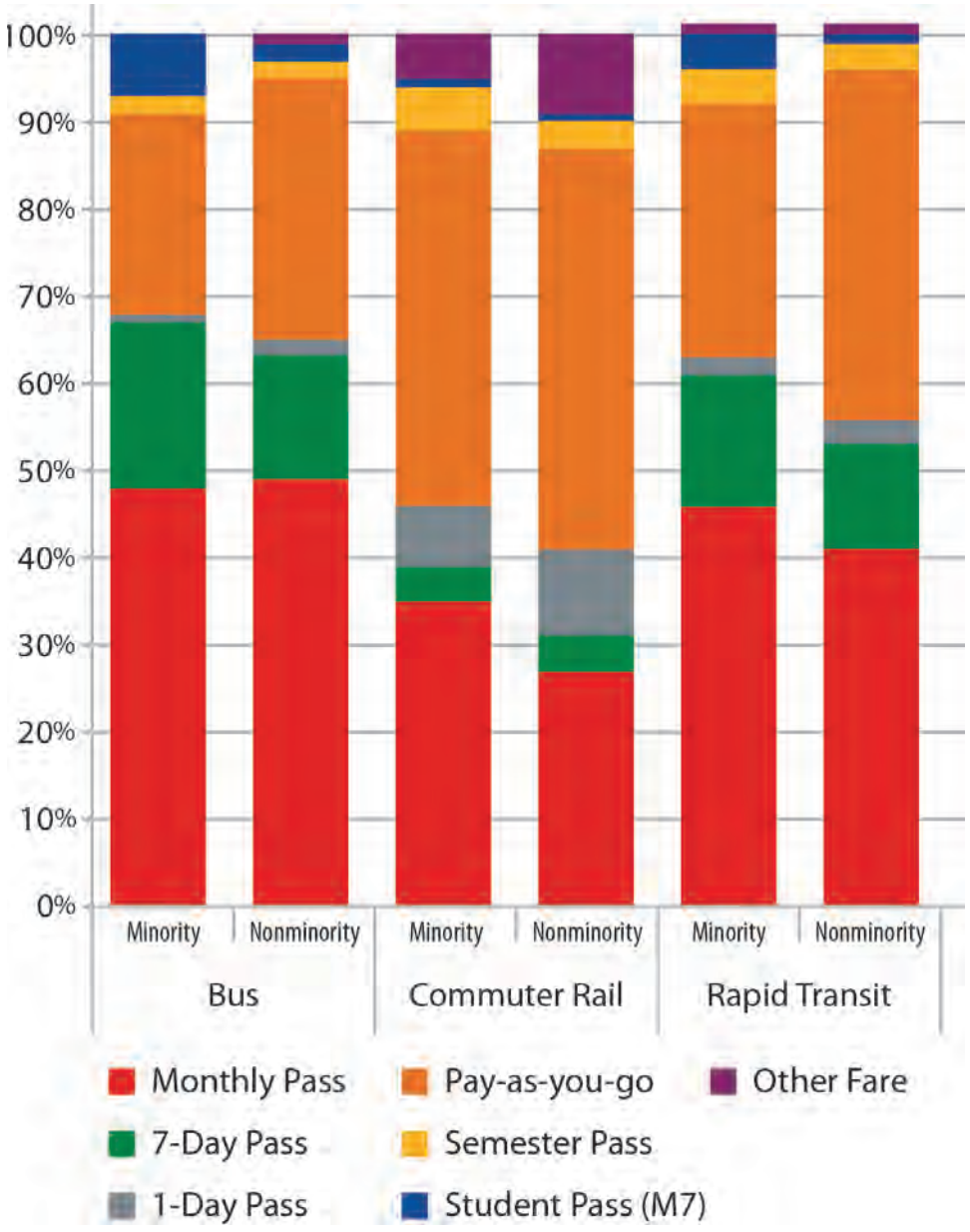


Table 4-3
Fare Type by Mode and Minority Status

Mode	Minority Status	Monthly Pass	7-Day Pass	1-Day Pass	Pay-as-you-go	Semester Pass	Student Pass (M7)	Other Fare
Bus	Minority	48%	19%	1%	23%	2%	7%	0%
Bus	Nonminority	49%	14%	2%	30%	2%	2%	1%
Commuter Rail	Minority	35%	4%	7%	43%	5%	1%	5%
Commuter Rail	Nonminority	27%	4%	10%	46%	3%	1%	9%
Rapid Transit	Minority	46%	15%	2%	29%	4%	4%	1%
Rapid Transit	Nonminority	41%	12%	3%	40%	3%	1%	1%

Note: The final count does not include those who did not specify their race or fare type. The rows of figures in this table may not add up to 100 percent due to rounding. All calculations were performed using unrounded values.

Source: 2022 MBTA Systemwide Passenger Survey.



Fare product usage patterns differed significantly between low-income riders and non-low-income riders. On all modes, low-income riders were less likely than non-low-income riders to use adult monthly passes, but more likely to use 7-day passes and 1-day commuter rail passes.

Figure 4-3
Fare Type by Mode and Low-Income Status

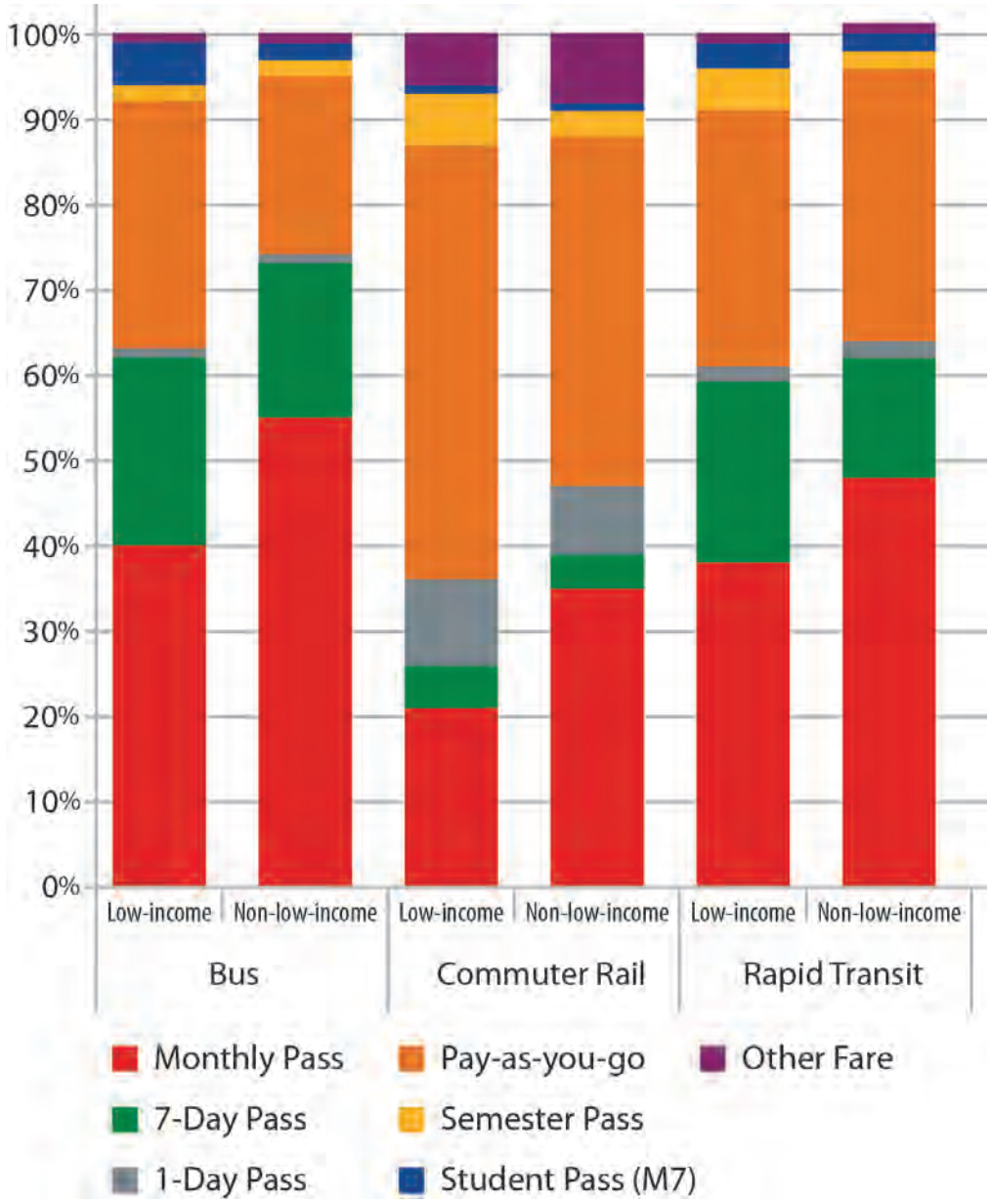


Table 4-4
Fare Type by Mode and Low-Income Status

Mode	Income Status	Monthly Pass	7-Day Pass	1-Day Pass	Pay-as-you-go	Semester Pass	Student Pass (M7)	Other Fare
Bus	Low-income	40%	22%	1%	29%	2%	5%	1%
Bus	Non-low-income	55%	18%	1%	21%	2%	3%	1%
Commuter Rail	Low-income	21%	5%	10%	51%	6%	1%	6%
Commuter Rail	Non-low-income	35%	4%	8%	41%	3%	1%	8%
Rapid Transit	Low-income	38%	21%	2%	30%	5%	3%	1%
Rapid Transit	Non-low-income	48%	14%	2%	32%	2%	2%	1%

Note: The final count does not include those who did not specify their income status or fare type. The rows of figures in this table may not add up to 100 percent due to rounding. All calculations were performed using unrounded values.

Source: 2022 MBTA Systemwide Passenger Survey.



FREQUENCY OF USE

Figure 4-4 and Table 4-5 show the results of the analysis of frequency of use by mode for minority and nonminority riders. Overall, about half of the riders, minorities and nonminorities alike, made their reported trip using the MBTA between three and five days per week. The most "traditional" five-day-per-week commuter travel occurred on the bus, particularly among minority riders; 45 percent of minority bus riders made their reported trip on the MBTA five days per week.

A higher percentage of minority riders than of nonminority riders reported using the MBTA six or seven days per week, across all modes. In addition, more minority riders than nonminority riders reported using the MBTA more than four days per week.

Figure 4-4
Frequency of Use by Mode and Minority Status

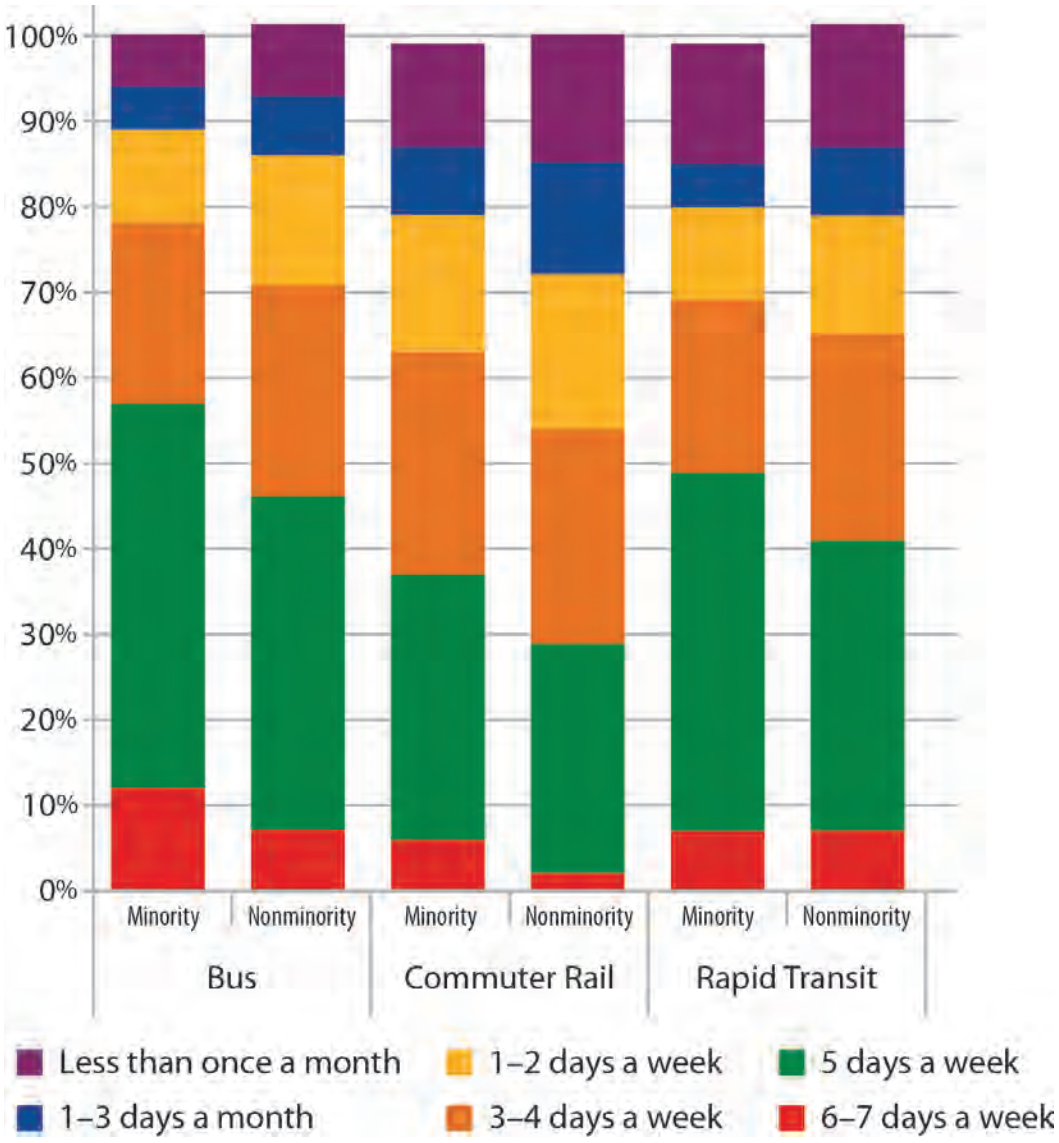


Table 4-5
Frequency of Use by Mode and Minority Status

Mode	Minority Status	6-7 days a week	5 days a week	3-4 days a week	1-2 days a week	1-3 days a month	Less than once a month
Bus	Minority	12%	45%	21%	11%	5%	6%
Bus	Nonminority	7%	39%	25%	15%	7%	8%
Commuter Rail	Minority	6%	31%	26%	16%	8%	12%
Commuter Rail	Nonminority	2%	27%	25%	18%	13%	15%
Rapid Transit	Minority	13%	42%	20%	11%	5%	8%
Rapid Transit	Nonminority	7%	34%	24%	14%	8%	14%

Note: The final count does not include those who did not specify their race or frequency of transit use. The rows of figures in this table may not add up to 100 percent due to rounding. All calculations were performed using unrounded values.

Source: 2022 MBTA Systemwide Passenger Survey.



TRANSFER RATE

Transfer rate refers to the percentage of riders who transfer between MBTA services to complete a one-way trip. The survey showed a difference between minority and nonminority respondents in this measure. Overall, 52 percent of survey respondents made at least one transfer. For minority respondents the rate was 57 percent, compared with 46 percent for nonminority respondents. This finding is partly a reflection of the high percentage of trips taken by minority riders that begin or end on local bus routes and require the rider to transfer to a rail rapid transit line to reach downtown Boston.

TRANSIT DEPENDENCY

Transit dependency is an important factor to consider in analyses for fare and service changes. The responses to a question on the MBTA Systemwide Passenger Survey were used to compare the estimated level of transit dependency of minority and nonminority riders; the survey asked for the number of usable vehicles in the respondent's household.

Figure 4-5 and Table 4-6 show the percentage of riders by mode and minority status who had zero, one, two, or three or more vehicles in their households. Minority riders had fewer vehicles per household than nonminority riders across all modes.

Figure 4-5
Vehicles per Household by Mode and Minority Status

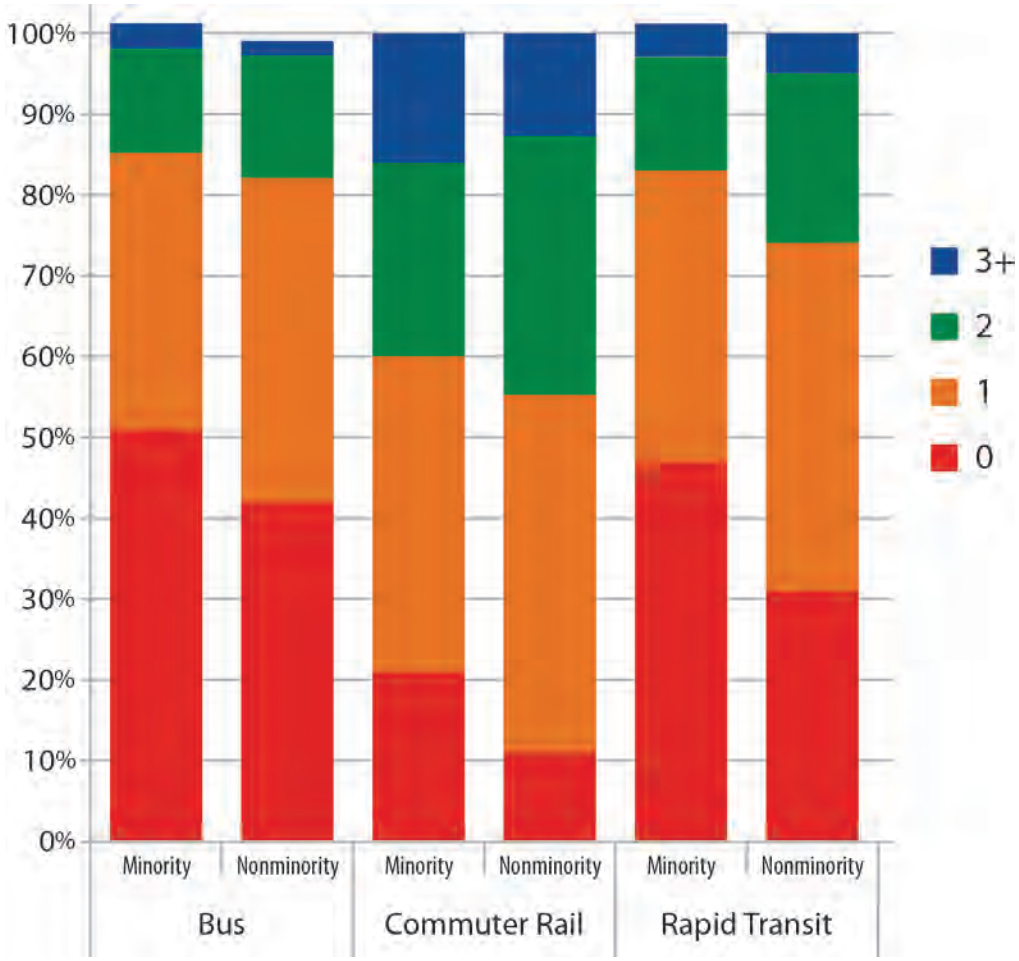


Table 4-6
Vehicles per Household by Mode and Minority Status

Mode	Minority Status	Zero Vehicles	1 Vehicle	2 Vehicles	3+ Vehicles
Bus	Minority	51%	34%	13%	3%
Bus	Nonminority	42%	40%	15%	2%
Commuter Rail	Minority	21%	39%	24%	16%
Commuter Rail	Nonminority	11%	44%	32%	13%
Rapid Transit	Minority	47%	36%	14%	4%
Rapid Transit	Nonminority	31%	43%	21%	5%

Note: The final count does not include those who did not specify their race or vehicle ownership. The rows of figures in this table may not add up to 100 percent due to rounding. All calculations were performed using unrounded values.

Source: 2022 MBTA Systemwide Passenger Survey.



2022 PASSENGER SURVEY METHODOLOGY

A full report on the MBTA 2022 System-Wide Passenger Survey methodology is available at https://mbta-massdot.opendata.arcgis.com/documents/mbta-2022-system-wide-passenger-survey-technical-documentation/explore.

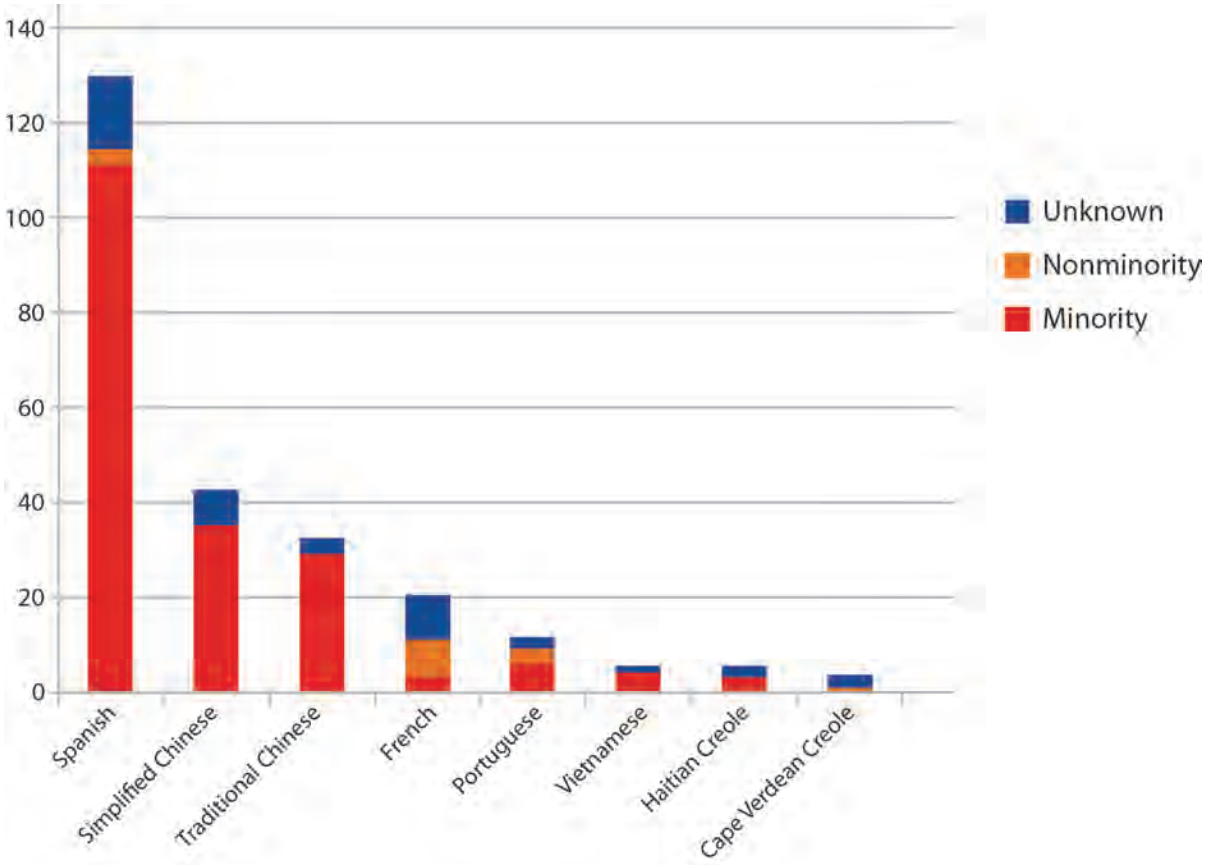
SURVEY LANGUAGES AND PREFERRED LANGUAGES FOR INFORMATION

The survey form was available in 11 languages in addition to English. The majority of returned surveys (95.6 percent) were the English version. The Spanish version accounted for 3.63 percent, and the Portuguese and Simplified Chinese version accounted for 0.43 percent and 0.16 percent, respectively. The French, Haitian Creole, Russian, Traditional Chinese, Vietnamese, Arabic, Italian, and Cape Verdean Creole versions each accounted for less than 0.1 percent.

Figure 4-6 shows the number of surveys returned in languages other than English, sorted by minority status. As shown in the figure, most of the non-English surveys were completed by minority riders.



Figure 4-6
Number of Surveys Returned in Languages Other Than English and Minority Status of Respondents



Source: 2022 MBTA Systemwide Passenger Survey.

All versions of the survey form asked respondents whether they preferred to receive information about riding the MBTA in English or in another language and, if the latter, to specify which language they prefer. The percent of respondents who indicated high proficiency in English (86.5 percent) was lower than the percent who took the survey on the English form (95.6 percent). The other languages spoken at home or work were Spanish (16.3 percent), Chinese (2.7 percent), French (2.2 percent), Portuguese (2.2 percent), Arabic (1.5 percent), and Haitian Creole (1.3 percent).





Chapter 5
Service Standards and Policies

To guard against discrimination resulting from service design or operation, the Federal Transit Administration (FTA) requires that the Massachusetts Bay Transportation Authority (MBTA) adopt systemwide service standards and policies for each fixed-route mode of service. These standards and policies are detailed below.

SYSTEMWIDE SERVICE STANDARDS (FTA C 4702.1B, IV-4.A)

FTA requires transit providers that operate fixed-route service to set quantitative systemwide service standards for vehicle load, vehicle headway, on-time performance, and service availability. Standards for these four performance indicators are found in the MBTA's 2021 Service Delivery Policy (see Appendix 5A).

This policy, first adopted in 1996, defines how the MBTA evaluates service quality and allocates transit service to meet the needs of the Boston region. The policy is consistent with the MBTA's enabling legislation and other external mandates, including Title VI of the Civil Rights Act of 1964 and the Americans with Disabilities Act of 1990 (ADA). Since 1996, the Service Delivery Policy has been revised seven times: in 2002, 2004, 2006, 2008, 2010, and 2017, and most recently in 2021.

The Service Delivery Policy:

- Establishes the aspects that define service availability and sets parameters for levels of provided service;
- Establishes objectives that define the key performance characteristics of quality transit services;
- Identifies quantifiable standards for measuring whether the MBTA's transit services achieve their objectives, within the context of federal, state, and local regulations;
- Outlines a service-planning process that applies the service standards in an objective, uniform, and accountable manner;
- Sets the priorities for the service-planning process by setting minimum levels and targets for the service standards; and
- Involves the public in the service-planning process in a consistent, fair, and thorough manner.

The Service Delivery Policy is designed to evolve as new data streams and technologies become available. With expanded capabilities to collect and analyze data, the MBTA intends to update the policy regularly to build out metrics and define service parameters and targets. In addition, as priorities for service change, the policy can be updated to reflect new priorities.

The Service Delivery Policy sets quantifiable standards to measure the MBTA's service objectives—including the four FTA-required standards for vehicle load, vehicle headway, on-time performance, and service availability, and four additional standards for span of service, platform accessibility, vehicle accessibility, and service operated.

Each standard has several components. The definition of each standard describes the conditions that are considered passing for that standard. The definition of a particular standard may vary depending on the type of service or time period of the evaluation. The pass/fail condition is measured at different levels of aggregation depending on the standard. For example, on-time performance of a bus is measured at each time point on the route, whereas span is measured for the entire route.

Vehicle Load (FTA C 4702.1B, IV-4.a.(1))

The MBTA assesses vehicle load using a set of passenger comfort standards. Passenger comfort is influenced by the number of people on the vehicle and whether a seat is available to each rider for all or most of the trip. The passenger comfort standards, which vary by mode and time of day analyzed, establish the maximum number of passengers that can be on a vehicle such that the ride is safe and comfortable. The MBTA's passenger comfort standards are detailed in the Service Delivery Policy. (See pages 26–29 of the Service Delivery Policy in Appendix 5A.)

Rail Service

The MBTA currently has limited data on the vehicle load of its subway, light rail, and commuter rail service because it has minimal passenger counting mechanisms. To address this limitation, automated passenger counters (APCs) are being installed on all commuter rail coaches. New cars on the Green, Orange, and Red Lines have APCs installed. Once compiled, the data obtained from the APCs will allow the MBTA to establish a baseline and update its standards for vehicle load.

Bus Service

APCs are currently installed on MBTA buses, so there is sufficient data for assessing vehicle load for this mode. Bus passenger comfort standards are different for high-volume and low-volume periods.[1]

High-Volume Time Periods

The maximum comfortable passenger-to-seat ratio for high-volume travel periods is 140 percent. All passengers are considered comfortable on buses with loads up to 140 percent of seated capacity, and no passengers are considered comfortable when the vehicle load exceeds 140 percent of seated capacity.

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1 High-volume periods on bus and rapid transit are defined as weekdays from 7:00 AM to 9:00 AM and from 4:00 PM to 6:30 PM. All other times are low-volume periods.

Low-Volume Time Periods

The maximum comfortable passenger-to-seat ratio for low-volume travel periods is 125 percent. Seated passengers are considered comfortable when loads are between 125 percent and 140 percent of seated capacity. No passengers are considered comfortable when the vehicle load exceeds 140 percent of seated capacity.

Vehicle Headway (FTA C 4702.1B, IV-4.a.(2))

To ensure that customers have reasonable waiting times when accessing the transportation network, the MBTA establishes minimum frequency-of-service levels for each mode, by time of day. The following provides a summary of the MBTA's frequency-of-service standards that are detailed in the 2021 Service Delivery Policy (pages 13–15).

The MBTA's frequency-of-service standards are measured using either headway (minutes between trips) or frequency (trips per time period), as summarized in Table 5-1. If Table 5-1 does not specify an expected frequency for a mode or time period, then there is no respective standard, and frequencies for these services are set based on demand.



Table 5-1
Service Frequency

Mode	Weekday Time Periods	Expected Frequency or Headway
Bus—Local and Community	AM and PM peak	Every 30 minutes
	All other periods	Every 60 minutes
	Saturday and Sunday	Every 60 minutes
Bus—Commuter	AM peak	3 trips in the peak direction
	PM peak	3 trips in the peak direction
Bus—Key Bus Routes	AM and PM peak	Every 10 minutes
	Early AM and midday base/school	Every 15 minutes
	Evening and late evening	Every 20 minutes
	Saturday and Sunday	Every 20 minutes
Rapid Transit	AM and PM peak	Every 10 minutes
	All other periods	Every 15 minutes
	Saturday and Sunday	Every 15 minutes
Commuter Rail	AM peak	3 trips in the peak direction
	PM peak	4 trips in peak direction
	All other periods	Every 3 hours in each direction
	Saturday	Every 3 hours in each direction
Ferry	AM and PM peak	3 trips in the peak direction
	Off-peak periods	Every 3 hours

Note: There is no frequency standard during the *sunrise* or *night* times or for supplemental bus service. *AM peak and PM peak* are defined differently for commuter rail service. For bus and rapid transit, AM peak is from 7:00 AM to 9:00 AM and PM peak is 4:00 PM to 6:30 PM. For commuter rail, AM peak includes all trains that arrive in Boston between 6:00 AM and 10:00 AM, and PM peak includes all trains that depart from Boston between 3:30 PM and 7:00 PM.

Source: Table 5 in the 2021 Service Delivery Policy.

The MBTA counts passenger trips taken on services that operate at the expected frequency as passing and trips taken on services that operate at less than the expected frequency as *failing*. This measure is weighted by ridership in each time period, which prioritizes meeting the expected frequency at peak periods and on routes and services with high ridership.

On-Time Performance (FTA C 4702.1B, IV-4.a.(3))

Reliability standards provide tools to evaluate the on-time performance of individual MBTA lines and routes. Reliability standards vary by mode and frequency of service because passengers using high-frequency services generally are more interested in regular vehicle arrivals than in strict adherence to published timetables, whereas passengers who use less-frequent services expect arrivals and departures to occur as published. The following provides a summary of the MBTA's reliability service standards that are detailed in the 2021 Service Delivery Policy (pages 21–25).

Bus

To determine whether a bus is on time at an individual timepoint, such as the beginning of a route, end of a route, or a scheduled point in between, the MBTA uses two different tests based on the scheduled frequency of the service:

- **Scheduled-Departure Service:** A trip is considered to provide scheduled-departure service when it operates with a headway longer than 15 minutes. For scheduled-departure services, passengers generally time their arrivals at bus stops to correspond with the specific published departure times.
- **Frequent Service**: A trip is considered to provide frequent service when it operates with a headway of 15 minutes or less. For frequent service, passengers can arrive at a stop without looking at a schedule and expect a reasonably short wait. Passengers use the services on Key Bus Routes as frequent services despite occasional longer than 15-minute headways; therefore, these routes are always evaluated using the frequent-service definition even when their headways exceed 15 minutes.

Routes other than Key Bus Routes might operate entirely with frequent service, entirely with scheduled-departure service, or with a combination of both throughout the day. Because any given route may have both types of service, each trip is considered individually to determine whether it represents scheduled-departure service or frequent service, and each timepoint crossed on that trip is measured accordingly.

On-Time Test for Scheduled-Departure Timepoints

To be considered on time at a timepoint, any trip evaluated using the scheduled-departure standard must meet the applicable condition cited below.

- **Origin timepoint:** The trip must depart its origin timepoint no later than three minutes after its scheduled departure time.
- **Mid-route timepoint:** The trip must leave the mid-route timepoint(s) between one minute before and six minutes after its scheduled departure time.
- **Destination timepoint:** The trip must arrive at its destination timepoint no later than five minutes after its scheduled arrival time.

On-Time Test for Timepoints on Frequent Services

To be considered on time at a timepoint, any trip evaluated using the frequent service standard must meet the applicable condition cited below.

- **Origin or mid-route timepoint**: A trip must leave its origin timepoint or mid-route timepoint no later than the amount of time scheduled for headway plus three minutes after the previous trip departed that timepoint.
- **Destination timepoint:** The actual run time from the origin timepoint to the destination timepoint must be no more than 120 percent of the scheduled run time for the trip to be considered on time at the destination timepoint.

On-Time Test for Bus Routes

Bus reliability for a specific route is calculated as the percentage of timepoints that pass the on-time tests.

Heavy and Light Rail

Passengers on light rail and heavy rail do not rely on published schedules; rather, they expect trains to arrive at consistent headways. Therefore, schedule adherence for light rail and heavy rail is measured as the proportion of a line's passengers who wait the amount of time of the scheduled headway, or less, for a train to arrive. For passengers boarding on the trunk section of the Green Line, the headway is defined as three minutes.

Commuter Rail

Commuter rail passengers expect to arrive at their destination station at the time posted in the schedule. Therefore, schedule adherence for commuter rail is measured as the number of trains that arrive at the destination terminal no later than five minutes after the time published in the schedule.

Ferry

Ferry passengers expect to arrive at their destination dock at the time posted in the schedule. Therefore, schedule adherence for commuter boats is measured as the number of boats that arrive at the destination terminal no later than five minutes after the time published in the schedule.

Service Availability (FTA C 4702.1B, IV-4.a.(4))

An important aspect of providing the region with adequate access to transit services is the system's geographic coverage. The following provides a summary of the MBTA's coverage standards that are detailed in the 2021 Service Delivery Policy (pages 15–18).

The MBTA recognizes that coverage means different things to different markets. To address these different groups, the MBTA measures coverage in two ways:

- Base coverage
- Frequent service in dense areas coverage

The MBTA prioritizes high-frequency service in high-density areas and service to areas with high proportions of low-income households, while maintaining an acceptable level of base coverage. While the MBTA monitors the effect of proposed service modifications on all three components of the coverage standard as part of its service-planning process, only the base-coverage standard is evaluated for Title VI service monitoring.

To monitor its base level of coverage, the MBTA measures the percentage of the population that lives no more than 0.5 miles from a bus stop, rapid transit station, commuter rail station, or ferry dock in the municipalities in the MBTA's service area, excluding municipalities that are members of another regional transit authority.

Span of Service

Span of service refers to the hours during which service is available. The MBTA has established span-of-service standards that define the expected hours that any given service will operate. The following provides a summary of the MBTA's span-of-service standards that are detailed in the 2021 Service Delivery Policy (pages 11–13).

The span-of-service standards, summarized in Table 5-2, vary by mode and by day of the week, reflecting the predominant travel flows in the region. The standards require that the first trip in the morning in the peak direction of travel must arrive in downtown Boston, or the route terminal if the route does not serve downtown Boston, at or before the beginning span-of-service time. At the end of the service day, the last trip in the evening in the peak direction of travel must depart downtown Boston, or the route terminal if the route does not serve downtown Boston, at or after the ending span-of-service time. If Table 5-2 does not specify an expected span of service for a mode or time period, that indicates that there is no respective standard and service hours are set based on demand.

Table 5-2
Span of Service

Mode	Day	Expected Span of Service
Bus—Local	Weekday	7:00 AM – 7:00 PM
	Saturday	8:00 AM – 6:30 PM
	Sunday	10:00 AM – 6:30 PM
Bus—Community	Weekday	10:00 AM – 4:00 PM
Bus—Commuter	Weekday	7:00 AM – 9:00 AM
	Weekday	4:00 PM – 6:30 PM
Bus—Supplemental	Weekday	No minimum span
Bus—Key Bus Routes	Weekday	6:00 AM – midnight
	Saturday	6:00 AM – midnight
	Sunday	7:00 AM – midnight
Heavy Rail	Weekday	6:00 AM – midnight
	Saturday	6:00 AM – midnight
	Sunday	7:00 AM – midnight
Light Rail	Weekday	6:00 AM – midnight
	Saturday	6:00 AM – midnight
	Sunday	7:00 AM – midnight
Commuter Rail	Weekday	7:00 AM – 10:00 PM
	Saturday	8:00 AM – 6:30 PM
Ferry	Weekday	7:00 AM – 6:30 PM
	Saturday*	8:00 AM – 6:30 PM

* This service operates from Memorial Day to Columbus Day.

Note: The RIDE generally operates from 5:00 AM to 1:00 AM. The MBTA provides extended hours for trips starting and ending within 0.75 miles of a fixed-route service that operates outside of these hours.

Source: Table 3 in the MBTA's 2017 Service Delivery Policy.

The MBTA counts passenger trips taken on services that operate at least during the expected span as passing and trips taken on services that operate less than the expected span as *failing*. This measure is weighted by ridership to prioritize the objective of meeting the expected span of service on routes and services with high ridership.

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 by 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. MBTA measures structural station accessibility in two ways: unweighted and ridership-weighted.

First, MBTA will measure the *percent of MBTA stations that are accessible*. Station accessibility performance will also be evaluated using ridership weighting, thereby prioritizing the accessibility of stations with high ridership. The MBTA will also measure the *percent of riders boarding at MBTA stations that are accessible*.

The MBTA will also measure the *percent of low-income riders and the percent of riders of color boarding at MBTA stations that are accessible*. Both station accessibility measures include all rapid transit stations (including surface Green Line), Silver Line stops and stations, and commuter rail stations. The ridership weighted measure will exclude stations for which reasonably accurate and current ridership data is not available. The minimum for both measures will always be set as the current annual performance, and the MBTA will continue to measure progress toward this standard.

Platform Accessibility

Riders should also be able to access the platforms in each accessible station at all times service is offered. Platform accessibility is an alternative measure of *elevator uptime* that evaluates access to platforms.

The MBTA will measure the *percent of total platform-hours that are accessible via elevators*. A platform is considered accessible during those service hours when passengers can reach the street and any transfer platforms without using stairs or escalators. This measure encompasses the platforms at rapid transit and commuter rail stations with elevators that are owned and maintained by the MBTA. There are times in which an elevator outage may not affect access to station platforms due to redundant elevators or, conversely, times in which a single elevator outage could hinder access to multiple platforms at once. Instances of planned outages in which accessible shuttle alternatives are provided are considered accessible platform-hours.

Vehicle Accessibility

The following provides a summary of the MBTA's vehicle accessibility standard that is detailed in the 2021 Service Delivery Policy (page 20):

> *The MBTA should provide at least one ADA-compliant vehicle on each trip it operates. To this end, the MBTA measures the percentage of trips that are provided with at least one ADA-compliant vehicle.*
>
> *Trips on the Green Line are considered compliant if at least one of the vehicles in a train set is ADA-compliant.*
>
> *A trip on Commuter Rail is considered compliant if at least one ADA-compliant car or coach in the train set matches the location of each high-level platform at stations served by the trip. ADA-compliant Commuter Rail coaches must include ADA-compliant restrooms.*
>
> *Bus trips are not measured since ramps can be deployed manually. All heavy rail vehicles are accessible today and therefore not included within this metric.*

Service Operated

The following provides a summary of the MBTA's service-operated standard that is detailed in the 2021 Service Delivery Policy (pages 25–26):

> *The MBTA intends to operate all of the service it schedules. A multitude of factors—including equipment failure, lack of personnel, and unforeseen delays, such as medical and police emergencies—can sometimes prevent the MBTA from operating scheduled service. To this end, the MBTA measures the percentage of scheduled service that is actually provided for each bus route, light rail line, heavy rail line, commuter rail line, and ferry route. Planned heavy, light, and commuter rail outages where the MBTA offers substitute service do not count against this standard.*



SYSTEMWIDE SERVICE POLICIES (FTA C 4702.1B, IV-4.B)

FTA guidance requires that the MBTA adopt systemwide service policies for the distribution of transit amenities and vehicle assignment for each mode to ensure service design and operations practices do not result in discrimination on the basis of race, color, or national origin. Service policies differ from service standards in that they are not necessarily based on a quantitative threshold.

Distribution of Transit Amenities (FTA C 4702.1B, IV-4.B.(1))

FTA Circular 4702.1B defines transit amenities as items of comfort, convenience, and safety that are available to the general riding public. FTA guidance requires the MBTA to set policy to ensure equitable distribution of transit amenities across the system. The following policies address how amenities are distributed within the MBTA's transit system.

Bus Stop Amenities

The following provides a summary of the MBTA's policy on bus stop amenities detailed in Chapter 6 of the MBTA's *Bus Stop Planning & Design Guide* (pages 36–37):[2]

> *The bus stop represents one of the MBTA's best marketing opportunities. A well designed and equipped bus stop improves operations, ridership, and transit's value to the community. Certain customer amenities can also play a significant role in attracting and retaining customers. Customer amenities are intended to improve customer comfort, as well as provide a sense of safety and security. These attributes can affect an individual's decision on whether to use transit. The following types of amenities can be provided at bus stops, depending on level of usage or type of service:*
>
> - ***Shelters** provide comfort and protection from the elements*
> - ***Benches** provide a level of comfort for customers*
> - ***Trash and recycling receptacles** help to keep the bus stop area free of litter*
> - ***Signs, schedules, and maps** provide customer information*
> - ***Next bus arrival information** provides expected wait time for the next arriving bus*
> - ***Bicycle parking facilities** help to facilitate multimodal connections*

2 MBTA, *Bus Stop Planning & Design Guide* (April 2018). https://cdn.mbta.com/sites/default/files/engineering/001-design-standards-and-guidelines/2018-04-01-bus-stop-planning-and-design-guide.pdf

The decision to install amenities at a particular stop takes into account a number of factors, including the following:

- ***Customer Utilization—****The level and type of customer usage plays a primary role in determining where amenities are warranted. Bus stop consolidation often results in customers having to walk greater distances to access transit. In these cases, provision of certain amenities is desirable to offset the inconvenience.*
- ***Customer Transfer Activity—****High transfer activity generally means that customers may have to wait longer periods of time to make transit connections. Depending on the characteristics of the connection, additional amenities should be considered.*
- ***Transit Corridor Marketing Efforts—****Bus rapid transit (BRT) and Key Bus Route improvements both benefit from enhanced marketing and branding, which is often provided through the provision of amenities.*
- ***Title VI, Environmental Justice, and Community Equity—****Amenities need to be evenly and fairly distributed among bus stops in both minority and low-income communities to meet the requirements of Title VI of the 1964 Civil Rights Act, as defined in FTA C 4702.1B. Title VI and Environmental Justice principles mandate that MBTA services—including shelters and amenities—are distributed in such a manner that minority and low-income communities receive benefits in the same proportion as the total service area.*
- ***Proximity to Existing Sheltered Areas—****New amenities may not be needed if customers are able to take advantage of existing facilities located at the bus stop. For example, an existing storefront canopy or awning could provide shelter for waiting customers and preclude the need for a new freestanding shelter.*
- ***Customer and Community Requests—****Communities and individuals often make requests for amenities at specific stops. Often these requests reflect specific needs related to the proximity to senior housing or medical facilities.*
- ***Installation and Maintenance Costs—****The benefits offered by each type of amenity must be weighed against the cost of installation and maintenance. Although the MBTA may carry the cost of purchasing and installing amenities, often a municipality or a third party will be asked to take on the responsibility for maintenance. Adopt-a-Stop programs can often be established to cover installation and/or maintenance costs.*
- ***Bus Stop Environment/Adjacent Land Use—****The characteristics of the surrounding neighborhood may influence the type or design of bus stop amenities. For example, neighborhoods may require street furniture that is consistent with the overall design of the streetscape. Design should consider the needs of the local environment and incorporate community input.*

Bus Shelter Placement

The following provides a summary of the MBTA's bus shelter policy. This text is a slightly modified excerpt from Chapter 7 of the MBTA's *Bus Stop Planning & Design Guide* (pages 47–50):

MBTA Shelter Policy

Given fiscal constraints and right-of-way constraints, the MBTA is not able to provide bus shelters at most of its 8,100 stops. To fairly distribute shelters systemwide, the following MBTA Shelter Policy provides guidance for the placement of bus shelters and establishes a procedure for evaluating shelter requests. This policy in no way establishes a requirement for placement, since all placements will be dependent on available resources. In areas or locations where the MBTA, or its contractors, are the primary suppliers of shelters at bus stops, placements must:

1. *conform with shelter eligibility standards;*
2. *pass a site suitability test;*
3. *meet the requirements of Title VI; and*
4. *comply fully with accessibility regulations.*

Shelter Eligibility Standards

Customer utilization is the primary consideration when determining if a bus stop is eligible for a shelter. All bus stops that meet the required number of boardings are eligible. Table 5-3 lists all criteria to be factored into an assessment of eligibility for each bus stop and the value associated with each criterion. A site must receive a total of 70 points to be considered eligible under this policy. The following criteria are considered:

- ***Customer Utilization —*** *The number of customers boarding at a stop on an average weekday. Any bus stop that has more than 70 boardings is automatically eligible for a shelter. For bus stops with fewer boardings, a combination of the factors listed below are considered in determining eligibility. Stops that have fewer than 25 boardings are not eligible for a shelter.*
- ***MBTA Initiatives to Strengthen Identity of Route or Bus Stop —*** *The bus stop is located on a designated Key Bus Route or it serves a potentially highly transit dependent development.*
- ***Demographics —*** *The bus stop is in close proximity to medical facilities or senior housing, and/or is used by significant numbers of seniors and/or persons with disabilities.*

- ***Minority and/or Low-Income Areas —*** *The bus stop is in a Title VI or environmental justice community.*
- ***Connectivity —*** *The bus stop serves as a major transfer point to another transit or bus route.*
- ***Frequency of Service —*** *Bus stops on routes with less frequent service are more likely to qualify for a shelter, due to the longer time that customers may have to wait for a bus.*
- ***Site Conditions —*** *Bus stops that have an unusually high exposure to adverse weather elements.*

Table 5-3
Bus Shelter Eligibility

Eligibility Criteria	Points
70 or more average weekday boardings	70
25-69 average weekday boardings	50
MBTA initiative to strengthen route or stop identity	10
Facilities for seniors, disabled, medical or social services nearby	20
Minority and/or low-income area	15
Bus route transfer/connection point	5
Infrequent bus service	10
Poor site conditions at bus stop	10

Source: Table 7.1 in the MBTA's Bus Stop Planning & Design Guide.

For shelters that are procured, installed, and maintained by others, it is not necessary for the shelter to meet these eligibility standards. However, it is strongly recommended for transit equity purposes.

Site Suitability Test

The following physical and practical requirements must be met before a bus stop can be considered for a shelter:

- ***Site ownership:** Permission to install a shelter must be granted by the landowner. In most cases, the landowner is the municipality that owns the sidewalk. In some cases, property easements, license agreements, and/or land takings may be required if the sidewalk width is inadequate and the shelter must encroach on adjacent property.*
- ***Abutter approval:** Depending on the site ownership and proposed setback of the shelter, it may be necessary to notify the abutter and/or obtain their approval.*
- ***Adequate physical space and clearances:** This typically pertains to sidewalk widths and potential obstacles to an accessible and safe path of travel. There must be sufficient space for the shelter, as well as an accessible path of travel around the shelter and between other street furniture. The busier the sidewalk, the more space is required. In addition, shelters must be sufficiently set back from the curb to avoid being struck by vehicles. Where sidewalks are not sufficiently wide, options may include sidewalk widening or installation of a narrow shelter, curb extension, or bulb out.*
- ***Proximity to the bus stop:** The shelter should generally be located within the limits of the bus stop zone or no greater than 50 feet from the designated bus boarding area.*
- ***Community and municipal approval:** For advertising shelters, a license agreement between the municipality and the shelter company is generally required. A permit may also be required from the State Office of Outdoor Advertising (OOA).*

Title VI Requirements

Title VI and environmental justice principles mandate that MBTA services—including shelters and amenities—are distributed in such a manner that minority and low-income communities receive benefits in the same proportion as the total service area. The MBTA and CTPS periodically conduct a Title VI analysis to ensure compliance. At times there may be a disparity that needs to be addressed.

Accessibility Requirements

Installation of a bus shelter may trigger specific accessibility requirements, including lengthening of the bus stop, building an accessible bus landing pad, and providing an accessible path of travel between the landing pad, the sidewalk, and the shelter.

Benches at Bus Stops

The following provides a summary of the MBTA's policy on benches at bus stops, as detailed in Chapter 6 of the MBTA's *Bus Stop Planning & Design Guide* (page 38):

> *Benches are the most common bus stop amenity and are generally the simplest and most desirable to provide, given their nominal cost and space requirements. Benches should be provided when any of the following conditions exist:*
>
> - *The bus stop has at least 50 daily boardings.*
> - *The stop serves a significant number of seniors or persons with disabilities.*
>
> *Benches may also be warranted in the following situations:*
>
> - *There is evidence of customers sitting on steps, walls, or other structures located on abutting private property.*
> - *The stop is located on a low frequency bus route.*

Provision of Information

Variable Message Signs

The MBTA currently uses four different types of electronic message signs on the bus, rapid transit, and commuter rail systems. These include the following:

- Countdown or public address signs at stations count down the number of minutes until the next vehicle arrives at or departs from the station and display public-service announcements. These are present at all subway stations, most commuter rail stations, most BRT stations, and some above-ground light rail stations.
- Departure boards at stations list upcoming departures. These are present at three major commuter rail stations.
- In-vehicle signs display the next stop. These are present on all buses, all Blue and Green Line trains, one-third of Red Line trains, all new Orange Line trains, one-third of commuter rail coaches, and two new ferries. There are no Mattapan Line trolleys that currently have in-vehicle message signs.
- E-ink signs are a practical solution for providing real-time information where electricity is not available. The MBTA has conducted multiple pilots installing solar powered e-ink signs and continues to expand this effort.
- Advertising displays show real-time information and service alerts. These are present at most subway stations.

It is important to note that the MBTA has developed a set of audio/visual equivalence guidelines that include requirements for ensuring critical transit information be provided both audibly and visually in order to provide the information in a fully accessible manner. The MBTA routinely looks for opportunities to install new signs.

Neighborhood Maps

The MBTA's Neighborhood Map Program produces maps for wayfinding around transit stations. The objectives of the program include (1) providing route and schedule information for bus routes serving that station, (2) placing the transit station in the context of the surrounding neighborhood, and (3) highlighting the areas around the station that are within easy walking distance.

Two types of maps are placed at stations that have bus connections: (1) neighborhood maps, showing major landmarks, bus routes, the street network, the one-half-mile walking radius around the station, green space, pathways, and accessible station entrances; and (2) more detailed maps that show all bus routes that serve a particular station, along with service frequency information.

Where space allows, one or both maps are placed at stations with bus connections. The maps are also generally installed at new or renovated stations, regardless of whether a station has bus service. The MBTA has installed maps at all rapid transit transfer stations. On the commuter rail, the MBTA has installed maps at stations on the Fairmount Line and plans to add maps at nine other stations. Due to space constraints, maps are not located at many surface Green Line stops.

Escalators

Escalators provide vital access to the system, particularly for persons with disabilities. In 2006, when the MBTA and BCIL entered into a settlement agreement regarding ADA accessibility of MBTA services and infrastructure, operational protocols and standards were set, as well as a proactive agenda for making the transit system more accessible. For all escalator maintenance activities, the MBTA follows its Vertical Transportation Equipment Contract, which considers the operability standard defined in Title 49 of the Code of Federal Regulations, Section 37.161—*Maintenance of accessible feature: General*—which reads as follows:



a) *Public and private entities providing transportation services shall maintain in operative condition those features of facilities and vehicles that are required to make the vehicles and facilities readily accessible to and usable by individuals with disabilities. These features include, but are not limited to, lifts and other means of access to vehicles, securement devices, elevators, signage and systems to facilitate communications with persons with impaired vision or hearing.*

b) *Accessibility features shall be repaired promptly if they are damaged or out of order. When an accessibility feature is out of order, the entity shall take reasonable steps to accommodate individuals with disabilities who would otherwise use the feature.*

c) *This section does not prohibit isolated or temporary interruptions in service or access due to maintenance or repairs.*

The MBTA contracts for the complete maintenance, service testing, and inspection of all transit system and facility escalators. The MBTA's contract imposes penalties if the contractor fails to comply with the ADA requirements. The MBTA has implemented a proactive maintenance program to keep equipment safe and operational. Maintenance specifications are defined to cover all equipment components. The MBTA's Maintenance Control Center (MCC) tracks all escalator service requests, which are transmitted to the MCC via MBTA personnel and field inspectors. The MCC transmits the service-request information to the escalator maintenance contractor via a computer terminal, and the contractor then dispatches maintenance personnel to perform repairs. The causes of equipment failures vary, as well as the length of time required to repair them.

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. Station elevators should be operational at all times service is offered, though some regular elevator maintenance is required.

The MBTA will measure the percent of total elevator-hours in which elevators are operational.

If an elevator is out of service due to maintenance or an unplanned outage, it is considered non-operational for the duration of the outage regardless of the number of platforms it services or any redundant elevators.

This measure encompasses the elevators at rapid transit and commuter rail stations that are owned and maintained by the MBTA. Instances of long-term planned outages in which accessible shuttle alternatives are provided (typically when an elevator is being completely rebuilt) are excluded from the measure.

Vehicle Assignment (FTA C 4702.1B, IV-4.b.(2))

Vehicle assignment refers to the process by which vehicles are placed in garages and assigned to routes throughout the system. The policies used for vehicle assignment vary by mode and are governed by various operational characteristics and constraints.

Bus Vehicle Assignment

The MBTA's bus fleet consists of 540 hybrid vehicles, 367 emission-control-diesel vehicles, 175 compressed-natural-gas (CNG) vehicles, 32 diesel-electric (dual-mode) vehicles, and 5 battery-powered electric buses. Since 2019, the MBTA has acquired 259 new buses, including a combination of expansion buses and replacements for the oldest vehicles in the fleet.

In accordance with an administrative consent order issued in 2000 by the Massachusetts Department of Environmental Protection, the MBTA "insofar as possible, operates the lowest emission buses in the fleet in transit dependent, urban areas with highest usage and ridership as the buses enter the MBTA bus fleet."

Table 5-4 provides additional information on the vehicles in the bus fleet.



Table 5-4
Bus Fleet Roster

Propulsion	Active Vehicles	Year Built	Overhaul	Length (feet)	Seats
Battery	5	2019	None	60′	51
CNG Cummins ISLG	175	2016-17	None	40′	36
Diesel Series 60 500 HP (dual-mode)	24	2004-05	None	60′	47
	8	2005	None	60′	38
Diesel Caterpillar C9	61	2004-05	2013-15	40′	38
Diesel Cummins ISL	306	2006-08	None	40′	39
Hybrid	25	2010	None	60′	57
	60	2014-15	None	40′	37
	45	2016-18	None	60′	53
	156	2016-17	None	40′	36
	254	2019-20	None	40′	36

Notes: All buses in the fleet are ramp accessible.

The roster above reflects the MBTA bus fleet inventory as of November 2022.

Source: MBTA.

The MBTA's policy is to maintain an average age of eight years or less for the bus fleet. In general, each bus is assigned to one of nine MBTA bus garages and operates only on routes emanating from the garage to which it is assigned. Individual vehicles within each garage are not assigned to specific routes but circulate among routes based on operating constraints and equipment criteria. The following summarizes the guidelines used by inspectors when assigning vehicles in the current bus fleet to routes:

- **175 CNG Buses—**There are 120 of these buses assigned to the Arborway garage, and 55 assigned to the Cabot garage. They provide service on many routes in the urban core. Inspectors assign these buses daily, on a random basis, within each garage.
- **367 Diesel Buses—**The diesel buses are assigned to the suburban garages and to the Albany and Southampton garages. They are garaged at the following facilities: Albany (126), Fellsway (86), Quincy (80), and Southampton (39), and Lynn (36).

- **32 Diesel-Electric (Dual-Mode) Buses—**All of the 60-foot, articulated dual-mode vehicles are designed for operation on the Waterfront portion of the Silver Line BRT service between South Station, South Boston, Logan Airport, and Chelsea.
- **540 Hybrid Buses—**There are 239 of the 40-foot hybrid buses assigned to the Charlestown garage, 150 assigned to the Cabot garage, 75 assigned to the Lynn garage, and six assigned to the private carrier that operates Routes 712 and 713 between Orient Heights Station and Point Shirley. Seventy 60-foot, articulated hybrid vehicles are assigned to the Southampton garage and operate on the following routes: Route 28, which operates between Mattapan Station and Ruggles Station via Nubian Station; Route 39, between Forest Hills Station and Back Bay Station; Silver Line 4 (SL4), between Nubian Station and South Station; and Silver Line 5 (SL5), between Nubian Station and Downtown Crossing. Since 2019, the MBTA has acquired 254 new 40-foot hybrid buses, and these vehicles have replaced older diesel buses.
- **5 Battery-powered Electric Buses—**These vehicles are assigned to the Southampton garage and can operate on all Silver Line routes.

Light Rail Vehicle Assignment

The MBTA operates light rail vehicles on the Mattapan Line and on all four branches of the Green Line: B–Boston College, C–Cleveland Circle, D–Riverside, and E–Heath Street. All Green Line vehicles can be operated on any Green Line branch.

Since 2018, the MBTA has acquired 24 new Type 9 Green Line vehicles. These vehicles will accommodate expanded Green Line service associated with the extension of the line to Somerville and Medford.

The Mattapan Line has weight, curve, and power limitations that prevent the use of current Green Line light rail vehicles. Instead, President's Conference Committee (PCC) cars are used for that line. All of the PCC cars have undergone extensive rehabilitation, including the replacement of major structural components.

Table 5-5 lists the vehicles in the light rail fleet.

Table 5-5
Light Rail Fleet Roster

Type/Class of Vehicle	Fleet Size	Year Built	Overhaul	Builder	Length (feet)	Width (inches)	Seats
Green Line—Type 7 (1)	82	1986-88	2015–19	Kinki-Sharyo	72′	104″	46
Green Line—Type 7 (2)	14	1997	2018–19	Kinki-Sharyo	72′	104″	46
Green Line—Type 8	81	1999–2007	--	Breda	74′	104″	44
Green Line—Type 9	24	2018–20	--	CAF	74′	104″	44
Mattapan Line—"Wartime" PCC	5	1945–46	1978–83; 1999–2005; 2021–22	Pullman-Standard	46′	100″	41

Source: MBTA.

Heavy Rail Vehicle Assignment

Heavy rail vehicles are operated on three subway lines: the Blue, Orange, and Red Lines. The specific operating environment of each line prevents one line's cars from operating on another line; therefore, each line has its own dedicated fleet.

Because there are no branches on the Blue Line and there is only one type of Blue Line car, no distribution guidelines are necessary for the line. The Blue Line introduced a new replacement fleet between 2007 and 2009. Similarly, the Orange Line has no branches and a replacement of the entire Orange Line fleet is underway, so no distribution guidelines are necessary.

The Red Line has two branches (Ashmont and Braintree) and currently operates using four types of cars. There are no set distribution policies for the assignment of cars to the two Red Line branches. All four car types are put into service on both branches as available. Presently, the MBTA does not have a policy regarding the assignment of Red Line cars because the only difference between them is the number of doors (three or four). A new Red Line fleet is under construction. Delivery of new cars began in 2019 and is expected to continue through 2024. Once the new fleet is in service, all older cars are expected to be retired.

Table 5-6 lists the vehicles that are currently in the heavy rail fleet.

Table 5-6
Heavy Rail Fleet Roster

Type/Class of Vehicle	Fleet Size	Year Built	Builder	Length (feet, inches)	Width (inches)	Seats
Blue Line—No. 5	94	2007–09	Siemens	48′ 06″	111″	35
Orange Line—No. 12	48	1979–81	Hawker-Siddeley	65′	111″	58
Orange Line—No. 14	74	2018–22	CRRC	65′	111″	44-50
Red Line—No. 1	68	1969–70	Pullman-Standard	69′ 6″	122″	63
Red Line—No. 2	56	1987–89	Urban Transportation Development Corporation	69′ 9″	120″	62
Red Line—No. 3	82	1993–94	Bombardier	69′ 6″	120″	50
Red Line—No. 4	10	2019–22	CRRC	69′ 6″	120″	43-50

Source: MBTA.

Commuter Rail Vehicle Assignment

Vehicle assignments for commuter rail are developed based on specific service standards. These standards require the provision of a minimum number of seats for each scheduled trip and one functioning toilet in each trainset, the maintenance of an appropriate train length to accommodate infrastructure constraints, and the provision of modified vehicles, when necessary, for a specific operating environment. The MBTA strives to assign its vehicles as equitably as possible within the equipment and operational constraints of the system.

The MBTA's Railroad Operations runs a 401-route-mile regional rail system in the Boston metropolitan area composed of 14 lines that serve 133 stations. The existing system consists of two separate rail networks: a five-line northern system, which operates from North Station to terminals at Rockport, Newburyport, Haverhill, Lowell, and Wachusett; and a nine-line southern system, which operates from South Station to terminals at Worcester, Needham, Franklin, Wickford Junction, Stoughton, Readville, Greenbush, Middleborough, and Kingston. Trains operate in a push-pull mode, with the locomotive leading (pull mode) when departing Boston and the control car leading (push mode) when arriving in Boston.

The commuter rail coach fleet is composed of five types of coaches and three types of locomotives, which are assigned to the 14 commuter rail lines. Both coaches and locomotives have a service life of 25 years. Table 5-7 lists the vehicles in the current fleet.

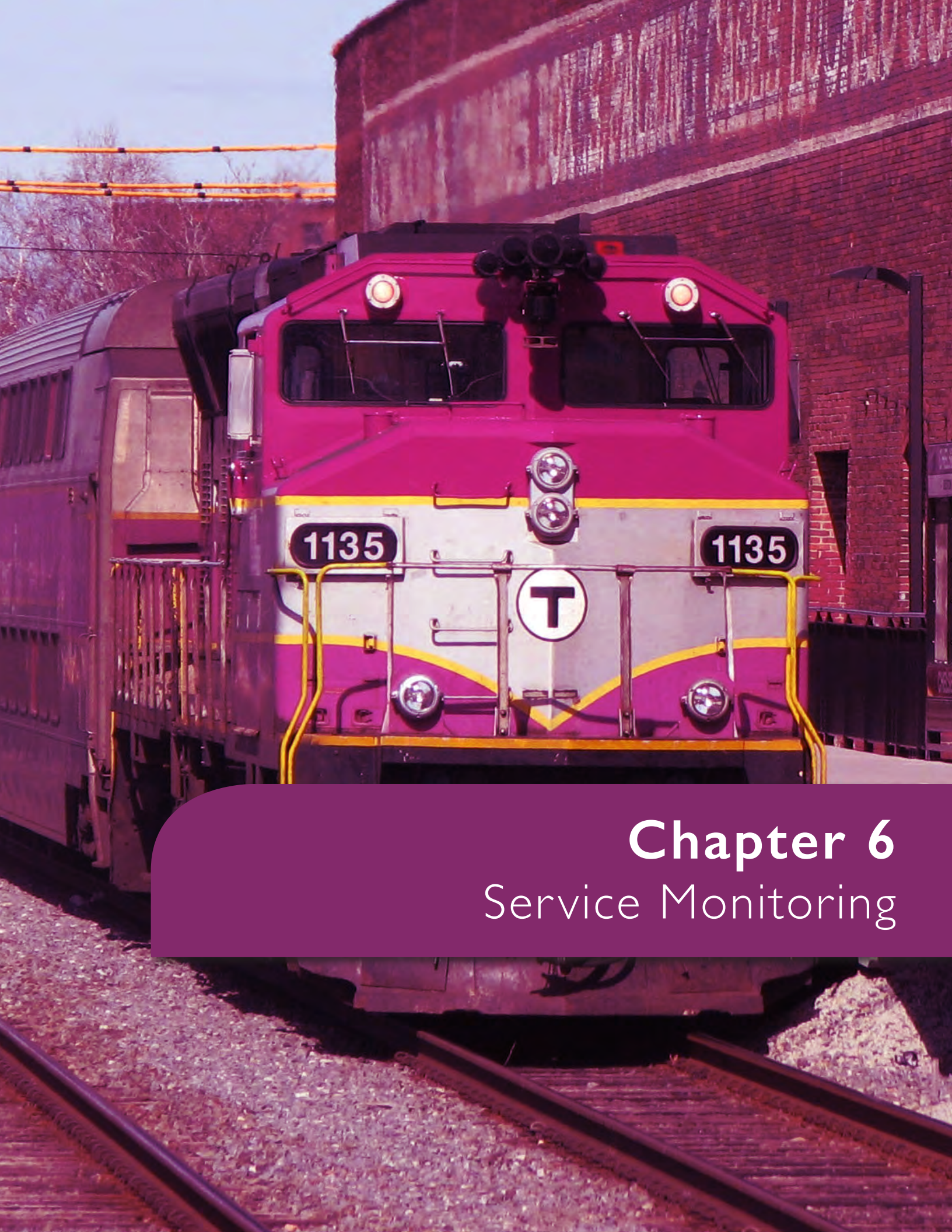
Table 5-7
Commuter Rail Fleet Roster

Manufacturer	Fleet Size	Built	Classification	Rebuilt	Seats
Pullman	33	1978–79	BTC-1C	1996	114
MBB	9	1987–88	BTC-3	-	94
MBB	6	1987–88	CTC-3	-	96
Bombardier A	40	1987	BTC-1A	-	127
Bombardier B	49	1989–90	BTC-1B	-	122
Bombardier C	51	1989–90	CTC-1B	-	122
Kawasaki	50	1990–91	BTC-4	-	185
Kawasaki	23	1990–91	CTC-4	-	175
Kawasaki	17	1997–98	BTC-4A	-	182
Kawasaki	15	2001–02	BTC-4B	-	182
Kawasaki	33	2005–06	BTC-4C	-	178
Rotem	27	2012–14	CTC-5	-	173
Rotem	46	2012–14	BTC-4D	-	179

BTC = Blind Trailer Coach. CTC = Controller Trailer Coach. MBB = Messerschmitt-Bolkow-Blohm.
Source: MBTA.

Train consists are assembled as required based on minimum seating capacity to meet the morning and evening peak-period requirements. Presently, the MBTA commuter rail contract operator is contractually required to have 133 coaches in 25 North Side trains and 232 coaches in 40 South Side trains. Most train consists generally are not dedicated to a specific line but are cycled throughout the system (either North or South Side). Every train consist must have a control coach.

All coaches in the commuter rail fleet are equipped with similar amenities, the exception being the coaches equipped with toilets; therefore, the primary variation among coaches is age. For the purpose of periodic monitoring, an assessment of compliance for vehicle assignment is completed each year based on the average age of a trainset for a specified time period.



Chapter 6
Service Monitoring

The Federal Transit Administration (FTA) requires large transit agencies to monitor the performance of their systems relative to their systemwide service standards and policies. FTA also requires each transit agency to develop a policy for determining whether disparate impacts exist based on race, color, or national origin and to apply that policy to the results of the monitoring activities. Although the FTA requires monitoring at a minimum of every three years, the Massachusetts Bay Transportation Authority (MBTA) monitors its system every year to ensure that potential problems are found and rectified in a timely fashion. The framework for the MBTA's Title VI service monitoring schedule is provided in Table 6-1.

Table 6-1
MBTA Title VI Service Monitoring Schedule

Service Indicator	Agency Responsible for Providing Data	Department Responsible for Providing Data	Planned Frequency of Compliance Assessment
Vehicle load	MBTA	Office of Performance Management and Innovation (OPMI)	Annually
Vehicle headway	MBTA	OPMI	Annually
On-time performance	MBTA	OPMI	Annually
Service availability	CTPS	Transit Analysis and Planning	Annually
Span of service	MBTA	OPMI	Annually
Platform accessibility	MBTA	OPMI	Annually
Vehicle accessibility	MBTA	OPMI	Annually
Service operated	MBTA	Service Planning	Annually
Bus shelter and bench placement	MBTA	Advertising Department and Department of System-Wide Accessibility	Biennially—odd years
Bus shelter amenities and conditions	CTPS	Transit Analysis and Planning	Biennially—odd years



Table 6-1 (cont.)

Service Indicator	Agency Responsible for Providing Data	Department Responsible for Providing Data	Planned Frequency of Compliance Assessment
Rapid transit station amenities	CTPS	Transit Analysis and Planning	Biennially—even years
Rapid transit station conditions	MBTA	Engineering and Maintenance	Biennially—even years
Commuter rail station amenities	CTPS	Transit Analysis and Planning	Biennially—even years
Commuter rail station conditions	KCS	N/A	Biennially—even years
Faregate and fare-vending machine operability	MBTA	Automated Fare Collection	Annually
Location of CharlieCard retail sales terminals	MBTA	OPMI	Annually
Escalator operability	MBTA	Engineering and Maintenance	Annually
Vehicle assignment	MBTA	Bus, Subway, and Railroad Operations	Annually

CTPS = Central Transportation Planning Staff. KCS = Keolis Commuter Services. MBTA = Massachusetts Bay Transportation Authority. N/A = Not applicable. OPMI = Office of Performance Management and Innovation.

MINORITY CLASSIFICATION

Title VI requires the MBTA to compare the level of service provided to areas with predominantly minority customers with the level of service provided to areas with predominantly nonminority customers. Consistent with FTA guidance, to make these classifications the MBTA relies on both census data and the demographic data collected in the MBTA 2022 System-Wide Passenger Survey. These data were used to classify MBTA bus routes, rapid transit lines and stations, commuter rail lines, and ferry lines as either "minority" or "nonminority." Where sufficient survey data were unavailable, population data from the United States Census was used to make these classifications.

A full report on the MBTA 2022 System-Wide Passenger Survey methodology is available at https://mbta-massdot.opendata.arcgis.com/documents/mbta-2022-system-wide-passenger-survey-technical-documentation/explore.

Minority classification of each MBTA service was based on the percentage of respondents accessing the service who were classified as minority relative to the systemwide average for all services. The percentage of MBTA customers systemwide classified as minority was determined to be 57.95 percent. Therefore, by applying the industry standard of using the systemwide average as a threshold for minority classifications, any MBTA bus route, rapid transit line or station, commuter rail line, or ferry route found to have a percentage of minority customers greater than 57.95 percent was classified as minority; otherwise, it was classified as nonminority. The analysis results contained in this chapter reflect this industry practice. Given the significant shift in passenger demographics evidenced in the MBTA's most recent (2022) survey, however, the MBTA is compelled to look more closely at this practice and is considering a more tailored approach to these classifications.

The classifications of MBTA bus routes, rapid transit lines and stations, commuter rail lines and stations, and ferry routes are provided in Appendix 6A, Tables 6A-1 through 6A-4.

DISPARATE IMPACT THRESHOLD FOR SERVICE MONITORING

The MBTA's threshold for determining a potential disparate impact in service monitoring is 80 percent. For each service standard or policy, if the ratio of minority performance to nonminority performance falls below 0.80, then that service standard or policy would be determined to pose a potential disparate impact on minority customers. This threshold is consistent with the MBTA's threshold for determining whether adverse impacts of major service changes may result in a disparate impact to minority customers. A more detailed explanation can be found in the MBTA's Service and Fare Change Equity Policy (Appendix 6B).

SERVICE MONITORING RESULTS (FTA C 4702.1B, IV-6)

The remainder of this chapter presents a summary of the results of the MBTA's monitoring program for its service standards and policies. These results were approved as part of the overall approval of the MBTA's Title VI program. (See Appendix 1A.) No service monitoring analyses were performed for ferry services because all ferry services are classified as nonminority.

Service Standards

The MBTA evaluates performance based on the following service standards: vehicle load, vehicle headway, on-time performance, service availability, span of service, platform accessibility, vehicle accessibility, and service operated. The analyses are performed by mode (bus, heavy and light rail, and commuter rail) and by service day (weekday, Saturday, and Sunday).

Table 6-2 presents a summary of the results of the MBTA's service standards monitoring program. The MBTA analyzed 38 indicators of service standards, of which 31 showed no disparate impact and seven showed a potential disparate impact. (Ten other indicators were not analyzed either due to lack of data or because rapid transit equipment is not interchangeable.) The MBTA has either already addressed or has a plan to address the seven indicators that showed a potential disparate impact. The text and tables that follow Table 6-2 present the results of the analyses for those seven indicators. Appendix 6C presents results and analysis for the service monitoring indicators that showed no disparate impact.

Table 6-2
Summary of Service Standards Monitoring Results

Indicator/Mode	Result of Disparate Impact Analysis	Page
Vehicle Load		
Bus vehicle load—weekday	No disparate impact	6C-1
Bus vehicle load—Saturday	No disparate impact	6C-2
Bus vehicle load—Sunday	No disparate impact	6C-2
Heavy and light rail vehicle load—weekday	N/A*	6C-2
Heavy and light rail vehicle load—Saturday	N/A*	6C-2
Heavy and light rail vehicle load—Sunday	N/A*	6C-2
Commuter rail vehicle load—weekday	No disparate impact	6C-3
Commuter rail vehicle load—Saturday	No disparate impact	6C-4
Commuter rail vehicle load—Sunday	No disparate impact	6C-4
Vehicle Headway		
Bus vehicle headway—weekday	No disparate impact	6C-5
Bus vehicle headway—Saturday	N/A*	6C-5
Bus vehicle headway—Sunday	N/A*	6C-5
Heavy and light rail vehicle headway—weekday	No disparate impact	6C-5
Heavy and light rail vehicle headway—Saturday	N/A*	6C-6
Heavy and light rail vehicle headway—Sunday	N/A*	6C-6
Commuter rail vehicle headway—weekday	No disparate impact	6C-6
Commuter rail vehicle headway—Saturday	N/A*	6C-7
On-Time Performance		
Bus on-time performance—weekday	Potential disparate impact	6-9
Bus on-time performance—Saturday	No disparate impact	6C-6

Table 6-2 (cont.)

Indicator/Mode	Result of Disparate Impact Analysis	Page
Bus on-time performance—Sunday	Potential disparate impact	6-10
Heavy and light rail on-time performance—weekday	No disparate impact	6C-7
Heavy and light rail on-time performance—Saturday	Potential disparate impact	6-11
Heavy and light rail on-time performance—Sunday	Potential disparate impact	6-13
Commuter rail on-time performance—weekday	No disparate impact	6C-7
Commuter rail on-time performance—Saturday	No disparate impact	6C-8
Commuter rail on-time performance—Sunday	No disparate impact	6C-8
Service Availability		
Service availability—weekday	No disparate impact	6C-9
Service availability—Saturday	No disparate impact	6C-9
Service availability—Sunday	No disparate impact	6C-10
Span of Service		
Bus span of service—weekday	No disparate impact	6C-10
Bus span of service—Saturday	No disparate impact	6C-11
Bus span of service—Sunday	No disparate impact	6C-11
Heavy and light rail span of service—weekday	No disparate impact	6C-12
Heavy and light rail span of service—Saturday	No disparate impact	6C-12
Heavy and light rail span of service—Sunday	No disparate impact	6C-12
Commuter rail span of service—weekday	No disparate impact	6C-13
Commuter rail span of service—Saturday	No disparate impact	6C-13

Table 6-2 (cont.)

Indicator/Mode	Result of Disparate Impact Analysis	Page
Platform Accessibility		
Platform accessibility—gated rapid transit stations with elevators	No disparate impact	6-14
Platform accessibility—commuter rail stations	No disparate impact	6C-15
Vehicle Accessibility		
Heavy and light rail vehicle accessibility	N/A**	6C-20
Commuter rail vehicle accessibility	N/A*	6C-20
Service Operated		
Bus service operated—weekday	No disparate impact	6C-16
Bus service operated—Saturday	Potential disparate impact	6-14
Bus service operated—Sunday	No disparate impact	6C-16
Heavy and light rail service operated—all days	Potential disparate impact	6-15
Commuter rail service operated—weekday	No disparate impact	6C-17
Commuter rail service operated—Saturday	Potential disparate impact	6-16
Commuter rail service operated—Sunday	No disparate impact	6C-18

N/A* = No data were available for these items.

N/A** = Not applicable to heavy rail lines and the Mattapan Line because the lines have dedicated equipment that is not interchangeable. Not applicable to the Green Line because all branches are classified as nonminority.

Source: CTPS.

On-Time Performance

Bus On-Time Performance—Weekday

The MBTA uses its standards for bus reliability to assess bus on-time performance. (See Appendix 5A, pages 20-22.) For each bus route, the timepoints at which a vehicle was on time were summed for all trips on that route and divided by the total number of timepoints across all trips on that route, yielding an average on-time performance for that route. The MBTA's target is for 75 percent of bus timepoints to be on time. Table 6-3 shows that on weekdays 20 of 94 minority-classified routes (21.3 percent) met the target and 23 of 55 nonminority-classified routes (41.8 percent) met the target. The ratio of minority routes that met the target to nonminority routes that met the target is 0.51. This ratio is less than 0.80, so a potential disparate impact is found.

Table 6-3
Bus On-Time Performance—Weekday

Route Classification	Number of Routes	Number of Routes Meeting the Target	Percentage of Routes Meeting the Target
Minority	94	20	21.3%
Nonminority	55	23	41.8%
Ratio of minority to nonminority			0.51
Disparate impact threshold			0.80
Result of disparate impact analysis			Potential Disparate Impact

Note: The data pertain to weekdays between July 1, 2021, and June 30, 2022.

Source: MBTA Open Data Portal.

Although a potential disparate impact is found using FTA's required method of comparing service on a route-by-route basis, a supplemental analysis can gain a broader understanding of the situation. Performing this supplemental analysis allows the MBTA to look more closely at potential disparity findings to understand with more certainty whether a corrective action is needed or if the required analysis methodology failed to consider critical details. There are many factors contributing to on-time performance, some of which are neutral factors such as roadway congestion and higher ridership in urban areas.

The supplemental analysis differs from the primary method by examining the overall percentage of all weekday timepoints on the MBTA bus system for minority and nonminority routes that were on time, rather than relying on a binary classification of 75 percent for each route. For instance, if a route has 74 percent on-time timepoints, it is classified as not on-time, even though it is quite close to the 75 percent benchmark. This supplemental method is also better able to account for the varying number of vehicle trips operated on each route, which results in giving more weight to routes with more trips rather than treating each route equally. By avoiding the binary benchmark and comparing the total number of timepoints instead of routes, the supplemental method is more effective at measuring the differences in on-time performance between minority and nonminority bus service than the primary method.

The supplemental analysis for weekday bus performance compared the overall percentage of weekday timepoints on minority routes that are on time (71.6 percent) to the overall percentage of weekday timepoints on nonminority routes that are on time (73.1 percent). The resulting ratio is 0.98, indicating that on-time performance levels are similar along minority and nonminority routes.

Bus On-Time Performance—Sunday

Table 6-4 shows that on Sundays, 27 of 67 minority-classified bus routes (40.3 percent) met the on-time performance target and 21 of 34 nonminority-classified routes (61.8 percent) met the target. The ratio of minority routes that met the target to nonminority routes that met the target is 0.65. This ratio is less than 0.80, so a potential disparate impact is found.

Table 6-4
Bus On-Time Performance—Sunday

Route Classification	Number of Routes	Number of Routes Meeting the Target	Percentage of Routes Meeting the Target
Minority	67	27	40.3%
Nonminority	34	21	61.8%
Ratio of minority to nonminority			0.65
Disparate impact threshold			0.80
Result of disparate impact analysis			Potential Disparate Impact

Note: The data pertain to Sundays between July 1, 2021, and June 30, 2022.

Source: MBTA Open Data Portal.

Although a potential disparate impact is found using FTA's required method of comparing service on a route-by-route basis, as in the analysis of weekday on-time performance, a supplemental analysis is needed. Performing this supplemental analysis allows the MBTA to look more closely at potential disparity findings to understand with more certainty whether a corrective action is needed or if the required analysis methodology failed to consider additional information. Comparing the overall percentage of Sunday timepoints on minority routes that are on time (74.8 percent) to the overall percentage of Sunday timepoints on nonminority routes that are on time (76.2 percent) results in a ratio of 0.98, indicating that on time performance levels are similar along minority and nonminority routes.

The supplemental analysis, similar to that performed for weekday service, differs from the primary method by examining the overall percentage of all Sunday timepoints on the MBTA bus system for minority and nonminority routes that were on time, rather than relying on a binary classification of 75 percent for each route. For instance, if a route has 74 percent on-time timepoints, it is classified as not on-time, even though it is quite close to the 75 percent benchmark. This supplemental method is also better able to account for the varying number of vehicle trips operated on each route which has the result of giving more weight to routes with more trips rather than treating each route equally. By avoiding the binary benchmark and comparing the total number of timepoints instead of routes, the supplemental method is more effective at measuring the differences in on-time performance between minority and nonminority bus service than the primary method.

Going forward, the MBTA will continue to work consciously to advance equity with regards to reliability and on-time performance by, for example,

- placing transit priority infrastructure to improve reliability with a focus on prioritizing high frequency routes;
- rebuilding schedules to reflect operating conditions and help ensure that MBTA Operations can operate a schedule reliably; and
- making sure there are no disparities when trips must be dropped due to a mismatch between actual service capacity and scheduled service.

Heavy and Light Rail On-Time Performance—Saturday

The MBTA uses its standards for rapid transit passenger wait times to assess on-time performance on heavy and light rail. (See Appendix 5A, page 24.) The MBTA's target is for 90 percent of rapid transit passengers to wait no longer than the scheduled headway. Table 6-5 shows that on Saturdays no minority-classified lines met the target, and one of six (16.7 percent) nonminority-classified lines met the target. With a ratio of 0.00, this figure falls below the 0.80 threshold, indicating a potential disparate impact.

Table 6-5
Heavy and Light Rail On-Time Performance—Saturday

Line Classification	Number of Lines	Number of Lines Meeting the Target	Percentage of Lines Meeting the Target
Minority	1	0	0.0%
Nonminority	6	1	16.7%
Ratio of minority to nonminority			0.00
Disparate impact threshold			0.80
Result of disparate impact analysis			Potential Disparate Impact

Note: The data pertain to Saturdays between July 1, 2021, and June 30, 2022.

Source: MBTA Open Data Portal.

The underlying cause for this potential disparate impact is that the Blue Line is the sole line meeting the on-time performance threshold, and it is classified as a nonminority line.[1] This classification results from the demographics of the Blue Line ridership, which consists of 56.2 percent minority passengers, a figure slightly below the systemwide minority percentage of 58 percent. The classifications in this analysis were calculated using 2022 passenger survey data, which resulted in a change in classification for the Blue Line from the previous submission. Consequently, the line is categorized as nonminority, contributing to the observed potential disparate impact.

To further investigate the on-time performance of rapid transit lines, a supplemental analysis was conducted, following the same methodology as the previously discussed supplemental analysis for bus on-time performance. This approach compares the overall percentage of on-time timepoints for minority and nonminority rapid transit lines, providing a more detailed examination of on-time performance by avoiding potentially misleading binary classifications of whether a route meets an on-time performance threshold.

1 The six nonminority-classified lines are the Red Line, Blue Line, and the four branches (B, C, D, and E) of the Green Line. On-time performance data was not available for the Mattapan Line, so it is not included in this analysis.

The supplemental analysis reveals that 87.9 percent of timepoints on the sole minority line are on time, while 85.1 percent of timepoints on nonminority lines are on time. Contrary to the results of the primary analysis, the supplemental analysis indicates that the minority-classified route exhibits better on-time performance than the combined performances of the nonminority routes.

Heavy and Light Rail On-Time Performance—Sunday

Table 6-6 shows that on Sundays no minority-classified lines met the target, and one of six (16.7 percent) nonminority-classified lines met the target. With a ratio of 0.00, this figure falls below the 0.80 threshold, indicating a potential disparate impact. The results of this metric are identical to the Saturday on-time performance results above in Table 6-5. Furthermore, the underlying cause for this potential disparate impact is the same.

Table 6-6
Heavy and Light Rail On-Time Performance—Sunday

Line Classification	Number of Lines	Number of Lines Meeting the Target	Percentage of Lines Meeting the Target
Minority	1	0	0.0%
Nonminority	6	1	16.7%
Ratio of minority to nonminority			0.00
Disparate impact threshold			0.80
Result of disparate impact analysis			Potential Disparate Impact

Note: The data pertain to Sundays between July 1, 2021, and June 30, 2022.

Source: MBTA Open Data Portal.

In the supplemental analysis conducted for Sunday on-time performance, the results closely mirror those observed on Saturdays. The analysis reveals that 89.1 percent of timepoints on minority routes are on time, while 86.9 percent of timepoints on nonminority routes are on time. These findings suggest that, similar to Saturday performance, the minority-classified line exhibits better on-time performance than the combined performances of the nonminority lines on Sundays.

Service Operated

Bus Service Operated—Saturday

The MBTA aims to operate all of the service it schedules, so it measures the percent of scheduled service that is actually provided on each bus route to assess the amount of bus service operated. (See Appendix 5A, page 25.) The MBTA's target for bus service operated is 99.5 percent. Table 6-7 shows that on Saturdays 32 of 81 minority-classified routes (39.5 percent) met the target and 24 of 44 nonminority-classified routes (54.5 percent) met the target. The resulting ratio is 0.72. This ratio is less than 0.80, indicating a potential disparate impact.

Table 6-7
Bus Service Operated—Saturday

Route Classification	Number of Routes	Number of Routes Meeting the Target	Percentage of Routes Meeting the Target
Minority	81	32	39.5%
Nonminority	44	24	54.5%
Ratio of minority to nonminority			0.72
Disparate impact threshold			0.80
Result of disparate impact analysis			Potential Disparate Impact

Note: The data pertain to weekdays between July 1, 2021, and June 30, 2022.

Source: MBTA service planning.

Dropped trips are disproportionately higher on certain routes because there is a tendency to drop trips on high frequency routes rather than low frequency routes in order to minimize the headway impact. The MBTA is working on right-sizing the cover list to decrease dropped trips overall and the MBTA has multiple strategies in development to ultimately lead to better service for bus customers.

Heavy and Light Rail Service Operated

The MBTA aims to operate all the service it schedules, so it measures the percent of scheduled service that is actually provided on each heavy and light rail line to assess the amount of service operated. (See Appendix 5A, page 25.) The MBTA's target is to operate 99.5 percent of scheduled service on heavy and light rail. Table 6-8 shows that the single minority-classified line did not meet the target and one of the three nonminority-classified lines met the target.[2] The ratio of minority lines that met the target to nonminority lines that met the target results in a ratio 0.00, which falls below the 0.80 threshold, indicating a potential disparate impact.

Table 6-8
Heavy and Light Rail Service Operated

Line Classification	Number of Lines	Number of Lines Meeting the Target	Percentage of Lines Meeting the Target
Minority	1	0	0.0%
Nonminority	3	1	33.3%
Ratio of minority to nonminority			0.00
Disparate impact threshold			0.80
Result of disparate impact analysis			Potential Disparate Impact

Note: The data pertain to the period between July 1, 2021, and June 30, 2022.

Source: MBTA Operations Control Center.

However, to further examine the percentage of scheduled service operated on heavy and light rail lines, a supplemental analysis was conducted, adopting a methodology akin to the on-time performance supplemental analysis. This approach focuses on aggregating the number of operated trips across all routes, rather than conducting a route-by-route analysis.

2 The one minority-classified line is the Orange Line. The remaining nonminority-classified lines are the Red Line, Blue Line, Green Line (considering all branches combined into one line), and Mattapan Line. For the analysis, the data for these lines were combined because the light rail data could not be evaluated separately.

The supplemental analysis reveals that 99.1 percent of scheduled trips on the sole minority route were operated, while 96.7 percent of scheduled trips on non-minority routes were operated. These findings suggest, contrary to the primary analysis results, that the minority-classified line demonstrates better adherence to the scheduled service than the nonminority lines.

Commuter Rail Service Operated—Saturday

The MBTA aims to operate all of the service it schedules, so it measures the percent of scheduled service that is actually provided on each commuter rail line to assess the amount of commuter rail service operated. (See Appendix 5A, page 24.) On Saturdays, 99.5 percent of scheduled commuter rail service was operated. Table 6-9 shows that the one minority-classified line, the Fairmount line, did not perform above the systemwide average, and five of 11 nonminority-classified lines (45.5 percent) performed above the systemwide average. The ratio of above-average minority lines to above-average nonminority lines is 0.00. This ratio is less than 0.80, so a potential disparate impact is found.

Table 6-9
Commuter Rail Service Operated—Saturday

Line Classification	Number of Lines	Number of Lines Performing Above Average	Percentage of Lines Performing Above Average
Minority	1	0	0%
Nonminority	11	5	45.5%
Ratio of minority to nonminority			0.00
Disparate impact threshold			0.80
Result of disparate impact analysis			Potential Disparate Impact

Note: The data pertain to Saturdays between July 1, 2021, and June 30, 2022.

Source: MBTA Open Data Portal.

Although Table 6-9 shows a potential disparate impact, 99.4 percent of Saturday service was operated on the one minority-classified line, which is only 0.1 percent less than the Saturday average of 99.5 percent. Because there is only one minority-classified line, the percentage of above-average minority lines can only be 100 percent or zero percent.

Additionally, the MBTA has worked with Keolis to institute a protocol for advance-notice train cancelations for the Fairmount line. Decisions regarding cancelations are reviewed by the MBTA Chief Railroad Office to ensure the prevention of any undue burden or impact on customers. This protocol takes into account a variety of operational factors coupled with line demographic classifications and cancelation history.

Service Policies

The MBTA evaluates the performance of its policies for distribution of transit amenities and vehicle assignment. Table 6-10 presents a summary of the results of the MBTA's service policies monitoring program. The MBTA analyzed 50 indicators of service policies; 48 showed no disparate impact and two showed a potential disparate impact. The results of the analysis for the service policy indicators that showed a potential disparate impact follow Table 6-10. Appendix 6C presents detailed results and analysis for the service monitoring indicators that showed no disparate impact.



Table 6-10
Summary of Service Policies Monitoring Results

Indicator/Mode	Result of Disparate Impact Analysis	Page
Bus Shelter and Bench Placement		
Shelter placement—stops with more than 70 ADB	No disparate impact	6C-19
Shelter placement—stops with more than 25 ADB	No disparate impact	6C-19
Bench placement—stops with more than 50 ADB and no shelter	No disparate impact	6C-20
Bench placement—all stops with no shelter	No disparate impact	6C-21
Bus Shelter —Amenities and Conditions		
Shelter amenities—seating fixtures	No disparate impact	6C-21
Shelter amenities— bus maps	No disparate impact	6C-21
Shelter amenities—streetside signs	No disparate impact	6C-21
Shelter conditions—structure	No disparate impact	6C-22
Shelter conditions—vandalism	No disparate impact	6C-22
Shelter conditions—cleanliness	No disparate impact	6C-22
Rapid Transit Station Amenities and Conditions		
Gated rapid transit lobby amenities—trash receptacles	No disparate impact	6C-23
Gated rapid transit lobby amenities—recycling receptacles	No disparate impact	6C-23
Gated rapid transit lobby amenities—seating fixtures	No disparate impact	6C-23
Gated rapid transit lobby amenities—system map	No disparate impact	6C-23
Gated rapid transit lobby amenities—neighborhood map	No disparate impact	6C-23
Gated rapid transit lobby amenities—bicycle parking	No disparate impact	6C-23

Table 6-10 (cont.)

Indicator/Mode	Result of Disparate Impact Analysis	Page
Gated rapid transit platform amenities—trash receptacles	No disparate impact	6C-23
Gated rapid transit platform amenities—recycling receptacles	No disparate impact	6C-23
Gated rapid transit platform amenities—seating fixtures	No disparate impact	6C-23
Gated rapid transit platform amenities—system map	No disparate impact	6C-23
Gated rapid transit platform amenities—line map	No disparate impact	6C-23
Bus transfer maps at gated rapid transit stations	No disparate impact	6C-24
Distribution of VMS with bus arrival information	No disparate impact	6C-24
Gated rapid transit station conditions	No disparate impact	6C-24
Surface rapid transit amenities—trash receptacles	No disparate impact	6C-25
Surface rapid transit amenities—recycling receptacles	No disparate impact	6C-25
Surface rapid transit amenities—seating fixtures	No disparate impact	6C-25
Surface rapid transit amenities—system map	No disparate impact	6C-25
Surface rapid transit amenities—line map	No disparate impact	6C-25
Surface rapid transit amenities—neighborhood map	No disparate impact	6C-25
Surface rapid transit amenities—bicycle parking	No disparate impact	6C-25
Surface rapid transit conditions	No disparate impact	6C-26
Commuter Rail Station Amenities and Conditions		
Station amenities—trash receptacles	No disparate impact	6C-26
Station amenities—seating fixtures	No disparate impact	6C-26
Station amenities—system map	No disparate impact	6C-26

Table 6-10 (cont.)

Indicator/Mode	Result of Disparate Impact Analysis	Page
Station amenities—line schedule	No disparate impact	6C-26
Station amenities—Title VI notice	No disparate impact	6C-26
Station amenities—bicycle parking	No disparate impact	6C-26
Station conditions	No disparate impact	6C-27
Variable Message Signs		
Operability of VMS at gated rapid transit stations	No disparate impact	6-13
Operability of VMS at surface rapid transit stations	No disparate impact	6-13
Operability of VMS at commuter rail stations	Potential disparate impact	6-21
Automated Fare Collection		
Faregate operability	No disparate impact	6C-28
Availability of full-service FVMs	No disparate impact	6C-28
Availability of cashless and full-service FVMs	No disparate impact	6C-29
Populations served by CharlieCard retail sales terminals	No disparate impact	6C-30
Escalator Operability		
Escalator operability	No disparate impact	6C-30
Vehicle Assignment		
Bus vehicle age	No disparate impact	6C-31
Bus air conditioning operability	No disparate impact	6C-32
Heavy and light rail vehicle age	N/A*	6C-32
Commuter rail vehicle age	Potential disparate impact	6-22

ADB = Average daily boardings. FVM = Fare vending machines. VMS = Variable-message signs.

N/A* = Not applicable to heavy rail lines and the Mattapan Line because the lines use dedicated equipment that is not interchangeable. Not applicable to the Green Line because all branches are classified as nonminority.

Source: CTPS.

Variable-Message Signs

All gated rapid transit stations and most commuter rail stations have variable-message signs that alert customers to the approach and arrival of trains. There are also variable-message signs at surface rapid transit stations on the Silver Line Chelsea route (SL3), the Silver Line Washington route (SL4/SL5), the Mattapan Line, and portions of the Green Line. Because of the lack of power and communication connections to most above-ground stations on the B, C, and E Branches of the Green Line, no variable-message signs can be installed to display next-train information at these stations in the near term. The MBTA has installed solar powered e-ink signs for real time information and continues to expand this effort. For more information on this program, visit www.mbta.com/projects/solar-powered-e-ink-signs.

When collecting station amenity data from August through December 2022, Central Transportation Planning Staff (CTPS) field staff conducted a one-time inspection of the operability of variable-message signs at each gated rapid transit station, surface rapid transit station, and commuter rail station that had variable-message signs. Table 6-11 shows that the ratios of the percentage of operating to non-operating signs at minority-classified gated and surface rapid transit stations compared to ratios at nonminority-classified gated and surface rapid transit stations are above the MBTA's disparate impact threshold of 0.80, indicating no disparate impacts for these metrics.

However, in examining the variable-message signs for the commuter rail, the analysis shows a potential disparate impact with a ratio of 0.73, falling below the 0.80 threshold. Due to sample size limitations, the 2022 survey reports commuter rail demographics by line rather than by individual stations, which has led to a reduction in the number of minority stations identified. For the analysis, therefore, the minority stations were limited to those on the Fairmount Line—the only commuter rail line classified as minority. During the inspection, CTPS observed that two stations on this line, Morton Street and Four Corners/Geneva, had malfunctioning variable-message signs. In response to this finding, the non-operational signs were repaired and are confirmed to be functioning as intended, as of the date of this report.

Table 6-11
Variable-Message Sign Operability

Station Classification	Percentage with All VMSs Operating: Gated Rapid Transit	Percentage with All VMSs Operating: Surface Rapid Transit*	Percentage with All VMSs Operating: Commuter Rail
Minority	89.5%	94.7%	71.4%
Nonminority	86.0%	96.3%	97.5%
Ratio of minority to nonminority	1.04	0.98	0.73
Disparate impact threshold	0.80	0.80	0.80
Result of disparate impact analysis	NDI	NDI	PDI

Note: Each gated rapid transit station, surface rapid transit station, and commuter rail station was inspected once between August 9 and December 14, 2022.
* Silver Line Chelsea route (SL3), Silver Line Washington route (SL4/SL5), Mattapan Line, and some Green Line stations.
NDI = No disparate impact. PDI = Potential disparate impact. VMS = Variable-message sign.

Source: CTPS.

Vehicle Assignment

Commuter Rail Vehicle Age

To assess commuter rail vehicle age on the minority-classified line and nonminority-classified lines, the MBTA compared the average age of coaches on trains run on each line to the average age of coaches on trains run systemwide. The average age of commuter rail trains run systemwide was 25.7 years. Table 6-12 shows that the average age of coaches on the single commuter rail line that is classified as minority was not below the systemwide average. Also, on seven of the 11 commuter rail lines (63.6 percent) that are classified as nonminority, the average age of coaches was below the systemwide average. The ratio of the percentage of below-average minority-classified lines to the percentage of below-average nonminority-classified lines is 0.00. This ratio is less than 0.80, so a potential disparate impact is found.

Table 6-12
Commuter Rail Vehicle Age

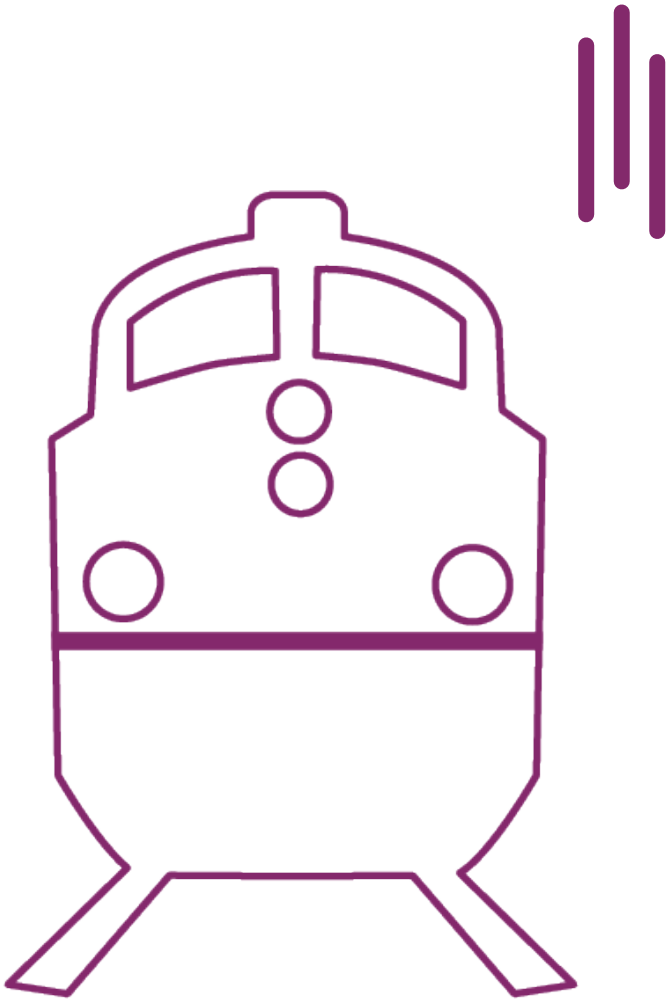
Line Classification	Number of Lines	Number of Lines with Below-Average Coach Age	Percentage of Lines with Below-Average Coach Age
Minority	1	0	0.0%
Nonminority	11	7	63.6%
Ratio of minority to nonminority			0.00
Disparate impact threshold			0.80
Result of disparate impact analysis			Potential Disparate Impact

Note: The data pertain to vehicle assignments on August 26, 2021.

Source: Keolis.

The results shown in Table 6-12 indicate a potential disparate impact in part because there is only one minority-classified line, so the percentage of above-average minority lines can only be 100 percent or zero percent. Also, the one minority line has relatively low ridership compared to other commuter rail lines, so the trainset that operates most frequently on the line is composed of lower-capacity single-level rail cars, all of which are older than the bi-level rail cars required to accommodate the ridership on many other lines.

The MBTA is ordering 80 new bi-level rail cars to increase capacity and replace the oldest single-level cars, and it has issued a request for information for new train equipment that could be used on the minority line. Approximately 22 vehicles have been delivered and are currently in pre-revenue acceptance testing. Once accepted, the new cars will replace some of the oldest single-level cars in the commuter rail fleet.





Chapter 7
Requirement to Evaluate Service and Fare Changes

As a transit provider that operates 50 or more fixed-route vehicles during peak service in an urbanized area of more than 200,000 in population, the Massachusetts Bay Transportation Authority (MBTA) is required to evaluate major service change and fare change proposals to identify possible disparate impacts on minority populations or disproportionate burdens on low-income populations in the service area. From January 2020 through December 2022, the MBTA performed the following analyses:

- A fare equity analysis for State Fiscal Year (SFY) 2021 MBTA fare changes was accepted by the MBTA Fiscal and Management Control Board (FMCB) on May 21, 2020.
- As part of its Fare Transformation initiative, the MBTA proposed a preliminary network of fare sales locations. A fare equity analysis of this proposed network was presented to the FMCB on March 8, 2021, but the board was not asked to vote on it because the network was preliminary. Once the MBTA develops a final network, it will present a revised fare equity analysis to the board for its consideration.
- A service equity analysis for the Forging Ahead service changes, which proposed changes to bus and subway services in response to reduced demand due to the COVID-19 pandemic, was accepted by the FMCB on March 8, 2021.
- A fare equity analysis for SFY 2022 MBTA fare changes was accepted by the FMCB on May 10, 2021.
- A service equity analysis for the Green Line Extension, which brings Green Line service into Somerville and Medford, was accepted by the FMCB on May 24, 2021.
- A fare equity analysis for SFY 2023 MBTA fare changes was accepted by the MBTA Board of Directors on March 24, 2022.[1]
- A fare equity analysis for free fares on bus Routes 23, 28, and 29 was accepted by the MBTA Board of Directors on July 19, 2022.
- While not technically required by the FTA, the MBTA conducted an additional Forging Ahead related analysis in August 2022, which provided an equity lookback at the way Forging Ahead changes were implemented. This was not formally accepted by the MBTA Board of Directors as there were no new changes involved.
- A service and fare equity analysis for Bus Network Redesign was accepted by the MBTA Board of Directors on December 15, 2022.

1 From 2015 to 2021 the MBTA was governed by a Fiscal and Management Control Board. Since then, it has been governed by a board of directors.

MBTA SERVICE AND FARE CHANGE EQUITY POLICY

The Federal Transit Administration (FTA) requires transit service providers to set several distinct policies that shape the evaluation process for these service and fare change equity analyses—including definitional policies and numeric threshold policies. As such, the MBTA conducts its analyses in accordance with established policies that define necessary terms, identify analysis thresholds, and detail data sources.

In 2023, the MBTA updated its DI/DB Policy, including changing the title to "Service and Fare Change Equity Policy," presented in Appendix 6B. The MBTA Board of Directors voted to accept the Service and Fare Change Equity Policy on April 19, 2023. (See Appendix 7A.) A copy of the presentation to the board is included in Appendix 7B. The Service and Fare Change Equity Policy is composed of the following:

- Major Service Change Policy, which defines those service change proposals that are considered "major" and would, therefore, require a disparate impact and disproportionate burden analysis to understand possible impacts on protected (minority and low-income) populations from the proposed service change.
- Disparate Impact Policy, which sets a threshold for identifying the potential adverse effects of major service and/or fare changes to be experienced disparately by minority populations within the service area.
- Disproportionate Burden Policy, which sets a threshold for identifying the potential adverse effects of major service and/or fare changes to be experienced disproportionately by low-income populations within the service area.
- Service Equity Policy, which describes the varying nature of the appropriate data needed and the techniques and technology used for a given service equity analysis.
- Fare Equity Policy, which describes when the MBTA will conduct a fare equity analysis and how the analysis is conducted.
- Public Participation and Board Approval, which outlines the opportunities for public comment and the requirement to present Title VI equity analyses to the Board of Directors for their consideration, awareness, and approval prior to the implementation of any proposed fare or major service change.

The MBTA's current Service and Fare Change Equity Policy is the result of a 2023 undertaking to revise the 2017 version of the policy. Key objectives for the 2023 revision process included the following:

- Renaming the document "Service and Fare Change Equity Policy" to more clearly state the policy's purpose and enhance understanding.
- Redefining "major service change" to account for network-wide effects and clarify when service changes and disruptions do not require a service equity analysis.

- Updating the definition of low-income, to be more inclusive by increasing the low-income threshold, thereby accounting for more riders with low-income in our equity analyses.
- Stating the circumstances that require a fare equity analysis and which fare changes are exempt.
- Describing the public engagement and board approval process required for any major service change or fare change.
- Replacing reference to "minority" populations with more inclusive language to reflect communities served.

The MBTA conducted an extensive public engagement effort for setting these policies, including the following activities:

- Two stakeholder workshops representing diverse interests and communities served by the MBTA (17 organizations were invited and 10 participated)
    - January 24, 2023: Nine organizations represented, 27 attendees
    - March 2, 2023: 10 organizations represented, 30 attendees
- Three public meetings:
    - March 21, 2023: Hybrid meeting held in the State Transportation Building. Chinese, Spanish, and ASL interpretation services were provided at this meeting.
    - March 22, 2023: In person meeting held at Quincy Asian Resources Inc. (QARI), in Quincy, Massachusetts. Chinese interpretation services were provided at this meeting.
    - March 28, 2023: In person meeting held at La Colaborativa in Chelsea, Massachusetts. Spanish interpretation services were provided at this meeting.
- Two additional presentations:
    - March 30, 2023: Riders' Transportation Access Group (R-TAG) Meeting
    - April 4, 2023: Capital Investment Plan (CIP) in person public meeting held at the State Transportation Building.
- MBTA webpage providing draft policy text, background information, policy update summary, process charts providing a simplified version of each equity analysis process, and online comment opportunity. All policy documents were available in English, Simplified Chinese, Haitian Creole, Portuguese, Spanish, and Vietnamese.
- Press release providing details for public comment, including the list of scheduled public meetings.
- Public meeting flyers emailed to approximately 2,500 contacts from the MBTA Master Contact List.

- Public Meeting Flyers were shared with members of the Policy Development Working Group, representing 17 organizations around the MBTA service area including:
    - A Better City
    - Alternatives for Community
    - Environment (ACE)
    - ACLU of Massachusetts
    - Allston Brighton Health Collaborative
    - Conservation Law Foundation
    - Executive Office of Health and Human Services (EOHHS)
    - Fenway CDC
    - Green Roots Chelsea
    - Lawyers for Civil Rights
    - Livable Streets
    - Mass Budget
    - Mass Community Labor United
    - Mass Senior Action Council
    - Mattapan Food and Fitness Coalition
    - Metropolitan Area Planning Council (MAPC)
    - Transit Matters
    - Transportation for Massachusetts



- For all public meetings, additional accessibility accommodations and language services were available upon request and contact information for requesting services was included in all meeting announcements.
- Meeting announcements, the availability of the draft policy, and the opportunity for public comment were published in both English and non-English newspapers including the following:
    - Chelsea Record (English and Spanish)
    - Quincy Patriot Ledger (English and Chinese)
    - Bay State Banner (English)
    - Boston Herald (English)
    - Boston Globe (English)
- A follow-up email was sent to those who expressed interest in the policy update by attending a public meeting. The email included a reminder on the various ways and deadline to submit comments, a link to the public feedback survey, and links to the dedicated webpage and events page where the presentation and hybrid public meeting recording are available.



MBTA SERVICE AND FARE EQUITY ANALYSES, 2020–22 (FTA C 4702.1B, IV-7)

The equity analyses performed by Central Transportation Planning Staff (CTPS) on behalf of the MBTA during this triennial reporting period are described below. These analyses were completed prior to the completion of the MBTA's 2023 Service and Fare Change Equity Policy. Instead, they were completed in accordance with the MBTA's 2017 Disparate Impact and Disproportionate Burden policy, which is presented in Appendix 7C.

Fare Equity Analysis: SFY 2021 MBTA Fare Change

In SFY 2021, the MBTA made the following changes to its fares and fare structure:

- Lowered CharlieTicket and cash fares to the same level as CharlieCard fares (eliminating the CharlieTicket and cash fare differential)
- Allowed step-up transfers between the Fairmount Line and the bus and rapid transit systems at South Station
- Offered reduced fares for commuter rail trips inside Zone 1A for Youth Pass holders

CTPS used an elasticity-based spreadsheet model known as the Fare Elasticity, Ridership, and Revenue Estimation Tool (FERRET) along with ad-hoc analyses to estimate the effects of the fare changes. CTPS compared the relative fare decreases between riders who are classified as minorities and all riders, and between riders who are classified as low-income and all riders. CTPS applied the MBTA's DI/DB Policy and found neither a disparate impact nor a disproportionate burden.[2]

The fare equity analysis is provided in Appendix 7D. The FMCB voted to approve the analysis on May 21, 2020, and the board's approval is provided in Appendix 7E.

Fare Equity Analysis: Fare Sales Network

As part of its Fare Transformation initiative, the MBTA proposed a new network of fare sales locations. The new network would greatly expand the number of sales terminals, but riders would no longer be able to pay cash onboard buses, light rail vehicles, or commuter rail trains. CTPS analyzed the equity implications of those proposed changes and found neither a disparate impact nor a disproportionate burden.

The fare equity analysis is provided in Appendix 7F. It was presented to the FMCB on March 8, 2021, but the board was not asked to vote on it because the network was still preliminary. Once the MBTA develops a final network, an updated fare equity analysis will be presented to the board for its consideration.

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2 Service and fare equity analyses conducted during the lookback period were performed using the 2017 Disparate Impact/Disproportionate Burden Policy. All future analyses will be performed using the 2023 Service and Fare Change Equity Policy.

Service Equity Analysis: Forging Ahead

In spring and summer 2021, the MBTA adjusted its service levels to address the significant drop in ridership that occurred due to the COVID-19 pandemic and to hold resources in reserve to maintain service for critical workers who continued to rely on transit during the pandemic. CTPS applied the MBTA's DI/DB Policy and found that implementation of the combined spring and summer 2021 Forging Ahead service changes would result in neither a disparate impact nor a disproportionate burden.

The service equity analysis is provided in Appendix 7G. The FMCB voted to approve the analysis on March 8, 2021, and the board's approval is provided in Appendix 7H.

Fare Equity Analysis: SFY 2022 MBTA Fare Change

In SFY 2022, the MBTA made three changes to its fares and fare structure:

- Lowered the Outer Express bus fares to match the Inner Express bus fares
- Provided Youth Pass riders access to discounted express bus fares
- Provided Youth Pass riders access to discounted commuter rail and ferry fares

CTPS used the FERRET model along with ad hoc analyses to estimate the effects of the fare changes. CTPS compared the relative fare decreases between riders who are classified as minorities and all riders, and between riders who are classified as low-income and all riders. CTPS applied the MBTA's DI/DB Policy and identified a disproportionate benefit to non-low-income riders. CTPS did not identify a disproportionate impact to minority riders.

The fare equity analysis is provided in Appendix 7J. The FMCB voted to approve the analysis on May 10, 2021, and the board's approval is provided in Appendix 7J.

Service Equity Analysis: Green Line Extension

The Green Line Extension adds two new branches and six new stations to the Green Line and changes the termini of Green Line trains as follows:

- B Branch: Changes the terminus from Park Street to Government Center
- C Branch: Changes the terminus from North Station to Government Center
- D Branch: Changes the terminus from Government Center to the new Union Square Station
- E Branch: Changes the terminus from Lechmere to the new Medford/Tufts Station

CTPS applied the MBTA's DI/DB Policy and found that implementation of the combined changes associated with the Green Line Extension result in disparate benefits to nonminority populations and disproportionate benefits to non-low-income populations.

The service equity analysis is provided in Appendix 7K. The FMCB voted to approve the analysis on May 24, 2021, and the board's approval is provided in Appendix 7L.

Fare Equity Analysis: SFY 2023 MBTA Fare Change

In SFY 2023, the MBTA made the following changes to its fares and fare structure:

- Made 5-day Flex Passes on commuter rail a permanent fare product
- Reduced the price of a 1-day pass from $12.75 to $11.00
- Introduced 7-day passes for reduced-fare riders for $10.00
- Introduced monthly passes for reduced-fare riders on commuter rail, express bus, and ferry services
- Made reduced price LinkPasses valid on commuter rail Zone 1A and Charlestown ferry
- Changed transfer rules to allow a second free transfer on bus and subway and one free transfer between express buses

CTPS used an agent-based ridership model based on the systemwide ridership survey accompanied by ad hoc analyses to estimate the effects of the fare changes. CTPS applied the MBTA's DI/DB Policy and found neither a disparate impact to minority riders nor a disproportionate burden to low-income riders.

The fare equity analysis is provided in Appendix 7M. The MBTA Board of Directors voted to approve the analysis on March 24, 2022, and the board's approval is provided in Appendix 7N.

Fare Equity Analysis: Free Fares on Bus Routes 23, 28, and 29

From March 1, 2022, to February 29, 2024, the MBTA is not charging fares to customers who board bus Routes 23, 28, or 29. This program is funded by the City of Boston and builds on the Route 28 free-fare pilot program that began on August 29, 2021. CTPS examined the equity impacts of eliminating fares on those routes using an agent-based ridership model based on the systemwide passenger survey. CTPS concluded that eliminating fares on Routes 23, 28, and 29 resulted in neither a disparate impact to minority riders nor a disproportionate burden to low-income riders.

The fare equity analysis is provided in Appendix 7O. The MBTA Board of Directors voted to approve the analysis on July 19, 2022, and the board's approval is provided in Appendix 7P.

Service Equity Analysis: Forging Ahead, Title VI Cumulative Lookback

In March 2021, CTPS completed a Title VI service equity analysis that evaluated the impact of the then proposed Forging Ahead service changes (Appendix 7G). The Forging Ahead proposal represented a series of significant service reductions in response to the decline of ridership due to the COVID-19 pandemic. If fully implemented, Forging Ahead would have represented an approximate 16 percent systemwide reduction in revenue vehicle hours (RVH) and route length. The original analysis concluded that these proposed service changes would not have resulted in a disparate impact to minority populations or a disproportionate burden to low-income populations. However, with an infusion of federal assistance the MBTA did not implement many of the proposed service reductions. Instead, after some initial reductions the MBTA began the process of gradually restoring service.

Since the original analysis evaluated the impact of an unrealized proposed schedule, it remained unclear whether the actual service changes would have passed a Title VI service equity analysis. This study addressed this question by conducting an abbreviated follow-up Title VI service equity analysis. This study evaluated the cumulative equity impact over an approximate two-year period from a pre-pandemic baseline in March 2020 to March 2022. This analysis revealed that the observed reduction in service hours and route length over the study period did not result in a disparate impact to minority populations or a disproportionate burden to low-income populations. The analysis is provided in Appendix 7Q.

Service and Fare Equity Analysis: Bus Network Redesign

In late 2022, the MBTA approved a plan to redesign its bus network to better align service to where current and potential riders are travelling. This plan qualified as a major service change, so CTPS performed a service equity analysis. The plan does not directly modify fares but it could affect the average fares paid by riders who might switch to higher or lower fare transit service to access the MBTA network, so CTPS also performed a fare equity analysis.

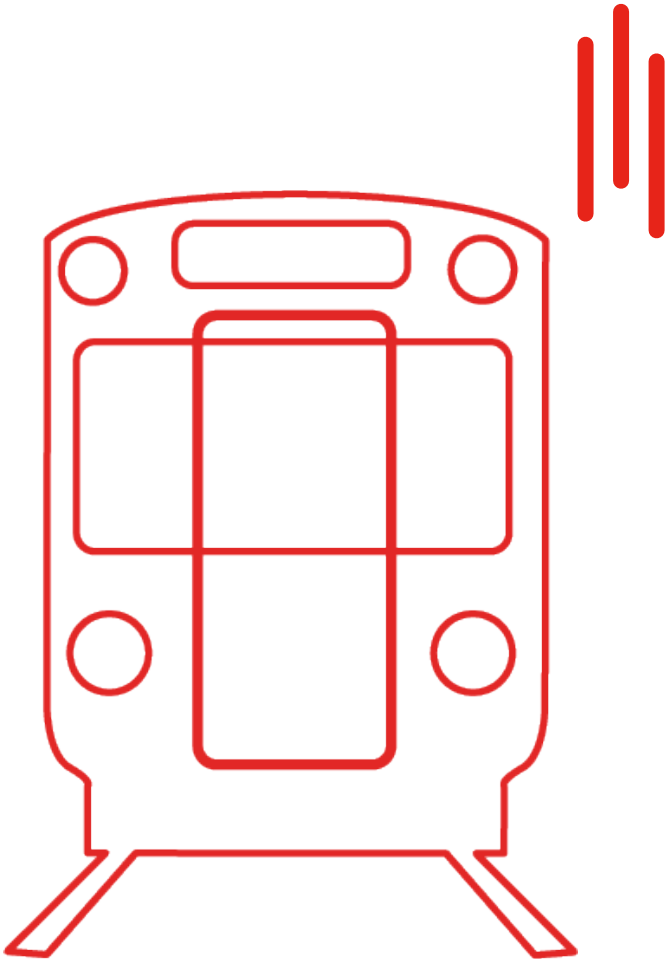
The service equity analysis indicated that the bus network redesign plan would result in no disparate impact to minority riders. Results for five out of six tests for equity for low-income riders showed no disproportionate burden or benefit, and the sixth test showed a potential disproportionate benefit to non-low-income populations. The results of the fare equity analysis showed no disparate impact to minority populations or disproportionate burden to low-income populations.

The service and fare equity analysis is provided in Appendix 7R. The MBTA Board of Directors voted to approve the analysis on December 15, 2022, and the board's approval is provided in Appendix 7S.



Appendix 1A

Approval of MBTA Title VI Program



This is a true and accurate copy of the action taken by the Board of Directors of the Massachusetts Bay Transportation Authority on May 25, 2023.

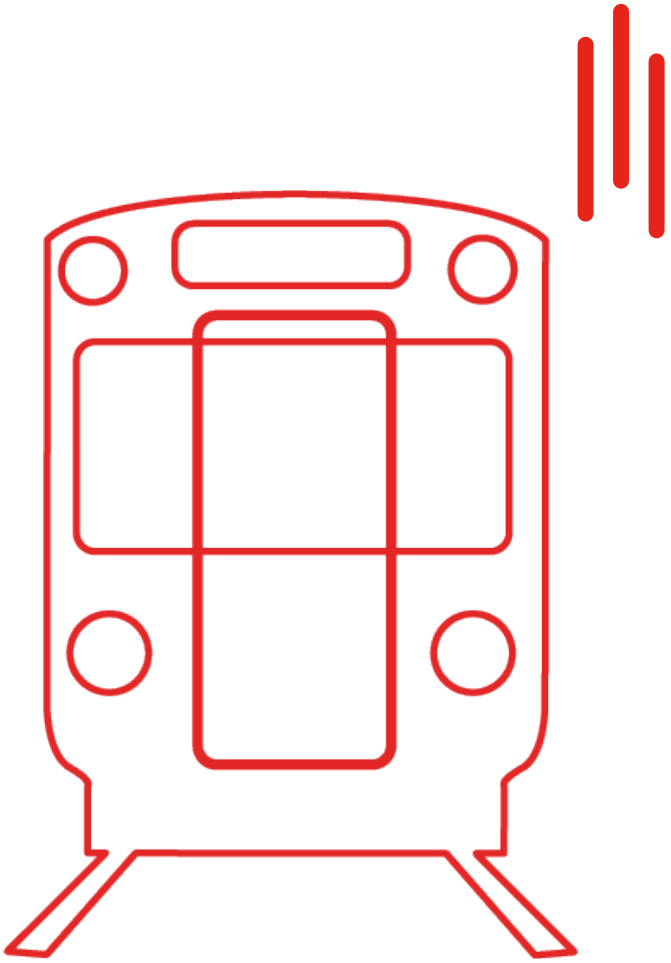
VOTED:

To approve the 2023-2026 Title VI Program.



Kevin Scanlon

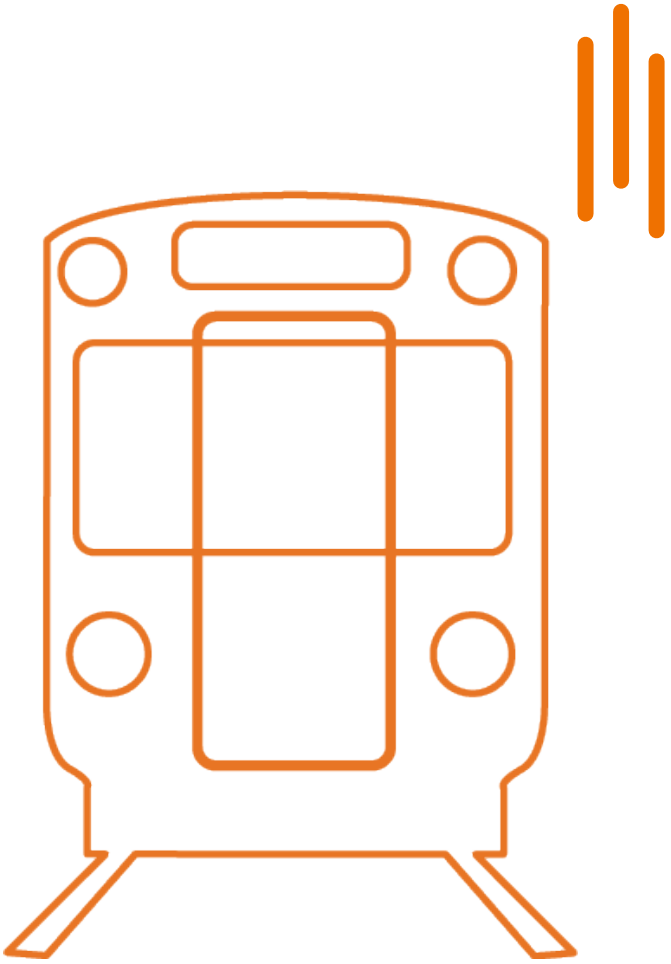
Kevin Scanlon, Chief Counsel





Appendix 2A

Title VI Nondiscrimination Notice



Civil Rights Notice to the Public

The Massachusetts Department of Transportation (MassDOT) and the Massachusetts Bay Transportation Authority (MBTA) comply with Title VI of the Civil Rights Act of 1964, which prohibits discrimination on the basis of race, color, or national origin (including limited English proficiency). Related federal and state nondiscrimination laws prohibit discrimination on the basis of age, sex, disability, and additional protected characteristics. MassDOT and the MBTA are committed to nondiscrimination in all activities.

Individuals who believe they have been discriminated against may file a complaint with MassDOT/MBTA at:

MassDOT/MBTA Title VI Specialists
Office of Diversity and Civil Rights – Title VI Unit
10 Park Plaza, Suite 3800
Boston, MA 02116
Phone: (857) 368-8580 or 7-1-1 for Relay Service
Email: MassDOT.CivilRights@state.ma.us or MBTAcivilrights@mbta.com

Complaints may also be filed directly with the United States Department of Transportation at:

U.S. Department of Transportation
Office of Civil Rights
1200 New Jersey Avenue, SE
Washington, DC 20590
Website: civilrights.justice.gov/

For additional information, language service requests, or reasonable accommodations visit mass.gov/nondiscrimination-in-transportation-program or mbta.com/titlevi

massDOT
Massachusetts Department of Transportation

Translation

English: Discrimination is prohibited at MassDOT/MBTA. If you believe discrimination has occurred you have the right to file a complaint. For translations of this notice visit mass.gov/service-details/title-vi-rights-and-protections or mbta.com/titlevi

Português: A discriminação é proibida no MassDOT/MBTA. Se você acredita que ocorreu discriminação, você tem o direito de apresentar uma queixa. Para traduções desta notificação, visite mass.gov/service-details/title-vi-rights-and-protections or mbta.com/titlevi

Español: La discriminación se prohíbe en MassDOT/MBTA. Si cree que se ha producido una discriminación, tiene derecho a presentar una queja. Para ver las traducciones de este aviso, visite mass.gov/service-details/title-vi-rights-and-protections or mbta.com/titlevi

英语：MassDOT/MBTA 禁止歧视。如果您认为遭遇了歧视，您有权提出投诉。有关本告知书的翻译，请访问 mass.gov/service-details/title-vi-rights-and-protections 或 mbta.com/titlevi

英語：MassDOT/MBTA 禁止歧視。如果您認為遭遇了歧視，您有權投訴。有關本告知書的翻譯，請訪問 mass.gov/service-details/title-vi-rights-and-protections 或 mbta.com/titlevi

Русский: Дискриминация запрещена в MassDOT/MBTA. Если вы считаете, что имела место дискриминация, вы имеете право на подачу жалобы. Для перевода этого уведомления посетите сайт mass.gov/service-details/title-vi-rights-and-protections или mbta.com/titlevi

Kreyòl Ayisyen: Yo defann fè diskriminasyon nan MassDOT/MBTA. Si ou kwè gen diskriminasyon ki fèt, ou gen dwa pote plent. Pou wè tradiksyon anons sa a, ale nan adrès mass.gov/service-details/title-vi-rights-and-protections oswaâ mbta.com/titlevi

Tiếng Việt: Phân biệt đối xử bị nghiêm cấm ở MassDOT/MBTA. Nếu quý vị tin rằng bản thân đã bị phân biệt đối xử, quý vị có quyền nộp đơn khiếu nại. Để xem các bản dịch của thông báo này, vui lòng truy cập mass.gov/service-details/title-vi-rights-and-protections hoặc mbta.com/titlevi

Français : Tout acte discriminatoire est interdit chez MassDOT/MBTA. Si vous pensez avoir été victime d'une discrimination, vous avez le droit de déposer une plainte. Pour les traductions de cet avis, rendez-vous sur le site mass.gov/service-details/title-vi-rights-and-protections ou mbta.com/titlevi

Italiano: la discriminazione è vietata nel MassDOT/MBTA. Se ritiene che si sia verificata una discriminazione, ha il diritto di presentare un reclamo. Per la traduzione di questo avviso visitare il sito mass.gov/service-details/title-vi-rights-and-protections o mbta.com/titlevi

ខ្មែរ: ហាមដាច់ខាតចំពោះការរើសអើងនៅ MassDOT/MBTA។ ប្រសិនបើអ្នកជឿថា មានការរើសអើងកើតឡើង អ្នកមានសិទ្ធិដាក់ពាក្យបណ្តឹង។ សម្រាប់សេវាបកប្រែលិខិតជូនដំណឹងនេះ សូមចូលមើលវេបសាយត៍ mass.gov/service-details/title-vi-rights-and-protections ឬ mbta.com/titlevi

العربية: يحظر التمييز في MassDOT/MBTA. إذا كنت تعتقد أنك تعرضت للتمييز، فيحق لك تقديم شكوى. لترجمات هذا الإعلام، يُرجى زيارة الموقع الإلكتروني: mass.gov/service-details/title-vi-rights-and-protections، أو الموقع: mbta.com/titlevi.

إشعار بالحقوق المدنية لعامة الناس

تمتثل كل من قسم النقل في ولاية ماساتشوستس (MassDOT) وسلطة النقل الخاصة بمدينة ماساتشوستس (MBTA) لعنوان السادس من قانون الحقوق المدنية لعام 1964 الذي يحظر التمييز على أساس العرق أو اللون أو الأصل القومي في برامجها وأنشطتها وخدماتها. وتحظر قوانين الحقوق المدنية ذات الصلة التمييز على أساس العمر والجنس والإعاقة. وتلتزم كل من قسم النقل في ولاية ماساتشوستس وسلطة النقل الخاصة بمدينة ماساتشوستس بالامتثال لجميع قوانين الحقوق المدنية الفيدرالية والولائية ذات الصلة.

يمكن لأي فرد يعتقد أنه تعرض لتمييز غير مشروع من قسم النقل في ولاية ماساتشوستس/سلطة النقل الخاصة بمدينة ماساتشوستس تقديم شكوى إلى:

أخصائيو عنوان السادس التابع لسلطة النقل الخاصة بمدينة ماساتشوستس/قسم النقل في ولاية ماساتشوستس
مكتب التنوع والحقوق المدنية – وحدة عنوان السادس
العنوان:
MassDOT/MBTA Title VI Specialists
Office of Diversity and Civil Rights – Title VI Unit
10 Park Plaza, Suite 3800
Boston, MA 02116
الهاتف: 8580-368 (857) أو 711 (خدمة التتابع)
البريد الإلكتروني: MassDOT.CivilRights@state.ma.us) أو MBTAcivilrights@mbta.com).

يمكن أيضًا تقديم الشكوى إلى وزارة النقل في الولايات المتحدة:

وزارة النقل في الولايات المتحدة
مكتب الحقوق المدنية
العنوان:
U.S. Department of Transportation
Office of Civil Rights
1200 New Jersey Avenue, SE
Washington, DC 20590
الموقع الإلكتروني: civilrights.justice.gov/

للمزيد من المعلومات، أو لطلب خدمات المساعدة، أو لطلب ترجمة تحريرية، يُرجى زيارة موقع الويب: mass.gov/nondiscrimination-in-transportation-program، أو الموقع: mbta.com/titlevi.

massDOT
Massachusetts Department of Transportation

公众民权告知书

麻州交通部（MassDOT）和麻州湾交通管理局（MBTA）遵守1964年《民权法案》第六章之规定，禁止基于种族、肤色或国籍（包括有限的英语水平）的歧视。联邦和州有一系列消除歧视的法律，禁止基于年龄、性别、残疾和其他受保护的个人因素的歧视。MassDOT和MBTA承诺在一切活动中实行无歧视政策。

如果您认为自己受到歧视请向MassDOT/MBTA提出投诉：

MassDOT/MBTA Title VI Specialists
Office of Diversity and Civil Rights – Title VI Unit
10 Park Plaza, Suite 3800
Boston, MA 02116
电话：（857）368-8580 或 7-1-1 电话中继服务
电子邮件：MassDOT.CivilRights@state.ma.us 或 MBTAcivilrights@mbta.com

相应投诉也可以直接向美国交通部提出，地址为：

U.S.Department of Transportation
Office of Civil Rights
1200 New Jersey Avenue, SE
Washington, DC 20590
网站： civilrights.justice.gov/

如需解更多信息，或需要请求语言服务或合理的特殊安置，请访问
mass.gov/nondiscrimination-in-transportation-program 或 mbta.com/titlevi

massDOT
Massachusetts Department of Transportation

公眾民權告知書

麻州交通部（MassDOT）和麻州灣交通管理局（MBTA）遵守1964年《民權法案》第六章之規定，禁止基於種族、膚色或國籍（包括有限的英語水準）的歧視。聯邦和州有一系列消除歧視的法律，禁止基於年齡、性別、殘疾和其他受保護的個人因素的歧視。MassDOT和MBTA承諾在一切活動中實行無歧視政策。

如果您認為自己受到歧視請向MassDOT/MBTA呈交投訴：

MassDOT/MBTA Title VI Specialists
Office of Diversity and Civil Rights – Title VI Unit
10 Park Plaza, Suite 3800
Boston, MA 02116
電話：（857）368-8580 或 7-1-1 電話中繼服務
電子郵件：MassDOT.CivilRights@state.ma.us 或 MBTAcivilrights@mbta.com

相應投訴也可以直接呈交美國交通部，地址為：

U.S.Department of Transportation
Office of Civil Rights
1200 New Jersey Avenue, SE
Washington, DC 20590
網站： civilrights.justice.gov/

如需解更多資訊，或需要請求語言服務或合理的特殊安置，請訪問
mass.gov/nondiscrimination-in-transportation-program 或 mbta.com/titlevi

massDOT
Massachusetts Department of Transportation

Avis relatif aux droits civils à l'attention du public

Le Massachusetts Department of Transportation (MassDOT) et le Massachusetts Bay Transportation Authority (MBTA) sont en conformité avec le Titre VI du *Civil Rights Act of 1964*, qui interdit toute discrimination sur la base de la race, de la couleur de la peau ou de l'origine nationale (y compris une maitrise limitée de l'anglais). Les lois fédérales et étatiques connexes sur la non-discrimination interdisent la discrimination sur la base de l'âge, du sexe, du handicap et d'autres caractéristiques protégées. MassDOT et MBTA s'engagent à imposer la non-discrimination dans toutes leurs activités.

Les personnes qui pensent avoir été victimes de discrimination peuvent déposer une plainte auprès de MassDOT/MBTA en contactant :

MassDOT/MBTA Title VI Specialists
Office of Diversity and Civil Rights – Title VI Unit
10 Park Plaza, Suite 3800
Boston, MA 02116 - É.-U.
Tél. : (857) 368-8580 ou 7-1-1 pour le service de relais
Courriel : MassDOT.CivilRights@state.ma.us ou MBTAcivilrights@mbta.com

Les plaintes peuvent être déposées directement auprès du Ministère des transports des États-Unis à l'adresse suivante :

U.S. Department of Transportation
Office of Civil Rights
1200 New Jersey Avenue, SE
Washington, DC 20590 - É.-U.
Site internet : civilrights.justice.gov/

Pour plus de renseignements; des demandes de service linguistique ou des accommodations raisonnables, rendez-vous sur le site mass.gov/nondiscrimination-in-transportation-program ou mbta.com/titlevi

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Massachusetts Department of Transportation

Anons pou Piblik la sou Dwa Sivik

Depatman Transpò Massachusetts la (MassDOT, ki vle di "Massachusetts Department of Transportation") ak Ajans Transpò Massachusetts Bay a (MBTA, ki vle di "Massachusetts Bay Transportation Authority") respekte Tit 6 nan Lwa sou Dwa Sivik 1964 la (Title VI of the Civil Rights Act of 1964), ki defann fè diskriminasyon kont moun poutèt ras, koulè, oswa peyi kote yon moun sòti (ansanm ak moun ki pa pale angle byen). Lwa kont diskriminasyon nan gouvènman federal ak nan Eta a defann fè diskriminasyon kont moun poutèt laj, oubyen si se gason oswa fi, oubyen kont moun andikape, ak pou lòt karakteristik pwoteje. MassDOT ak MBTA ap fè tout sa yo kapab kont diskriminasyon nan tout aktivite yo.

Si yo moun kwè yo fè diskriminasyon kont li, moun lan mèt pote plent bay MassDOT/MBTA nan adrès sa a:

MassDOT/MBTA Title VI Specialists
Office of Diversity and Civil Rights – Title VI Unit
10 Park Plaza, Suite 3800
Boston, MA 02116
Telefòn: (857) 368-8580 oswa 7-1-1 pou Sèvis Relè (moun ki pa tande byen)
Adrès elektwonnik: MassDOT.CivilRights@state.ma.us or MBTAcivilrights@mbta.com

Plent yo mèt depoze dirèk tou nan Depatman Transpò Etazini (United States Department of Transportation) nan adrès:

U.S. Department of Transportation
Office of Civil Rights
1200 New Jersey Avenue, SE
Washington, DC 20590
Sit Entènèt: civilrights.justice.gov/

Pou plis enfòmasyon, oubyen pou mande sèvis tradiksyon, oswa aranjman rezonnab, ale nan adrès mass.gov/nondiscrimination-in-transportation-program oswa mbta.com/titlevi

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Massachusetts Department of Transportation

Avviso al pubblico sui diritti civili

Il Massachusetts Department of Transportation (MassDOT) e la Massachusetts Bay Transportation Authority (MBTA) operano conformemente al Titolo VI della Legge sui Diritti Civili del 1964, che proibisce la discriminazione sulla base della razza, del colore della pelle o dell'origine nazionale (compresa la conoscenza limitata dell'inglese). Le leggi federali e statali sulla non discriminazione vietano la discriminazione per età, sesso, disabilità e altre caratteristiche protette. Il MassDOT e la MBTA si impegnano a non discriminare in tutte le attività.

Le persone che ritengono di essere state discriminate possono presentare un reclamo al MassDOT/MBTA all'indirizzo:

MassDOT/MBTA Title VI Specialists
Office of Diversity and Civil Rights – Title VI Unit
10 Park Plaza, Suite 3800
Boston, MA 02116
Telefono: (857) 368-8580 o 7-1-1 per il servizio ponte telefono
E-mail: MassDOT.CivilRights@state.ma.us o MBTAcivilrights@mbta.com

I reclami possono anche essere presentati direttamente all'United States Department of Transportation all'indirizzo:

U.S. Department of Transportation
Office of Civil Rights
1200 New Jersey Avenue, SE
Washington, DC 20590
Sito web civilrights.justice.gov/

Per ulteriori informazioni, richieste di servizi linguistici o accomodamenti ragionevoli, visitare il sito mass.gov/nondiscrimination-in-transportation-program o mbta.com/titlevi

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Massachusetts Department of Transportation

សេចក្តីជូនដំណឹងសដល់សាធារណជនអំពីសិទ្ធិពលរដ្ឋ

នាយកដ្ឋានដឹកជញ្ជូនរដ្ឋ Massachusetts (MassDOT) និងអាជ្ញាធរដឹកជញ្ជូន Massachusetts Bay (MBTA) គោរពទៅតាមមាត្រា 6 នៃច្បាប់ស្តីពីសិទ្ធិពលរដ្ឋឆ្នាំ 1964 ដែលហាមមិនឱ្យមានការរើសអើងដោយផ្អែកលើមូលហេតុជាតិសាសន៍ ពណ៌សម្បុរ ឬសញ្ជាតិ (រួមទាំងកម្រិតជំនាញភាសាអង់គ្លេស)។ ច្បាប់ស្តីពីការមិនរើសអើងរបស់សហព័ន្ធ និងរដ្ឋដែលពាក់ព័ន្ធហាមមិនឱ្យមានការរើសអើងដោយផ្អែកលើមូលហេតុអាយុ ភេទ ពិការភាព និងលក្ខណៈដែលមានការការពារបន្ថែម។ MassDOT និង MBTA ប្តេជ្ញាចិត្តមិនអនុវត្តការរើសអើងនៅក្នុងគ្រប់សកម្មភាពទាំងអស់។

បុគ្គលដែលជឿជាក់ថាខ្លួនទទួលបានទទួលរងនូវការរើសអើង អាចដាក់ពាក្យប្តឹងទៅកាន់ MassDOT/MBTA តាមរយៈ៖

MassDOT/MBTA Title VI Specialists
Office of Diversity and Civil Rights- Title VI Unit
10 Park Plaza, Suite 3800
Boston, MA 02116
ទូរសព្ទ៖ (857) 368-8580 ឬ 7-1-1 សម្រាប់សេវា Relay Service
អ៊ីមែល៖ MassDOT.CivilRights@state.ma.us ឬ MBTAcivilrights@mbta.com

បណ្តឹងអាចដាក់ដោយផ្ទាល់ទៅកាន់ក្រសួងដឹកជញ្ជូនសហរដ្ឋអាមេរិកតាមរយៈ៖

U.S. Department of Transportation
Office of Civil Rights
1200 New Jersey Avenue, SE
Washington, DC 20590
វេបសាយត៍៖ civilrights.justice.gov/

សម្រាប់ព័ត៌មានបន្ថែម សំណើសេវាបកប្រែភាសា ឬកន្លែងស្នាក់នៅសមស្រប សូមចូលមើលវេបសាយត៍៖
mass.gov/nondiscrimination-in-transportation-program ឬ mbta.com/titlevi

massDOT
Massachusetts Department of Transportation

Aviso ao Público sobre Direitos Civis

O Departamento de Transportes de Massachusetts (MassDOT) e a Autoridade de Transportes da Baía de Massachusetts (MBTA) cumprem com o Título VI da Lei de Direitos Civis de 1964, que proíbe a discriminação de raça, cor ou origem nacional (incluindo proficiência limitada em inglês). Leis federais e estaduais de não-discriminação relacionadas proíbem a discriminação de idade, sexo, deficiência e características adicionais protegidas. O MassDOT e a MBTA estão comprometidos com a não-discriminação em todas as atividades.

Indivíduos que acreditam ter sido discriminados podem apresentar uma reclamação junto ao MassDOT/MBTA em:

MassDOT/MBTA Title VI Specialists
Office of Diversity and Civil Rights – Title VI Unit
10 Park Plaza, Suite 3800
Boston, MA 02116
Fone: (857) 368-8580 ou 7-1-1 para o Serviço de Relay
E-mail: MassDOT.CivilRights@state.ma.us ou MBTAcivilrights@mbta.com

Reclamações também podem ser apresentadas diretamente no Departamento de Transportes dos Estados Unidos:

U.S. Department of Transportation
Office of Civil Rights
1200 New Jersey Avenue, SE
Washington, DC 20590
Site: civilrights.justice.gov/

Para informações adicionais, solicitações de serviços linguísticos ou acomodações razoáveis, visite mass.gov/nondiscrimination-in-transportation-program ou mbta.com/titlevi

massDOT
Massachusetts Department of Transportation

Уведомление о гражданских правах для общественности

Департамент транспорта Массачусетса (MassDOT) и Управление транспорта Массачусетского залива (MBTA) соблюдают Титул VI Закона о гражданских правах 1964 года, который запрещает дискриминацию по признаку расы, цвета кожи или национального происхождения (включая ограниченное владение английским языком). Связанные с этим федеральные законы и законы штата о недискриминации запрещают дискриминацию по признаку возраста, пола, инвалидности и дополнительных защищенных характеристик. MassDOT и MBTA обязуются не допускать дискриминации во всех сферах деятельности.

Лица, считающие, что они подверглись дискриминации, могут подать жалобу в MassDOT/MBTA по адресу:

MassDOT/MBTA Title VI Specialists
Office of Diversity and Civil Rights – Title VI Unit
10 Park Plaza, Suite 3800
Boston, MA 02116
Телефон: (857) 368-8580 или 7-1-1 для службы ретрансляции
Электронная почта: MassDOT.CivilRights@state.ma.us или MBTAcivilrights@mbta.com

Жалобы также можно подать непосредственно в Министерство транспорта США по адресу:

U.S. Department of Transportation
Office of Civil Rights
1200 New Jersey Avenue, SE
Washington, DC 20590
Вебсайт: civilrights.justice.gov/

Для получения дополнительной информации, запросов на переводческие услуги или специализированной поддержки посетите веб-сайт mass.gov/nondiscrimination-in-transportation-program или mbta.com/titlevi.

massDOT
Massachusetts Department of Transportation

Aviso al público sobre los derechos civiles

El Massachusetts Department of Transportation [Departamento de Transporte de Massachusetts] (MassDOT) y el Massachusetts Bay Transportation Authority [Autoridad de Transporte de la Bahía de Massachusetts] (MBTA) cumplen con el Título VI de la Ley de Derechos Civiles de 1964, que prohíbe la discriminación por motivos de raza, color o nacionalidad (incluido el dominio limitado del inglés). Las leyes federales y estatales de no discriminación prohíben la discriminación por motivos de edad, sexo, discapacidad y otras características protegidas. MassDOT y MBTA están comprometidos con la no discriminación en todas sus actividades.

Las personas que crean haber sido discriminadas pueden presentar una queja ante MassDOT/MBTA en

MassDOT/MBTA Title VI Specialists
Office of Diversity and Civil Rights – Title VI Unit
10 Park Plaza, Suite 3800
Boston, MA 02116
Teléfono: (857) 368-8580 o 7-1-1 para servicios de retrasmisión
Correo electrónico: MassDOT.CivilRights@state.ma.us or MBTAcivilrights@mbta.com

Las quejas también pueden presentarse directamente ante el United States Department of Transportation [Departamento de transporte de los EE. UU.] en:

U.S. Department of Transportation
Office of Civil Rights
1200 New Jersey Avenue, SE
Washington, DC 20590
Sitio web: civilrights.justice.gov/

Para obtener más información, solicitar servicios lingüísticos o realizar acomodaciones viables, visite mass.gov/nondiscrimination-in-transportation-program or mbta.com/titlevi

massDOT
Massachusetts Department of Transportation

Thông báo về Dân Quyền đến Công chúng

Sở Giao thông Vận tải Massachusetts (MassDOT) và Cơ quan Giao thông Vận tải Vịnh Massachusetts (MBTA) tuân thủ Tiêu Đề VI của Đạo luật Dân Quyền năm 1964, nghiêm cấm phân biệt đối xử dựa trên chủng tộc, màu da, hoặc nguồn gốc quốc gia (bao gồm trình độ Tiếng Anh hạn chế). Các luật không phân biệt đối xử có liên quan của liên bang và tiểu bang nghiêm cấm phân biệt đối xử dựa trên tuổi tác, giới tính, khuyết tật, và các đặc trưng được bảo vệ khác. MassDOT và MBTA cam kết không phân biệt đối xử trong tất cả các hoạt động.

Những cá nhân tin rằng mình đã bị phân biệt đối xử có thể nộp đơn khiếu nại với MassDOT/MBTA qua:

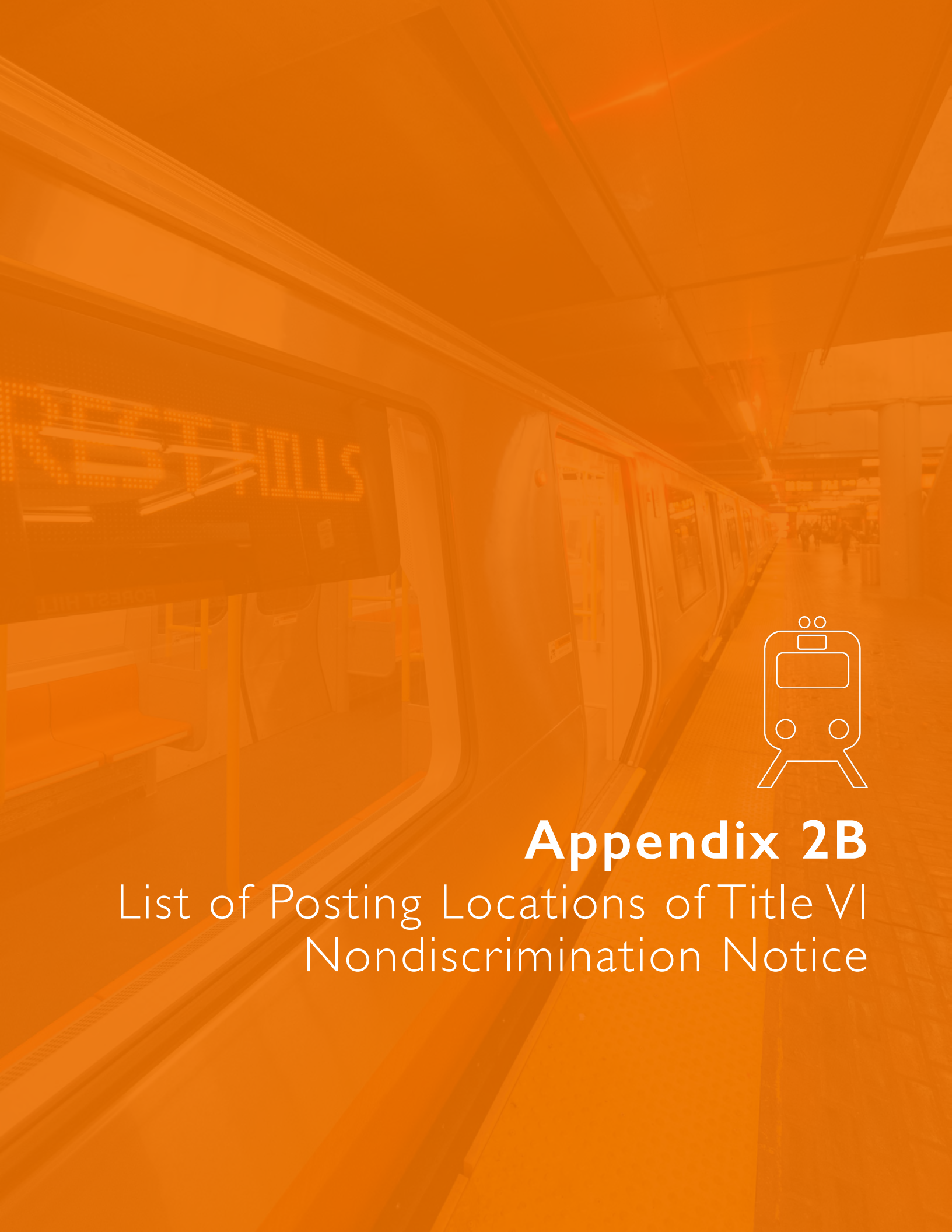
MassDOT/MBTA Title VI Specialists
Office of Diversity and Civil Rights – Title VI Unit
10 Park Plaza, Suite 3800
Boston, MA 02116
Điện thoại: (857) 368-8580 hoặc 7-1-1 đối với Dịch vụ Chuyển tiếp
Email: MassDOT.CivilRights@state.ma.us hoặc MBTAcivilrights@mbta.com

Quý vị cũng có thể nộp đơn khiếu nại trực tiếp cho Bộ Giao thông Vận tải Hoa Kỳ tại:

U.S. Department of Transportation
Office of Civil Rights
1200 New Jersey Avenue, SE
Washington, DC 20590
Trang web: civilrights.justice.gov/

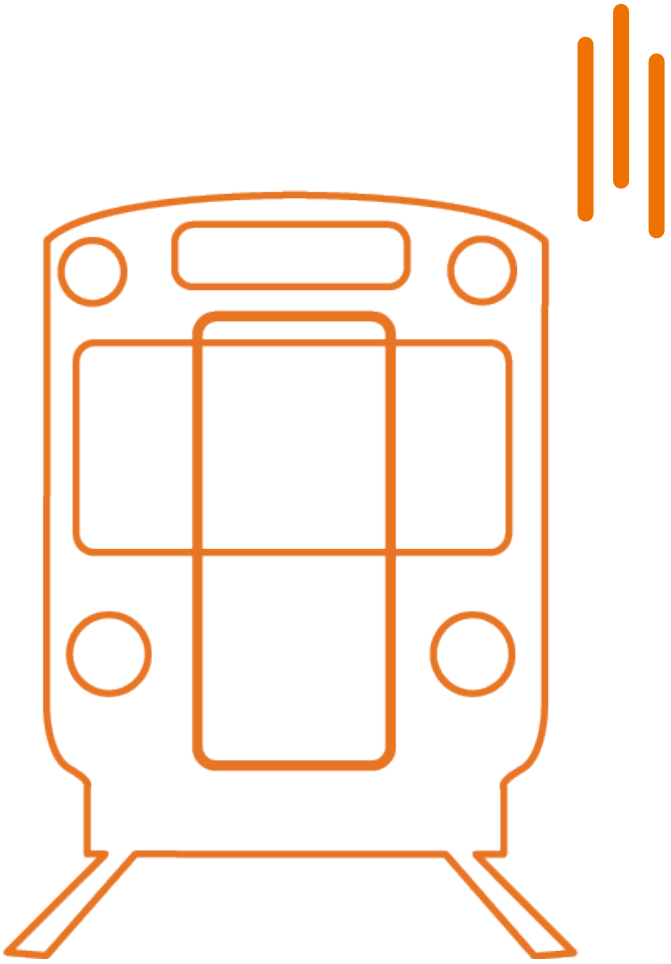
Để biết thêm thông tin chi tiết, yêu cầu dịch vụ hỗ trợ ngôn ngữ, hoặc các hỗ trợ hợp lý, vui lòng truy cập mass.gov/nondiscrimination-in-transportation-program hoặc mbta.com/titlevi

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Appendix 2B

List of Posting Locations of Title VI Nondiscrimination Notice



	Number of Notices
Red Line	
Alewife	2
Davis	2
Porter	2
Harvard	4
Central	3
Kendall/MIT	2
Charles/MGH	1
Downtown Crossing	1
South Station	2
Broadway	1
Andrew	1
JFK/UMass	1
Savin Hill	1
Fields Corner	1
Shawmut	2
Ashmont	2
North Quincy	2
Wollaston	1
Quincy Center	1
Quincy Adams	1
Braintree	2

Orange Line	
Oak Grove	1
Malden Center	1
Wellington	1
Assembly	2
Sullivan Square	1
Community College	1
North Station	3
Haymarket	2
State Street	3
Downtown Crossing	4
Chinatown	1
Tufts Medical Center	2
Back Bay	2
Massachusetts Avenue	1
Ruggles	4
Roxbury Crossing	1
Jackson Square	1
Stony Brook	2
Green Street	2
Forest Hills	3

Blue Line	
Wonderland	2
Revere Beach	1
Beachmont	2
Suffolk Downs	2
Orient Heights	2
Wood Island	2
Airport	2
Maverick	2
Aquarium	2
State Street	2
Government Center	1
Bowdoin	1

Green Line	
Medford/Tufts	2
Ball Square	2
Magoun Square	2
Gilman Square	2
East Somerville	2
Union Square	2
Lechmere	2
Science Park/West End	3
Haymarket	2
Government Center	1
Park Street	5
Boylston	2
Arlington	1
Copley	4
Hynes Convention Center	1
Kenmore	2
Prudential	1
Symphony	2
Northeastern University	2
Museum of Fine Arts	2
Longwood Medical Area	2
Brigham Circle	2
Fenwood Road	1
Mission Park	1
Back of the Hill	2
Heath	1
Longwood	1
Brookline Village	2
Brookline Hills	2

Reservoir	1
Riverside	1
Hawes Street	1
Kent Street	2
Saint Paul Street	2
Coolidge Corner	2
Summit Avenue	1
Brandon Hall	1
Fairbanks Street	1
Tappan Street	1
Dean Road	1
Englewood Avenue	1
Cleveland Circle	1
Amory Street	2
Babcock Street	2
Packards Corner	1
Griggs Street	1
Allston Street	1
Warren Street	1
Boston College	2

Silver Line	
South Station	3
World Trade Center	4
Silver Line Way	2
Drydock	1
Harbor Street	1
Tide Street	2
Design Center	1
Eastern Avenue	2
Box District	2
Bellingham Square	2
Chelsea	2
Herald Street	2
East Berkeley Street	2
Union Park Street	2
Newton Street	2
Worcester Square	1
Massachusetts Avenue	2
Lenox Street	2
Melnea Cass Boulevard	2
Nubian	1

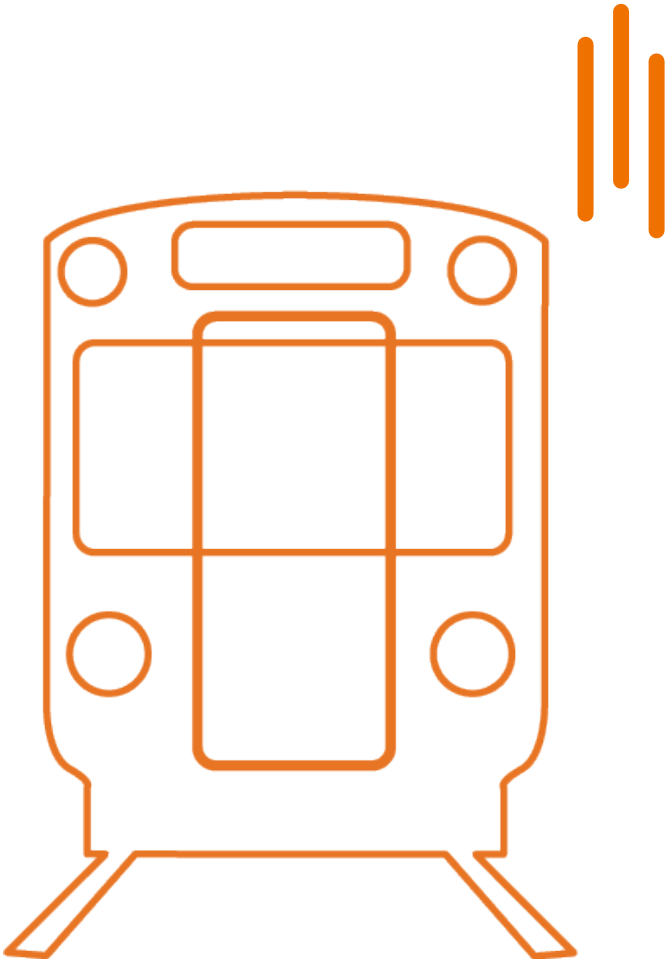
Mattapan Line	
Ashmont	1

Cedar Grove	2
Butler	2
Milton	2
Central Avenue	2
Valley Road	2
Capen Street	2
Mattapan	3



Appendix 2C

Title VI Complaint Form



Discrimination Complaint Form

Please provide the following information in order for us to process your complaint. This form is available in alternate formats and multiple languages. Should you require these services or any other assistance in completing this form, please let us know.

Name:_____
_____

Address:_____
_____

Telephone Numbers:
(Home)_____(Work)_____(Cell)_____

Email
Address:_____
_

Please indicate the nature of the alleged discrimination:

Categories protected under *Title VI of the Civil Rights Act of 1964*:

☐ Race ☐ Color ☐ National Origin (including limited English Proficiency)

Additional categories protected under related Federal and/or State laws/orders:

☐ Disability ☐ Age ☐ Sex ☐ Sexual Orientation ☐ Religion ☐ Ancestry

☐ Gender ☐ Ethnicity ☐ Gender Identity ☐ Gender Expression ☐ Creed ☐ Veteran's Status ☐ Background ☐ Low Income

Who do you allege was the victim of discrimination?

☐ You ☐ A Third Party Individual ☐ A Class of Persons

Name of individual and/or organization you allege is discriminating:

_____
_____

Do you consent to the investigator sharing your name and other personal information with other parties to this matter when doing so will assist in investigating and resolving your complaint?

☐ Yes ☐ No

Please describe your complaint. You should include specific details such as names, dates, times, witnesses, and any other information that would assist us in our investigation of your allegations. Please include any other documentation that is relevant to this complaint. You may attach additional pages to explain your complaint.

_____
_____
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___

Have you filed this complaint with any other agency (Federal, State, or Local)?

☐ Yes ☐ No

If yes, please identify:_____

Have you filed a lawsuit regarding this complaint?

☐ Yes ☐ No

If yes, please provide a copy of the complaint.

Signature: _____
Date:_____

Mail to: Title VI Coordinator, MBTA Office of Diversity and Civil Rights, Suite 3800, 10 Park Plaza, Boston, MA 02116

or,

Email to: MBTACivilRights@mbta.com

Maura Healey, Governor
Kimberley Driscoll, Lieutenant Governor
Gina Fiandaca, Secretary & CEO
Phillip Eng, General Manager & CEO

massDOT
Massachusetts Department of Transportation

نموذج شكوى حول وقوع حالة تمييز

يُرجى توفير المعلومات التالية لكي نتعامل مع الشكوى التي تقدمتم بها. يتوفر هذا النموذج بأشكال بديلة وبلغات متعددة. إذا رغبتم بهذه الخدمات أو أي مساعدة أخرى لتعبئة هذا النموذج، يُرجى إبلاغنا.

الاسم:
_____

العنوان:
_____

أرقام الهواتف: (المنزل) _____ (العمل) _____ (الجوال)
_____

البريد الالكتروني:
_____

يُرجى الاشارة إلى طبيعة التمييز الذي تدّعونه:

الفئات التي يحميها القسم السادس من قانون حقوق الانسان لعام 1964:

☐ العرق ☐ اللون ☐ الأصل الوطني أو القومي (بما في ذلك الكفاءة المحدودة في اللغة الانجليزية)

الفئات الاضافية التي تحميها القوانين/ الاوامر الفيدرالية و/ أو الخاصة بالولاية ذات الصلة:

☐ الإعاقات ☐ العمر ☐ الجنس ☐ التوجه الجنسي ☐ الدين ☐ سُلالة المرء

☐ النوع ☐ الاثنية ☐ هوية النوع ☐ التعبير عن النوع

☐ العقيدة ☐ الوضع كمحارب قديم ☐ الخلفية ☐ ذوي الدخل المنخفض

من هو الشخص الذي تدّعون بأنه ضحية عمل تمييزي؟

☐ أنت ☐ فرد آخر أو طرف ثالث ☐ مجموعة أفراد

اسم الفرد و/ أو المنظمة التي تدعون بأنها تُمارس التمييز؟

_____

هل توافقون على أن يقوم المحقق بمشاركة اسمكم ومعلوماتكم الشخصية الأخرى مع أطراف أخرى متعلقة بهذا الموضوع إذا كانت هذه المشاركة ستساعد في عملية التحقيق وإيجاد حل لشكواكم؟

☐ نعم ☐ لا

يُرجى وصف الشكوى الخاصة بكم. يجب ان تذكروا تفاصيل مُحددة مثل اسماء وتواريخ وأوقات وشهود وأي معلومات اخرى من شأنها ان تساعدنا في التحقيق الذي سوف نجريه في ادعاءاتكم. ويُرجى ذكر أي وثائق اخرى لها علاقة بهذه الشكوى. يجوز لكم ان تُرفقوا صفحات اضافية لتوضيح شكواكم.

_____
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هل قدمت هذه الشكوى لدى أي هيئة أخرى (فيدرالية، تابعة لولاية، أو محلية)؟

☐ نعم ☐ لا

إذا كانت الاجابة نعم، يُرجى تحديد الجهة:

_____

هل قُمتم برفع دعوى بخصوص هذه الشكوى؟

☐ نعم ☐ لا

إذا كانت الاجابة نعم، يُرجى تزويدنا بنسخة من الشكوى.

التوقيع: _____ التاريخ: _____

يُرجى إرسال الشكوى إلى العنوان التالي:

Title VI Specialist, MBTA Office of Diversity and Civil Rights, Suite 3800,
10 Park Plaza, Boston, MA 02116

يُرجى ارسال الشكوى إلى البريد الالكتروني: MBTACivilRights@mbta.com

Maura Healey, Governor
Kimberley Driscoll, Lieutenant Governor
Gina Fiandaca, Secretary & CEO
Phillip Eng, General Manager & CEO

massDOT
Massachusetts Department of Transportation

歧视投诉表

请提供以下信息以便我们处理您的投诉。本表有特殊版式以及多语种版本可供选择。如您需要此类版本或其它任何协助以填写投诉信息，请联系我们。

姓名：_____

地址：_____

电话号码：（家）_____（工作）_____（手机）_____

电子邮件地址：_____

请说明投诉歧视的性质：

*1964年颁发的民权法案第六章*保护的类别：

☐种族 ☐肤色 ☐国籍（包括有限的英文水平）

相关的联邦和/或州法律/条例保护的其它类别：

☐残障 ☐年龄 ☐性别 ☐性取向 ☐宗教 ☐祖籍 ☐低收入人群

☐社会性别 ☐族群 ☐性别认同 ☐性别表达 ☐教义 ☐退伍军人身份

☐背景

您投诉的歧视受害者是谁？

☐**本人** ☐第三方个人 ☐一个类别的人士

您投诉的歧视的个人和/或组织的姓名或名称：

_____
_____

您同意让调查人员同其他相关方共享您的姓名和其它个人信息以协助调查并解决投诉吗？

☐是　☐否

请描述您的投诉。您在描述中应提供细节信息，如姓名、日期、时刻、证人以及其它任何有助于我们调查您所投诉的信息。请提供任何其它与本投诉相关的证明材料。您可另页附上您对投诉的解释。

_____
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您向其它机构（联邦、州或当地机构）提交过本投诉吗？

☐是　☐否

如投诉过，请说明：

_____

您对本投诉提起过诉讼吗？

☐是　☐否

如果提起过诉讼，请提交一份诉讼副本。

签名：_____ 日期：
_____

邮寄地址： Title VI Specialist, MBTA Office of Diversity and Civil Rights, Suite 3800, 10 Park Plaza, Boston, MA 02116

电子邮件： MBTACivilRights@mbta.com

歧視投訴表

請提供以下信息以便我們處理您的投訴。本文檔具有特殊版式以及多個語種版本供選用。如您需要此類版本或其它任何協助以報告投訴，請聯系我們。

姓名：_____

地址：_____

電話號碼：（家）_____（工作）_____（手機）____

電子郵件地址：____

請說明投訴歧視的性質：

*1964年頒發的民權法案第六章*保護的類別：

☐種族　☐膚色　☐國籍（包括有限的英文水平）

相關的聯邦和/或州法律/條例保護的其它類別：

☐殘障 ☐年齡 ☐性別 ☐性取向 ☐宗教 ☐祖籍 ☐低收入群體

☐社會性別 ☐族群 ☐性別認同 ☐性別表達 ☐教義 ☐退伍軍人身份 ☐背景

您投訴的歧視受害者是誰？

☐ 本人　☐第三方個人　☐ 一個類別的人士

您投訴的歧視的個人和/或組織的姓名或名稱：

_____

您同意讓調查人員同其他相關方共享您的姓名和其它個人信息以協助調查並解決投訴嗎？

☐是　☐否

請描述您的投訴。您在描述中應提供具體細節，如姓名、日期、時刻、證人以及其它任何有助於我們調查您本次投訴的信息。請提供任何其它與本投訴相關的證明檔案。您可另頁附上您對投訴的解釋。

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您向其它機構（聯邦、州或當地機構）提交過本投訴嗎？

☐是　☐否

如投訴過，請說明：_____

您對本投訴提起過訴訟嗎？

☐是　☐否

如果提起過訴訟，請提交一份訴訟副本。

簽名：_____ 日期：_____

郵寄地址：Title VI Specialist, MBTA Office of Diversity and Civil Rights, Suite 3800, 10 Park Plaza, Boston, MA 02116

電子郵件地址：MBTACivilRights@mbta.com

Formulaire de plainte pour discrimination

Veuillez fournir les informations suivantes afin que nous puissions considérer votre plainte. Ce formulaire est disponible dans d'autres formats et en plusieurs langues. Si vous avez besoin de ces services ou de toute autre assistance pour remplir ce formulaire, merci de nous le faire savoir.

Nom :_____

Adresse :_____

Numéro de téléphone : (Domicile)_____ (Travail)_____ (Portable)____

Courriel :_____

Veuillez indiquer la nature de la discrimination alléguée :

Catégories couvertes en vertu du *titre VI de la loi sur les droits civils (Civil Rights Act) de 1964* :

☐ Race ☐ Couleur de peau

☐ Nationalité d'origine (Inclus connaissance limitée de l'anglais)

Catégories supplémentaires couvertes en vertu des lois/ordonnances fédérales et/ou des États :

☐ Handicap ☐ Age ☐ Sexe ☐ Orientation sexuelle ☐ Religion ☐ Filiation

☐ Genre ☐ Ethnicité ☐ Identité de genre ☐ Expression sexuelle

☐ Croyance ☐ Statut d'ancien combattant ☐ Antécédent ☐ Faibles revenus

Qui, d'après vous, serait victime de discrimination?

☐ Vous ☐ Un tiers ☐ Un ensemble de personnes

Nom de la personne et/ou de l'organisation qui, d'après vous, exercerait la discrimination :

_____
_____

Consentez-vous que l'enquêteur communique votre nom et informations personnelles à d'autres parties à ce sujet, sachant que votre accord assistera dans l'examen des faits et la décision de votre plainte?

☐ Oui ☐ Non

Veuillez décrire la discrimination alléguée. Vous devez inclure des détails précis comme des noms, des dates, des rendez-vous, des témoins ainsi que toute autre information qui pourrait nous aider dans l'enquête menée au sujet de vos allégations. Incluez toute autre documentation que vous jugez pertinente pour votre plainte. Vous pouvez attacher des pages supplémentaires pour expliquer votre plainte.

_____
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La plainte a-t-elle été déposée auprès d'un autre organisme ou d'un tribunal (fédéral, d'état ou local)?

☐ Oui ☐ Non

Si oui, nom complet de l'organisme :_____

Avez-vous engagé une action en justice à propos de cette plainte?

☐ Oui ☐ Non

Si oui, veuillez fournir une copie de la plainte.

Signature : _____ Date :_____

Poste : Title VI Specialist, MBTA Office of Diversity and Civil Rights, Suite 3800, 10 Park Plaza, Boston, MA 02116

Courriel : MBTACivilRights@mbta.com

Maura Healey, Governor
Kimberley Driscoll, Lieutenant Governor
Gina Fiandaca, Secretary & CEO
Phillip Eng, General Manager & CEO

massDOT
Massachusetts Department of Transportation

Fòmilè pou Pote Plent pou Diskriminasyon

Tanpri, ekri enfòmasyon yo mande la yo,pou ede nou travay sou plent ou pote a. Ou ka jwenn fòmilè sa a nan lòt fòma, ak nan plizyè lang. Si ou bezwen li nan lòt fòma oubyen lòt lang, oubyen si ou vle mande lòt kalite asistans pou reponn kesyon nan fòmilè sa a, tanpri fè nou konnen.

Non ou: _____

Adrès: _____

Nimewo telefòn: (Lakay ou) _____ (Nan Travay ou) _____ (Tel. Selilè) _____

Adrès elektwonnik:_____

Tanpri, ekri pi ba la a pou ki kalite diskriminasyon w ap pote plent:

Kategori ki pwoteje dapre *Tit 6 nan Lwa sou Dwa Sivik 1964 la*:

☐ Ras ☐ Koulè ☐ Nasyonnalite (oubyen moun ki pa konn pale angle byen)

Lòt kategori ki pwoteje dapre lwa/òdonnans Eta a oswa gouvènman federal la:

☐ Andikap ☐ Laj ☐ Gason oubyen Fi ☐ Oryantasyon seksyèl ☐ Relijyon ☐ Zansèt

☐ Gason ak Fanm ☐ Gwoup Etnik ☐ Idantite gason oswa fanm ☐

Deklarasyon idantite Gason oswa Fanm ☐ Kwayans ☐ Kondisyon Veteran

☐ Antesedan

☐ Touche Ti Salè

Ki moun ou vle di ki viktim diskriminasyon an?

☐ Oumenm ☐ Yon Lòt Moun ☐ Yon Gwoup Moun

Di non moun ak/oswa òganizasyon ou kwè ki fè diskriminasyon an:

_____
_____

Èske ou dakò pou moun k ap mennen ankèt la bay lòt moun ki fè pati nan ka a, non ou ak lòt enfòmasyon pèsonnèl sou ou, si sa kapab ede nan ankèt sou plent ou fè a, oswa rezoud pwoblèm lan?

☐ Wi ☐ Non

Tanpri, esplike plent ou vle fè a. Ou dwe mete detay ki gen presizyon, tankou non moun, dat, lè, temwen, ak nenpòt lòt enfòmasyon ki ka ede nou nan ankèt sou sa ou rapòte a. Tanpri, mete tout lòt dokimantasyon ki anrapò avèk plent lan. Ou mèt ajoute lòt paj, si ou bezwen plis plas pou esplike plent lan.

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Èske ou pote menm plent lan devan okenn lòt ajans (Federal, Eta, Lokal)?

☐ Wi ☐ Non

Si ou reponn Wi, ekri non lòt ajans lan: _____

Èske ou louvri yon aksyon devan lajistis pou plent sa a?

☐Wi ☐Non

Si ou reponn Wi, voye yon kopi dokiman sou aksyon devan la jistis la.

Siyati: _____
Dat:_____

Voye pa lapòs nan adrès sa a: Title VI Specialist, MBTA Office of Diversity and Civil Rights, Suite 3800, 10 Park Plaza, Boston, MA 02116

Voye nan adrès elektwonnik sa a: MBTACivilRights@mbta.com

Maura Healey, Governor
Kimberley Driscoll, Lieutenant Governor
Gina Fiandaca, Secretary & CEO
Phillip Eng, General Manager & CEO

massDOT
Massachusetts Department of Transportation

Modulo di denuncia per discriminazione

Si prega di fornire le seguenti informazioni per consentirci di elaborare la denuncia. Questo modulo è disponibile in formati alternativi e in più lingue. Se si necessita usufruire di tali servizi o di qualsiasi altro tipo di assistenza nella compilazione del modulo, La preghiamo di farcelo sapere.

Nome:_____
_____

Indirizzo:_____
_____

Numeri di telefono: (Casa)_____(Ufficio)_____(Cellulare)_____

Indirizzo e-mail:_____

Indicare la natura della presunta discriminazione:

Categorie protette in virtù del *Title VI of the Civil Rights Act of 1964*:

☐ Razza ☐ Colore

☐ Origine nazionale (compresa la limitata padronanza della lingua inglese)

Altre categorie protette da norme/ordinanze federali e/o statali:

☐ Disabilità ☐ Età ☐ Sesso ☐ Orientamento sessuale ☐ Religione ☐ Stirpe

☐ Gender ☐ Etnicità ☐ Identità di genere ☐ Espressione di genere ☐ Fede

☐ Veterano ☐ Storia personale ☐ Basso reddito

Chi ritiene essere stato vittima di discriminazione?

☐ Lei stesso/a ☐ Una terza persona ☐ Un gruppo di persone

Nome della persona e/o dell'organizzazione che Lei ritiene abbia compiuto l'azione discriminante:

_____
_____

Rilascia il consenso all'investigatore di condividere il Suo nome ed altre informazioni personali con altre parti inerenti a questo caso quando così facendo si collabora nell'investigazione e nella risoluzione del Suo reclamo?

☐ Sì ☐ No

Descriva il Suo reclamo. Includere dettagli specifici come nomi, date, orari, testimoni e qualsiasi altra informazione che potrebbe aiutarci nella nostra indagine in base alle Sue affermazioni. Includere inoltre qualsiasi altra documentazione pertinente alla presente denuncia. È possibile allegare pagine aggiuntive per spiegare il Suo reclamo.

_____
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Ha presentato questa denuncia presso altre agenzie (federali, statali o locali)?

☐ Sì ☐ No

Se sì,
specificare:_____

Ha presentato querela in relazione a questo reclamo?

☐Sì ☐No

In caso affermativo, fornire una copia della denuncia.

Firma: _____
Data:_____

Scrivere a: Title VI Specialist, MBTA Office of Diversity and Civil Rights, Suite 3800, 10 Park Plaza, Boston, MA 02116

Inviare per email a: MBTACivilRights@mbta.com

Maura Healey, Governor
Kimberley Driscoll, Lieutenant Governor
Gina Fiandaca, Secretary & CEO
Phillip Eng, General Manager & CEO

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ពាក្យបណ្តឹងស្តីពីភាពរើសអើង

សូមផ្តល់ព័ត៌មានខាងក្រោម ដើម្បីអោយយើងខ្ញុំធ្វើការលើបណ្តឹងរបស់អ្នក។ ពាក្យបណ្តឹងនេះមានទម្រង់ផ្សេងៗគ្នា និងមានជាច្រើនភាសា។ ប្រសិនបើអ្នកចង់បានសេវាកម្មទាំងនោះ ឬជំនួយផ្សេងៗទៀតក្នុងការបំពេញពាក្យបណ្តឹង សូមប្រាប់យើងខ្ញុំ។

ឈ្មោះ: _____

_____

អាសយដ្ឋាន: _____

_____

លេខទូរស័ព្ទ: (ផ្ទះ) _____ (កន្លែងការងារ) _____ (ដៃ) _____

_____

អ៊ីមែល: _____

_____

សូមបង្ហាញពីប្រភេទនៃភាពរើសអើងដែលអ្នកចោទប្រកាន់:

ប្រភេទទាំងឡាយណាដែលត្រូវបានការពារដោយ *មាត្រាទីVI នៃច្បាប់សិទ្ធស៊ីវិលឆ្នាំ1964*:

☐ អម្បូរ ☐ ពណ៌សម្បុរ ☐ ប្រភពកំណើត (រួមទាំងសមត្ថភាពប្រើភាសាអង់គ្លេសមានកម្រិត)

ប្រភេទផ្សេងទៀតដែលត្រូវបានការពារដោយដីការ/ច្បាប់រដ្ឋ ឬ/និងដីការ/ច្បាប់សហព័ន្ធដែលពាក់ព័ន្ធ:

☐ ពិការភាព ☐ អាយុ ☐ ភេទ ☐ ទំនោរផ្លូវភេទ ☐ សាសនា ☐ ជូនតា

☐ យេនឌឺរ ☐ ជាតិសាសន៍ ☐ អត្តសញ្ញាណយេនឌឺរ ☐ ការបង្ហាញយេនឌឺរ ☐ ជំនឿ ☐ អតីតយុទ្ធជន ☐ ប្រវត្តិ ☐ ព្រាក់ចំណូលទាប

តើនរណាជាមនុស្សដែលអ្នកចោទប្រកាន់ថាជាអ្នករងគ្រោះពីភាពរើសអើង?

☐ អ្នក ☐ បុគ្គលទីបី ☐ មនុស្សមួយក្រុម

សូមផ្តល់ឈ្មោះបុគ្គល និង/ឬអង្គភាពដែលអ្នកចោទប្រកាន់ពីភាពរើសអើង:

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តើអ្នកអនុញ្ញាតអោយអ្នកស៊ើបអង្កេតបង្ហាញឈ្មោះនិងព័ត៌មានផ្ទាល់ខ្លួនរបស់អ្នកទៅកាន់បុគ្គលផ្សេងទៀតទាក់ទងនឹងបញ្ហានេះដែរឬទេ ប្រសិនបើព័ត៌មានទាំងនេះជួយដល់ការស៊ើបអង្កេត និងដោះស្រាយបណ្តឹងរបស់អ្នក?

☐ បាទ/ចាស៎ ☐ ទេ

សូមរៀបរាប់បណ្តឹងរបស់អ្នក៖ អ្នកគួរសរសេរព័ត៌មានលម្អិតជាក់លាក់ដូចជា ឈ្មោះ កាលបរិច្ឆេទ ពេលវេលា សាក្សី និងព័ត៌មានផ្សេងទៀត ដែលអាចជួយយើងខ្ញុំក្នុងការស៊ើបអង្កេតការចោទប្រកាន់របស់អ្នក។ សូមសរសេរទាំង ឯកសារទាំងឡាយណាដែលទាក់ទងនឹងបណ្តឹងនេះ។ អ្នកអាចសរសេរលើក្រដាសផ្សេងបន្ថែមទៀតដើម្បីពន្យល់ពីបណ្តឹងរបស់អ្នក រួចភ្ជាប់មកជាមួយ។

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តើអ្នកធ្លាប់បានសរសេរបណ្តឹងនេះទៅកាន់ភ្នាក់ងារផ្សេងទៀតដែរឬទេ (សហព័ន្ធរដ្ឋ រដ្ឋ ឬតំបន់)?

☐ បាទ/ចាស៎ ☐ ទេ

ប្រសិនបើធ្លាប់ សូមបញ្ជាក់៖ _____

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តើអ្នកធ្លាប់បានដាក់ពាក្យបណ្តឹងទៅកាន់តុលាការអំពីបញ្ហានេះដែរឬទេ?

☐ បាទ/ចាស៎ ☐ ទេ

ប្រសិនបើធ្លាប់ សូមភ្ជាប់ពាក្យបណ្តឹងនោះមកជាមួយ។

ហត្ថលេខា៖ _____ កាលបរិច្ឆេទ៖ _____

_____

សូមផ្ញើរទៅកាន់៖ អ្នកសម្របសម្រួលមាត្រាទីVI, MBTA Office of Diversity and Civil Rights, Suite 3800, 10 Park Plaza, Boston, MA 02116
សូមផ្ញើរអ៊ីម៉ែលទៅកាន់៖ MBTACivilRights@mbta.com

Maura Healey, Governor
Kimberley Driscoll, Lieutenant Governor
Gina Fiandaca, Secretary & CEO
Phillip Eng, General Manager & CEO

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Massachusetts Department of Transportation

Formulário de Reclamação por Discriminação

Por favor, preencha com as seguintes informações para que possamos processar sua reclamação. Este formulário está disponível em formatos alternativos e em múltiplas línguas. Se você precisar de outro tipo de formulário ou de auxílio no preenchimento, por favor, avise um de nossos funcionários.

Nome:_____
_____

Endereço:_____
_____

Números de Telefone:
(Res.)_____(Com.)_____(Celular)_____

Endereço de
Email:_____

Por favor, indique a natureza da discriminação alegada:

Categorias protegidas sob o *Título VI da Lei de Direitos Civis de 1964*:

☐Raça ☐Cor ☐Origem Nacional (incluindo proficiência limitada do inglês)

Categorias adicionais protegidas sob leis e/ou disposições federais e estaduais:

☐Deficiência ☐Idade ☐Sexo ☐Orientação Sexual ☐Religião ☐ Antepassados

☐Gênero ☐Etnia ☐Identidade de Gênero ☐Expressão de Gênero ☐ Credo ☐Condição de Veterano ☐Antecedentes ☐ De baixa renda

Quem você alega ter sido a vítima da discriminação?

☐Você ☐Terceiro ☐Uma Classe de Pessoas

Nome do indivíduo e/ou organização que você alega estar discriminando:

_____
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Você consente que seu nome e suas informações pessoais sejam partilhados pelo investigador com as outras partes, auxiliando na resolução de sua reclamação?

☐ Sim ☐ Não

Por favor, descreva sua reclamação. Você deve incluir pormenores específicos tais como nomes, datas, horários, testemunhas, e quaisquer outras informações que possam ajudar em nossa investigação de suas alegações. Por favor, inclua também qualquer outra documentação relevante a esta reclamação. Você pode adicionar páginas à explicação de sua reclamação.

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Você registrou esta reclamação com qualquer outra agência (federal, estadual ou local)?

☐ Sim ☐ Não

Caso afirmativo, por favor, identifique:_____

Você protocolou uma ação judicial relativa a esta reclamação?

☐Sim ☐Não

Caso afirmativo, por favor, forneça uma cópia da ação.

Assinatura: _____
Data:_____

Envie pelos correios para: Title VI Specialist, MBTA Office of Diversity and Civil Rights, Suite 3800, 10 Park Plaza, Boston, MA 02116

Envie por email para: MBTACivilRights@mbta.com

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Жалоба о Дискриминации

Пожалуйста, предоставьте следующую информацию для того, чтобы мы могли обработать вашу жалобу. Эта форма доступна в альтернативных форматах и на нескольких языках. Если вам потребуются эти услуги или любая другая помощь в заполнении этой формы, пожалуйста, сообщите нам об этом.

ФИО:_____

Адрес:_____

Телефонные номера: (Дом)_____(Раб)_____(Моб)_____

Электронный адрес:_____

Пожалуйста укажите характер предполагаемой дискриминации:

Категории, защищаемые в соответствии с Титулом VI Закона о Гражданских Правах 1964 года:

☐Раса ☐Цвет кожи ☐Национальное происхождение (в том числе ограниченное знание английского языка)

Дополнительные категории, защищаемые соответствующими законами/ приказами на уровне федерации и/или штата:

☐Инвалидность ☐Возраст ☐Пол ☐Сексуальная Ориентация ☐Религиозные убеждения ☐Происхождение

☐Гендер ☐Этничность ☐Гендерная Идентичность ☐ Гендерное Выражение ☐Убеждения ☐Статус Ветерана ☐Биография

☐ Низким уровнем дохода

Кто, согласно Вашим предположениям, являлся жертвой дискриминации?

☐Вы ☐Третье лицо ☐Класс лиц

Имя лица и / или название организации, которые, согласно Вашим предположениям, осуществляют дискриминацию:

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Согласны ли Вы, чтобы рассматривающий жалобу предоставил Ваше имя и прочую личную информацию другим сторонам, если это окажет помощь в расследовании и разрешении Вашей жалобы?

☐Да ☐Нет

Пожалуйста, опишите Вашу жалобу. Вы должны включить конкретные детали, такие как имена, даты, время, свидетели, а также любую другую информацию, которая поможет нам в расследовании Ваших утверждений. Просьба включить любую другую документацию, которая имеет отношение к этой жалобе. Вы можете приложить дополнительные страницы, чтобы объяснить вашу жалобу.

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Подавали ли Вы данную жалобу в любое другое учреждение (Федеральное, на уровне Штата или Местное)?

☐Да ☐Нет

Если да, пожалуйста
укажите:_____

Подавали ли Вы в суд по поводу этой жалобы?

☐Да ☐Нет

Если да, пожалуйста предоставьте копию жалобы.

Подпись: _____
Дата:_____

Почтовый адрес:

Title VI Specialist, MBTA Office of Diversity and Civil Rights, Suite 3800
10 Park Plaza, Boston, MA 02116

Электронный адрес: www.MBTACivilRights@mbta.com

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Formulario de queja por discriminación

Por favor, complete la siguiente información para que podamos tramitar su queja. Este formulario está disponible en otros formatos y en varios idiomas. Si usted necesitara estos servicios o cualquier otro tipo de asistencia para completar este formulario, por favor, avísenos.

Nombre:_____
_____

Dirección:_____
_____

Nos. de teléfono:
(Casa)_____(Trabajo)_____(Celular)_____

Dirección de correo
electrónico:_____

Por favor, indique la índole de la presunta discriminación:

Categorías protegidas por el *Artículo VI de la ley de derechos civiles de 1964*:

☐ Raza ☐ Color ☐ Origen nacional (incluido un nivel limitado del idioma inglés)

Otras categorías protegidas por leyes o disposiciones federales y/o estatales:

☐ Discapacidad ☐ Edad ☐ Sexo ☐ Orientación sexual ☐ Religión ☐ Abolengo

☐ Género ☐ Etnia ☐ Identidad de género ☐ Expresión de género ☐ Credo

☐ Categoría de veterano ☐ Origen

¿Quién afirma usted que fue víctima de discriminación?

☐ Usted ☐ Un tercero ☐ Una clase de personas

Nombre de la persona u organización que usted afirma que está discriminando:

_____
_____

¿Consiente usted en que el investigador facilite su nombre y otros datos personales a otras partes de este asunto con el fin de que ayuden en la investigación para poder resolver su queja?

☐ Sí ☐ No

Por favor, describa su queja. Incluya detalles específicos, como nombres, fechas, horarios, testigos y otra información que pudiera ayudarnos en nuestra investigación de sus alegatos. También incluya cualquier otra documentación que fuera relevante para esta queja. Puede adjuntar páginas adicionales para explicar su queja.

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¿Ha presentado esta queja en algún otro organismo (federal, estatal o local)?

☐ Sí ☐ No

Si contestó que sí,
identifíquelo:_____

¿Ha presentado una demanda con respecto a esta queja?

☐Sí ☐No

Si contestó que sí, entregue una copia de la queja.

Firma:
_____Fecha:_____

Enviar por correo postal a: Title VI Specialist, MBTA Office of Diversity and Civil Rights, Suite 3800, 10 Park Plaza, Boston, MA 02116

Enviar por correo electrónico a: MBTACivilRights@mbta.com

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Đơn Khiếu nại Phân biệt đối xử

Vui lòng cung cấp các thông tin sau để chúng tôi xử lý khiếu nại của quý vị. Đơn này có sẵn ở các định dạng khác nhau và bằng nhiều ngôn ngữ. Hãy cho chúng tôi biết nếu quý vị cần các dịch vụ này hoặc bất kỳ hỗ trợ nào khác để điền đơn này.

Tên:_____
____

Địa chỉ:_____
_

Số điện thoại: (Nhà)_____(Cơ quan)_____(Di động)_____

Địa chỉ email:_____

Vui lòng cho biết bản chất của sự việc bị cho là phân biệt đối xử:

Các thể loại được bảo vệ theo Đạo luật *VI của Luật dân quyền năm 1964*:

☐ Chủng tộc ☐ Màu da ☐ Quốc gia xuất xứ (bao gồm tiếng Anh không thông thạo)

Các thể loại bổ sung được bảo vệ theo luật/lệnh liên quan của Liên bang và/hoặc Tiểu bang:

☐ Khuyết tật ☐ Tuổi ☐ Giới tính (Sex) ☐ Định hướng tình dục

☐ Tôn giáo ☐ Tổ tiên

☐ Phái tính (Gender) ☐ Dân tộc ☐ Xác định phái tính ☐ Thể hiện phái tính

☐ Tín điều (Creed) ☐ Tình trạng thương binh ☐ Lý lịch ☐ Thu nhập thấp

Ai là người quý vị cho là nạn nhân của phân biệt đối xử?

☐Quý vị ☐Một cá nhân thứ ba ☐Một lớp người

Tên của Cá nhân và/hoặc tổ chức mà quý vị cho là đang phân biệt đối xử:

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Quý vị có đồng ý cho điều tra viên chia sẻ tên và các thông tin cá nhân khác của quý vị với các bên khác về vấn đề này để hỗ trợ việc điều tra và giải quyết khiếu nại của quý vị không?

☐Có ☐Không

Vui lòng mô tả khiếu nại của quý vị. Quý vị nên bao gồm các chi tiết cụ thể như là những tên, ngày tháng, thời gian, nhân chứng, và bất kỳ thông tin nào khác sẽ hỗ trợ chúng tôi trong việc điều tra của chúng tôi về cáo buộc của quý vị. Vui lòng bao gồm bất cứ tài liệu nào khác liên quan đến khiếu nại này. Quý vị có thể đính kèm thêm nhiều trang để giải thích khiếu nại của mình.

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Quý vị có nộp khiếu nại này cho bất kỳ cơ quan nào khác (Liên bang, Tiểu bang, hoặc Địa phương) chưa?

☐ Có ☐ Chưa

Nếu có, vui lòng cho biết tên cơ quan đó:_____

Quý vị có nộp đơn kiện liên quan đến khiếu nại này chưa?

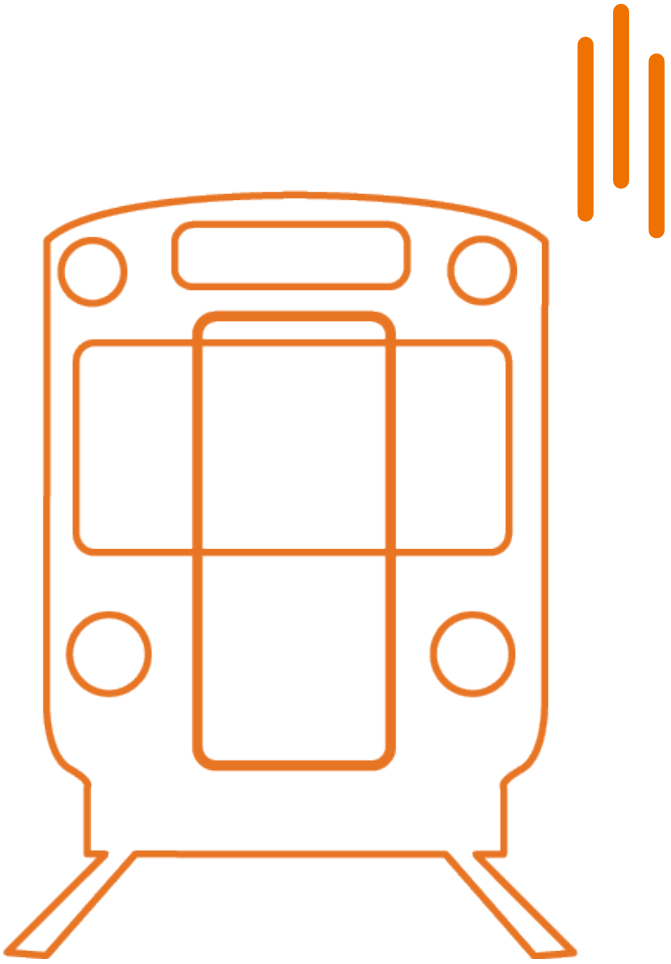
☐ Có ☐ Chưa

Nếu có, vui lòng cung cấp một bản sao của khiếu nại.

Ký tên:
_____Ngày:_____

Gởi qua đường bưu điện đến: Title VI Coordinator, MassDOT Office of Diversity and Civil Rights, Suite 3800,10 Park Plaza, Boston, MA 02116

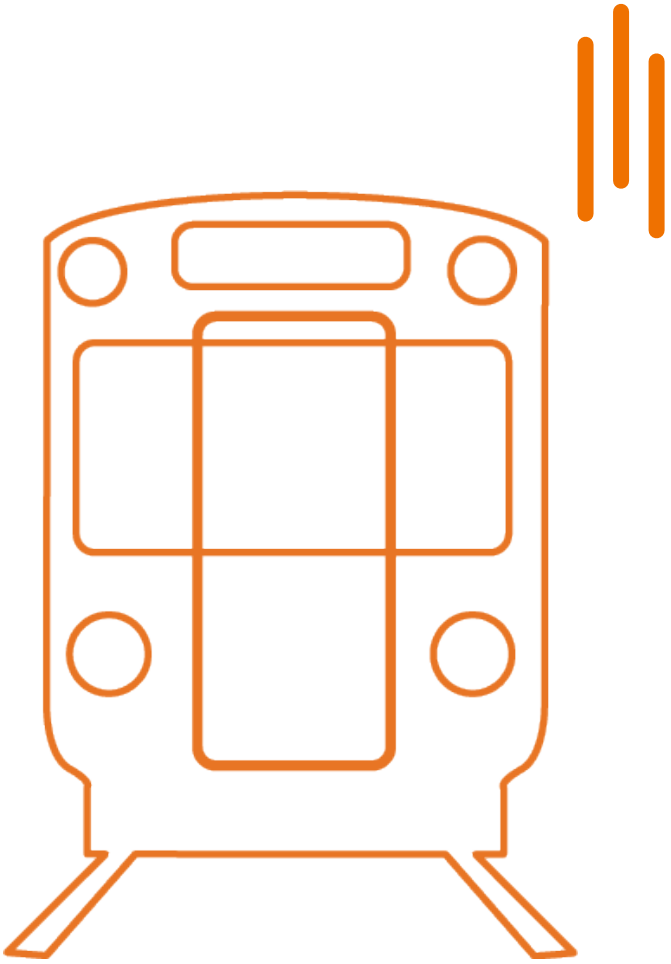
Gởi email đến : MassDOT.CivilRights@state.ma.us





Appendix 2D

Title VI Complaint Procedures



Title VI Complaint Procedures

Purpose and Applicability

The purpose of this document is to establish procedures for the processing and disposition of both discrimination complaints filed directly with the Massachusetts Department of Transportation (MassDOT) or the Massachusetts Bay Transportation Authority (MBTA), and discrimination complaints that MassDOT/MBTA have the delegated authority to process under Title VI of the Civil Rights Act of 1964 (Title VI) and related state and federal nondiscrimination authorities, including the Americans with Disabilities Act (ADA).

- The processing of discrimination complaints will follow the steps outlined below and are further detailed throughout this document.
- Step 1: Complainant submits their complaint.
- Step 2: MassDOT/MBTA issues the complainant an acknowledgment letter.
- Step 3: Complaint is assigned to, and reviewed by, an investigator.
- Step 4: Investigator conducts interviews of complainants, witnesses, and the respondent.
- Step 5: Investigator reviews the evidence and testimonies to determine whether a violation has occurred.
- Step 6: Complainant and Respondent are issued a letter of resolution or a letter of finding and offered appeal rights.
- Step 7: Once the appeal period has expired, the investigation is closed.

The procedures describe an administrative process aimed at identifying and eliminating discrimination in federally funded programs and activities. The procedures do not provide an avenue for relief for complainants seeking individual remedies, including punitive damages or compensatory remuneration; they do not prohibit complainants from filing complaints with other state or federal agencies; nor do they deny complainants the right to seek private counsel to address acts of alleged discrimination.

The procedures described in this document apply to MassDOT/MBTA and their subrecipients, contractors, and subcontractors in their administration of federally funded programs and activities.

As part of their efforts to comply with Title VI, subrecipients of federal financial assistance through MassDOT/MBTA are encouraged to adopt these complaint procedures. In so doing, these subrecipients acknowledge their obligation to afford members of the public with an opportunity to file complaints alleging violations of nondiscrimination policies in place across their organization and in their programs, services, and activities. In accordance with federal guidance, subrecipients of transit-related funds understand they have the authority to process Title VI complaints and will inform their recipients, MassDOT/MBTA, of complaints received and the outcome of investigations as the matters are resolved.

Subrecipients of highway-related funds further understand they do not have the authority to investigate Title VI violation claims filed against their organization (where their organization is the respondent or party alleged to have violated Title VI). All such claims will be forwarded to the MassDOT/MBTA Office of Diversity and Civil Rights (ODCR) to determine the appropriate investigative authority. Highway-funding subrecipients retain the right to consider Title VI violation allegations as a matter of Assurance and/or internal policy compliance but are precluded from making determinations as to possible violations of Title VI. MassDOT/MBTA encourages all subrecipients to communicate with ODCR's Title VI Specialists, the Director of Title VI and Accessibility, and/or the Director of Investigations when/if Title VI complaints are received to ensure proper handling.

Definitions

Complainant – A person who files a complaint with MassDOT/MBTA.

Complaint – Written, verbal or electronic statement concerning an allegation of discrimination that contains a request for the receiving office to take action. Where a complaint is filed by a person with a disability, the term complaint encompasses alternative formats to accommodate the complainant's disability.

Discrimination – That act or inaction, whether intentional or unintentional, through which a person in the United States, solely because of race, color, national origin, or bases covered by other nondiscrimination authorities, such as gender, age, or disability, has been subjected to unequal treatment or disparate impact under any program or activity receiving federal assistance.

Operating Administrations – Agencies of the U.S. Department of Transportation, including the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), the Federal Rail Administration (FRA), the National Highway Traffic Safety Administration (NHTSA), and the Federal Motor Carrier Safety Administration (FMSCA), that fund transportation programs or activities.

Respondent – The person, agency, institution, or organization alleged to have engaged in discrimination.

Filing of Complaints

This section details MassDOT/MBTA's procedures for processing Title VI discrimination complaints (on the basis of race, color, or national origin, including language) and complaints alleging discrimination on the basis of additional federal nondiscrimination provisions (on the basis of age, sex, and disability). Federal law and regulations governing Title VI of the Civil Rights Act of 1964 (Title VI) places the overall coordination authority for the investigation of civil rights complaints in the United States Department of Justice, which works collaboratively with federal agencies that carry out this responsibility. In the transportation sector, this investigative authority rests with the US Department of Transportation (US DOT) and its agencies for the different modes of transportation, including the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA). In coordination with USDOT requirements, FHWA and FTA have established regulations and guidance that require recipients and subrecipients of federal financial assistance to establish procedures for processing Title VI complaints filed with these organizations.

The procedures described below, modeled on recommended complaint procedures promulgated by the US Department of Justice (US DOJ), are designed to provide a fair opportunity to have complaints addressed that respect due process for both complainants and respondents. In addition to the formal complaint resolution process detailed herein, MassDOT/MBTA shall take affirmative steps to pursue informal resolution of any and all Title VI complaints, when possible.

The Complaint Process

1. Who can file a complaint?

ANY member of the public, along with all MassDOT/MBTA customers, applicants, contractors, or subrecipients who believe that they themselves, a third party, or a class of persons were mistreated or treated unfairly because of their race, color, or national origin

(including limited English proficiency) in violation of Title VI of the Civil Rights Act of 1964, related federal and state laws and orders, or MassDOT/MBTA's Anti-Discrimination/Harassment Prevention (ADHP) Policy. Retaliation against a member of the public on the basis of race, color, or national origin is also prohibited under Title VI and the ADHP Policy.

2. How do I file a complaint?

A complaint may be filed with the following:

MassDOT/MBTA Title VI Specialists
Office of Diversity and Civil Rights – Title VI Unit
10 Park Plaza, Suite 3800
Boston, MA 02116
Phone: (857) 368-8580 or 7-1-1 for Relay Service
Email: MassDOT.CivilRights@state.ma.us or MBTAcivilrights@mbta.com

MassDOT/MBTA, Assistant Secretary and Chief Diversity Officer
Office of Diversity and Civil Rights – Investigations Unit
10 Park Plaza, Suite 3800
Boston, MA 02116
Phone: (857) 368-8580
Email: odcrcomplaints@dot.state.ma.us

MBTA Customer Call Center: (617) 222-3200
The Call Center staff will seek to obtain basic information about the matter from the caller, and details of the call will be forwarded to the Office of Diversity and Civil Rights for processing according to these procedures.

U.S. Department of Transportation
Office of Civil Rights
1200 New Jersey Avenue, SE
Washington, DC 20590
Website: civilrights.justice.gov/

Please note:

- When FTA receives a Title VI complaint regarding MassDOT/MBTA, a subrecipient, or a contractor, the FTA may request the matter be investigated by MassDOT/MBTA.

- If a Title VI complaint is filed with MassDOT that alleges a violation by MassDOT's Highway Division, then it will be forwarded to the local FHWA Division Office which will then forward the complaint to the FHWA Headquarters Office of Civil Rights (HCR) for processing.

- If a Title VI complaint is received by MassDOT that is filed against a subrecipient of the MassDOT Highway Division, then MassDOT may process and investigate the complaint or may refer to HCR for investigation.

- If FMCSA receives a complaint filed against MassDOT, FMCSA will forward the complaint to MassDOT for a written response. This allows MassDOT to either resolve the complaint or to provide a written response to the allegations. The written response is used to determine what steps FMCSA will take to process the complaint.

3. What do I need to include in a complaint?

A Title VI/Nondiscrimination Complaint form is available electronically on the MassDOT Title VI website, the MBTA Title VI website, or in hardcopy at the MassDOT/MBTA Office of Diversity and Civil Rights. Alternatively, a complainant may submit correspondence in an alternative format that should include:

- Your name, signature and, current contact information (i.e., telephone number, email address and postal mailing address);
- The name and badge number (if known and applicable) of the alleged perpetrator;
- A description of how, when, and where the alleged prohibited conduct occurred;
- A detailed description of why you believe you were treated differently;
- Names and contact information of any witnesses; and
- Any other information you believe is relevant to your complaint.

A. In cases where the complainant is unable to provide a written statement, a verbal complaint may be made to the Office of Diversity & Civil Rights (ODCR). Complainants will be interviewed by a Civil Rights Investigator (CRI). If necessary, the CRI will assist the person in converting the verbal complaint to writing. All complaints should be signed by the complainant.

B. Anonymous complaints may be filed in the same manner. Anonymous complaints shall be investigated in the same manner as any other complaint.

C. Complaints will be accepted in any recognized language. Multi-lingual complaint forms are available.

4. How long do I have to file a complaint?

A. A complaint alleging violation of Title VI and/or MassDOT/MBTA's ADHP policy should be filed no later than one hundred and eighty (180) days from the date of the alleged violation.

B. Complaints alleging violations of state or federal law must be filed within the time frames established by statute, regulation, or case law – in certain instances up to three hundred (300) days from the date of the alleged violation.

5. How will my complaint be handled?

When a complaint is received, it is assigned to a Civil Rights Investigator (CRI). The CRI will:

A. Determine Jurisdiction: ODCR has jurisdiction if the complaint:
   1) involves a statement or conduct that violates:
      i. MassDOT/MBTA's legal obligation and commitment to prevent discrimination, harassment, or retaliation on the basis of a protected characteristic with regard to any aspect of the Agency's service to the public;
      ii. or

      The commitment made by subrecipients and contractors working with MassDOT/MBTA to adhere to MassDOT/MBTA policies;

   AND

   2) is timely filed.

B. Acknowledge receipt of the complaint and provide jurisdictional determination within ten (10) business days of receipt of the complaint.
   1) If the CRI determines that any complaint does not have the potential to establish a civil rights violation, then the CRI shall notify the complainant and Title VI Specialist in writing of its finding and the matter shall be closed.

C. Conduct a thorough investigation of the allegations contained in the complaint in accordance with the MassDOT/MBTA Internal Complaint Procedures.

6. Findings and Recommendations?

At the conclusion of the investigation, the CRI will transmit to the complainant and the respondent one of the following three letters based on the findings:

A. A letter of resolution that explains the steps the respondent has taken or will take to comply with Title VI.

B. A letter of finding that is issued when the respondent is found to be in compliance with Title VI. This letter will include an explanation of why the respondent was found to be in compliance and provide notification of the complainant's appeal rights.

C. A letter of finding that is issued when the respondent is found to be in noncompliance.

This letter will include each violation referenced as to the applicable regulations, a brief description of findings/recommendations, the consequences of failure to achieve voluntary compliance, and an offer of assistance in devising a remedial plan for compliance, if appropriate.

7. Can I appeal a Finding?

If a complainant or respondent does not agree with the findings of the CRI then he/she/they may appeal to the Assistant Secretary and Chief Diversity Officer. The appealing party must provide any **new information that was not readily available during the course of the original investigation that would lead MassDOT/MBTA to reconsider its determinations.** The request for an appeal and any new information must be submitted within thirty (30) days of the date the letter of finding was transmitted. After reviewing this information, MassDOT/MBTA will respond either by issuing a revised letter of resolution or by informing the appealing party that the original letter of resolution or finding remains in force.

إجراءات تقديم الشكاوى حسب الباب السادس

الغرض ومدى التطبيق

إن غرض هذه الوثيقة هو وضع الإجراءات الخاصة بالتعامل مع وتنظيم كل من الشكاوى المتعلقة بالتمييز التي يتم تقديمها بشكل مباشر لقسم النقل في ولاية ماساتشوستس أو سلطة النقل في خليج ماساتشوستس، أو شكاوى التمييز التي لدى قسم النقل في ولاية ماساتشوستس/ سلطة النقل في خليج ماساتشوستس سلطة التعامل معها وفقا للباب السادس من قانون الحقوق المدنية لعام 1964 (الباب السادس) وسلطات الولاية والسلطات الفدرالية ذات العلاقة والتي لها صلة بعدم التمييز، بما في ذلك قانون الأمريكيين ذوي الاعاقات.

تتبع عملية التعامل مع شكاوى التمييز الخطوات المذكورة أدناه ويتم التطرق إليها بالتفصيل في هذه الوثيقة.

الخطوة 1: يقوم المشتكي بتقديم الشكوى.

الخطوة 2: يصدر قسم النقل في ولاية ماساتشوستس/ سلطة النقل في خليج ماساتشوستس رسالة تؤكد تلقيها للشكوى.

الخطوة 3: يتم تنسيب الشكوى إلى أحد المحققين الذي يُراجع الشكوى.

الخطوة 4: يُجري المحقق مقابلات مع المشتكين والشهود والجهة المُستجيبة للشكوى.

الخطوة 5: يُراج المحقق الأدلة والشهادات لتحديد ما إذا كان هناك انتهاكا قد حصل.

الخطوة 6: يتم إصدار رسالة حل أو رسالة نتائج التحقيق لكل من المشتكي والجهة المُستجيبة للشكوى ويتم اعطائهما حقوق الاستئناف.

الخطوة 7: وبعد ان تنقضي فترة الاستئناف، يتم غلق التحقيق.

تصف الإجراءات العملية الإدارية التي تهدف إلى تحديد حالات التمييز وانهاءها في البرامج والأنشطة التي يتم تمويلها على المستوى الفدرالي. ولا توفر الإجراءات سبيلا لإغاثة المشتكين الذين يسعون للحصول على تعويضات فردية، بما في ذلك التعويضات الجزائية بسبب اضرار والمكافئات التعويضية، وهي لا تمنع المشتكين من تقديم الشكاوى لدى وكالات أخرى تابعة للولاية او وكالات فدرالية، كما لا تحرم المشتكين من حق السعي للحصول على خدمات محامي خاص للتعامل مع أعمال التمييز المزعومة.

تنطبق الإجراءات المذكورة في هذه الوثيقة على قسم النقل في ولاية ماساتشوستس/ سلطة النقل في خليج ماساتشوستس والتابعين له من المتلقين الفرعيين للأموال الفدرالية والمقاولين والمقاولين الفرعيين في إدارتهم الخاصة بالبرامج والأنشطة التي يتم تمويلها فدراليا.

وكجز من جهودهم للامتثال للباب السادس، يتم تشجيع المتلقين الفرعيين للمساعدة المالية الفدرالية من خلال قسم النقل في ولاية ماساتشوستس/ سلطة النقل في خليج ماساتشوستس على اعتماد إجراءات تقديم الشكاوى هذه. ومن خلال القيام بذلك، فإن هؤلاء المتلقين الفرعيين يعترفون بالتزامهم بتوفير الفرصة للعامة من الناس لتقديم شكوى يزعمون فيها حصول انتهاكات بحق متطلبات عدم التمييز في كل جوانب برامج وخدمات وانشطة المنظمة. ووفقا للمبادئ التوجيهية الفدرالية، فإن المتلقين الفرعيين للأموال المتعلقة بمشاريع النقل يفهمون بأن لديهم سطلة التعامل مع الشكاوى المتعلقة بالباب السادس وسوف يبلغون المتلقين الرئيسيين وقسم النقل في ولاية ماساتشوستس/ سلطة النقل في خليج ماساتشوستس بالشكاوى التي يتلقونها ونتائج التحقيقات بالطريقة التي يتم فيها التعامل مع الأمور.

ويفهم كذلك المتلقون الفرعيون للأموال المتعلقة بمشاريع الطرق السريعة بأن ليس لديهم سطلة التحقيق في الشكاوى التي تتعلق بانتهاكات للباب السادس التي يتم تقديمها ضد منظمتهم (حيث تكون منظمتهم هي المستجيب أو الطرف الذي يُزعَم قيامه بانتهاك الباب السادس). ويتم إحالة جميع المطالبات إلى قسم النقل في ولاية ماساتشوستس/ سلطة النقل في خليج ماساتشوستس لتحديد السلطة التحقيقية المناسبة. ويحتفظ المتلقون الفرعيون للأموال المتعلقة بمشاريع الطرق السريعة بحق النظر في مزاعم انتهاك القسم السادس كمسألة تتعلق بالتأمين و/ أو الامتثال للسياسة الداخلية، غير أنه لا يُسمح لهم اتخاذ القرارات حول انتهاكات محتملة للباب السادس. ويشجع قسم النقل في ولاية ماساتشوستس/ سلطة النقل في خليج ماساتشوستس جميع المتلقين الفرعيين على التواصل مع الموظف

المختص بالباب السادس التابع لمكتب التنوع والحقوق المدنية، ومدير البرامج الفدرالية و/ أو مدير قسم التحقيقات عندما/ إذا يتم تسلم الشكاوى وذلك لضمان التعامل السليم مع القضية.

التعريفات

***المشتكي* (*Complainant*)** – الشخص الذي يقدم شكوى لدى قسم النقل في ولاية ماساتشوستس.

***الشكوى* (*Complaint*)**- بيان مكتوب او مطبوع الكترونيا يخص مزاعما بحصول تمييز يحتوي على طلب من المكتب المتلقي للشكوى لكي يتخذ اجراءً معيناً. وعندما يتم تقديم الشكوى من قبل شخص ذي إعاقة، فإن مصطلح شكوى يشتمل تنسيقات بديلة لاستيعاب حالة الإعاقة لدى المشتكي.

***التمييز* (*Discrimination*)**- هو الفعل أو عدم اتخاذ فعل معين، سواء كان مقصودا ام غير مقصود، يتعرض من خلاله شخص في الولايات المتحدة لمعاملة لا تتسم بالمساواة أو تأثير مُتباين تحت أي برنامج أو نشاط يتلقى المساعدة الفدرالية وذلك فقط بسبب العرق او اللون او الأصل الوطني او لأسباب تغطيها سلطات أخرى لعدم التمييز، مثل النوع الاجتماعي والعمر والإعاقة.

***الإدارات العاملة* (*Operating Administrations*)**- وكالات تابعة لوزارة النقل الامريكية، بما في ذلك الإدارة الفدرالية للطرق السريعة، والإدارة الفدرالية للنقل، والإدارة الفدرالية لسكك الحديد، والإدارة الوطنية لسلامة الطرق السريعة، و الإدارة الفيدرالية لنقل السيارات التي تموّل برامج وأنشطة النقل.

***الجهة المستجيبة للشكوى* (*Respondent*)**- الشخص أو الوكالة او المؤسسة او المنظمة التي يُزعم قيامها بعملية تمييز.

تقديم الشكاوى

يشرح هذا القسم بالتفصيل إجراءات قسم النقل في ولاية ماساتشوستس/ سلطة النقل في خليج ماساتشوستس للتعامل مع شكاوى التمييز التي تتعلق بالباب السادس (القائمة على العرق او اللون أو الأصل الوطني، بما في ذلك اللغة) وشكاوى التمييز القائمة على أساس الاحكام الإضافية لعدم التمييز (القائمة على أساس العمر والجنس والإعاقة). يجعل القانون الفدرالي واللوائح الفدرالية التي تحكم الباب السادس لقانون الحقوق المدنية لعام 1964 (الباب السادس) عاتق سلطة التنسيق الكلي للتحقيق في شكاوى الحقوق المدنية، من مسؤوليات وزارة العدل الامريكية، التي تعمل بالتعاون مع الوكالات الفدرالية التي تنفذ هذه المسؤوليات. وفي مجال النقل، فإن هذه السلطة التحقيقية هي من مسؤوليات وزارة النقل الامريكية ووكالاتها الخاصة بوسائل النقل المختلفة، بما في ذلك الإدارة الفدرالية للطرق السريعة، والإدارة الفدرالية للنقل. وبالتنسيق مع متطلبات وزارة النقل الامريكية، وضعت الإدارة الفدرالية للطرق السريعة والإدارة الفدرالية للنقل لوائحا وارشادات تطلب من المتلقين الرئيسيين والمتلقين الفرعيين للمساعدات المالية الفدرالية ان يضعوا إجراءات للتعامل مع الشكاوى التي تتعلق بالباب السادس التي يتم تقديمها لدى هذه المنظمات.

تم تصميم الإجراءات التي يتم شرحها ادناه، والتي هي على غرار إجراءات الشكاوى التي تم التوصية بها والتي أصدرتها وزارة العدل الامريكية، لتوفير فرصة مناسبة للتعامل مع الشكاوى مع احترام الإجراءات الواجبة لكل من المشتكين والجهات المستجيبة للشكوى. وبالإضافة إلى عملية الحل الرسمي للشكاوى والتي يتم شرحها بالتفصيل هنا، فإن قسم النقل في ولاية ماساتشوستس/ سلطة النقل في خليج ماساتشوستس تتخذ خطوات اكيدة لمتابعة الحل غير الرسمي لأي أو جميع شكاوى الباب السادس، عندما يكون ذلك مناسبا.

عملية تقديم الشكوى

1. من يمكن له أن يقدم شكوى؟

أي شخص من عامة الناس، بالإضافة إلى جميع عملاء قسم النقل في ولاية ماساتشوستس/ سلطة النقل في خليج ماساتشوستس، ومقدمي الطلبات، والمقاولين، والمتلقين الفرعيين الذين يعتقدون أنه تم إساءة معاملتهم هم او طرف ثالث او مجموعة اشخاص أو تم معاملتهم بشكل غير منصف بسبب عرقهم او لونهم او أصلهم الوطني (بما في ذلك محدودية الكفاءة في استخدام اللغة الإنجليزية)

والذي يُعد انتهاكا للباب السادس لقانون الحقوق المدنية لعام 1964، والقوانين الفدرالية او قوانين الولاية وانظمتها ذات العلاقة، أو سياسة منع المضايقة والتمييز التابعة لقسم النقل في ولاية ماساتشوستس/ سلطة النقل في خليج ماساتشوستس. ووفقا للباب السادس وسياسة منع المضايقة والتمييز، فإن الانتقام من عامة الناس على أساس العرق أو اللون أو الأصل الوطني هو امر محظور أيضا.

2. كيف أقدم الشكوى؟

يمكن تقديم الشكوى لدى الكيانات التالية:

اخصائيو الباب السادس التابع لقسم النقل في ولاية ماساتشوستس/ سلطة النقل في خليج ماساتشوستس
مكتب التنوع والحقوق المدنية – الباب السادس
MassDOT/MBTA Title VI Specialists
Office of Diversity and Civil Rights – Title VI Unit
10 Park Plaza, Suite 3800
Boston, MA 02116
الهاتف: 368-8580 (857)، ولفاقدي السمع: 711.
البريد الإلكتروني: MassDOT.CivilRights@state.ma.us، أو MBTAcivilrights@mbta.com.

مساعد السكرتير وكبير مسؤولي التنويع التابع لقسم النقل في ولاية ماساتشوستس/ سلطة النقل في خليج ماساتشوستس
مكتب التنوع والحقوق المدنية – وحدة التحقيق
MassDOT/MBTA, Assistant Secretary and Chief Diversity Officer
Office of Diversity and Civil Rights – Investigations Unit
10 Park Plaza, Suite 3800
Boston, MA 02116
الهاتف: 368-8580 (857).
البريد الإلكتروني: odcrcomplaints@dot.state.ma.us.

مركز الاتصالات لعُملاء قسم النقل في ولاية ماساتشوستس/ سلطة النقل في خليج ماساتشوستس: 3200-222 (617).
سيسعى موظفو مركز الاتصال للحصول على المعلومات الأساسية حول الأمر ذي الصلة، وسيتم إرسال تفاصيل المكالمة إلى مكتب التنوع والحقوق المدنية للمعالجة وفقا لهذه الإجراءات.

وزارة النقل في الولايات المتحدة
مكتب الحقوق المدنية
U.S. Department of Transportation
Office of Civil Rights
1200 New Jersey Avenue, SE
Washington, DC 20590
الموقع الإلكتروني: civilrights.justice.gov/.

يرجى ملاحظة ما يلي:

- عندما تستلم الإدارة الفدرالية للنقل شكوى حول الباب السادس فيما يخص قسم النقل في ولاية ماساتشوستس/ سلطة النقل في خليج ماساتشوستس، أو متلقي فرعي أو مقاول، فإنه يجوز لها أن تطلب من قسم النقل في ولاية ماساتشوستس/ سلطة النقل في خليج ماساتشوستس ان يُجري التحقيق في المسألة.

- إذا تم تقديم شكوى ما لقسم النقل في ولاية ماساتشوستس تتعلق بالباب السادس وتدعي حصول انتهاك من قبل شعبة الطرق السريعة التابعة لقسم النقل في ولاية ماساتشوستس، فإنه يتم إحالة الشكوى إلى المكتب المحلي التابع للإدارة الفدرالية للطرق السريعة الذي بدوره يقوم بإحالة الشكوى لمكتب الحقوق المدنية التابع لمقر الإدارة الفدرالية للطرق السريعة ليتم التعامل مع ذلك.

- إذا تسلّمَ قسم النقل في ولاية ماساتشوستس شكوى ما تتعلق بالباب السادس تم تقديمها ضد متلقي فرعي من شعبة الطرق السريعة في قسم النقل في ولاية ماساتشوستس، فإنه يجوز لقسم النقل في ولاية ماساتشوستس التعامل مع الشكوى والتحقيق في شأنها، أو يجوز له إحالتها لمكتب الحقوق المدنية التابع لمقر الإدارة الفدرالية للطرق السريعة.

- إذا تلقت الإدارة الفدرالية لسلامة السيارات شكوى تم تقديمها ضد قسم النقل في ولاية ماساتشوستس، فإن الإدارة ستقوم بإحالة الشكوى على قسم النقل في ولاية ماساتشوستس للحصول على رد مكتوب. وهذا يسمح لقسم النقل في ولاية ماساتشوستس إما بحل الشكوى أو تقديم رد مكتوب على الادعاءات. ويتم استخدام الرد المكتوب لتحديد الخطوات التي ستتخذها الإدارة الفدرالية لسلامة السيارات لمعالجة الشكوى.

3. مالذي يجب عليَّ تقديمه مع الشكوى؟

يتوفر نموذج الشكوى المتعلقة بالباب السادس/ عدم التمييز بشكل الكتروني على موقع الباب السادس لقسم النقل في ولاية ماساتشوستس، أو الموقع الإلكتروني الخاص بالباب السادس لسلطة النقل في خليج ماساتشوستس، أو على شكل أوراق مطبوعة يمكن الحصول عليها من مكتب التنوع والحقوق المدنية لقسم النقل في ولاية ماساتشوستس/ سلطة النقل في خليج ماساتشوستس والمذكور أعلاه. وعوضا عن ذلك، فإنه يجوز للمشتكي ان يقدم الشكوى على شكل رسالة كطريقة بديلة ويجب ان تحتوي على مايلي:

- اسمك، وتوقيعك، ومعلومات الاتصال الحالية الخاصة بك (مثل، رقم الهاتف والعنوان).
- اسم الجاني المزعوم ورقم بطاقته (إذا كان معروفا ومنطبقا).
- وصف لكيفية حصول التصرف المحظور، مع ذكر الزمان والمكان.
- وصف بالتفاصيل يظهر لماذا تعتقد أنه تم التعامل معك بصورة مختلفة.
- أسماء ومعلومات الاتصال الخاص بأي شهود.
- أي معلومات أخرى تعتقد أن لها علاق بشكواك.

أ. في حال عدم تمكن المشتكي من توفير بيان مكتوب، فإنه يمكن تقديم شكوى شفهية إلى مكتب التنوع والحقوق المدنية. يُجري محقق مختص بالحقوق المدنية مقابلة مع المشتكي. ويقوم مُحقق الحقوق المدنية بمساعدة الشخص، إذا تطلب الامر ذلك، لتحويل الشكوى الشفهية إلى شكوى مكتوبة. ويجب ان يوقع المشتكي على جميع الشكاوى.

ب. يجوز تقديم الشكاوى مجهولة المصدر بنفس الطريقة. ويتم التحقيق في الشكاوى مجهولة المصدر بنفس طريقة الشكاوى الأخرى.

ج. يتم قبول الشكاوى بأي لغة مُعترف بها، وتتوفر نماذج لتقديم الشكاوى بعدة لغات.

4. كم هي الفترة الزمنية التي يمكن لي خلالها تقديم الشكوى؟

أ. يجب تقديم الشكوى التي تدّعي حصول انتهاك للباب السادس و/ أو سياسة منع المضايقة والتمييز التابعة لقسم النقل في ولاية ماساتشوستس/ سلطة النقل في خليج ماساتشوستس في موعد أقصاه مائة وثمانين (**180**) يوما من تاريخ الانتهاك المزعوم.

ب. يجب تقدم الشكاوى التي تدّعي حصول انتهاكات لقانون الولاية أو القانون الفدرالي ضمن الإطار الزمني التي يضعه القانون الفرعي، او اللوائح أو السوابق القضائية – وفي حالات معينة قد يصل ذلك على ثلاثمائة (300) يوما من تاريخ الانتهاك المزعوم.

5. كيف سيتم التعامل مع الشكوى الخاصة بي؟

عندما يتم تسلم شكوى ما، فإنه يتم تعيينها لمحقق مختص بالحقوق المدنية. ويعمل هذا المحقق على:

أ. تحديد الولاية القضائية: يملك مكتب التنوع والحقوق المدنية الولاية القضائية إذا كانت الشكوى:

1) تنطوي على بيان أو سلوك ينتهك ما يلي:

أولا. التعهد والالتزام القانونيان لقسم النقل في ولاية ماساتشوستس/ سلطة النقل في خليج ماساتشوستس المعنيان بمنع التمييز أو التحرش أو الانتقام على أساس الميزات المحمية فيما يتعلق بأي مجال من مجالات الخدمة العامة للوكالة، أو

ثانيا. الالتزام الذي قطعه المتلقون الفرعيون والمقاولون العاملون مع قسم النقل في ولاية ماساتشوستس/ سلطة النقل في خليج ماساتشوستس للالتزام بسياسات قسم النقل في ولاية ماساتشوستس/ سلطة النقل في خليج ماساتشوستس،

و

2) إذا تم تقديمه في الوق المناسب.

ت. التأكيد باستلام الشكوى وتقديم قرار فيما يخص الولاية القضائية خلال عشرة (10) أيام عمل من تاريخ استلام الشكوى.

1) إذا قرر المحقق المختص بالحقوق المدنية أن الشكوى لا ترتقي لتشكل انتهاكا للحقوق المدنية، فإنه يقوم بإبلاغ المشتكي والموظف المختص بالباب السادس بشكل خطي فيما يخص النتائج ويتم إغلاق القضية.

ج. إجراء تحقيق مُكثّف بالمزاعم المذكورة في الشكوى وذلك وفقا للإجراءات الداخلية للشكاوى الخاصة بقسم النقل في ولاية ماساتشوستس/ سلطة النقل في خليج ماساتشوستس.

6. ماذا يحصل للتوصل إلى النتائج وتقديم التوصيات؟

في نهاية التحقيق، يُرسل المحقق واحدة من الرسائل الثلاثة التالية إلى المشتكي والجهة المستجيبة للشكوى وذلك بناء على النتائج التي تم التوصل إليها:

أ. رسالة تحتوي على حل للمشكلة توضح الخطوات التي اتخذتها أو ستتخذها الجهة المستجيبة للشكوى للامتثال للباب السادس.

ب. رسلة تخص التوصل إلى النتائج يتم إصدارها عندما يتم التأكد ان الجهة المستجيبة للشكوى تمتثل للباب السادس. وتشمل هذه الرسالة توضيحا يبين سبب كون الجهة المستجيبة للشكوى ممتثلة، وتقدم اشعارا بحقوق المشتكي بتقديم استئناف.

ج. رسالة تخص التوصل النتائج عندما يتم التأكد من ان الجهة المستجيبة للشكوى لا تمتثل للباب السادس. وتشمل هذه الرسالة كل انتهاك يتم الإشارة إليه بناء على اللوائح المعمول بها، ووصف مختصر بالنتائج/ التوصيات، وعواقب عدم الامتثال الطوعي، وعرض للمساعدة في وضع خطة لحل المشكلة من خلال الامتثال، إذا كان ذلك مناسبا.

7. هل يمكن لي ان أقدم استئنافا بحق نتائج ما؟

إذا لم يوافق المشتكي أو الجهة المستجيبة للشكوى على نتائج المحقق فيمكن له/ لها/ لهم تقديم استئناف لمساعد السكرتير الخاص بالتنوع والحقوق المدنية. ويجب على الجهة المقدمة للاستئناف ان توفر أيه **معلومات جديدة لم تكن متوفرة أثناء سير التحقيق الأصلي والتي من شأنها ان تجعل قسم النقل في ولاية ماساتشوستس/ سلطة النقل في خليج ماساتشوستس يعيد النظر في قراراته**. يجب تقديم طلب الاستئناف وأية معلومات جديدة خلال ثلاثين (30) يوما من تاريخ ارسال رسالة النتائج. وبعد مراجعة هذه المعلومات، سيجيب قسم النقل في ولاية ماساتشوستس/ سلطة النقل في خليج ماساتشوستس أما من خلال اصدار رسالة مُنَقّحة تحتوي على قرار أو من خلال إعلام الجهة المُقدمة للاستئناف أن الرسالة الاصلية الخاصة بالقرار أو النتائج تبقى سارية المفعول.

《第六章》投诉程序

目的及适用范围

本文件旨在明确客户向 MassDOT/MBTA 直接提交的歧视投诉的受理和处置程序，以及由 1964 年《民权法》（第六章）以及相关州级或联邦消除歧视管理部门，包括《美国残疾人法》（ADA）授权 MassDOT/MBTA 处理的歧视投诉。

歧视投诉的处理将遵循以下步骤，并在本文件中进一步详细说明。

第 1 步：投诉人提交投诉。

第 2 步：MassDOT/MBTA 向投诉人发出确认信。

第 3 步：为相应投诉分配调查员并负责审查。

第 4 步：调查员对投诉人、证人和被投诉人进行约谈。

第 5 步：调查员审查证据和证词，审查是否发生了违规行为。

第 6 步：向投诉人和被投诉人各发出解决方案告知信或调查结果告知信，并给予上诉权。

第 7 步：上诉期满调查即告结束。

以上规定是一个行政程序，旨在调查和消除联邦政府资助的项目和活动中的歧视现象。以上程序不为寻求个人补偿的投诉人提供救济途径，包括惩罚性赔偿或补偿性报酬；不禁止投诉人向其它州或联邦机构提出投诉；也不否认投诉人寻求私人法律顾问解决受控歧视行为的权利。

本文件所述程序适用于 MassDOT/MBTA 及其次级承接单位、承包商和分包人管理动作的联邦资助项目和活动。

为遵守《民权法案》第六章，我们鼓励通过 MassDOT/MBTA 获得联邦财政资助的次级承接单位采纳此投诉程序。如采纳，次级承接单位承认有义务为公众提供机会投诉其机构项目、服务和活动中违反反歧视要求的行为。根据联邦规定，公交类资助的次级承接单位理解其有权处理《民权法案》第六章投诉，并将知会其上级承接单位 MassDOT/MBTA 收到的投诉以及问题处理调查结果。

公路类资助的次级承接单位应明白其无权调查针对其机构（即该单位是被控违反《民权法案》第六章的被投诉人或一方）的《民权法案》第六章投诉。所有此类投诉须转给 MassDOT/MBTA 多元化和民权办公室决定合适的调查机构。公路类资助的次级承接单位可以保留将不违反《民权法案》第六章指控作为工作承诺和（或）内部政策承诺的权利，但无权裁定被指控行为是否违反《民权法案》第六章。

MassDOT/MBTA 鼓励所有次级承接单位在收到《民权法案》第六章投诉时与多样性及民权办公室《民权法案》第六章专员、联邦项目管理人和（或）调查部门负责人沟通，以保证问题得到恰当处理。

定义

投诉人：向 MassDOT/MBTA 提出投诉的人。

投诉：有关歧视指控的书面或电子陈述，其中包含要求受理部门采取行动的诉求。如投诉由残障人士提交，则"投诉"应当涵盖投诉人因其残障而需要使用的替代文本格式。

歧视：无论故意还是无意，在美国的个人仅因种族、肤色、国籍，或其它反歧视机构规定的情形，如性别、年龄，或残障等而受到任何接受联邦资助的项目或活动的不公对待或完全不同影响的行为或无作为。

运营管理机构：美国政府各类机构受资助项目或活动的美国交通部各机构，包括联邦公路管理局（FHWA）、联邦公交管理局（FTA）、联邦铁路管理局（FRA）和全美公路交通安全管理局（NHTSA）和联邦机动车交通安全管理局（FMCSA）。

被投诉人：被控有歧视行为的人员、代理、机构或组织。

提出投诉

本节具体说明麻州交通部处理《民权法案》第六章歧视投诉（基于种族、肤色，或国籍，包括语言）以及基于（年龄、性别和残障）其它联邦反歧视规定的歧视投诉的程序。1964 年《民权法案》第六章（Title VI）对应的联邦法律和法规将调查民权投诉的总体协调权授予美国司法部，司法部与履行这一职责的相应联邦机构合作。在交通领域，此调查权被赋予美国交通部及其各类型交通管理机构，包括联邦公路管理局（FHWA）和联邦公交管理局（FTA）。根据美国交通部的规定，联邦公路管理局、联邦公交管理局建立规章制度要求接受联邦财政资助单位及其次级承接单位建立处理针对本机构的《民权法案》第六章投诉程序。

下述程序的制定以美国司法部设立并推荐的投诉程序为模型，其目的是在尊重正当程序的基础上为投诉和被投诉双方解决投诉问题提供公平机会。除以下正式的投诉解决过程，在可能的情况下，MassDOT/MBTA 也会采取积极措施寻求对任何、所有《民权法案》第六章相关投诉的非正式解决方法。

投诉流程

1.谁可以提出投诉？

任何公众群体或个人，包括 MassDOT/MBTA 所有客户、申请人、承包商，或次级承接单位，都可提出投诉，如果他们认为自己、第三方，或一群人因其种族、肤色，或国籍（包括有限的英文水平）而受到不当对待或不公正对待，从而违反了 1964 颁布的《民权法案》第六章、相关联邦、州法律法规，或麻

州交通部制定的反歧视/反骚扰预防政策。《民权法案》第六章和反歧视骚扰预防政策也禁止因种族、肤色，或国籍对公众进行报复的行为。

2.如何提出投诉？

投诉可以通过以下方式提出：

MassDOT/MBTA Title VI Specialists
Office of Diversity and Civil Rights – Title VI Unit
10 Park Plaza, Suite 3800
Boston, MA 02116
电话：（857）368-8580 或 7-1-1 电话中继服务
电子邮件：MassDOT.CivilRights@state.ma.us or MBTAcivilrights@mbta.com

MassDOT/MBTA, Assistant Secretary & Chief Diversity Officer
Office of Diversity and Civil Rights – Investigations Unit
10 Park Plaza, Suite 3800
Boston, MA 02116
电话：*(857) 368-8580*
电子邮件： odcrcomplaints@dot.state.ma.us

MBTA 客户呼叫中心：*(617) 222-3200*
呼叫中心工作人员将从来电者收集有关指控事项的基本信息，并将通话的详细信息转发给多元化和民权办公室，以便根据上述程序进行处理。

U.S. Department of Transportation
Office of Civil Rights
1200 New Jersey Avenue, SE
Washington, DC 20590
网站：civilrights.justice.gov/

请注意：

- FTA 在收到针对 MassDOT/MBTA 或其次级承接单位、承包商的第六章投诉时，FTA 可以要求 MassDOT/MBTA 开展调查。
- 如果相应第六章投诉虽向 MassDOT 提出，但指控对象是 MassDOT 的公路部门，则将转给当地 FHWA 部门办公室，然后转交 FHWA 总部民权办公室（HCR）处理。
- 如果 MassDOT 收到针对 MassDOT 公路部门下属次级承接单位的第六章投诉，则 MassDOT 可以直接处理并开展调查，也可以将投诉提交给 HCR 进行调查。

- 如果 FMCSA 收到针对 MassDOT 的投诉，FMCSA 会将投诉转发给 MassDOT 进行书面回复。MassDOT 收到后可以调查并解决相应投诉，或对相应指控作出书面答复。FMCSA 将根据相应的书面答复确定采取哪些步骤处理投诉。

3.投诉需说明哪些内容？

《民权法案》第六章/反歧视投诉表可从 MassDOT 第六章网站、MBTA 第六章网站下载，或从 MassDOT/MBTA 多元化和民权办公室获取纸质本填写。投诉人也可以使用其他格式的通信提交，通信应包括以下信息：

- 您的姓名、签名和当前联系信息（即电话号码、电子邮件地址和邮寄地址）；
- 被指控人的姓名和徽章号码（如已知或适用）；
- 描述被投诉行为如何、何时、何处发生；
- 详细描述为什么您认为受到了不公对待；
- 任何证人的姓名和联系方式；
- 您认为与您的投诉相关的任何其他信息。

A. 如果投诉人无法提供书面陈述，可以向多元化和民权办公室（ODCR）提出口头投诉。投诉人将由民权调查员（CRI）进行访谈。如有必要，CRI 将协助投诉人将口头投诉转换为书面投诉。所有投诉应由投诉人签名。

B. 匿名投诉可以以同样的方式提出。匿名投诉的调查方式与任何其他投诉相同。

C. 投诉接受任何语言。提供多语种投诉表格。

4.我必须多久以后提交投诉？

A. 指控违反《民权法案》第六章和/或 MassDOT/MBTA 反歧视骚扰预防政策（ADHP）的投诉应在事件发生后一百八十（180）天内提交。

B. 指控违反州或联邦法律的投诉应在相应法律法规或判例法规定的时间范围内提交——在某些情况下，自涉嫌事发之日起最多三百（300）天。

5.我的投诉将如何处理？

收到的投诉会分配给民权调查员（CRI）。CRI 将：

A. 确定管辖权：如果投诉符合以下条件，ODCR 具有管辖权：

1) 违反以下情况的言论或行为：

i. MassDOT/MBTA 预防受保护因素在公众服务中遭受歧视、骚扰或报复的法律义务和承诺；

ii. 或

MassDOT/MBTA 的次级承接单位和承包商遵守 MassDOT/MBTA 政策的承诺；

并且，

2) 及时提交。

B. 确认收到投诉、告知管辖权的决定，应在收到投诉后十（10）个工作日内做出。

1) 如 CRI 裁定相应投诉不具有构成违反民权的可能性，调查员应书面通知投诉人以及《民权法案》第六章专员。相应投诉结案。

C. 根据 MassDOT/MBTA 内部投诉程序对投诉所涉的指控进行彻底调查。

6.调查结果和处理意见？

调查结束时，CRI 将根据调查结果向投诉人和被投诉人转交以下三封通信之一：

A. 一是解决方案，说明被投诉人已经或将会采取何种措施遵守《民权法案》第六章。

B. 一是调查无结果，调查发现被投诉人没有违反第六章的规定。此函将解释被投诉人为什么被认为遵守了《民权法案》第六章，并告知投诉者有申诉的权利。

C. 一是调查属实，调查发现被投诉人确有不合规。

此函将罗列被投诉人所有的不合规情况，简要描述调查结果/处理意见，被投诉人没有自觉遵守相应法律法规的处罚；如合适，提请投诉人协助制定改正方案。

7.我可以对调查结果提出上诉吗？

如果投诉人或被投诉人不同意 CRI 的调查结果，那么他/她/他们可以向助理秘书兼多元化主管提出上诉。申诉方须提供任何**上一轮调查未获得的新信息，以便 MassDOT/MBTA 重新考虑其结论。**申诉请求和补充的新信息须在调查结果通知传达后三十（30）日内提交。在审查相应信息后，MassDOT/MBTA 可以做出的决定包括，修订解决方案并重新发布，或通知上诉方维持原始解决方案或调查结果不变。

《第六章》投訴流程

目的及適用範圍

本檔旨在明確客戶向 MassDOT/MBTA 直接呈交歧視投訴的受理和處置流程，以及由 1964 年《民權法》（第六章）以及相關州級或聯邦消除歧視管理部門，包括《美國殘疾人法》（ADA）授權 MassDOT/MBTA 處理的歧視投訴。

歧視投訴的處理將遵循以下步驟，並在本檔中進一步詳細說明。

第 1 步：投訴人呈交投訴。

第 2 步：MassDOT/MBTA 向投訴人發出確認信。

第 3 步：為相應投訴分配調查員並負責審查。

第 4 步：調查員對投訴人、證人和被投訴人進行約談。

第 5 步：調查員審查證據和證詞，審查是否發生違規行為。

第 6 步：向投訴人和被投訴人各發出解決方案告知信或調查結果告知信，並給予上訴權。

第 7 步：上訴期滿調查即告結束。

以上規定是一個行政流程，旨在調查和消除聯邦政府資助的專案和活動中的歧視現象。以上流程不為尋求個人補償的投訴人提供救濟途徑，包括懲罰性賠償或補償性報酬；不禁止投訴人向其它州或聯邦機構呈交投訴；也不否認投訴人尋求私人法律顧問解決受控歧視行為的權利。

本檔所述流程適用於 MassDOT/MBTA 及其次級承接單位、承包商和分包人管理動作的聯邦資助專案和活動。

為遵守《民權法案》第六章，我們鼓勵透過 MassDOT/MBTA 獲得聯邦財政資助的次級承接單位採納此投訴流程。如採納，次級承接單位承認有義務為公眾提供機會投訴其機構專案、服務和活動中違反反歧視要求的行為。根據聯邦規定，公交類資助的次級承接單位理解其有權處理《民權法案》第六章投訴，並將知會其上級承接單位 MassDOT/MBTA 收到的投訴以及問題處理調查結果。

公路類資助的次級承接單位應明白其無權調查針對其機構（即該單位是被控違反《民權法案》第六章的被投訴人或一方）的《民權法案》第六章投訴。所有此類投訴須轉給 MassDOT/MBTA 多元化和民權辦公室決定合適的調查機構。公路類資助的次級承接單位可以保留將不違反《民權法案》第六章指控作為工作承諾和（或）內部政策承諾的權利，但無權裁定被指控行為是否違反《民權法案》第六章。

MassDOT/MBTA 鼓勵所有次級承接單位在收到《民權法案》第六章投訴時與多樣性及民權辦公室《民權法案》第六章專員、聯邦專案管理人和（或）調查部門負責人溝通，以保證問題得到恰當處理。

定義

投訴人：向 MassDOT/MBTA 呈交投訴的人。

投訴：有關歧視指控的書面或電子陳述，其中包含要求受理部門採取行動的訴求。如投訴由殘障人士呈交，則「投訴」應當涵蓋投訴人因其殘障而需要使用的替代文本格式。

歧視：無論故意還是無意，在美國的個人僅因種族、膚色、國籍，或其它反歧視機構規定的情形，如性別、年齡，或殘障等而受到任何接受聯邦資助的項目或活動的不公對待或完全不同影響的行為或無作為。

運營管理機構：美國政府各類機構受資助專案或活動的美國交通部各機構，包括聯邦公路管理局（FHWA）、聯邦公交管理局（FTA）、聯邦鐵路管理局（FRA）和全美公路交通安全管理局（NHTSA）和聯邦機動車交通安全管理局（FMCSA）。

被投訴人：被控有歧視行為的人員、代理、機構或組織。

呈交投訴

本節具體說明麻州交通部處理《民權法案》第六章歧視投訴（基於種族、膚色，或國籍，包括語言）以及基於（年齡、性別和殘障）其它聯邦反歧視規定的歧視投訴的流程。1964 年《民權法案》第六章（Title VI）對應的聯邦法律和法規將調查民權投訴的總體協調權授予美國司法部，司法部與履行這一職責的相應聯邦機構合作。在交通領域，此調查權被賦予美國交通部及其各類型交通管理機構，包括聯邦公路管理局（FHWA）和聯邦公交管理局（FTA）。根據美國交通部的規定，聯邦公路管理局、聯邦公交管理局建立規章制度要求接受聯邦財政資助單位及其次級承接單位建立處理針對本機構的《民權法案》第六章投訴流程。

下述流程的制定以美國司法部設立並推薦的投訴流程為模型，其目的是在尊重正當流程的基礎上為投訴和被投訴雙方解決投訴問題提供公平機會。除以下正式的投訴解決過程，在可能的情況下，MassDOT/MBTA 也會採取積極措施尋求對任何、所有《民權法案》第六章相關投訴的非正式解決方法。

投訴流程

1.誰可以呈交投訴？

任何公眾群體或個人，包括 MassDOT/MBTA 所有客戶、申請人、承包商，或次級承接單位，都可呈交投訴，如果他們認為自己、協力廠商，或一群人因其種族、膚色，或國籍（包括有限的英文水準）而受到不當對待或不公正對待，從而違反了 1964 頒佈的《民權法案》第六章、相關聯邦、州法律法規，或

麻州交通部制定的反歧視/反騷擾預防政策。《民權法案》第六章和反歧視騷擾預防政策也禁止因種族、膚色，或國籍對公眾進行報復的行為。

2.如何呈交投訴？

投訴可以透過以下方式呈交：

MassDOT/MBTA Title VI Specialists
Office of Diversity and Civil Rights – Title VI Unit
10 Park Plaza, Suite 3800
Boston, MA 02116
電話：（857）368-8580 或 7-1-1 電話中繼服務
電子郵件：MassDOT.CivilRights@state.ma.us or MBTAcivilrights@mbta.com

MassDOT/MBTA Assistant Secretary & Chief Diversity Officer
Office of Diversity and Civil Rights – Investigations Unit
10 Park Plaza, Suite 3800
Boston, MA 02116
電話：(857) 368-8580
電子郵件： odcrcomplaints@dot.state.ma.us

MBTA 客戶呼叫中心：(617) 222-3200
呼叫中心工作人員將從來電者收集有關指控事項的基本資訊，並將通話的詳細資訊轉發給多元化和民權辦公室，以便根據上述流程進行處理。

U.S. Department of Transportation
Office of Civil Rights
1200 New Jersey Avenue, SE
Washington, DC 20590
網站：civilrights.justice.gov/

請注意：

- FTA 在收到針對 MassDOT/MBTA 或其次級承接單位、承包商的第六章投訴時，FTA 可以要求 MassDOT/MBTA 開展調查。
- 如果相應第六章投訴雖向 MassDOT 呈交，但指控物件是 MassDOT 的公路部門，則將轉給當地 FHWA 部門辦公室，然後轉交 FHWA 總部民權辦公室（HCR）處理。
- 如果 MassDOT 收到針對 MassDOT 公路部門下屬次級承接單位的第六章投訴，則 MassDOT 可以直接處理並開展調查，也可以將投訴呈交給 HCR 進行調查。

- 如果 FMCSA 收到針對 MassDOT 的投訴，FMCSA 會將投訴轉發給 MassDOT 進行書面回復。MassDOT 收到後可以調查並解決相應投訴，或對相應指控作出書面答覆。FMCSA 將根據相應的書面答覆確定採取哪些步驟處理投訴。

3.投訴需說明哪些內容？

《民權法案》第六章/反歧視投訴表可從 MassDOT 第六章網站、MBTA 第六章網站下載，或從 MassDOT/MBTA 多元化和民權辦公室獲取紙質本填寫。投訴人也可以使用其他格式的通信呈交，通信應包括以下資訊：

- 您的姓名、簽名和當前聯繫資訊（即電話號碼、電子郵寄地址和郵寄位址）；
- 被指控人的姓名和徽章號碼（如已知或適用）；
- 描述被投訴行為如何、何時、何處發生；
- 詳細描述為什麼您認為受到了不公對待；
- 任何證人的姓名和聯繫方式；
- 您認為與您的投訴相關的任何其他資訊。

A. 如果投訴人無法提供書面陳述，可以向多元化和民權辦公室（ODCR）呈交口頭投訴。投訴人將由民權調查員（CRI）進行訪談。如有必要，CRI 將協助投訴人將口頭投訴轉換為書面投訴。所有投訴應由投訴人簽名。

B. 匿名投訴可以以同樣的方式呈交。匿名投訴的調查方式與任何其他投訴相同。

C. 投訴接受任何語言。提供多語種投訴表格。

4.我必須多久以後呈交投訴？

A. 指控違反《民權法案》第六章和/或 MassDOT/MBTA 反歧視騷擾預防政策（ADHP）的投訴應在事件發生後一百八十（180）天內呈交。

B. 指控違反州或聯邦法律的投訴應在相應法律法規或判例法規定的時間範圍內呈交——在某些情況下，自涉嫌事發之日起最多三百（300）天。

5.我的投訴將如何處理？

收到的投訴會分配給民權調查員（CRI）。CRI 將：

A. 確定管轄權：如果投訴符合以下條件，ODCR 具有管轄權：

1) 違反以下情況的言論或行為：

i. MassDOT/MBTA 預防受保護因素在公眾服務中遭受歧視、騷擾或報復的法律義務和承諾；

ii. 或

MassDOT/MBTA 的次級承接單位和承包商遵守 MassDOT/MBTA 政策的承諾；

並且，

2) 及時呈交。

B. 確認收到投訴、告知管轄權的決定，應在收到投訴後十（10）個工作日內做出。

1) 如 CRI 裁定相應投訴不具有構成違反民權的可能性，調查員應書面通知投訴人以及《民權法案》第六章專員。相應投訴結案。

C. 根據 MassDOT/MBTA 內部投訴流程對投訴所涉的指控進行徹底調查。

6.調查結果和處理意見？

調查結束時，CRI 將根據調查結果向投訴人和被投訴人轉交以下三封通信之一：

A. 一是解決方案，說明被投訴人已經或將會採取何種措施遵守《民權法案》第六章。

B. 一是調查無結果，調查發現被投訴人沒有違反第六章的規定。此函將解釋被投訴人為什麼被認為遵守了《民權法案》第六章，並告知投訴者有申訴的權利。

C. 一是調查屬實，調查發現被投訴人確有不合規。

此函將羅列被投訴人所有的不合規情況，簡要描述調查結果/處理意見，被投訴人沒有自覺遵守相應法律法規的處罰；如合適，提請投訴人協助制定改正方案。

7.我可以對調查結果上訴嗎？

如果投訴人或被投訴人不同意 CRI 的調查結果，那麼他/她/他們可以向助理秘書兼多元化主管呈交上訴。申訴方須提供任何**上一輪調查未獲得的新資訊，以便 MassDOT/MBTA 重新考慮其結論。**申訴請求和補充的新資訊須在調查結果通知傳達後三十（30）日內呈交。在審查相應資訊後，MassDOT/MBTA 可以做出的決定包括，修訂解決方案並重新發佈，或通知上訴方維持原始解決方案或調查結果不變。

Procédures de plainte en vertu du Titre VI

But et applicabilité

Le présent document vise à établir les procédures pour le traitement et l'arrangement des deux formes de plaintes contre la discrimination déposées directement après de MassDOT (Massachusetts Department of Transportation) ou de MBTA (Massachusetts Bay Transportation Authority) ainsi que les plaintes de discrimination pour lesquelles MassDOT /MBTA possèdent l'autorité déléguée de traiter en vertu du Titre VI du *Civil Rights Act of 1964* et les autorités connexes des juridictions de l'état et fédérales de non-discrimination, y compris le *Americans with Disabilities Act* ou ADA.

Le traitement des plaintes de discrimination devra respecter les démarches indiquées ci-dessous qui seront décrites de manière plus détaillée dans le reste de la présente.

Étape 1 : Le plaignant [Complainant] dépose sa plainte.

Étape 2 : MassDOT/MBTA envoie un accusé de réception au plaignant.

Étape 3 : La plainte est assignée à un enquêteur qui est chargé de l'examiner.

Étape 4 : L'enquêteur va procéder à l'entretien des plaignants, des témoins et de la personne dont l'attitude est à l'origine de la plainte (l'intimé).

Étape 5 : L'enquêteur examine les preuves et les témoignages afin de décider si une violation des droits a bien eu lieu.

Étape 6 : Le plaignant et l'intimé recevront une lettre de résolution ou une lettre de conclusion. Leurs droits en termes d'appel leur seront expliqués.

Étape 7 : À l'expiration de la période d'appel, l'enquête sera considérée classée.

Les procédures décrivent un processus administratif visant à identifier et à éliminer la discrimination dans les programmes et les activités financées par le gouvernement fédéral. Les procédures ne prévoient pas de recours pour les plaignants cherchant des voies de recours individuels, y compris les dommages-intérêts punitifs ou la rémunération compensatoire; elles n'interdisent pas aux plaignants de porter plainte auprès d'autres organismes publics ou fédéraux; elles ne refusent pas non plus aux plaignants le droit de s'adresser à un conseiller privé pour traiter les actes de discrimination allégués.

Les procédures décrites dans le présent document s'appliquent à MassDOT/MBTA et à leurs sous-bénéficiaires, contractants et sous-contractants dans l'administration des programmes et activités financés par le gouvernement fédéral.

Dans le cadre de leurs efforts pour se conformer au Titre VI, les sous-bénéficiaires de l'aide financière fédérale par l'intermédiaire de MassDOT/MBTA sont encouragés à adopter ces procédures de plainte. Ce faisant, ces sous bénéficiaires reconnaissent leur obligation d'accorder aux membres du public l'occasion de déposer des plaintes alléguant des violations aux politiques de non-discrimination dans l'ensemble des programmes, services et activités de l'organisation. Conformément aux directives fédérales, les sous bénéficiaires de fonds liés aux transports en commun comprennent qu'ils ont le droit de traiter les plaintes du Titre VI et informeront leurs destinataires, MassDOT/MBTA, des plaintes reçues et des résultats des enquêtes au fur et à mesure que les affaires sont traitées.

Les sous bénéficiaires de fonds liés au réseau routier comprennent également qu'ils n'ont pas l'autorité nécessaire pour enquêter sur les allégations de violation du Titre VI déposées contre leur organisation (lorsque leur organisation est l'intimée ou partie alléguée d'avoir enfreint le Titre VI). Toutes ces plaintes seront transmises au bureau de la diversité et des droits civils (*Office of Diversity and Civil Rights* ou *ODCR*) de MassDOT/MBTA afin de déterminer qui aura juridiction pour enquêter en la matière. Les sous bénéficiaires du financement du réseau routier se réservent le droit d'examiner les allégations de violation du Titre VI comme une question d'assurance et/ou de conformité aux règlements internes, mais ils sont dans l'impossibilité de prendre des décisions relatives à d'éventuelles violations du Titre VI. MassDOT/MBTA encourage tous les sous bénéficiaires à communiquer avec les spécialistes du Titre VI, le directeur du Titre VI et de l'accessibilité et/ou le directeur des enquêtes d'ODCR quand / si les plaintes concernant l'article VI sont reçues afin d'assurer une gestion correcte.

Définitions

Plaignant (Complainant) – une personne qui dépose une plainte auprès de MassDOT/MBTA.

Plainte (Complaint) – Déclaration écrite, verbale ou électronique concernant une allégation de discrimination qui contient une demande d'intervention de la part de l'office récepteur. Lorsqu'une personne handicapée dépose une plainte, le terme « plainte » englobe d'autres formats pour accommoder le handicap du plaignant.

Discrimination (Discrimination) – Cet acte ou inaction, intentionnel ou non, par lequel une personne aux États-Unis a été soumise à un traitement inégal ou a des effets disparates dans le cadre de tout programme ou activité bénéficiant d'une aide financière fédérale, uniquement en raison de sa race, de la couleur de sa peau, de son origine nationale ou des bases couvertes par d'autres dispositions légales non-discriminatoires, tels que le sexe, l'âge ou le handicap.

Administrations (Operating Administrations) – Agences du Ministère des Transports des États-Unis, y compris l'administration fédérale responsable des autoroutes (*Federal Highway Administration* ou FHWA), l'administration fédérale des transports publics (*Federal Transit Administration* ou FTA), l'administration fédérale du réseau ferroviaire (*Federal Rail Administration* ou FRA), l'administration nationale de la sécurité routière (*National Highway Traffic Safety Administration* ou NHTSA), et l'administration fédérale pour la sécurité des transporteurs routiers (*Federal Motor Carrier Safety Administration* ou FMCSA), qui assurent le financement des programmes ou activités liés aux transports.

Intimé (Respondent) – La personne, l'organisme, l'institution ou l'organisation accusé(e) de discrimination.

Dépôt de plaintes

Cette section détaille les procédures de MassDOT/MBTA pour le traitement des plaintes de discrimination en vertu du Titre VI (sur la base de la race, de la couleur de peau ou de l'origine nationale, y compris la langue) et des plaintes alléguant une discrimination sur la base de dispositions fédérales non discriminatoires supplémentaires (sur la base de l'âge, du sexe et du handicap). La loi fédérale et les règlements fédéraux régissant le Titre VI du *Civil Rights Act of 1964* placent l'autorité générale de coordination des enquêtes sur les plaintes de droits civils entre les mains du ministère de la Justice des États-Unis, qui travaille en collaboration avec les organismes fédéraux à qui incombe cette responsabilité. Dans le secteur des transports, cette autorité d'enquête incombe au Ministère des transports des États-Unis (*US Department of Transportation* ou US DOT) et à ses agences pour les différents modes de transport, y compris la *Federal Highway Administration (FHWA)* et la *Federal Transit Administration (FTA*). En coordination avec les exigences de USDOT, la FHWA et la FTA ont établi des règlements et directives qui exigent que les bénéficiaires et les sous bénéficiaires de l'aide financière fédérale établissent des procédures de traitement des plaintes en vertu du Titre VI déposées auprès de ces organisations.

Les procédures de plainte décrites ci-dessous s'appuient sur les recommandations de procédure promulguées par le Ministère de la justice des États-Unis (*US Department of Justice* ou US DOJ) et sont conçues pour offrir une chance équitable de saisir des plaintes tout en respectant les procédures établies pour les deux parties concernées : plaignants et intimés. Outre le processus de résolution de plainte formelle décrit dans les présentes, MassDOT/MBTA prendront des mesures positives pour poursuivre, dans la mesure du possible, le règlement à l'amiable de toutes les plaintes en vertu du Titre VI.

Le processus de plainte

1. Qui peut déposer une plainte?

TOUT membre du public, ainsi que tous les clients de MassDOT/MBTA, les postulants, les contractants ou les sous bénéficiaires qui sont persuadés qu'eux-mêmes, un tiers, ou une classe de personnes ont été maltraités ou traités injustement en raison de leur race, de la couleur de leur peau ou de leur origine nationale (y compris une maîtrise limitée de l'anglais) en violation du Titre VI du *Civil Rights Act of 1964*, des lois et des ordonnances fédérales et étatiques, ou de la politique de prévention et de la lutte contre la discrimination et le harcèlement (*Anti-Discrimination Harassment Prevention* ou ADHP] de MassDOT/MBTA. Les représailles contre un membre du public sur la base de la race, de la couleur de la peau ou de l'origine nationale sont également interdites en vertu du Titre VI et du règlement de l'ADHP.

2. Comment puis-je déposer une plainte?

Une plainte peut être déposée aux services suivants :

MassDOT/MBTA Title VI Specialists
Office of Diversity and Civil Rights – Title VI Unit
10 Park Plaza, Suite 3800
Boston, MA 02116 - É.U.
Tél. : (857) 368-8580 ou 7-1-1 pour le service de relais
Courriel : MassDOT.CivilRights@state.ma.us ou MBTAcivilrights@mbta.com

MassDOT/MBTA, Assistant Secretary and Chief Diversity Officer
Office of Diversity and Civil Rights – Investigations Unit
10 Park Plaza, Suite 3800
Boston, MA 02116
Tél. : (857) 368-8580
Courriel : odcrcomplaints@dot.state.ma.us

Centre d'appel de MBTA : (617) 222-3200
Le personnel du centre d'appel s'efforcera de recueillir les renseignements essentiels sur la plainte en parlant avec l'interlocuteur. Les détails de l'appel seront ensuite envoyés au bureau de la diversité et des droits civils (*Office of Diversity and Civil Rights*) pour qu'il soit traité conformément à ces procédures.

U.S. Department of Transportation
Office of Civil Rights
1200 New Jersey Avenue, SE
Washington, DC 20590
Site internet : civilrights.justice.gov/

Veuillez noter que :

- Lorsque FTA reçoit une plainte en vertu du Titre VI concernant MassDOT/MBTA, un sous bénéficiaire ou un contractant, FTA peut demander à MassDOT d'examiner l'affaire.

- Si une plainte en vertu du Titre VI est déposée auprès de MassDOT alléguant une violation de la part de la division des autoroutes de MassDOT, cette plainte sera transmise au bureau local de la division FHWA qui la transmettra ensuite pour résolution au bureau des droits civils [*Office of Civil Rights* ou HCR) du siège de la FHWA.

- Si MassDOT reçoit une plainte en vertu du Titre VI contre un sous bénéficiaire de la division des autoroutes de MassDOT, MassDOT peut alors traiter la plainte et enquêter sur celle-ci, ou la transmettre à HCR pour qu'une enquête soit menée à ce niveau-là.

- Si FMCSA reçoit une plainte déposée contre MassDOT, FMCSA la transmettra à MassDOT pour qu'une réponse écrite soit envoyée. Cela permettra à MassDOT soit d'apporter une résolution à la plainte, soit

de répondre par écrit aux allégations. La correspondance servira à déterminer quelles étapes FMCSA devra suivre pour traiter la plainte.

3. Que dois-je inclure dans une plainte?

Un formulaire de plainte en vertu du Titre Vi/de non-discrimination est disponible en version électronique sur le site internet MassDOT Title VI , le site internet MBTA Title VI, ou en version sur papier que l'on peut se procurer auprès du bureau de la diversité et des droits civils de MassDOT/MBTA (*Office of Diversity and Civil Rights)*. Il est également possible, par ailleurs, qu'un plaignant soumette une correspondance sous un autre format qui doit inclure les détails suivants :

- Votre nom, votre signature et vos coordonnées actuelles (c.-à-d. numéro de téléphone, courriel et adresse postale);
- Le nom et le numéro de badge (si vous le connaissez et le cas échéant) de l'auteur présumé de l'acte;
- Une description de comment, quand et où la conduite interdite alléguée a eu lieu;
- Une description détaillée des raisons pour lesquelles vous croyez avoir été traité(e) différemment;
- Noms et coordonnées des témoins, et
- Toute autre information que vous jugez pertinente à votre plainte.

A. Dans les cas où le plaignant est incapable de fournir une déclaration écrite, une plainte verbale peut être déposée auprès du bureau de la diversité et des droits civils (*Office of Diversity & Civil Rights*, ODCR). Les plaignants seront interviewés par un enquêteur de droits civils [*Civil Rights Inverstigator* ou CRI]. . Si nécessaire, le CRI aidera la personne à rédiger la plainte verbale Toutes les plaintes doivent être signées par le plaignant.

B. Les plaintes anonymes peuvent être déposées de la même manière. Les plaintes anonymes font l'objet d'une enquête similaire à toute autre plainte.

C. Les plaintes seront acceptées dans toutes les langues reconnues. Des formulaires de plainte multilingues sont disponibles.

4. De combien de temps est-ce que je dispose pour déposer une plainte?

A. Une plainte alléguant une violation du Titre VI et/ou du règlement ADHP de MassDOT/MBTA doit être déposée dans un délai de cent quatre-vingts (180) jours suivant la date de l'incident allégué.

B. Les plaintes alléguant des violations des lois régionales ou fédérales doivent être déposées dans des délais fixés par les ordonnances, règlementations ou la jurisprudence – dans certains cas jusqu'à trois cent (300) jours après la date de l'incident allégué.

5. Comment ma plainte sera-t-elle traitée?

Lorsqu'une plainte est reçue, elle est assignée à un enquêteur des droits civils (*Civil Rights Investigator* ou CRI). Ce CRI procèdera comme suit :

A. Déterminer la juridiction : ODCR a compétence si la plainte :

1) concerne une déclaration ou un comportement qui transgresse :

   i. L'obligation légale de MassDOT/MBTA et son engagement pour prévenir la discrimination, le harcèlement ou les représailles sur la base d'une caractéristique protégée concernant tout aspect du service au public de l'agence;

   ii. ou

   L'engagement pris par les sous bénéficiaires et les contractants collaborant avec MassDOT/MBTA pour se conformer aux règlements de MassDOT/MBTA;

   ET

2) Est déposée dans des délais raisonnables.

B. Accuser réception de la plainte et fournir une décision quant à la juridiction compétente dans les dix (10) jours ouvrables qui suivent la réception de la plainte.

   1) Si le CRI détermine qu'une plainte n'a pas le potentiel d'établir une violation des droits civils, il doit alors aviser le plaignant et le spécialiste du Titre VI par écrit de ses conclusions et l'affaire sera considérée classée.

C. Mener une enquête approfondie sur les allégations contenues dans la plainte conformément aux procédures internes de traitement des plaintes de MassDOT/MBTA.

6. Conclusions et recommandations?

À l'issue de l'enquête, le CRI transmettra au plaignant et à l'intimé, l'une des trois lettres suivantes en fonction des conclusions qu'il aura tirées :

A. Une lettre de résolution expliquant les mesures que l'intimé a prises ou prendra pour se conformer au Titre VI.

B. Une lettre de conclusion qui est émise lorsque le comportement de l'intimé s'avère être conforme aux normes du Titre VI. Cette lettre comportera une explication des raisons pour lesquelles le comportement de l'intimé s'est avéré conforme et avertira le plaignant de ses droits en termes d'appel.

C. Une lettre de conclusion qui est émise lorsque le comportement de l'intimé est jugé être en non-conformité.

Cette lettre comprendra chaque violation avec un renvoi aux règlements applicables, une description succincte des conclusions et recommandations, les conséquences d'un défaut de conformité volontaire et une offre d'assistance à l'élaboration d'un plan correctif de conformité, le cas échéant.

7. Puis-je faire appel?

Si le plaignant ou l'intimé n'accepte pas les conclusions du CRI, il/elle peut faire appel auprès du secrétaire adjoint à la diversité & droits civils (*Assistant Secretary and Chief Diversity Officer*). La partie faisant appel doit fournir toute **nouvelle information qui n'était pas disponible lors de l'enquête initiale et qui conduirait MassDOT/MBTA à reconsidérer ses conclusions.** La demande en appel et toute

nouvelle information doivent être soumises dans les soixante (60) jours de la date à laquelle la lettre de conclusion a été envoyée. Après avoir examiné ces informations, MassDOT/MBTA répondront soit en publiant une lettre révisée de la résolution, soit en avisant la partie faisant appel que la lettre originale de résolution ou de conclusion reste en vigueur.

Pwosedi pou Pote Plent dapre Tit 6

Objektif ak Posiblite pou Aplikasyon

Objektif dokiman sa a, se pou tabli pwosedi pou trete ak pran desizyon sou toude kalite plent pou diskriminasyon sa yo: plent dirèk yo pote devan MassDOT (Massachusetts Department of Transportation), oswa MBTA (Massachusetts Bay Transportation Authority), ak plent MassDOT/MBTA resevwa delegasyon otorite pou yo trete dapre Tit 6 nan Lwa sou Dwa Sivik 1964 la [Civil Rights Act of 1964 (Title VI)], ansanm ak otorite yo resevwa dapre règleman kont diskriminasyon Eta ak gouvènman federal la, tankou Lwa pou Moun Andikape nan Etazini yo [Americans with Disabilities Act (ADA)].

Tretman plent kont diskriminasyon yo ap swiv etap ki dekri pi ba la yo, epi pral genyen plis detay sou yo nan tout dokiman sa a.

Etap 1: Pleyan an depoze pwòt plent li.

Etap 2: MassDOT/MBTA ap voye yon lèt konfimasyon bay Pleyan an.

Etap 3: Pleyan an afekte bay yon anketè, ki etidye dosye a.

Etap 4: Anketè a fè entèvyou avèk Pleyan an, temwen yo, ak Repondè a.

Etap 5: Anketè a ànalize prèv ak temwayaj yo pou gade si gen yon vyolasyon ki komèt.

Etap 6: Y ap bay Pleyan an ak Repondè a yon lèt desizyon oswa yon lèt konklizyon, epi y ap ofri yo dwa pou yo fè apèl.

Etap 7: Depi peryòd pou fè apèl la fin pase, ankèt la ap fèmen.

Pwosedi yo dekri pwosesis administratif ki fèt pou idantifye ak eliminen diskriminasyon nan pwogram ak nan aktivite gouvènman federal la finanse. Pwosedi sa yo pa louvri chimen pou pèmèt moun ki pote plent yo jwenn konpansasyon pèsonnèl, tankou sanksyon poutèt abi yo fè yo, ni konpansasyon lajan; yo pa anpeche moun ki pote plent yo ale pote plent bay lòt ajans nan Eta a, oswa lòt ajans gouvènman; ni yo pa anpeche moun ki pote plent yo non plis, pou yo pran yon avoka prive, pou ede yo regle ka diskriminasyon yo vle rapòte.

Pwosedi ki dekri nan dokiman sa a aplikab pou MassDOT/MBTA ansanm ak filyal yo, kontraktè yo, ak soutretan yo nan jan y ap mennen pwogram ak aktivite gouvènman federal la finanse.

Nan travay y ap fè dapre Tit 6 la, soutretan ki resevwa asistans federal nan men MassDOT yo dwe sèvi avèk pwosedi sa yo, pou trete plent moun pote. Lè yo fè sa, soutretan yo rekonnèt obligasyon yo genyen pou bay moun nan piblik la yon chans pou yo pote plent kont sa yo kwè ki vyolasyon prensip kont diskriminasyon yo nan tout pwogram, sèvis, ak aktivite òganizasyon yo ap fè. Dapre direktiv gouvènman federal la, soutretan k ap administre finansman ki anrapò avèk transpò yo byen konprann yo gen otorite pou yo trete plent moun pote dapre Tit 6 la, epi pou yo fè MassDOT, ki reprezante yo, konnen plent yo resevwa, ansanm ak rezilta pandan ankèt pandan y ap rezoud ka sa yo.

Soutretan k ap administre finansman ki anrapò avèk transpò sou granwout yo byen konprann yo pa gen otorite pou mennen ankèt sou reklamasyon ki fèt kont pwòp òganizasyon yo dapre Tit 6 (sa ki vle di, lè se pwòp òganizasyon yo ki defandè oswa ki akize dèske li te patisipe nan vyolasyon kont Tit 6 la). Tout reklamasyon konsa yo dwe transfere bay Biwo sou Divèsite ak Dwa Sivik MassDOT/MBTA a, pou li deside ki kote ki pral gen otorite pou mennen ankèt la. Soutretan k ap administre finansman ki anrapò avèk transpò sou granwout yo toujou gen dwa pou yo konsidere deklarasyon vyolasyon dapre Tit 6 yo tankou yon kesyon kontwòl ak/oswa obsèvasyon règleman entèn, men yo pa gen dwa pran okenn desizyon sou ka ki kapab se vyolasyon dapre Tit 6 la. MassDOT ankouraje tout soutretan yo kominike avèk Espesyalis ODCR pou Tit 6 la, avèk Direktè Pwogram Federal yo, ak/oswa avèk Direktè Envestigasyon an si yo resevwa yon plent dapre Tit 6 la, pou yo kapab sèten ka a trete yon jan ki kòrèk.

Definisyon

Pleyan [*Complainant*] – Se yon moun ki pote yon plent bay MassDOT.

Plent [*Complaint]* – Se yon deklarasyon ekri oubyen elektwonnik sou sa yo rapòte kòm yon ka diskriminasyon, ki genyen yon demann pou biwo ki resevwa plent lan pran yon aksyon. Lè moun ki pote plent lan se yon moun andikape, sa yo rele plent lan kapab fèt tou nan yon fòma altènatif ki koresponn avèk andikap pleyan an genyen an.

Diskriminasyon [*Discrimination*] – Se aksyon oubyen inaksyon, kit li fèt avèk oubyen san entansyon, kote yon moun ki nan Etazini sibi yon tretman ki pa menm ak lòt moun, oswa resevwa yon lòt kalite sèvis nan nenpòt pwogram oswa nenpòt aktivite ki resevwa asistans federal, sèlman poutèt ras moun lan, koulè li, peyi li soti, oswa poutèt lòt rezon ki kouvri dapre lòt règleman kont diskriminasyon, tankou si moun lan se gason oubyen fi, laj li, oubyen andikap li genyen.

Administrasyon pou Operasyon [*Operating Administrations]* – Se ajans nan Depatman Transpò Etazini [U.S. Department of Transportation], tankou Administrasyon Federal pou Granwout [Federal Highway Administration (FHWA)], ak Administrasyon Federal pou

Transpò [Federal Transit Administration (FTA)], ak Administrasyon Federal pou Wout Tren [Federal Rail Administration (FRA)], ak Administrasyon Nasyonnal pou Sekirite nan Sikilasyon sou Granwout [National Highway Traffic Safety Administration (NHTSA)], ak Administrasyon Federal pou Sekirite nan Transporteur Motor [Federal Motor Carrier Safety Administration (FMCSA)] ki finanse pwogram oswa aktivite pou transpò.

Defandè [*Respondent]* – Se moun, oswa ajans, oswa enstitisyon, oswa òganizasyon yo di ki fè dikriminasyon an.

Pou Depoze yon Plent

Seksyon sa a esplike an detay pwosedi Depatman Transpò Massachusetts la [Massachusetts Department of Transportation (MassDOT)] sèvi pou trete plent pou diskriminasyon dapre Tit 6 la (diskriminasyon ki fèt poutèt ras yon moun, peyi li soti, oswa tou lang li pale) ak plent pou diskriminasyon yo di ki fèt dapre lòt dispozisyon federal ankò (tankou laj, si moun lan se gason oubyen fi, oubyen andikap li genyen). Lwa ak règleman federal ki gouvènen Tit 6 nan Lwa sou Dwa Sivik 1964 la [Title VI of the Civil Rights Act of 1964 (Title VI)] mete responsablite pou kowòdinasyon jenneral pou ankèt sou plent pou dwa sivik yo nan men Depatman Lajistis Etazini [United States Department of Justice], ki travay an kolaborasyon avèk ajans federal ki egzekite responsablite sa yo. Nan sektè transpò a, otorite pou mennen ankèt konsa chita nan men Depatman Transpò Etazini [US Department of Transportation (US DOT)] ansanm ak ajans li yo pou diferan mòd transpò, tankou Administrasyon Federal pou Granwout [Federal Highway Administration (FHWA)], ak Administrasyon Federal pou Transpò [Federal Transit Administration (FTA)]. An konfòmite avèk sa USDOT mande yo, FHWA ak FTA tabli règleman ak direktiv ki egzije bennefisyè ak soutretan pou asistans federal yo, pou yo defini pwosedi pou trete plent moun pote devan yo dapre Tit 6.

Pwosedi pi ba la yo, ki ekri dapre pwosedi pou plent ki rekòmande epi ki adopte nan Depatman Lajistis Etazini [US Department of Justice (US DOJ)], fèt yon jan pou pèmèt moun jwenn yon chans nòmal pou fè konnen plent yo, ki aplike yon metòd ekitab ni pou pleyan an, ni pou defandè a. Anplis pwosedi fòmèl pou rezoud plent ki dekri la a, MassDOT/MBTA pran aksyon afimatif pou jwenn solisyon enfòmèl pou tout plent ki pote dapre Tit 6, lè sa posib.

Pwosesis pou Pote Plent Ian

1. Kimoun ki kapab depoze yon plent?

NENPÒT moun nan piblik la, ansanm ak tout kliyan, demandè enskripsyon, kontraktè, oswa bennefisyè segondè MassDOT ki kwè yomenm, oswa yon moun yo konnen, oswa yon klas moun te resevwa move sèvis oswa yon tretman ki pa ekitab poutèt ras yo, koulè yo, oswa peyi kote yo soti (sa ki vle di tou, moun ki pa pale angle byen) an vyolasyon Tit 6 nan Lwa sou Dwa Sivik 1964 la [Title VI of the Civil Rights Act of 1964], anrapò avèk lwa ak direktiv nan Eta a, oswa avèk régleman MassDOT pou Prevansyon kont Pèsekisyon poutèt

Diskriminasyon [Discrimination Harassment Prevention (ADHP)]. Tit 6 ak Règleman ADHP yo defann tou pou fè vanjans kont yon moun nan piblik la poutèt ras, koulè, oswa peyi kote moun lan soti.

2. Kouman pou mwen depoze yon plent?

Ou ka depoze yon plent devan youn nan kote sa yo:

MassDOT/MBTA Title VI Specialists
MassDOT Office of Diversity and Civil Rights - Title VI Unit
10 Park Plaza, Suite 3800
Boston, MA 02116
Telefòn: (857) 368-8580, oswa pou Relay Service (Sèvis Relè).
Adrès elektwonnik: MassDOT.CivilRights@state.ma.us
oswa MBTAcivilrights@mbta.com

MassDOT/MBTA, Assistant Secretary an Chief Diversity Officer
Office of Diversity and Civil Rights - Investigations Unit
10 Park Plaza, Suite 3800
Boston, MA 02116
Telefòn: (857) 368-8580
Adrès elektwonnik: odcrcomplaints@dot.state.ma.us

Sant Apèl pou Kliyan MBTA: (617) 222-3200
Sant Apèl la ap mande moun ki rele a enfòmasyon bazik sou kesyon an, epi l ap voye enfòmasyon yo bay Biwo Divèsite ak Dwa Sivik la pou li trete yo dapre pwosedi sa yo.

U.S. Department of Transportation
Office of Civil Rights (Biwo pou Dwa Sivik)
1200 New Jersey Avenue, SE
Washington, DC 20590
Sit Entènèt: civilrights.justice.gov/

Remak:

- Lè FTA resevwa yon plent dapre Tit 6, ki anrapò avèk MassDOT, oswa avèk yon soutretan, oswa avèk yon kontraktè, FTA kapab mande pou MassDOT mennen yon ankèt sou zafè a.
- Si yo depoze yon plent dapre Tit 6 devan MassDOT pou fè rapò sou yon vyolasyon Divizyon pou Granwout [Highway Division] MassDOT la komèt, lè sa a yo pral voye plent lan bay Biwo Divizyon FHWA lokal la, ki pral voye li bay

Biwo Katye Jenneral pou Dwa Sivik FHWA a [Headquarters Office of Civil Rights (HCR)] pou li trete plent lan.

- Si MassDOT resevwa yon plent dapre Tit 6 ki depoze kont yon soutretan nan Divizyon pou Granwout MassDOT la, lè sa a MassDOT kapab trete plent lan ak mennen yon ankèt oubyen voye li nan HCR pour yo fè yon ankèt.

- Si FMCSA resevwa yon plent kont MassDOT, FMCSA ap voye plent lan bay MassDOT pou mande li yon repons ekri. Sa pèmèt MassDOT swa rezoud plent lan, swa bay yon repons ekri sou sa yo di ki rive a. Repons ekri a ap sèvi pou deside ki etap FMCSA pral pran pou trete plent lan.

3. Kisa mwen dwe mete nan yon plent?

Ou ka jwenn yon fòmilè elektwonnik pou Plent kont diskriminasyon dapre Tit 6 nan pòtay Entènèt MassDOT Title VI la, oswa MBTA Title VI la, oswa yon fòmilè sou papye nan biwo Espesyalis MassDOT/MBTA pou Divèsite ak Dwa Sivik la. Osinon, ou ka remèt yon plent nan yon lèt ki ekri nan yon lòt fòma, ki dwe genyen:

- Non, siyati, ak enfòmasyon ki valab kounye a si pou yo kontakte w (tankou nimewo telefòn ak adrès potal ou);
- Non ak nimewo idantifikasyon (si li genyen, epi si ou konnen li) moun ou kwè ki fè vyolasyon an;
- Yon deskripsyon ki di kouman, kilè, ak ki kote aksyon ou kwè ki vyolasyon an rive;
- Yon deskripsyon detaye ki di pou kisa ou kwè yo pa te trete w menm jan ak tout moun;
- Non ak enfòmasyon pou kontakte nenpòt ki temwen ou ka bay; epi
- Nenpòt ki lòt enfòmasyon ou kwè ki kapab anrapò avèk plent ou pote a.

A. Si moun k ap pote plent lan pa kapab bay yon deklarasyon ekri, li ka pote yon plent nan bouch nan Biwo pou Divèsite ak Dwa Sivik la [Office of Diversity & Civil Rights (ODCR)]. Pleyan yo pral gen yon entèvyou avèk yon Anketè Dwa Sivik [Civil Rights Investigator (CRI)]. Si pleyan an bezwen sa, CRI ka ede l mete plent nan bouch li a sou papye. Pleyan an dwe siyen tout plent li pote.

B. Plent anonim yo kapab fèt menm jan an. Plent anonim yo pral pase nan yon ankèt menm jan ak nenpòt ki lòt plent.

C. Yo kapab aksepte plent ki pote nan nenpòt ki lang yo rekonnèt. Ou ka jwenn fòmilè pou plent ki nan plizyè lang.

4. Konbyen tan mwen genyen pou mwen depoze yon plent?

A. Si ou vle depoze yon plent pou rapòte sa ou kwè ki yon vyolasyon prensip nan Tit 6 ak/oswa nan ADHP MassDOT/MBTA âa, ou dwe depoze li anvan san katreven (180) jou pase apre dat vyolasyon ou kwè ki rive a.

B. Si yon plent ap fèt kont yon aksyon ki sanble yon vyolasyon lwa Eta oswa lwa federal yo, li dwe depoze pandan tan ki tabli nan règ, ak nan règleman, oswa nan lwa sou ka konsa yo.

5. Kouman yo pral trete yon plent mwen pote?

Lè yo resevwa yon plent, yo mete ka a nan men yon Anketè Dwa Sivik [Civil Rights Investigator (CRI)]. CRI a pral

A. Pran desizyon sou dwa jiridiksyon: ODCR gen dwa jiridiksyon si pleyan an:
   1) ankòz nan yon deklarasyon oswa nan yon aksyon ki vyole:
      i. obligasyon legal ak angajman MassDOT/MBTA nan anpeche diskriminasyon, pèsekisyon, oswa vanjans poutèt youn nan karakteristik ki gen pwoteksyon nenpòt ki jan, nan sèvis Ajans lan fè pou piblik la;
      ii. oswa

      angajman soutretan ak kontraktè yo pran, nan travay y ap fè avèk MassDOT /MBTA pou respekte prensip MassDOT/MBTA;

      EPI
   2) plent lan depoze anvan tan an pase pou sa.

B. Fè konnen li resevwa plent lan, epi deside sou jiridiksyon konpetan an anvan dis (10) jou pase apre li resevwa plent lan.
   1) Si CRI a wè yon plent pa gen posiblite pou li montre gen yon vyolasyon dwa sivik ki rive, CRI a ap fè pleyan an ak Espesyalis pou Tit 6 la konnen sa nan yon lèt, epi zafè a ap rete kanpe la.

C. Mennen yon ankèt total sou deklarasyon ki nan plent lan, dapre pwosedi entèn MassDOT/MBTA sou plent yo.

6. Konklizyon ak Rekòmandasyon

Lè ankèt la fini, CRI pral voye bay pleyan an ak bay defandè a youn nan twa lèt sa yo, sou konklizyon li jwenn yo:

A. Yon lèt rezolisyon, ki pral esplike ki aksyon defandè a pran oubyen pral pran pou satisfè sa Tit 6 la mande.

B. Yon lèt sou konklizyon, si yo wè defandè a satisfè sa Tit 6 la mande. Lèt sa a pral esplike pou kisa yo wè defandè a satisfè kondisyon ki nesesè yo, epi l ap fè pleyan an konnen dwa li pou mande yon apèl.

C. Yon lèt sou konklizyon, si yo wè defandè a pa satisfè kondisyon ki nesesè yo. Lèt sa a pral genyen ladan yon referans pou chak vyolasyon, k ap montre règleman ki aplikab la; yon deskripsyon kout sou konklizyon ak rekòmandasyon yo, ak konsekans k ap genyen si yon moun pa pote koreksyon an volontèman; epi yon pwopozisyon pou asistans nan tabli yon plan pou koreksyon an, si sa nesesè.

7. Èske mwen ka mande yon apèl kont konklizyon an?

Si yon pleyan oswa yon defandè pa dakò avèk konklizyon CRI la, li ka fè yon apèl devan Sekretè Adjwen pou Divèsite ak Dwa Sivik la [Assistant Secretary of Diversity & Civil Rights]. Moun ki fè apèl la dwe bay tout **nouvo enfòmasyon yo pa te kapab jwenn fasil pandan yo t ap mennen premye ankèt la, ki ta kapab lakòz MassDOT retounen gade desizyon yo pran an**. Lè gen yon demann apèl k ap fèt, yo dwe prezante demann lan, ansanm ak nouvo enfòmasyon yo, anvan swasant (60) jou pase apre dat yo te voye lèt ki gen desizyon an. Lè li fin gade enfòmasyon sa yo, MassDOT ap reponn swa nan yon lèt kote li korije desizyon an, swa nan yon notifikasyon pou fè moun ki fè apèl la konnen desizyon oswa konklizyon an ap rete menm jan.

Procedure di ricorso ai sensi del Titolo VI

Scopo e applicabilità

Scopo di questo documento è stabilire le procedure relative alla lavorazione e alla risoluzione di ricorsi relativi a casi di discriminazione presentate direttamente al Massachusetts Department of Transportation (MassDOT, Dipartimento dei Trasporti del Massachusetts) o alla Massachusetts Bay Transportation Authority (Autorità dei Trasporti della Baia del Massachusetts, MBTA) nonché di ricorsi relativi a casi di discriminazione per cui MassDOT/MBTA hanno autorità delegata ai sensi del Titolo VI della Legge sui Diritti Civili del 1964 (Titolo VI) e delle relative autorità statali e federali competenti in materia di non discriminazione, inclusa la Legge degli Stati Uniti sui Disabili (Americans with Disabilities Act, ADA).

Il trattamento dei ricorsi per discriminazione seguirà l'iter descritto di seguito e ulteriormente dettagliato nel presente documento.

Fase 1: Il ricorrente presenta il proprio ricorso.

Fase 2: Il MassDOT/MBTA invia al ricorrente una lettera di conferma.

Fase 3: Al ricorso viene assegnato un investigatore che lo esamina.

Fase 4: L'investigatore conduce colloqui con ricorrenti, testimoni e con il convenuto.

Fase 5: L'investigatore esamina le prove e le testimonianze per determinare se si è verificata una violazione.

Fase 6: Il ricorrente e il convenuto ricevono una lettera di risoluzione o una lettera di constatazione e hanno la possibilità di ricorrere in appello.

Fase 7: Una volta scaduto il periodo di appello, l'indagine è chiusa.

Le procedure delineano un iter amministrativo finalizzato ad identificare ed eliminare la discriminazione nei programmi e nelle attività finanziate a livello federale. Le procedure non rappresentano una via d'uscita per ricorrenti in cerca di risarcimenti individuali, inclusi danni punitivi o indennizzi; non impediscono ai ricorrenti di presentare i ricorsi presso altre agenzie federali o statali; e non negano neanche ai ricorrenti il diritto di rivolgersi a un difensore di fiducia affinché si occupi di presunti atti di discriminazione.

Le procedure descritte in questo documento si applicano a MassDOT/MBTA e ai suoi beneficiari secondari, appaltatori e subappaltatori per ciò che riguarda la gestione dei programmi e delle attività finanziate a livello federale.

Nel quadro delle azioni rivolte all'adeguamento con il Titolo VI, i beneficiari secondari che ricevono assistenza finanziaria federale tramite MassDOT/MBTA sono incoraggiati ad adottare queste procedure di ricorso. In tal modo, i suddetti beneficiari secondari riconoscono l'obbligo di offrire ai cittadini la possibilità di presentare ricorso per presunte violazioni dei requisiti di non discriminazione nei programmi, servizi ed attività dell'organizzazione. Conformemente a quanto stabilito dall'orientamento federale- i beneficiari secondari dei fondi relativi ai trasporti riconoscono la loro autorità nell'esame dei ricorsi ai sensi del Titolo VI e notificheranno al loro beneficiario, MassDOT/MBTA, i ricorsi presentati e l'esito delle indagini riguardanti la gestione dei casi.

I beneficiari secondari dei fondi relativi alle autostrade riconoscono inoltre di non avere autorità-per esaminare le richieste di violazione presentate contro la loro organizzazione (laddove l'organizzazione è la parte convenuta oppure la parte accusata di aver violato il Titolo VI). Tutti i ricorsi verranno inoltrati all'Office of Diversity and Civil Rights (ODCR) di MassDOT/MBTA al fine di determinare l'autorità investigativa competente. I beneficiari secondari- dei finanziamenti relativi alle autostrade conservano il diritto di considerare le dichiarazioni di violazione del Titolo VI come una questione di Assicurazione e/o di adempimento della politica interna ma non gli è consentito di prendere decisioni riguardo alle possibili violazioni del Titolo VI. Il MassDOT/MBTA incoraggia tutti i beneficiari secondari a contattare lo Specialista del Titolo VI dell'Ufficio per la Diversità e i Diritti Civili (ODCR), il Direttore dei Programmi Federali e/o il Direttore delle Indagini quando/se i ricorsi sono presentati al fine di garantirne il corretto svolgimento.

Definizioni

Ricorrente - Persona che presenta un ricorso presso MassDOT/MBTA.

Ricorso – Dichiarazione scritta o elettronica riguardante un'accusa di discriminazione in cui viene richiesto all'ufficio ricevente di adottare provvedimenti. Laddove il ricorso sia presentato da una persona con disabilità, il termine ricorso include formati alternativi che si adattino alla disabilità del ricorrente.

Discriminazione - Atto o inazione, intenzionale o meno, attraverso cui una persona negli Stati Uniti esclusivamente per motivi di razza, colore, paese di origine, o categorie protette da altre autorità competenti in materia di non discriminazione, quali sesso, età o disabilità, viene sottoposta ad una disparità di trattamento o ad un diverso impatto in qualunque programma o attività finanziata a livello federale.

Amministrazioni operanti - Agenzie del Dipartimento degli Stati Uniti dei Trasporti, incluso l'Amministrazione Federale delle Autostrade (Federal Highway Administration, FHWA), l'Amministrazione Federale dei Trasporti (Federal Transit Administration, FTA), l'Amministrazione Federale delle Ferrovie (Federal Rail Administration, FRA), l'Amministrazione Nazionale per la Sicurezza Stradale (National Highway Traffic Safety Administration, NHTSA) e l'Amministrazione Federale per la Sicurezza dei Vettori Automobilistici (Federal Motor Carrier Safety Administration, FMSCA), che finanzia i programmi e le attività sui trasporti.

Convenuto - La persona, agenzia, istituzione od organizzazione accusate di discriminazione.

Presentazione dei ricorsi

Questa sezione descrive le procedure del Dipartimento dei Trasporti del Massachusetts (MassDOT) per presentare ricorsi relativi al Titolo VI sulla discriminazione (sulla base di razza, colore, paese di origine, inclusa la lingua) e i ricorsi di presunta discriminazione sulla base di ulteriori disposizioni federali di non discriminazione (sulla base di età, sesso e disabilità). La legge federale e le normative che disciplinano il Titolo VI delle Legge degli Stati Uniti sui Diritti Civili del 1964 (Titolo VI) assegnano al Dipartimento di Giustizia degli Stati Uniti l'autorità di coordinamento generale nell'ambito dell'indagine sui ricorsi riguardanti i diritti civili, in collaborazione con le agenzie federali che svolgono tale funzione. Nel settore dei trasporti, l'autorità investigativa competente è il Dipartimento dei Trasporti degli Stati Uniti (US Department of Transportation, US DOT) e le sue agenzie suddivise nelle varie modalità di trasporto, incluso l'Amministrazione Federale delle Autostrade (Federal Highway Administration, FHWA) e l'Amministrazione Federale dei Trasporti (Federal Transit Administration, FTA). In coordinamento con i requisiti del Dipartimento dei Trasporti degli Stati Uniti (USDOT), l'Amministrazione Federale delle Autostrade (FHWA) e l'Amministrazione Federale dei Trasporti (FTA) hanno stabilito delle normative ed un orientamento per cui i beneficiari ed i beneficiari secondari che ricevono assistenza finanziaria federale sono obbligati a stabilire delle procedure per l'esame dei ricorsi presentati a tali organizzazioni.

Le procedure, come successivamente indicato, basate sulle procedure raccomandate emanate dal Dipartimento di Giustizia degli Stati Uniti (US DOJ), si propongono di garantire eque opportunità affinché i ricorsi presentati rispettino il principio del giusto processo per il ricorrente e per il convenuto Oltre all'iter di risoluzione dei casi di ricorso qui dettagliato, e quando possibile, MassDOT/MBTA adotta misure concrete per cercare una risoluzione informale di tutti e di ciascun rixorso ai sensi del Titolo VI.

Il processo di ricorso

1. Chi può presentare ricorso?

OGNI cittadino, oltre ai clienti, richiedenti, appaltatori o beneficiari secondari che creda di essere stato oggetto, lui stesso, di maltrattamenti, una parte terza o una categoria di persone o di essere stato trattato ingiustamente a causa della sua razza, colore od origine nazionale (inclusa limitata padronanza della lingua inglese) in violazione a quanto stabilito dal Titolo VI della Legge degli Stati Uniti sui Diritti Civili del 1964, le relative leggi ed ordinamenti federali e statali, o dalla Politica Antidiscriminatoria di-Prevenzione delle Molestie di MassDOT (MassDOT's Anti-Discrimination Harassment Prevention (ADHP) Policy). La politica ADHP e il Titolo VI proibiscono ogni forma di ritorsione nei confronti di un cittadino sulla base della razza, origine nazionale o colore.

2. Come si presenta un ricorso?

Il ricorso può essere presentato a:

MassDOT/MBTA Title VI Specialists

Office of Diversity and Civil Rights – Title VI Unit
10 Park Plaza, Suite 3800
Boston, MA 02116
Telefono: (857) 368-8580 o 7-1-1 per il servizio ponte telefono
E-mail: MassDOT.CivilRights@state.ma.us o MBTAcivilrights@mbta.com

MassDOT/MBTA, Assistant Secretary & Chief Diversity Officer
Office of Diversity and Civil Rights – Investigations Unit
10 Park Plaza, Suite 3800
Boston, MA 02116
Telefono: (857) 368-8580
E-mail: odcrcomplaints@dot.state.ma.us

Call Center clienti MBTA: (617) 222-3200
Il personale del call center cercherà di ottenere dal chiamante le informazioni di base sulla questione e i dettagli della chiamata saranno inoltrati all'Ufficio per le diversità e i diritti civili per l'elaborazione secondo le presenti procedure.

U.S. Department of Transportation
Office of Civil Rights
1200 New Jersey Avenue, SE
Washington, DC 20590
Sito web civilrights.justice.gov/

Si segnala inoltre che:

- Quando si presenta un ricorso in base al Titolo VI all'Amministrazione Federale dei Trasporti (FTA) nei confronti diMassDOT/MBTA, un beneficiario secondario o un appaltatore, l'FTA può richiedere che la questione sia esaminata da MassDOT/MBTA.

- Se un ricorso in base al Titolo VI presentato presso MassDOT sostiene che ci sia stata una violazione da parte della Divisione Autostrade, in questo caso il ricorso verrà inoltrato all'Ufficio Divisione locale FHWA che a sua volta lo inoltrerà alla Sede Centrale dei Diritti Civili FHWA affinché venga esaminato.

- Se un ricorso in base al Titolo VI nei confronti di un beneficiario secondario della Divisione Autostrade di MassDOT viene presentato presso MassDOT, in questo caso MassDOT può esaminare e effettuare le indagini del caso o rivolgersi a HCR per le attività di indagine.

- Se FMCSA riceve un reclamo presentato contro il MassDOT, FMCSA lo inoltra al MassDOT per una risposta scritta. Ciò consente al MassDOT di risolvere il ricorso o di fornire una risposta scritta alle accuse. La risposta scritta viene utilizzata per determinare le misure che FMCSA adotterà per trattare il ricorso.

3. Cosa devo inserire nel ricorso?

Un modulo di ricorso ai sensi della legge sulla Non discriminazione/Titolo VI è disponibile in formato elettronico sul sito web Titolo VI di MassDOT, sul sito web Titolo VI di MBTAo in formato cartaceo presso l'Ufficio per la diversità e i diritti civili di MassDOT/MBTA. In alternativa, il ricorrente può presentare la documentazione in formato alternativo che preveda:

- Nome, firma e informazione di contatto attuale (ovvero numero di telefono, indirizzo e-mail e indirizzo postale);
- Nome e numero di tesserino (se conosciuti e se del caso) del presunto autore;
- Una descrizione di come, quando e dove sia avvenuta la presunta infrazione;
- Una descrizione dettagliata del perché lei ritenga di essere stato trattato diversamente;
- Nomi e informazioni di contatto di qualunque testimone; e
- Ogni altra informazione ritenuta utile ai fini del ricorso.

A. Qualora il ricorrente non sia in grado di presentare una dichiarazione scritta, una denuncia verbale può essere rilasciata all'Ufficio per la Diversità e i Diritti Civili (ODCR). I ricorrenti verranno interrogati da un Inquirente per i Diritti Civili (CRI). Se necessario, l'Inquirente per i Diritti Civili (CRI) aiuterà la persona a mettere per iscritto la denuncia verbale. Tutti i ricorsi devono essere firmati dal ricorrente.

B. Le denunce anonime possono essere presentate nello stesso modo. Le denunce anonime vanno esaminate esattamente come ogni altro ricorso.

C. I ricorsi verranno accettati in ogni lingua riconosciuta. Sono- disponibili moduli multilingue.

4. Quando devo presentare un ricorso?

A. Un ricorso di presunta violazione del Titolo VI e/o alla Politica ADHP di MassDOT deve essere presentata entro (180) giorni dalla data della presunta violazione.

B. I ricorsi di presunte violazioni della legge statale o federale devono essere presentati nel rispetto dei tempi stabiliti dallo statuto, norma o giurisprudenza, in alcuni casi fino a trecento (300) giorni dalla data della presunta violazione.

5. In che modo verrà gestito il mio ricorso?

Quando si presenta un ricorso, questo viene assegnato ad un Inquirente per I Diritti Civili (CRI). Il CRI dovrà:

A. Determinare la competenza giurisdizionale: L'ODCR ha giurisdizione se il ricorso:

1) Comporta una dichiarazione o condotta che viola:

i. L'obbligo legale e l'impegno di MassDOT/MBTA di prevenire ogni forma di discriminazione, molestia e ritorsione sulla base di una categoria protetta con riferimento ad ogni aspetto del servizio che l'Agenzia offre al pubblico;

ii. o

L'impegno preso dai beneficiari secondari e dagli appaltatori che lavorano per MassDOT/MBTA di rispettare le politiche di MassDOT/MBTA;

E

2) Viene presentato al momento opportuno.

B. Notifica l'avvenuto ricevimento del ricorso e indica la competenza giurisdizionale entro dieci (10) giorni lavorativi dal ricevimento del ricorso.

1) Se il CRI decide che il ricorso non ha il potenziale di stabilire una violazione dei diritti civili, allora il CRI dovrà notificare per iscritto al ricorrente e allo Specialista del Titolo VI i suoi risultati e il caso dovrà essere chiuso.

C. Condurre un'indagine approfondita delle accuse contenute nel ricorso in conformità con le Procedure di Denuncia Interne di MassDOT/MBTA.

6. Conclusioni e raccomandazioni?

Una volta terminata l'indagine, il CRI invierà al ricorrente e al convenuto una delle tre seguenti lettere in base alle sue conclusioni:

A. Una lettera di risoluzione in cui vengono spiegate le misure che il convenuto ha adottato o dovrà adottare per adempiere a quanto stabilito dal Titolo VI.

B. Una lettera di constatazione che viene inviata quando la condotta del convenuto è giudicata conforme al Titolo VI. Questa lettera spiegherà perché la condotta del convenuto è giudicata conforme e comunicherà al ricorrente i suoi diritti di appello.

C. Una lettera di constatazione che viene inviata quando si ritiene che il comportamento del convenuto configuri una discriminazione.

Questa lettera comprenderà ciascuna violazione con riferimento alla normativa vigente, una breve descrizione delle conclusioni/raccomandazioni, le conseguenze del mancato raggiungimento di una condotta volontariamente conforme alla legge, e un'offerta di assistenza nella definizione di un piano di azioni correttive, se del caso.

7. Posso presentare appello contro una constatazione?

Se un ricorrente o un convenuto non sono d'accordo con le conclusioni del CRI, in questo caso possono presentare appello al Sottosegretario per la Diversità e i Diritti Civili. La parte che ha presentato ricorso deve apportare **elementi nuovi, che non erano disponibili nel corso della prima indagine e che porterebbero MassDOT/MBT a riconsiderare le proprie decisioni.** *La richiesta di appello e ogni nuovo elemento deve essere presentato entro sessanta (60) giorni dalla data in cui è stata trasmessa la lettera di constatazione. Dopo aver riesaminato questi elementi, MassDOT/MBT risponderà con l'invio di una nuova lettera di risoluzione oppure informando la parte che ha presentato ricorso che la lettera originale di risoluzione o di constatazione resta valida.*

នីតិវិធីដាក់ពាក្យបណ្តឹងតាមមាត្រា 6

គោលបំណង និងវិសាលភាពអនុវត្ត

ឯកសារនេះមានគោលបំណងដើម្បីបង្កើតនីតិវិធីសម្រាប់ដំណើរការ និងចាត់ចែងទាំងបណ្តឹងស្តីពីរើសអើងដែលបានដាក់ដោយផ្ទាល់ទៅកាន់នាយកដ្ឋានដឹកជញ្ជូនរដ្ឋ Massachusetts (MassDOT) ឬអាជ្ញាធរដឹកជញ្ជូន Massachusetts Bay (MBTA) និងពាក្យបណ្តឹងស្តីពីការរើសអើងដែល MassDOT/MBTA មានសិទ្ធិអំណាចដែលបានប្រគល់ជូន ដើម្បីដំណើរការក្រោមមាត្រា 6 នៃច្បាប់ស្តីពីសិទ្ធិពលរដ្ឋឆ្នាំ 1964 (មាត្រា 6) និងអាជ្ញាធរប្រឆាំងការរើសអើងថ្នាក់រដ្ឋ និងសហព័ន្ធដែលពាក់ព័ន្ធ រួមទាំងច្បាប់ស្តីពីជនពិការអាមេរិក (ADA) ផងដែរ។

ដំណើរការពាក្យបណ្តឹងស្តីពីការរើសអើងនឹងអនុវត្តតាមដំណាក់កាលដូចដែលបានរៀបរាប់ខាងក្រោម ហើយមានរៀបរាប់លម្អិតបន្ថែមនៅក្នុងឯកសារនេះ។

ដំណាក់កាលទី 1៖ ដើមបណ្តឹងដាក់ពាក្យបណ្តឹង។

ដំណាក់កាលទី 2៖ MassDOT/MBTA ចេញលិខិតទទួលស្គាល់ជូនដើមបណ្តឹង។

ដំណាក់កាលទី 3៖ ពាក្យបណ្តឹងត្រូវបានចាត់តាំង និងពិនិត្យដោយអ្នកស៊ើបអង្កេត។

ដំណាក់កាលទី 4៖ អ្នកស៊ើបអង្កេតដើមបណ្តឹង សាក្សី និងចុងបណ្តឹង។

ដំណាក់កាលទី 5៖ អ្នកស៊ើបអង្កេតពិនិត្យមើលភស្តុតាង និងសក្តីកម្ម ដើម្បីកំណត់ថាតើមានការរំលោភបំពាន ដែរឬទេ។

ដំណាក់កាលទី 6៖ ដើមបណ្តឹង និងចុងបណ្តឹងត្រូវបានចេញលិខិតដោះស្រាយ ឬលិខិតស្វែងរក និងផ្តល់សិទ្ធិប្តឹងឧទ្ធរណ៍។

ដំណាក់កាលទី 7៖ នៅពេលដែលរយៈពេលនៃការប្តឹងឧទ្ធរណ៍ផុតកំណត់ ការស៊ើបអង្កេតនឹងបិទ.

នីតិវិធីទាំងនេះរៀបរាប់ពីដំណើរការរដ្ឋបាលដែលមានគោលដៅកំណត់សម្គាល់ និងលុបបំបាត់ការរើសអើងនៅក្នុងសកម្មភាព និងកម្មវិធីនានាដែលទទួលជំនួយពីសហព័ន្ធ។ នីតិវិធីទាំងនេះមិនផ្តល់មធ្យោបាយដោះស្រាយដល់ដើមបណ្តឹងដែលស្វែងរកដំណោះស្រាយផ្លូវច្បាប់ ដែលរួមមានសំណងជំងឺចិត្ត ឬប្រាក់ទូទាត់ឡើយ។ នីតិវិធីទាំងនេះក៏មិនហាមឃាត់ដើមបណ្តឹងមិនឱ្យទៅដាក់ពាក្យប្តឹងទៅកាន់នឹងភ្នាក់ងាររដ្ឋ និងសហព័ន្ធផ្សេងទៀត ឬក៏បដិសេធសិទ្ធរបស់ដើមបណ្តឹងក្នុងការស្នើសុំការផ្តល់ប្រឹក្សាជាលក្ខណៈឯកជនសម្រាប់ដោះស្រាយទង្វើរើសអើងដែលបានចោទក្នុងពាក្យបណ្តឹងនោះដែរ។

នីតិវិធីដែលបានរៀបរាប់ក្នុងឯកសារនេះត្រូវបានអនុវត្តចំពោះ MassDOT/MBTA និងអ្នកទទួលជំនួយបន្ត ក្រុមហ៊ុនម៉ៅការ និងក្រុមហ៊ុនម៉ៅការបន្ត នៅក្នុងការការគ្រប់គ្រងសកម្មភាព និងកម្មវិធីនានាដែលទទួលជំនួយពីសហព័ន្ធ។

ជាផ្នែកមួយនៃកិច្ចខំប្រឹងប្រែងនៅក្នុងការអនុវត្តតាមមាត្រា 6 អ្នកទទួលជំនួយហិរញ្ញវត្ថុពីសហព័ន្ធតាមរយៈ MassDOT/MBTA ត្រូវបានលើកទឹកចិត្តឱ្យប្រើប្រាស់នីតិវិធីនៃការដាក់ពាក្យបណ្តឹងនេះ។ ការប្រើប្រាស់នីតិវិធីនេះបញ្ជាក់ថាអ្នកទទួលជំនួយបន្តទាំងនេះ ទទួលស្គាល់កាតព្វកិច្ចរបស់ពួកគេក្នុងការផ្តល់ឱកាសឱ្យសាធារណជនដាក់ពាក្យបណ្តឹងប្រឆាំងនឹងការបំពានគោលនយោបាយប្រឆាំងការរើសអើងនៅក្នុងគ្រប់សកម្មភាព សេវាកម្ម និងកម្មវិធីនានារបស់អង្គភាព។ ដោយគោរពតាមការណែនាំរបស់សហព័ន្ធ អ្នកទទួលជំនួយបន្តទាក់ទងនឹងការធ្វើដំណើរ យល់ដឹងថាពួកគេមានសិទ្ធិអំណាចក្នុងការអនុវត្តបណ្តឹងមាត្រា 6 រួចផ្តល់ដំណឹងដល់អ្នកទទួលជំនួយដែលជា MassDOT/MBTA អំពីពាក្យបណ្តឹងដែលគេបានទទួល និង លទ្ធផលនៃការស៊ើបអង្កេតនៅពេលដែលដោះស្រាយពាក្យបណ្តឹង។

អ្នកទទួលជំនួយបន្តទាក់ទងនឹងការធ្វើដំណើរលើផ្លូវធំ កាន់តែយល់ថា ពួកគេគ្មានសិទ្ធិអំណាចក្នុងការស៊ើបអង្កេត ពាក្យបណ្តឹងស្តីពីបទល្មើសមាត្រា 6 ដែលមានអង្គភាពរបស់ពួកគេជាចុងបណ្តឹងនោះទេ (ប្រសិនអង្គភាពរបស់ពួកគេជាចុងបណ្តឹង ឬ ភាគីដែលត្រូវបានគេចោទថាបានល្មើសមាត្រា 6) ។ គ្រប់ពាក្យបណ្តឹងទាំងនេះ នឹងត្រូវគេបញ្ជូនទៅ MassDOT/MBTA ដើម្បីធ្វើការសម្រេចថា អង្គភាពណាមានសិទ្ធស៊ើបអង្កេត។ អ្នកទទួលជំនួយបន្តទាក់ទងនឹងការធ្វើដំណើរលើផ្លូវធំ រក្សាសិទ្ធពិចារណាថាការចោទប្រកាន់នៃការល្មើសមាត្រា 6 ជាបញ្ហារ៉ាប់រង និង/ឬ បញ្ហានៃការគោរពគោលការណ៍ផ្ទៃក្នុង ប៉ុន្តែពួកគេត្រូវបានហាមឃាត់មិនឱ្យចេញសេចក្តីសម្រេច ព្រោះនេះអាចជាការល្មើសទៅនឹងមាត្រា 6។ MassDOT/MBTA សូមលើកទឹកចិត្តឱ្យអ្នកទទួលជំនួយបន្តទាំងអស់ទាក់ទងទៅអ្នកជំនាញមាត្រា 6 របស់ ODCR ដែលជានាយកគ្រប់គ្រងកម្មវិធីសហព័ន្ធ និង/ឬ នាយកគ្រប់គ្រងស៊ើបអង្កេត នៅពេលដែល/ប្រសិនបើពួកគេបានទទួលពាក្យបណ្តឹងទាក់ទងនឹងមាត្រា 6 ដើម្បីជានាថាមានការដោះស្រាយត្រឹមត្រូវ។

និយមន័យ

ដើមបណ្តឹង (Complainant)៖ បុគ្គលដែលដាក់ពាក្យបណ្តឹងទៅ MassDOT/MBTA។

ពាក្យបណ្តឹង (Complaint)៖ ឯកសារស្តីពីការចោទប្រកាន់ទាក់ទងនឹងការរើសអើង ជាលិខិតសរសេរដោយដៃ ឬ ជាសារអេឡិចត្រូនិចដែលទាមទារឱ្យការិយាល័យដែលបានទទួលឯកសារនោះចាត់វិធានការដោះស្រាយ។ ប្រសិនបើអ្នកដាក់ពាក្យបណ្តឹងមានពិការភាព នោះនិយមន័យនៃពាក្យបណ្តឹងនេះ រាប់បញ្ចូលទាំងទម្រង់ផ្សេងៗដែលជួយសម្រួលដល់ពិការភាពរបស់ដើមបណ្តឹង។

ការរើសអើង (Discrimination)៖ សកម្មភាព ឬ អសកម្មភាព ដោយចេតនា ឬ អចេតនា ចំពោះជនណាម្នាក់ក្នុងសហរដ្ឋអាមេរិកដែលបានទទួលរងភាពមិនស្មើគ្នា ឬ ភាពខុសគ្នាដាច់ស្រឡះក្នុងសកម្មភាពឬកម្មវិធីណាមួយដែលទទួលជំនួយពីសហព័ន្ធ ដោយសារតែជាតិសាសន៍, ពណ៌សម្បុរ ដើមកំណើត ឬលក្ខណៈផ្សេងទៀតដែលទទួលស្គាល់ដោយអាជ្ញាធរទប់ស្កាត់ការរើសអើងដូចជា ភេទ អាយុ ឬពិការភាព។

រដ្ឋបាលប្រតិបត្តិការ (Operating Administrations)៖ ភ្នាក់ងារផ្សេងៗនៃនាយកដ្ឋានដឹកជញ្ជូនរបស់សហរដ្ឋអាមេរិក រួមមាន រដ្ឋបាលផ្លូវធំរបស់សហព័ន្ធ (FHWA: Federal Highway Administration) រដ្ឋបាលសេវាធ្វើដំណើរសាធារណៈរបស់សហព័ន្ធ (FTA: Federal Transit Administration) រដ្ឋបាលផ្លូវដែកសហព័ន្ធ (FRA: Federal Rail Administration) រដ្ឋបាលសុវត្ថិភាពចរាចរណ៍ផ្លូវជាតិ (NHTSA: National Highway Traffic Safety Administration) និងរដ្ឋបាលសុវត្ថិភាពក្រុមហ៊ុនដឹកជញ្ជូនរថយន្តសហព័ន្ធ (FMCSA: Federal Motor Carrier Safety Administration) ដែលផ្តល់ជំនួយសម្រាប់សកម្មភាព ឬកម្មវិធីទាំងឡាយណាទាក់ទងនឹងការដឹកជញ្ជូន។

ចុងបណ្តឹង (Respondent)៖ បុគ្គល ភ្នាក់ងារ ស្ថាប័ន ឬ អង្គការដែលត្រូវបានចោទប្រកាន់ថា មានជាប់ពាក់ព័ន្ធនឹងការរើសអើង។

ការដាក់ពាក្យបណ្តឹង

ផ្នែកនេះនឹងរៀបរាប់លម្អិតអំពីនីតិវិធីរបស់នាយកដ្ឋានដឹកជញ្ជូនរដ្ឋម៉ាសាឈូសេត (MassDOT/MBTA) ក្នុងការចាត់ចែងពាក្យបណ្តឹងស្តីពីការរើសអើងមាត្រា 6 (រើសអើងដោយសារជាតិសាសន៍ ពណ៌សម្បុរ ឬដើមកំណើត រួមបញ្ចូលទាំងភាសា) និង ពាក្យបណ្តឹងស្តីពីការរើសអើងដែលមានចែងបន្ថែមក្នុងច្បាប់ស្តីពីភាពគ្មានការរើសអើងរបស់សហព័ន្ធ (រើសអើងដោយសារ ភេទ អាយុ ឬពិការភាព)។ ច្បាប់និងនីតិបញ្ញត្តិរបស់សហព័ន្ធដែលគ្របដណ្តប់មាត្រា 6 នៃច្បាប់ស្តីពីសិទ្ធិពលរដ្ឋឆ្នាំ1964 (មាត្រា 6) ផ្តល់សិទ្ធិអំណាចសម្របសម្រួលក្នុងការស៊ើបអង្កេតពាក្យបណ្តឹងទាក់ទងនឹងសិទ្ធិពលរដ្ឋទៅឱ្យក្រសួងយុត្តិធម៌សហរដ្ឋអាមេរិក (US DOT) ដែលសហការយ៉ាងជិតស្និទ្ធជាមួយនិងភ្នាក់ងារសហព័ន្ធដែលមានទំនួលខុសត្រូវនេះ។ ក្នុងវិស័យដឹកជញ្ជូន សិទ្ធិអំណាចស៊ើបអង្កេតនេះស្ថិតក្នុងដៃក្រសួងដឹកជញ្ជូនសហរដ្ឋអាមេរិក (US DOT) និងភ្នាក់ងារផ្សេងៗរបស់នាយកដ្ឋាននេះសម្រាប់មធ្យោបាយដឹកជញ្ជូនផ្សេងៗ រួមទាំងរដ្ឋបាលផ្លូវធំរបស់សហព័ន្ធ (FHWA) និងរដ្ឋបាលសេវាធ្វើដំណើរសាធារណៈរបស់សហព័ន្ធ (FTA)។ ដើម្បីឱ្យស្របទៅតាមលក្ខខណ្ឌរបស់ក្រសួងដឹកជញ្ជូនសហរដ្ឋអាមេរិក FHWA និងFTA បាន

បង្កើតបទបញ្ជាត្តិ និងការណែនាំ ដែលតម្រូវឱ្យអ្នកទទួលជំនួយ និងអ្នកទទួលជំនួយសហព័ន្ធបន្ត បង្កើតនីតិវិធីសំរាប់ចាត់ចែងពាក្យបណ្តឹងមាត្រា6 ដែលគេបានដាក់ជាមួយនឹងអង្គភាពទាំងនេះ។

នីតិវិធីដែលមានរៀបរាប់ខាងក្រោម ត្រូវបានកែសម្រួលពីនីតិវិធីដែលត្រូវបានណែនាំឱ្យប្រើប្រាស់ ដោយក្រសួងយុត្តិធម៌សហរដ្ឋអាមេរិក (US DOJ) ហើយត្រូវបានរៀបចំឡើង ដើម្បីផ្តល់ឱកាសស្មើភាពមួយ ក្នុងការដោះស្រាយពាក្យបណ្តឹងដែលគោរពតាមនីតិវិធីត្រឹមត្រូវ ឱ្យទាំងដើមបណ្តឹង និងចុងបណ្តឹង។ ក្រៅពីនីតិវិធីដោះស្រាយពាក្យបណ្តឹងជាផ្លូវការដែលបានរៀបរាប់ជាលម្អិតនៅទីនេះ MassDOT/MBTA នឹងចាត់វិធានការទប់ស្កាត់ការ

រើសអើង ដើម្បីស្វែងរកដំណោះស្រាយក្រៅផ្លូវការចំពោះពាក្យបណ្តឹងមាត្រា 6 ទាំងអស់នៅពេលណាដែលអាចធ្វើបាន។

ដំណើរការនៃការដាក់ពាក្យបណ្តឹង

1. តើអ្នកណាអាចដាក់ពាក្យបណ្តឹងបាន?

ក្រប់សាធារណជន រួមទាំងអតិថិជន បេក្ខជន ក្រុមហ៊ុនម៉ៅការ ឬ អ្នកទទួលជំនួយបន្តរបស់ MassDOT/MBTA ទាំងអស់ដែលយល់ថា ពួកគេផ្ទាល់ ឬភាគីទីបី ឬក្រុមណាមួយទទួលរងការធ្វើបាប ឬការប្រព្រឹត្តមិនស្មើភាព ដោយសារតែជាតិសាសន៍ ពណ៌សម្បុរ ឬដើមកំណើត (រួមទាំង ចំណេះដឹងភាសាអង់គ្លេសមានកម្រិត) ដែលល្មើសនឹងមាត្រា 6 នៃច្បាប់ស្តីពីសិទ្ធិពលរដ្ឋឆ្នាំ1964 ពាក់ព័ន្ធនឹងដីការ និងច្បាប់រដ្ឋ និងសហព័ន្ធ ឬល្មើសនឹងគោលនយោបាយប្រឆាំងការរើសអើង/ទប់ស្កាត់ការបៀតបៀនរបស់ MassDOT/MBTA (ADHP)។ មាត្រា 6 និងគោលការណ៍ ADHP ក៏បានហាមមិនឱ្យមានការសងសឹកចំពោះសាធារណជន ដោយសារតែមូលហេតុជាតិសាសន៍ ពណ៌សម្បុរ ឬដើមកំណើតផងដែរ។

2. តើខ្ញុំដាក់ពាក្យបណ្តឹងដោយរបៀបណា?

ពាក្យបណ្តឹងអាចដាក់បានតាមរយៈ ៖

MassDOT/MBTA Title VI Complaint Specialists

Office of Diversity and Civil Rights – Title VI Unit

10 Park Plaza, Suite 3800

Boston, Ma 02116

ទូរស័ព្ទ៖ (857) 368-8580 ឬ 7-1-1 សេវាកម្មសម្រាប់ជនពិការ

អ៊ីមែល៖ MassDOT.CivilRights@state.ma.us ឬ MBTAcivilrights@mbta.com

MassDOT/MBTA Assistant Secretary & Chief Diversity Officer

Office of Diversity and Civil Rights – Investigations Unit

10 Park Plaza, Suite 3800

Boston, Ma 02116

អ៊ីម៉ែល៖ (857) 368-8580

អ៊ីម៉ែល៖ odcrcomplaints@dot.state.ma.us

មជ្ឈមណ្ឌលទំនាក់ទំនងអតិថិជនសម្រាប់ MBTA: (617) 222-3200

បុគ្គលិកមជ្ឈមណ្ឌលហៅទូរសព្ទ នឹងទទួលបានព័ត៌មានមូលដ្ឋានអំពីបញ្ហានេះពីអ្នកហៅទូរសព្ទ។ ព័ត៌មានលម្អិតនៃការហៅទូរសព្ទនឹងត្រូវបញ្ជូនបន្តទៅ ការិយាល័យសិទ្ធិពលរដ្ឋនិងចម្រុះរបស់ ដើម្បីដំណើរការ។

U.S. Department of Transportation

Office of Civil Rights

1200 New Jersey Avenue, SE

Washington, DC 20590

អ៊ីម៉ែល៖ civilrights.justice.gov

សូមកំណត់ចំណាំថា៖

- នៅពេល FTA ទទួលពាក្យបណ្តឹងមាត្រា 6 ទាក់ទងនឹង MassDOT/MBTA អ្នកទទួលដំនួយបន្ត ឬក្រុមហ៊ុនម៉ៅការ នោះFTA អាចស្នើ MassDOT/MBTA ឱ្យស៊ើបអង្កេតករណីនេះ។
- ប្រសិនបើពាក្យបណ្តឹងមាត្រា6 ត្រូវបានដាក់ទៅឱ្យ MassDOT ដោយចោទអង្គភាពផ្នែកផ្លូវធំរបស់ MassDOT (MassDOT's Highway Division)ពីបទបំពាន នោះពាក្យបណ្តឹងនឹងត្រូវបញ្ជូនបន្តទៅការិយាល័យផ្នែក FHWA ប្រចាំតំបន់ដែលនឹងបញ្ជូនពាក្យបណ្តឹងបន្តទៅការិយាល័យកណ្តាលផ្នែកសិទ្ធិពលរដ្ឋរបស់ FHWA សម្រាប់ចាត់ការបន្ត។
- ប្រសិនបើពាក្យបណ្តឹងមាត្រា6 ប្តឹងអ្នកទទួលដំនួយបន្តរបស់អង្គភាពផ្នែកផ្លូវធំរបស់MassDot ហើយពាក្យបណ្តឹងត្រូវបានទទួលដោយ MassDOT នោះ MassDOT អាចចាត់ចែង និងស៊ើបអង្កេតពាក្យបណ្តឹង ឬ អាចនឹងបញ្ជូនបន្តទៅ HCR ដើម្បីស៊ើបអង្កេត។

3. តើខ្ញុំត្រូវមានអ្វីខ្លះនៅក្នុងពាក្យបណ្តឹងរបស់ខ្ញុំ?

ទម្រង់បែបបទនៃពាក្យបណ្តឹងមាត្រា 6/ភាពគ្មានការរើសអើង អាចទាញយកបានតាមរយៈប្រព័ន្ធអេឡិចត្រូនិច ពីគេហទំព័រមាត្រា 6របស់MassDOT គេហទំព័រ មាត្រា 6របស់MBTA ឬ ជាទម្រង់ក្រដាសបំពេញដោយដៃ ពីអ្នកជំនាញមាត្រា 6 របស់ MassDOT/MBTA ដែលបានរៀបរាប់ខាងលើ។ ម៉្យាងវិញទៀត ដើមបណ្តឹងក៏អាចដាក់ពាក្យបណ្តឹងដែលមានលក្ខណៈស្រដៀងគ្នាក្នុងទម្រង់ផ្សេងទៀតដែលរួមមាន៖

- ឈ្មោះ ហត្ថលេខា និងព័ត៌មានទំនាក់ទំនងក្នុងពេលបច្ចុប្បន្នរបស់អ្នក (ដូចជាលេខទូរស័ព្ទ និង អាសយដ្ឋាន)
- ឈ្មោះ និងលេខសម្គាល់របស់ជនជាប់ចោទ (ប្រសិនបើអ្នកដឹង ហើយប្រសិនបើចាំបាច់)
- ការរៀបរាប់ពីពេលវេលា ទីកន្លែង និងវិធីដែលទង្វើហាមឃាត់ ដែលអ្នកកំពុងចោទប្តឹងនេះបានកើតឡើង
- ការរៀបរាប់លម្អិតថាតើហេតុអ្វីបានជាអ្នកយល់ថា គេប្រព្រឹត្តិទៅលើអ្នក ខុសពីអ្នកដទៃ?
- ឈ្មោះ និងព័ត៌មានទំនាក់ទំនងរបស់សាក្សី និង
- ព័ត៌មាននានាទាំងឡាយណាដែលអ្នកយល់ថាមានជាប់ទាក់ទងនឹងពាក្យបណ្តឹងរបស់អ្នក

ក. ក្នុងករណីដែលដើមបណ្តឹងមិនអាចផ្តល់លិខិតជាលាយលក្ខណ៍អក្សរបានទេ ពាក្យបណ្តឹងជាពាក្យសំដីអាចធ្វើទៅបានទៅកាន់ការិយាល័យសិទ្ធិពលរដ្ឋ និងចម្រុះ (ODCR)។ ដើមបណ្តឹងនឹងត្រូវសម្ភាសដោយមន្ត្រីស៊ើបអង្កេតសិទ្ធិពលរដ្ឋ (CRI)។ ប្រសិនបើចាំបាច់ មន្ត្រី CRI នឹងជួយដើមបណ្តឹងក្នុងការប្រែក្លាយពាក្យបណ្តឹងជាពាក្យសំដី មកជាពាក្យបណ្តឹងលាយលក្ខណ៍អក្សរ។ ដើមបណ្តឹងគួរតែចុះហត្ថលេខាលើគ្រប់ពាក្យបណ្តឹងទាំងអស់។

ខ. ពាក្យបណ្តឹងអនាមិកអាចនឹងដាក់តាមវិធីដូចគ្នា។ ពាក្យបណ្តឹងអនាមិកនឹងត្រូវបានស៊ើបអង្កេតតាមវិធីដូចគ្នានឹងពាក្យបណ្តឹងដទៃទៀត។

គ. ពាក្យបណ្តឹងសរសេរជាភាសាណាក៏ដោយដែលត្រូវបានគេទទួល។ បែបបទពាក្យបណ្តឹងជាដែល សរសេរជាភាសាក៏មានផ្តល់ជូនផងដែរ។

4. តើខ្ញុំត្រូវដាក់ពាក្យបណ្តឹងក្នុងរយៈពេលប៉ុន្មាន?

ក. ពាក្យបណ្តឹងចោទប្រកាន់ពីបទល្មើសមាត្រា 6 និង/ឬ គោលការណ៍ADHPរបស់MassDOT/MBTA ត្រូវដាក់ មិនឱ្យលើសមួយរយប៉ែតសិបថ្ងៃ (**180**) ចាប់ពីថ្ងៃដែលបទល្មើសបានកើតឡើង។

ខ. ពាក្យបណ្តឹងចោទប្រកាន់ពីបទល្មើសច្បាប់រដ្ឋ ឬសហព័ន្ធ ត្រូវដាក់ក្នុងអំឡុងពេលដែលកំណត់ដោយ បញ្ញត្តិ បទបញ្ជា ឬច្បាប់យុត្តិសាស្ត្រ។

5. តើពាក្យបណ្តឹងរបស់ខ្ញុំនឹងត្រូវដោះស្រាយដោយរបៀបណា?

នៅពេលដែលពាក្យបណ្តឹងត្រូវបានទទួល ពាក្យបណ្តឹងនោះនឹងត្រូវបានប្រគល់ឱ្យទៅមន្ត្រីស៊ើបអង្កេតសិទ្ធិពលរដ្ឋ (CRI)។ មន្ត្រីCRIនេះនឹង៖

ក. កំណត់ដែនសមត្ថកិច្ច៖ ODCR មានដែនសមត្ថកិច្ច ប្រសិនបើពាក្យបណ្តឹង៖

1. ពាក់ព័ន្ធនឹងការអះអាង ឬ ការប្រព្រឹត្តិដែលរំលោភបំពាន៖

- ការប្តេជ្ញាចិត្ត និង កាតព្វកិច្ចផ្លូវច្បាប់របស់ MassDOT/MBTA ដើម្បីទប់ស្កាត់ការរើសអើង ការរំលោភបំពាន ឬ ការសងសឹក ដោយពឹងផ្អែកទៅលើលក្ខណៈការពារ ចំពោះផ្នែកណាមួយ នៃសេវាកម្មផ្តល់ដោយភ្នាក់ងារជូនសាធារណជន។

ឬ

- ការប្តេជ្ញាចិត្តធ្វើឡើងដោយអ្នកទទួលជំនួយបន្ត និងក្រុមហ៊ុនម៉ៅការដែលកំពុងធ្វើការជាមួយ MassDOT/MBTA ប្រកាន់ខ្ជាប់នឹងគោលការណ៍របស់ MassDOT/MBTA ហើយ

និង

2. ពាក្យបណ្តឹងនេះត្រូវបានដាក់ទាន់ពេលវេលា។

ខ. ជូនដំណឹងថាបានទទួលពាក្យបណ្តឹង ហើយផ្តល់សេចក្តីសម្រេចដែនសមត្ថកិច្ច ក្នុងរយៈពេល 10 ថ្ងៃធ្វើការ គិតចាប់ពីថ្ងៃទទួលពាក្យបណ្តឹងនេះ។

1. ប្រសិនបើមន្ត្រី CRI សម្រេចថា ពាក្យបណ្តឹងមិនមានពាក់ព័ន្ធនឹងការបំពានសិទ្ធិពលរដ្ឋ នោះមន្ត្រី CRI នឹងផ្តល់ដំណឹងទៅដើមបណ្តឹង និងអ្នកជំនាញមាត្រា 6 ជាលាយលក្ខណ៍អក្សរអំពីលទ្ធផល ហើយករណីនោះនឹងត្រូវបញ្ចប់។

ក. ធ្វើការស៊ើបអង្កេតយ៉ាងល្អិតល្អន់លើការចោទប្រកាន់ដែលមាននៅក្នុងពាក្យបណ្តឹង ស្របទៅតាមនីតិវិធីនៃការដាក់ពាក្យបណ្តឹងផ្ទៃក្នុងរបស់ MassDOT/MBTA។

6. លទ្ធផល និងការណែនាំ?

នៅពេលបញ្ចប់ការស៊ើបអង្កេត មន្ត្រី CRI នឹងផ្ញើរលិខិតមួយ ក្នុងចំណោមលិខិតទាំងបីខាងក្រោមទៅដើមបណ្តឹង និងចុងបណ្តឹងអាស្រ័យទៅលើលទ្ធផលនៃការស៊ើបអង្កេត៖

ក. លិខិតបញ្ជាក់ពីដំណោះស្រាយដែលពន្យល់ចុងបណ្តឹងពីវិធានការដែលចុងបណ្តឹងបានអនុវត្ត ឬនឹងអនុវត្តដើម្បីអនុវត្តតាមមាត្រា 6។

ខ. លិខិតបញ្ជាក់ពីលទ្ធផលថា ចុងបណ្តឹងបានប្រព្រឹត្តត្រឹមត្រូវទៅតាមមាត្រា 6។ លិខិតនេះនឹងមានការពន្យល់បកស្រាយអំពីមូលហេតុដែលចុងបណ្តឹងត្រូវបានរកឃើញថាបានប្រព្រឹត្តត្រឹមត្រូវ និងផ្តល់ព័ត៌មានទៅដើមបណ្តឹងថាដើមបណ្តឹងមានសិទ្ធប្តឹងជំទាស់។

ក. លិខិតបញ្ជាក់ពីលទ្ធផលថា ចុងបណ្តឹងត្រូវបានរកឃើញថាបានប្រព្រឹត្តខុស។ លិខិតនេះនឹងបញ្ជាក់ពីបទល្មើសនីមួយៗ ដោយយោងទៅតាមបទបញ្ជាដែលកំពុងដាក់ឱ្យប្រើប្រាស់ ការរៀបរាប់សង្ខេបអំពីលទ្ធផល/ការណែនាំ ផលវិបាកនៃការមិនបានបំពេញការប្រព្រឹត្តតាមច្បាប់ដោយស្ម័គ្រចិត្ត និងសំណើរផ្តល់ជំនួយក្នុងការរៀបចំផែនការអនុលោមតាមច្បាប់ ប្រសិនបើសមស្រប។

7. តើខ្ញុំអាចប្តឹងជំទាស់លទ្ធផលបានទេ?

ប្រសិនបើដើមបណ្តឹង ឬ ចុងបណ្តឹងមិនយល់ស្របនឹងការរកឃើញរបស់មន្ត្រីCRIទេ គេអាចប្តឹងជំទាស់ទៅជំនួយការលេខាធិការនៃការិយាល័យសិទ្ធិពលរដ្ឋនិងចម្រុះ។ ភាគីប្តឹងជំទាស់ត្រូវតែផ្តល់**ព័ត៌មានថ្មីណាមួយដែលមិនមានក្នុងអំឡុងពេលស៊ើបអង្កេតដំបូងដែលនឹងធ្វើឱ្យ MassDOT/MBTA ពិចារណាលើការសម្រេចរបស់ខ្លួនសារជាថ្មីម្តងទៀត។** ពាក្យស្នើប្តឹងជំទាស់ និងព័ត៌មានថ្មីទាំងឡាយត្រូវតែដាក់បញ្ជូនមកក្នុងរយៈពេល 30 ថ្ងៃ រាប់ចាប់ពីថ្ងៃដែលលិខិតបញ្ជាក់លទ្ធផលបានបញ្ជូនចេញទៅ។ បន្ទាប់ពីធ្វើការពិនិត្យសើរើព័ត៌មាននេះ MassDOT/MBTA នឹងឆ្លើយតប ដោយចេញលិខិតបញ្ជាក់ដំណោះស្រាយដែលពួកគេបានកែសម្រួល ឬ ផ្តល់ដំណឹងទៅភាគីប្តឹងជំទាស់ថា លិខិតបញ្ជាក់អំពីដំណោះស្រាយ ឬលិខិតបញ្ជាក់អំពីលទ្ធផលច្បាប់ដើមនៅតែមានប្រសិទ្ធភាព។

Procedimentos de Queixa sob o Título VI

Objetivo e aplicabilidade

O objetivo deste documento é estabelecer procedimentos para o processamento e disposição tanto de queixas de discriminação apresentadas diretamente ao Departamento de Transportes de Massachusetts (MassDOT) ou à Autoridade de Transporte da Baía de Massachusetts (MBTA), quanto de queixas de discriminação que o MassDOT/MBTA tenha autoridade delegada de processar sob o Título VI da Lei de Direitos Civis de 1964 (Título VI) e sob autoridades não-discriminatórias estaduais e federais relacionadas, incluindo a Lei Americana de Portadores de Deficiência (ADA).

O processamento das queixas de discriminação seguirá os passos descritos abaixo e são especificados mais detalhadamente ao longo deste documento.

Passo 1: O reclamante apresenta sua queixa.

Passo 2: O MassDOT/MBTA emite ao reclamante uma carta de reconhecimento.

Passo 3: A queixa é atribuída a um investigador e analisada por ele.

Passo 4: O investigador entrevista os reclamantes, testemunhas e réus.

Passo 5: O investigador analisa as provas e os testemunhos para determinar se ocorreu uma violação.

Passo 6: O reclamante e o réu recebem uma carta de resolução ou uma carta de constatação e são oferecidos direitos de apelação.

Passo 7: Uma vez expirado o prazo de apelação, a investigação é encerrada.

Os procedimentos descrevem um processo administrativo destinado a identificar e eliminar a discriminação em programas e atividades financiadas pelo governo federal. Os procedimentos não oferecem um meio de alívio para os reclamantes que buscam recursos individuais, incluindo danos punitivos ou remuneração compensatória; nem proíbem os reclamantes de apresentar queixas a outros órgãos estaduais ou federais; nem negam aos reclamantes o direito de procurar um advogado particular para tratar de supostos atos de discriminação.

Os procedimentos descritos neste documento se aplicam ao MassDOT/MBTA e seus sub-recipientes, empreiteiros e subcontratados que administram programas e atividades com financiamento federal.

Como parte dos esforços para cumprir o Título VI, os sub-recipientes de assistência financeira federal através do MassDOT/MBTA são encorajados a adotar estes procedimentos de queixa. Ao fazer isso, esses sub-recipientes reconhecem a obrigação de dar ao público a oportunidade de apresentar queixas alegando violações das políticas de não-discriminação em vigor em toda a sua organização, programas, serviços e atividades. Segundo orientação federal, os sub-recipientes de fundos

relacionados ao trânsito entendem que têm a autoridade para processar queixas do Título VI e que informarão os réus, MassDOT/MBTA, das queixas recebidas e do resultado das investigações à medida que são resolvidos.

Sub-recipientes de fundos relacionados a rodovias entendem ainda que não têm autoridade para investigar queixas de violação do Título VI apresentadas contra sua organização (quando a organização é o réu alegado de ter violado o Título VI). Todas essas reivindicações serão encaminhadas ao Escritório de Diversidade e Direitos Civis do MassDOT/MBTA (ODCR) para determinar a autoridade de investigação apropriada. Os sub-recipientes de financiamento de rodovias mantêm o direito de considerar as alegações de violação do Título VI como uma questão de Garantia e/ou cumprimento de política interna, mas estão impedidos de fazer determinações quanto a possíveis violações do Título VI. O MassDOT/MBTA incentiva todos os sub-recipientes a se comunicarem com Especialistas em Título VI da ODCR, o Diretor de Título VI e Acessibilidade, e/ou o Diretor de Investigações quando/se forem recebidas queixas de Título VI para garantir um tratamento adequado.

Definições

Reclamante - Uma pessoa que apresenta uma queixa ao MassDOT/MBTA.

Queixa - Declaração escrita, verbal ou eletrônica relativa a uma alegação de discriminação que contém um pedido para que o escritório receptor tome providências. Quando uma queixa é apresentada por uma pessoa com deficiência, o termo queixa engloba formatos alternativos para acomodar a deficiência do reclamante.

Discriminação - O ato ou inação, seja intencional ou não intencional, através do qual uma pessoa nos Estados Unidos, apenas por causa de sua raça, cor, origem nacional ou bases cobertas por outras autoridades não discriminatórias, tais como sexo, idade ou deficiência, foi sujeita a tratamento desigual ou impacto desigual sob qualquer programa ou atividade que recebe assistência federal.

Administrações operacionais - Agências do Departamento de Transporte dos EUA, incluindo a Administração Federal de Rodovias (FHWA), a Administração Federal de Trânsito (FTA), a Administração Federal de Ferrovias (FRA), a Administração Nacional de Segurança do Trânsito Rodoviário (NHTSA), e a Administração Federal de Segurança do Transporte Rodoviário (FMCSA), que financiam programas ou atividades de transporte.

Réu - A pessoa, agência, instituição ou organização supostamente envolvida em discriminação.

Apresentação de queixas

Esta seção detalha os procedimentos do MassDOT/MBTA para o processamento de queixas de discriminação sob o Título VI (com base em raça, cor ou origem nacional, incluindo idioma) e queixas alegando discriminação com base em disposições federais adicionais de não discriminação (com base em idade, sexo e deficiência). A lei federal e os regulamentos que regem o Título VI da Lei de Direitos Civis de 1964 (Título VI) coloca a autoridade de coordenação geral para a investigação de queixas de

direitos civis no Departamento de Justiça dos Estados Unidos, que trabalha em colaboração com os órgãos federais que executam essa responsabilidade. No setor de transportes, essa autoridade investigativa fica com o Departamento de Transportes dos Estados Unidos (US DOT) e suas agências para os diferentes meios de transporte, incluindo a Administração Federal de Rodovias (FHWA) e a Administração Federal de Trânsito (FTA). Em coordenação com exigências do USDOT, a FHWA e FTA estabeleceram regulamentos e orientações que exigem que recipientes e sub-recipientes de assistência financeira federal estabeleçam procedimentos para o processamento de queixas sob o Título VI apresentadas a essas organizações.

Os procedimentos descritos abaixo, baseados nos recomendados procedimentos de queixa promulgados pelo Departamento de Justiça dos EUA (US DOJ), são projetados para proporcionar uma oportunidade justa de ter queixas tratadas que dizem respeito ao devido processo tanto para os reclamantes quanto para os réus. Além do processo formal de resolução de queixa aqui detalhado, o MassDOT/MBTA tomará medidas afirmativas para buscar resoluções informais de toda e qualquer queixa sob o Título VI, quando possível.

O processo de queixas

1. Quem pode apresentar uma queixa?

QUALQUER membro do público, juntamente com todos os clientes do MassDOT/MBTA, candidatos, contratantes ou sub-recipientes que acreditam que eles mesmos, um terceiro ou uma classe de pessoas foram maltratados ou tratados injustamente por causa de sua raça, cor ou origem nacional (incluindo proficiência limitada em inglês) em violação ao Título VI da Lei de Direitos Civis de 1964, às leis e ordens federais e estaduais relacionadas, ou à Política de anti-discriminação/prevenção de assédio (ADHP) do MassDOT/MBTA. A retaliação contra um membro do público com base em raça, cor ou origem nacional também é proibida sob os termos do Título VI e da Política ADHP.

2. Como faço para registrar uma queixa?

Uma queixa pode ser apresentada perante as seguintes agências:

MassDOT/MBTA Title VI Specialists
Office of Diversity and Civil Rights – Title VI Unit
10 Park Plaza, Suite 3800
Boston, MA 02116
Fone: (857) 368-8580 ou 7-1-1 para o Serviço de Relay
E-mail: MassDOT.CivilRights@state.ma.us ou MBTAcivilrights@mbta.com

MassDOT/MBTA, Assistant Secretary & Chief Diversity Officer
Office of Diversity and Civil Rights – Investigations Unit
10 Park Plaza, Suite 3800
Boston, MA 02116
Fone: (857) 368-8580
E-mail: odcrcomplaints@dot.state.ma.us

Central de Atendimento ao Cliente da MBTA: (617) 222-3200
Os funcionários do call center procurarão obter informações básicas sobre o assunto junto ao chamador, e os detalhes da chamada serão encaminhados ao Escritório de Diversidade e Direitos Civis para processamento de acordo com estes procedimentos.

U.S. Department of Transportation
Office of Civil Rights
1200 New Jersey Avenue, SE
Washington, DC 20590
Site: civilrights.justice.gov/

Favor notar:

- Quando a FTA recebe uma queixa de Título VI relativa ao MassDOT/MBTA, ou a um sub-recipiente ou um empreiteiro, a FTA pode solicitar que o assunto seja investigado pelo MassDOT/MBTA.

- Se uma queixa de Título VI é apresentada ao MassDOT que alega uma violação pela Divisão de Rodovias do MassDOT, ela será encaminhada ao escritório local da Divisão FHWA que então encaminhará a queixa ao Escritório Central de Direitos Civis (HCR) da FHWA para processamento.

- Se uma queixa de Título VI é recebida pelo MassDOT que foi apresentada contra um sub-recipiente da Divisão de Rodovias da MassDOT, então o MassDOT poderá processar e investigar a queixa ou poderá recorrer ao HCR para investigação.

- Se a FMCSA receber uma queixa apresentada contra o MassDOT, a FMCSA encaminhará a queixa ao MassDOT para uma resposta por escrito. Isto permite que o MassDOT ou resolva a queixa ou forneça uma resposta por escrito às alegações. A resposta por escrito é usada para determinar quais passos a FMCSA tomará para processar a queixa.

3. O que eu preciso incluir em uma queixa?

Um formulário de Queixa de Título VI/Não Discriminação está disponível eletronicamente no Site do Title VI do MassDOT, no Site do Title VI da MBTA , ou em cópia impressa no Escritório de Diversidade e Direitos Civis do MassDOT/MBTA. Alternativamente, um reclamante pode apresentar correspondência em formato alternativo que inclua:

- Seu nome, assinatura e informações de contato atuais (ou seja, número de telefone, endereço de e-mail e endereço postal);
- O nome e número do crachá (se conhecido e aplicável) do suposto infrator;
- Uma descrição de como, quando e onde ocorreu a alegada conduta proibida;
- Uma descrição detalhada do motivo pelo qual você acredita ter sido tratado de forma diferente;
- Nomes e informações de contato de quaisquer testemunhas; e
- Qualquer outra informação que você acredita ser relevante para sua queixa.

A. Nos casos em que o reclamante não puder fornecer uma declaração escrita, uma queixa verbal pode ser feita ao Escritório da Diversidade e Direitos Civis (ODCR). Os reclamantes serão entrevistados por um Investigador de Direitos Civis (CRI). Se necessário, o CRI ajudará a pessoa a converter a queixa verbal em escrita. Todas as queixas devem ser assinadas pelo reclamante.

B. Queixas anônimas podem ser apresentadas da mesma forma. As queixas anônimas devem ser investigadas da mesma forma que qualquer outra queixa.

C. Queixas serão aceitas em qualquer língua reconhecida. Estão disponíveis formulários de queixa em vários idiomas.

4. Quanto tempo tenho que apresentar uma queixa?

A. Uma queixa alegando violação do Título VI e/ou da política ADHP do MassDOT/MBTA deve ser apresentada no máximo cento e oitenta (180) dias a partir da data da suposta violação.

B. Queixas alegando violações da lei estadual ou federal devem ser apresentadas dentro dos prazos estabelecidos por lei, regulamento ou jurisprudência - em certos casos até trezentos (300) dias a partir da data da suposta violação.

5. Como a minha queixa será tratada?

Quando uma queixa é recebida, ela é atribuída a um Investigador de Direitos Civis (CRI). O CRI:

A. Determinará a jurisdição: a ODCR tem jurisdição se a queixa:

   1) envolve uma declaração ou conduta que viola:

      i. A obrigação legal e o compromisso do MassDOT/MBTA de impedir a discriminação, o assédio ou a retaliação com base em uma característica protegida em relação a qualquer aspecto do serviço da Agência ao público;

      ii. ou

      O compromisso assumido por sub-recipientes e empreiteiros que trabalham com o MassDOT/MBTA de aderir às políticas do MassDOT/MBTA;

   E

   2) é apresentada em tempo hábil.

B. Confirmará o recebimento da queixa e fornecerá uma determinação jurisdicional dentro de dez (10) dias úteis a partir do recebimento da queixa.

   1) Se o CRI determinar que a queixa não tem o potencial de se enquadrar como violação de direitos civis, o CRI deverá notificar o reclamante e o Especialista em Título VI por escrito de sua constatação e o assunto deverá ser encerrado.

C. Conduzirá uma investigação completa das alegações contidas na queixa de acordo com os Procedimentos Internos de Queixa do MassDOT/MBTA.

6. Constatações e recomendações?

No fim da investigação, a CRI transmitirá ao reclamante e ao réu uma das três cartas a seguir, com base nas constatações:

A. Uma carta de resolução que explica os passos que o réu tomou ou tomará para cumprir com o Título VI.

B. Uma carta de constatação que é emitida quando o réu é considerado em conformidade com o Título VI. Esta carta incluirá uma explicação do motivo pelo qual o réu foi considerado em conformidade e fornecerá notificação dos direitos de apelação do reclamante.

C. Uma carta de constatação que é emitida quando o réu é considerado em desacordo.

Esta carta incluirá todas as violações referidas quanto aos regulamentos aplicáveis, uma breve descrição das constatações/recomendações, as consequências do não cumprimento voluntário e uma oferta de assistência na elaboração de um plano de remediação para o cumprimento, se apropriado.

7. Posso apelar uma constatação?

Se o reclamante ou réu não concordar com as constatações do CRI, ele(a) poderá recorrer ao Secretário Assistente e ao Diretor de Diversidade. A parte apelante deve fornecer qualquer **nova informação que não foi prontamente disponível durante a investigação original e que levaria o MassDOT/MBTA a reconsiderar suas determinações**. O pedido de apelo e qualquer nova informação devem ser apresentados dentro de trinta (30) dias a partir da data em que a carta de constatação foi transmitida. Após a revisão dessas informações, o MassDOT/MBTA responderá ou emitindo uma carta de resolução revisada ou informando à parte apelante que a carta de resolução ou constatação original permanece em vigor.

Титул VI Процедуры подачи жалоб

Цель и применимость

Цель этого документа заключается в том, чтобы установить процедуры обработки и распоряжения как дискриминационными жалобами, поданными непосредственно в организацию MassDOT или в Управление транспорта Массачусетского залива (MBTA), так и дискриминационными жалобами, которые может обрабатывать MassDOT, имеющий делегированные полномочия, согласно Титулу VI Закона о гражданских правах 1964 года (Титул VI) и связанных с ним правовых документов по недискриминации на уровне штата и федеральном уровне, включая Закон об американцах с инвалидностью (ADA).

Обработка жалоб на дискриминацию будет осуществляться в соответствии с шагами, описанными ниже и более подробно описанными в этом документе.

Шаг 1: Истец подает жалобу.

Шаг 2: MassDOT/MBTA выдает истцу письмо-подтверждение.

Шаг 3: Жалоба направляется следователю и рассматривается им.

Шаг 4: Следователь допрашивает истцов, свидетелей и ответчика.

Шаг 5: Следователь изучает доказательства и свидетельские показания, чтобы определить, имело ли место нарушение.

Шаг 6: Истцу и Ответчику выдается письмо с резолюцией или письмо с заключением и предлагаются права на апелляцию.

Шаг 7: По истечении срока обжалования расследование закрывается.

Эти процедуры описывают административный процесс, направленный на выявление и ликвидацию дискриминации в программах и мероприятиях, финансируемых из федерального бюджета. Эти процедуры не предоставляют возможности для оказания помощи истцам, обращающимся за индивидуальными средствами правовой защиты, включая штрафные убытки или компенсационное вознаграждение; они не запрещают истцам подавать жалобы в другие штатные или федеральные агентства; и они не отказывают истцам в праве искать частных адвокатов для рассмотрения актов предполагаемой дискриминации.

Процедуры, описанные в этом документе, применяются к MassDOT/MBTA и их субподрядчикам, контрактникам и субконтрактникам при их администрировании программ и мероприятий, финансируемых из федерального бюджета.

В рамках своих усилий по соблюдению Титула VI субподрядчикам, получающим федеральную финансовую помощь через MassDOT/MBTA, советуют принять данные процедуры рассмотрения жалоб. При этом эти субподрядчики признают свое обязательство предоставлять членам общественности возможность подавать жалобы, в которых утверждается нарушение требований о недискриминации в рамках программ, услуг и мероприятий организации. В соответствии с федеральным руководством, субподрядчики, получающие гранты, связанные с транзитом, понимают, что они имеют право обрабатывать жалобы по Титулу VI и сообщать MassDOT/MBTA о полученных жалобах и результатах расследований по мере рассмотрения этих вопросов.

Субподрядчики, получающие финансирование, связанное с автомагистралями, понимают, что они не имеют права расследовать жалобы на нарушение Титула VI, поданные против их организации (если их организация является ответчиком или стороной, предположительно нарушившей Титул VI). Все такие претензии будут направлены в Управление разнообразия и гражданских прав MassDOT/MBTA (ODCR) для определения соответствующих следственных органов. Данные субподрядчики сохраняют за собой право рассматривать заявления о нарушении Титула VI в качестве вопроса в рамках обеспечения и / или соблюдения внутренней политики, но не могут принимать решения о возможных нарушениях Титула VI. MassDOT/MBTA советует всем субподрядчикам связываться со специалистом ODCR по Титулу VI , менеджером по Титулу VI и вопросам доступности и / или менеджером расследований, когда / если были получены жалобы по Титулу VI для обеспечения надлежащего их рассмотрения.

Определения

Истец (Complainant) - лицо, подающее жалобу в MassDOT/MBTA.

Жалоба (Complaint) - Письменное или электронное заявление, касающееся утверждения о дискриминации, в котором содержится просьба в соответствующую инстанцию о принятии соответствующих мер. В тех случаях, когда жалоба подана лицом с инвалидностью, термин жалоба включает в себя альтернативные пути для учета инвалидности истца при разрешении данной жалобы.

Дискриминация (Discrimination) - это действие или бездействие, будь то преднамеренное или непреднамеренное, посредством которого лица в Соединенных Штатах подвергаются неравному или различному обращению в рамках любой программы или деятельности, получающей федеральную помощь, исключительно по

признаку расы, цвета кожи, национального происхождения или по дополнительным защищаемым категориям, таким как пол, возраст или инвалидность.

Рабочие инстанции (Operating Administrations) - агентства Министерства транспорта США, в том числе Федеральная администрация автомобильных дорог (FHWA), Федеральная администрация транзита (FTA), Федеральное управление железных дорог (FRA), Национальная администрация безопасности дорожного движения (NHTSA), и Федеральное управление безопасности автотранспортных средств (FMSCA), которые финансируют транспортные программы или мероприятия.

Ответчик (Respondent) - лицо, агентство, учреждение или организация, которые предположительно участвуют в дискриминации.

Подача жалоб

В этом разделе описываются процедуры MassDOT/MBTA для обработки жалоб на дискриминацию по Титулу VI (по признаку расы, цвета кожи или национального происхождения, включая язык) и жалоб на возможную дискриминацию на основе дополнительных федеральных положений о недискриминации (на основе возраста, пола и инвалидности). Федеральный закон и правила, регулирующие Титул VI Закона о гражданских правах 1964 года (Титул VI), определяют Министерство юстиции Соединенных Штатов в качестве общего координационного органа для расследования жалоб на нарушение гражданских прав. Данный орган работает совместно с федеральными агентствами, на которые возложена эта ответственность. В транспортном секторе такие полномочия принадлежат Департаменту транспорта США (US DOT) и его агентствам для различных видов транспорта, включая Федеральную администрацию автомобильных дорог (FHWA) и Федеральную администрацию транзита (FTA). В соответствии с требованиями Департамента транспорта США, FHWA и FTA установили правила и рекомендации, которые требуют, чтобы подрядчики и субподрядчики, получающие федеральную финансовую помощь, устанавливали процедуры обработки поданных в эти организации жалоб в соответствии с Титулом VI.

Описанные ниже процедуры, составленные по образцу рекомендуемых процедур подачи жалоб, обнародованных Министерством юстиции США (US DOJ), призваны обеспечить справедливую возможность рассмотрения жалоб с соблюдением надлежащей правовой процедуры как для истцов, так и для ответчиков. В дополнение к формальному процессу рассмотрения жалоб, подробно описанному в данном документе, MassDOT/MBTA предпринимают позитивные шаги для обеспечения неофициального разрешения любых жалоб по Титулу VI, когда это возможно.

Процесс подачи жалоб

1. Кто может подать жалобу?

ЛЮБОЙ человек, включая всех клиентов MassDOT/MBTA, заявителей, подрядчиков или субподрядчиков, которые считают, что они сами, третье лицо или класс лиц подвергались жестокому обращению или к ним относились несправедливо по причине их расы, цвета кожи или национального происхождения (включая ограниченный уровень владения английским языком) в нарушение Титула VI Закона о гражданских правах 1964 года, соответствующих федеральных законов и законов штата, а также Политики MassDOT/MBTA по Предотвращению Дискриминации и Домогательств (ADHP). Месть против любого человека по признаку расы, цвета кожи или национального происхождения также запрещена, согласно Титулу VI и политике ADHP.

2. Как подать жалобу?

Жалоба может быть подана следующим образом:

MassDOT/MBTA Title VI Specialists
Office of Diversity and Civil Rights – Title VI Unit
10 Park Plaza, Suite 3800
Boston, MA 02116
Тел: (857) 368-8580 or 7-1-1 for Relay Service
Эл. почта: MassDOT.CivilRights@state.ma.us or MBTAcivilrights@mbta.com

MassDOT/MBTA, Assistant Secretary and Chief Diversity Officer
Office of Diversity and Civil Rights – Investigations Unit
10 Park Plaza, Suite 3800
Boston, MA 02116
Тел: (857) 368-8580
Эл. почта: odcrcomplaints@dot.state.ma.us

Центр обслуживания клиентов MBTA: (617) 222-3200
Сотрудники центра обслуживания попытаются получить от звонящего основную информацию, и детали звонка будут переданы в Управление по вопросам разнообразия и гражданских прав для обработки в соответствии с этими процедурами.

U.S. Department of Transportation
Office of Civil Rights
1200 New Jersey Avenue, SE
Washington, DC 20590
Вебсайт: civilrights.justice.gov/

Пожалуйста, обратите внимание:

- Когда FTA получает жалобу по Титулу VI относительно MassDOT/MBTA, субподрядчика или подрядчика, FTA может запросить, чтобы вопрос был исследован самими организациями MassDOT/MBTA.

- Если жалоба по Титулу VI подана в MassDOT и заявляет о нарушении со стороны Отдела автомобильных дорог MassDOT, она будет отправлена в местное отделение отдела FHWA, которое затем направит жалобу в Главное управление по гражданским правам FHWA (HCR) для ее обработки.

- Если жалоба по Титулу VI получена MassDOT и подана против субподрядчика Отдела автомобильных дорог MassDOT, MassDOT может обработать и расследовать жалобу или обратиться к HCR для расследования.

- Если FMCSA получит жалобу, поданную против MassDOT, FMCSA направит жалобу в MassDOT для письменного ответа. Это позволяет MassDOT либо разрешить жалобу, либо предоставить письменный ответ на обвинения. Письменный ответ используется для определения того, какие шаги предпримет FMCSA для обработки жалобы.

3. Что мне нужно включить в жалобу?

Форма жалобы по Титулу VI / недискриминация доступна в электронном виде на сайте MassDOT Title VI сайте MBTA Title VI website или в печатном виде у специалиста по Титулу VI MassDOT/MBTA. В качестве альтернативы, истец может отправить корреспонденцию в альтернативном формате, которая должна включать следующее:

- Ваше имя, подпись и текущая контактная информация (например, номер телефона, адрес электронной почты и почтовый адрес);
- Имя и идентификационный номер (если известно и применимо) предполагаемого нарушителя;
- Описание того, как, когда, где произошло предполагаемое запрещенное поведение;
- Подробное описание того, почему вы считаете, что к вам относились несправедливо;
- Имена и контактная информация любых свидетелей; а также
- Любая другая информация, которая, по вашему мнению, имеет отношение к вашей жалобе.

A. В случаях, когда истец не может представить письменное заявление, может быть подана устная жалоба в Управление по вопросам разнообразия и гражданских прав (ODCR). Истцы будут опрошены следователем по гражданским правам (CRI). В случае необходимости, CRI поможет человеку преобразовать

вербальную жалобу в письменной форме. Все жалобы должны быть подписаны истцом.

Б. Анонимные жалобы могут быть поданы таким же образом. Анонимные жалобы расследуются таким же образом, как и любая другая жалоба.

В. Жалобы принимаются на любом признанном языке. Доступны многоязычные формы жалоб.

4. Как скоро я должен подать жалобу?

А. Жалоба, в которой утверждается нарушение Титула VI и/или политики ADHP от MassDOT/MBTA, должна быть подана не позднее, чем через сто восемьдесят (180) дней с даты предполагаемого нарушения.

Б. Жалобы, в которых утверждается нарушение государственного или федерального закона, должны быть поданы в сроки, установленные уставом, постановлением или прецедентным правом - в некоторых случаях в срок до трехсот (300) дней с даты предполагаемого нарушения.

5. Как будет обрабатываться моя жалоба?

Когда жалоба получена, она выносится на рассмотрение следователя по гражданским правам (CRI). CRI предпримет следующие действия:

А. Определит юрисдикцию: ODCR имеет юрисдикцию, если жалоба:

1) включает в себя заявление или поведение, которое нарушает:

i. Юридическое обязательство и задачи MassDOT/MBTA по предотвращению дискриминации, преследований или актов мести в рамках любой из программ данной организации;

ii. или

Обязательство, данное субподрядчиками и подрядчиками, работающими с MassDOT/MBTA, придерживаться политики MassDOT/MBTA;

А ТАКЖЕ

2) своевременно подана.

Б. Подтвердит получение жалобы и обеспечит юрисдикционное определение в течение десяти (10) рабочих дней с момента получения жалобы.

1) Если CRI определяет, что жалоба не является результатом нарушения гражданских прав, тогда он должен письменно известить об этом истца и специалиста по Титулу VI, и дело будет закрыто.

B. Проведет тщательное расследование утверждений, содержащихся в жалобе, в соответствии с внутренними процедурами MassDOT/MBTA по рассмотрению жалоб.

6. Выводы и рекомендации?

По завершении расследования CRI передаст истцу и ответчику одно из следующих трех писем, основанное на результатах:

A. Письмо с резолюцией, в котором объясняются шаги, предпринятые или принимаемые ответчиком для соблюдения Титула VI.

Б. Письмо о результатах, которое выдается, когда установлено, что действия ответчика не нарушают положения Титула VI. Данное письмо указывает, почему ответчик был признан невиновным, и уведомляет об апелляционных правах истца.

B. Письмо о результатах, которое выдается, когда действия ответчика нарушают положения Титула VI.

Это письмо будет содержать информацию о каждом нарушении со ссылками на соответствующие правила, краткое описание выводов / рекомендаций, последствия неспособности добиться добровольного соблюдения и предложение помощи в разработке исправительного плана для соблюдения Титула VI, если это необходимо.

7. Могу ли я подать апелляцию?

Если истец или ответчик не согласны с выводами CRI, то он / она / они могут обратиться к помощнику секретаря по вопросам разнообразия и гражданских прав. Апелляционная сторона должна предоставить любую **новую информацию, которая не была доступна в ходе первоначального расследования, что приведет MassDOT/MBTA к пересмотру своих решений.** Запрос на апелляцию и предоставление любой новой информации должен быть представлен в течение тридцати (30) дней с даты, когда было отправлено письмо с результатами. После рассмотрения этой информации MassDOT/MBTA ответит либо с помощью пересмотренного письма с разрешением, либо путем информирования апелляционной стороны о том, что первоначальное письмо с резолюцией или определенными выводами остается в силе.

Procedimientos de reclamación del Título VI

Propósito y aplicabilidad

El propósito de este documento es establecer los procedimientos para la tramitación y disposición tanto de las quejas por discriminación presentadas directamente ante el Massachusetts Department of Transportation [Departamento de Transporte de Massachusetts] (MassDOT) o la Massachusetts Bay Transportation Authority [Autoridad de Transporte de la Bahía de Massachusetts](MBTA), como de las quejas por discriminación que MassDOT/MBTA tienen la autoridad delegada para tramitar en virtud del Título VI de la Ley de Derechos Civiles de 1964 (Título VI) y de las autoridades estatales y federales relacionadas con la no discriminación, incluida la Ley de Estadounidenses con Discapacidades (ADA).

La tramitación de las quejas por discriminación seguirá los pasos que se indican a continuación y que se detallan más a lo largo de este documento.

Paso 1: El denunciante presenta su queja.

Paso 2: MassDOT/MBTA envía al denunciante una carta de acuse de recibo.

Paso 3: La queja se asigna a un investigador y es revisada.

Paso 4: El investigador realiza entrevistas a los denunciantes, a los testigos y al denunciado.

Paso 5: El investigador revisa las pruebas y los testimonios para determinar si se ha producido una infracción.

Paso 6: El demandante y el demandado reciben una carta de resolución o una carta de constatación y se les ofrecen derechos de apelación.

Paso 7: Una vez que el periodo de apelación ha expirado, la investigación se cierra.

Los procedimientos describen un proceso administrativo destinado a identificar y eliminar la discriminación en los programas y actividades financiados con fondos federales. Los procedimientos no ofrecen una vía de desagravio a los denunciantes que busquen remedios individuales, incluyendo daños punitivos o remuneración compensatoria; no prohíben a los denunciantes presentar quejas ante otras agencias estatales o federales; ni niegan a los denunciantes el derecho a buscar un abogado privado para abordar los actos de presunta discriminación.

Los procedimientos descritos en este documento se aplican a MassDOT/MBTA y a sus subreceptores, contratistas y subcontratistas en su administración de programas y actividades financiados con fondos federales.

Como parte de sus esfuerzos para cumplir con el Título VI, se anima a los subreceptores de ayuda financiera federal a través de MassDOT/MBTA a adoptar estos procedimientos de reclamación. Al hacerlo, estos subreceptores reconocen su obligación de ofrecer a los miembros del público la oportunidad de presentar quejas que aleguen violaciones de las políticas de no discriminación vigentes en su organización y en sus programas, servicios y actividades. De acuerdo con las orientaciones federales, los subreceptores de fondos relacionados con el tránsito entienden que tienen la autoridad para procesar las quejas del Título VI e informarán a sus receptores, MassDOT/MBTA, de las quejas recibidas y del resultado de las investigaciones a medida que se resuelvan los asuntos.

Los subreceptores de fondos relacionados con las autopistas entienden además que no tienen autoridad para investigar las reclamaciones de violación del Título VI presentadas contra su organización (cuando su organización es la parte demandada o la parte que supuestamente ha violado el Título VI). Todas las reclamaciones de este tipo se remitirán a la Oficina de Diversidad y Derechos Civiles (ODCR) de MassDOT/MBTA para determinar la autoridad de investigación apropiada. Los subreceptores que financian las autopistas conservan el derecho a considerar las alegaciones de violación del Título VI como una cuestión de garantía y/o de cumplimiento de la política interna, pero están excluidos de hacer determinaciones en cuanto a posibles violaciones del Título VI. El MassDOT/MBTA anima a todos los subreceptores a comunicarse con los Especialistas del Título VI de la ODCR, el Director del Título VI y Accesibilidad, y/o el Director de Investigaciones cuando/si se reciben quejas sobre el Título VI para asegurar un manejo adecuado.

Definiciones

Reclamante - Persona que presenta una reclamación ante MassDOT/MBTA.

Queja - Declaración escrita, verbal o electrónica relativa a una alegación de discriminación que contiene una solicitud para que la oficina receptora tome medidas. Cuando la queja es presentada por una persona con discapacidad, el término queja abarca formatos alternativos para adaptarse a la discapacidad del demandante.

Discriminación - Aquel acto o inacción, ya sea intencional o no, por el cual una persona en los Estados Unidos, únicamente por motivos de raza, color, origen nacional o bases cubiertas por otras autoridades de no discriminación, como el género, la edad o la discapacidad, ha sido sometida a un trato desigual o a un impacto dispar en cualquier programa o actividad que reciba asistencia federal.

Administraciones operativas - Agencias del Departamento de Transporte de EE.UU., incluyendo la Administración Federal de Carreteras (FHWA), la Administración Federal de Tránsito (FTA), la Administración Federal de Ferrocarriles (FRA), la Administración Nacional de Seguridad Vial (NHTSA) y la Administración Federal de Seguridad de Autotransportes (FMSCA), que financian programas o actividades de transporte.

Demandado - La persona, agencia, institución u organización que supuestamente ha incurrido en discriminación.

Presentación de reclamaciones

Esta sección detalla los procedimientos de MassDOT/MBTA para la tramitación de las denuncias de discriminación en virtud del Título VI (por motivos de raza, color u origen nacional, incluido el idioma) y de las denuncias de discriminación en virtud de otras disposiciones federales de no discriminación (por motivos de edad, sexo y discapacidad). La ley y los reglamentos federales que rigen el Título VI de la Ley de Derechos Civiles de 1964 (Título VI) otorgan la autoridad de coordinación general para la investigación de las quejas sobre derechos civiles al Departamento de Justicia de los Estados Unidos, que trabaja en colaboración con los organismos federales que desempeñan esta responsabilidad. En el sector del transporte, esta autoridad de investigación recae en el Departamento de Transporte de EE.UU. (US DOT) y en sus agencias para los diferentes modos de transporte, incluidas la Administración Federal de Carreteras (FHWA) y la Administración Federal de Tránsito (FTA). En coordinación con los requisitos del USDOT, la FHWA y la FTA han establecido reglamentos y orientaciones que exigen a los receptores y subreceptores de ayuda financiera federal que establezcan procedimientos para tramitar las quejas del Título VI presentadas ante estas organizaciones.

Los procedimientos que se describen a continuación, basados en los procedimientos recomendados para la presentación de quejas promulgados por el Departamento de Justicia de los Estados Unidos (US DOJ), están diseñados para ofrecer una oportunidad justa de que se aborden las quejas que respeten el debido proceso tanto para los demandantes como para los demandados. Además del proceso formal de resolución de quejas aquí detallado, MassDOT/MBTA tomará medidas afirmativas para buscar una resolución informal de todas y cada una de las quejas del Título VI, cuando sea posible.

El proceso de reclamación

1. ¿Quién puede presentar una queja?

Cualquier miembro del público, junto con todos los clientes, solicitantes, contratistas o subreceptores de MassDOT/MBTA que crean que ellos mismos, un tercero o una clase de personas fueron maltratados o tratados injustamente debido a su raza, color u origen nacional (incluyendo el dominio limitado del inglés) en violación del Título VI de la Ley de Derechos Civiles de 1964, las leyes y órdenes federales y estatales relacionadas, o la Política de Prevención de la Discriminación/Acoso (ADHP) de MassDOT/MBTA. Las represalias contra un miembro del público por motivos de raza, color u origen nacional también están prohibidas en virtud del Título VI y de la Política ADHP.

2. ¿Cómo puedo presentar una queja?

Se puede presentar una queja ante lo siguiente

MassDOT/MBTA Title VI Specialists
Office of Diversity and Civil Rights – Title VI Unit
10 Park Plaza, Suite 3800
Boston, MA 02116
Teléfono: (857) 368-8580 o 7-1-1 para el servicio de retransmisión

Correo electrónico: MassDOT.CivilRights@state.ma.us o MBTAcivilrights@mbta.com

MassDOT/MBTA, Assistant Secretary & Chief Diversity Officer
Office of Diversity and Civil Rights – Investigations Unit
10 Park Plaza, Suite 3800
Boston, MA 02116
Teléfono: (857) 368-8580
Correo electrónico: odcrcomplaints@dot.state.ma.us

Centro de atención al cliente de la MBTA: (617) 222-3200
El personal del Centro de Llamadas tratará de obtener la información básica sobre el asunto de la persona que llama, y los detalles de la llamada se remitirán a la Oficina de Diversidad y Derechos Civiles para su procesamiento de acuerdo con estos procedimientos.

U.S. Department of Transportation
Office of Civil Rights
1200 New Jersey Avenue, SE
Washington, DC 20590
Página web: civilrights.justice.gov/

Tenga en cuenta:

- Cuando la FTA reciba una queja sobre el Título VI en relación con el MassDOT/MBTA, un subreceptor o un contratista, la FTA puede solicitar que el asunto sea investigado por el MassDOT/MBTA.

- Si se presenta una queja sobre el Título VI en MassDOT que alegue una infracción por parte de la División de Carreteras de MassDOT, se remitirá a la Oficina de la División local de la FHWA, que a su vez remitirá la queja a la Oficina de Derechos Civiles (HCR) de la sede central de la FHWA para su tramitación.

- Si MassDOT recibe una queja del Título VI presentada contra un subreceptor de la División de Carreteras de MassDOT, entonces MassDOT puede procesar e investigar la queja o puede remitirla a HCR para su investigación.

- Si la FMCSA recibe una queja presentada contra el MassDOT, la FMCSA remitirá la queja al MassDOT para que responda por escrito. Esto permite a MassDOT resolver la queja o proporcionar una respuesta por escrito a las alegaciones. La respuesta escrita se utiliza para determinar los pasos que dará la FMCSA para procesar la queja.

3. ¿Qué debo incluir en una reclamación?

Hay un formulario de queja sobre el Título VI/no discriminación disponible en formato electrónico en el sitio web del Título VI del MassDOT, en el sitio web del Título VI de la MBTA o en formato impreso

en la Oficina de Diversidad y Derechos Civiles del MassDOT/MBTA. Alternativamente, un demandante puede presentar la correspondencia en un formato alternativo que debe incluir:

- Su nombre, firma y, información de contacto actual (es decir, número de teléfono, dirección de correo electrónico y dirección postal);
- El nombre y el número de placa (si se conoce y es aplicable) del presunto autor;
- Una descripción de cómo, cuándo y dónde ocurrió la supuesta conducta prohibida;
- Una descripción detallada de por qué cree que se le trató de forma diferente;
- Nombres e información de contacto de cualquier testigo; y
- Cualquier otra información que considere relevante para su queja.

A. En los casos en los que el denunciante no pueda proporcionar una declaración escrita, podrá presentar una queja verbal a la Oficina de Diversidad y Derechos Civiles (ODCR). Los denunciantes serán entrevistados por un Investigador de Derechos Civiles (IRC). Si es necesario, el IRC ayudará a la persona a convertir la queja verbal en escrita. Todas las quejas deben estar firmadas por el denunciante.

B. Las quejas anónimas pueden presentarse de la misma manera. Las quejas anónimas se investigarán de la misma manera que cualquier otra queja.

C. Se aceptarán quejas en cualquier idioma reconocido. Existen formularios de reclamación multilingües.

4. ¿De cuánto tiempo dispongo para presentar una denuncia?

A. Una queja en la que se alegue una violación del Título VI y/o de la política de ADHP de MassDOT/MBTA debe presentarse a más tardar en los ciento ochenta (180) días siguientes a la fecha de la supuesta violación.

B. Las quejas que alegan violaciones de la ley estatal o federal deben presentarse dentro de los plazos establecidos por la ley, el reglamento o la jurisprudencia - en ciertos casos hasta trescientos (300) días a partir de la fecha de la supuesta violación.

5. ¿Cómo se tramitará mi queja?

Cuando se recibe una queja, se asigna a un Investigador de Derechos Civiles (IRC). El IRC lo hará:

A. Determine la jurisdicción: La ODCR tiene jurisdicción si la queja:

1) implica una declaración o una conducta que viola:

i. La obligación legal y el compromiso de MassDOT/MBTA de evitar la discriminación, el acoso o las represalias en base a una característica protegida con respecto a cualquier aspecto del servicio de la Agencia al público;

ii. o

El compromiso asumido por los subreceptores y contratistas que trabajan con MassDOT/MBTA de adherirse a las políticas de MassDOT/MBTA;

Y

2) se presenta a tiempo.

B. Acusar recibo de la queja y proporcionar la determinación jurisdiccional dentro de los diez (10) días hábiles siguientes a la recepción de la queja.

    1) Si la IRC determina que alguna queja no tiene el potencial de establecer una violación de los derechos civiles, entonces la IRC notificará por escrito al demandante y al Especialista del Título VI su hallazgo y el asunto se cerrará.

C. Llevar a cabo una investigación exhaustiva de las alegaciones contenidas en la queja de acuerdo con los procedimientos internos de quejas de MassDOT/MBTA.

6. Conclusiones y recomendaciones...

Al concluir la investigación, el IRC transmitirá al denunciante y al denunciado una de las tres cartas siguientes en función de las conclusiones:

A. Una carta de resolución que explique las medidas que el demandado ha tomado o tomará para cumplir con el Título VI.

B. Una carta de constatación que se emite cuando se determina que el demandado cumple con el Título VI. Esta carta incluirá una explicación de por qué se ha determinado que el demandado cumple con las normas y proporcionará una notificación de los derechos de apelación del demandante.

C. Una carta de constatación que se emite cuando se comprueba que el demandado no cumple.

Esta carta incluirá cada una de las infracciones a las que se hace referencia en cuanto a la normativa aplicable, una breve descripción de los hallazgos/recomendaciones, las consecuencias de no lograr el cumplimiento voluntario y una oferta de asistencia para elaborar un plan de recuperación para el cumplimiento, si procede.

7. ¿Puedo apelar un dictamen?

Si un demandante o demandado no está de acuerdo con las conclusiones de la IRC, puede apelar al Secretario Adjunto y Jefe de Diversidad. La parte que apele deberá aportar cualquier **información nueva que no estuviera disponible durante el curso de la investigación original y que pudiera llevar a MassDOT/MBTA a reconsiderar sus determinaciones.** *La solicitud de apelación y cualquier información nueva deberán presentarse en un plazo de treinta (30) días a partir de la fecha de transmisión de la carta de constatación. Después de revisar esta información, MassDOT/MBTA responderá emitiendo una carta de resolución revisada o informando a la parte apelante de que la carta de resolución o constatación original sigue vigente.*

Trình tự, thủ tục khiếu nại Tiêu Đề VI

Mục đích và Phạm vi áp dụng

Mục đích của tài liệu này là xây dựng trình tự, thủ tục xử lý và giải quyết cả những khiếu nại phân biệt đối xử nộp trực tiếp với Sở Giao thông Vận tải Massachusetts (MassDOT) hoặc Cơ quan Giao thông Vận tải Vịnh Massachusetts (MBTA), và những khiếu nại phân biệt đối xử mà MassDOT/MBTA được ủy quyền xử lý theo Tiêu Đề VI của Đạo luật Dân Quyền năm 1964 (Tiêu Đề VI) và các quyền không phân biệt đối xử có liên quan của tiểu bang và liên bang, bao gồm Đạo luật Người Mỹ Khuyết tật (ADA).

Việc xử lý các khiếu nại phân biệt đối xử sẽ được tiến hành theo các bước dưới đây và được giải thích cụ thể trong tài liệu này.

Bước 1: Người khiếu nại nộp đơn khiếu nại.

Bước 2: MassDOT/MBTA ban hành thư xác nhận đến người khiếu nại.

Bước 3: Đơn khiếu nại được phân công cho một điều tra viên xem xét.

Bước 4: Điều tra viên thực hiện phỏng vấn với người khiếu nại, nhân chứng, và bị đơn.

Bước 5: Điều tra viên xem xét chứng cứ và lời khai để xác định liệu vi phạm có xảy ra hay không.

Bước 6: Người khiếu nại và Bị đơn nhận được thư giải quyết khiếu nại hoặc thư thông báo kết quả điều tra và có quyền kháng cáo.

Bước 7: Một khi quá thời hạn kháng cáo, việc điều tra sẽ khép lại.

Trình tự, thủ tục này mô tả quy trình hành chính hướng đến phát hiện và loại bỏ phân biệt đối xử trong các chương trình và hoạt động được liên bang tài trợ. Trình tự, thủ tục này không phải là một cứu cánh cho những người khiếu nại tìm kiếm giải pháp mang tính cá nhân, bao gồm những thiệt hại mang tính trừng phạt hay tiền đền bù; trình tự, thủ tục này không cấm người khiếu nại nộp đơn khiếu nại cho các cơ quan tiểu bang hay liên bang khác, và cũng không chối bỏ quyền tìm kiếm luật sư tư của người khiếu nại để giải quyết hành vi phân biệt đối xử bị cáo buộc.

Trình tự, thủ tục được miêu tả trong tài liệu này áp dụng cho MassDOT/MBTA và các đơn vị cấp dưới, các nhà thầu, và nhà thầu phụ trong công tác quản lý những chương trình và hoạt động được liên bang tài trợ.

Với nỗ lực tuân thủ Tiêu Đề VI, các đơn vị cấp dưới nhận hỗ trợ tài chính từ liên bang thông qua MassDOT/MBTA được khuyến khích áp dụng trình tự, thủ tục khiếu nại này. Như vậy, các đơn vị cấp dưới này thừa nhận nghĩa vụ tạo cơ hội cho công chúng nộp đơn khiếu nại các cáo buộc vi phạm chính sách không phân biệt đối xử hiện hành trong chính tổ chức và trong các chương trình, dịch vụ và hoạt động của họ. Theo hướng dẫn của liên bang, các đơn vị cấp dưới nhận tài trợ liên quan đến vận chuyển hiểu rằng họ có thẩm quyền xử lý những khiếu nại về vi phạm Tiêu Đề VI và sẽ thông báo cho đơn vị nhận tài trợ, MassDOT/MBTA, về những khiếu nại nhận được và kết quả điều tra khi vấn đề được giải quyết.

Các đơn vị cấp dưới nhận tài trợ liên quan đến cao tốc cũng hiểu rằng họ không có thẩm quyền điều tra những khiếu nại vi phạm Tiêu Đề VI đối với chính tổ chức của họ (khi tổ chức của họ là bị đơn hoặc bên bị cáo buộc vi phạm Tiêu Đề VI). Tất cả những khiếu nại như vậy sẽ được chuyển đến Văn phòng về Đa Dạng và Dân Quyền (ODCR) của MassDOT/MBTA để quyết định cơ quan điều tra thích hợp. Các đơn vị cấp dưới nhận tài trợ liên quan đến cao tốc vẫn có quyền xem xét những cáo buộc vi phạm Tiêu Đề VI như là một vấn đề về Đảm bảo và/hoặc tuân thủ chính sách nội bộ nhưng không được phép đưa ra quyết định về khả năng vi phạm Tiêu Đề VI. MassDOT/MBTA khuyến khích tất cả các đơn vị cấp dưới liên lạc với Chuyên viên Tiêu Đề VI của ODCR, Giám đốc Phụ trách Tiêu Đề VI và Tính dễ tiếp cận, và/hoặc Giám đốc Điều tra khi/nếu tiếp nhận những khiếu nại về vi phạm Tiêu Đề VI để đảm bảo xử lý đúng mực.

Định nghĩa

Người khiếu nại – Người nộp đơn khiếu nại cho MassDOT/MBTA.

(Đơn) khiếu nại – Tường trình dưới dạng văn bản, lời nói hoặc điện tử liên quan đến cáo buộc phân biệt đối xử và yêu cầu cơ quan tiếp nhận có hành động xử lý. Trong trường hợp người nộp đơn khiếu nại là người khuyết tật, đơn khiếu nại sẽ gồm những hình thức thay thế để phù hợp với tình trạng khuyết tật của người khiếu nại.

Phân biệt đối xử – Là hành động hoặc không phải hành động, dù cố ý hay vô ý, mà qua đó một cá nhân tại Hoa Kỳ bị đối xử bất bình đẳng hay phân biệt trong bất kỳ chương trình hay hoạt động nào có hỗ trợ từ liên bang, chỉ vì chủng tộc, màu da, dân tộc, hay dựa trên những cơ sở được quy định bởi các cơ quan không phân biệt đối xử khác như là giới tính, tuổi tác, hay khuyết tật.

Các Cơ quan Điều hành – Các cơ quan của Bộ Giao thông Vận tải Hoa Kỳ, bao gồm Cơ quan Quản lý Cao tốc Liên bang (FHWA),Cơ quan Quản lý Vận chuyển Liên bang (FTA), Cơ quan Quản lý Đường sắt Liên bang (FRA), Cơ quan Quản lý An toàn Giao thông Cao tốc Quốc gia (NHTSA), và Cơ quan Quản lý An Toàn Xe hạng nặng Liên bang (FMCSA), tài trợ cho các chương trình hay hoạt động giao thông.

Bị đơn – Cá nhân, cơ quan, hoặc tổ chức bị cáo buộc có liên quan đến phân biệt đối xử.

Nộp đơn khiếu nại

Phần này miêu tả chi tiết trình tự, thủ tục MassDOT/MBTA xử lý những đơn khiếu nại phân biệt đối xử vi phạm Tiêu Đề VI (dựa trên chủng tộc, màu da, hoặc nguồn gốc quốc gia, bao gồm ngôn ngữ) và những khiếu nại cáo buộc phân biệt đối xử liên quan đến những điều khoản bổ sung về không phân biệt đối xử của liên bang (dựa trên tuổi tác, giới tính, và khuyết tật). Luật pháp và các quy định của liên bang quản lý Tiêu Đề VI của Đạo luật Dân Quyền năm 1964 (Tiêu Đề VI) quy định Bộ Tư Pháp Hoa Kỳ là cơ quan có thẩm quyền điều phối chung việc điều tra các khiếu nại dân quyền; Bộ Tư Pháp Hoa Kỳ phối hợp với các cơ quan liên bang thực hiện trách nhiệm này. Trong lĩnh vực giao thông, thẩm quyền điều tra này thuộc về Bộ Giao thông Vận tải Hoa Kỳ (US DOT) và các cơ quan trực thuộc phụ trách các phương thức giao thông khác nhau, bao gồm Cơ quan Quản lý Cao tốc Liên bang (FHWA) và Cơ quan Quản lý Vận tải Liên bang (FTA). Dựa theo những yêu cầu của USDOT, FHWA và FTA đã thiết lập những quy định và hướng dẫn đòi hỏi các đơn vị nhận tài trợ và đơn vị cấp dưới nhận hỗ trợ tài chính từ liên bang xây dựng trình tự, thủ tục xử lý các khiếu nại về vi phạm Tiêu Đề VI được nộp cho những tổ chức này.

Trình tự, thủ tục được miêu tả dưới đây, mô phỏng theo trình tự, thủ tục khiếu nại được khuyến nghị do Bộ Tư Pháp Hoa Kỳ (US DOJ) ban hành, được thiết kế nhằm tạo cơ hội công bằng để những khiếu nại được xử lý theo trình tự, thủ tục tố tụng hợp pháp cho cả người khiếu nại và bị đơn. Ngoài trình tự, thủ tục giải quyết khiếu nại chính thức nêu chi tiết ở đây, MassDOT/MBTA sẽ thực hiện các bước cụ thể để xử lý không chính thức bất kỳ và tất cả những khiếu nại về vi phạm Tiêu Đề VI, khi có thể.

Quy trình Khiếu nại

1. Ai có thể nộp đơn khiếu nại?

BẤT KỲ người dân nào, cùng với tất cả các khách hàng, ứng viên, nhà thầu, hay đơn vị cấp dưới của MassDOT/MBTA nếu tin rằng bản thân họ, một bên thứ ba, hoặc một tầng lớp người đã bị ngược đãi hay bị đối xử không công bằng vì chủng tộc, màu da hay nguồn gốc quốc gia (bao gồm trình độ tiếng Anh hạn chế), vi phạm Tiêu Đề VI của Đạo luật Dân Quyền năm 1964, các điều luật và pháp lệnh liên quan của liên bang và tiểu bang, hay Chính sách Chống Phân biệt Đối xử/Quấy rối (ADHP) của MassDOT/MBTA. Hành vi trả thù một người dân dựa trên chủng tộc, màu da hay nguồn gốc quốc gia cũng bị nghiêm cấm theo Tiêu Đề VI và Chính sách Chống Phân biệt Đối xử/Quấy rối (ADHP).

2. Tôi nộp đơn khiếu nại bằng cách nào?

Có thể nộp đơn khiếu nại cho các đơn vị sau đây:

MassDOT/MBTA Title VI Specialists
Office of Diversity and Civil Rights – Title VI Unit
10 Park Plaza, Suite 3800
Boston, MA 02116
Điện thoại: (857) 368-8580 hoặc 7-1-1 đối với Dịch vụ Chuyển tiếp
Email: MassDOT.CivilRights@state.ma.us hoặc MBTAcivilrights@mbta.com

MassDOT/MBTA, Assistant Secretary and Chief Diversity Officer
Office of Diversity and Civil Rights – Investigations Unit
10 Park Plaza, Suite 3800
Boston, MA 02116
Điện thoại: (857) 368-8580
Email: odcrcomplaints@dot.state.ma.us

MBTA Customer Call Center : (617) 222-3200
(Tổng đài Hỗ trợ Khách hàng của MBTA)
Các nhân viên Tổng đài sẽ tìm hiểu thu thập thông tin cơ bản về vấn đề từ người gọi đến, và chi tiết cuộc gọi sẽ được chuyển đến Văn phòng về Đa dạng và Dân Quyền để tiến hành xử lý theo trình tự, thủ tục này.

U.S. Department of Transportation
Office of Civil Rights
1200 New Jersey Avenue, SE
Washington, DC 20590
Trang web: civilrights.justice.gov/

Xin lưu ý:

- Khi FTA tiếp nhận đơn khiếu nại về vi phạm Tiêu Đề VI liên quan đến MassDOT/MBTA, một đơn vị nhận cấp dưới, hay một nhà thầu, FTA có thể yêu cầu MassDOT/MBTA điều tra vấn đề này.
- Nếu đơn khiếu nại về vi phạm Tiêu Đề VI được nộp cho MassDOT cáo buộc một vi phạm của Ban Cao tốc thuộc MassDOT, thì đơn khiếu nại sẽ được chuyển đến Văn phòng Ban FHWA địa phương, văn phòng này sau đó sẽ chuyển đơn khiếu nại đến Trụ sở của Văn phòng Dân Quyền (HCR) của FHWA để xử lý.
- Nếu đơn khiếu nại về vi phạm Tiêu Đề VI được nộp cho MassDOT cáo buộc một đơn vị cấp dưới của Ban Cao tốc thuộc MassDOT, thì MassDOT có thể xử lý và điều tra khiếu nại này hoặc chuyển cho HCR điều tra.
- Nếu FMCSA nhận được một khiếu nại cáo buộc MassDOT, FMCSA sẽ chuyển khiếu nại này đến MassDOT để nhận phản hồi bằng văn bản. Việc này cho phép MassDOT

hoặc xử lý khiếu nại hoặc phản hồi cáo buộc bằng văn bản. Phản hồi bằng văn bản được sử dụng để xác định các bước mà FMCSA sẽ tiến hành để xử lý khiếu nại.

3. Đơn khiếu nại của tôi cần bao gồm những gì?

Mẫu đơn khiếu nại về vi phạm Tiêu Đề VI/Không phân biệt đối xử có sẵn dưới dạng điện tử trên trang web Tiêu Đề VI của MassDOT, trang web Tiêu Đề VI của MBTA, hoặc dưới dạng giấy tại Văn phòng về Đa Dạng và Dân Quyền của MassDOT/MBTA. Hoặc, người khiếu nại có thể nộp các thông tin trao đổi dưới hình thức khác và phải bao gồm:

- Tên, chữ ký và thông tin liên hệ hiện tại của quý vị (ví dụ như số điện thoại, địa chỉ email và địa chỉ nhận thư bưu chính);
- Tên và số hiệu (nếu biết và nếu có) của người bị cáo buộc có hành vi phân biệt đối xử;
- Mô tả cách thức, thời gian và địa điểm hành động phân biệt đối xử bị cáo buộc đó xảy ra;
- Mô tả chi tiết vì sao quý vị tin rằng mình bị đối xử khác biệt;
- Tên và thông tin liên hệ của bất kỳ nhân chứng nào; và
- Bất kỳ thông tin nào khác mà quý vị tin là có liên quan đến khiếu nại của mình.

A. Trong trường hợp người khiếu nại không thể cung cấp đơn khiếu nại bằng văn bản, khiếu nại bằng lời nói có thể được nộp cho Văn phòng về Đa Dạng và Dân Quyền (ODCR). Người khiếu nại sẽ được Điều tra viên Dân Quyền (CRI) phỏng vấn. Nếu cần thiết, Điều tra viên Dân Quyền sẽ hỗ trợ người đó chuyển khiếu nại bằng lời nói sang khiếu nại bằng văn bản. Tất cả các đơn khiếu nại phải có chữ ký của người khiếu nại.

B. Những đơn khiếu nại ẩn danh có thể được nộp tương tự. Những đơn khiếu nại ẩn danh sẽ được điều tra tương tự như bất kỳ đơn khiếu nại nào khác.

C. Đơn khiếu nại được chấp nhận bằng bất kỳ ngôn ngữ được công nhận nào. Chúng tôi có mẫu đơn khiếu nại bằng nhiều ngôn ngữ.

4. Tôi có bao lâu để nộp đơn khiếu nại?

A. Đơn khiếu nại cáo buộc vi phạm Tiêu Đề VI và/hay chính sách ADHP của MassDOT/MBTA nên được nộp trong thời hạn một trăm tám mươi (180) ngày kể từ ngày vi phạm bị cáo buộc xảy ra.

B. Đơn khiếu nại cáo buộc các vi phạm luật tiểu bang và liên bang phải được nộp trong khung thời gian được thiết lập bởi quy chế, quy định, hoặc án lệ – trong các trường hợp nhất định lên đến ba trăm (300) ngày kể từ ngày vi phạm bị cáo buộc xảy ra.

5. Đơn khiếu nại của tôi sẽ được xử lý như thế nào?

Khi được tiếp nhận, đơn khiếu nại sẽ được phân công cho một Điều tra viên Dân Quyền (CRI). Điều tra viên Dân Quyền này sẽ:

A. Xác định Thẩm quyền: ODCR có thẩm quyền nếu đơn khiếu nại:

1) liên quan đến một tuyên bố hoặc hành vi vi phạm:

i. Nghĩa vụ và cam kết pháp lý của MassDOT/MBTA chống phân biệt đối xử, quấy rối, hoặc trả thù vì một đặc trưng được bảo vệ liên quan đến bất kỳ khía cạnh nào của dịch vụ của Cơ quan dành cho công chúng;

ii. hoặc
Cam kết của các đơn vị cấp dưới và nhà thầu làm việc với MassDOT/MBTA tuân thủ các chính sách của MassDOT/MBTA;

VÀ

2) được nộp đúng hạn.

B. Xác nhận việc tiếp nhận đơn khiếu nại và xác định thẩm quyền trong vòng mười (10) ngày làm việc kể từ khi tiếp nhận đơn khiếu nại.

1) Nếu Điều tra viên Dân Quyền xác định đơn khiếu nại không có khả năng thiết lập một vi phạm dân quyền, thì Điều tra viên Dân quyền này sẽ thông báo kết quả khiếu nại cho người nộp đơn khiếu nại và Chuyên viên Tiêu Đề VI bằng văn bản và vấn đề sẽ được khép lại.

C. Thực hiện một cuộc điều tra thấu đáo những cáo buộc nêu trong đơn khiếu nại theo Trình tự, thủ tục Khiếu nại Nội bộ của MassDOT/MBTA.

6.Kết quả điều tra và Kiến nghị xử lý?

Khi kết thúc điều tra, Điều tra viên Dân Quyền sẽ gửi cho người khiếu nại và bị đơn một trong ba thư dưới đây tùy vào kết quả điều tra:

A. Thư giải quyết khiếu nại giải thích các bước mà bị đơn đã hoặc sẽ thực hiện để tuân thủ Tiêu Đề VI.

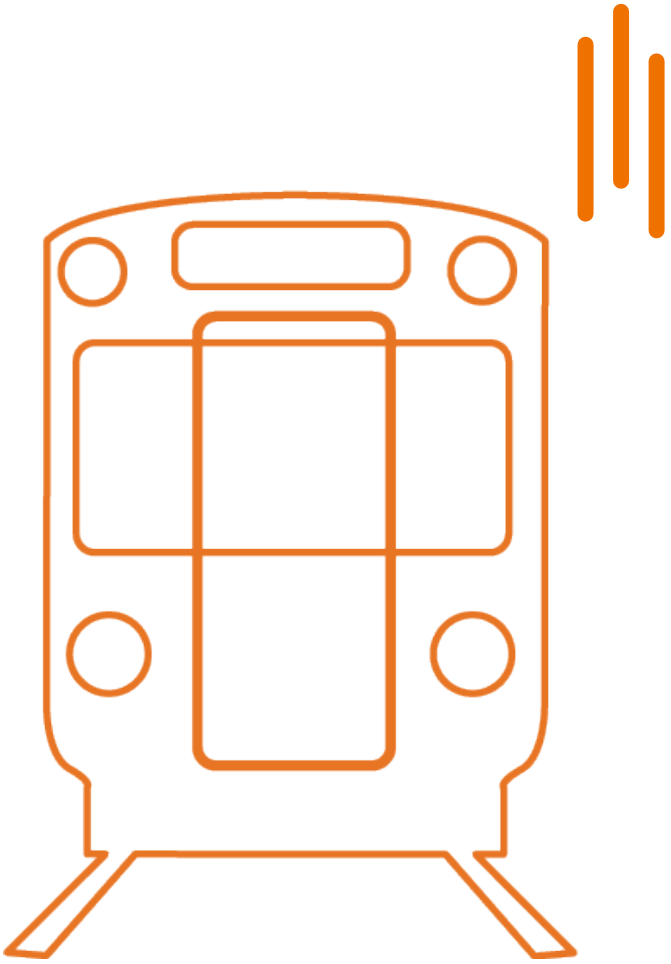
B. Thư thông báo kết quả sẽ được ban hành khi bị đơn được xác định là có tuân thủ Tiêu Đề VI. Thư này sẽ bao gồm một phần giải thích tại sao bị đơn được xác định là có tuân thủ và thông báo về quyền kháng cáo của người khiếu nại.

C. Thư thông báo kết quả được ban hành khi bị đơn được xác định là không tuân thủ Tiêu Đề VI.

Thư này sẽ bao gồm từng vi phạm được tham chiếu với quy định được áp dụng, mô tả ngắn gọn kết quả điều tra/kiến nghị xử lý, hệ quả của việc không tự giác tuân thủ, và đề nghị hỗ trợ lập kế hoạch khắc phục đối với việc tuân thủ, nếu thích hợp.

7. Tôi có thể kháng cáo Kết quả điều tra không?

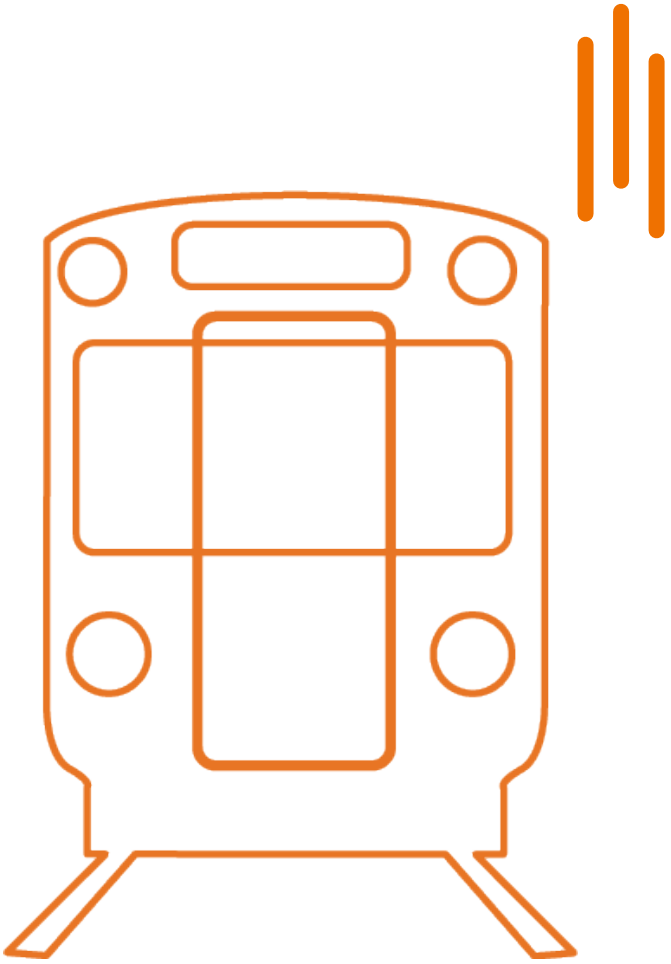
Nếu người khiếu nại hoặc bị đơn không đồng ý với kết quả điều tra của Điều tra viên Dân Quyền, thì anh ấy/cô ấy/họ có thể kháng cáo với Trợ lý Thư ký và Giám đốc về Đa Dạng. Bên kháng cáo phải cung cấp bất kỳ **thông tin mới nào chưa được đưa ra trong quá trình điều tra ban đầu mà sẽ khiến MassDOT/MBTA cân nhắc lại các quyết định của mình**. Yêu cầu kháng cáo và bất kỳ thông tin mới nào phải được nộp trong vòng ba mươi (30) ngày kể từ ngày thư thông báo kết quả được gửi đi. Sau khi xem xét thông tin này, MassDOT/MBTA sẽ phản hồi bằng cách gửi thư giải quyết khiếu nại có chỉnh sửa hoặc bằng cách thông báo với bên kháng cáo rằng thư giải quyết hoặc kết quả điều tra ban đầu vẫn giữ nguyên hiệu lực.





Appendix 2E

List of Title VI Complaints



Date	Basis	Action(s) Taken	Summary	Status
1/12/2020	Race	Referred to Area	CP alleges that RSPs were yelling racial slurs and obscenities at each other on the platform("f--k you; n----r"). Insufficient evidence.	Closed
1/13/2020	Race	Referred to Area	CP alleges race discrimination when RSP, a Bus Op. refused to let a Black passenger board the bus. Insufficient evidence.	Closed
1/21/2020	Race	Referred to Area	CP alleges race discrimination when RSP, a Bus Op. told him to "go steal another one like the rest of them" when CP told RSP he had lost his wallet. Insufficient evidence.	Closed
1/22/2020	Race	Referred to Area	CP alleges that RSP, a Bus Op. called him an "ignorant White a-----e" Insufficient evidence.	Closed
2/4/2020	Race	Referred to Area	CP alleges that RSP, a Bus Op. refused to let an Asian passenger board the bus and cited as the reason that the passenger had the corona virus. Insufficient evidence.	Closed
2/6/2020	Race	Referred to Area	Complainant alleges that when she boarded the bus and told the Bus Operator that she did not have enough money on her pass, Respondent replied, "That will be 20 lashes." Insufficient evidence.	Closed
2/9/2020	Language	Administrative Closure/RIDE	CP alleges that: her ride does not show up; she paid more for her fare than she was told she would have to; when she calls customer service and asks for a Spanish representative the call ends.	Closed
2/22/2020	Race	Referred to Area	CP alleges that RSP spoke to her in Chinese even though she is not Chinese. Insufficient evidence.	Closed
3/6/2020	Race	Referred to Area	CP alleges that RSP told an Asian couple to go back to their country. Insufficient evidence.	Closed
3/8/2020	Race	Referred to Area	CP alleges that RSP charged him the full fare for his children who are under 11 yrs old due to their race; Insufficient evidence.	Closed
3/11/2020	Race	Referred to Area	CP alleges RSP told him that he did not have time to help Black people. Insufficient evidence.	Closed
3/12/2020	Race	Referred to Area	CP alleges that RSP questioned her about her student pass due to her race.	Closed
3/12/2020	Race	Administrative Closure	CP alleges she was bypassed. Insufficient evidence to identify the Bus Operator.	Closed
4/4/2020	Race	Referred to Area	CP alleges he was bypassed by RSPs based on his race. Insufficient evidence.	Closed
4/18/2020	Race	Administrative Closure	CP alleges that RSP refused to answer his questions. Insufficient evidence.	Closed
6/10/2020	Race	Referred to Area	CP alleges that RSP repeatedly called him "boy." Insufficient evidence	Closed
6/16/2020	Race	Referred to Area	CP reported inappropriate comments that RSP posted on Facebook. Cause Finding	Closed

Date	Basis	Action(s) Taken	Summary	Status
6/18/2020	Race	Referred to Area	CP alleges that RSP bypassed him and called him the "n word." Insufficient evidence	Closed
6/22/2020	Race	Administrative Closure	CP alleges that he was denied service due to his race. Insufficient evidence to identify employee.	Closed
7/23/2020	Race	Referred to Area	CP alleges that RSP yelled and cursed at him when he tried to exit the bus through the front bus door. Insufficient evidence.	Closed
7/26/2020	Race	Referred to Area	CP alleges that RSP yelled at her to move seats based on her race. Insufficient evidence.	Closed
8/11/2020	Race	Administrative Closure	CP alleges that RSP accused her of trying to use a bus pass with no funds but let other customers board the bus without paying the bus fare. Insufficient evidence to identify the employee.	Closed
8/14/2020	National Origin	Referred to Area	CP alleges that RSP almost hit his car with the bus and "flipped him off." Insufficient evidence.	Closed
8/19/2020	Race	Administrative Closure	CP alleges that RSP did not allow him to board the bus while RSP took his break. Insufficient evidence to identify employee.	Closed
8/22/2020	Race	Referred to Area	CP alleges that RSP was rude to him and other customers. Insufficient evidence.	Closed
8/27/2020	Race	Referred to Area	CP alleges that RSP yelled at her son when he tried to pay a reduced bus fair. Insuficient evidence.	Closed
9/4/2020	Race	Referred to Area	CP alleges that RSP said "Black boy you better get off my bus" and closed the doors in his face. Insufficient evidence.	Closed
9/10/2020	Race	Referred to Area	CP alleges that RSP did not take action when another customer used derogatory language on the bus. Insufficient evidence.	Closed
9/12/2020	Race	Referred to Area	CP alleges that he and another passenger were bypassed due to their race. Insufficient evidence	Closed
11/8/2020	Race	Administrative Closure	CP alleges that RSP made inappropriate comments towards their roommate when the roommate boarded the bus. Non-responsive customer; insufficient evidence to identify the employee	Closed
1/11/2021	Race	Referred to Area	CP alleges that RSP did not allow Hispanic passengers to board the bus because of their race before the departure time. Insufficient evidence	Closed
1/12/2021	Race	Referred to Area	CP alleges that RSP failed to stop when she requested to exit the bus and told her she had to exit the bus or he would call the police later. Insufficient evidence	Closed
1/27/2021	Race; gender	Referred to Area	CP alleges that RSP questioned her about her use of a youth pass. Insufficient evidence	Closed

Date	Basis	Action(s) Taken	Summary	Status
2/5/2021	Race	Referred to Area	CP alleges that the Bus Operator was rude when she paid her fare. Insufficient evidence	Closed
2/6/2021	Race	Referral to Area	CP alleges that RSP would not allow CP to close bus windows and further spoke to CP in a racist manner. RSP denied the allegation. Insufficient evidence.	Closed
2/9/2021	Race	Referred to Area	CP alleges that RSP has dropped her off at a different stop. Insufficient evidence	Closed
2/9/2021	Race	Admistrative Closure	CP alleges that RSP was rude to him. CP refused to participate in the investigation. Insufficient evidence to identify the employee.	Closed
2/18/2021	Race; Age	Referred to Area	CP alleges the the Bus Operator questioned him about his youth pass. Insufficient evidence	Closed
2/18/2021	Race; Age	Referred to Area	CP alleges the the Bus Operator questioned another cusomer about his youth pass. Insufficient evidence	Closed
2/25/2021	Race	Referral to Area	CP alleges that RSP told him "if you are not my skin color you are nothing." RSP denied the allegation. Insufficient evidence.	Closed
3/11/2021	Race	Referred to Area	CP alleges that as they were paying the fare, the Bus Operator called them the "n word." Insufficient evidence	Closed
4/4/2021	Race	Referral to Area	CP alleges that RSP did not allow him to sit in the seats near her, but allowed two White customers to sit in those seats. RSP denied the allegation. Insufficient evidence.	Closed
4/9/2021	Race	Referral to Area	CP alleges that White bus operator failed to stop at designated stop and made CP board in middle of intersection. CP is person of color and was only passenger waiting at stop to board. RSP denied the allegation. Insufficent evidence.	Closed
4/12/2021	Race, Gender	Referral to Area	CP alleges that RSP asked him to tap his pass on the fare box a second time due to this race. RSP denied the allegation. Insufficient evidence.	Closed
4/21/2021	Race	Referral to Area	CP alleges that RSP bypassed her due to race. RSP denied the allegation. Insufficient evidence.	Closesd
4/22/2021	Race, Age	Referral to Area	CP alleges that RSP demanded that she pay her fare and said "you people of that color and age think you can get away with anything." RSP denied the allegation. Insufficient evidence.	Closed
4/23/2021	National Origin	Referral to Area	CP alleges that RSP kicked off a Southeast Asian customer for no reason. RSP denied the allegation. Insufficient evidence.	Closed
4/24/2021	Race	Referral to Area	CP alleges that RSP bypassed her due to her race. RSP denied the allegation. Insufficient evidence.	Closed

Date	Basis	Action(s) Taken	Summary	Status
4/27/2021	Race, Disability	Referral to Area	CP alleges that Route 77 bus operator harasses CP about the way CP sits on the bus. RSP denied the allegation. Insufficient evidence.	Closed
4/30/2021	Language	Referral to Area	CP alleges that Green Line Motorperson in question treats non-English speaking passengers poorly. CP did not request response. RSP denied the allegation. Insufficient evidence.	Closed
5/12/2021	Race	Referral to Area	CP alleges that RSP (Black) allowed a Black, drunk man to board bus without paying but then made CP pay. CP, who is Latina, believes that this was due to her race. RSP denied the allegation. Insufficient evidence.	Closed
5/13/2021	Color	Investigated and Closed – No Additional Actions Needed	Customer alleges a male bus operator and his supervisor removed her from the bus. The bus operator and his supervisor could not be identified. Insufficent evidence.	Closed
5/16/2021	Race	Investigated and Closed – No Additional Actions Needed	Customer alleges that a bus operator treated her differently than customer outside of her race when he expected her to pay her fare to board the bus but allowed the customers outside of her race to ride the bus without paying their fare. The bus operator denies the different treatement, and the video footage is unavaiable. Insufficient evidence.	Closed
5/17/2021	Race	Referral to Area	CP alleges that RSP, a Green Line Motorperson, called CP a "stupid white bitch" because CP did not hear another passenger whisper to CP. RSP denied the allegation. Insufficient evidence.	Closed
5/25/2021	Race	Investigated and Closed – No Additional Actions Needed	Customer alleges that a bus operator would not allow him to board the bus. The bus operator denies the allegations, and the video footage is unavailable. Insufficent evdience.	Closed
6/4/2021	Race	Referral to Area	CP alleges that RSP waited for several minutes because Black male teenager did not pay; RSP only started driving when another passenger paid for teenager's fare. CP, who is White and grew up in Boston, believes RSP's actions were racially-motivated. RSP denied the allegation. Insufficient evidence.	Closed
6/11/2021	Race and National Origin	Investigated and Closed – No Additional Actions Needed	Customer alleges that a bus operator bypassed her. The bus operator denies the allegations, and the video footage is unavailable. Insufficent evidence.	Closed

Date	Basis	Action(s) Taken	Summary	Status
6/23/2021	Race	Investigated and Closed – No Additional Actions Needed	Customer alleges that a bus operator treated her differently than passengers outside of her protected class when he did not pull fully to the curb at the Kenmore bus stop, where she boarded the bus, but did pull fully to the curb and lowered the bus at the Brookline/Pearl Street bus stop, where an African-American female passenger boarded the bus. Customer also alleges that the bus operator told her to “Get your mask up now” when her mask slipped a little and to “Get going, I have to make the light.” Customer also alleges that the bus operator narrowly missed a pedestrian when he turned onto Pearl Street. CP alleges that the the bus operator did not pull fully to the curb when she got off at Cypress Street. The bus operator denies the allegations, and the video footage did not corroborate the customer's allegations. Insufficient evdience.	Closed
6/25/2021	Race	Referral to Area with re-instruction on MBTA Rules for Operations Employees	Customer alleges that a bus operator tried to force him off the road by cutting him off three times and then made racial slurs to him. The bus operator denies the allegations, and the video footage is unavailable. Insuffient evidence.	Closed
7/6/2021	Race	Investigated and Closed – No Additional Actions Needed	Customer alleges that a bus operator kicked him off the bus because he was playing his music on his phone. The bus operator denies that he kicked the customer off the bus, but did admit that he asked the customer to turn his music off. MBTA’s Rules for Operations Employees states that “when a customer is observed playing a radio he/she must be asked to either turn it off or use earphones or a headset." The video footage is unavailable. Insufficent evidence.	Closed
7/12/2021	Race	Investigated and Closed – No Additional Actions Needed	Customer alleges that a bus operator bypassed him but picked up other customers outside of his race at the same bus stop. The bus operator stated in his written statement that “I can only assume the customer didn’t want the bus once he turned away after the other people got on.” Although a review of the video footage showed that the customer was bypassed at the bus stop, there is no indication that the bus operator bypassed the customer because of his race or knew that the customer was waiting to get on the bus. Insufficient evidence.	Closed

Date	Basis	Action(s) Taken	Summary	Status
7/13/2021	Race and Color	Investigated and Closed – No Additional Actions Needed	Customer alleges that a train operator would not allow him and his two daughters to board the train. There is insufficient information to identify the train operator, and the video footage is unavailable. Insufficient evidence.	Closed
7/15/2021	National Origin	Investigated and Closed – No Additional Actions Needed	Customer alleges thatt the bus operator behaved in an unprofessional and disrepectful manner towards her sister. Customer alleges that the bus operator would not lower the bus for her sister when she had a stroller. Customer alleges that she has overheard the bus operator call her sister stupid. There is insufficent information to identify the bus operator, and the video footage is unavailable. Insufficient evidence.	Closed
7/24/2021	Race	Investigated and Closed – No Additional Actions Needed	Customer alleges that a bus operator called the police and and told then that he did not pay his fare and requested that the police take him off the bus. The bus operator stated in his written statement that when he told the customer that he needed to pay the full fare, the customer became angry. A review of the video footage shows that the customer tapped his card a few times, walked to the back of the bus, and when the bus operator motioned for him to come back to the front of the bus, the customer started pointing his finger at the bus operator. Insufficent evidence.	Closed
7/24/2021	Race	Investigated and Closed – No Additional Actions Needed	Customer alleges that a train operator yelled at him that he needed to move back despite the train being full and there was no room for him to move back. He also alleges that the train operator looked as if she was going to beat him up. The train operator denies the allegations, and the video footage is unavailable. Insufficient evidence.	Closed
7/30/2021	Race	Referral to Area	Customer alleges that a bus operator would not allow her to pay the fare with pennies due to her race. The bus operator denied the allegation. Insufficient evidence.	Closed

Date	Basis	Action(s) Taken	Summary	Status
7/31/2021	Race	Investigated and Closed – No Additional Actions Needed	Customer alleges that one of the employees on the train stared her down and yelled at her saying "everyone is off the train. Pay attention and get off, *****!" Customer alleges that she did not know the green line train was prematurely ending its route at the time. There is insufficient information to identify the train employee, and the video footage is unavailable. Insufficident evidence.	Closed
8/8/2021	Age, Race, Sex	Referral to Area with recommendation of re-instruction on fare collection rules	Customer alleges that a bus operator acted rude towards her when she attempted to pay her fare. The operator denied the allegation. Insufficient evidence.	Closed
8/12/2021	Race	Referral to Area with recommendation of re-instruction on the courtesy and professional conduct rule and ADHP training attendance	Customer alleges that a bus operator acted rude towards him on the bus and made a discriminatory comment. The operator denied the allegation. Insufficient evidence.	Closed
8/20/2021	Race	Referral to Area	Customer alleges that a bus operator refused to allow her on the bus due to her race. The operator denied the allegation. Insufficient evidence.	Closed
8/26/2021	Race	Investigated and Closed – No Additional Actions Needed	Customer alleges that he parked his car at a bus stop, ran into a liquor store right in front of the bus stop, and ran back out to move his car when he saw that the bus was trying to pull into that bus stop. Customer alleges that as he ran back to his car, the bus driver started yelling at him. Customer alleges that after he got back into his car and the bus operator pulled the bus into the bus stop, he heard the bus operator yell the word "N--ger" to him. The bus operator denies the allegations, and the video footage is unavailable. Insufficient evidence.	Closed
9/1/2021	Race	Referral to Area	Customer alleges that a bus operator accused her of not paying the fare when she did. The bus operator denied the allegation. Insufficient evidence.	Closed
9/8/2021	National Origin	Referral to Area	Customer alleges that a bus operator made a discriminatory comment based on his national origin. The bus operator denied the allegation. Insufficient evidence.	Closed
9/25/2021	Race	Referral to Area	Customer alleges that a bus operator told Black customers that they could not use their personal devices on the bus. The bus operator denied the allegation. Insufficient evidence.	Closed

Date	Basis	Action(s) Taken	Summary	Status
9/30/2021	Race	Referral to Area with re-instruction on MBTA Rules for Operations Employees, and Referred to Corrective Action Committee	Customer alleges that a bus operator called her the "N" word after she told him that he was late getting back to the bus and that she had to get to work. The bus operator denies calling the customer the "N" word. Although a review of the video footage only showed by movement, another customer on the bus with no relation to the customer at issue corroborated the customer's allegations. Sufficent evdience.	Closed
10/9/2021	Race	Referral to Area	Customer alleges that a motorperson did not open the rear door of the bus for her due to her race. The motorperson denies the allegation. Insufficient evidence.	Closed
10/10/2021	Race	Referral to Area	Customer alleges that a transit ambassador refused to assist him when he needed help. The transit ambassador denies the allegation. Insufficient evidence.	Closed
10/19/2021	Race, Sex	Referral to Area	Customer alleges that a motorperson screamed at her for having a bike on the train. The motorperson denied the allegation. Insufficient evidence.	Closed
11/7/2021	Race	Referral to Area	Customer alleges that a motorperson failed to assist her when she fell and hit her head. The motorperson denied the allegation. Insufficient evidence.	Closed
11/15/2021	Race	Referral to Area	Customer alleges that a bus operator yelled at him for lowering his mask due to his race. The bus operator denied the allegation. Insufficient evidence.	Closed
11/30/2021	Race	Referral to Area with re-instruction on MBTA Rules for Operations Employees	Customer alleges that a bus operator made discriminatory comments about Asian people. The bus operator denied the allegation. Insufficient evidence.	Closed
12/3/2021	Race	Referral to Area with re-instruction on MBTA Rules for Operations Employees	Customer alleges that a bus operator acted rude towards her due to her race. The bus operator denied the allegation. Insufficient evidence.	Closed
12/7/2021	Race	Referral to Area	Customer alleges that a motorperson directed a racial slur at him. The motorperson denied the allegation. Insufficient evidence.	Closed
12/15/2021	Race	Referral to Area	Customer alleges that a bus operator told him he was not allowed on the bus due to his race. The bus operator denied the allegation. Insufficient evidence.	Closed
12/21/2021	Race	Investigated - No Cause	CP alleges that RSP, a Transit Ambassador called him the N word several times	Closed
12/28/2021	Race	Investigated - No Cause	CP alleges that RSP, a Bus Op. called him the "n" word	Closed

Date	Basis	Action(s) Taken	Summary	Status
12/30/2021	Race/Color	Investigated	CP alleges that RSP a Bus Op. discriminated against her when they refused to let her exit the bus	Open
1/10/2022	Race	Investigated	CP alleges that RSP, Motorperson let two White passengers board the train & not him	Open
1/12/2022	Race	Investigated - No Cause	CP alleges disparate treatment because she was not allowed to use the restroom at Maverick station & alleges that customers of color are allowed to use the restroom and not White customers	Closed
1/15/2022	Race	Referred to another department	CP alleges that a conductor told her to "speak English we are in America"	Closed
1/18/2022	Race	Investigated - No Cause	CP alleges that RSP bypassed her	Closed
1/19/2022	Race	Referred to another department	CP alleges that a conductor racially profiled a customer	Closed
1/20/2022	Race	Investigated - No Cause	CP alleges that a Bus Op and Official give preferential treatment to Black customers	Closed
1/25/2022	National Origin	Investigated - No Cause	CP alleges that RSP berated her and made fun of her accent	Closed
2/4/2022	Race	Investigated - No Cause	CP alleges that RSP harassed her when she tried to pay her fare	Closed
2/13/2022	Race		Received email stating bus operator didn't require "pretty girls" to pay. Alleged this was discrimination and racist.	Closed
2/15/2022	Race	Investigated - No Cause	Received IRIS HEAT complaint alleging inappropriate behavior off site, based on race.	Closed
2/18/2022	Race	Investigated - No Cause	CP alleges RSP required cash payment on dash and subsequently disembark	Closed
2/21/2022	Race	Investigated - No Cause	CP alleges subway operator told him she didn't have to wait for him and denied him service based on his race (white).	Closed
3/1/2022	Race	Administratively Closed	CP alleges that the failure to address or rectify her complaint of another's inappropriate conduct on the train was due to her race.	Closed
3/4/2022	Race, National Origin	Investigated - No Cause	CP alleges the T operator was deciding to let certain people ride w/o paying a fare based on race or national origin.	Closed
3/9/2022	Race	Investigated - No Cause	CP alleges RSP has bypassed him while he's waited for his bus, due to his race.	Closed
3/9/2022	Race	Investigated - No Cause	CP alleges RSP is being rude to people on the basis of their race.	Closed

Date	Basis	Action(s) Taken	Summary	Status
3/9/2022	Race	Investigated - No Cause	CP alleges witnessing bus 101 operator allow a white woman ride w/o paying, then denying a black mother and daughter the same service when they only had $1 towards their fare.	Closed
3/11/2022	Race	Investigated - No Cause	CP alleges RSP bus operator discriminated against her on the basis of CP's race by asking CP to sit down rather than stand behind the bus' yellow line.	Closed
3/16/2022	Race	Investigated by the Title VI unit to identify potential systemic disparity.	CP alleges race discrimination regarding the infrequency and untimeliness of the Ashmont Red Line vs. that of the Braintree line.	Closed
3/16/2022	Race	Investigated by the Title VI unit to identify potential systemic disparity.	CP alleges race discrimination regarding delays and services issues of the Ashmont Red Line vs. that of the Braintree line.	Closed
3/18/2022	Race		CP alleges the vehicle is not there for her when she goes to meet it due to her race.	Open
4/2/2022	Race	Administrative Closure	CP alleges bus operator denied her service based on race.	Closed
4/4/2022	National Origin		CP alleges an MBTA employee made a derogatory comment and used a derogatory slur in speaking with CP, based on his National Origin, Italian.	Open
4/6/2022	Race	Administratively Closed	CP alleges RSP used the words "you people" when speaking to CP.	Closed
4/7/2022	Race	Investigated - No Cause	CP alleges that the 201, 202 and 23 bus lines leaving from Fields Corner, a Black neighborhood, to Gallivan Blvd. turn around before the final stop so the Fields Corner customers are not receiving the same service as other neighborhoods based on race.	Closed
4/9/2022	Race	Investigated by the Title VI unit to identify potential systemic disparity.	CP alleges untimely service in Braintree Red Line on basis of race.	Closed
4/15/2022	Race		CP alleges bus sl4 bypassed him and another who was waiting on the basis of race.	Open
4/19/2022	Unknown	Investigated - No Cause	CP alleges bus operator acted discriminatorily against passengers by unnecessarly requiring use of rear door for entry.	Closed
4/20/2022	Race		CP alleges bus operator obstructed her ability to board with her mobility device, delayed her exit and acted inappropriately with her on the basis of race.	Open

Date	Basis	Action(s) Taken	Summary	Status
5/11/2022	Race		CP (Asian) alleges he was denied service/help by person in the Quincy station booth who told CP he'd help a White customer but not CP when CP was asking about a bus allegedly 30+ minutes late.	Open
5/14/2022	Race	Investigated - No Cause	CP alleges that, during a service interruption on the Red Line, passengers were only bussed from Alewife to Park, but no further, based on race.	Closed
5/15/2022	Unknown investigator will seek additional information when the investigation commences		CP alleges that, during a medical emergency, busses were only running on the north end of the red line and passengers had to wait 1 hour+ to get on a train; that this was socioeconomically equitable.	Open
5/16/2022	Race	Investigated - No Cause	CP alleges that he is being denied train and bus service and timely service on the basis of his race.	Closed
5/21/2022	National Origin		CP alleges operator was disrespectful towards someone who he told "even as a passenger" he had to learn English.	Open
5/30/2022	Disability, Race, Age		CP alleges being denied services 2 days in a row by a Yankee bus at the Revere stop headed towards Orient Height. The operator told her she'd have to wait for for another bus. CP is 64 y.o., in a wheelchair and wondered if her being Hispanic may have been the reason.	Open
6/2/2022	Race		CP alleges RSP 455 bus operator going towards Salem was aggressive and verbally abusive after CP accidentally hit the stop-request button; that RSP left his driver's seat, approached CP and used racial slurs "white cracker" and "whitey" and expletives with him.	Open
6/25/2022	Race		CP alleges Operator of the 77 bus did not stop at the Mass Ave @ Linnnaen Street bus stop where 2 black people were waiting.	Open
7/5/2022	Race		CP alleges that the bus from Quincy Center to Montello doesn't show, runs late and/or runs less frequently than other bus lines there due to a lot of African Americans that use the 230 bus line.	Open
7/14/2022	Race		CP alleges RSP was rude on the basis of race/color.	Open
7/15/2022	Race		CP alleges RSP swore at him, used the "N" word and tried to hit him.	Open

Date	Basis	Action(s) Taken	Summary	Status
7/21/2022	National Origin		CP alleges RSP was rude to her and asked her to stop using her phone but did not require English speaking phone users to stop using theirs.	Open
7/27/2022	National Origin		CP alleges the RSP denied her service based on a "board" memorializing CP's father who was Iranian.	Open
8/1/2022	National Origin, Gender		CP alleges RSP is rude to her and does not greet her, possibly because of her being a Latina femle, stating the RSP greets all caucasions.	Open
8/8/2022	Race	Investigated by the Title VI unit to identify potential systemic disparity.	CP alleges the Ashmont Red Line services is less frequent and timely than the Braintree line, on the basis of race.	Open
8/9/2022	Race	Investigated by the Title VI unit to identify potential systemic disparity.	CP alleges the Ashmont Red Line services is less frequent and timely than the Braintree line, on the basis of race.	Open
8/10/2022	National Origin, Ancestry, Disability	Investigated - no cause	CP alleges RSP operated the bus dangerously, affecting a disabled partner, and that RSP called CP a "terrorist."	Closed
8/11/2022	Race (Cuacasian)	Investigated - no cause	CP alleges s/he observed RSP be rude towards a Caucasian family and be very helpful and accommodating towards an African American customer with the same skin color as RSP.	Closed
8/16/2022	Race		CP alleges RSP Red Line employee spoke inappropriately to him, telling him he would put CP's "bicycle around [him] like a Slave" if he saw him taking the train again.	Open
8/16/2022	National Origin		CP alleges RSP denied him/her service and acted inappropriately towards him/her on the basis of national origin.	Open
8/17/2022	National Origin		CP alleges RSP bus operator was rude to him on the basis of his race or national origin (Asian).	Open
8/19/2022	Race		CP alleges Green Line, B, Babcock St. conductor closed doors in CP's face as she was trying to board; wondered if it was xenophobia or profiling.	Open
8/21/2022	Age, National Origin		CP alleges 3 conductors going towards Boston laughed and made fun of her elderly parents for speaking a different language.	Open
8/21/2022	Race, National Origin, Religion		CP alleges employees have been "harassing, provoking, intimidating me and my associates by making racist antisemitic comments, and threats including comments about Covid-19 over the walkie-talkie intercom systems."	Open

Date	Basis	Action(s) Taken	Summary	Status
8/22/2022	Race		CP alleges RSP bus operator of #1809 required her to insert $10 bill at Mass. Ave. stop in front of CVS in order to board, but let everyone else on the bus for free. CP and 11 y.o. daughter did not board.	Open
8/22/2022	National Origin	Investigated - No Cause	CP alleges RSP got out of her seat and said to a customer “learn English, if you are going to live here you need to speak English.” CP also alleges RSP's voice was "raised and … very unkind."	Closed
8/23/2022	Race		CP alleges a problem with a transaction was racially motivated.	Open
8/27/2022	Race		CP alleges the bus operator, near 77 Mass Ave headed to Harvard, yelled at him to go to the back of the bus, and smirked and laughed at him when he unboarded, on the basis of race.	Open
8/29/2022	Race, National Origin		CP alleges RSP acted "condescending" and "mean" towards customers who were not White or spoke with an accent.	Open
8/30/2022	Race		CP alleges bus operator for the 89 bus in Davis Square opened the door and let a woman in, but would not do the same for CP on the basis of race.	Open
9/1/2022	National Origin		CP alleges RSP attacked CP on the bus; that CP was the only one attacked and the only Asian person present. Alleges this took place between Brookline Village and Coolidge Corner on Bus 66, "Bus Code 1910."	Open
9/12/2022	Unknown: investigator will seek additional information when the investigation commences	Administrative Closure	CP alleges RSP, a female, yelled at CP and asked her to pay but not other passengers that got on from Boston University. In follow-up complaint of same day, CP seems to complain that all rides should be free, not just some passengers, because of the shutdown.	Closed
9/12/2022	Race/Color		CP alleges RSP told her she couldn't talk on the phone b/c she "didn't feel like hearing me" and said there were "multiple people of her skin color" who were loud and not yelled at.	Open
9/13/2022	Race/Color		CP alleges RSP, a White employee at the fare gate, harrassed CP for going through the gate behind others, as others were doing. CP said she tapped her card. CP alleges "[a]ll MBTA employees see others, blacks and browns, bunches of family members, going through the gates for free, and say nothing."	Open
9/14/2022	Race, National Origin		CP alleges RSP racially profiled on bus 1120 on the SL3 route by offering to let her pay a reduced fare. She identified Cape Verdean, among other races/national origins.	Open

Date	Basis	Action(s) Taken	Summary	Status
9/15/2022	Race, color, national origin		CP alleges he "received racist death threats and was harassed, intimidated and stalked home by a group of white-european males and females as well as Hispanics" while using Green Line. He alleges they stated "nobody likes you or your people, nobody wants to look like you, and your people are the cause of COVID-19 virus you stupid, brown dirty, monkey" and "go back to live in your cave in Saudi Arabia." in Spanish and English by the individuals.	Open
9/16/2022	Race (White)		CP alleges RSP told CP to get off the bus for swearing at/in front of CP's child. CP alleges this is due to her being a white female in the hood getting on her bus.	Open
9/19/2022	Race		CP (Black) alleges a woman (White) working on the train was "rude and dismissive" towards CP on the basis of race when CP asked if the train would be stopping at Hyde Park.	Open
9/19/2022	Race		CP alleges RSP didn't want to stop for a Black male on the basis of race.	Open
9/20/2022	Race		CP alleges RSP closed the Orange Line doors when she tried to board at Jamaica Plain, though stopped and waited at different locations, on the basis of race.	Open
9/20/2022	Race, Gender		CP alleges RSP did not lower the bus entry ramp low enough, and said it presented an uncomfortable situation with female and "preferably black" operators.	Open
9/25/2022	Disability, National Origin		CP alleges that on 9/25/22 at 2:35 pm, the driver of the Route 47 bus mocked Mr. Colon's Spanish and called him stupid for his inquiry about the fare.	Open
10/5/2022	Race, Gender		CP alleges a bus did not stop for her on the basis of her race and gender, Black woman, and the driver was a White man.	Open
10/18/2022	Race		CP made a complaint re: the difference between the Ashmont and Braintree Lines, indicating the Braintree Line receives better service, based on the race of its customers (Caucasian).	Open
10/27/2022	Race, Age	Administrative Closure	CP's complaint alleges race and age discrimination will arise if Bus 411 is discontinued, inter alia.	Closed

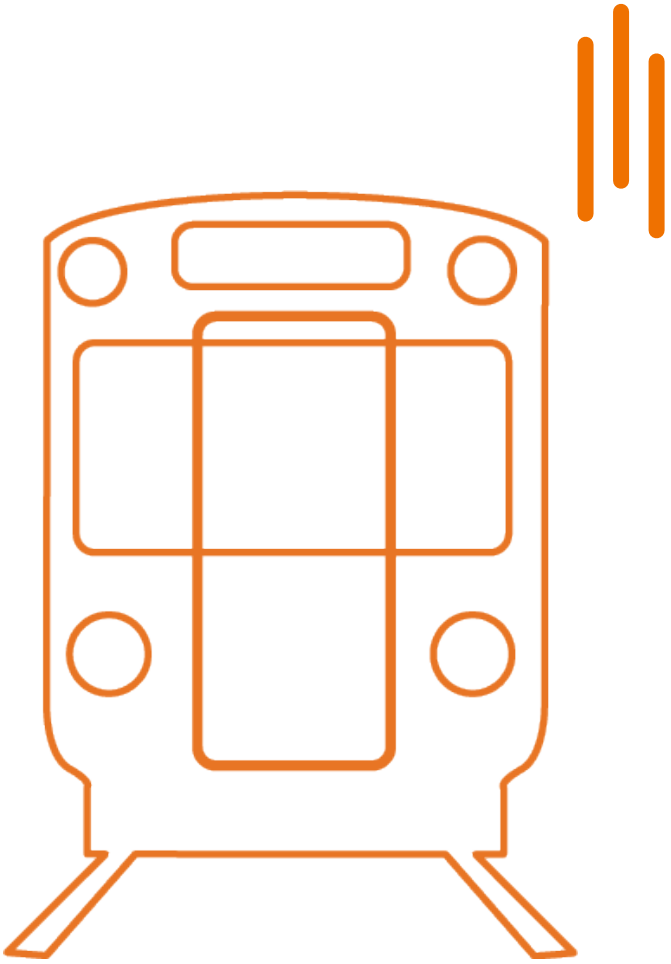
Date	Basis	Action(s) Taken	Summary	Status
11/2/2022	Race		CP's mother alleges RSP driver ("older white female ") "is rude, argumentative and racist" and that RSP said "on multiple occasions she hate[s] black people, they don't belong here and hopes they all die." CP's mother alleges that on 10/31/22 her daughter got off the bus early because "the argument was still going on."	Open
11/2/2022	Unknown: investigator will seek additional information when the investigation commences	Investigated by the Title VI unit to identify potential systemic disparity.	CP alleges a disparity in frequency of service between the #9 and #47 Bus Lines based on community demographics, affluency.	Open
11/14/2022	Unknown: investigator will seek additional information when the investigation commences		CP alleges a "civil rights violation" by a female inspector. Unclear what the conduct was; appears to be an unwillingness to answer questions and inappropriately responding to request for fare assistance, but with respect to "customers" in geneal.	Open
11/14/2022	Unknown: investigator will seek additional information when the investigation commences		CP alleges RSP nearly hit her; yelled out discriminating comments about how she talks; saying she must have bad credit; and "tried to insult an area of low income without any facts."	Open
11/21/2022	Race	Investigated by the Title VI unit to identify potential systemic disparity.	CP alleges that the Red Line's Braintree train is timely, while the Ashmont train is not, and this being unfair to "dominant minority" people who take the Ashmont train.	Open
11/22/2022	Unknown: investigator will seek additional information when the investigation commences		CP alleges he was discriminated against when RSP told him to get off the bus; and that RSP was rude and raised his voice towards him.	Open
11/27/2022	National Origin		CP alleges the Arlington Heights driver to Harvard, 10:00am bus number 1965, "doesn't seem to like foreign passengers" and thinks "he considers all non-white people foreigners." CP alleges RSP treated a "white lady" "nicely," while only said "open" to CP when accessing his Charlie Card in his wallet.	Open

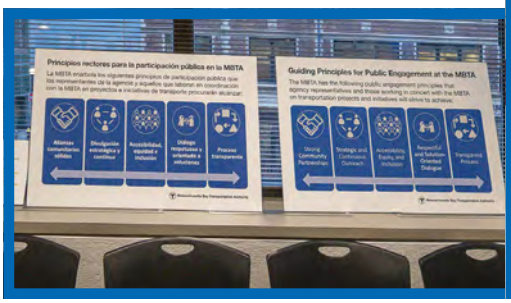
Date	Basis	Action(s) Taken	Summary	Status
11/27/2022	Race		CP alleges RSP stopped the train for several minutes while CP was looking for his Charlie Card, making passengers wait; seems to question whether race was the reason. Identified driver as a "white guy."	Open
12/5/2022	Unknown: investigator will seek additional information when the investigation commences		Inappropriate Comment	Open
12/6/2022	Race	Referred to The Ride	Inappropriate Comment	Unknown
12/7/2022	National Origin		CP alleges RSP made racist comments to CP, speaking in Chinese	Open
12/7/2022	National Orgin		Inappropriate Comment	Open
12/10/2022	Race, National Origin		Inappropriate Comment and Behavior	Open
12/12/2022	Race		Inappropriate Behavior	Open
12/12/2022	Race		Inappropriate Behavior	Open
12/13/2022	Unknown: investigator will seek additional information when the investigation commences		CP alleges RSP driver of 0876 on the 116 line harassed and discriminated against her by throwing things and yelling at her while she was sitting, ordering her off the bus and back on, and telling her to sit at the back rather than the front of the bus	Open
12/29/2022	Color	Referred for investigation	Inappropriate Behavior	Open

Investigated - No Cause:	No violation of the Anti-Discrimination/Harassment Prevention Policy found.
*Investigated - Cause:	Violation of the Anti-Discrimination/Harassment Prevention Policy found.
*Cause findings lead to Corrective Action Committee Meeting where discipline is decided upon and directed.	
Administrative Closure:	Unable to obtain necessary information from complainant to conduct investigation.
Non-Civil Rights Closure:	Allegations are unrelated to civil rights/protected characteristic.
Referred to Area:	Allegations implicate non-ODCR jurisidiction, such as Area Rules violations.
Referred to LR:	Allegations implicate Human Resources jurisidiction, such as employee relations matter.
Referred to HR:	Allegations implicate Labor Relations jurisidiction, such as union matter.
Referred for Investigation:	Allegations implicate matter(s) related to violation re civil rights/protected characteristics.



Appendix 2F
Public Engagement Plan









MBTA Public Engagement Plan

Massachusetts Bay Transportation Authority

MBTA Public Engagement Plan

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Updated in April 2023

Executive Summary

The Massachusetts Bay Transportation Authority (MBTA)[1] believes that engaging the public in the development and improvement of transit infrastructure and planning is critical to responding to the evolving needs of the Commonwealth. We have developed a Public Engagement Plan (PEP or Plan) to detail our commitment to meeting these evolving needs, as well as ensuring the civil rights[2] of members of the public to participate in and influence transportation decisions through accessible and inclusive engagement strategies.



Community Meeting at La Collaborativa on the Service and Fare Change Equity Policy and Updated Public Engagement Plan, 2023

The PEP outlines why engaging the public is important; the principles for how we will reach out to the public; our goals for responsible and thoughtful outreach; the methods and types of community and public events; and our efforts to ensure accommodations so that all may participate. The PEP, at a high level, seeks to explain which kinds of processes, projects, and decisions the public may influence through their engagement and our responsibility in these processes.[3]

Going back decades, certain populations' interests have been underrepresented and not prioritized in decision-making processes. This PEP represents our proactive course correction to that historical reality. We wish to hear from historically disadvantaged populations, including but not limited to: populations protected on

1 MBTA public website is available at: www.mbta.com

2 The Federal Transit Authority has issued guidance on inclusive public participation, available at FTA Circular 4702.1B, Title VI Requirements and Guidelines for Federal Transit Administration Recipients, at Chapter 3-5.

3 In addition, we seek to align our practices with the Boston Region Metropolitan Planning Organization's "Public Participation Plan" revised in 2019, which can be found here.

the basis of race or ethnicity[4], low-income[5], elderly, disability, veteran, and LGBTQ+ communities, the Limited English Proficiency population, and non-US-citizens.

The MBTA is committed to developing policies and procedures to achieve the goals and principles outlined in this PEP. We look forward to the public's continued participation in transit development from planning, design, and construction, to service planning and policy.



Community Meeting at La Colaborativa in Chelsea on the Service and Fare Change Equity Policy and Updated Public Engagement Plan, 2023

Background on the MBTA

The MBTA is the country's 5th-largest transit agency and the largest transit system in Massachusetts. The MBTA is responsible for multi-modal transit operations within Greater Boston, including the provision of commuter rail service that extends into 170 communities. The MBTA is a public entity and is overseen and funded in part by the Commonwealth of Massachusetts and cities and towns in its service area.

The legislature established an MBTA Board of Directors[6] to bring oversight, support, and fiscal accountability to the Authority. The Board consists of seven members, including the Secretary of Transportation and one member with municipal government experience. The remaining members are appointed by the Governor and include a rider and resident of an environmental justice population, and a per-

4 FTA Circular 4702.1B provides that any individual who identifies as belonging in any one or more of the following US census categories is a member of a population that is protected from discrimination on the basis of race and/or ethnicity: American Indian and Alaska Native; Asian; Black or African American; Hispanic or Latino (of any race); Native Hawaiian or Other Pacific Islander.

5 The MBTA defines low-income populations as those in which the median household income is less than 80% of the median household income for the MBTA service area (approximately $82,000 in 2023 and subject to annual modification).

6 For more information on the MBTA's Board of Directors, visit: www.mbta.com/leadership/mbta-board-directors

son recommended by the President of the AFL-CIO.

The MBTA's General Manager, Deputy General Manager, and Chief Administrative Officer report regularly to the Board on the current state of the system performance, operation, finances, and Authority initiatives. In addition, the public is invited to comment on topics on the agenda at Board meetings.



Bus Network Redesign Open House, 2022

Public Engagement at the MBTA

The MBTA has developed this Plan to provide a baseline for holding inclusive, accessible, and responsive public meetings, hearings, and other forms of participation for transportation decision-making, in accordance with state and federal law. This Plan will be updated on a regular basis to incorporate improvements to public engagement at the Authority. It is a step toward outlining and communicating our goals and priorities for the public.

This Plan presupposes a desire to have early, continuous, and meaningful opportunities for the public to help identify social, economic, and environmental impacts of proposed transit policies, projects, and initiatives. It has been written to ensure that sufficient consideration of, outreach to, and inclusion of underserved or histor-

ically marginalized communities are incorporated into the MBTA's public engagement procedures. Adherences to these principles will ensure broad compliance with nondiscrimination obligations,[7] which expand protections for some groups against discrimination based on, for example, sexual orientation and veteran status.

As a public entity serving the needs of the public, the MBTA has a responsibility to be transparent about decisions that impact the public, create multiple channels through which members of the public can provide input, and weigh this input as part of its decision-making process. The MBTA recognizes that this input can lead to the delivery of service and projects that align with the interests of the riding public – a benefit for the Authority and riders in the long-run – which is why this Plan emphasizes hearing from a variety of rider views and different communities within the MBTA service area when making decisions.



Quincy Center, Thomas Library, Community Meeting 2019

The Plan focuses on four main types of decisions that the MBTA makes that impact the public: service, fares, capital budget and projects, and policies. Most decisions include multiple components and sometimes conflicting input and opinions. In addition to public input, the MBTA must consider technical expertise and feasibility, funding availability, legal authority and jurisdiction, and balancing the needs of many stakeholders. However, public interest and public input are at the forefront of these decisions.

The MBTA is required to follow federal nondiscrimination obligations through Title VI of the Civil Rights Act of 1964, Sections 504 and 508 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act. The MBTA will not discriminate

7 Obligations set at the state level mandate considerations that go beyond federal protections to include ethnicity, sexual orientation, gender identity or expression, religion, creed, ancestry, and veteran's status (including Vietnam-era veterans).





Bus Network Redesign Open House, Columbus Ave, 2022

on the basis of race, color, national origin (including limited English proficiency), or disability. Moreover, state and federal law bar discrimination the basis of age, sex, and sexual orientation. In addition, the MBTA has redoubled its commitments to accessibility for persons with disabilities. In accordance with the 2018 Amended Settlement Agreement *Daniels-Finegold et al vs. MBTA,*[8] the MBTA is committed to ensuring any proposed service changes include specific outreach to persons with disabilities.

Guiding Principles for Public Engagement

Prior to final decision-making, project development processes need to offer the public opportunities to participate in discussions to describe their needs and offer opinions. The MBTA has the following public engagement principles that agency representatives and those working in concert with the MBTA on transportation projects and initiatives will strive to achieve:

- **Strong Community Partnerships:** The MBTA shall develop collaborative working partnerships with community members, community and advocacy organizations, and municipalities to build trust, avenues for regular communication, and ongoing engagement.

8 For more on this history, visit: www.mbta.com/accessibility/history

- **Strategic and Continuous Outreach:** Concerted effort must be given to encouraging participation through early, accessible, and ongoing strategic outreach to the public we serve. This includes using a variety of tools and mechanisms to reach the riders who are most likely to be impacted by proposed changes.
- **Accessibility, Equity, and Inclusion:** All public participation and engagement activities should promote inclusion and equity with specific strategies that encourage participation from diverse members of the community. Every effort should be made to ensure that participation opportunities are physically, geographically, temporally, linguistically, and culturally accessible. Public engagement processes should include, as appropriate to a project or those impacted, a range of socioeconomic, ethnic, environmental, and cultural perspectives and include people with low-incomes, people of color, people with disabilities, people with limited English proficiency, young people and older adults, and other traditionally underserved communities.



Dudley Better Bus Meeting, 2022



MBTA KIPP Academy School Visit, 2023

- **Respectful and Solution-Oriented Dialogue:** The MBTA welcomes the constructive contributions by members of the public, and encourages the respect and inclusion of all points of view. When there are conflicting opinions, conversations should be structured to allow for compromise, when possible, while staying solution-focused to respond to community concerns.
- **Transparent Process:** The decision-making processes and level of input for any event or community process should be clear, open, and understandable. Plans and projects must be clearly described, including the potential effect of public input, so that the public understands what is being proposed and how to get involved.

Responsible and Conscious Outreach

The MBTA should understand the full range of a community's needs in order to create responsive and innovative transportation plans, projects, and policies. This entails learning about the community from the community and understanding their relationship to transportation and the project in question. By consistently interacting with community members and leaders, the MBTA gains insight into the reasons why community members may agree or disagree with proposed plans or projects.

Historically, conventional outreach methods have missed populations protected on the basis of race or ethnicity and individuals in low-income communities, as well as those with low literacy and/or limited English proficiency. Outreach to tradition-

ally underserved groups helps ensure that all riders have opportunities to affect the MBTA's decision-making process. MBTA public outreach efforts must be designed to accommodate the needs of populations protected on the basis of race or ethnicity, low-income communities, persons with limited English proficiency, people with disabilities, and other traditionally underserved people throughout all phases of any public engagement process.

The MBTA recognizes that our most common outreach techniques are not always effective with these populations.The MBTA also has an obligation to conduct outreach to encourage attendance, particularly among groups protected by federal and state nondiscrimination laws. Ensuring that as many members of the public as possible are given a chance to participate in the discussion goes beyond selecting the right place, time, and location for a meeting.

To support creative public meeting planning, meetings should be tailored to effectively inform the community and/or the target audience on the subject matter to be addressed and to respond to their questions or concerns. From a civil rights perspective, effective public engagement requires knowing the target audience, including languages spoken, racial or cultural groups in the area, community organizations and leaders, and other key players. Ideally, organizers will go even further to learn about the community's transportation history, such as past issues and areas of concern.

Engagement tools outside of traditional public meetings should also be pursued as a mechanism for engaging diverse communities and are outlined in the following section.



In Person Public Meeting on the Proposed FY2024-2028 Capital Investment Plan, 2023

Strategic planning for the involvement of communities of color, low-income, disability, and other protected groups is essential to an inclusive and successful effort. Taking steps to overcome barriers to participation increases the representation of



AFC 2.0 Prototype Visit, 2019



South Boston Community Meeting, 2019

members of the public and the potential for a project to be fully embraced by the community. Engaging the public in a targeted context is complex, especially while ensuring diverse participation, yet this work is essential to meaningfully engage with the public.

Community Events and Engagement

The MBTA will seek to engage the public about our policies, planning, and projects. The level of complexity for each project and the impact on the community will guide the structure and process of public engagement. Simple projects may require a less extensive engagement process, while some projects may require more outreach over the life of the project. Further, the MBTA recognizes that our riders have different time constraints and strives to provide multiple ways to ensure rider voices are heard.

The most common types of public engagement used by the MBTA are in-person and virtual public meetings, including public hearings, as well as community meetings, open houses, stakeholder meetings, and one-on-one interactions. The MBTA also deploys street outreach teams, intercept and periodic surveys, interviews or asking questions at stations or bus stops, and has increased virtual public involvement to meet riders where they are. See below for a description of the common

types of engagement. [9]

These engagement strategies vary by time of day and day of week to ensure broad access to multiple opportunities for input.

Public Meetings, including Public Hearings (in-person and virtual)

Public meetings, both at the project level and more broadly, are an opportunity for members of the public to engage in the transportation decision-making process. During public meetings, MBTA staff should present information about the project, service or fare change, or policy update for individuals who may be less familiar with the context and answer questions.

Public hearings are a type of public meeting held with more formality and are often required by state or federal law. At a public hearing any community member has an opportunity to provide a formal public comment on the topic at hand. The MBTA records all comments in a written transcript.



MBTA Forest Hills Station Clean-Up, 2023

9 All scheduled public engagement events can be found at: www.mbta.com/events

Community Meetings

In addition to more formal types of public events hosted by the MBTA, there are also less formal opportunities when MBTA employees go into existing community spaces to seek public input, often through invitations from community members and/or organizations. This could take the form of attending or presenting at existing forums, attending community or neighborhood meetings, or attending local events or fairs. In these cases, rather than hope the community comes to our meetings, we seek to engage communities where they are and in familiar settings. These tools should be leveraged extensively to minimize the barriers involved with community engagement.



Immigrant Family Services Institute Job Fair, 2023



Union Capital Boston Spring Fair, 2023

Open Houses and Breakout Sessions

MBTA staff and consultants regularly interact with members of the public through open houses or breakout sessions. These are less formal than public meetings or hearings and provide members of the public an opportunity to view study documents or project design plans. In some cases, open house and breakout sessions occur prior to a public meeting so that the public can be well informed in advance of the meeting. MBTA staff and consultants are on hand at these meetings to discuss particular details with members of the public. While the interactions during these sessions are informal, critical issues are often raised. MBTA staff and consultants strive to address these issues accurately and effectively during these sessions. Further, conversations with the public are documented to inform study or project development.

Stakeholder Meetings

The MBTA is committed to engaging diverse stakeholders, both internal and external to the organization, to elicit feedback on many complex projects. In some circumstances, it may be appropriate to develop a group of stakeholders that meet regularly throughout the project process to share their specialized knowledge. At

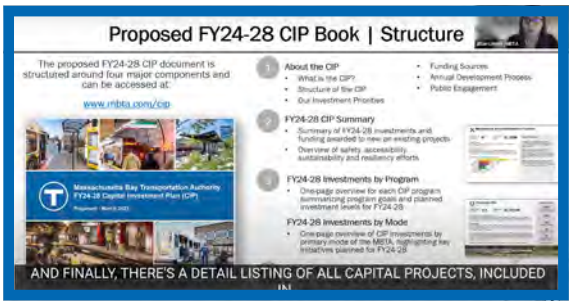
other times, it may be necessary to specifically target certain stakeholder groups. For example, a project manager overseeing the redevelopment of pedestrian pathways at a train station may benefit from specifically coordinating a meeting with disability stakeholders given the complexity and importance of that group's unique perspective on the issue. [10] Including a diverse range of community leaders in conversations such as these is a useful strategy to solicit representative feedback. Stakeholders may include. but are not limited to, local shop owners, neighborhood associations, chambers of commerce, main streets organizations, municipal staff, and advocacy organizations.

One-on-One Interactions

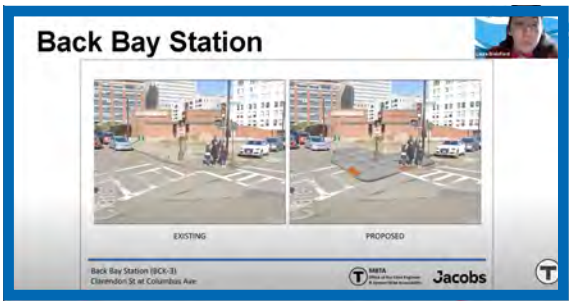
MBTA staff members interact directly with the public by virtue of the public facing programs, services, and activities we provide. These interactions can include planned meetings and spontaneous interactions with members of the public. In these instances, MBTA staff strive to engage the public on a more personal level, while maintaining similar access and inclusion provided in more formal methods of engagement. When possible, the MBTA makes it a purpose to report back on these discussions to help inform the work that we do.

Virtual Public Engagement

During the COVID-19 pandemic, the MBTA's public engagement opportunities were converted to virtual spaces to protect everyone's health and safety. These virtual spaces include video conferences, webinars, websites, live stream, mobile applications, online surveys, and social media. While the MBTA is committed to



Virtual Public Meeting on the Proposed FY2024-2028 Capital Investment Plan, 2023



Riders' Transportation Access Group - Virtual Advisory Meeting, 2023



Riders' Transportation Access Group - Virtual Advisory Meeting, 2023

10 One such customer engagement group is the Riders' Transportation Access Group (R-TAG) which focuses on transportation matters that affect seniors and persons with disabilities. The group is the official advisory group to the MBTA on accessibility matters and is comprised of a nine-member Executive Board and general members.

in-person public engagement, virtual public engagement methods have proven to make participation more accessible and convenient for the public and staff alike and are a key public engagement strategy across the Authority.

The MBTA continually innovates and strives to utilize new communication and engagement tools to increase the number of public voices in important decisions. We want to ensure that we are reaching a diverse audience and providing a meaningful opportunity for members of the public to share feedback, while guaranteeing accessible formats for participation.

Accessibility and Public Engagement

When planning, advertising, or hosting public meetings and/or engaging with the public, MBTA staff must be sure that everyone can fully participate, regardless of race and ethnicity, income, limited English proficiency, age, disability, or geography. This requires special consideration for meeting notices, promotion, and accommodations.

To ensure that members of the public are aware of outreach and engagement events, the MBTA strives to provide notice as early and broadly as possible. The MBTA aims to post notices (flyers, signage, or web pages) at least 14 days prior to a community event. While the 14-day notice is our goal, there are instances where this is not met due to the dynamic nature of transportation projects and when tradeoffs are made to immediately respond to public concerns. Notices should include information as to how the public may participate.

There are a number of avenues utilized by the MBTA in order to ensure broad outreach so the public may participate in community events. These outreach avenues include posted signs in public locations (transit stations, bus stops, city/town halls, libraries, community bulletin boards, etc.), local newspaper notices, social media posts, distribution through the MBTA website, and through the communication networks of our community partners. Using available data, MBTA staff identify language needs of affected communities so that project information and public meeting notices are posted in those identified languages to encourage participation from traditionally under-served populations. Utilizing these various communication methods is necessary to reach a broad demographic.

Early notice of a public event is also critical because it allows participants to plan for attendance. It also provides enough time for participants to request any needed accommodations, such as those related to a disability or limited English proficiency. The MBTA generally asks that these accommodations are requested at least 10

days in advance of the event to ensure our ability to meet the needs of the participant. In addition, the MBTA strives to ensure accessibility during virtual public involvement. Requests for accommodations at virtual events should also be sent 10 days in advance.

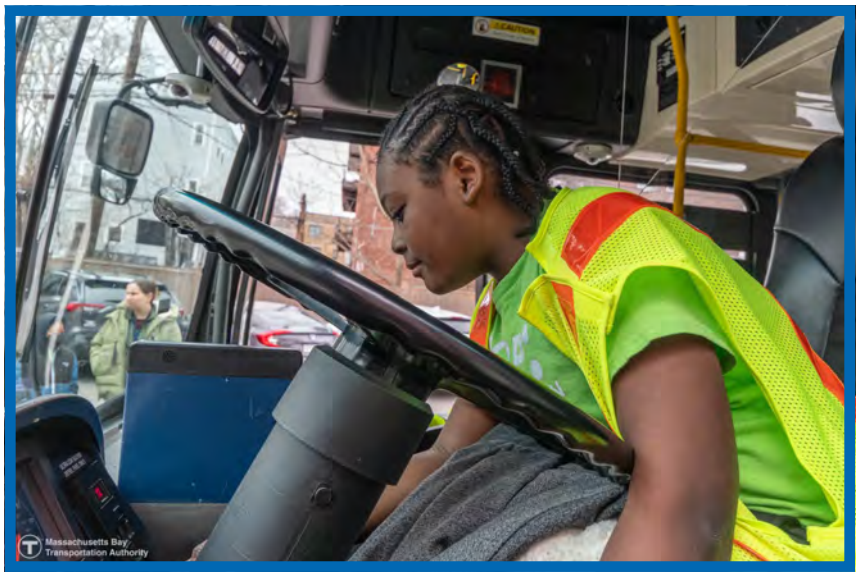
When choosing the location for a community event, MBTA staff consider a number of factors to ensure that the location is easy to get to and accessible for those who wish to attend and participate. All community events should be located within a project's affected community or study area and be accessible by public transit if possible. Additionally, a meeting location will ideally provide Wi-Fi. The location must also be accessible to participants with disabilities and compliant with state and federal accessibility regulations. To achieve this, the MBTA must consider several factors before choosing a meeting location. Some of these requirements include, but are not limited to:

- Accessible via public transportation, if possible;
- Accessible parking;
- Clear paths of travel;
- Accessible entrances;
- Accessible restrooms;
- Accessible meeting room;
- Space for computer assisted real-time transcription (CART);
- Space and signage for language interpreters;
- Adjustable microphones and podiums; and
- Accessible raised platforms.

Beyond ensuring that a public meeting is physically accessible, other accommodations may also be considered. As mentioned above, the MBTA strives to provide additional reasonable accommodations when requested. When the public has an accessibility or language accommodation request, they can make their request through a designated MBTA contact person, which should always be listed on any community event notice or flyer. Examples of specific accommodations that can be provided to individuals in order to allow them to meaningfully participate in a community event include the following:

- Documents in alternative formats (large print, electronic, braille or audible);
- Translated documents;
- Assistive listening devices;
- Video remote interpreting;
- Video and telecommunication voice relay services;
- Closed captioning;
- Computer assisted real-time transcription (CART);
- American sign language (ASL) interpreters; and
- Language interpreters.

Planning for the language and interpretation needs of a community is important. Using available data, MBTA staff proactively identify language needs of affected communities so that project information and public meeting notices are posted in those identified languages to encourage participation from traditionally underserved groups. The public can learn more about language accessibility on our website at: **www.mbta.com/language-services.**



MBTA KIPP Academy School Visit, 2023



Columbus Ave Open House In Roxbury, 2022

Public Engagement Regarding Fare Changes

MBTA Fare Policy targets three key goals: revenue[11], ridership, and equity. From time to time, the MBTA may change fares to target one or more of these levers. Examples include fare increases to increase revenue and the introduction of new passes for reduced fare riders to increase equity.

State law allows the MBTA to raise fares at regular, modest increments, limiting increases to once every 2 years with a cap of no more than 7% for each increase.[12] When considering a fare change, the MBTA develops one or two scenarios and the associated revenue, ridership, and equity impacts.

The MBTA recognizes that any changes to fare costs and products will impact customers. The MBTA is committed to engaging our ridership in a meaningful conversation whenever we consider changing fares. All fare changes and related fare equity analyses[13] are presented to the public for a comment period lasting for at least 21 days. If a fare equity analysis finds that a proposed fare change places a disproportionate burden on protected populations, the MBTA will also engage the public to discuss any proposed mitigation measures, including the less discriminatory alternatives that may be available.

The MBTA sets up multiple channels for comment, including a dedicated web page, online forms or a dedicated email address, a physical mailing address, and

11 The revenue needed to operate the MBTA comes from multiple sources: Massachusetts sales tax and municipal/ local assessments, own source revenue (e.g., parking, advertising, and real estate), one-time revenue such as grant funding, and fare revenue. The strength of the economy in Massachusetts drives increased revenue from the state sales tax and indirectly drives increased advertising and real estate revenues. The formula for municipal assessments is set by the Massachusetts legislature. Finally, the MBTA can increase revenue through fare and parking rate increases.

12 As of January 1, 2017, fare increases may only take effect every two years, and not at more than 7% each increase. See An Act Relative to MBTA Fare Increases, 2016 Mass. Acts Ch. 164.

13 The MBTA's service and fare equity analyses are described in the MBTA's Service and Fare Change Equity Policy, available online at: www.mbta.com/policies

hosting in-person or virtual public meetings and/or hearings for taking testimony. At any such hearing, the MBTA will make a formal presentation regarding the proposed fare changes, and the public will have the opportunity to provide testimony on the proposal for the public record.

The goal of a public meeting about a proposed fare change is to discuss the proposed changes and solicit direct input from the public. This may be accomplished as a standalone meeting or in combination with other, related MBTA initiatives. The MBTA prioritizes meeting formats that allow the public to ask questions directly of MBTA leadership.

The number and location of public meetings about proposed fare changes depend on other ongoing MBTA initiatives, but locations will be selected to cover the MBTA service area while making sure that communities most impacted by the changes have opportunities to comment. As with all public engagement, fare change meetings shall be accessible, designed to disseminate information, and shall take into consideration optimal meeting type (in-person or virtual), timing, location and language equity.

Public input can have an impact on the amount of a fare increase, whether fares are increased on all fare products or types, the introduction of new fare products or programs to serve particular riders, or the reduction or elimination of some fare products.

After the public comment period, MBTA staff reviews and considers the suggestions received and submits any systemwide fare changes to the MBTA Advisory Board for review before creating a summary for the MBTA's leadership. The summary is used to make potential revisions to the proposed scenario(s). A revised scenario is presented to the MBTA Board of Directors with an updated revenue, ridership, and equity analysis.

The MBTA's Board of Directors will make a final vote on a proposed fare change after considering the overall financial condition of the MBTA, the ridership, revenue, and equity implications of the change, the staff's summary of public comments, and comments from the MBTA Advisory Board.

When the MBTA is considering major changes to the fare structure, more significant public engagement is required. Examples of changes to the fare structure are distance-based or time-of-day pricing. These types of changes will include more types of public engagement and a longer time period to explain options and consider different scenarios. Such a process would likely include multiple stakeholder meetings, open houses, and workshops to discuss the trade-offs between policy goals. Once formal scenarios are created, the adoption process follows the same steps as that of standard fare increases.

Public Engagement Regarding Service Planning and Service Changes

The MBTA has set service objectives and standards for all MBTA services.[14] In order to meet these stated goals, and to accommodate changing travel behaviors in the region, the MBTA regularly evaluates performance of its services and recommends service changes through the service planning process. The service planning process includes system-wide quarterly changes[15], ongoing rolling Service Plan changes, and an annual evaluation.

Outside of the regular service planning process, service changes can be proposed by any MBTA staff and members of the public, including municipalities, organizations, and customers. The common ways for the public to submit service change ideas are through public meetings or workshops, written correspondence, the MBTA website, MBTA Customer Support[16], email, and social media platforms such as Twitter. Municipalities can also submit service ideas for the MBTA to pilot through our Service Pilot process.

For any Service Plan, including any proposed major service reductions, [17] the MBTA must engage the public to ensure that the benefits of the proposed changes outweigh any potential downsides. As with fare changes, all proposed major service changes are presented to the public for comment for a period lasting at least 21 days via the feedback channels listed above. For example, the MBTA will schedule one or more in-person or virtual public meetings, including an official public hearing, to present the changes, as well as any equity analyses or tradeoffs behind the proposed major service changes. These public meetings are meant to solicit public comments and any testimony provided at public hearings will be for the public record. All public meetings relating to Service Planning will follow the public meeting values and principles outlined in this document, including holding public meetings, where possible, in the communities that are most affected by the proposed change.

After the public comment period, MBTA staff reviews and considers the suggestions received, and submits any proposed decreases in systemwide service of 10% or more to the MBTA Advisory Board for review before creating a summary for the MBTA's leadership. The summary is used to make potential revisions to the proposed service changes. For proposed major service changes, a final proposal and

14 The MBTA's Service Delivery Policy can be found online at: www.mbta.com/policies

15 Quarterly changes can be implemented with existing equipment and within the adopted budget after being approved by the Service Committee per the MBTA's Service Delivery Policy.

16 For information on how to contact MBTA Customer Support, visit: www.mbta.com/customer-support

17 The MBTA's definition of major service change, including major service reduction, can be found in the MBTA's Service and Fare Change Equity Policy, available at: www.mbta.com/policies

equity analysis is presented to the MBTA Board of Directors who will vote to approve the final proposal and accept the equity analysis before implementation.

Additionally, the MBTA provides avenues for ongoing communication through its website, customer phone line, social media outlets, standing committees, and comments sent to individual MBTA employees. Service-related comments and requests are directed to the appropriate department for consideration and response. Upon request, MBTA staff will also consider attending public meetings held by municipalities or with public officials to address specific service issues. From time to time, the MBTA may conduct specific market or route-based meetings to gather direct feedback on potential service changes. This ongoing public outreach informs both the quarterly service planning process and the Service Plan process.

Public Engagement Regarding Capital Projects

Capital projects are developed in response to identified needs in the system and arise from suggestions or concerns about an asset or through corridor or area planning processes. Capital needs are also identified through planning organization initiatives or may arise from community, legislative, or citizen input. Input from the public is essential for the MBTA to continue to meet the evolving needs of riders.

The MBTA, in coordination with the Massachusetts Department of Transportation (MassDOT) Office of Transportation Planning, has developed a long-range investment plan to position the MBTA to meet the needs of the Greater Boston region in 2040. In developing the plan, known as Focus40 [18], MBTA and MassDOT conducted significant research and public engagement to identify future needs for MBTA service. Through these initiatives, the public had the opportunity to influence what projects the MBTA builds. Working with local MPOs and other planning agencies as well as directly with MassDOT on our long-range planning is the best way to identify future transportation needs and get projects into the pipeline. Identified needs ultimately develop into projects contained in the MBTA's five-year Capital Investment Plan (CIP).[19]

Once a project is prioritized through the CIP process for funding, individual project planning and design begins. During the planning phase, potential issues, impacts, and required approvals are identified in order to determine which design and permitting processes may apply. Public engagement on a project should begin early

18 The MBTA's long range investment plan, Focus40, can be found here: www.mbtafocus40.com

19 Capital Investment Plan can be found here: www.mass.gov/service-details/capital-investment-plan-cip

in project planning and before there is a recommended course of action. For major projects, the initial public engagement process should start before design and continue at critical milestones throughout the planning process.

Public meetings are conducted during the planning phase in order to relay information to the general public and to solicit input concerning the project. The public meetings serve as forums at which the MBTA can learn about and respond to community concerns. Some projects, particularly those related to system maintenance and asset improvement, may not necessitate public engagement. However, progress on those initiatives should be reported out to the public regularly.



Informational posters at an in person CIP meeting, 2023



In Person Public Meeting on the Proposed FY2024-2028 Capital Investment Plan, 2023

After a construction contract is awarded, a construction management plan should be developed. The permitting agencies, local authorities, businesses, and affected members of the general public need to be informed of changes in detours, traffic operations, alternative service, and construction areas and activities occurring throughout the project.

Before construction activities begin, the project managers shall determine the appropriate type of public notification and participation needed. Projects result in different types of disruption to transportation and other nearby activities. For simple projects, a minimal degree of public engagement may be needed. For these projects, the project owner should, at a minimum, notify abutters (in languages other than English, if appropriate) of the impending construction activity. For more complex projects, more public engagement may be needed. Monthly or quarterly stakeholder and abutter meetings may be held when the size or location of a project calls for them. In addition, the MBTA will utilize the following communication tools to share project information and receive feedback:

- MBTA website;
- Media outlets, both print and TV;
- Social media tools; and
- Public affairs email account.

While the depth of public engagement does depend on the size, scope and complexity of a project, the MBTA values consistent and regular communication with the public, along with opportunities for the public to share their feedback at regular intervals.

Public Engagement in Policy Development

The MBTA develops policies to guide our decision-making in a transparent manner and inform members of the public and stakeholders what they should expect. [20] Some policies, like those relating to civil rights and Title VI, are federally required and require formal public engagement following the standards outlined in this Plan. Other policies, like our Service Pilot Policy or Service Delivery Policy, are not federally required. Even so, the MBTA is committed to engaging our customers on issues important to the riding public. Therefore, policies like these are crafted based on input the MBTA has received through ongoing public dialogue. Riders who are potentially impacted by changes in policy will be engaged, as appropriate.

Continuous Engagement

The MBTA provides a service to riders every day, outside of capital projects, fare changes, service changes, and policy development. Therefore, it is vital to maintain open communication with riders outside of these specified engagement opportunities. The MBTA has forums for riders to give feedback outside of broader, project-specific engagement opportunities, such as through the MBTA Customer Support and social media. The MBTA monitors and uses this feedback to improve the quality of the service delivered to our riders.

Closing

The MBTA is committed to doing our part in improving the Commonwealth's transportation system. Meaningful, continuous, and accessible public engagement is critical to doing so efficiently and successfully. By utilizing the strategies and methods set forth in this document, the MBTA is confident that together, we can enhance how we move.

20 MBTA policies can be found here: www.mbta.com/policies

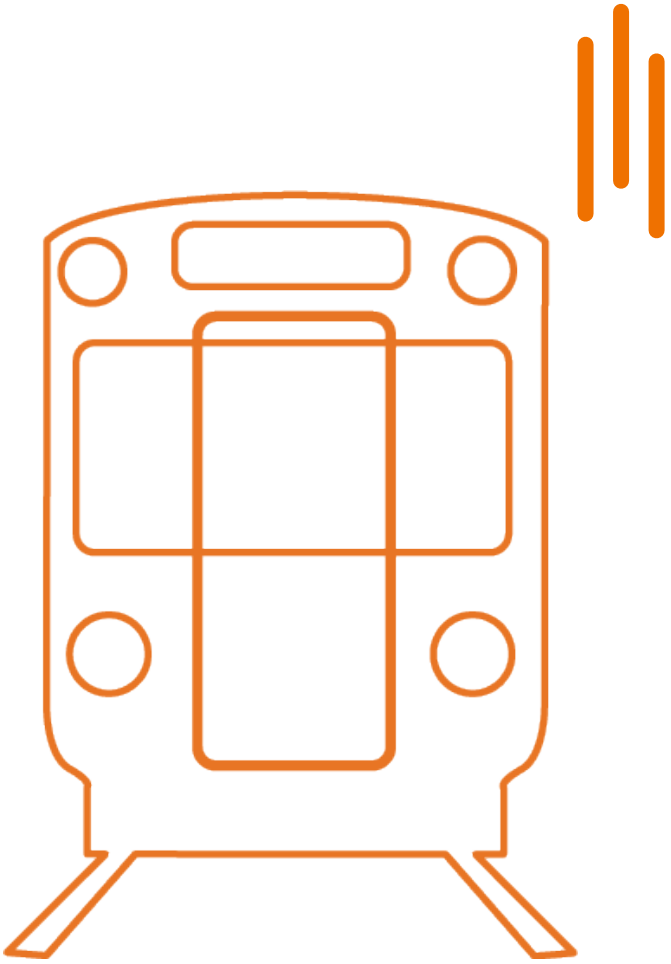


Massachusetts Bay
Transportation Authority



Appendix 2G

List of Public Meetings



Event Type	Meeting Name	Date_Time	Location
Committee Meeting	Finance and Audit Committee Meeting	January 8, 2020, 10:30 AM	State Transportation Building, Boston, MA
Board Meeting	Fiscal and Management Control Board Meeting	January 13, 2020, 12:00 PM	State Transportation Building, Boston, MA
Open House	South Station Pre-Construction Open House	January 22, 2020, 4:30 PM	BSA Space, Fort Point Room, 2nd Floor, Boston, MA
Board Meeting	Fiscal and Management Control Board Meeting	January 27, 2020, 12:00 PM	State Transportation Building, Boston, MA
Committee Meeting	Lynn Transit Action Plan Advisory Committee Meeting #3	January 31, 2020, 10:00 AM	Lynn YMCA, Lynn, MA
Contractor Forum	South Coast Rail Construction Phase 1 Contractor Forum	January 31, 2020, 10:00 AM	State Transportation Building, 2nd Floor, Board Room,
Advisory Meeting	Riders' Transportation Access Group Meeting	February 3, 2020, 5:30 PM	State Transportation Building, 2nd Floor, Board Room,
Committee Meeting	Finance and Audit Committee Meeting	February 5, 2020, 9:30 AM	State Transportation Building, Boston, MA
Committee Meeting	Capital Programs Committee Meeting	February 5, 2020, 10:30 AM	State Transportation Building, Boston, MA
Joint Board Meeting	Joint Meeting of the MassDOT Board and the Fiscal and	February 10, 2020, 11:00 AM	State Transportation Building, Boston, MA
Information Meeting	Lynn Transit Action Plan Public Information Meeting	February 11, 2020, 6:00 PM	North Shore Community College, Lynn, MA
Site Visit	Newtonville Station Site Visit for Seniors, People with Disabilities	February 13, 2020, 1:00 PM	Newtonville Commuter Rail Station, Newton, MA
Public Meeting	Public Engagement Plan Meeting (Boston)	February 13, 2020, 6:00 PM	State Transportation Building, 2nd Floor, Board Room,
Workshop	Newton Accessibility Improvements Workshop for Seniors, People with	February 14, 2020, 1:00 PM	Newton Free Library, Newton, MA
Site Visit	West Newton Station Site Visit for Seniors, People with Disabilities	February 17, 2020, 1:00 PM	West Newton Station, Newton, MA
Workshop	Newton Accessibility Improvements Workshop for Seniors, People with	February 18, 2020, 1:00 PM	Newton Free Library, Newton, MA
Site Visit	Auburndale Station Site Visit for Seniors, People with Disabilities	February 20, 2020, 1:00 PM	Auburndale Station, Newton, MA
Workshop	Newton Accessibility Improvements Workshop for Seniors, People with	February 21, 2020, 1:00 PM	Newton Free Library, Newton, MA
Board Meeting	Fiscal and Management Control Board Meeting	February 24, 2020, 12:00 PM	State Transportation Building, Boston, MA
Public Meeting	Public Engagement Plan Meeting (Quincy)	February 27, 2020, 6:00 PM	Quincy City Hall, Main Forum Meeting Room, Quincy, MA
Public Meeting	Winchester Center Station	March 4, 2020, 6:30 PM	McCall Middle School Auditorium, Winchester, MA
Public Meeting	Public Engagement Plan Meeting (Chelsea)	March 5, 2020, 6:00 PM	Chelsea City Hall, 2nd Floor, City Council Chambers,
Board Meeting	Fiscal and Management Control Board Meeting	March 9, 2020, 12:00 PM	State Transportation Building, Boston, MA

Event Type	Meeting Name	Date_Time	Location
Committee Meeting	Finance and Audit Committee Meeting	March 18, 2020, 9:30 AM	State Transportation Building, Boston, MA
Committee Meeting	Capital Programs Committee Meeting	March 23, 2020, 10:00 AM	State Transportation Building, Boston, MA
Joint Control Board	Joint Meeting of the MassDOT Board and Fiscal and Management	March 23, 2020, 11:00 AM	State Transportation Building, Boston, MA
Committee Meeting	Finance and Audit Committee Meeting	April 8, 2020, 9:30 AM	State Transportation Building, Boston, MA
Committee Meeting	Capital Programs Committee Meeting	April 13, 2020, 10:30 AM	State Transportation Building, Boston, MA
Joint Control Board	Joint Meeting of the MassDOT Board and the Fiscal and	April 13, 2020, 12:00 PM	State Transportation Building, Boston, MA
Board Meeting	Fiscal and Management Control Board Meeting	April 27, 2020, 12:00 PM	State Transportation Building, Boston, MA
Board Meeting	Fiscal and Management Control Board Meeting	May 4, 2020, 12:00 PM	State Transportation Building, 2nd Floor, Boston, MA
Committee Meeting	Finance and Audit Committee Meeting	May 6, 2020, 9:00 AM	State Transportation Building, Boston, MA
Committee Meeting	Capital Programs Committee Meeting	May 6, 2020, 11:00 AM	State Transportation Building, Boston, MA
Joint Control Board	Joint Meeting of the MassDOT Board and the Fiscal and	May 11, 2020, 11:00 AM	State Transportation Building, Boston, MA
Advisory Meeting	Riders' Transportation Access Group	May 11, 2020, 5:30	Virtual
Board Meeting	Fiscal and Management Control Board Meeting	May 21, 2020, 12:00 PM	State Transportation Building, Boston, MA
Public Meeting	Worcester Union Station Virtual	May 27, 2020, 5:30	Virtual
Public Meeting	BCIL Settlement Update Meeting, Presented by the Honorable Judge	June 3, 2020, 5:30 PM	Virtual
Public Meeting	Wellesley Bacon Street Bridge Replacement Project	June 3, 2020, 6:00 PM	Virtual
Public Meeting	East Cottage Street and Norfolk Avenue Bridges Replacement	June 4, 2020, 6:00 PM	Virtual
Public Meeting	Weston Intervale Road Bridge Replacement Project	June 4, 2020, 6:00 PM	Virtual
Board Meeting	Fiscal and Management Control	June 5, 2020, 4:00	Telephonic
Informational Webi	Means-Tested Fares Challenge: Informational Webinar	June 11, 2020, 11:00 AM	Virtual
Board Meeting	Fiscal and Management Control Board Meeting	June 15, 2020, 12:00 PM	State Transportation Building, Boston, MA
Committee Meeting	Finance and Audit Committee Meeting	June 17, 2020, 9:30 AM	State Transportation Building, Boston, MA
Committee Meeting	Capital Programs Committee Meeting	June 17, 2020, 10:30 AM	State Transportation Building, Boston, MA
Committee Meeting	Lynn Transit Action Plan Advisory Committee Meeting #4	June 18, 2020, 1:30 PM	Virtual

Event Type	Meeting Name	Date_Time	Location
Joint Control Board	Joint Meeting of the MassDOT Board and the Fiscal and	June 22, 2020, 11:00 AM	State Transportation Building, Boston, MA
Public Meeting	Green Line Extension Virtual Public	June 24, 2020, 5:00	Virtual
Public Meeting	Quincy Bus Facility Virtual Public	June 24, 2020, 5:30	Virtual
Informational Webi	Means-Tested Fares Challenge: Informational Webinar	June 25, 2020, 11:30 AM	Virtual
Public Meeting	Green Line C Branch Track and Intersection Upgrades Virtual Public	June 29, 2020, 6:00 PM	Virtual
Committee Meeting	Capital Programs Committee Meeting	July 15, 2020, 11:30 AM	State Transportation Building, 2nd Floor, Boston, MA
Advisory Meeting	Advisory Meeting | Riders' Transportation Access Group	July 16, 2020, 4:00 PM	Virtual
Information Meetin	Roslindale Robert Street Bridge Replacement Project Virtual Public	July 16, 2020, 6:00 PM	Virtual
Public Meeting	Green Line E Branch Track and Intersections Upgrades Virtual	July 23, 2020, 6:00 PM	Virtual
Event	Senior CharlieCard Event	July 27, 2020, 11:00 AM	Sharon Communtiy Center, Lower Level, Adult Center/Council on Aging,
Ãºblica sobre los ca	ReuniÃ³n pÃºblica sobre los cambios al servicio de autobuses para	August 12, 2020, 6:00 PM	Virtual
Public Meeting	Fall 2020 Bus Service Changes Public Meeting	August 13, 2020, 6:00 PM	Virtual
Committee Meeting	Finance and Audit Committee Meeting	August 19, 2020, 9:30 AM	State Transportation Building, 2nd Floor, Boston, MA
Committee Meeting	Capital Programs Committee Meeting	August 19, 2020, 10:30 AM	State Transportation Building, 2nd Floor, Boston, MA
Public Meeting	Codman Yard Expansion and Improvements Virtual Public	August 20, 2020, 6:00 PM	Virtual
Public Meeting	Disadvantaged Business Enterprise (DBE) Program Public Meeting	August 21, 2020, 10:00 AM	Virtual
Joint Control Board	Joint Meeting of the MassDOT Board and the Fiscal and	August 24, 2020, 10:00 AM	State Transportation Building, 2nd Floor, Boston, MA
Public Meeting	Parker Street Bridge Replacement Virtual Public Meeting	September 2, 2020, 6:00 PM	Virtual
Public Meeting	Lynn Commercial Street Bridge Replacement Virtual Public Meeting	September 9, 2020, 6:00 PM	Virtual
Board Meeting	Fiscal and Management Control Board Meeting	September 14, 2020, 12:00 PM	State Transportation Building, 2nd Floor, Boston, MA
Committee Meeting	Finance and Audit Committee Meeting	September 16, 2020, 9:30 AM	State Transportation Building, 2nd Floor, Boston, MA
Committee Meeting	Capital Programs Committee Meeting	September 16, 2020, 10:30 AM	State Transportation Building, 2nd Floor, Boston, MA
Scoping Session	Quincy Bus Maintenance Facility MEPA ENF Scoping Session	September 21, 2020, 10:00 AM	Virtual

Event Type	Meeting Name	Date_Time	Location
Joint Control Board	Joint Meeting of the MassDOT Board and the Fiscal and	September 21, 2020, 12:00 PM	State Transportation Building, 2nd Floor, Boston, MA
Listening Session	New Bedford South Coast Rail Listening Session	September 22, 2020, 6:00 PM	Virtual
Board Meeting	Fiscal and Management Control Board Meeting	October 5, 2020, 11:00 AM	State Transportation Building, 2nd Floor, Boston, MA
Public Meeting	Lynn Fells Parkway Bridge Replacement Project Virtual Public	October 13, 2020, 6:00 PM	Virtual
Committee Meeting	Finance and Audit Committee Meeting	October 14, 2020, 9:30 AM	State Transportation Building, 2nd Floor, Boston, MA
Committee Meeting	Capital Programs Committee Meeting	October 14, 2020, 10:30 AM	State Transportation Building, 2nd Floor, Boston, MA
Group Meeting	Advisory Meeting | Riders' Transportation Access Group	October 15, 2020, 5:30 PM	Virtual
Joint Control Board	Joint Meeting of the MassDOT Board and the Fiscal and	October 19, 2020, 12:00 PM	State Transportation Building, 2nd Floor, Boston, MA
Public Meeting	Porter Square Retaining Wall Repairs Virtual Public Meeting	November 5, 2020, 6:00 PM	Virtual
Board Meeting	Fiscal and Management Control Board Meeting	November 9, 2020, 11:00 AM	State Transportation Building, 2nd Floor, Boston, MA
Public Meeting	Forging Ahead Virtual Public Meeting: Metrowest (Region 1)	November 10, 2020, 6:00 PM	Virtual
Public Meeting	Forging Ahead Virtual Public Meeting: Minuteman (Region 2)	November 12, 2020, 6:00 PM	Virtual
Public Meeting	Forging Ahead Virtual Public Meeting: Boston and Milton (Region	November 14, 2020, 1:00 PM	Virtual
Public Meeting	Forging Ahead Virtual Public Meeting: Inner Core (Region 4)	November 17, 2020, 6:00 PM	Virtual
Committee Meeting	Finance and Audit Committee Meeting	November 18, 2020, 9:00 AM	State Transportation Building, 2nd Floor, Boston, MA
Committee Meeting	Capital Programs Committee Meeting	November 18, 2020, 10:30 AM	State Transportation Building, 2nd Floor, Boston, MA
Public Meeting	Forging Ahead Virtual Public Meeting: Mystic River (Region 5)	November 18, 2020, 6:00 PM	Virtual
Group Meeting	Advisory Meeting | Riders' Transportation Access Group	November 19, 2020, 2:00 PM	Virtual
Public Hearing	Forging Ahead Virtual Public Hearing: System-Wide Service	November 19, 2020, 6:00 PM	Virtual
Joint Control Board	Joint Meeting of the MassDOT Board and the Fiscal and	November 23, 2020, 12:00 PM	State Transportation Building, 2nd Floor, Boston, MA
Public Meeting	Forging Ahead Virtual Public Meeting: South Shore (Region 6)	November 23, 2020, 6:00 PM	Virtual
Public Meeting	Forging Ahead Virtual Public Meeting: North Shore (Region 7)	November 24, 2020, 6:00 PM	Virtual
Public Meeting	Forging Ahead Virtual Public Meeting: Bristol (Region 8)	November 30, 2020, 6:00 PM	Virtual

Event Type	Meeting Name	Date_Time	Location
Public Meeting	Forging Ahead Virtual Public Meeting: Merrimack Valley (Region	December 1, 2020, 6:00 PM	Virtual
Public Meeting	Public Meeting on Accessibility and BCIL Settlement Update	December 2, 2020, 1:00 PM	Virtual
Public Meeting	Forging Ahead Virtual Public Meeting: System-Wide Service	December 2, 2020, 6:00 PM	Virtual
Board Meeting	Fiscal and Management Control Board Meeting	December 7, 2020, 11:00 AM	State Transportation Building, 2nd Floor, Boston, MA
Public Meeting	Green Line Extension (GLX) Virtual Public Meeting	December 9, 2020, 6:30 PM	Virtual
Board Meeting	Fiscal and Management Control Board Meeting	December 14, 2020, 12:00 PM	State Transportation Building, 2nd Floor, Boston, MA
Public Meeting	High Line Bridge Replacement Virtual Public Meeting	December 14, 2020, 6:00 PM	Virtual
Public Meeting	Quincy Bus Facility Virtual Public Meeting	December 16, 2020, 5:30 PM	Virtual
Joint Control Board	Joint Meeting of the MassDOT Board and the Fiscal and	January 11, 2021, 12:00 PM	State Transportation Building, 2nd Floor, Boston, MA
Public Meeting	Hingham Ferry Dock Improvements Virtual Public Meeting	January 14, 2021, 6:00 PM	Virtual
Advisory Meeting	Advisory Meeting | Riders' Transportation Access Group	January 20, 2021, 5:00 PM	Virtual
Board Meeting	Fiscal and Management Control Board Meeting	January 25, 2021, 12:00 PM	State Transportation Building, 2nd Floor, Boston, MA
Public Meeting	Middleborough South Coast Rail Virtual Meeting	January 27, 2021, 6:00 PM	Virtual
Public Meeting	Green Line Transformation B Branch Station Consolidation Virtual Public	January 28, 2021, 6:00 PM	Virtual
Working Group Mee	Silver Line Extension Alternatives Analysis Working Group Meeting #1	February 1, 2021, 12:30 PM	Virtual
Public Meeting	Taunton South Coast Rail Virtual Meeting	February 4, 2021, 6:00 PM	Virtual
Board Meeting	Fiscal and Management Control Board Meeting	February 8, 2021, 12:00 PM	State Transportation Building, 2nd Floor, Boston, MA
Public Meeting	Spring 2021 Service Changes Virtual Public Meeting	February 17, 2021, 6:00 PM	Virtual
Joint Control Board	Joint Meeting of the MassDOT Board and the Fiscal and	February 22, 2021, 12:00 PM	State Transportation Building, 2nd Floor, Boston, MA
Consultation Sessior	Forging Ahead Service Level Reduction Environmental Notification Form (ENF)	February 23, 2021, 6:00 PM	Virtual
Public Meeting	Public Meeting | Winchester Center Station (Virtual)	February 23, 2021, 6:00 PM	Virtual
Public Meeting	Spring 2021 Service Changes Virtual Public Meeting	February 24, 2021, 6:00 PM	Virtual

Event Type	Meeting Name	Date_Time	Location
Public Meeting	Fall River South Coast Rail Virtual Meeting	February 25, 2021, 6:00 PM	Virtual
Public Meeting	Green Line Transformation Symphony Station Accessibility	March 3, 2021, 6:00 PM	Virtual
Public Meeting	South Attleboro Station Accessibility Improvements Virtual Public	March 4, 2021, 6:00 PM	Virtual
Board Meeting	Fiscal and Management Control Board Meeting	March 8, 2021, 12:00 PM	State Transportation Building, 2nd Floor, Boston, MA
Public Meeting	Fare Transformation Sales Network Virtual Public Meeting	March 23, 2021, 6:00 PM	Virtual
Advisory Meeting	Advisory Meeting | Riders' Transportation Access Group	March 25, 2021, 2:00 PM	Virtual
Public Meeting	Dorchester Ave Bridge Replacement Virtual Public Meeting	March 25, 2021, 6:00 PM	Virtual
Public Meeting	Fare Transformation Sales Network Virtual Public Meeting	March 25, 2021, 6:00 PM	Virtual
Working Group Mee	Silver Line Extension Alternatives Analysis Working Group Meeting #2	March 29, 2021, 12:00 PM	Virtual
Joint Control Board	Joint Meeting of the MassDOT Board and the Fiscal and	March 29, 2021, 12:00 PM	State Transportation Building, 2nd Floor, Boston, MA
Public Meeting	Gloucester Drawbridge Virtual Public Meeting	March 30, 2021, 6:00 PM	Virtual
Public Meeting	Fare Transformation Sales Network Virtual Public Meeting	March 30, 2021, 6:00 PM	Virtual
Board Meeting	Fiscal and Management Control Board Meeting	April 12, 2021, 12:00 PM	State Transportation Building, 2nd Floor, Boston, MA
Public Hearing	Fare Evasion Regulations Public	April 15, 2021, 6:00	Virtual
Public Meeting	Fare Payment Verification Public	April 20, 2021, 6:00	Virtual
Joint Control Board	Joint Meeting of the MassDOT Board and the Fiscal and	April 26, 2021, 12:00 PM	State Transportation Building, 2nd Floor, Boston, MA
Public Meeting	Silver Line Extension Alternatives Analysis Public Meeting #1	April 27, 2021, 6:00 PM	Virtual
Public Meeting	Fare Payment Verification Public	April 29, 2021, 6:00	Virtual
Public Meeting	GLT D Branch Station Accessibility Improvements Public Meeting	April 29, 2021, 6:00 PM	Virtual
Public Meeting	East Cottage Street and Norfolk Avenue Bridges Replacement	May 6, 2021, 6:00 PM	Virtual
Board Meeting	Fiscal and Management Control Board Meeting	May 10, 2021, 12:00 PM	State Transportation Building, 2nd Floor, Boston, MA
Advisory Meeting	Advisory Meeting | Riders' Transportation Access Group	May 18, 2021, 5:30 PM	Virtual
Joint Control Board	Joint Meeting of the MassDOT Board and the Fiscal and	May 24, 2021, 12:00 PM	State Transportation Building, 2nd Floor, Boston, MA
Public Meeting	Public Meeting | Fare Rules (Virtual)	May 25, 2021, 6:00	Virtual
Public Meeting	Public Meeting | Capital Investment Plan (Northern Middlesex /	May 26, 2021, 6:00 PM	Virtual

Event Type	Meeting Name	Date_Time	Location
Public Meeting	Public Meeting | Capital Investment Plan (Central Mass / Montachusett)	May 27, 2021, 6:00 PM	Virtual
Public Meeting	Public Meeting | Fare Rules (Virtual)	May 27, 2021, 6:00	Virtual
Public Meeting	Public Meeting | Capital Investment Plan (Boston Region)	June 1, 2021, 6:00 PM	Virtual
Public Meeting	Public Meeting on Accessibility and Daniels-Finegold v. MBTA	June 2, 2021, 1:00 PM	Virtual
Public Meeting	Public Meeting | Capital Investment Plan (Southeastern Mass / Old	June 2, 2021, 6:00 PM	Virtual
Board Meeting	Fiscal and Management Control Board Meeting	June 7, 2021, 12:00 PM	State Transportation Building, 2nd Floor, Boston, MA
Public Meeting	Bus Network Redesign Public	June 8, 2021, 6:00	Virtual
Public Meeting	Public Meeting | Summer 2021 Service Changes (Virtual)	June 10, 2021, 6:00 PM	Virtual
Joint Control Board	Joint Meeting of the MassDOT Board and the Fiscal and	June 21, 2021, 12:00 PM	State Transportation Building, 2nd Floor, Boston, MA
Public Meeting	Public Meeting | Green Line Transformation (GLT) E Branch Track and Intersection Upgrades (Virtual)	July 14, 2021, 6:00 PM	Virtual
Public Meeting	Public Meeting | MassDOT Finance and Audit Subcommittee	July 21, 2021, 9:30 AM	Virtual
Public Meeting	Public Meeting | MassDOT Capital Programs Subcommittee	July 21, 2021, 10:30 AM	Virtual
Public Meeting	Public Meeting | MassDOT Board of	July 26, 2021, 12:00	Virtual
Public Meeting	Public Meeting | Fall 2021 Service Changes (Virtual)	August 5, 2021, 6:00 PM	Virtual
Public Meeting	Public Meeting | Better Bus Project Open House (Virtual)	August 26, 2021, 6:00 PM	Virtual
Working Group Mee	Silver Line Extension Alternatives Analysis Working Group Meeting #3	September 14, 2021, 2:00 PM	Virtual
Public Meeting	Silver Line Extension Alternatives Analysis Public Meeting #2	September 28, 2021, 6:00 PM	Virtual
Public Meeting	Public Meeting | Bus Accessibility Demo of the Quantum Mobility	October 6, 2021, 11:00 AM	City Hall Plaza, Boston, MA
Public Meeting	Public Meeting | MA Commission for the Blind and MBTA Town Hall	October 7, 2021, 12:00 PM	Virtual
Community Engager	Community Engagement | Better Bus Project Street Team (Harvard	October 12, 2021, 10:00 AM	Harvard Square Station, Cambridge, MA
Community Engager	Community Engagement | Better Bus Project Street Team (Forest	October 12, 2021, 4:30 PM	Forest Hills Station, Jamaica Plain, MA
Community Engager	Community Engagement | Better Bus Project Street Team	October 13, 2021, 10:00 AM	Haymarket Station, Boston, MA
Community Engager	Community Engagement | Better Bus Project Street Team (Ashmont)	October 13, 2021, 2:30 PM	Ashmont Station, Boston, MA
Public Meeting	Public Meeting | Newton Commuter Rail Stations Accessibility	October 13, 2021, 6:00 PM	Virtual

Event Type	Meeting Name	Date_Time	Location
Community Engager	Community Engagement | Better Bus Project Street Team (Forest	October 14, 2021, 10:00 AM	Forest Hills Station, Jamaica Plain, MA
Public Meeting	Public Meeting | Bus Accessibility Demo of the Quantum Mobility	October 14, 2021, 11:00 AM	Upper level, Ruggles station, Roxbury, MA
Community Engager	Community Engagement | Better Bus Project Street Team	October 14, 2021, 3:00 PM	Haymarket Station, Boston, MA
Community Engager	Community Engagement | Better Bus Project Street Team (Ashmont)	October 18, 2021, 10:00 AM	Ashmont Station, Boston, MA
Community Engager	Community Engagement | Better Bus Project Street Team (Sullivan	October 18, 2021, 3:00 PM	Sullivan Square Station, Charlestown, MA
Community Engager	Community Engagement | Better Bus Project Street Team (Nubian	October 19, 2021, 10:00 AM	Nubian Square Station, Roxbury, MA
Community Engager	Community Engagement | Better Bus Project Street Team (Maverick)	October 20, 2021, 10:00 AM	Maverick Station, East Boston, MA
Community Engager	Community Engagement | Better Bus Project Street Team (Nubian	October 20, 2021, 4:00 PM	Nubian Square Station, Roxbury, MA
Community Engager	Community Engagement | Better Bus Project Street Team (Sullivan	October 21, 2021, 10:00 AM	Sullivan Square Station, Charlestown, MA
Community Engager	Community Engagement | Better Bus Project Street Team (Harvard	October 21, 2021, 4:30 PM	Harvard Square Station, Cambridge, MA
Public Meeting	Public Meeting | Green Line Transformation Symphony Station Accessibility Improvements (Virtual)	October 21, 2021, 6:00 PM	Virtual
Community Engager	Community Engagement | Better Bus Project Street Team	October 25, 2021, 10:00 AM	Wonderland Station, Revere, MA
Public Meeting	Public Meeting | Downtown Crossing Accessibility Phase II	October 25, 2021, 6:00 PM	Virtual
Community Engager	Community Engagement | Better Bus Project Street Team (Quincy	October 26, 2021, 10:00 AM	Quincy Center Station, Quincy, MA
Community Engager	Community Engagement | Better Bus Project Street Team	October 26, 2021, 4:00 PM	Wonderland Station, Revere, MA
Board Meeting	Board Meeting | MBTA Board of Directors (Virtual)	October 27, 2021, 11:00 AM	State Transportation Building, 2nd Floor, Boston, MA
Public Meeting	Public Meeting | Bus Network Redesign (Virtual)	October 27, 2021, 6:00 PM	Virtual
Board Meeting	Board Meeting | MBTA Audit and Finance Subcommittee (Virtual)	November 10, 2021, 12:00 PM	Virtual
Board Meeting	Board Meeting | MBTA Planning, Workforce & Development	November 10, 2021, 3:00 PM	Virtual
Board Meeting	Board Meeting | MBTA Safety Subcommittee (Virtual)	November 10, 2021, 4:00 PM	Virtual
Advisory Meeting	Advisory Meeting | Riders' Transportation Access Group â€”	November 16, 2021, 3:00 PM	Virtual
Board Meeting	Board Meeting | MBTA Board of Directors (Virtual)	November 17, 2021, 10:00 AM	Virtual

Event Type	Meeting Name	Date_Time	Location
Public Meeting	Public Meeting | Quincy Bus Maintenance Facility (Virtual)	November 18, 2021, 5:30 PM	Virtual
Public Meeting	Public Meeting | Accessibility and Daniels-Finegold v. MBTA	December 8, 2021, 1:00 PM	Virtual
Public Meeting	Public Meeting | Winter 2022 Service Changes (Virtual)	December 8, 2021, 6:00 PM	Virtual
Board Meeting	Board Meeting | MBTA Audit and Finance Subcommittee (Virtual)	December 9, 2021, 2:00 PM	Virtual
Board Meeting	Board Meeting | MBTA Safety, Health & Environment	December 9, 2021, 4:00 PM	Virtual
Public Meeting	Public Meeting | Dedham East Street Bridge Replacement (Virtual)	December 9, 2021, 6:00 PM	Virtual
Public Meeting	Public Meeting | Arborway Bus Maintenance Facility (Virtual)	December 9, 2021, 6:00 PM	Virtual
Public Meeting	Public Meeting | Winchester Center Station (Virtual)	December 15, 2021, 6:00 PM	Virtual
Board Meeting	Board Meeting | MBTA Board of Directors (Virtual)	December 16, 2021, 1:00 PM	Virtual
Advisory Meeting	Advisory Meeting | Riders' Transportation Access Group (R-	December 16, 2021, 2:00 PM	Virtual
Board Meeting	Board Meeting | MBTA Planning, Workforce, Development & Compensation Subcommittee	January 26, 2022, 8:00 AM	Virtual
Board Meeting	Board Meeting | MBTA Audit and Finance Subcommittee (Virtual)	January 26, 2022, 9:00 AM	Virtual
Board Meeting	Board Meeting | MBTA Safety, Health & Environment	January 26, 2022, 10:30 AM	Virtual
Board Meeting	Board Meeting | MBTA Board of Directors (Virtual)	January 27, 2022, 10:00 AM	Virtual
Board Meeting	Board Meeting | MBTA Audit and Finance Subcommittee (Virtual)	February 10, 2022, 9:00 AM	Virtual
Board Meeting	Board Meeting | MBTA Planning, Workforce, Development & Compensation Subcommittee	February 10, 2022, 10:00 AM	Virtual
Board Meeting	Board Meeting | MBTA Safety, Health & Environment	February 10, 2022, 11:00 AM	Virtual
Public Meeting	Public Meeting | MBTA Fare Tariff Changes	February 10, 2022, 6:00 PM	Virtual
Public Meeting	Public Meeting | Bus Electrification Update and North Cambridge	February 15, 2022, 6:00 PM	Virtual
Public Meeting	Public Hearing | MBTA Fare Tariff Changes	February 17, 2022, 6:00 PM	Virtual
Board Meeting	Board Meeting | MBTA Board of Directors (Virtual)	February 24, 2022, 10:00 AM	Virtual
Advisory Meeting	Advisory Meeting | Riders' Transportation Access Group (R-	February 24, 2022, 5:30 PM	Virtual

Event Type	Meeting Name	Date_Time	Location
Public Meeting	Public Meeting | Spring 2022 Service Changes (Virtual)	March 1, 2022, 6:00 PM	Virtual
Public Meeting	Public Meeting | New Bedford	March 1, 2022, 6:00	Virtual
Public Meeting	Public Meeting | Forest Hills Station Accessibility Updates (Virtual)	March 9, 2022, 6:00 PM	Virtual
Board Meeting	Board Meeting | MBTA Audit and Finance Subcommittee (Virtual)	March 10, 2022, 9:00 AM	Virtual
Board Meeting	Board Meeting | MBTA Planning, Workforce, Development & Compensation Subcommittee	March 10, 2022, 10:00 AM	Virtual
Public Meeting	Public Meeting | RLT Codman Yard Expansion and Improvements	March 10, 2022, 6:00 PM	Virtual
Board Meeting	Board Meeting | MBTA Safety, Health & Environment	March 11, 2022, 3:00 PM	Virtual
Job Fair	Job Fair | Fairmount Indigo Transit Coalition (FITC) Job Fair	March 14, 2022, 10:00 AM	South Station, Boston, MA
Public Meeting	Public Meeting | Fare Media Changes	March 15, 2022, 6:00 PM	Virtual
Public Meeting	Public Hearing | Fare Media Changes	March 22, 2022, 6:00 PM	Virtual
Board Meeting	Board Meeting | MBTA Board of Directors (Virtual)	March 24, 2022, 10:00 AM	Virtual
Listening Session	Listening Session | Accessibility at the MBTA: Improving the Experience for Riders Who Are Blind	March 31, 2022, 3:00 PM	Virtual
Public Meeting	Public Meeting | FY 2023 â€“ 2027 Capital Investment Plan (CIP)	March 31, 2022, 6:00 PM	Virtual
Hiring Event	Hiring Fair | One-Stop Bus Operator Hiring Event	April 5, 2022, 9:00 AM	State Transportation Building, Boston, MA
Public Meeting	Public Meeting | FY 2023 â€“ 2027 Capital Investment Plan (CIP)	April 6, 2022, 6:00 PM	Virtual
Observation Session	Observation Session | Silver Line Extension Alternatives Analysis	April 12, 2022, 1:00 PM	Virtual
Public Meeting	Public Meeting | FY 2023 â€“ 2027 Capital Investment Plan (CIP)	April 12, 2022, 7:00 PM	Virtual
Public Meeting	Public Meeting | Mattapan Line Transformation Program (Virtual)	April 13, 2022, 6:30 PM	Virtual
Board Meeting	Board Meeting | MBTA Audit and Finance Subcommittee (Virtual)	April 14, 2022, 9:00 AM	Virtual
Board Meeting	Board Meeting | MBTA Safety, Health & Environment	April 14, 2022, 11:00 AM	Virtual
Board Meeting	Board Meeting | MBTA Board of Directors (Virtual)	April 28, 2022, 10:00 AM	Virtual
Advisory Meeting	Advisory Meeting | Riders' Transportation Access Group (R-	April 28, 2022, 3:30 PM	Virtual

Event Type	Meeting Name	Date_Time	Location
Board Meeting	Board Meeting | MBTA Audit and Finance Subcommittee (Virtual)	May 12, 2022, 8:30 AM	Virtual
Board Meeting	Board Meeting | MBTA Planning, Workforce, Development & Compensation Subcommittee	May 12, 2022, 10:00 AM	Virtual
Board Meeting	Board Meeting | MBTA Safety, Health & Environment	May 16, 2022, 11:00 AM	Virtual
Public Meeting	Public Meeting | Green Line Train Protection and Track Upgrades	May 18, 2022, 6:00 PM	Virtual
Public Meeting	Public Meeting | Bus Network Redesign - Systemwide (Virtual)	May 19, 2022, 6:00 PM	Virtual
Public Meeting	Public Meeting | Bus Network Redesign - South Shore & South	May 24, 2022, 6:00 PM	Virtual
Board Meeting	Board Meeting | MBTA Board of Directors (Virtual)	May 26, 2022, 10:00 AM	Virtual
Public Meeting	Bus Network Redesign - Harvard Station Open House	June 1, 2022, 3:30 PM	Harvard Station, Cambridge, MA
Public Meeting	Ruggles Station Improvements Project - Phase II (Virtual)	June 1, 2022, 6:00 PM	Virtual, Boston, MA
Board Meeting	MBTA Audit and Finance	June 2, 2022, 9:00	Virtual, Boston, MA
Public Meeting	Bus Network Redesign - Boston	June 2, 2022, 6:00	Virtual, Boston, MA
Public Meeting	Bus Network Redesign - Quincy Center Station Open House	June 7, 2022, 4:00 PM	Quincy Center Station, Quincy, MA
Public Meeting	Accessibility and Daniels-Finegold v. MBTA Settlement Update (Virtual)	June 8, 2022, 1:00 PM	Virtual, Boston, MA
Public Meeting	Bus Network Redesign - Mystic River & North Shore (Virtual)	June 8, 2022, 6:00 PM	Virtual, Boston, MA
Board Meeting	MBTA Board of Directors (Virtual)	June 9, 2022, 8:30	Virtual, Boston, MA
Board Meeting	MBTA Planning, Workforce, Development & Compensation	June 9, 2022, 10:00 AM	Virtual, Boston, MA
Public Meeting	Forest Hills Station Accessibility	June 9, 2022, 6:00	Virtual, Boston, MA
Board Meeting	MBTA Safety, Health & Environment Subcommittee (Virtual)	June 13, 2022, 9:00 AM	Virtual, Boston, MA
Public Meeting	Bus Network Redesign - Dewey Square Station Open House	June 14, 2022, 11:00 AM	Dewey Square (near South Station), Boston, MA
Public Meeting	Winchester Station Construction Project Update (Virtual)	June 14, 2022, 6:00 PM	Virtual, Boston, MA
Public Meeting	Bus Network Redesign – Inner Core	June 16, 2022, 6:00	Virtual, Boston, MA
Public Meeting	Fare Evasion Regulations	June 21, 2022, 6:00	Virtual, Boston, MA
Public Meeting	Bus Network Redesign - Minuteman & Metro North (Virtual)	June 22, 2022, 6:00 PM	Virtual, Boston, MA
Public Meeting	MBTA Board of Directors (Virtual)	June 23, 2022, 10:00 AM	Virtual, Boston, MA
Public Meeting	Bus Network Redesign - Ashmont Station Open House	June 23, 2022, 4:30 PM	Ashmont Station, Boston, MA
Public Meeting	Fare-Free Bus Program	June 23, 2022, 6:00	Virtual, Boston, MA

Event Type	Meeting Name	Date_Time	Location
Public Meeting	GLT D Branch Station Accessibility Improvements (Virtual)	June 23, 2022, 6:00 PM	Virtual, Boston, MA
Public Meeting	Bus Network Redesign - Metrowest	June 28, 2022, 6:00	Virtual, Boston, MA
Public Meeting	Bus Network Redesign - Malden Center Station Open House	June 30, 2022, 4:30 PM	Malden Center Station, Malden, MA
Advisory Meeting	Riders' Transportation Access Group (R-TAG) (Virtual)	June 30, 2022, 5:30 PM	Virtual, Boston, MA
Public Meeting	Accelerating Wellington Yard Reliability Upgrades (Virtual)	June 30, 2022, 6:00 PM	Virtual, Boston, MA
Public Meeting	Bus Network Redesign - Sullivan Square Station Open House	July 7, 2022, 3:30 PM	Sullivan Square Station, Charlestown, MA
Public Meeting	Bus Network Redesign - Forest Hills Station Open House	July 12, 2022, 3:00 PM	Forest Hills station, Jamaica Plain, MA
Public Meeting	MBTA Audit and Finance	July 14, 2022, 9:00	Virtual, Boston, MA
Public Meeting	MBTA Planning, Workforce, Development & Compensation	July 14, 2022, 10:00 AM	Virtual, Boston, MA
Public Meeting	MBTA Safety, Health & Environment Subcommittee	July 14, 2022, 11:00 AM	Virtual, Boston, MA
Public Meeting	MBTA Board of Directors	July 19, 2022, 10:00 AM	State Transportation Building, 2nd Floor Board Room,
Public Meeting	Bus Network Redesign - Systemwide Open House	July 19, 2022, 6:00 PM	Bruce C. Bolling Municipal Building, Roxbury, MA
Public Meeting	Bus Network Redesign - Wonderland Station Open House	July 21, 2022, 3:00 PM	Wonderland station, Revere, MA
Public Meeting	Bus Network Redesign - Systemwide	July 26, 2022, 6:00	Virtual, Boston, MA
Public Meeting	Bus Network Redesign - Systemwide	July 28, 2022, 6:00 PM	State Transportation Building, 2nd Floor, Boston, MA
Public Meeting	MBTA Board of Directors (Virtual)	August 3, 2022, 10:15 AM	Virtual, Boston, MA
Public Meeting	MBTA Audit and Finance Subcommittee (Virtual)	August 11, 2022, 9:00 AM	Virtual, Boston, MA
Public Meeting	MBTA Planning, Workforce, Development & Compensation	August 11, 2022, 10:00 AM	Virtual, Boston, MA
Public Meeting	MBTA Safety, Health & Environment Subcommittee (Virtual)	August 11, 2022, 11:00 AM	Virtual, Boston, MA
Advisory Meeting	Riders' Transportation Access Group (R-TAG) (Virtual)	August 25, 2022, 5:30 PM	Virtual
Board Meeting	MBTA Board of Directors (Virtual)	August 31, 2022, 10:00 AM	Virtual, Boston, MA
Board Meeting	MBTA Planning, Workforce Development & Compensation	September 14, 2022, 8:30 AM	Virtual, Boston, MA
Board Meeting	MBTA Audit and Finance Subcommittee (Virtual)	September 15, 2022, 9:00 AM	Virtual, Boston, MA
Board Meeting	MBTA Safety, Health & Environment Subcommittee (Virtual)	September 15, 2022, 11:00 AM	Virtual, Boston, MA

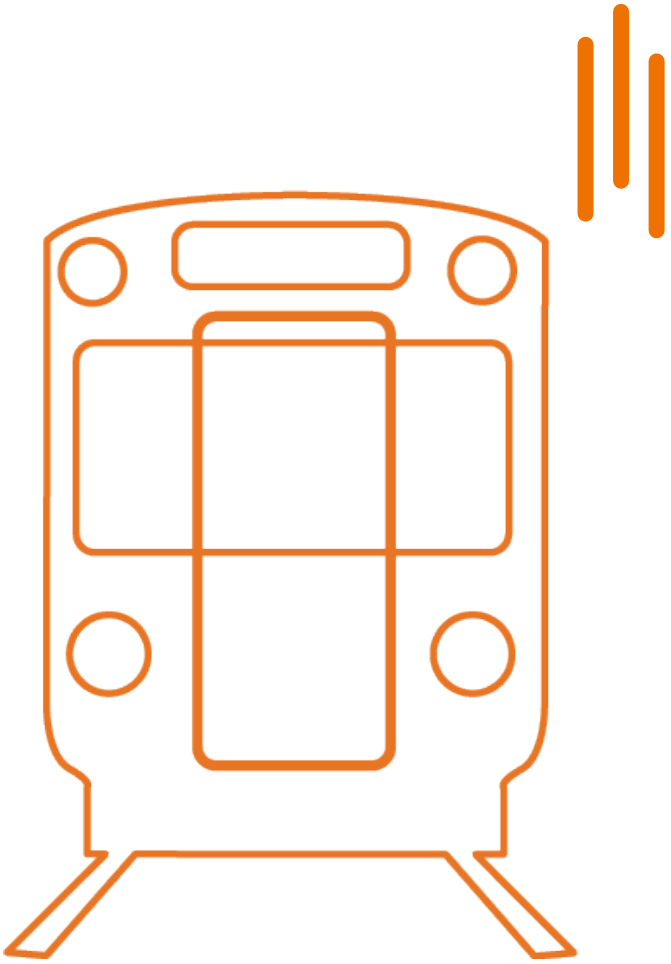
Event Type	Meeting Name	Date_Time	Location
Public Meeting	Dedham East Street Bridge Replacement (Virtual)	September 28, 2022, 6:00 PM	Virtual, Boston, MA
Board Meeting	MBTA Board of Directors (Virtual)	September 29, 2022, 12:00 PM	Virtual, Boston, MA
Listening Session	Riders' Transportation Access Group (R-TAG) (Virtual)	September 29, 2022, 5:30 PM	Virtual, Boston, MA
Board Meeting	MBTA Audit and Finance Subcommittee (Virtual)	October 13, 2022, 9:00 AM	Virtual, Boston, MA
Board Meeting	MBTA Planning, Workforce, Development & Compensation	October 13, 2022, 10:00 AM	Virtual, Boston, MA
Employment Fair	MBTA Employment Fair	October 13, 2022, 10:00 AM	Boston City Hall Plaza, Boston, MA
Public Meeting	Fall River South Coast Rail	October 13, 2022, 6:00 PM	Morton Middle School, Fall River, MA
Public Meeting	Codman Yard Expansion and Improvements Pre-Construction	October 13, 2022, 6:00 PM	Virtual, Boston, MA
Public Meeting	Mattapan Line Transformation Program (Virtual)	October 18, 2022, 6:30 PM	Virtual, Boston, MA
Public Meeting	MBTA Safety, Health & Environment Subcommittee (Virtual)	October 20, 2022, 11:00 AM	Virtual, Boston, MA
Public Meeting	Blue Hill Avenue Transportation Action Plan (Virtual)	October 25, 2022, 6:30 PM	Zoom, Boston, MA
Public Meeting	Tremont/Columbus Bus Lanes	October 26, 2022, 6:00 PM	Virtual, Boston, MA
Public Meeting	MBTA Board of Directors (Virtual)	October 27, 2022, 10:00 AM	Virtual, Boston, MA
Advisory Meeting	Riders' Transportation Access Group (R-TAG) (Virtual)	October 27, 2022, 5:30 PM	Virtual
Public Meeting	Lynn Improvements Program Update	November 2, 2022, 6:00 PM	Lynn City Hall, Lynn, MA
Public Meeting	Bus Network Redesign (Virtual)	November 2, 2022, 6:00 PM	Virtual, Boston, MA
Board Meeting	MBTA Planning, Workforce, Development & Compensation	November 3, 2022, 10:00 AM	Virtual, Boston, MA
Board Meeting	MBTA Safety, Health & Environment Subcommittee (Virtual)	November 3, 2022, 11:00 AM	Virtual, Boston, MA
Public Meeting	Open House for Tremont/Columbus Bus Lanes Phase 2	November 9, 2022, 5:30 PM	Roxbury Community College, Commons 3 and 4, First Floor, Academic Building, Boston,
Public Meeting	Bus Network Redesign (Virtual)	November 14, 2022, 6:00 PM	Virtual, Boston, MA
Board Meeting	MBTA Audit and Finance Subcommittee (Virtual)	November 16, 2022, 11:00 AM	Virtual, Boston, MA
Public Meeting	Davis Station Accessibility Improvements Project (Virtual)	November 16, 2022, 6:00 PM	Virtual, Boston, MA

Event Type	Meeting Name	Date_Time	Location
Board Meeting	MBTA Board of Directors (Virtual)	November 17, 2022, 9:00 AM	Virtual, Boston, MA
Working Group Mee	Silver Line Extension Alternatives Analysis Working Group Meeting #5	November 29, 2022, 1:00 PM	Virtual, Boston, MA
Board Meeting	MBTA Audit and Finance Subcommittee (Virtual)	December 1, 2022, 9:00 AM	Virtual, Boston, MA
Board Meeting	MBTA Planning, Workforce, Development & Compensation	December 1, 2022, 10:00 AM	Virtual, Boston, MA
Board Meeting	MBTA Safety, Health & Environment Subcommittee (Virtual)	December 7, 2022, 1:00 PM	Virtual, Boston, MA
Public Meeting	Accessibility and Daniels-Finegold v. MBTA Settlement Update (Virtual)	December 7, 2022, 5:30 PM	Virtual, Boston, MA
Public Meeting	Bus Network Redesign - Fare & Service Equity Analyses (Virtual)	December 8, 2022, 6:00 PM	Virtual, Boston, MA
Public Meeting	Tremont/Columbus Avenue Bus Lanes Phase 2	December 12, 2022, 6:00 PM	Virtual, Boston, MA
Public Meeting	Silver Line Extension Alternatives Analysis Public Meeting #3	December 13, 2022, 6:00 PM	Virtual, Boston, MA
Public Meeting	Winchester Station Construction Update (Virtual)	December 14, 2022, 6:00 PM	Virtual, Boston, MA
Board Meeting	MBTA Board of Directors (Virtual)	December 15, 2022, 10:00 AM	Virtual, Boston, MA
Advisory Meeting	Riders' Transportation Access Group (R-TAG) (Virtual)	December 15, 2022, 5:30 PM	Virtual, Boston, MA



Appendix 2H

2022 Orange Line Closure Engagement



PUBLIC OUTREACH AND ENGAGEMENT ACTIVITIES

2022 Orange Line Track and Signal Upgrades Project



Massachusetts Bay Transportation Authority

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Appendix 1: The Rider's Guide to Planning Ahead

1. INTRODUCTION

The purpose of this report is to provide an overview of the equity-focused outreach and accommodations that occurred during the 2022 Orange Line Track and Signal Upgrades Project from August 19 to September 18 of 2022.

The Federal Transit Administration (FTA) conducted a months-long inspection brought on by a series of safety incidents that in some cases have caused injuries or deaths. On August 31, the FTA issued a 90-page final report with 53 findings for the Massachusetts Bay Transportation Authority (MBTA) and the Department of Public Utilities. The series of new orders required the MBTA to draft a series of plans in six weeks to fix the deficiencies identified. The FTA directives expedited safety improvements at the MBTA and encouraged the Legislature and the Baker administration to fast-track hundreds of millions of dollars in aid to support the transit agency.

To address the safety actions, the MBTA shut down Orange Line train service for 30 days, from August 19 to September 18 to complete five years' worth of track and signal replacement and maintenance as well as other projects to bring the line into a state of good repair in an unprecedented 30-day timeframe. The work enables the transit agency to eliminate slow zones along the Orange Line and leads to faster service at eight stations. The MBTA also replaced a fleet of Orange Line cars with new cars. The purpose was to improve safety, increase reliability, and provide smoother trips for riders.

The MBTA also suspended Green Line service between Government Center and Union Square from August 22 to September 18. The section of the line was shut down to ease the opening of the Medford Branch of the new Green Line Extension, while lane enabling demolition to resume on the Government Center garage.

Temporary service changes that last less than 12 months are exempt from the Title VI service equity analysis requirement. Due to the impact of the closure on riders, careful planning measures were undertaken to ensure an equitable outreach process. The Orange Line normally handles about 100,000 trips per day, bringing commuters to work, students to school, and visitors to many of Boston's top tourist attractions. For the Orange Line and Green Line diversion, MBTA offered a variety of alternative transit options and deployed a range of public outreach strategies to maintain access to public transportation and keep the public informed throughout the process. Outreach was ongoing to communicate what was accomplished and gather feedback on what could have been improved for future surges.

2. PLANNING

Planning the equity-focused outreach involved establishing a line of communication with MBTA Departments and other teams involved, particularly those with equity roles, and determining the demographics of the riders that would be impacted during the Orange Line track and signal upgrades. A line of communication was established with the Office of Diversity and Civil Rights Title VI staff, the UMass Translation Center, and Global Link for translation services. Regular weekly meetings were held with those identified in **Table 2-1** below.

Table 2-1 Internal MBTA Weekly Meeting Involvement

Entity	About
Public Engagement	The Public Engagement Team conducted thoughtful outreach to facilitate an inclusive relationship between the T and its diverse rider base and enable the public to influence and understand MBTA decisions. Outreach was conducted in accordance with the MBTA Public Engagement Plan and federal, state, and local requirements.
External Communications – Customer Experience	Media Relations Team, Marketing Team, and social media Teams promoted, translated, and communicated project information and updates from the MBTA.
Customer Technology Department	The Customer Technology Department (CTD) applies modern principles of research, design, and technology to help riders use the MBTA transit system. They were available to pull digital assets together and support MBTA representatives that needed help in the stations.
Legislative	Legislative personnel coordinated communications with elected officials.
Diversion Outlook and Construction Projects	Diversion Outlook and Construction Projects personnel provided updates on project progress.
Service Planning	Service Planning coordinated MBTA service.

Entity	About
System-Wide Accessibility, RIDE, and R-TAG	The Department of System-Wide Accessibility (SWA) oversees the accessibility of all bus, subway, Commuter Rail, and ferry service at the MBTA. The Office for Transportation Access (OTA) oversees the RIDE, the MBTA paratransit service. R-TAG is an autonomous, customer-driven organization whose role is to advise the MBTA on matters related to accessibility. The team helped prepare and disseminate materials and provided opportunities for information sharing and eliciting feedback. The team worked with CX on materials for the Mobility Center and developed an accessibility guide (https://www.boston.gov/sites/default/files/file/2022/08/Accessibility-Guide-Orange-Line-Shutdown.pdf). The team worked with City of the Boston and Age Strong, as well as others, to provide feedback on the OL shuttles accessibility. The team provided an MBTA cooling bus at the ADA Day celebration August 31, 2022 City Hall Plaza to honor the ADA and celebrate the rights of persons with disabilities. The team continually tracked any grievances relating to wheel-chairs, riders' experience through face-to-face interactions, the MBTA call center, and during meetings, including R-TAG meetings.
Board Meeting	The MBTA Board of Directors consists of seven members, including the Secretary of Transportation and one member with municipal government experience. The rest are appointed by the Governor. The meetings provided opportunities to give updates on the Orange Line and Green Line surges. The agendas are posted on the MBTA website.
Policy Team	The policy team worked to ensure transit services were meeting the needs of riders, including working on the bus lane changes..
Keolis	Keolis is a committed partner to MBTA in the execution of rail projects. Keolis supported the surge by staffing personnel at different stations and working on the Rider's Guide and infographics to assist riders with reading a schedule. They also reported feedback and questions received to the MBTA for response.
Office of Diversity and Civil Rights (ODCR)	ODCR's Title VI staff provided guidance and technical assistance on developing public engagement strategies that could effectively reach the MBTA's diverse ridership.

3. DEMOGRAPHICS

Part of seeking to ensure everyone could fully participate, regardless of race and ethnicity, income, limited English proficiency (LEP), age, disability, or geography involved understanding existing demographics. Using available data, the MBTA identified groups of stakeholders for outreach that continued to evolve as the project progressed. The MBTA also identified language needs of affected communities so that project information would be posted in those identified languages in relevant outlets to encourage participation from historically underserved populations. The identified demographic information and stakeholders are described in this section.

3.1. Minority and Low-Income Populations

The MBTA identified minority and low-income populations to inform its outreach strategy. **Figure 3-1** and **Figure 3-2** show the MBTA's services and fixed transit facilities (transit routes, lines, and stations with and without parking; and bus shelters and routes) in relation to the minority and low-income populations in each of the MBTA's service areas. Many of the tracts in the core service area are classified as minority and/or low income, and the majority of bus and rapid transit facilities are located in minority and/or low-income tracts.

Figure 1 MBTA Fixed Transit Facilities: Core Service Area, Bus

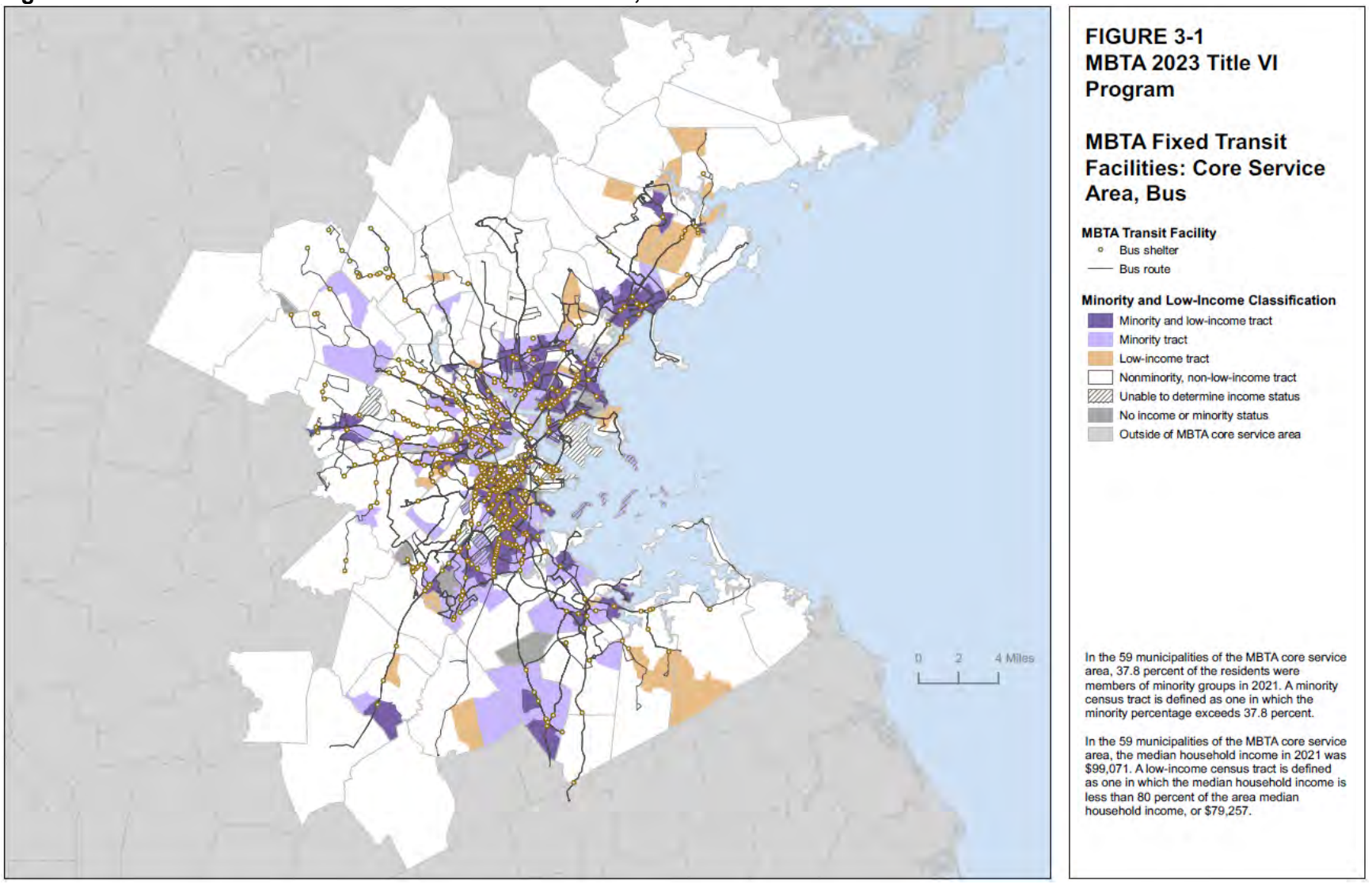
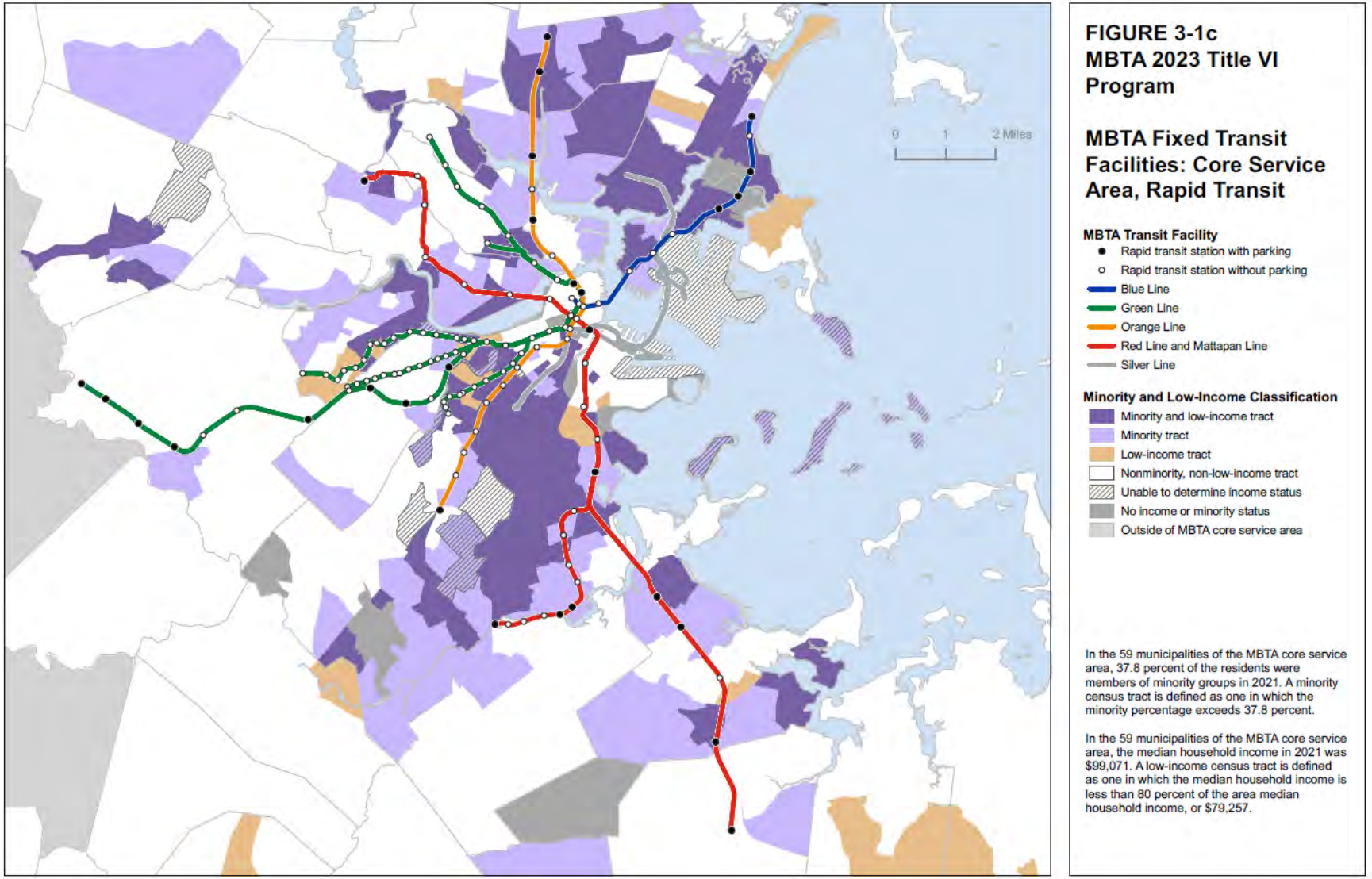


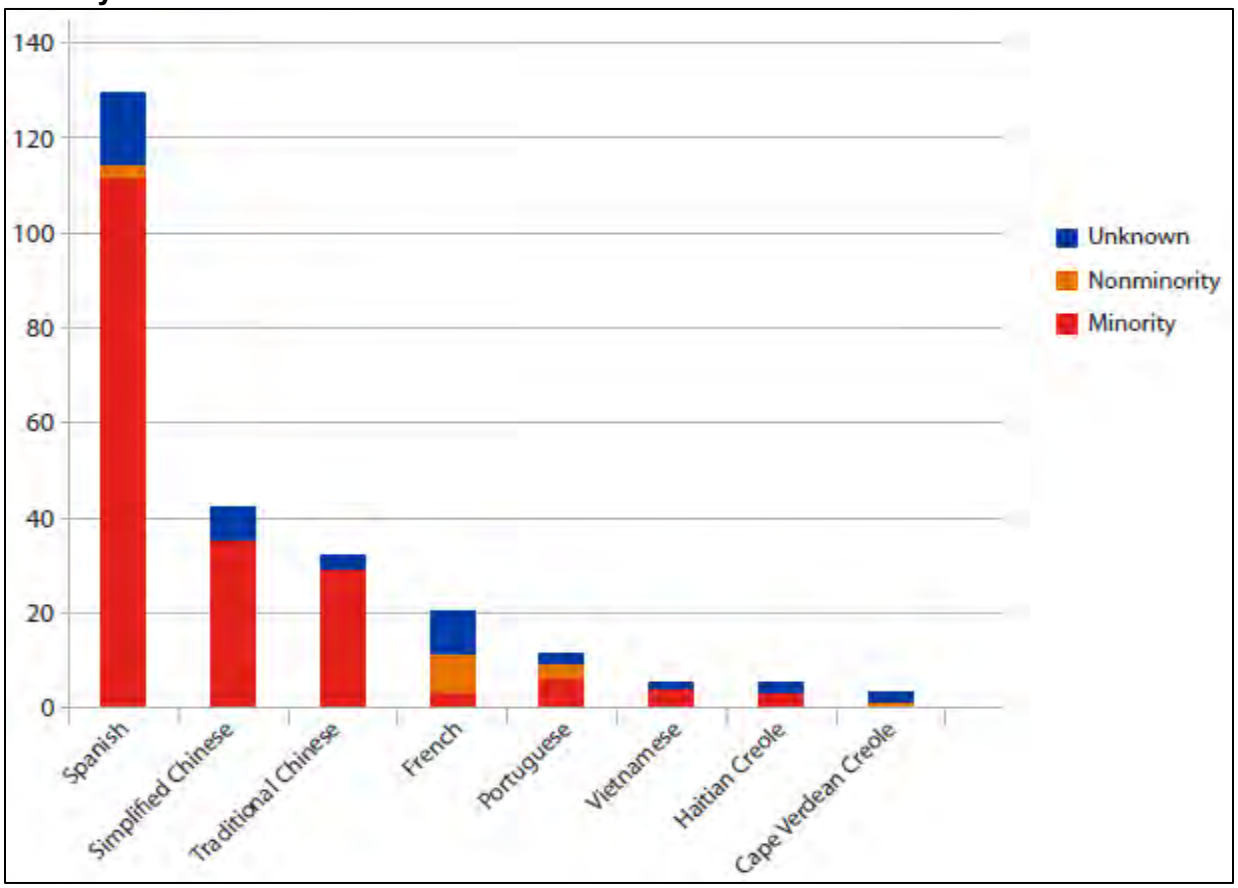
Figure 2 MBTA Fixed Transit Facilities: Core Service Area, Rapid Transit



3.2. Limited English Proficiency (LEP)

The MBTA Systemwide Passenger Survey conducted between October 2015 and May 2017 was used to identify LEP individuals accessing rapid transit, which are presented by mode.[1] The survey form was available in eight languages in addition to English. The majority of returned surveys (99.3 percent) were the English version. The Spanish version accounted for 0.37 percent, and the Simplified Chinese version accounted for 0.12 percent. The Traditional Chinese, French, Portuguese, Vietnamese, Haitian Creole, and Cape Verdean Creole versions each accounted for less than 0.1 percent. **Figure 3-2** shows the number of surveys returned in languages other than English by minority status. As shown in the figure, most of the non-English surveys were completed by minority riders.

Figure 3 Number of Surveys Returned in Languages Other Than English by Minority Status



All versions of the survey form asked respondents whether they preferred to receive information about riding the MBTA in English or in another language and,

[1] The MBTA systemwide surveys were distributed on all modes. The surveys included questions about each respondent's most recent one-way MBTA trip. The results were tabulated for each mode used in each reported trip.

if the latter, to specify which language they prefer. The percent of respondents who expressed a preference for English (98.6 percent) was slightly lower than the percent who took the survey on the English form (99.3 percent). The other most preferred languages were Spanish (0.7 percent) and Chinese (0.2 percent).

3.3. Community-Based Organization Engagement

The MBTA is committed to engaging diverse stakeholders, both internal and external to the organization, to elicit feedback on many complex projects such as this one. The MBTA developed strong community partnerships with the City of Boston, the Boston Public School system, and the MassDOT Highway Division to carry out the project as evidenced within this report. The MBTA organized a weekly meeting with elected officials and federal, state, and local governments, and with the business community, respectively. These included (but were not limited to), local shop owners, neighborhood associations, Chambers of Commerce, Main Streets organizations, municipal staff, and advocacy organizations. The MBTA's Systemwide Accessibility (SWA), Office of Transportation Access (OTA), and Riders Transportation Access Group (R-TAG) targeted older riders and riders with disabilities, given the complexity and importance of these individual's unique perspective on the issues.

The MBTA interacted directly with members of the public through other planned meetings and interactions at MBTA facilities. In these cases, MBTA staff would report back on these discussions to help inform the project and make improvements to the extent feasible. Beyond in-person engagement, the MBTA sought additional avenues for public participation, such as through webinars, websites, mobile applications (e.g., MBTA mTicket) and social media. The following are examples of community contacts for the project:

- Youth Pass Cardholders and Youth Pass Municipal/Nonprofit Partners
- Senior CharlieCard Cardholders that provided email addresses upon signup
- National Association for the Advancement of Colored People (NAACP) Boston Branch
- Semester Administrators
- MBTA Autopay Users
- The University of Massachusetts Boston
- Ben Franklin Institute of Technology
- Roxbury Community College
- Bunker Hill Community College
- The University of Massachusetts Lowell
- Middlesex Community College
- Mass Bay Community College
- Quincy College
- The Young Men's Christian Association (YMCA) of Greater Boston
- Urban League of Eastern Massachusetts
- YMCA Training Inc.
- East Boston Health Center

- Enhance Asian Community on Health Inc.
- Fallon Health
- Manet Community Health Center
- North Suffolk Mental Health Association
- South Cove Community Health Center
- Brookline Center for Community Mental Health
- Mattapan Community Health Center
- Uphams Corner Community Health Center
- Whittier Street Community Health Center

3.4. Identification of non-English Language Media

The MBTA collected information on non-English Language media, including important information for publication such as creative deadlines and contact information, to prepare for publishing information in an expeditious manner (see **Table 3-1**).

Table 3-1 Non-English Language Media Along the Orange Line

Language	Newspaper	
Arabic	Profile News	Digital Ads run in Arabic Thursday 8/18
Chinese	Sampan	Ads run in Chinese on Friday 8/19
Haitian Creole	Dorchester Reporter	Ads run in English and Haitian Creole/English Thursday 8/18
Portuguese and Spanish	Vocero Hispano	Ads run in Spanish Thursday 8/18

4. COORDINATING ACCESS AND ACCESSIBILITY

The project focused on ensuring accessibility and input from different communities in the MBTA service area.

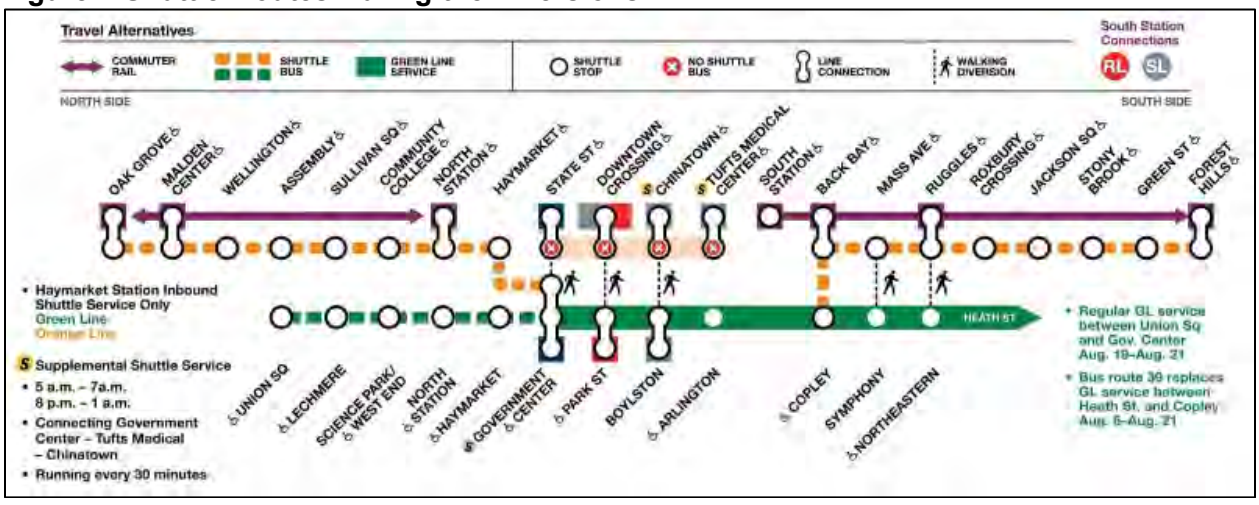
4.1. Accommodations for Service Changes

During the Green and Orange Line closure, Green Line stations north of Government Center and all Orange Line stations were closed. Riders were provided with alternate shuttle service: one connecting the North side stops from Oak Grove to Government Center, and one connecting the South side stops from Forest Hills through Copley. Passengers seeking downtown service were required to either transfer from the shuttle to the Green Line or use pedestrian detours. Passengers were also instructed to use alternate MBTA services such as Commuter Rail or bus to reach their destinations, and to work from home if possible.

Vehicle Accessibility: The MBTA offered free, accessible shuttle buses running on two separate routes – one on each end of the Orange Line - rather than a route connecting every Orange Line stop (see **Figure 4-1** below).

- North: Shuttle buses ran between Oak Grove and Haymarket, with an additional stop at Government Center (Green and Blue Lines).
- South: Shuttle buses ran between Forest Hills and Back Bay, with an additional stop at Copley (Green Line).

Figure 4 Shuttle Routes During the Diversions





MBTA shuttle buses were provided by third-party bus companies led by Yankee Line and were identifiable by vinyl signage on the bus exterior. During peak service hours over 160 buses supported the shuttle service. All buses were accessible. Some consisted of low-floor buses with ramps at the front of the bus. Most shuttle buses were high-floor coach buses with wheelchair lifts near the rear of the bus. MBTA understood high-floor coach buses with lifts present unique accessibility challenges, so the MBTA also made accessible vans available for riders who preferred them. MBTA personnel were available at every station to assist riders in requesting this accessible van service.

Shuttle bus stop locations varied from station to station. Most shuttle buses were located in the station busway (if available) or on the street just outside the station. At a small number of stations, shuttle bus stops were located within one to two blocks. Wayfinding signage were placed along the path of travel between station entrances and shuttle bus stops to help guide riders. Details regarding the specific location of shuttle stops were available on the Project webpage. The City of Boston designated curb space for accessible vans in addition to the curb space designated for shuttles. The City of Boston assessed the shuttle stops for accessible routes and level landings for lifts and ramps of shuttle buses and vans.



The RIDE continued to be available to anyone with a disability that prevents them from taking the fixed route. Due to the free shuttle bus service, RIDE trips that began and ended within ¾ mile of the Orange Line were free for RIDE users during the 30-day shutdown.

The City of Boston contracted with a third-party transportation provider to offer shuttle service in the Chinatown area during daytime hours beginning September 2nd. The Chinatown shuttle operated between Government Center and Tufts Medical Center/Chinatown Stations. Each shuttle seated at least 14 passengers and was ADA compliant via ramp or lift. There was at least one designated seat for wheelchair users. This service supplemented the early-morning and nighttime service provided by the MBTA.

The MBTA and City of Boston joint shuttle route in Chinatown ran every 30 minutes from 5 a.m. until 1 a.m. the next day. Both City and MBTA shuttles used

the same stops and had integrated signage to guide riders. The service ran through the end of the closure on September 19th.

Street Changes: To allow the shuttles to move safely and efficiently, the City of Boston and MassDOT Highway Division implemented multiple changes, including bus lanes, transit-only areas, changes to traffic signal timing, and parking restrictions. This included dedicated bus lanes, parking restrictions, and curb space to allow shuttle buses to load passengers and queue. City crews changed street markings and signage to create transit hubs at Copley Square and Government Center. Several streets were closed to general traffic to allow shuttle operations. A full list of road closures and traffic restrictions are available in a PDF posted on the City of Boston website.

City crews made a priority bus lane on Huntington Avenue to support the Route 39 bus, a popular alternative service for Orange Line riders. Striping and signage were completed around North Station, with dedicated pop-up bus lanes on Staniford Street and Nashua Street. In Jamaica Plain, street changes included bus lanes on Boylston Street from Amory to Lamartine Street and on Washington Street. There were also street parking restrictions on Amory Street in key locations.

The MBTA came to an agreement with municipalities that were part of the OL closure and reimbursed them for police detail to help keep shuttles moving. At almost every major intersection across the Orange Line route, Boston police officers and cadets helped to direct traffic for drivers and pedestrians.

The City of Boston installed tents to provide shade and protection from the elements at key stops, including at:

- Government Center
- Copley Square
- Massachusetts Avenue
- Jackson Square
- North Station, and
- Community College

Enhanced Commuter Rail and Silver Line (SL) Options: Commuter Rail trains made additional stops at Forest Hills, Ruggles, Back Bay, North Station, Malden Center, and Oak Grove stations to accommodate Orange Line passengers impacted by the bus diversion. Riders could show their CharlieCard or CharlieTicket to conductors to ride the Commuter Rail in Zones 1A, 1, and 2 on all Commuter Rail lines at no additional charge. Transportation Access Pass (TAP) could be used in place of CharlieCards for access to the Commuter Rail at no additional charge. TAP provides reduced MBTA fares and is available for people with disabilities and Medicare cardholders. Information on the Commuter Rail schedule were provided by the MBTA in their Multilingual Ridership Guide as described herein, as well as by the City of Boston in their Commuter Rail Schedule Flyers. The schedule was also communicated by MBTA representatives present along the Orange Line diversion route throughout the shutdown.

To support the Chinatown community, the City of Boston and MBTA worked together to add a stop to the Silver Line - SL4 outbound route. The Surface Artery at Kneeland Street stop creates direct access to Chinatown from South Station. This provided an important connection for previous southern route Orange Line riders who switched to the Commuter Rail during the shutdown.

Station Accessibility: Transit ambassador staffing was increased at Orange Line station street level locations for the duration of the closure. Station staff included a combination of MBTA Transit Ambassadors and other T personnel. Staff were responsible for helping riders locate shuttle bus stops, request accessible vans, acquire and/or read alternative Commuter Rail schedule information, or any reasonable request for an accommodation, including providing sighted guide to/from shuttles and stations. Service animals were welcome on all shuttle buses and vans during all hours of operation.



Bike Lanes and Access: The City of Boston offered free 30 Day Bluebikes passes to assist with alternative travel through the Bluebikes website and in the mobile app. Bicycle sharing system Bluebikes offers bike shares with stations located throughout the Boston metropolitan area. The City of Boston provided a guide with further details in English, Spanish, Haitian Creole, and Simplified Chinese.

The City of Boston installed temporary bike lanes:

- On Boylston Street in Back Bay. This was done to provide a safe and protected bike connection from Dartmouth Street, the end of the shuttle bus route, to the separated bike lanes that begin at Arlington Street.
- On Columbus Avenue in the South End.
- On the Alford Street Bridge in Charlestown.

MassDOT compiled a guide for riders who would be bicycling during the 30-day full closure of the Orange Line between Oak Grove and Forest Hills stations. The Bicyclist Guide was a tool to provide route options, safety tips for people driving and bicycling, and offer additional resources to aid new and experienced cyclists alike. The recommended routes were shown using Google Maps, and trailblazing signs were provided along each of the routes. The routes were specifically developed to avoid areas that would be used frequently by the Orange Line bus shuttles. The areas for bicyclists to avoid included Sullivan Square, Rutherford Avenue, the Charles River Dam Road, and Martha Road by North Station. The Bicyclist Guide provided information on how riders could bring their bike on the T or park it at an MBTA station.

Customer Support: The Customer Support Center was available by phone or email (MBTA.com/customer-support or OLT@mbta.com) to ask questions, report complaints, and/or request a reasonable accommodation. The Customer Support Center took calls Monday through Friday from 6:30 AM to 8:00 PM and Saturday through Sunday from 8:00 AM until 4:00 PM. Call center staff were able to address customer language assistance needs with either in house multilingual staff or by accessing the Language Line. The Department of System-Wide Accessibility was also available to answer any questions specific to accessibility considerations regarding the diversions.

Boston Public Schools (BPS) Transportation Support: Families were able to apply for a waiver on the BPS Transportation Support Portal for students in 7th and 8th grade to receive yellow bus service instead of MBTA service. The BPS Transportation Helpline continued to be available to students and families at 617-635-9520 or by email at schoolbus@bostonpublicschools.org. The Transportation Hotline operates from 6 a.m. - 7 p.m. on days that school is in session. In addition, the hotline is open for limited hours on school vacations, typically from 9 a.m.-5 p.m. BPS also provided the students and families it serves other resources and support, including free CharlieCards, waived penalties for tardiness, additional staff support to help guide students along the Orange Line shuttle route, and continuation of healthy lunches, even if students arrived “after the bell.”

Permanent Infrastructure Changes: Certain infrastructure changes that improved traffic flow or public safety will remain in place after the closure. Some street changes have or will be temporarily removed and then reinstalled permanently. All other changes made during the Orange Line shutdown have or will be removed. The following street infrastructure changes will remain in place:

- **Chinatown MBTA SL4 bus stop:** This newly added bus stop creates a vital link for Chinatown residents to the SL4.
- **Copley Square area bus lanes:** These bus lanes include Boylston Street (Ring Road to Clarendon Street); Clarendon Street (Boylston Street to Columbus Ave.); St. James Street (west of Berkeley Street to Dartmouth Street). These bus lanes support the 39, 9, and 10 bus routes, which together serve more than 10,000 riders per weekday.

- **South End loading zones and drop-off zones:** Changes to parking restrictions remained in place for improved curbside management and reduced double parking in the unprotected bike lane.
- **Jamaica Plain pavement marking and signage:** This includes traffic safety elements such as "Don't Block the Box" and parking restrictions at corners to improve visibility. These changes have been shown to improve traffic safety and management.
- **Boylston Street one-way for vehicles:** Closing part of Boylston Street (between Amory & Lamartine) to traffic throughout the shutdown improved safety (collisions and near-misses) along the Southwest Corridor. Reopening this stretch as a one-way street from Amory to Lamartine for vehicles supports long-term bike connectivity plans, improves safety for all modes, and reduces conflict at the high crash intersection of Boylston and Lamartine Streets.
- **Huntington Avenue bus and bike priority lane:** The priority bus and bike lane that was added to Huntington Avenue from Brigham Circle to Gainsborough Street improved speed for the Route 39 bus. As a permanent lane, it will continue to support the thousands of people who ride the Route 39 bus and will improve safety for those on bikes.
- **Columbus Avenue pop-up bike lane:** This was in place until early December 2022 and then removed for the season. Boston Transportation Department Active Transportation will continue to monitor and move barrels daily to enable street sweeping. Long-term planning is underway for a potential permanent facility. This is one of the busiest corridors for biking. Improving conditions, even on just a few blocks, can make the overall trip safer and more enjoyable.
- **Bluebikes parking:** The City retained Bluebikes docks added during the shutdown, with minor modifications as needed, to keep up with record-breaking ridership numbers. The City is also exploring options to provide free or low-cost bike share service.

4.2. Language Access and ADA Accommodations for Community Outreach

Interpretation and translation services were available in accordance with the MBTA Language Assistance Plan.

Meetings: Real-time captioning (CART) was provided during all virtual meetings. Other accessibility accommodations and language services were offered and/or provided free of charge, upon request, as available. These include documents in alternate formats, translated materials, assistive listening devices, and interpreters. Riders were provided an email address and phone number to request a reasonable accommodation.

Translations: The MBTA enlisted the services of UMass Translation Center and Global Link to provide written translations for certain materials such as

Riders Guides discussed further herein, flyers, one-pagers, and digital and A-frame signage at all stops along the Orange Line. The languages selected for translation of the Rider's Guide and flyers reflect commitments made in the MBTA Language Access Plan to provide vital information in the top languages in the service area as well as responses to specific requests for additional language support. For instance, the Rider's Guide was translated to Nepali as requested by the City of Somerville. The full list of languages provided include:

- Simplified and Traditional Chinese
- Portuguese
- French
- Haitian Creole
- Arabic
- Vietnamese
- Cabo Verdean Creole
- Somali
- Nepali
- Spanish

The translated flyers are available at: https://www.boston.gov/departments/mayors-office/orange-line-shutdown-boston.

Additionally, the City of Boston provided a multilingual Accessibility Guide for the Orange Line Shutdown in English, Spanish, Haitian Creole, Simplified Chinese, and Traditional Chinese. Lastly, the MBTA website (mbta.com) has a widget that translates the site into thirteen non-English languages that was available for the project-specific webpage.

Interpreters: When providing language interpretation services, either in person or in real-time over the phone, the MBTA made reasonable efforts to provide appropriate dialects. Specifically, Spanish, Creole, and Portuguese interpreter services were provided during virtual meetings and other interpreters were provided as requested in advance.

Accessibility of materials: All documentation published virtually and printed was run through an accessibility checker to ensure content was legible by persons with disabilities and remediated where needed.

5. TITLE VI AND COMMUNITY OUTREACH

5.1. Face-to-Face Interactions

Meetings and other virtual and face-to-face interactions that have occurred to date are shown below in **Table 4-1**. It was standard procedure to distribute free CharlieCards and printed copies of the Riders Guide in multiple languages at all in-person events, and multilingual flyers and the Orange Line Shutdown one-pager in multiple language for virtual events.



Table 4-1 Meetings Held During the 2022 Orange Line Track and Signal Upgrades Project

Date	Meeting Location	Description
September 29, 2022	Virtual - Zoom	Public meeting held by System-Wide Accessibility & the Riders' Transportation Access Group (RTAG) for a T Access listening session to share riders' experience on alternative service. Following recent diversions, System-Wide Accessibility (SWA) is updating protocols & best practices for ensuring accessible options.
September 18, 2022	Tufts Medical Center (MBTA Station)	On the last day of the 30-day Orange Line diversion, General Manager Poftak and Governor Baker discussed work accomplished and plans for a full return to service on Monday morning.
September 16, 2022	Virtual	Weekly meeting with the business community to provide updates on the Orange and Green Line diversions.
September 16, 2022	Virtual	Weekly meeting with elected officials and federal, state, and local governments to provide

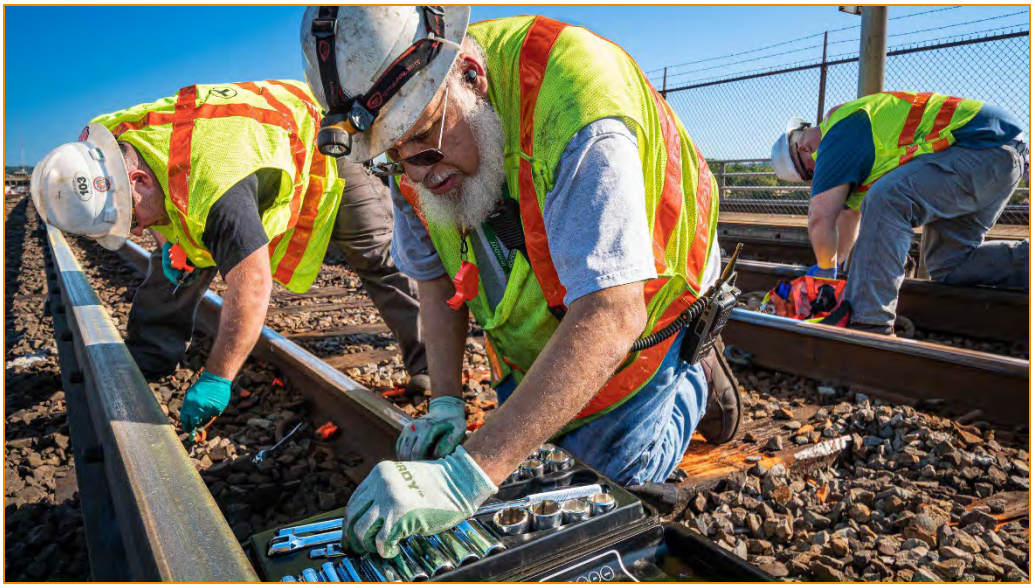
Date	Meeting Location	Description
		updates on the Orange and Green Line diversions.
September 13, 2022	Virtual	The Mayor's Office for Immigrant Advancement community-based organizations to provide project updates.
September 12, 2022	Virtual	An immigrant serving media roundtable meeting.
September 9, 2022	Virtual	Weekly meeting with the business community to provide updates on the Orange and Green Line diversions.
September 9, 2022	Virtual	Weekly meeting with elected officials and federal, state, and local governments to provide updates on the Orange and Green Line diversions.
September 9, 2022	Wellington Station	General Manager Poftak shares a progress update on the Orange Line 30-day diversion
September 2, 2022	Virtual	Weekly meeting with the business community to provide updates on the Orange and Green Line diversions.
September 2, 2022	Virtual	Weekly meeting with elected officials and federal, state, and local governments to provide updates on the Orange and Green Line diversions.
August 29, 2022	State Street Station	On Sunday, day 9 of the full Orange Line diversion, Governor Baker joined General Manager Poftak, MassDOT Secretary Tesler, and MBTA personnel to check on the progress being made.
August 29, 2022	Virtual	Meeting held with the Governor's Office to discuss project updates.
August 26, 2022	Virtual	Weekly meeting with the business community to provide updates on the Orange and Green Line diversions.
August 26, 2022	Virtual	Weekly meeting with elected officials and federal, state, and local governments to provide updates on the Orange and Green Line diversions.
August 24, 2022	Ruggles Station	MBTA General Manager Poftak gave an update on work progress during the Orange and Green Line diversions.
August 19, 2022	Forest Hills	With the Orange Line 30-day diversion beginning at 9:00 PM this evening, General Manager Poftak joined MassDOT Secretary Tesler, and Highway Administrator Gulliver to share final details in advance of the closure.
August 19, 2022	Virtual	Weekly meeting with the business community to provide updates on the Orange and Green Line diversions.
August 19, 2022	Virtual	Weekly meeting with elected officials and federal, state, and local governments to provide

Date	Meeting Location	Description
		updates on the Orange and Green Line diversions.
August 17, 2022	Josiah Quincy Elementary School in Boston's Chinatown	Meeting held to inform the community about the project.
August 16, 2022	Boston Public Library, City Hall, and councilors	MBTA provided the City of Boston with 3,000 CharlieCards to distribute for the upcoming Orange and Green Line closure. During the diversions, riders were able to use their CharlieCards to access alternate T transit, including MBTA commuter Rail in Zones 1A, 1, and 2. MBTA also gave 5,000 pre-loaded CharlieCards to Boston Schools so parents could ride along with their children and familiarize themselves with the diversions. With 7-day passes, parents could help their children prepare for the first day of school.
August 16, 2022	Virtual	Meeting with community-based organizations to provide information on the diversions.
August 15, 2022	MBTA – 10 Park Plaza	In advance of the upcoming Orange & Green Line diversions, General Manager Poftak joined Governor Baker, MassDOT Undersecretary Bosworth, MassDOT Highway Administrator Gulliver, and City of Boston Chief of Streets Franklin-Hodge to discuss plans for closures and transportation impacts on the region.
August 15, 2022	Virtual	Meeting with the City of Boston to discuss upcoming activities.
August 11, 2022	Orange Line	MBTA invited Mayor Wu, Boston Transportation Department, and Boston Police for a ride along as they test drove the shuttle route for the upcoming Orange Line Diversion. This test run helped all coordinating agencies get a first-hand look at the routing and identify areas where we can optimize service. During the test run, MBTA pointed out key interactions and stops where they would need City of Boston support to ensure that the shuttle would run smoothly. The ride-along was a great opportunity for partner organizations to experience the route in real-time and provide any final feedback.
August 11, 2022	Virtual	Meeting with the City of Boston, Boston Public Schools, and Boston Transportation Department to discuss dissemination of resources, how to reach vulnerable populations, and other resources that will be available to riders.
August 9, 2022	Virtual	North side delegation briefing.
August 8, 2022	Virtual	Meeting held with the Governor's Office to discuss outreach approach to inform riders.

5.2. Key Messaging and Documentation

Information About the Work: The Orange Line closure would be used to address a maintenance backlog and planned construction investments, all of which are focused on safety improvements and returning the system to a state of good repair. Thirty days of 24-hour access would replace more than five years of work. The closure of the Green Line's Union Square Branch would allow the T to perform final-phase construction work necessary to open the Medford Branch, which opened in December 2022.

The major revitalization and safety work to take place on the Orange Line during this 30-day shutdown would deliver a number of projects, including track replacement, upgraded signal systems, and more, over five years faster than originally planned. The MBTA will also accomplish required track maintenance associated with Federal Transit Association (FTA) directives as quickly as possible. This shutdown would maximize the amount of work able to be accomplished and will progress a number of projects and maintenance along the entire Orange Line, which would improve service, safety, and reliability for riders.



Travel Impacts: MassDOT's Highway Division issued an advisory warning that travelers of all modes throughout the Orange Line corridor would experience increased traffic congestion as a result of roadway modifications necessary to support the MBTA's replacement bus shuttles. They were also advised that following the full Orange Line shutdown, regional traffic congestion would likely increase substantially. All travelers across all modes were strongly encouraged to avoid driving through the area altogether, work from home if possible, consider rescheduling trips through the area that are not absolutely necessary, or for necessary travel, to expect significant traffic congestion and travel delays.

Transportation officials, including the MBTA's General Manager Steve Poftak and Governor Charlie Baker, discussed travel options and answered questions during a media availability August 15, 2022 at the State Transportation Building. In

addition, City Councilors Erin Murphy and Michael Flaherty hosted an additional hearing to help prepare residents for the MBTA's shutdown.

Rider's Guide to Planning Ahead: The MBTA released the Rider's Guide to Planning Ahead August 12, 2022 ahead of the Orange Line closures (see Appendix 1). The Rider's Guide is a tool that provided riders with alternative travel options and information to inform travel decisions, including how the MBTA is ensuring accessibility during the shutdown. The Riders Guide was provided in English and translated into ten languages (Arabic, Cape Verdean, Chinese, French, Haitian Creole, Nepali, Portuguese, Somali, Spanish, and Vietnamese). The Riders Guides were available at mbta.com/RiderGuide. The MBTA Accessibility guide for the Orange Line and the Green Line during the closure was available on page 11. The Ridership Guide was widely disseminated using a number of strategies, including providing a QR code for access at virtual meetings and additional documentation.

5.3. Other Communications:

The community outreach team utilized a wide range of communication strategies to ensure the community stayed informed through the duration of the 2022 Orange Line Track and Signal Upgrades.

Website: The project website included information for a dedicated call line and email, provided weekly updates, and had a distribution list users could sign up for to receive a weekly newsletter. Riders could also access the website to sign up for T-Alerts and text messages relevant to them at chosen time intervals.

Additionally, the City of Boston provided information for the Orange Line Shutdown in Boston through their Orange Line Shutdown webpage. The information provided included:

- Critical information: MBTA shuttle routes and transit hubs, alternative forms of travel, Boston Public Schools Updates, and access for people with disabilities and seniors
- Maps: Orange Line diversion map, Orange Line shuttle map (Oak Grove to Government Center and Forest Hills to Copley Square), Green Line shuttle map, Tufts Medical and Chinatown shuttle, and Tufts medical map and flyer (provided in English, Simplified Chinese, and Traditional Chinese)
- Videos: Orange Line Information Session
- Multilingual Flyers: A notice of the closure provided in 12 languages
- Related Links: City of Boston announces permanent street changes following Orange Line shutdown, MBTA updates, and City of Boston permanent street changes

Social Media Posts: Social media platforms were utilized to spread the word about the project. Postings occurred most days starting before the project and continuing throughout its duration. Facebook, Instagram, and Twitter automatically show the captions in the user's preferred language. This can be customized through settings. While YouTube videos were posted in English,

closed caption settings allowed users to translate the script to the desired language. The posts provided updates on the status of the work during the closures and reopening status, information on transportation impacts on the region, where to find more information, and footage from in-person interactions, including announcements from the MBTA and Keolis general managers, MassDOT Secretary, Highway Administrator, and others. The MBTA social media accounts operated for the project are provided below:

- Twitter: @MBTA, #TAccess, #RideSafer, #BuildingABetterT
- Facebook: /TheMBTA
- Instagram: @thembta
- YouTube: /MBTAGM
- TikTok: @thembta

Examples include:

> *"VIDEO: On the last day of the 30-day Orange Line diversion, General Manager Poftak and Governor Baker discuss work accomplished and plans for a full return to service on Monday morning."*
>
> *"We missed our Orange Line riders and are excited to welcome them back after the 30-day closure. As a token of our appreciation, we're giving away @dunkin $5 gift cards at select Orange Line Stations. The Orange Line riders, thank you for your patience while #buildingabetterT."*
>
> *"In advance of the upcoming Orange & Green Line diversions, General Manager Poftak joined @MassGovernor Baker, @MassDOT Undersecretary Bosworth, MassDOT Highway Administrator Gulliver, and @cityofboston Chief of Streets Franklin-Hodge to discuss plans for closures and transportation impacts on the region."*
>
> *"Join System-Wide Accessibility & @R_TAGtweets for a #TAccess listening session today 9/29 at 5:30pm to share your experience on alternative service. Following recent diversions, SWA is updating protocols & best practices for ensuring accessible options. http://ow.ly/Wcp350KPKC1."*

Signage and Announcements: Signage was placed in and around stations to guide passengers on how to get to these new stops and continued to be placed each morning to ensure ease of wayfinding for riders. Translated signage was placed in key locations, including areas with high concentrations of LEP riders and high ridership based on the MBTA service area maps. Signage and announcements included:

- In-station, directional signage (at all affected stations) on A-frame sandwich boards
- Digital signage at available stations
- Highly visible feather flag banners marked all shuttle bus boarding areas at each stop throughout the 30-day diversion for riders
- In-station announcements



News Media: A press release of the MBTA diversion plan was published on the mass.gov website ahead of the closure. Representatives from newspaper publications were kept abreast of project activities to disseminate information to the public through media packets, invitations to conduct walking tours and take photos, interviews with MBTA staff, and publications in multiple languages in English and non-English newspapers as listed in **Table 3-1**. Examples include:

- CBS: MBTA General Manager Steve Poftak "confident" Orange Line will reopen on time; MBTA General Manager update on final details of Orange Line shutdown
- The Boston Globe: Goodbye, shuttle buses. Hello, trains. The Orange Line's return is greeted with hope that T service will improve.
- NBCBoston: End of the Line: MBTA Begins Disposing of Old Orange Line Cars

CharlieCard: The CharlieCard is a contactless smart card used for fare payment for the MBTA. The MBTA provided the City of Boston with 3,000 CharlieCards for the upcoming Orange and Green Line closure. During the diversions, riders were able to use their CharlieCards to access alternate T transit, including MBTA commuter Rail in Zones 1A, 1, and 2. MBTA also gave 5,000 pre-loaded CharlieCards to Boston Schools so parents could ride along with their children and familiarize themselves with the diversions. Additionally, CharlieCard stores offered increased walk-in availability and updated store hours. Details and available services were provided through the CharlieCard webpage.

6. COMMUNITY INTERACTIONS

6.1. Comments Received

Comments Received During Meetings with the Public: The MBTA proactively engaged riders to hear feedback regarding the diversions and seek to make improvements to the process to ease the inconvenience created by shutting down the Orange Line. Over the course of the surge, the MBTA listened to its riders, learned from their experiences, and made necessary wayfinding and service adjustments. The following provides a sample of some of the comments received and how they were addressed.

- **Experience:** She needed to go to Chinatown from Jackson Square but was told by MBTA staff she had to take the commuter rail at Ruggles. The shuttle bus from Jackson Square came late and the person missed the commuter rail. Instead of waiting two hours for the next train, she took the bus from Ruggles to Back Bay. She told me there was no sign to show her directions to take the shuttle bus to Back Bay.

  Response: We will flag this for the team.

  Action: Additional wayfinding street markings in Chinatown and translated guides were posted to help navigate between the stations. The purpose was to ensure commuters in the area were aware of Green Line, Silver Line, and Red Line alternative routes.
- **Experience:** Most of the people would go to the other side of Back Bay but there was no bus there, so they walked from Chinatown to Back Bay. It took them about 25 to 20 minutes. I think it's very hard for the senior citizens to walk on hot or rainy days and it is not comfortable for them to do so. I know some of the senior citizens usually go to the farmer's market near Roxbury Crossing farmer's market because it is cheaper than the one near the South Station. They cannot go because right now because there is no shuttle bus.

  Response: We will flag this for the team. If you or someone else needs a disability shuttle, then please go to someone in a red coat or MBTA vest and ask for a shuttle and they should be able to dispatch a shuttle for you going to Tufts. There should be MBTA staff to help guide that speak Cantonese Mandarin and different dialects. There should be two shuttles there at any point. The disability shuttle should be available 24 hours a day and available at all stops. There may be some confusion about which one is the disability shuttle versus the shuttle that runs in the morning because they are similar so we will make this clearer. There's no

schedule for the morning shuttle. The morning shuttle that is from 5 to 7 is dependent upon traffic and runs approximately every 30 minutes.

Action: The City of Boston contracted with a third-party transportation provider to offer shuttle service between Government Center and Tufts Medical Center/Chinatown Stations in the Chinatown area during daytime hours from September 2nd to September 19th.

- **Experience:** Hi, I am [REDACTED] and I am the executive director of [a local youth group] and I am supported by [REDACTED]. We do a lot of readiness work with young people, especially immigrants, and I want to know what is happening on the employment front. We want to know if there are any updates because there is a severe worker shortage, and we have young people who are looking for decent paying jobs.

  Response: We can connect offline – I will put my email in the chat.

  Action: A line of communication was opened with [the local youth group] and discussions are ongoing on how to address this.

- **Experience:** I would like clarification regarding the multilingual media events that were mentioned. I am with the Haitian community and work closely with the Haitian media daily. I contacted them about the Orange Line situation including the Haitian Liaison in Dorchester and Mattapan said they did not know and had not been contacted regarding this. I had suggested a Public Service Announcement (PSA) in Haitian Creole telling people the actions regarding that and I haven't received any updates on that. Secondly, I was in Forest Hills talking to people in the Haitian community and I said, "do you know that you could ride the commuter rail for free" and they did not know.

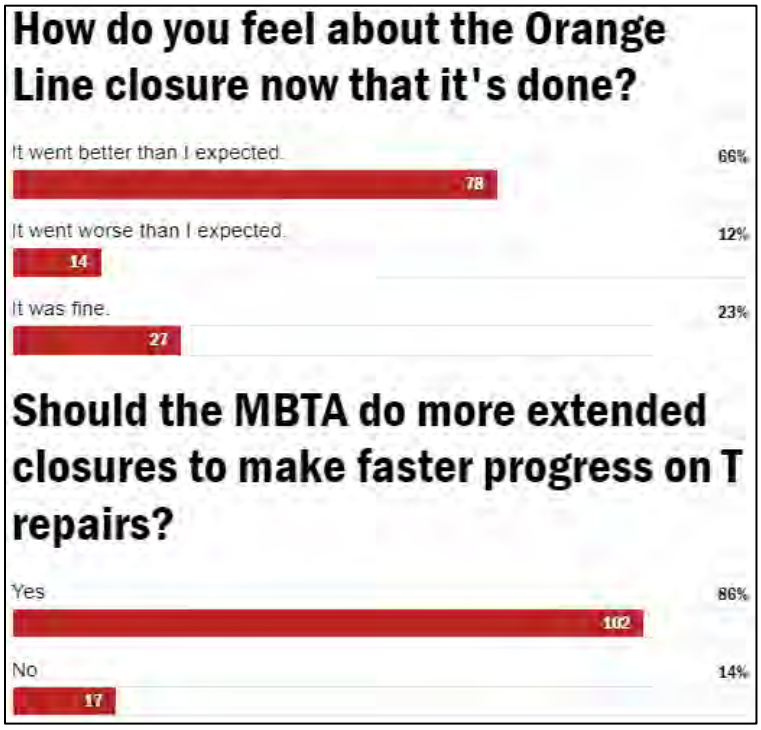
  Response: The MBTA reached out to multiethnic media outlet before and during the closure, including DOT Reporter in Haitian Creole, the Profile View in Arabic, and we've been running ads in Chinese since before the diversion happened. If there are more outlets we're missing, then I am happy to take that back to the team. We're hosting an immigrant serving media roundtable September 12th. We need to issue more directives and reminders that no one in Zone Two should be charged on the commuter rail to ensure everyone is aware of this. I know radio outreach is very impactful for the Haitian community, so we can arrange to have more radio interviews done.

  Action: There has and continues to be a substantial number of ongoing ad buys for multilingual newspapers. This includes publishing updates in Spanish on Vocero Hispano, in English and Haitian Creole in the DOT Reporter, in Arabic in Profile News, and in Chinese in Sampan.

R-TAG: R-TAG monitored accessibility during the Project. They assessed accessibility concerns received through several channels, including the Customer Support Center and Department of System-Wide Accessibility. They had undercover monitors out evaluating the shuttle service. There were some issues reported that R-TAG was able to address by adjusting protocols and holding contractors accountable.

Boston.com Survey: Boston.com asked its readers if they thought the service disruption was worth it, and if the MBTA should consider doing it again. Sixty-six percent of the 109 readers who responded to the poll said the shutdown went better than they thought and 85 percent said they would be in favor of similar closures in the future if it means more progress is made in improving the T. The multiple choice responses from *'A necessary strategy': Readers are in favor of more T shutdowns* by Zipporah Osei published September 22, 2022 are shown in **Figure 6-1** below. The article provides a sampling of written responses that corresponded to the survey.

Figure 5 Boston.com Survey



7. CLOSEOUT ITEMS

During the Orange Line 30-day surge, the MBTA:

- Addressed six slow zone removals, two located between Wellington and Assembly, and one each near North Station, between State Street and Downtown Crossing, in the tunnel at Tufts Medical Center, and at Jackson Square. However, slow zone removals will stay in effect for some time after the Orange Line reopening. That's because new track and ballast needs to settle under the weight and movement of trains and keeping the slow zones in place allows track engineers to monitor the new infrastructure and verify when it is ready for full-speed operation.
- Completed 14,000 linear feet of rail replacement between Wellington Yard and North Station Portal, in the tunnel at Tufts Medical Center, between State Street and Downtown Crossing, and at Back Bay station.
- Completed 3,500 feet of track replacement including replacement of 2,836 ties between Wellington and North Station Portal and at Back Bay station as well as ballast surfacing and track alignment between the Dana Bridge and Community College station.
- Renewed 20 units of special trackwork near Ruggles station, at Wellington Yard, near Jackson Square, and at Forest Hills and Back Bay stations.
- Installed 400 new Cologne eggs (vibration reduction hardware) at the Tufts Medical Center station.
- Installed new enhanced signal system between Oak Grove and Malden Center.
- Replaced 48,000 linear feet of signal cable between Back Bay and Forest Hills.
- During the Surge, the initial goal was to prepare 60 new Orange Line cars for when Orange Line service is restored September 19. Mechanics and engineers completed vehicle readiness of an additional 12 cars, more than enough to cover peak morning and afternoon service (six cars make up a train). Following the Surge, riders will experience better service on an Orange Line fleet that is predominately new cars.
- Advanced 27 additional projects, including 20 to improve state of good repair, three to enhance accessibility, and four to improve rider experience.

7.1. Project Completion Outreach

The completion of the Orange Line 30-Day Surge outreach included the following:

- Announcement by General Manager Poftak and Governor Baker at a public forum at Tufts Medical Center (MBTA station) on September 18, 2022.
- A progress update on work completed was provided on the MBTA Project webpage on September 19, 2022. This was also emailed to riders that signed up for Orange Line Transformation (OLT) updates.
- The MBTA issued a press release entitled, "*Orange Line and Green Line Extension Service Will Resume on Schedule, Monday, September 19*" on September 18, 2022.
- System-Wide Accessibility held a listening session September 29, 2022 to hear rider's experiences about the accessibility of recent MBTA service diversions. SWA is working to develop updated protocols and best practices related to ensuring accessibility during service diversions based on lessons learned.

7.2. Ridership Data During the Surge

To better plan future diversions and for general knowledge of the impacts of mitigations, the Ridership team in the Office of Performance Management and Innovation (OPMI) monitored ridership on various MBTA services during the closure. This team compiled data from all existing outlets and organized additional data collection where necessary to generate an estimate of ridership during the closure. The resulting "*Detailed Methodology Memo for Orange Line Surge Shutdown Ridership Analysis*" describes the detailed methods and results of that work, including plans for future adjustments as more data comes available. The resulting analysis found, as shown in **Figures 7-1** and **7-2**:

- About 40k trips were taken on the shuttles each weekday, which was about 40 percent of usual Orange Line ridership.
- About 8,000 (about 8 percent of baseline) usual Orange Line trips were made on Commuter Rail services instead, and 7-8,000 (7-8 percent) trips switched to MBTA bus services instead of their usual trip.
- About 2,000 additional trips in the vicinity of the Orange Line were made on Bluebikes, suggesting that these were substituting for usual Orange Line trips.
- About 42-43 percent of usual Orange Line trips are unaccounted for thus far. These were either made via personal or hired vehicles, personal bikes/scooters/etc., walking, or were not made at all.

OPMI developed a methodology to estimate the closure's effect on ridership, including shuttle ridership, changes in Commuter Rail ridership, and changes in bus ridership on both parallel and feeder routes to the Orange and Green Lines. While these methods have a high range of precision, they provide a reasonable estimate of the impacts of the shut down on travel patterns on our system. Additionally, the shuttles provided by Yankee under contract were not equipped with usable automatic passenger counters, so automated ridership data was not available from bus replacement shuttles. The basis for estimating shuttle ridership was manual counts conducted at selected stations during the diversion.

Figure 6 Alternative Modes Taken by Typical Orange Line Passengers

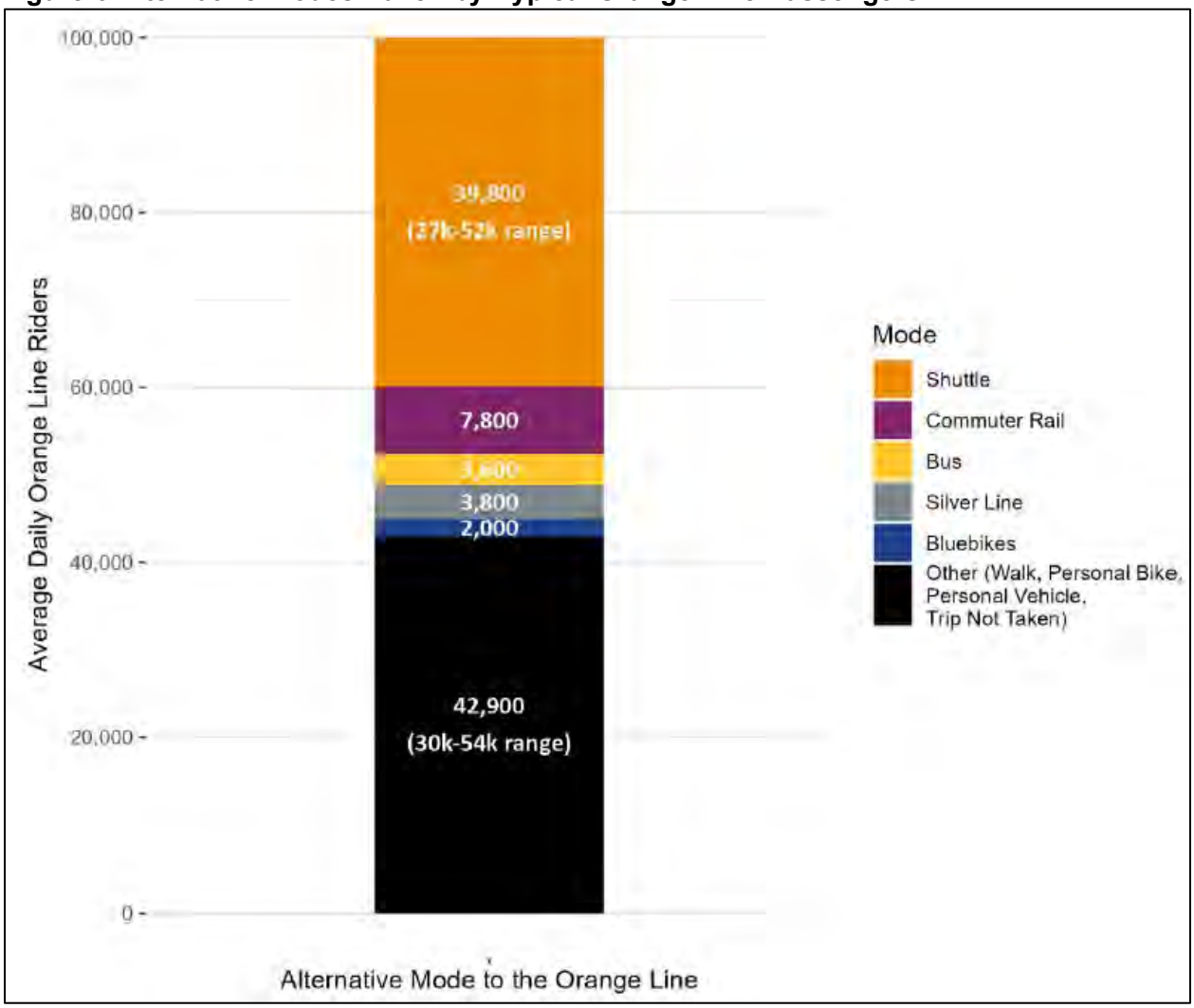
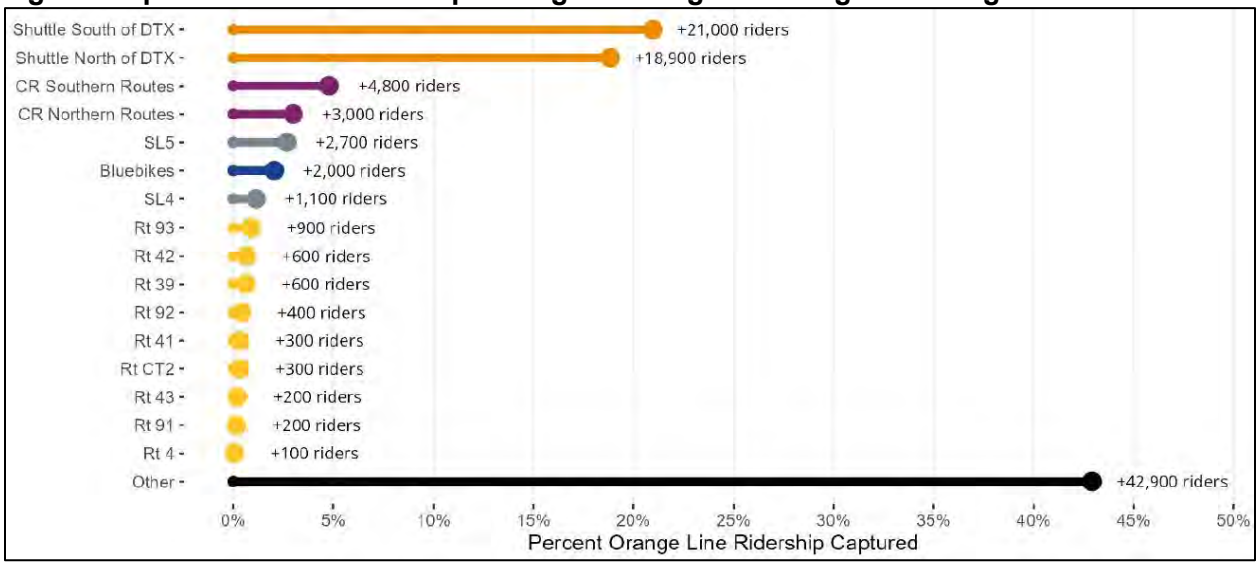


Figure 7 Specific Route Ridership Changes During the Orange line Surge



Bicycle Ridership: Boston.com published a story entitled, "Bluebikes rentals surge throughout Orange Line Shutdown" announcing that the City of Boston's bikeshare program saw record-breaking ridership during the 30-day surge. As previously described, the City of Boston offered a 30-day free Bluebike pass granting an unlimited number of 45-minute trips, waiving the $26.75 monthly pass fee. According to the City of Boston, pass purchases jumped from 44 on August 18, 2022, to 4,909 on August 19, 2022. Since launching in 2015, Bluebikes saw an average of about 103,825 rides in the span from August 19 to the end of the month. In 2022, the total rose to 236,810 rides (see **Figure 7-3**). On September 17, 2022, Bluebikes saw its largest number of trips ever, almost 27,000 trips in one day (see **Figure 7-4**). Beyond Bluebikes, bike shop employees reported an increase in customers for bike repairs, rentals, and maintenance.

Figure 8 August Bluebike Ridership Since 2015

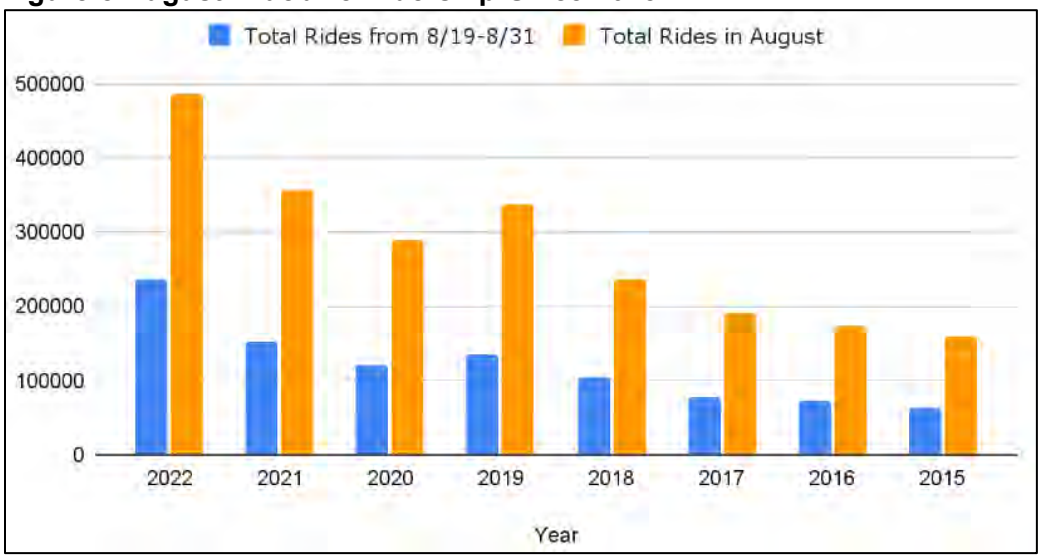


Figure 9 Bluebike Ridership Sets Record on September 17, 2022



8. CONCLUSIONS

As part of the Orange Line Transformation Program, the MBTA accelerated important reliability upgrades during a 30-day shutdown of the entire line from 9 PM on August 19 through September 18, during which crews completed five years of work. Regular Orange Line service returned as planned with the first train the morning of Monday, September 19. In the course of doing the work, other areas requiring additional work were identified to be able to lift some slow zone restrictions. This work is currently being scheduled or in progress with prioritization of safety for workers and riders alike to mitigate.

Outreach during the surge followed strategies outlined in the MBTA Public Engagement Plan to ensure a robust public engagement process. Alternative travel options were put into place to accommodate riders that may experience barriers to access, including non-English speakers and individuals with disabilities. MBTA partnered with the City of Boston, MassDOT, and Bluebike to increase engagement, implement roadway modifications to facilitate the safe movement of shuttles during the surge, and provide alternative modes of transportation. Information on diversions for all users was distributed widely with additional efforts being made to target historically disadvantaged populations, including but not limited to low-income individuals, people of color, older adults, people with disabilities, and those with Limited English Proficiency. Additional MBTA personnel and Transit Ambassadors were dispatched to get riders to their destinations as efficiently as possible while minimizing inconveniences to the extent feasible. As feedback was received, the MBTA took additional steps as needed to ensure the public was made aware of the diversions and to provide equitable access to all users. At the conclusion of the project, the majority of riders felt the surge went better than expected and they would be in favor of other closures that would further improve the MBTA.



Attachment 1: The Rider's Guide to Planning Ahead

A Rider's Guide to Planning Ahead

Upcoming Orange & Green Line Service Suspensions

August – September 2022

Building a better T.



Produced by Customer Experience

A Rider's Guide to Planning Ahead Table of Contents

Building a better T.

3 Building a better T
4 Upcoming Closures
5 Enabling Major Revitalization Work on the Orange Line
6 Helping Facilitate Fall '22 Opening on GLX Medford Branch
7 Planning Ahead
8 Onsite Navigation & Assistance
9 Alternative Travel (Overview)
10 Alternative Travel Options (By Station)
11 Alternative Travel Options (Accessibility)
12 Alternative Travel via Commuter Rail
13 Increased Commuter Rail Service
14 Forest Hills - Ruggles - Back Bay - to South Station Schedule
15 Haverhill to North Station Schedule
16 Stay Connected

The MBTA is Building a better T

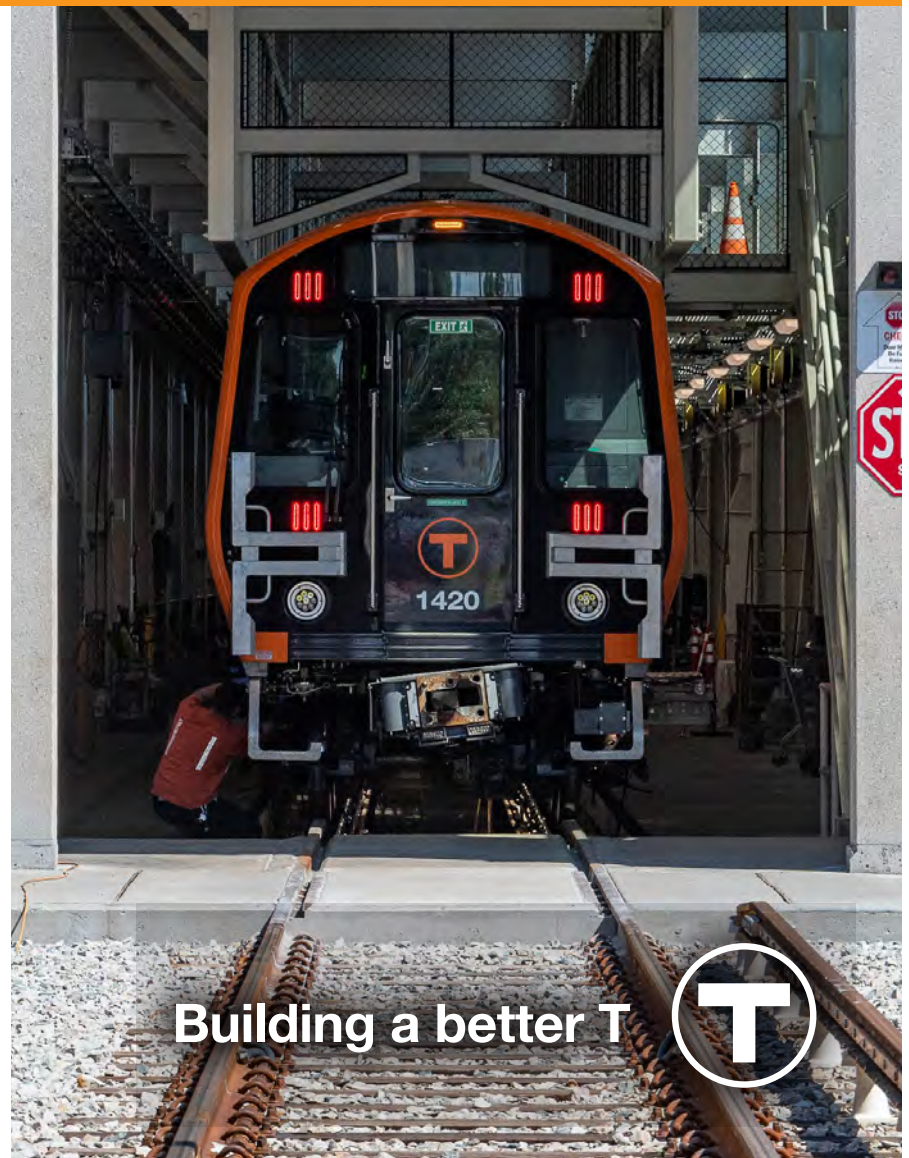
The MBTA is upgrading the 120-year-old rapid transit Orange Line serving the communities of Malden, Medford, Somerville, and Boston.

When complete, this work will bring to Orange Line riders an improved overall quality of service, faster travel times, and better service reliability.

The Green Line Extension extends the Green Line from Lechmere in East Cambridge to Union Square in Somerville.

The T will perform final-phase construction work necessary to open the Medford Branch, which is now anticipated to open in fall 2022. The diversion is also necessary to allow for continued work by the private developer responsible for the demolition and redevelopment of Government Center Garage.

The MBTA is committed to working with the City of Boston and all our municipal partners to provide our riders with alternative travel options during upcoming service disruptions. ***The Rider's Guide to Planning Ahead*** is a tool to provide you with options and information to inform your travel needs while the MBTA continues to Build a better T.



Upcoming Closures

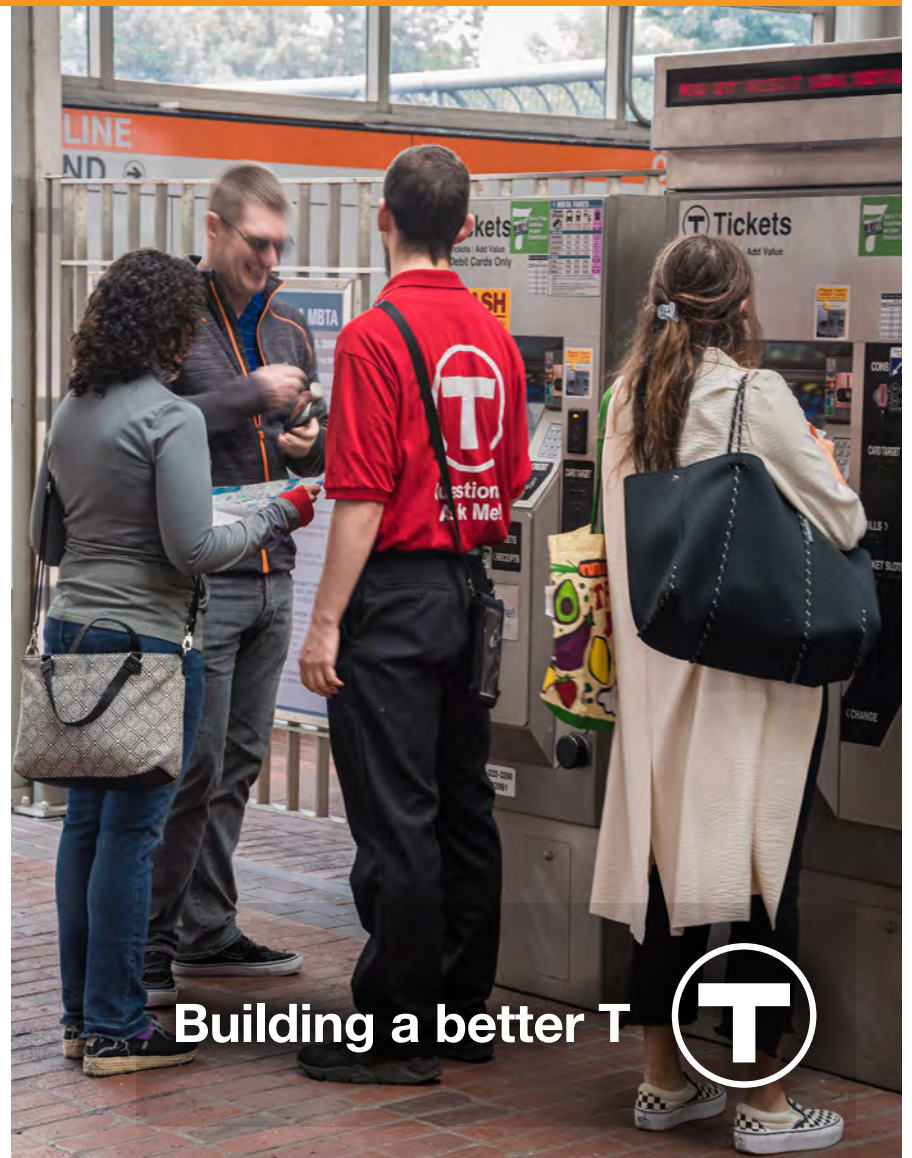
These closures will aim to accelerate projects to make the T safer, faster, and more reliable for riders

Orange Line Closure

- The MBTA is planning for a **full closure of the Orange Line from Oak Grove to Forest Hills** beginning Friday, August 19, 2022, at 9:00 pm through Sunday, September 18.
- The closure will address a maintenance backlog and planned construction investments, all of which are focused on safety improvements and returning the system closer to a state of good repair. This extended full access closure will bring to Orange Line riders an improved overall quality of service, faster travel times, and increased service reliability.

Green Line Closure (Union Sq. Branch)

- Beginning Monday, August 22, through Sunday, September 18, **service will be suspended on the Green Line between Government Center and Union Square** to allow the T to perform final-phase construction work necessary to open the Medford Branch, which is now anticipated to open in fall 2022.
- This diversion is also necessary to allow for continued work by the private developer responsible for the demolition and redevelopment of Government Center Garage



Enabling Major Revitalization Work on the Orange Line

The Orange Line closure will allow us to achieve planned repairs and upgrades

Orange Line work

Thirty days of 24-hour access will replace **more than five years** of Orange Line night and weekend diversions, and allow us to achieve repairs and upgrades.

- Track repairs to eliminate critical slow zones at Jackson Square, Back Bay, Tufts, and Haymarket
- Implementation of Maintenance of Way workplans to replace signals, power, track, ties, and ballast to bring the system into an advanced state of good repair
- Replace 3,500 feet of rail at Wellington Yard
- Replace crossovers to facilitate train movements, improve reliability, and add future capacity
- Repair Southwest Corridor special trackwork to improve reliability
- Install upgraded signal system at Oak Grove and Malden to increase safety and reliability



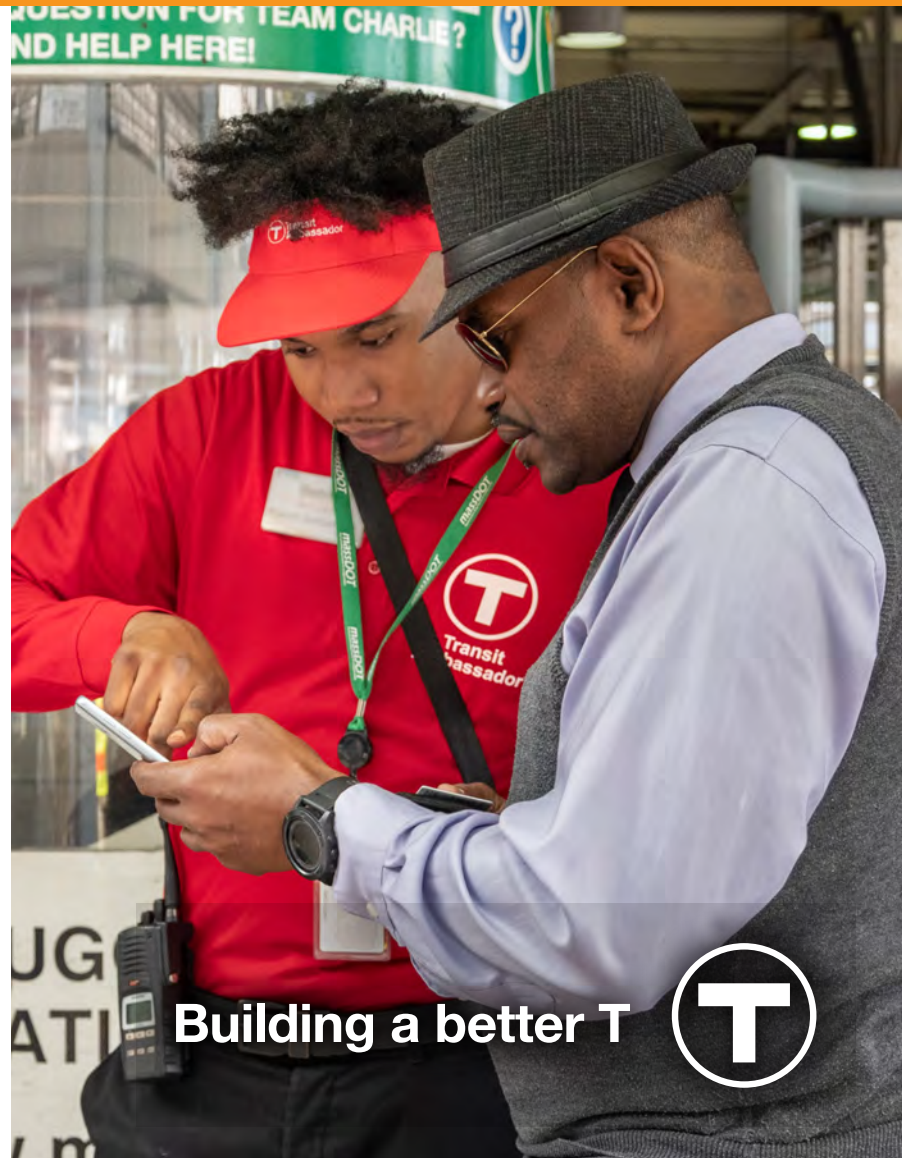
Helping Facilitate Fall ‘22 Opening on GLX Medford Branch

Suspension of Union Square Branch service enables final-phase construction work of the Medford Branch

Green Line work

Suspension of Green Line (Union Square to Government Center) service will enable the MBTA to facilitate the opening of the Medford Branch and perform final-phase construction work.

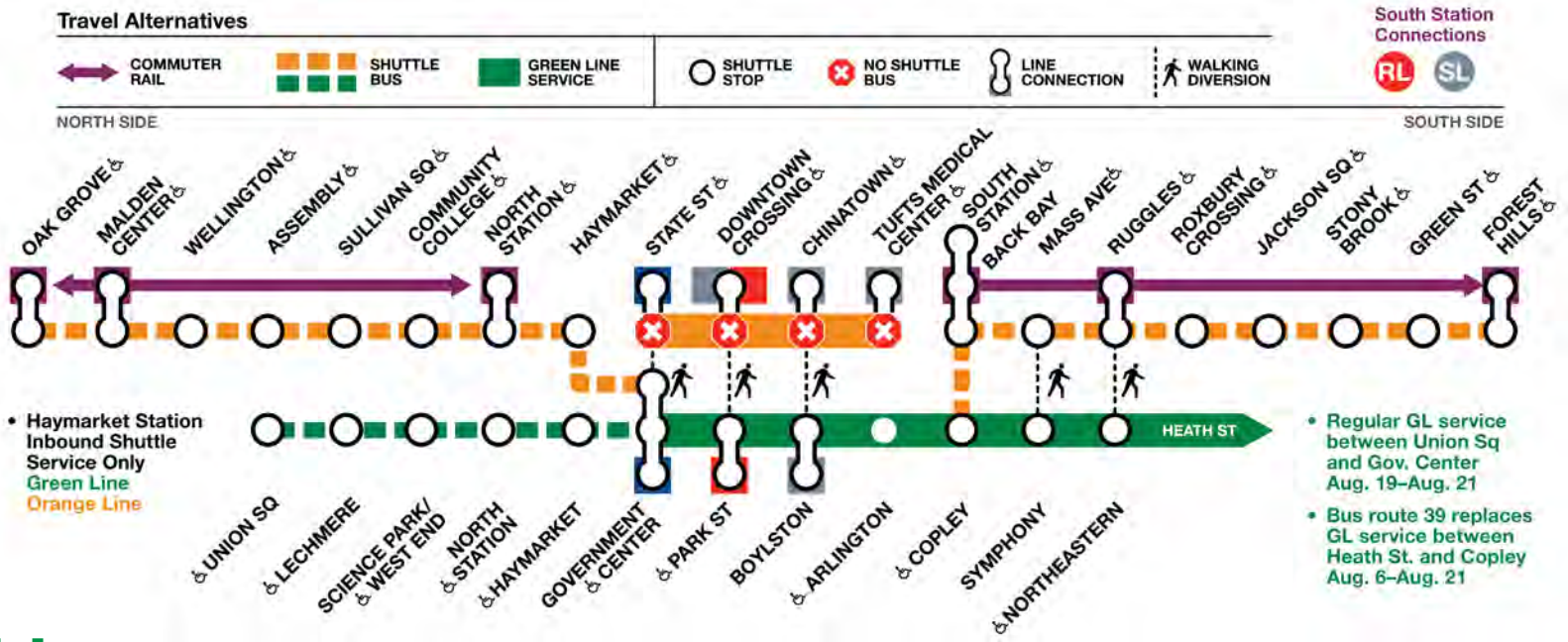
- Adjustments to the overhead wire on the East Cambridge Viaduct that will eliminate a temporary 10 mph speed restriction, allowing trolleys to operate at the system’s designed speed of 25 mph on a permanent basis
- Final testing and integration of track switches, power lines, signal equipment, and digital communications between the Green Line’s currently operating UnionSquare Branch, the soon-to-be-operational Medford Branch, and the MBTA’s Operations Control Center
- Installation of the last remaining sound wall panels along the Union Square Branch and other non-critical work items along the Medford Branch



Planning Ahead

Orange Line (Oak Grove to Forest Hills) – 9pm August 19 to September 18

During the Orange Line shutdown, the MBTA encourages those who can work from home to do so and for the public that needs to travel, to consider alternative travel options.



Green Line (Union Square to Government Center) – August 22 to September 18

During the Green Line shutdown, riders traveling between Government Center and Union Square will board free and accessible shuttle buses, which will make stops at Lechmere station and the Lechmere station bus loop.

Onsite Navigation & Assistance

Onsite Signage will include:

- In-station, directional signage (at all affected stations)
- Highly-visible feather flag banners will mark all shuttle bus boarding areas at each stop throughout the 30-day diversion for riders

Transit Ambassadors will also be available to assist riders:

- We are increasing Transit Ambassador staffing at OL station street level locations for the duration of the closure

MBTA's Trip Planner Tool

- For help with personal travel and identifying the best route from their specific location, riders can access the MBTA's online Trip Planner tool: MBTA.com/trip-planner



Alternative Travel Options for Orange Line Riders (Overview)

Enhanced Commuter Rail Options

- Riders commuting downtown are encouraged to use the Commuter Rail
- Riders can simply show their CharlieCard or CharlieTicket to conductors to ride the Commuter Rail in Zones 1A, 1, and 2 on ALL Commuter Rail lines at no charge.

Subway

- Green Line E Branch

Shuttles (all shuttles are accessible)

- Free shuttle buses between Oak Grove and Haymarket, Government Center
- Free shuttle buses between Forest Hills and Back Bay, Copley
- Accessible vans are also available upon request

The RIDE

- Due to the free shuttle bus service, RIDE trips that begin and end within ¾ mile of the Orange Line will be free for RIDE users during the 30-day shutdown.

Alternative Bus Routes to Orange Line

- Silver Line 4 and Silver Line 5 - including added T bus service to increase frequency and rider capacity
- Route 39 bus, servicing Forest Hills – Back Bay Station
- CT2 bus, servicing Sullivan Square – Ruggles Station
- Route 92 and Route 93, servicing Sullivan Square – Downtown Crossing
- Route 43, servicing Ruggles – Park St.

Bluebikes

- Bicycle sharing system Bluebikes offers bike shares with stations located throughout the Boston metropolitan area
- Note: the City of Boston will offer free 30 Day Bluebikes passes to assist with alternative travel during this time
- To find the nearest bike station, use Bluebikes' "Find a Bike" **System Map Tool:** https://member.bluebikes.com/map/

MBTA's Trip Planner Tool

- For help with personal travel and identifying the best route from their specific location, riders can access the MBTA's online Trip Planner tool: MBTA.com/trip-planner

Alternative Travel Options for Orange Line Riders (by Station)

STATION	Commuter Rail	Shuttle Bus	Shuttle Van	Other
Forest Hillls	✓	✓	✓	**# 39 Bus**
Green Street		✓	✓	**# 39 Bus** (Via Centre St.)
Stony Brook		✓	✓	**# 39 Bus** (Via Huntington Avenue)
Jackson Square		✓	✓	
Roxbury Crossing		✓	✓	
Ruggles	✓	✓	✓	**Green Line E** | **#39 Bus** (Via Huntington Ave.) | **CT2**
Massachusetts Avenue		✓	✓	**Green Line E** (@ Symphony)
Back Bay	✓	✓	✓	**Green Line** (@ Copley) | **#39 Bus**
Tufts Medical Center			✓	**Silver Line 4 & 5** (with added buses)
Chinatown			✓	**Green Line** (@ Bolyston) | **Silver Line 4 & 5** (with added buses)
Downtown Crossing			✓	**Green Line** (@ Park) | **Silver Line 4 & 5** (with added buses)
State			✓	**Blue Line** (Government Center 1 block away)
Haymarket		✓	✓	
North Station	✓	✓	✓	
Community College		✓	✓	
Sullivan Square		✓	✓	**# 92 Bus** | **# 93 Bus** | **CT2**
Assembly		✓	✓	
Wellington		✓	✓	
Malden Center	✓	✓	✓	
Oak Grove	✓	✓	✓	

Alternative Travel Options for Orange Line Riders (Accessibility)

Key information for riders who depend on the accessibility of our service

Shuttle Type

- All shuttles will be accessible, and all are contractually obligated to meet USDOT accessibility standards.
- While some low-floor buses, with ramps at the front of the bus will be in use, the majority will be high-floor coach buses with wheelchair lifts near the rear of the bus.
- Note: **upon request**, accessible vans will be available for riders who prefer them for this reason.

Accessible Vans

- Approx. 20 wheelchair-accessible vans will be on hand to supplement alternative bus service.
- Vans will be combination of ramp-equipped and lift-equipped vehicles,and will be positioned at or nearby each Orange Line station. Again, any rider preferring to be transported via accessible van can request to do so.

Accessibility policies

- MBTA and Yankee employees are required to honor all reasonable requests for assistance, including providing sighted guide to/from shuttles and stations, finding a seat on a vehicle, requesting accessible vans, etc. Service animals are welcome on all shuttle buses and vans during all hours of operation.

On-site Staff Assistance

- **Transit Ambassadors** and other **T personnel** will be located outside each Orange Line station to assist riders.

The RIDE

- The RIDE continues to be available to anyone with a disability that prevents them from taking the fixed route. Due to the free shuttle bus service, RIDE trips that begin and end within ¾ mile of the Orange Line will be free for RIDE users during the 30-day shutdown.
- To schedule The RIDE, call 844-427-7433 (MA Relay 711). To learn more and/or apply for the service, please contact the Mobility Center at 617-337-2727 (MA Relay 711). Eligibility decisions take 1-3 weeks after completing the application, interview, and assessment process.

Questions or need to report a problem?

- To ask questions or report complaints about this diversion, or to request a reasonable accommodation, contact Customer Support Center by calling 617-222-3200 (MA Relay 711) or by submitting an online customer complaint form.
- If you have questions specific to any of the accessibility considerations mentioned in this e-mail, you can also contact the Department of System-Wide Accessibility directly at **swa@mbta.com.**

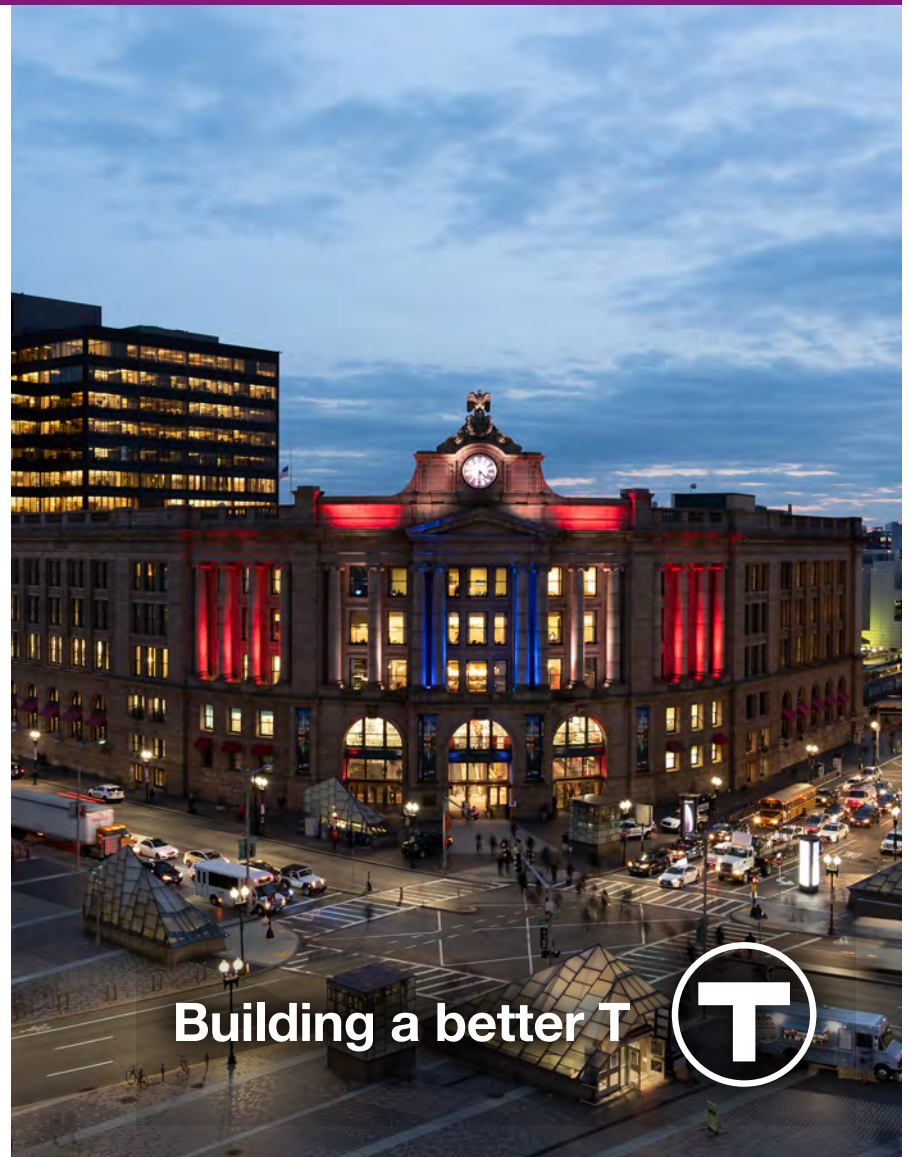
Alternative Travel via Commuter Rail

Orange Line riders commuting downtown are strongly encouraged to use the Commuter Rail as an alternative as the MBTA is making a series of changes in service to accommodate the change in travel patterns.

Riders can simply show their CharlieCard or CharlieTicket to conductors to ride the Commuter Rail in Zones 1A, 1, and 2 on ALL Commuter Rail lines at no charge.



Orange Line Stations with Commuter Rail Connection
Forest Hills
Ruggles
Back Bay
North Station
Malden Center
Oak Grove



Increased Commuter Rail Service

South Side: Needham and Providence Line Commuter Rail trains will stop at Hyde Park, Forest Hills, Ruggles, Back Bay, and South Station.

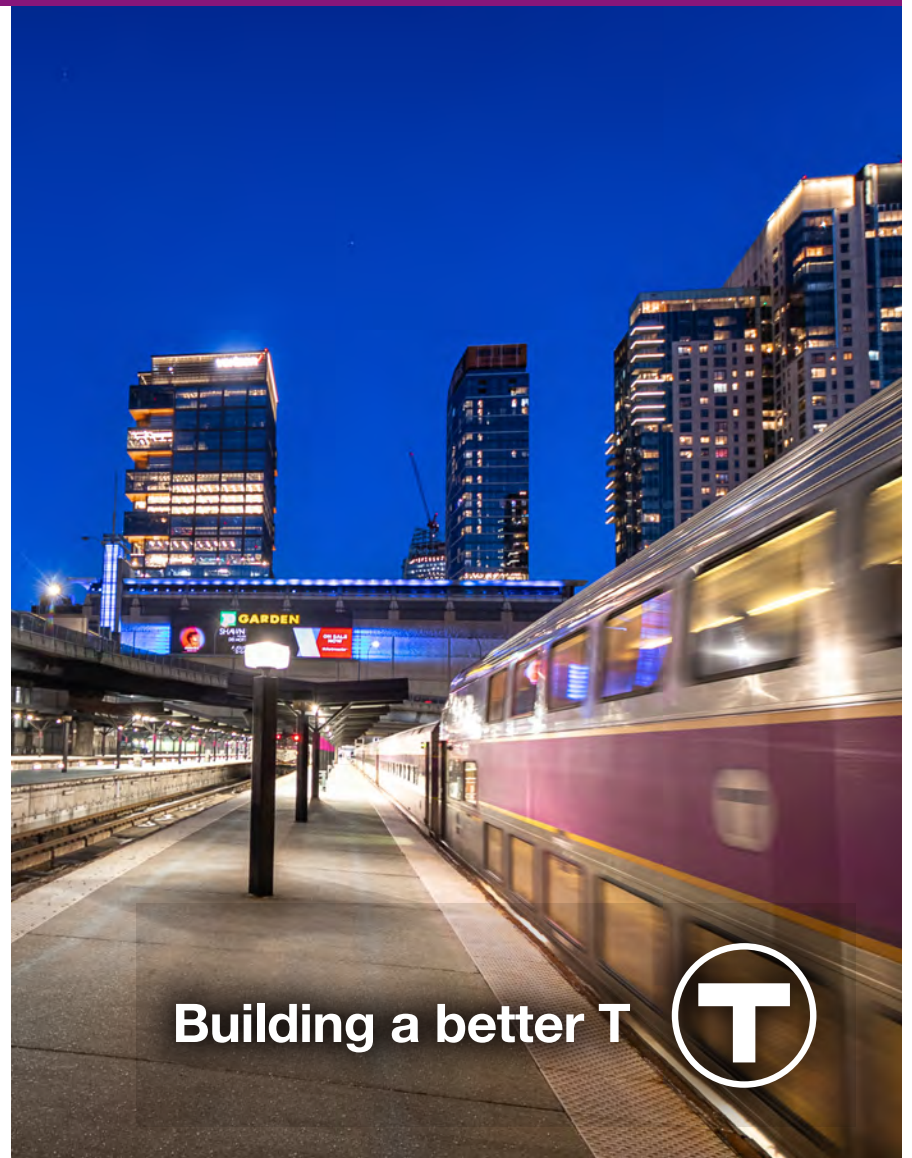
North Side: Haverhill Line Commuter Rail trains will stop at Oak Grove, Malden Center, and North Station.

Estimated Travel Times (Commuter Rail Alternative Service)	
SOUTH SIDE (to South Station)	**NORTH SIDE (to North Station)**
From Hyde Park – 23 Mins	From Oak Grove – 19 mins
From Forest Hills – 16 mins	From Malden Center – 16 mins
From Ruggles – 10 mins	-

See full schedules:

Haverhill Line (Northside)

Hyde Park – Forest Hills – Ruggles – Back Bay – South Station (Southside)



Forest Hills - Ruggles - Back Bay - to South Station Schedule

The MBTA is making a series of changes in service to accommodate the change in travel patterns

Monday to Friday

Inbound to Boston

		AM																																						PM						
	Train No.	800	600	500	860	700	502	802	602	582	862	702	504	804	552	806	742	604	864	584	704	506	808	744	810	606	866	586	706	812	508	608	868	708	814	510	610	870	752	816	612	872	712	818	514	614	754	820
	Bikes Allowed	🚲	🚲	🚲	🚲	🚲	🚲	🚲																											🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲
Zone	Train comes from	PROV	NEED	WOR	STOU	FORG	WOR	WICK	NEED	FRAM	STOU	FOR	WOR	PROV	FRAM	WICK	WAL	NEED	STOU	FRAM	FORG	WOR	PROV	WAL	WICK	NEED	STOU	WOR	FORG	PROV	WOR	NEED	STOU	FORG	WICK	WOR	NEED	STOU	FOX	PROV	NEED	STOU	FORG	PROV	WOR	NEED	FOX	WICK
1A	Forest Hills	-	5:31	-	-	-	-	-	6:34	-	L 6:42	-	-	L 7:16	-	-	-	7:34	L 7:42	-	-	-	-	-	-	8:34	L 8:42	-	-	L 9:14	-	9:31	L 9:42	-	L 10:16	-	10:31	L 10:42	-	-	11:31	L 11:47	-	L 12:17	-	12:31	-	-
1A	Ruggles	L 5:16	L 5:37	-	L 5:44	L 6:08	-	L 6:17	L 6:40	-	L 6:48	L 7:08	-	L 7:22	-	L 7:28	L 7:33	L 7:40	L 7:48	-	L 8:08	-	L 8:17	L 8:33	L 8:33	L 8:40	L 8:48	-	L 9:08	L 9:20	-	L 9:37	L 9:47	L 10:06	L 10:21	-	L 10:37	L 10:47	L 11:06	L 11:22	L 11:37	L 11:52	L 12:06	L 12:22	-	L 12:37	L 1:06	L 1:16
1A	Back Bay	L 5:20	L 5:41	L 5:44	L 5:48	L 6:12	L 6:17	L 6:21	L 6:44	L 6:45	L 6:52	L 7:12	L 7:17	L 7:26	L 7:29	L 7:32	L 7:37	L 7:44	L 7:52	L 7:55	L 8:12	L 8:17	L 8:21	L 8:37	L 8:37	L 8:44	L 8:52	L 8:50	L 9:12	L 9:24	L 9:28	L 9:40	L 9:51	L 10:10	L 10:25	L 10:32	L 10:40	L 10:51	L 11:10	L 11:26	L 11:40	L 11:56	L 12:10	L 12:26	L 12:27	L 12:40	L 1:10	L 1:20
1A	South Station	5:26	5:47	5:50	5:54	6:18	6:23	6:27	6:50	6:51	6:58	7:18	7:23	7:32	7:35	7:38	7:43	7:50	7:58	8:01	8:18	8:23	8:27	8:43	8:43	8:50	8:58	8:56	9:18	9:30	9:34	9:46	9:57	10:16	10:30	10:38	10:45	10:56	11:16	11:31	11:45	12:01	12:16	12:31	12:33	12:45	1:16	1:25

Monday to Friday

Inbound to Boston

		PM																																													
	Train No.	616	874	716	822	518	618	876	756	824	520	878	620	720	826	880	622	758	828	524	624	882	592	724	830	526	626	884	528	832	748	628	886	596	834	530	888	726	836	630	532	892	728	534	838	536	730
	Bikes Allowed	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲
Zone	Train comes from	NEED	STOU	FORG	PROV	WOR	NEED	STOU	FOX	PROV	WOR	STOU	NEED	FORG	WICK	STOU	NEED	FOX	PROV	WOR	NEED	STOU	FRAM	FORG	WICK	WOR	NEED	STOU	WOR	WICK	WAL	NEED	STOU	FRAM	PROV	WOR	STOU	FORG	WICK	NEED	WOR	STOU	FORG	WOR	WICK	WOR	FORG
1A	Forest Hills	1:31	L 1:47	-	-	-	2:36	-	-	L 3:18	-	-	3:36	-	-	-	4:36	-	-	-	5:36	-	-	-	-	-	6:36	-	-	-	-	7:36	-	-	-	-	-	-	-	-	9:16	-	-	-	-	-	-	-
1A	Ruggles	L 1:37	L 1:54	L 2:06	L 2:16	-	L 2:42	L 2:44	L 3:03	L 3:24	-	L 3:34	L 3:42	L 4:09	L 4:16	L 4:39	L 4:42	L 5:09	L 5:17	-	L 5:42	L 5:44	-	L 6:06	L 6:12	-	L 6:42	L 6:48	-	L 7:21	L 7:29	L 7:42	L 7:44	-	L 8:16	-	L 8:34	L 8:59	L 9:19	L 9:22	-	L 10:19	L 10:29	-	L 11:19	-	L 11:59
1A	Back Bay	L 1:40	L 1:58	L 2:10	L 2:20	L 2:27	L 2:45	L 2:48	L 3:07	L 3:28	L 3:27	L 3:38	L 3:45	L 4:13	L 4:20	L 4:43	L 4:45	L 5:13	L 5:21	L 5:22	L 5:45	L 5:48	L 5:52	L 6:10	L 6:16	L 6:22	L 6:45	L 6:52	L 7:12	L 7:25	L 7:33	L 7:45	L 7:48	L 7:57	L 8:20	L 8:22	L 8:38	L 9:03	L 9:23	L 9:25	L 9:52	L 10:23	L 10:33	L 10:52	L 11:23	L 11:47	L 12:03
1A	South Station	1:45	2:03	2:16	2:25	2:33	2:50	2:53	3:13	3:33	3:33	3:43	3:50	4:19	4:26	4:49	4:51	5:19	5:27	5:28	5:51	5:54	5:58	6:16	6:22	6:28	6:50	6:58	7:18	7:30	7:39	7:50	7:53	8:03	8:25	8:28	8:43	9:09	9:28	9:30	9:58	10:28	10:39	10:58	11:28	11:53	12:09

Monday to Friday

Outbound from Boston

		AM																																													
	Train No.	801	501	861	741	503	803	603	743	505	865	805	703	605	867	751	807	607	509	869	809	707	609	871	811	753	611	513	813	711	515	613	873	815	755	615	875	817	715	519	617	877	819	757	521	619
	Bikes Allowed	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲
1A	South Station	4:25	4:45	5:25	5:45	5:55	6:25	6:50	6:45	6:55	7:00	7:25	7:45	7:50	8:00	8:45	8:25	8:50	8:50	8:57	9:25	9:45	9:50	10:00	10:25	10:45	10:50	10:50	11:25	11:45	11:45	11:50	12:05	12:25	12:45	12:50	1:05	1:20	1:45	1:45	1:55	2:05	2:25	2:45	2:50	2:55
1A	Back Bay	4:30	4:51	5:30	5:50	6:01	6:30	6:55	6:50	7:01	7:05	7:30	7:50	7:55	8:05	8:50	8:30	8:55	8:56	9:02	9:30	9:50	9:55	10:05	10:30	10:50	10:55	10:56	11:30	11:50	11:51	11:55	12:10	12:30	12:50	12:55	1:10	1:25	1:50	1:51	2:00	2:10	2:30	2:50	2:56	3:00
1A	Ruggles	4:33	-	5:33	5:53	-	6:33	6:58	6:53	-	7:08	7:33	7:53	7:58	8:08	8:53	8:33	8:58	-	9:05	9:33	9:53	9:58	10:08	10:33	10:53	10:58	-	11:33	11:53	-	11:58	12:13	12:33	12:53	12:58	1:13	1:28	1:53	-	2:03	2:13	2:33	2:53	-	3:03
1A	Forest Hills	-	-	-	-	-	7:03	-	-	-	-	-	-	8:03	-	-	-	9:03	-	-	-	-	10:03	-	-	-	11:03	-	-	-	-	12:03	-	-	-	1:03	1:18	-	-	-	2:08	2:18	2:39	-	-	3:08
	Train continues to	WICK	WOR	STOU	WAL	WOR	WICK	NEED	WAL	WOR	STOU	PROV	FORG	NEED	STOU	FOX	PROV	NEED	WOR	STOU	WICK	FORG	NEED	STOU	PROV	FOX	NEED	WOR	PROV	FORG	WOR	NEED	STOU	WICK	FOX	NEED	STOU	PROV	FORG	WOR	NEED	STOU	WICK	FOX	WOR	NEED

Monday to Friday

Outbound from Boston

		PM																																												
	Train No.	879	821	591	719	823	621	881	523	745	825	593	721	827	623	551	883	525	747	595	829	723	625	885	527	831	529	725	627	887	833	531	629	889	727	835	533	891	631	837	729	535	893	839	537
	Bikes Allowed	🚲	🚲																											🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲
1A	South Station	2:55	3:25	3:35	3:45	3:52	3:55	4:00	4:05	4:10	4:25	4:25	4:45	4:52	4:55	4:55	5:00	5:05	5:20	5:35	5:40	5:45	5:55	6:00	6:05	6:22	6:35	6:45	6:55	7:00	7:25	7:35	7:55	8:00	8:15	8:25	8:35	9:00	9:20	9:40	9:45	10:05	10:20	11:00	11:05
1A	Back Bay	3:00	3:30	3:41	3:50	3:57	4:00	4:05	4:11	4:15	4:30	4:31	4:50	4:57	5:00	5:01	5:05	5:11	5:25	5:41	5:45	5:50	6:00	6:05	6:11	6:27	6:41	6:50	7:00	7:05	7:30	7:41	8:00	8:05	8:20	8:30	8:41	9:05	9:25	9:45	9:50	10:11	10:25	11:05	11:11
1A	Ruggles	3:03	3:33	-	3:53	4:01	4:03	4:08	-	4:18	4:33	-	4:53	5:01	5:03	-	5:08	-	5:29	-	5:49	5:53	6:03	6:08	-	6:30	-	6:53	7:03	7:08	7:33	-	8:03	8:08	8:23	8:33	-	9:08	9:28	9:48	9:53	-	10:28	11:08	-	
1A	Forest Hills	-	3:39	-	-	-	4:08	-	-	-	4:39	-	-	-	5:08	-	5:14	-	-	-	-	-	6:08	6:14	-	-	-	-	7:08	7:14	7:39	-	8:08	8:14	-	8:38	-	9:13	9:33	-	-	-	-	11:13	-		
	Train continues to	STOU	PROV	FRAM	FORG	WICK	NEED	STOU	WOR	NOR	PROV	FRAM	FORG	WICK	NEED	WOR	STOU	WOR	WAL	FRAM	WICK	FORG	NEED	STOU	WOR	PROV	WOR	FORG	NEED	STOU	WICK	WOR	NEED	STOU	FORG	PROV	WOR	STOU	NEED	WICK	FORG	WOR	STOU	PROV	WOR		

Weekend

Inbound to Boston

		AM											PM																																		
	Saturday Train No.	1700	1500	1800	1600	1502	1602	1802	1702	1504	1604	1804	1704	1506	1606	1806	1706	1508	1608	1808	1708	1510	1610	1810	1710	1512	1612	1812	1712	1514	1814	1614	1714	1516	1816	1716	1518
	Sunday Train No.	2700	2500	2800	2600	2502	2602	2802	2702	2504	2604	2804	2704	2506	2606	2806	2706	2508	2608	2808	2708	2510	2610	2810	2710	2512	2612	2812	2712	2514	2814	2614	2714	2516	2816	2716	2518
	Bikes Allowed	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲
Zone	Train comes from	FORG	WOR	PROV	NEED	WOR	NEED	PROV	FORG	WOR	NEED	PROV	FORG	WOR	NEED	PROV	FORG	WOR	NEED	PROV	FORG	WOR	NEED	PROV	FORG	WOR	NEED	PROV	FORG	WOR	PROV	NEED	FORG	WOR	PROV	FORG	WOR
1A	Forest Hills	-	-	L 6:31	6:36	-	8:36	L 8:51	-	-	10:36	L 10:51	-	-	12:36	L 12:51	-	-	2:36	L 2:48	-	-	4:36	-	-	-	6:36	-	-	-	-	8:36	-	-	-	-	-	-
1A	Ruggles	L 6:21	-	L 6:37	L 6:41	-	L 8:41	L 8:57	L 9:06	-	L 10:41	L 10:57	L 11:06	-	L 12:41	L 12:57	L 1:06	-	L 2:41	L 2:54	L 3:06	-	L 4:41	L 4:54	L 5:06	-	L 6:41	L 6:54	L 7:06	-	L 8:34	L 8:41	L 9:06	-	L 10:34	L 11:06	-	
1A	Back Bay	L 6:25	L 6:35	L 6:41	L 6:45	L 8:35	L 8:45	L 9:01	L 9:10	L 10:35	L 10:45	L 11:01	L 11:10	L 12:35	L 12:45	L 1:01	L 1:10	L 2:35	L 2:45	L 2:58	L 3:10	L 4:35	L 4:45	L 4:58	L 5:10	L 6:35	L 6:45	L 6:58	L 7:10	L 8:35	L 8:38	L 8:45	L 9:10	L 10:35	L 10:38	L 11:10	L 12:35
1A	South Station	6:31	6:40	6:46	6:50	8:40	8:50	9:06	9:16	10:40	10:50	11:06	11:16	12:40	12:50	1:06	1:16	2:40	2:50	3:03	3:16	4:40	4:50	5:03	5:16	6:40	6:50	7:03	7:16	8:40	8:43	8:50	9:16	10:40	10:43	11:16	12:40

Weekend

Outbound from Boston

		AM												PM																																		
	Saturday Train No.	1501	1801	1701	1503	1601	1803	1703	1505	1603	1805	1705	1507	1605	1807	1707	1509	1607	1809	1709	1511	1609	1811	1711	1513	1611	1813	1713	1515	1613	1815	1715	1517	1615	1717	1817	1519
	Sunday Train No.	2501	2801	2701	2503	2601	2803	2703	2505	2603	2805	2705	2507	2605	2807	2707	2509	2607	2809	2709	2511	2609	2811	2711	2513	2611	2813	2713	2515	2613	2815	2715	2517	2615	2717	2717	2519
Zone	Bikes Allowed	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲
1A	South Station	5:00	6:00	6:45	7:00	7:15	8:00	8:45	9:00	9:15	10:20	10:45	11:00	11:15	12:20	12:45	1:00	1:15	2:20	2:45	3:00	3:15	4:20	4:45	5:00	5:15	6:00	6:45	7:00	7:15	8:00	8:45	9:00	10:15	10:55	11:00	11:00
1A	Back Bay	5:06	6:05	6:50	7:06	7:20	8:05	8:50	9:06	9:20	10:25	10:50	11:06	11:20	12:25	12:50	1:06	1:20	2:25	2:50	3:06	3:20	4:25	4:50	5:06	5:20	6:05	6:50	7:06	7:20	8:05	8:50	9:06	10:20	11:00	11:05	11:06
1A	Ruggles	-	6:08	6:53	-	7:23	8:08	8:53	-	9:23	10:28	10:53	-	11:23	12:28	12:53	-	1:23	2:28	2:53	-	3:23	4:28	4:53	-	5:23	6:08	6:53	-	7:23	8:08	8:53	-	10:23	11:03	11:08	-
1A	Forest Hills	-	-	-	-	7:28	-	-	-	9:28	-	-	-	11:28	12:34	-	-	1:28	2:34	-	-	3:28	4:34	-	-	5:28	6:14	-	-	7:28	8:14	-	-	10:28	-	-	-
	Train continues to	WOR	PROV	FORG	WOR	NEED	PROV	FORG	WOR	NEED	PROV	FORG	WOR	NEED	PROV	FORG	WOR	NEED	PROV	FORG	WOR	NEED	PROV	FORG	WOR	NEED	PROV	FORG	WOR	NEED	PROV	FORG	WOR	NEED	FORG	PROV	WOR

Times in blue with "L" indicate an early departure: The train may leave ahead of schedule at these stops.

Bikes: Bicycles are allowed on trains with the bicycle symbol shown below the train number.

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Haverhill to North Station Schedule

The MBTA is making a series of changes in service to accommodate the change in travel patterns

Monday to Friday

Inbound to Boston

			AM										PM											
		Train No.	280	200	202	282	204	284	206	286	208	288	210	290	212	292	214	294	216	218	296	298	220	222	224
ZONE	STATION	Bikes Allowed	🚲								🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲
1A	Oak Grove		5:35	6:20	7:05	7:50	-	8:35	9:20	f 10:05	f 10:50	f 11:35	f 12:20	f 1:05	f 1:50	f 2:35	f 3:20	f 4:05	f 4:50	-	f 6:20	f 7:05	f 7:50	f 9:05	f 10:19
1A	Malden Center		L 5:38	L 6:23	L 7:08	L 7:53	-	L 8:38	L 9:23	L 10:08	L 10:53	L 11:38	L 12:23	L 1:08	L 1:53	L 2:38	L 3:23	L 4:08	L 4:53	-	L 6:23	L 7:08	L 7:53	L 9:08	L 10:22
1A	North Station		5:52	6:39	7:24	8:08	8:23	8:53	9:38	10:22	11:07	11:52	12:37	1:22	2:07	2:52	3:37	4:22	5:07	6:17	6:37	7:22	8:07	9:22	10:36

Monday to Friday

Outbound from Boston

			AM									PM											
		Train No.	201	281	283	203	285	205	287	207	289	209	291	211	293	213	215	295	217	297	219	221	223	225
ZONE	STATION	Bikes Allowed	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲							🚲	🚲	🚲
1A	North Station		5:55	6:40	7:25	8:10	8:55	9:40	10:25	11:10	11:55	12:40	1:25	2:10	2:55	3:40	4:25	5:10	5:40	5:55	6:40	7:55	9:35	10:55
1A	Malden Center		f 6:06	f 6:51	f 7:36	f 8:21	f 9:06	f 9:51	f 10:36	f 11:21	f 12:06	f 12:51	f 1:36	f 2:21	f 3:06	3:51	4:36	5:21	-	6:06	6:51	f 8:06	f 9:46	f 11:06
1A	Oak Grove		f 6:08	f 6:53	f 7:38	f 8:23	f 9:08	f 9:53	f 10:38	f 11:23	f 12:08	f 12:53	f 1:38	f 2:23	f 3:08	3:53	4:38	5:23	-	6:08	6:53	f 8:08	f 9:48	f 11:08

Weekend

Inbound to Boston

			AM			PM				
		Saturday Train No.	1200	1202	1204	1206	1208	1210	1212	1214
		Sunday Train No.	2200	2202	2204	2206	2208	2210	2212	2214
ZONE	STATION	Bikes Allowed	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲
1A	Oak Grove		f 6:27	f 9:27	f 11:27	f 1:27	f 3:27	f 5:27	f 7:27	f 10:27
1A	Malden Center		L 6:30	L 9:30	L 11:30	L 1:30	L 3:30	L 5:30	L 7:30	L 10:30
1A	North Station		6:43	9:43	11:43	1:43	3:43	5:43	7:43	10:43

Weekend

Outbound from Boston

			AM				PM			
		Saturday Train No.	1201	1203	1205	1207	1209	1211	1213	1215
		Sunday Train No.	2201	2203	2205	2207	2209	2211	2213	2215
ZONE	STATION	Bikes Allowed	🚲	🚲	🚲	🚲	🚲	🚲	🚲	🚲
1A	North Station		7:00	9:00	11:00	1:00	3:00	5:00	8:00	10:55
1A	Malden Center		f 7:11	f 9:11	f 11:11	f 1:11	f 3:11	f 5:11	f 8:11	f 11:06
1A	Oak Grove		f 7:13	f 9:13	f 11:13	f 1:13	f 3:13	f 5:13	f 8:13	f 11:08

Keep in Mind:

This schedule will be effective from August 19th to September 18th, 2022. Haverhill Line Trains will make additional stops at Oak Grove to accommodate Orange Line passengers impacted by the bus diversion between Forest Hills and Oak Grove.

Regular Spring/Summer schedule will resume on September 19th, 2022.

Times in purple with "f" indicate a flag stop: Passengers must tell the conductor that they wish to leave. Passengers waiting to board must be visible on the platform for the train to stop.

Times in blue with "L" indicate an early departure: The train may leave ahead of schedule at these stops.

Bikes: Bicycles are allowed on trains with the bicycle symbol shown below the train number.

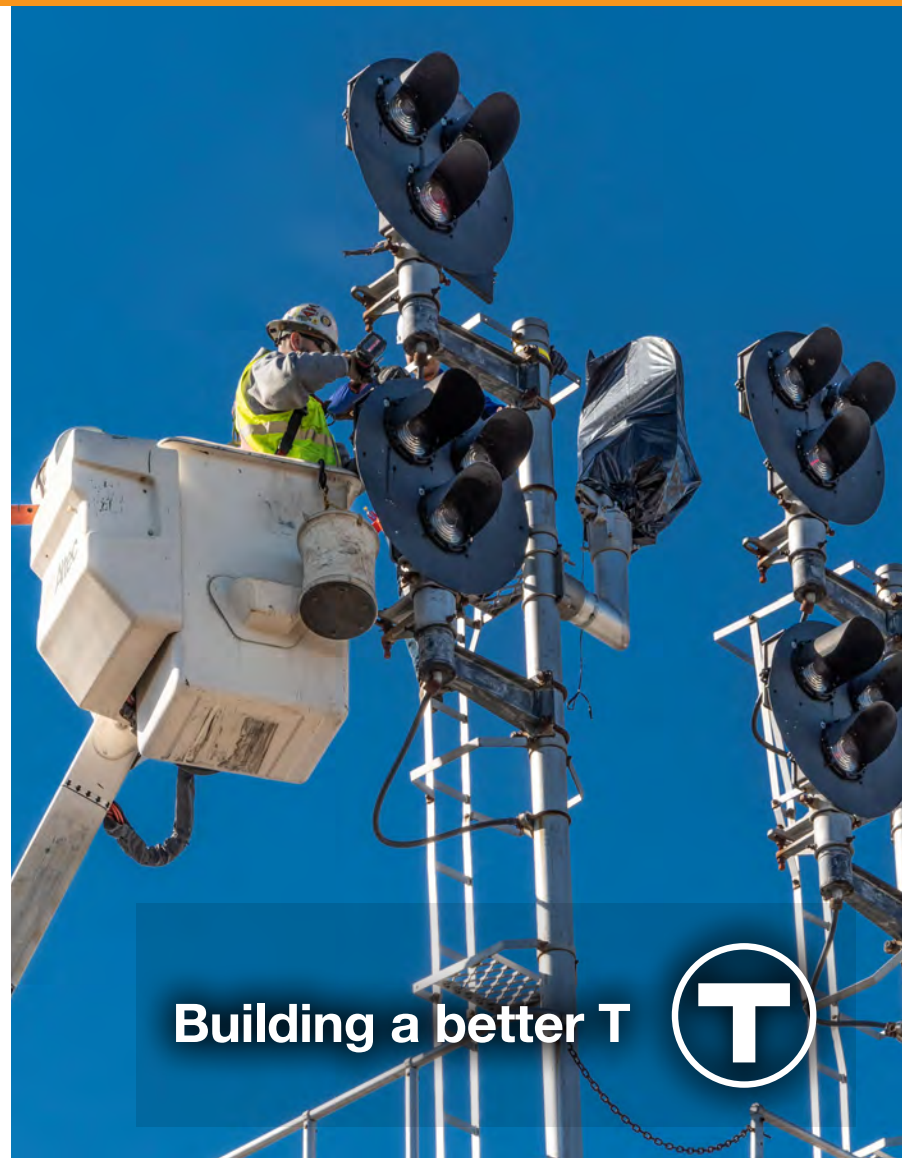
High level platform and bridge plate available. Visit **mbta.com/accessibility** for more information.

Stay Connected

The MBTA is making a series of changes in service to accommodate the change in travel patterns

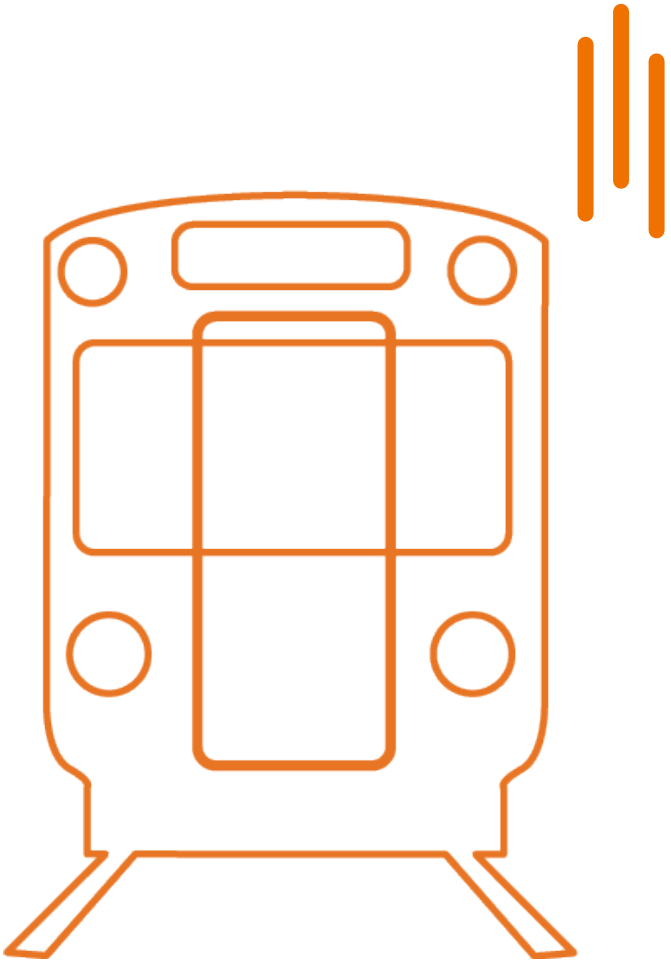
For the latest service updates, news, and more, follow the MBTA on social media.

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Appendix 21
Language Assistance Plan





Language Assistance Plan

PROVIDING ACCESS TO PROGRAMS AND SERVICES FOR PEOPLE WITH LIMITED ENGLISH PROFICIENCY

Massachusetts Bay Transportation Authority

MAY 2023

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Introduction

The purpose of the MBTA's Title VI Program is to ensure that no person shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance. This includes taking reasonable steps to provide meaningful access to programs and services for people with limited English proficiency.

Meaningful access goes beyond offering translation and interpretation services to limited-English-proficient (LEP) riders. It also includes informing customers and potential customers how to request language assistance. This assistance is available beyond simply riding the network, The MBTA encourages public input and engagement on projects, reaches out to understand community impacts, and tries to work with the feedback received to operate effectively.

This Language Assistance Plan (LAP) is monitored on an ongoing basis and is updated every three years to improve its effectiveness in accordance with federal regulations, and according to the changing needs of the region's diverse communities.

The Federal Transit Administration (FTA) defines LEP individuals as:

> ***persons for whom English is not their primary language and who have a limited ability to read, write, speak, or understand English. It includes people who reported to the US Census that they speak English less than very well, not well, or not at all.***

The MBTA uses this definition, decennial US Census data, the US Census American Community Survey (ACS), feedback from project management staff as well as front line operations staff, and additional local information such as information from community-based organizations (CBOs), to update the Language Assistance Plan.

The US Department of Transportation guidance outlines four factors that agencies should apply to the various kinds of contacts they have with the public to assess language needs and decide

what reasonable steps they should take to ensure meaningful access for LEP persons:

1. **LEP Population Size:** The number or proportion of LEP persons likely to be served in our programs. This includes:
   a. How LEP persons interact with our programs, activities, and services;
   b. Identification of LEP communities and assessment of LEP persons from each language group to determine appropriate language services for each group;
   c. The literacy skills of LEP populations in their native languages to determine whether translation of documents will be an effective practice; and
   d. Whether LEP persons are underserved due to language barriers.
2. **Frequency of Contact:** The frequency with which LEP persons come into contact with our programs, activities, and services. This includes, but is not limited to, assessments of:
   a. Pass and ticket purchases
   b. Website usage statistics
   c. Public meeting participation
   d. Customer service interactions
   e. Survey responses
3. **Importance:** The nature and importance of the program, activity, or service provided to people's lives. This is informed through:
   a. Feedback from LEP groups about effective means of providing meaningful information about services, programs, and public outreach
   b. Information obtained from public, facilitated meetings with LEP persons and stakeholders
   c. Analysis of surveys to determine the needs of LEP persons respective to different regions and communities
   d. Analysis of programs, activities, and services to ensure they are providing meaningful access to LEP persons
4. **Resources:** The resources available for LEP outreach and the costs associated with that outreach. This means addressing cost and resource issues by investigating:
   a. Technological advances
   b. Reasonable business practices
   c. The sharing of language assistance materials and services among and between recipients, advocacy groups, LEP populations, and federal agencies

The first two of the four factors are used to identify individuals who need language assistance. The third factor determines what needs to be translated, and the fourth factor identifies translation resources and costs. The MBTA has followed FTA guidance in completing a four-factor analysis to identify and document the number and geographic distribution of potential LEP customers within the MBTA's 176-municipality service area and to evaluate the need for language assistance.

I. Four Factor Analysis of LEP individuals for whom language assistance may be needed

Factor 1: The Number and Proportion of Persons in the Service Population Who Are LEP

Quantitative Analysis

Data from the 2016–2020 ACS five-year Public Use Microdata Sample were used to analyze the number of LEP persons living in the MBTA service area. The US Census tables titled "Language Spoken at Home" and "Ability to Speak English for the Population 5 Years and Over" were used to estimate the number of people with limited English proficiency for Public Use Microdata Areas (PUMAs) within Massachusetts. PUMAs are non-overlapping geographic areas defined by the US Census Bureau that contain no fewer than 100,000 people. To calculate the number of people with limited English proficiency the counts of people who self-reported as speaking English less than "very well" were summed.

The MBTA has two overlapping service areas: the commuter rail service area, which is 176 municipalities that have access to MBTA commuter rail service, and the core service area, which is 59 municipalities that have access to MBTA bus and rapid transit service in addition to commuter rail service. The US Census tables used for this analysis provide data by PUMA, not by municipality. PUMAs can consist of multiple municipalities, so PUMAs were assigned to service areas as follows:

- For the commuter rail service area, all PUMAs with any geographic overlap with the service area were included. Forty-three out of the 52 PUMAs in Massachusetts met this definition.
- For the core service area, PUMAs in which at least 15 percent of the geographic area overlaps with the service area were included. Twenty-four PUMAs met this definition.

This analysis will use the commuter service area in its evaluation of LEP populations since it consists of all municipalities covered in both service areas.

The total LEP population in the PUMAs of the commuter rail service area is 525,949 people, or approximately 9.2 percent of the total population age five or older. The largest single group of people with limited English proficiency is composed of Spanish speakers, who represent 39.4 percent of the LEP population in the commuter rail service area. Approximately 207,242 people in the service area are Spanish speakers with limited English proficiency.

Top Five Languages

Table 1 shows the top five language groups among people with limited English proficiency in the commuter rail service area.

Table 1
Top Five Language Groups in the MBTA Commuter Rail Service Area

Language	2020 LEP Speakers	Percentage of Total Population	Percentage of LEP Population
Spanish	207,242	3.63%	39.4%
Chinese	65,840	1.15%	12.5%
Portuguese	61,146	1.07%	11.6%
Haitian	37,820	0.66%	7.2%
Vietnamese	24,336	0.43%	4.6%

LEP = Limited English Proficiency.
Source: 2016–20 American Community Survey Five-year Public Use Microdata Sample.

Given that the majority of individuals with limited English proficiency in the MBTA service area belong to one of these top five language groups, further details about each of these language groups are provided below. Additional language groups beyond the top five are also identified.

The Central Transportation Planning Staff mapped the ACS data to provide a geographic representation of where concentrations of people with limited English proficiency live and to show the languages spoken at home in those areas. Figures 1-A and 1-B show the concentrations by PUMA, regardless of the language spoken at home, in the commuter rail and core service areas, respectively. The core service area is where the majority of MBTA transit services are located, and most of the areas with the highest concentrations of LEP persons are urban areas.

To identify locations containing large concentrations of people with limited English proficiency who speak the top five languages, PUMAs were selected that had an overall LEP population larger than five percent of the total population and where any of the top five language groups comprised more than 25 percent of the PUMA's LEP population, or more than 1,000 persons. The maps and tables below show that some languages are spoken primarily in and around Boston, while others are more broadly distributed.

Figures 2-A through 6-B show the concentrations of people in the commuter rail and core service areas whose primary language is one of the top five languages and who have limited English proficiency. The figures highlight the PUMAs with the largest concentrations of these populations. Tables 2 through 6 list these PUMAs and provide the number of speakers of these languages with limited English proficiency and their percentage of the total population and LEP population in each PUMA.

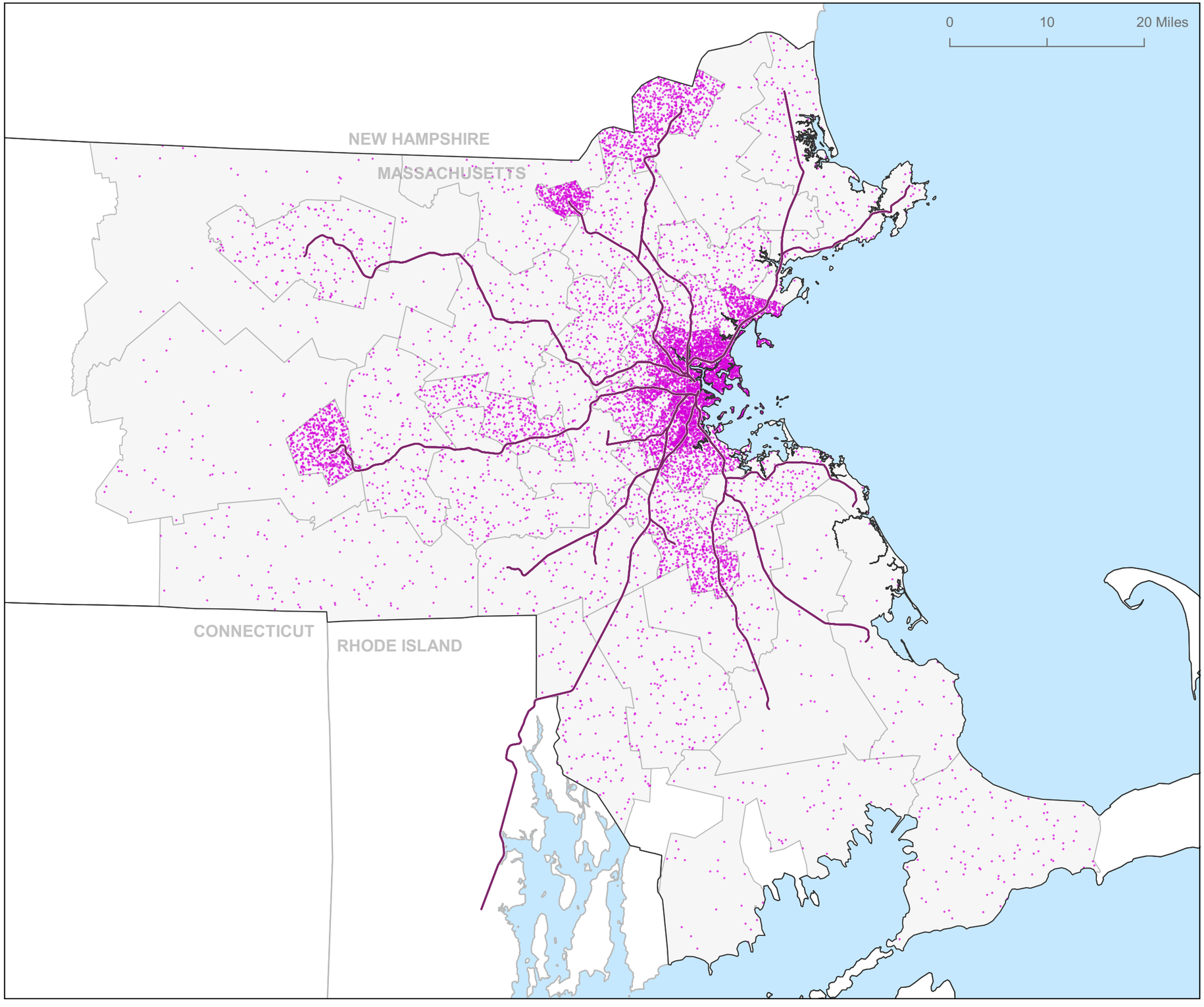


FIGURE 1-A
MBTA Language Assistance Plan

People with Limited English Proficiency in the MBTA Commuter Rail Service Area

All speakers who speak English "less than very well" (1 dot = 50 speakers)

Residents with limited English proficiency are defined for Title VI purposes as persons aged five and older whose ability to speak English was self-identified as less than "very well" in the 2020 American Community Survey five-year Public Use Microdata Samples.

Public Use Microdata Areas (PUMAs) are non-overlapping geographic areas defined by the US Census Bureau that contain no fewer than 100,000 people. PUMAs with any geographic overlap with the MBTA's 176-municipality commuter rail service area contribute to LEP summaries for the extended service area.

Dots are placed randomly within PUMAs to indicate the number of people with limited English proficiency.

The percentage of people with limited English proficiency in the MBTA's commuter rail service area is 9.2 percent.

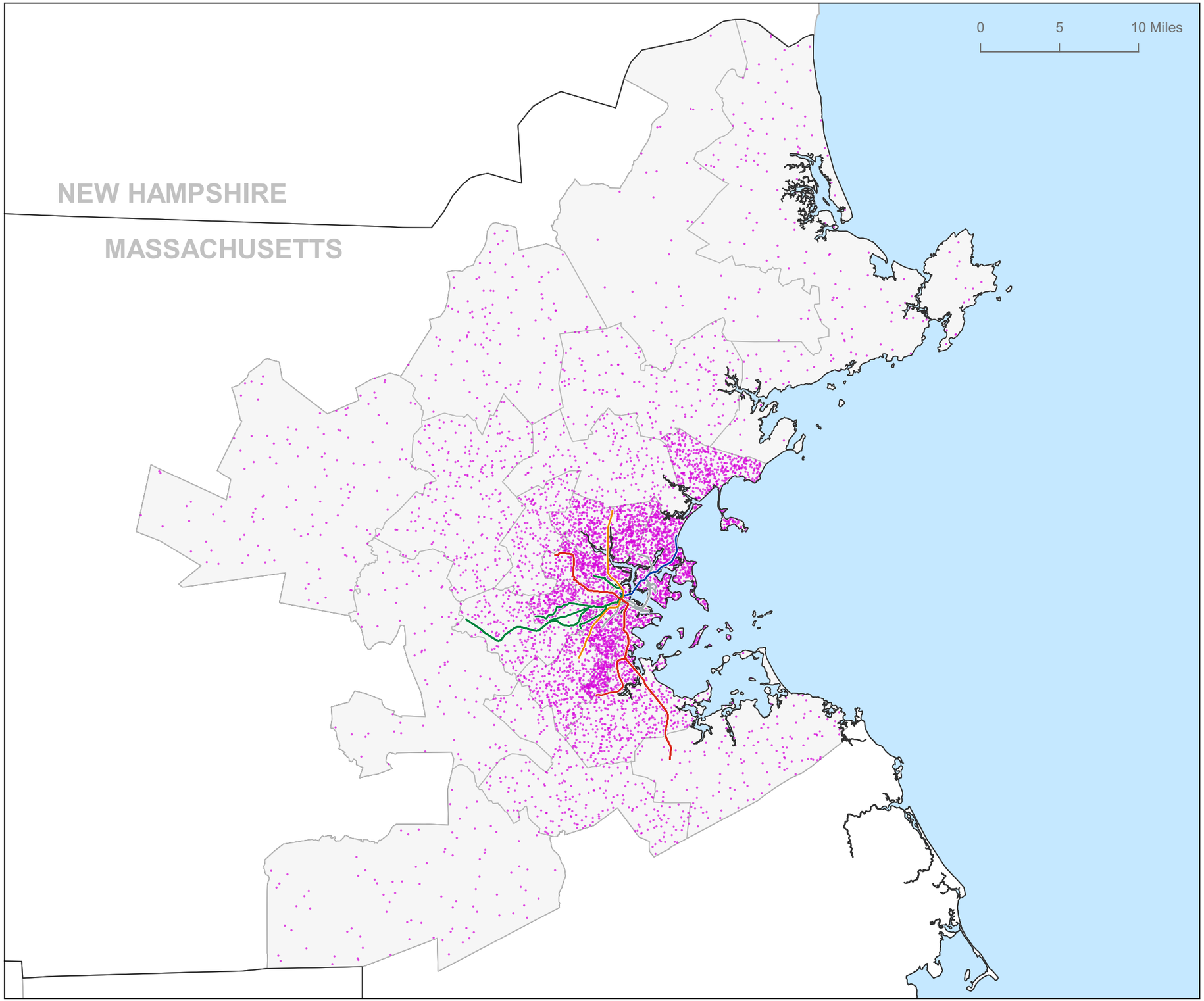


FIGURE 1-B
MBTA Language Assistance Plan

People with Limited English Proficiency in the MBTA Core Service Area

All speakers who speak English "less than very well" (1 dot = 50 speakers)

Residents with limited English proficiency are defined for Title VI purposes as persons aged five and older whose ability to speak English was self-identified as less than "very well" in the 2020 American Community Survey five-year Public Use Microdata Samples.

Public Use Microdata Areas (PUMAs) are non-overlapping geographic areas defined by the US Census Bureau that contain no fewer than 100,000 people. PUMAs where at least 15 percent of the geographic area of the PUMA is within the MBTA's 59-municipality core service area contribute to LEP summaries for the core service area.

Dots are placed randomly within PUMAs to indicate the number of people with limited English proficiency.

The percentage of people with limited English proficiency in the MBTA's extended service area is 10.5 percent.

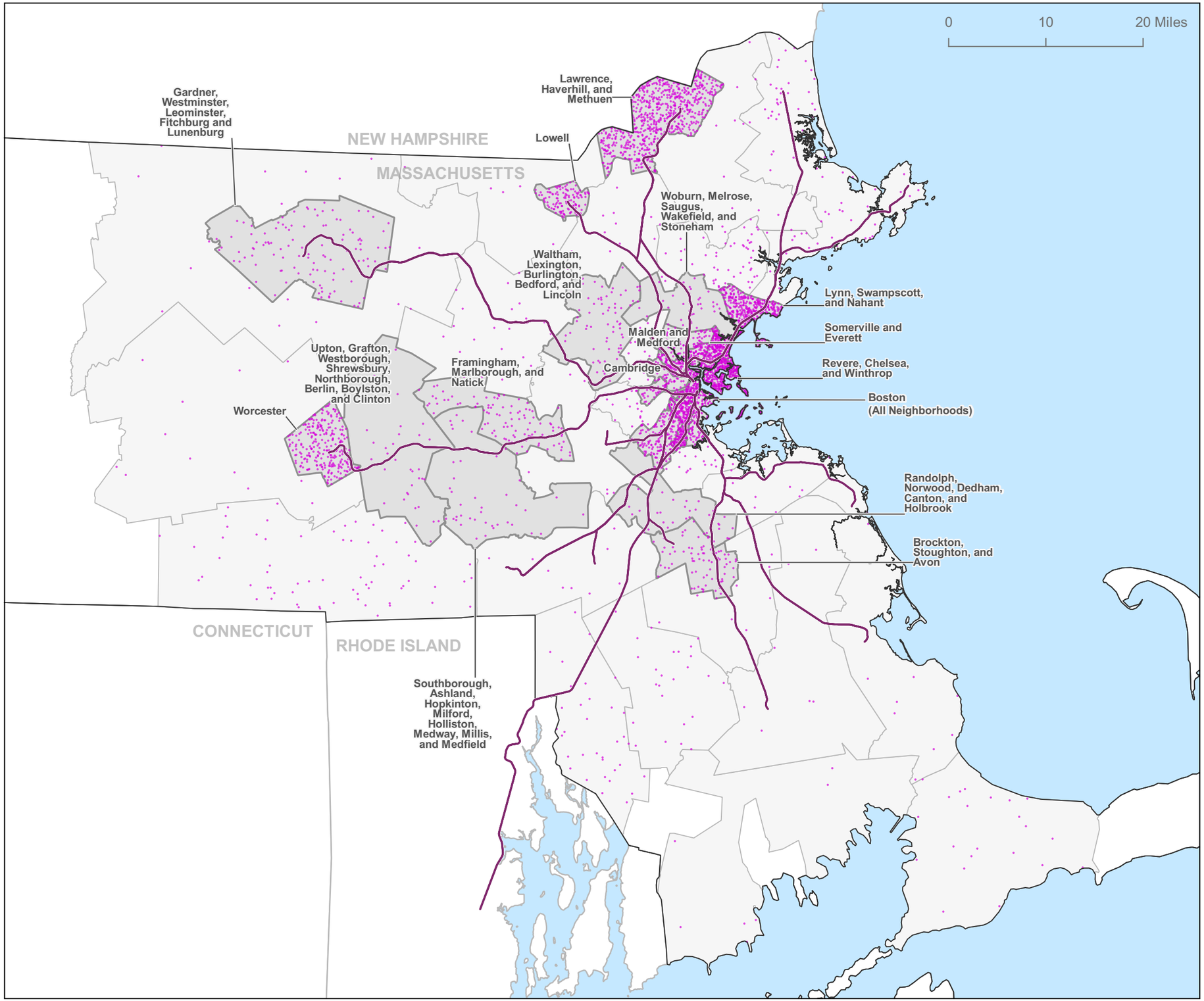


FIGURE 2-A
MBTA Language Assistance Plan

Spanish-speaking People with Limited English Proficiency in the MBTA Commuter Rail Service Area

- Spanish speakers who speak English "less than very well" (1 dot = 50 speakers)
- Significant Spanish-speaking populations

Residents with limited English proficiency are defined for Title VI purposes as persons aged five and older whose ability to speak English was self-identified as less than "very well" in the 2020 American Community Survey five-year Public Use Microdata Samples.

This map shows where the LEP population is more than five percent of the total population of a PUMA and where the Spanish-speaking population is either more than 1,000 individuals or more than 25 percent of the PUMA's LEP population.

Public Use Microdata Areas (PUMAs) are non-overlapping geographic areas defined by the US Census Bureau that contain no fewer than 100,000 people. PUMAs with any geographic overlap with the MBTA's 176-municipality commuter rail service area contribute to LEP summaries for the extended service area.

Dots are placed randomly within PUMAs to indicate the number of people with limited English proficiency.

The percentage of people with limited English proficiency in the MBTA's commuter rail service area is 9.2 percent.

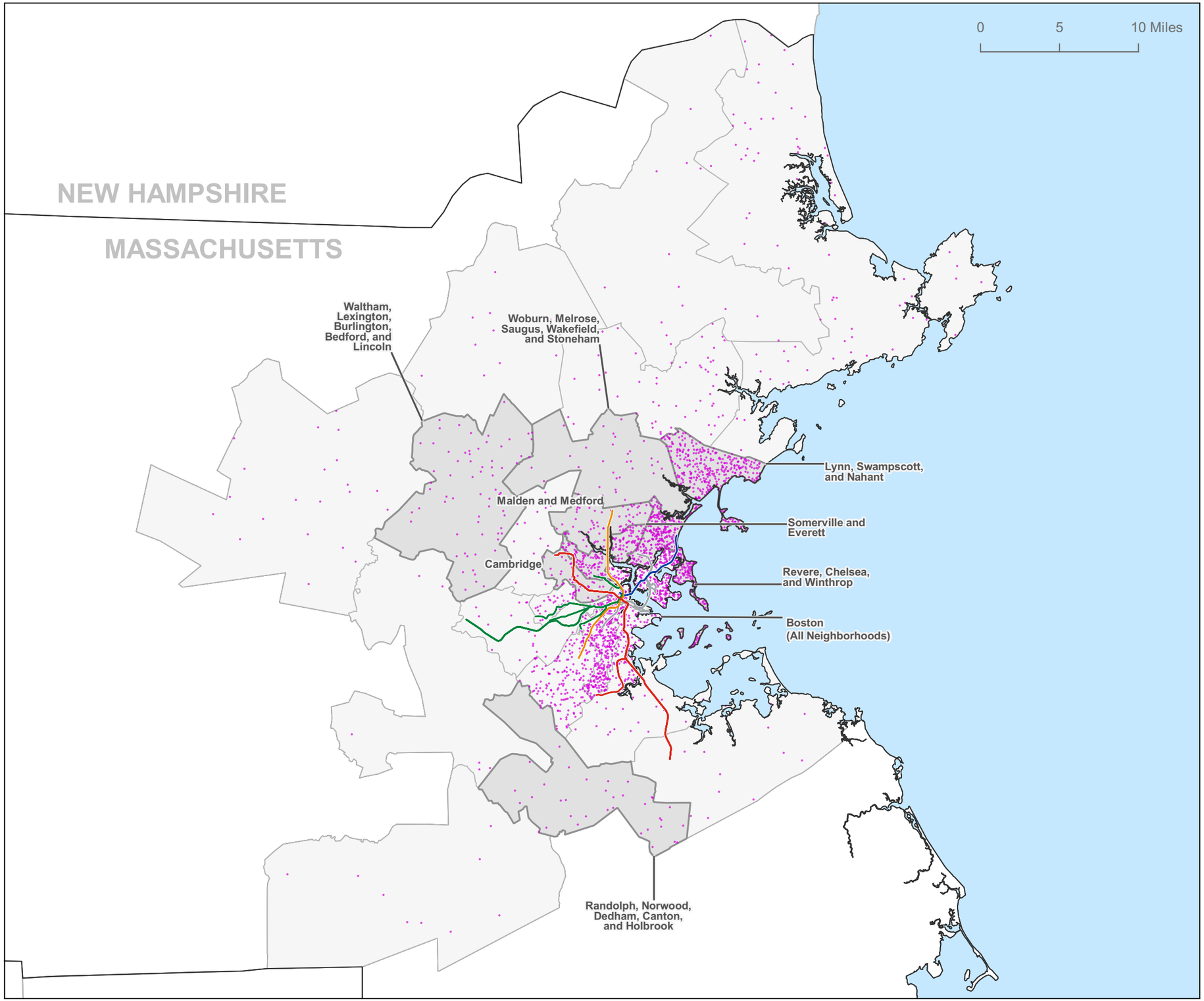


FIGURE 2-B
MBTA Language Assistance Plan

Spanish-speaking People with Limited English Proficiency in the MBTA Core Service Area

Spanish speakers who speak English "less than very well" (1 dot = 50 speakers)

Significant Spanish-speaking populations

Residents with limited English proficiency are defined for Title VI purposes as persons aged five and older whose ability to speak English was self-identified as less than "very well" in the 2020 American Community Survey five-year Public Use Microdata Samples.

This map shows where the LEP population is more than five percent of the total population of a PUMA and where the Spanish-speaking population is either more than 1,000 individuals or more than 25 percent of the PUMA's LEP population.

Public Use Microdata Areas (PUMAs) are non-overlapping geographic areas defined by the US Census Bureau that contain no fewer than 100,000 people. PUMAs where at least 15 percent of the geographic area of the PUMA is within the MBTA's 59-municipality core service area contribute to LEP summaries for the core service area.

Dots are placed randomly within PUMAs to indicate the number of people with limited English proficiency.

The percentage of people with limited English proficiency in the MBTA's extended service area is 10.5 percent.

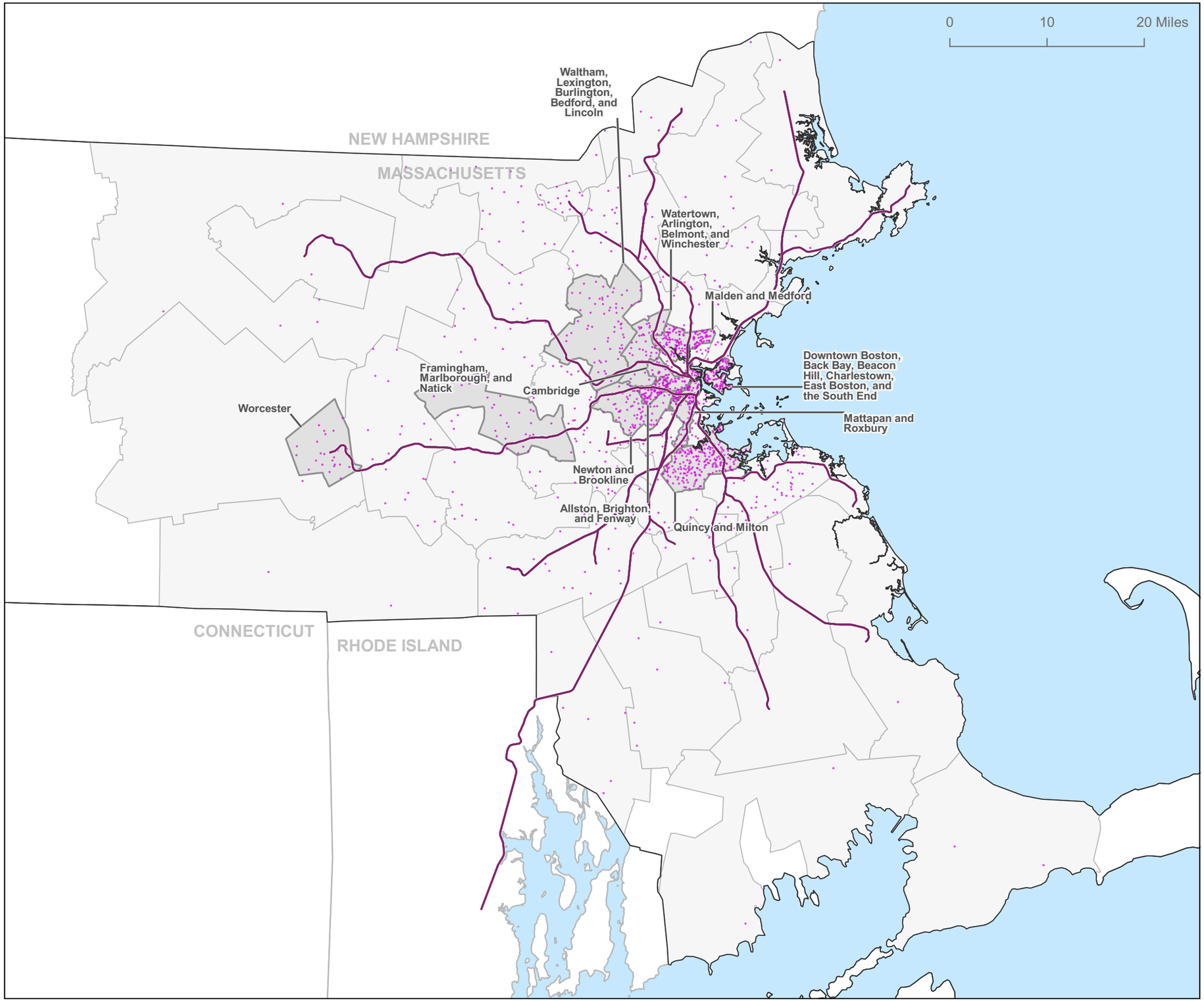


FIGURE 3-A
MBTA Language Assistance Plan

Chinese-speaking People with Limited English Proficiency in the MBTA Commuter Rail Service Area

Chinese speakers who speak English "less than very well" (1 dot = 50 speakers)

Significant Chinese-speaking populations

Residents with limited English proficiency are defined for Title VI purposes as persons aged five and older whose ability to speak English was self-identified as less than "very well" in the 2020 American Community Survey five-year Public Use Microdata Samples.

This map shows where the LEP population is more than five percent of the total population of a PUMA and where the Chinese-speaking population is either more than 1,000 individuals or more than 25 percent of the PUMA's LEP population.

Public Use Microdata Areas (PUMAs) are non-overlapping geographic areas defined by the US Census Bureau that contain no fewer than 100,000 people. PUMAs with any geographic overlap with the MBTA's 176-municipality commuter rail service area contribute to LEP summaries for the extended service area.

Dots are placed randomly within PUMAs to indicate the number of people with limited English proficiency.

The percentage of people with limited English proficiency in the MBTA's commuter rail service area is 9.2 percent.

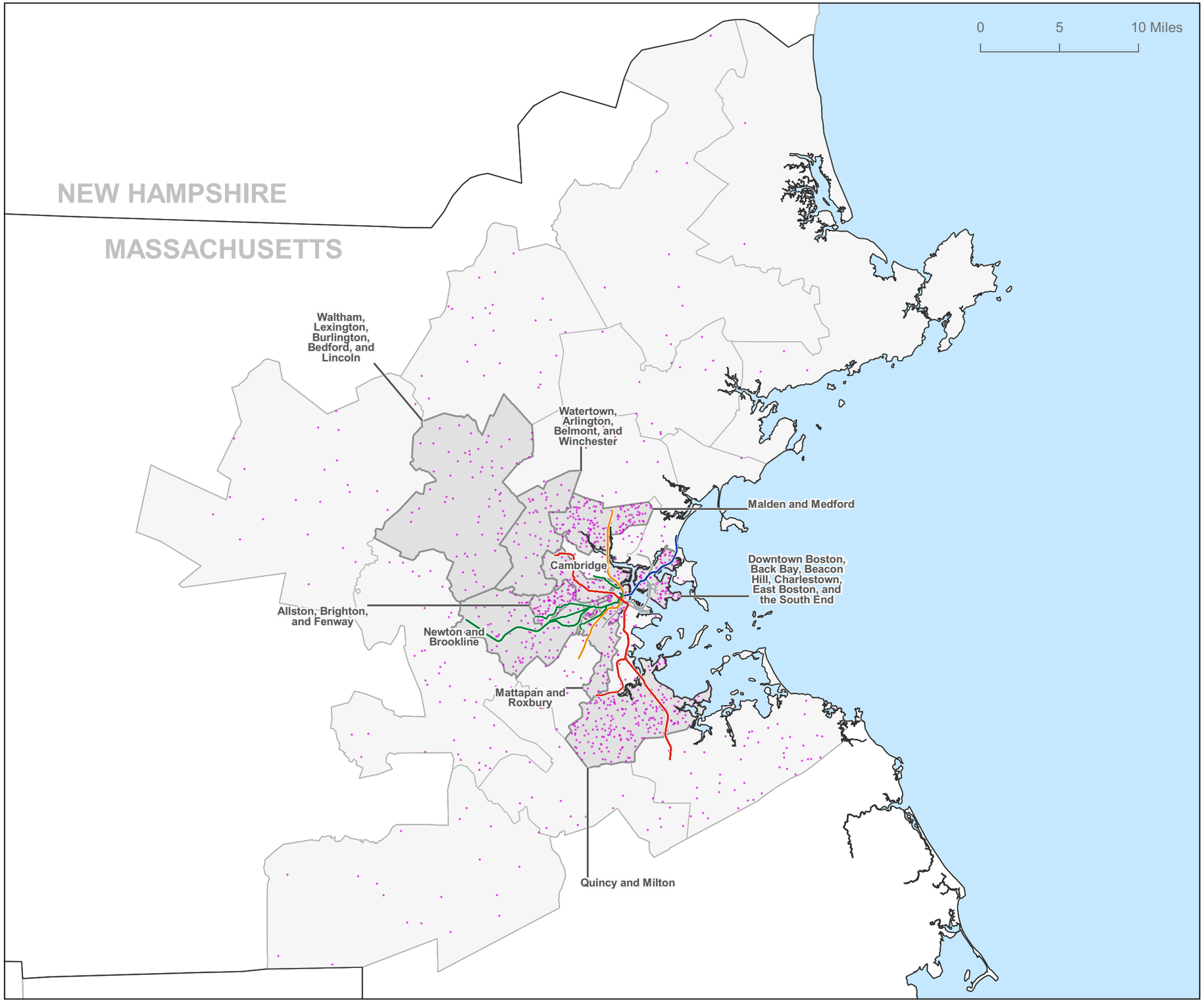


FIGURE 3-B
MBTA Language Assistance Plan

Chinese-speaking People with Limited English Proficiency in the MBTA Core Service Area

Chinese speakers who speak English "less than very well" (1 dot = 50 speakers)

Significant Chinese-speaking populations

Residents with limited English proficiency are defined for Title VI purposes as persons aged five and older whose ability to speak English was self-identified as less than "very well" in the 2020 American Community Survey five-year Public Use Microdata Samples.

This map shows where the LEP population is more than five percent of the total population of a PUMA and where the Chinese-speaking population is either more than 1,000 individuals or more than 25 percent of the PUMA's LEP population.

Public Use Microdata Areas (PUMAs) are non-overlapping geographic areas defined by the US Census Bureau that contain no fewer than 100,000 people. PUMAs where at least 15 percent of the geographic area of the PUMA is within the MBTA's 59-municipality core service area contribute to LEP summaries for the core service area.

Dots are placed randomly within PUMAs to indicate the number of people with limited English proficiency.

The percentage of people with limited English proficiency in the MBTA's extended service area is 10.5 percent.

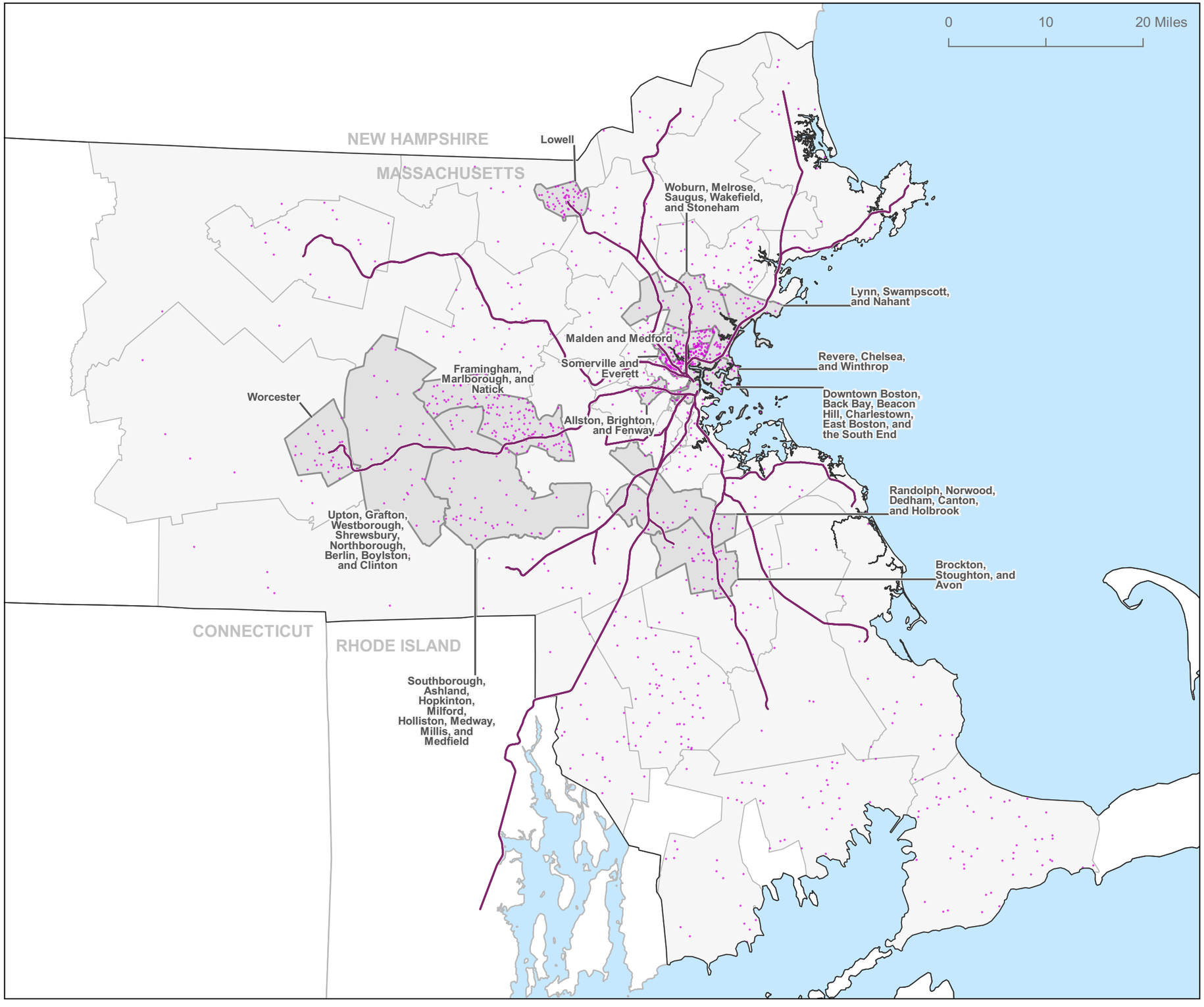


FIGURE 4-A
MBTA Language Assistance Plan

Portuguese-speaking People with Limited English Proficiency in the MBTA Commuter Rail Service Area

Portuguese speakers who speak English "less than very well" (1 dot = 50 speakers)

Significant Portuguese-speaking populations

Residents with limited English proficiency are defined for Title VI purposes as persons aged five and older whose ability to speak English was self-identified as less than "very well" in the 2020 American Community Survey five-year Public Use Microdata Samples.

This map shows where the LEP population is more than five percent of the total population of a PUMA and where the Portuguese-speaking population is either more than 1,000 individuals or more than 25 percent of the PUMA's LEP population.

Public Use Microdata Areas (PUMAs) are non-overlapping geographic areas defined by the US Census Bureau that contain no fewer than 100,000 people. PUMAs with any geographic overlap with the MBTA's 176-municipality commuter rail service area contribute to LEP summaries for the extended service area.

Dots are placed randomly within PUMAs to indicate the number of people with limited English proficiency.

The percentage of people with limited English proficiency in the MBTA's commuter rail service area is 9.2 percent.

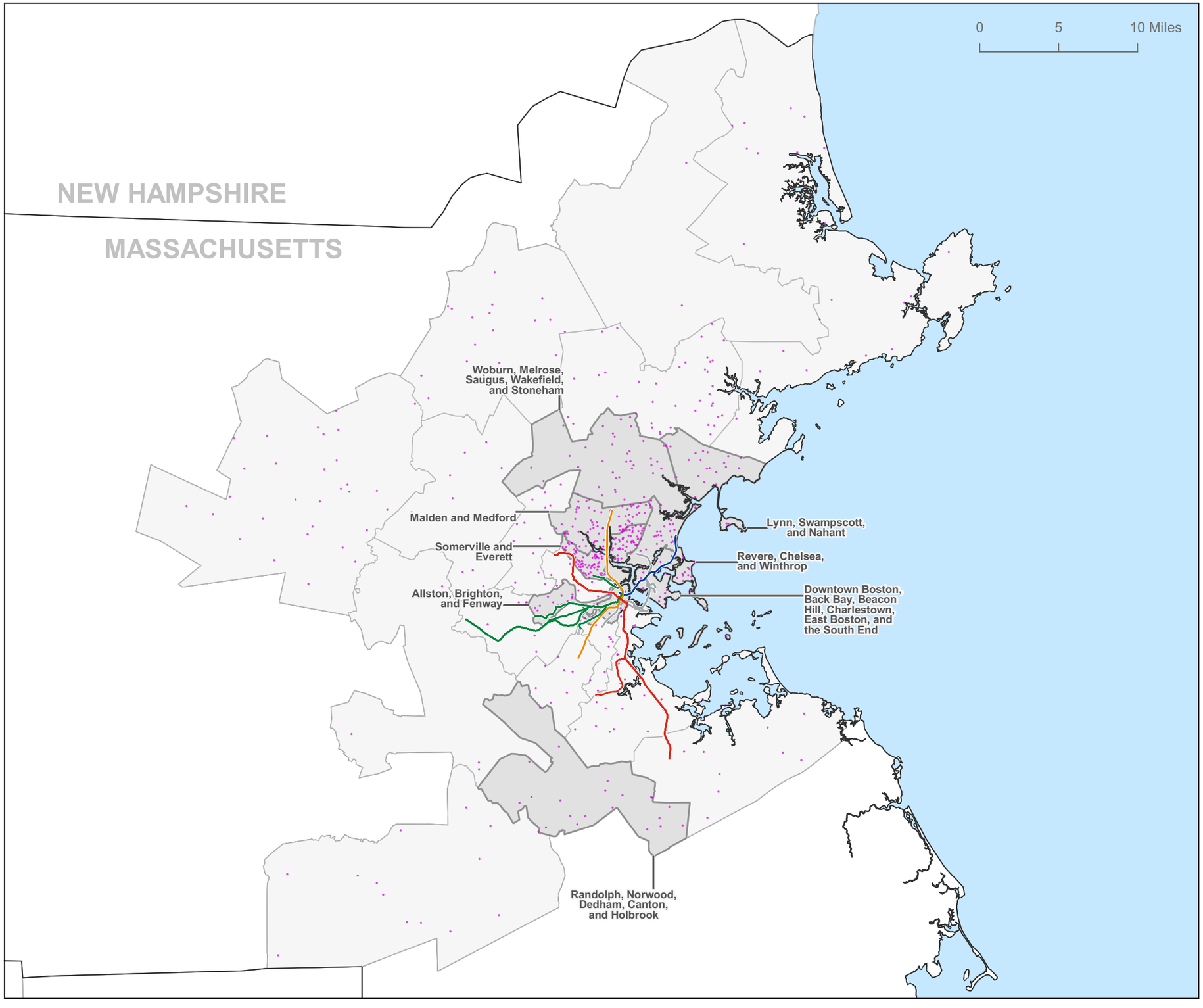


FIGURE 4-B
MBTA Language Assistance Plan

Portuguese-speaking People with Limited English Proficiency in the MBTA Core Service Area

Portuguese speakers who speak English "less than very well" (1 dot = 50 speakers)

Significant Portuguese-speaking populations

Residents with limited English proficiency are defined for Title VI purposes as persons aged five and older whose ability to speak English was self-identified as less than "very well" in the 2020 American Community Survey five-year Public Use Microdata Samples.

This map shows where the LEP population is more than five percent of the total population of a PUMA and where the Portuguese-speaking population is either more than 1,000 individuals or more than 25 percent of the PUMA's LEP population.

Public Use Microdata Areas (PUMAs) are non-overlapping geographic areas defined by the US Census Bureau that contain no fewer than 100,000 people. PUMAs where at least 15 percent of the geographic area of the PUMA is within the MBTA's 59-municipality core service area contribute to LEP summaries for the core service area.

Dots are placed randomly within PUMAs to indicate the number of people with limited English proficiency.

The percentage of people with limited English proficiency in the MBTA's extended service area is 10.5 percent.

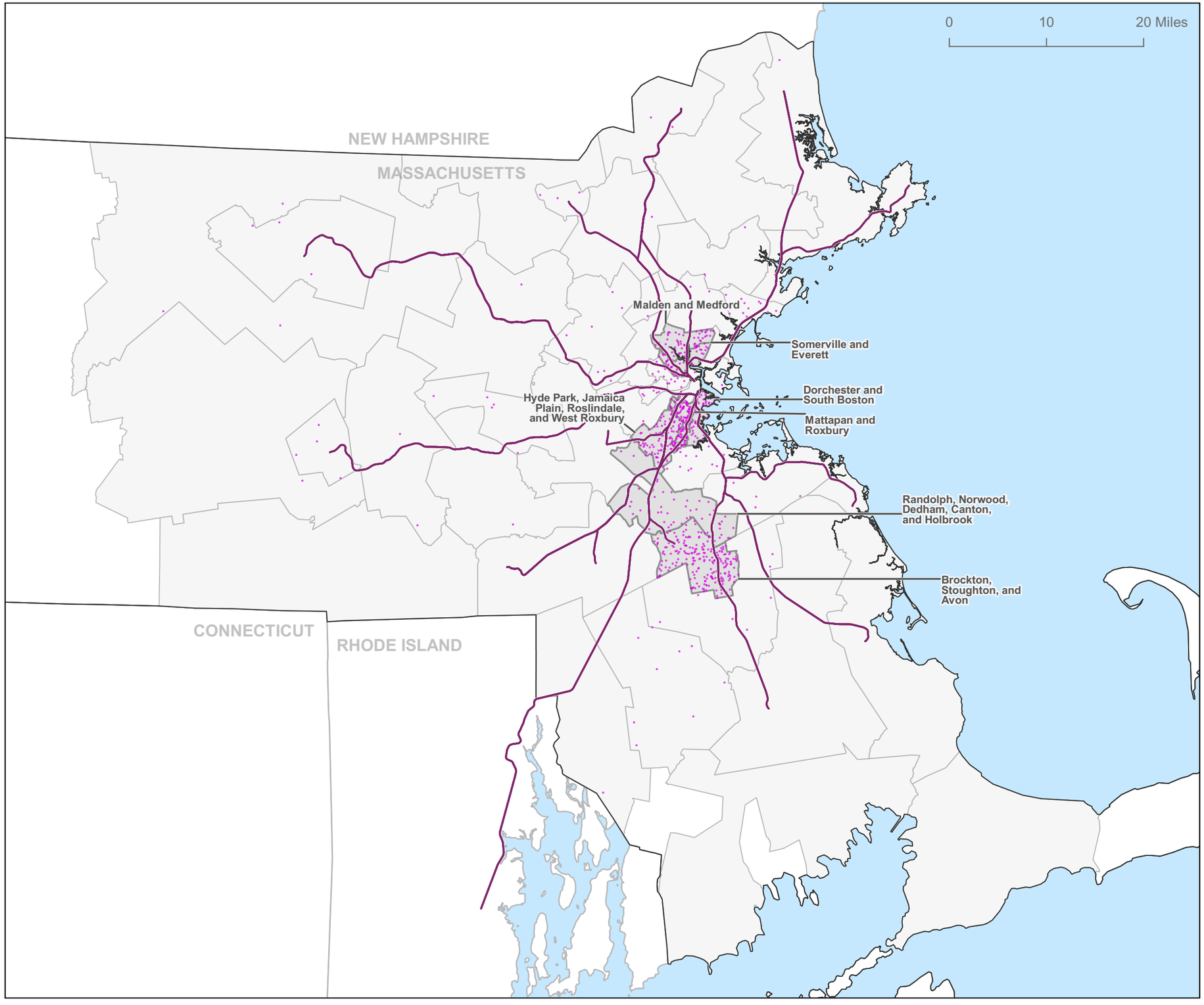


FIGURE 5-A
MBTA Language Assistance Plan

Haitian-speaking People with Limited English Proficiency in the MBTA Commuter Rail Service Area

Haitian speakers who speak English "less than very well" (1 dot = 50 speakers)

Significant Haitian-speaking populations

Residents with limited English proficiency are defined for Title VI purposes as persons aged five and older whose ability to speak English was self-identified as less than "very well" in the 2020 American Community Survey five-year Public Use Microdata Samples.

This map shows where the LEP population is more than five percent of the total population of a PUMA and where the Haitian-speaking population is either more than 1,000 individuals or more than 25 percent of the PUMA's LEP population.

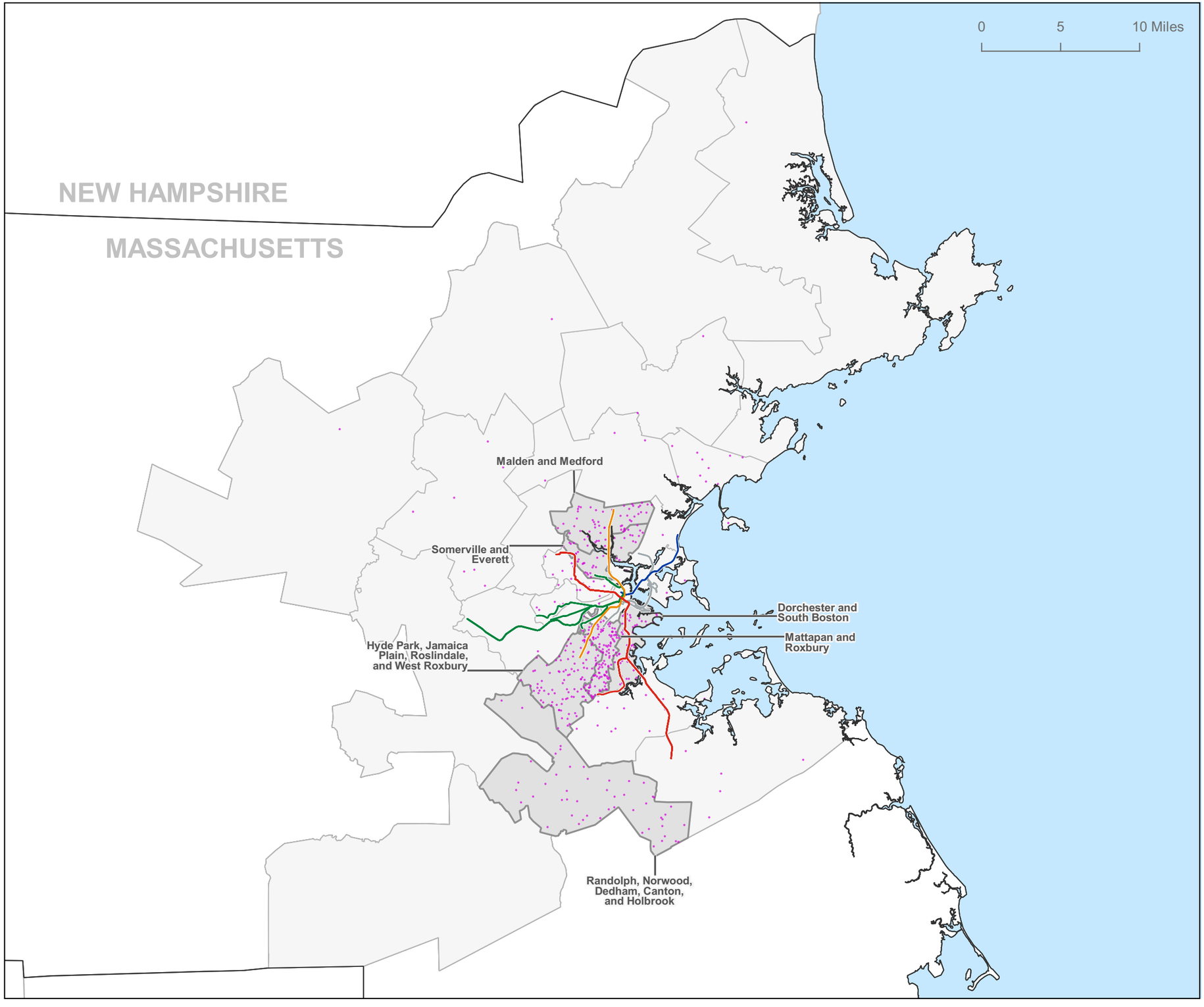
Public Use Microdata Areas (PUMAs) are non-overlapping geographic areas defined by the US Census Bureau that contain no fewer than 100,000 people. PUMAs with any geographic overlap with the MBTA's 176-municipality commuter rail service area contribute to LEP summaries for the extended service area.

Dots are placed randomly within PUMAs to indicate the number of people with limited English proficiency.

The percentage of people with limited English proficiency in the MBTA's commuter rail service area is 9.2 percent.

FIGURE 5-B
MBTA Language Assistance Plan

Haitian-speaking People with Limited English Proficiency in the MBTA Core Service Area



Haitian speakers who speak English "less than very well" (1 dot = 50 speakers)

Significant Haitian-speaking populations

Residents with limited English proficiency are defined for Title VI purposes as persons aged five and older whose ability to speak English was self-identified as less than "very well" in the 2020 American Community Survey five-year Public Use Microdata Samples.

This map shows where the LEP population is more than five percent of the total population of a PUMA and where the Haitian-speaking population is either more than 1,000 individuals or more than 25 percent of the PUMA's LEP population.

Public Use Microdata Areas (PUMAs) are non-overlapping geographic areas defined by the US Census Bureau that contain no fewer than 100,000 people. PUMAs where at least 15 percent of the geographic area of the PUMA is within the MBTA's 59-municipality core service area contribute to LEP summaries for the core service area.

Dots are placed randomly within PUMAs to indicate the number of people with limited English proficiency.

The percentage of people with limited English proficiency in the MBTA's extended service area is 10.5 percent.

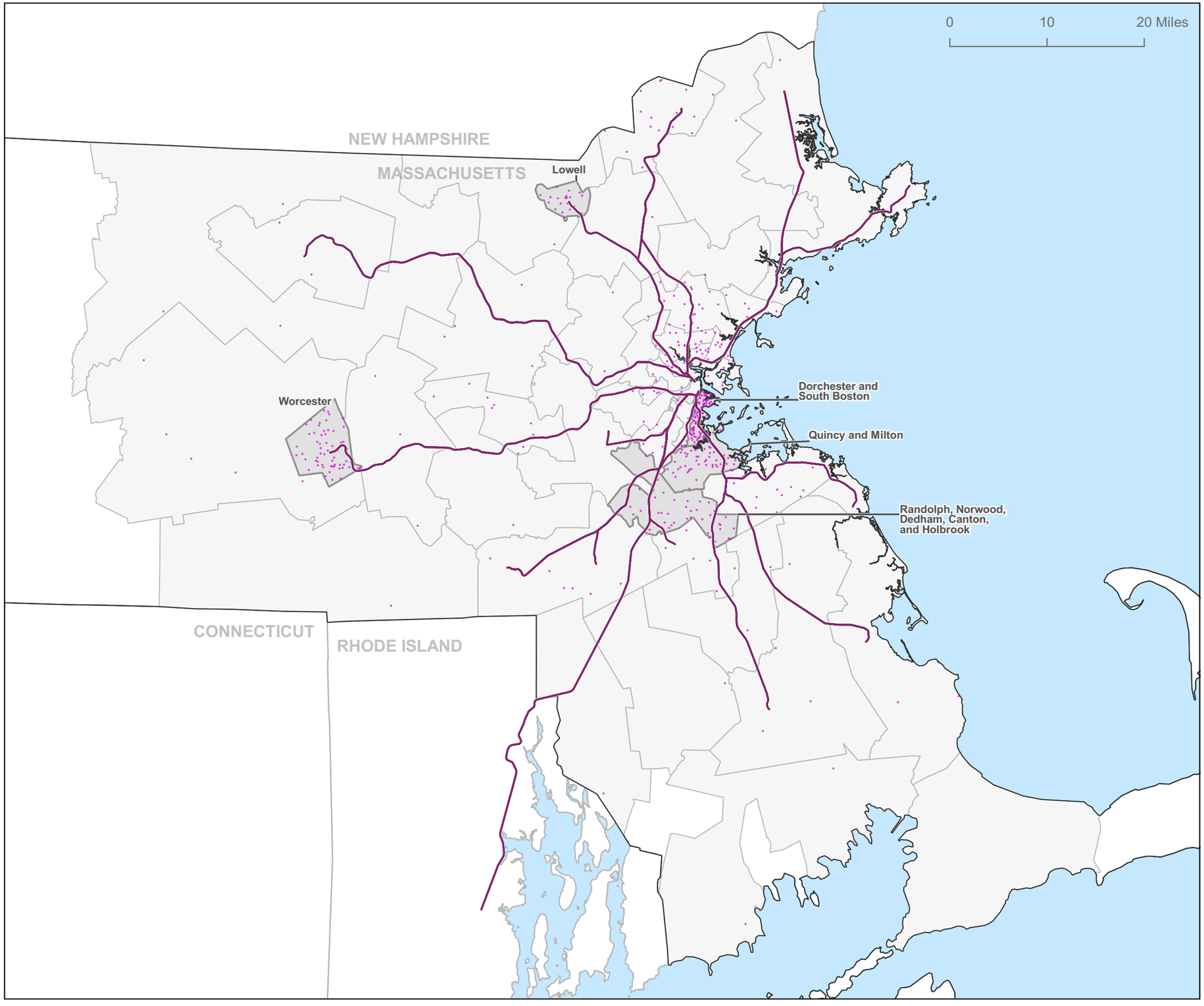


FIGURE 6-A
MBTA Language Assistance Plan

Vietnamese-speaking People with Limited English Proficiency in the MBTA Commuter Rail Service Area

Vietnamese speakers who speak English "less than very well" (1 dot = 50 speakers)

Significant Vietnamese-speaking populations

Residents with limited English proficiency are defined for Title VI purposes as persons aged five and older whose ability to speak English was self-identified as less than "very well" in the 2020 American Community Survey five-year Public Use Microdata Samples.

This map shows where the LEP population is more than five percent of the total population of a PUMA and where the Vietnamese-speaking population is either more than 1,000 individuals or more than 25 percent of the PUMA's LEP population.

Public Use Microdata Areas (PUMAs) are non-overlapping geographic areas defined by the US Census Bureau that contain no fewer than 100,000 people. PUMAs with any geographic overlap with the MBTA's 176-municipality commuter rail service area contribute to LEP summaries for the extended service area.

Dots are placed randomly within PUMAs to indicate the number of people with limited English proficiency.

The percentage of people with limited English proficiency in the MBTA's commuter rail service area is 9.2 percent.

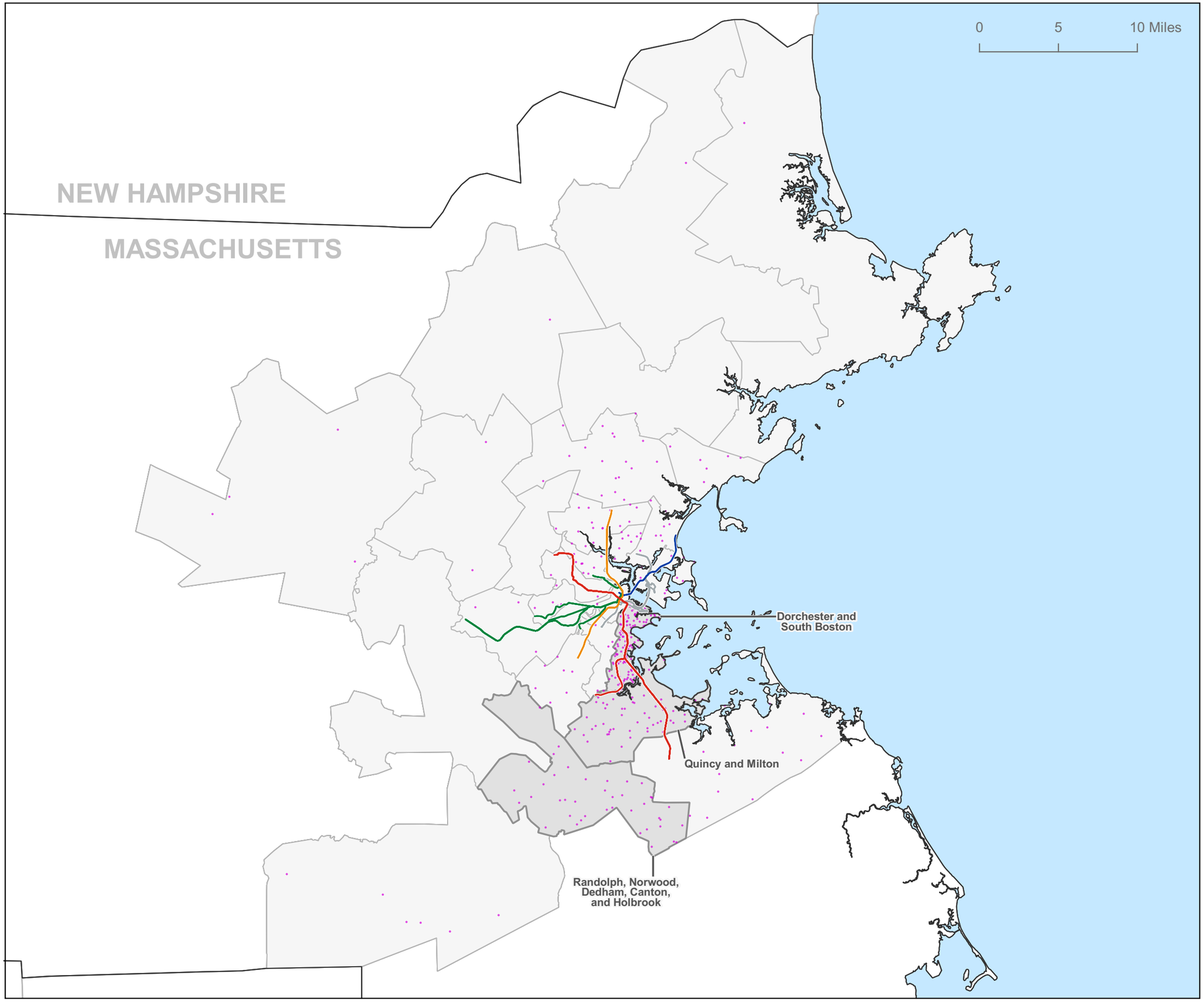


FIGURE 6-B
MBTA Language Assistance Plan

Vietnamese-speaking People with Limited English Proficiency in the MBTA Core Service Area

Vietnamese speakers who speak English "less than very well" (1 dot = 50 speakers)

Significant Vietnamese-speaking populations

Residents with limited English proficiency are defined for Title VI purposes as persons aged five and older whose ability to speak English was self-identified as less than "very well" in the 2020 American Community Survey five-year Public Use Microdata Samples.

This map shows where the LEP population is more than five percent of the total population of a PUMA and where the Vietnamese-speaking population is either more than 1,000 individuals or more than 25 percent of the PUMA's LEP population.

Public Use Microdata Areas (PUMAs) are non-overlapping geographic areas defined by the US Census Bureau that contain no fewer than 100,000 people. PUMAs where at least 15 percent of the geographic area of the PUMA is within the MBTA's 59-municipality core service area contribute to LEP summaries for the core service area.

Dots are placed randomly within PUMAs to indicate the number of people with limited English proficiency.

The percentage of LEP persons in the MBTA's core service area is 10.5 percent.

Spanish

Table 2
Spanish-speaking LEP Populations

PUMA	PUMA Name	Service Area	2020 Spanish-speaking LEP Population	Spanish-speaking LEP Population — Percentage of Total Population	Spanish-speaking LEP Population — Percentage of LEP Population
701	Lawrence, Haverhill, and Methuen	CR	34,399	17.70%	91.3%
3306	Revere, Chelsea, and Winthrop	Core	21,609	19.20%	74.2%
3302	Downtown Boston, Back Bay, Beacon Hill, Charlestown, East Boston, and the South End	Core	19,729	12.10%	61.5%
704	Lynn, Swampscott, and Nahant	Core	17,798	15.80%	70.9%
300	Worcester	CR	13,852	7.50%	47.9%
3304	Mattapan and Roxbury	Core	13,314	9.40%	52.0%
3305	Hyde Park, Jamaica Plain, Roslindale, and West Roxbury	Core	8,551	6.00%	45.8%
507	Somerville and Everett	Core	8,393	6.60%	37.2%
502	Lowell	CR	5,969	5.40%	30.5%
301	Gardner, Westminster, Leominster, Fitchburg, and Lunenburg	CR	5,759	4.70%	67.6%
504	Framingham, Marlborough, and Natick	CR	5,728	3.90%	32.0%
3303	Dorchester and South Boston	Core	5,655	4.60%	29.7%
4000	Brockton, Stoughton, and Avon	CR	4,054	3.10%	17.9%
503	Waltham, Lexington, Burlington, Bedford, and Lincoln	Core	3,452	2.40%	28.8%
508	Malden and Medford	Core	3,270	2.70%	14.7%
3301	Allston, Brighton, and the Fenway	Core	2,808	2.40%	18.7%
2400	Southborough, Ashland, Hopkinton, Milford, Holliston, Medway, Millis, and Medfield	CR	2,093	1.70%	28.2%
506	Cambridge	Core	1,920	1.60%	20.7%
303	Upton, Grafton, Westborough, Shrewsbury, Northborough, Berlin, Boylston, and Clinton	CR	1,819	1.50%	22.9%
2800	Woburn, Melrose, Saugus, Wakefield, and Stoneham	Core	1,742	1.20%	21.0%
3602	Randolph, Norwood, Dedham, Canton, and Holbrook	Core	1,729	1.40%	15.1%

CR = Commuter rail. LEP = Limited English Proficiency. PUMA = Public Use Microdata Area.
Source: 2016–20 American Community Survey Five-year Public Use Microdata Sample.

Chinese

The Chinese-speaking population is the second largest LEP population in the MBTA's service area.[1] The largest numbers of Chinese-speaking people with limited English proficiency are in Boston, Malden, and Quincy.

Table 3
Chinese-speaking LEP Populations

PUMA	PUMA Name	Service Area	2020 Chinese-speaking LEP Population	Chinese-speaking LEP Population — Percentage of Total Population	Chinese-speaking LEP Population — Percentage of LEP Population
3603	Quincy and Milton	Core	11,241	9.2%	54.8%
3302	Downtown Boston, Back Bay, Beacon Hill, Charlestown, East Boston, and the South End	Core	7,674	4.7%	23.9%
508	Malden and Medford	Core	7,387	6.2%	33.1%
3301	Allston, Brighton, and the Fenway	Core	5,547	4.7%	36.9%
3400	Newton and Brookline	Core	3,484	2.4%	32.8%
503	Waltham, Lexington, Burlington, Bedford, and Lincoln	Core	3,159	2.2%	26.4%
506	Cambridge	Core	2,368	2.0%	25.5%
505	Watertown, Arlington, Belmont, and Winchester	Core	2,162	1.7%	25.4%
3304	Mattapan and Roxbury	Core	1,342	1.0%	5.2%
504	Framingham, Marlborough, and Natick	CR	1,334	0.9%	7.5%
300	Worcester	CR	1,250	0.7%	4.3%

CR = Commuter rail. LEP = Limited English Proficiency. PUMA = Public Use Microdata Area.
Source: 2016–20 American Community Survey Five-year Public Use Microdata Sample.

Portuguese

The Portuguese-speaking population is the third largest LEP population in the MBTA's service area. The largest numbers of Portuguese-speaking people with limited English proficiency are in Framingham and Somerville.

Table 4
Portuguese-speaking LEP Populations

PUMA	PUMA Name	Service Area	2020 Portuguese-speaking LEP Population	Portuguese-speaking LEP Population — Percentage of Total Population	Portuguese-speaking LEP Population — Percentage of LEP Population
504	Framingham, Marlborough, and Natick	CR	7,168	4.8%	40.0%
507	Somerville and Everett	Core	6,741	5.3%	29.9%
508	Malden and Medford	Core	3,461	2.9%	15.5%
502	Lowell	CR	2,756	2.5%	14.1%

1 The data on Chinese speakers includes Mandarin, Cantonese, and Min Nan Chinese.

Table 4 *(continued)*
Portuguese-speaking LEP Populations

PUMA	PUMA Name	Service Area	2020 Portuguese-speaking LEP Population	Portuguese-speaking LEP Population — Percentage of Total Population	Portuguese-speaking LEP Population — Percentage of LEP Population
2400	Southborough, Ashland, Hopkinton, Milford, Holliston, Medway, Millis, and Medfield	CR	2,420	1.9%	32.6%
3306	Revere, Chelsea, and Winthrop	Core	2,412	2.1%	8.3%
4000	Brockton, Stoughton, and Avon	CR	2,128	1.6%	9.4%
2800	Woburn, Melrose, Saugus, Wakefield, and Stoneham	Core	1,981	1.3%	23.9%
300	Worcester	CR	1,802	1.0%	6.2%
303	Upton, Grafton, Westborough, Shrewsbury, Northborough, Berlin, Boylston, and Clinton	CR	1,402	1.2%	17.6%
3301	Allston, Brighton, and the Fenway	Core	1,113	0.9%	7.4%
3302	Downtown Boston, Back Bay, Beacon Hill, Charlestown, East Boston, and the South End	Core	1,065	0.7%	3.3%
3602	Randolph, Norwood, Dedham, Canton, and Holbrook	Core	1,065	0.9%	9.3%
704	Lynn, Swampscott, and Nahant	Core	1,027	0.9%	4.1%

CR = Commuter rail. LEP = Limited English Proficiency. PUMA = Public Use Microdata Area.
Source: 2016–20 American Community Survey Five-year Public Use Microdata Sample.

Haitian

The Haitian-speaking population is the fourth-largest LEP population in the MBTA's service area.[2] The largest numbers of Haitian-speaking people with limited English proficiency are in Boston and Brockton.

Table 5
Haitian-speaking LEP Populations

PUMA	PUMA Name	Service Area	2020 Haitian-speaking LEP Population	Haitian-speaking LEP Population — Percentage of Total Population	Haitian-speaking LEP Population — Percentage of LEP Population
4000	Brockton, Stoughton, and Avon	CR	11,141	8.6%	49.1%
3304	Mattapan and Roxbury	Core	6,273	4.4%	24.5%
3305	Hyde Park, Jamaica Plain, Roslindale, and West Roxbury	Core	4,893	3.4%	26.2%
508	Malden and Medford	Core	2,825	2.4%	12.7%
3602	Randolph, Norwood, Dedham, Canton, and Holbrook	Core	2,526	2.0%	22.1%
3303	Dorchester and South Boston	Core	2,481	2.0%	13.0%
507	Somerville and Everett	Core	1,999	1.6%	8.9%

CR = Commuter rail. LEP = Limited English Proficiency. PUMA = Public Use Microdata Area.
Source: 2016–20 American Community Survey Five-year Public Use Microdata Sample.

2 Haitian is also known as Haitian Creole or French Creole.

Vietnamese

The Vietnamese-speaking population is the fifth-largest LEP population in the MBTA's service area. The largest numbers of Vietnamese-speaking people with limited English proficiency are in Boston, Quincy, and Worcester.

Table 6
Vietnamese-speaking LEP Populations

PUMA	PUMA Name	Service Area	2020 Vietnamese-speaking LEP Population	Vietnamese-speaking LEP Population — Percentage of Total Population	Vietnamese-speaking LEP Population — Percentage of LEP Population
3303	Dorchester and South Boston	Core	5,800	4.7%	30.5%
300	Worcester	CR	3,167	1.7%	10.9%
3603	Quincy and Milton	Core	2,650	2.2%	12.9%
3602	Randolph, Norwood, Dedham, Canton, and Holbrook	Core	2,029	1.6%	17.7%
502	Lowell	CR	1,024	0.9%	5.2%

CR = Commuter rail. LEP = Limited English Proficiency. PUMA = Public Use Microdata Area.
Source: 2016–20 American Community Survey Five-year Public Use Microdata Sample.

Smaller Safe Harbor Language Groups

Table 7 shows the PUMAs with at least 1,000 people with limited English proficiency who speak languages other than the five most common languages.

Table 7
LEP Populations Speaking Other Languages

PUMA	PUMA Name	Service Area	2020 LEP Population Speaking Other Languages	LEP Population Speaking Other Languages — Percentage of Total Population	LEP Population Speaking Other Languages — Percentage of LEP Population
3301	Allston, Brighton, and the Fenway	Core	4,944	4.2%	32.9%
505	Watertown, Arlington, Belmont, and Winchester	Core	4,839	3.7%	56.9%
508	Malden and Medford	Core	4,605	3.9%	20.7%
4000	Brockton, Stoughton, and Avon	CR	4,540	3.5%	20.0%
503	Waltham, Lexington, Burlington, Bedford, and Lincoln	Core	4,502	3.1%	37.6%
3603	Quincy and Milton	Core	4,453	3.7%	21.7%
3304	Mattapan and Roxbury	Core	4,072	2.9%	15.9%
3306	Revere, Chelsea, and Winthrop	Core	3,957	3.5%	13.6%
3305	Hyde Park, Jamaica Plain, Roslindale, and West Roxbury	Core	3,866	2.7%	20.7%
507	Somerville and Everett	Core	3,856	3.0%	17.1%
506	Cambridge	Core	3,716	3.2%	40.1%

Table 7 *(continued)*
LEP Populations Speaking Other Languages

PUMA	PUMA Name	Service Area	2020 LEP Population Speaking Other Languages	LEP Population Speaking Other Languages — Percentage of Total Population	LEP Population Speaking Other Languages — Percentage of LEP Population
303	Upton, Grafton, Westborough, Shrewsbury, Northborough, Berlin, Boylston, and Clinton	CR	3,589	3.0%	45.1%
3303	Dorchester and South Boston	Core	3,545	2.9%	18.6%
3602	Randolph, Norwood, Dedham, Canton, and Holbrook	Core	3,193	2.6%	27.9%
3302	Downtown Boston, Back Bay, Beacon Hill, Charlestown, East Boston, and the South End	Core	3,008	1.8%	9.4%
504	Framingham, Marlborough, and Natick	CR	2,959	2.0%	16.5%
2800	Woburn, Melrose, Saugus, Wakefield, and Stoneham	Core	2,736	1.9%	33.0%
2400	Southborough, Ashland, Hopkinton, Milford, Holliston, Medway, Millis, and Medfield	CR	2,122	1.7%	28.6%
701	Lawrence, Haverhill, and Methuen	CR	1,837	0.9%	4.9%
301	Gardner, Westminster, Leominster, Fitchburg, and Lunenburg	CR	1,544	1.3%	18.1%

CR = Commuter rail. LEP = Limited English Proficiency. PUMA = Public Use Microdata Area.
Source: 2016–20 American Community Survey Five-year Public Use Microdata Sample.

Table 8 shows the languages spoken by at least 1,000 people with limited English proficiency other than the five most common languages in the commuter rail service area.

Table 8
Other Languages Spoken by LEP Populations

Language	2020 LEP Speakers	Percentage of Population of Commuter Rail Service Area	Percentage of LEP Population in Commuter Rail Service Area
Russian	13,092	0.23%	2.49%
Arabic	12,023	0.21%	2.29%
Khmer	9,896	0.17%	1.88%
French	7,827	0.14%	1.49%
Italian	6,724	0.12%	1.28%
Kabuverdianu	6,197	0.11%	1.18%
Greek	5,362	0.09%	1.02%
Korean	5,253	0.09%	1.00%
Hindi	4,853	0.08%	0.92%
Albanian	4,736	0.08%	0.90%
Gujarati	4,189	0.07%	0.80%
Japanese	3,206	0.06%	0.61%

Table 8 *(continued)*
Other Languages Spoken by LEP Populations

Language	2020 LEP Speakers	Percentage of Population of Commuter Rail Service Area	Percentage of LEP Population in Commuter Rail Service Area
Polish	3,118	0.05%	0.59%
Nepali	2,349	0.04%	0.45%
Bengali	2,083	0.04%	0.40%
Farsi	2,030	0.04%	0.39%
Akan (including Twi)	1,928	0.03%	0.37%
Punjabi	1,577	0.03%	0.30%
Turkish	1,573	0.03%	0.30%
Telugu	1,502	0.03%	0.29%
Armenian	1,432	0.03%	0.27%
Tamil	1,405	0.02%	0.27%
Thai	1,384	0.02%	0.26%
Tagalog	1,277	0.02%	0.24%
Urdu	1,236	0.02%	0.24%
Amharic	1,205	0.02%	0.23%
Swahili	1,162	0.02%	0.22%
German	1,140	0.02%	0.22%
Lao	1,099	0.02%	0.21%

LEP = Limited English Proficiency.
Source: 2016–20 American Community Survey Five-year Public Use Microdata Sample.

Languages by Line and Mode

Table 9 shows the top five languages spoken by people with limited English proficiency who live within the MBTA service area, and how many people speak each of those languages. The data were calculated for each line and mode by drawing a quarter-mile buffer around all stations, intersecting the buffer with PUMAs, and counting the number of people with limited English proficiency who speak each language in the intersecting PUMAs.

Table 9
Speakers of Languages by Line and Mode

Mode	Route or Line	Spanish	Chinese	Portuguese	Haitian	Vietnamese	Arabic	Russian	Kabu-verdianu	Khmer
Bus	All routes	125,980	57,630	31,775	35,729	17,393	--	--	--	--
RT	Blue Line	41,338	8,084	3,477	--	1,027	1,918	--	--	--
RT	Green Line	55,945	23,898	10,635	14,469	--	--	5,114	--	--
RT	Orange Line	59,727	26,317	15,509	17,471	3,954	--	--	--	--
RT	Red Line and Mattapan Line	54,103	34,431	12,215	12,868	11,149	--	--	--	--
CR	Fairmount	47,249	10,642	--	13,826	6,773	--	--	2,415	--
CR	Fitchburg	42,239	19,549	12,142	3,652	--	2,414	--	--	--
CR	Foxboro	27,918	12,616	3,612	5,192	8,544	--	--	--	--
CR	Franklin	52,591	20,164	5,457	16,714	9,356	--	--	--	--
CR	Greenbush	27,483	22,429	3,738	3,499	9,782	--	--	--	--

Table 9 *(continued)*
Speakers of Languages by Line and Mode

Mode	Route or Line	Spanish	Chinese	Portuguese	Haitian	Vietnamese	Arabic	Russian	Kabu-verdianu	Khmer
CR	Haverhill	64,186	19,990	10,119	4,168	3,135	--	--	--	--
CR	Kingston	28,311	22,699	4,993	3,893	10,075	--	--	--	--
CR	Lowell	33,925	22,083	11,406	4,165	--	--	--	--	6,045
CR	Middleboro-Lakeville	33,573	23,880	7,263	17,558	12,379	--	--	--	--
CR	Needham	50,380	18,314	3,693	14,188	7,032	--	--	--	--
CR	Newburyport-Rockport	73,987	11,936	12,812	3,594	--	3,210	--	--	--
CR	Providence-Stoughton	59,592	21,125	11,668	28,358	9,854	--	--	--	--
CR	Worcester	52,914	24,004	16,109	--	10,471	--	6,453	--	--
Ferry	All routes	47,644	11,482	4,606	3,000	7,605	--	--	--	--

CR = Commuter rail. RT = Rapid transit. LEP = Limited English Proficiency.
Source: 2016–20 American Community Survey Five-year Public Use Microdata Sample.

Table 10 shows the top five languages spoken by people with limited English proficiency who live around each MBTA line and the percentage of those people who speak each of the top five languages. The data were calculated for each line or mode by drawing a quarter-mile buffer around all stations on that line or mode, intersecting the buffer with PUMAs, counting people with limited English proficiency speaking each language in the intersecting PUMAs, and dividing by the total number of those people in the intersecting PUMAs.

Table 10
Languages by Line and Mode, Percentage of LEP Population

Mode	Route or Line	Spanish	Chinese	Portuguese	Haitian	Vietnamese	Arabic	Russian	Kabu-verdianu	Khmer
Bus	All routes	35%	16%	9%	10%	5%	--	--	--	--
RT	Blue Line	68%	13%	6%	--	2%	3%	--	--	--
RT	Green Line	40%	17%	8%	10%	--	--	4%	--	--
RT	Orange Line	39%	17%	10%	11%	3%	--	--	--	--
RT	Red Line and Mattapan Line	34%	22%	8%	8%	7%	--	--	--	--
CR	Fairmount	50%	11%	--	15%	7%	--	--	3%	--
CR	Fitchburg	40%	18%	11%	3%	--	2%	--	--	--
CR	Foxboro	39%	18%	5%	7%	12%	--	--	--	--
CR	Franklin	40%	15%	4%	13%	7%	--	--	--	--
CR	Greenbush	34%	28%	5%	4%	12%	--	--	--	--
CR	Haverhill	52%	16%	8%	3%	3%	--	--	--	--
CR	Kingston	33%	27%	6%	5%	12%	--	--	--	--
CR	Lowell	32%	21%	11%	4%	--	--	--	--	6%
CR	Middleboro-Lakeville	29%	20%	6%	15%	11%	--	--	--	--
CR	Needham	44%	16%	3%	12%	6%	--	--	--	--
CR	Newburyport-Rockport	57%	9%	10%	3%	--	2%	--	--	--
CR	Providence-Stoughton	36%	13%	7%	17%	6%	--	--	--	--
CR	Worcester	37%	17%	11%	--	7%	--	4%	--	--
Ferry	All routes	55%	13%	5%	3%	9%	--	--	--	--

CR = Commuter rail. RT = Rapid transit. LEP = Limited English Proficiency.
Source: 2016–20 American Community Survey Five-year Public Use Microdata Sample.

Qualitative Analysis Techniques

In addition to performing the quantitative analyses discussed above, the MBTA continues to refine its understanding of the locations of LEP populations through qualitative analyses. The MBTA works with CBOs, state legislators, and other government entities or interested parties to identify LEP populations that may need translation services for specific programs or activities. The MBTA conducts outreach to CBOs that work with LEP populations, such as neighborhood community service centers, community development corporations, and ethnic and cultural organizations. These organizations provide information that is not included in the census or state and local resources, such as the existence of pockets of the LEP populations relative to specific projects or public participation efforts, population trends, and what services are most frequently sought by the LEP population. Many of these organizations have resources that include language assistance, neighborhood knowledge, and expertise useful in communications with residents and customers. The MBTA's experience in this area shows that the greatest need for language assistance is in Spanish, but that there is also a need for assistance in a diverse range of primary languages, with an emphasis on the top LEP languages in the MBTA service area, including Chinese, Haitian Creole, Portuguese, and Vietnamese.

Conclusions for Factor 1

The MBTA has used quantitative, qualitative, and spatial analyses to estimate the total number and proportion of LEP people in its service area and to identify areas that have high concentrations of LEP people. The top five language groups—Spanish, Chinese, Portuguese, Haitian Creole, and Vietnamese—represent nearly 76 percent of the total LEP population.

Due to the size of these top LEP language groups, the MBTA can identify geographic areas and transit services where there is a prevalence of these LEP populations, allowing the MBTA to be proactive in disseminating multilingual information in those areas. The MBTA has studied the smaller LEP safe harbor populations that comprise the remaining 24% of language groups. To effectively reach these populations with vital information as well as instructions for making requests for additional language assistance, the MBTA relies on a coordinated strategy and information-sharing to reach these language groups wherever they exist across the system. This approach emphasizes informing members of LEP communities that language services are available and how to make specific requests for them while also disseminating vital information across all safe-harbor languages to strive to achieve a basic level of communication regarding MBTA services, both in regular operation as well as understanding how to handle emergencies, service disruptions, or other such events. When it is possible to identify concentrations among these smaller communities in connection with MBTA projects and initiatives, the MBTA makes reasonable efforts to provide translated materials. In addition to these standardized translation strategies, the MBTA provides notification that documents can be translated into additional languages upon request. For additional information or to request language assistance, the public can visit the MBTA's language assistant services at **www.mbta.com/language-services**

Factor 2: The Frequency of Contact

The MBTA uses the following data and analysis methods to evaluate the frequency with which LEP individuals come into contact with the MBTA:

- Evaluation of Call Center metrics
- Evaluation of customer website browser primary language preferences and visits to the MBTA website
- Analysis of paratransit records

Call Center

The Call Center houses several staff who are fluent in Spanish. The Call Center provides telephone translation service in all languages via a language assistance line.

Since June 2018, the MBTA has contracted with a private vendor to assume operations of the MBTA Call Center. The call center is open Monday – Friday 6:30 AM – 8:00 PM, and weekends 8:00 AM – 4:00 PM.

The MBTA has compiled Call Center data on the use of Language Line for calendar years 2019 - 2022. This data is shown in Table 11. The majority, 98%, of all calls requiring language assistance were in Spanish. There were significantly fewer calls across the smaller safe harbor populations that reside within the MBTA service areas being referred for Language Line interpretation assistance.

Table 11: Call Center Referrals to Language Line

Language	2019	2020	2021	2022	Total
Spanish	6,373	4,935	5,998	4,838	22,144
Albanian	0	2	0	0	2
Amharic	0	0	1	2	3
Arabic	6	3	3	3	15
Cantonese	4	6	9	2	21
Cape Verde Creole	2	1	1	3	7
Chinese	7	9	5	6	27
French	2	4	3	1	10
Greek	4	3	1	1	9
Haitian Creole	6	9	12	24	51
Italian	1	0	0	0	1
Japanese	1	1	0	0	2
Korean	0	3	2	2	7
Mandarin	5	5	15	18	43
Nepali	1	2	0	2	5
Polish	0	0	0	1	1
Portuguese	21	9	24	30	84
Romanian	0	2	0	0	2
Russian	7	16	12	20	55
Somali	3	0	0	0	3
Vietnamese	3	0	2	0	5

Website Analytics Based on Preferred Language and Locale Settings

The MBTA can distinguish between categories of visitors to its website by the language that an individual's Web browser identifies as its primary language.

Data from the MBTA website analytics for calendar year 2022 indicate that most visits (97.47%) to the MBTA's website are on browsers that are set to English as the primary language. The next two most commonly set alternative languages are Spanish (0.86% of all visits) and Chinese (0.52% of all visits), followed by French, German, Japanese, Portuguese, and Korean.

While there were fewer non-English-language requests to the MBTA website in 2020 and 2021

compared to previous years' reports, this was also true for English-language speakers, and for the total number of visitors overall to the website. These numbers increased in 2022, and the decrease in overall usage can likely be attributed to the COVID-19 pandemic.

The number of visitors reveals a greater statistical representation of LEP persons using technology than is shown in the population data from the ACS for the MBTA service area. One reason for this difference is that website data reveal the preferences of people living outside of the MBTA's service area, including visitors to the region who are interested in using public transit.

Within Table 12, below, the MBTA has outlined data on the number of visits to the MBTA website based on preference language on an annualized basis. From this data, there are clear indications over a number of years, from 2020 to 2022 of numerous "hits" that reflect recurring visits to the website by a consistent yet small number of LEP individuals among many visits across the broader LEP community. Across nearly half of the 28 Safe Harbor language groups in the MBTA service area, it is evident that we have annualized website visits far in excess of the population numbers for these groups in the MBTA service area.

There are also a significant number of other visits, of up to 37,546 from 2020-2022, among the "Other Languages" grouping, reflecting a significant number of potentially other smaller language groups. Recurring visits are evident among the other language groups. It is noteworthy that the MBTA has not received complaints about the information obtained from the web among foreign language users.

This data compels the conclusion that among many safe harbor communities, there is both consistent and recurring use of the MBTA website among LEP individuals, whether in Massachusetts or abroad. This reality does not speak to the quality of the translations of the MBTA website, although our research indicates that the efforts by Google and other machine translation service providers to improve translation accuracy have improved significantly in recent years. While this is not a preferred method for communication, the lack of complaints and evidence of use of this resource indicate that customers are in fact using the MBTA website and finding good results, even if the translations are not completely accurate. In conducting this element in the four-factor analysis, ODCR staff reached out to the Director of Customer Communications in the Customer Experience Department and confirmed that the MBTA has not received complaints or inquiry about the quality of the Google translation software.

Table 12
Number and Percentage of Visits by the Browser Setting for Preferred Language during Visits to the MBTA Website

Language	Number of Visits (2020)	Percentage of Visits (2020)	Number of Visits (2021)	Percentage of Visits (2021)	Number of Visits (2022)	Percentage of Visits (2022)
English	17,021,482	97.40%	22,089,166	97.52%	33,977,306	97.47%
Spanish	173,936	1.00%	224,933	0.99%	300,891	0.86%
Chinese	98,146	0.56%	135,784	0.60%	179,580	0.52%
French	34,589	0.20%	40,952	0.18%	96,055	0.28%
German	15,271	0.09%	19,193	0.08%	58,514	0.17%
Japanese	18,663	0.11%	21,734	0.10%	40,969	0.12%
Portuguese	38,008	0.22%	37,755	0.17%	64,907	0.19%
Korean	12,679	0.07%	17,467	0.08%	31,389	0.09%
Italian	8,163	0.05%	10,710	0.05%	24,830	0.07%
Russian	11,863	0.07%	12,490	0.06%	15,416	0.04%
Arabic	3,978	0.02%	2,061	0.01%	2,247	0.01%
Turkish	2,951	0.02%	3,949	0.02%	5,535	0.02%

Table 12 *(continued)*
Number and Percentage of Visits by the Browser Setting for Preferred Language during Visits to the MBTA Website

Language	Number of Visits (2020)	Percentage of Visits (2020)	Number of Visits (2021)	Percentage of Visits (2021)	Number of Visits (2022)	Percentage of Visits (2022)
Swedish	1,843	0.01%	1,921	0.01%	5,264	0.02%
Vietnamese	3,085	0.02%	3,950	0.02%	4,121	0.01%
Polish	2,501	0.01%	2,075	0.01%	4,452	0.01%
Hebrew	937	0.01%	2,022	0.01%	3,929	0.01%
Danish	1,202	0.01%	1,472	0.01%	4,447	0.01%
Greek	1,799	0.01%	1,738	0.01%	2,497	0.01%
Czech	979	0.01%	1,029	0.00%	2,216	0.01%
Finnish	727	0.00%	1,033	0.00%	2,585	0.01%
Thai	1,571	0.01%	3,330	0.01%	1,920	0.01%
Hungarian	752	0.00%	800	0.00%	1,069	0.00%
Norwegian	866	0.00%	1,015	0.00%	2,095	0.01%
Catalan	457	0.00%	533	0.00%	1,716	0.00%
Indonesian	1,095	0.01%	803	0.00%	346	0.00%
Dutch/Flemish	3,252	0.02%	3,603	0.02%	8,365	0.02%
Romanian	784	0.00%	956	0.00%	987	0.00%
Albanian	830	0.00%	426	0.00%	618	0.00%
Other Languages	13,527	0.08%	9,130	0.04%	14,889	0.04%
Total	**17,475,936**	**100.00%**	**22,652,030**	**100.00%**	**34,859,155**	**100.00%**

Paratransit (THE RIDE) Data for LEP Individuals

To ensure language access for LEP populations eligible for paratransit service through The RIDE, the MBTA informs potential customers of the availability of this service in multiple languages. Key publications meant to inform the public about this service, such as the "RIDE Guide," include instructions in multiple languages on how to secure language assistance in seeking The RIDE service.

The RIDE application is available in Spanish, Russian, Haitian Creole, Cape Verdean, Portuguese, Vietnamese, and Chinese. The application is available in both by paper and electronically. If an applicant requests another language not already translated, the Mobility Center offers to either send a translated application in 3-5 business days (the time it takes to translate) or have the customer complete the application during their appointment with an interpreter present.

The RIDE Guide, in its entirety, has been translated into Spanish, Chinese, Portuguese, Vietnamese, Haitian Creole, Russian, French, Italian, Arabic, and Khmer.

Additionally, a one-page brochure disseminated by the Mobility Center maintains translated versions of the brochures in the preferred languages of Spanish, Arabic, Simplified Chinese, French, Haitian Creole, Italian, Khmer, Portuguese, Russian and Vietnamese. LEP individuals interested in The RIDE service are directed to contact The RIDE via phone with real-time interpretation and verbal document translation provided by Language Line.

The MBTA tracks the use of this service. When sampling records over a 12-month period from November 1, 2021 – October 31, 2022, The RIDE received an average of 159 calls from potential LEP customers, per month. Although some of these calls may be repeat calls to finalize eligibility

from the same LEP individuals, the consistent averages provide a sense that LEP individuals are effectively making contact with and transacting business with the RIDE to seek out this important service and are receiving the assistance they need.

For the most part, the languages on these calls align with the top LEP language groups in the MBTA service area. A handful of additional languages have also been requested and the Language Line service was able to provide interpretation in those instances (23 different languages were requested during the 12-month period sampled above).

Minutes	Language	Number of Calls
61	Arabic	8
5	Armenian	1
14	Bengali	2
7	Bosnian	1
29	Cape Verdean Creole	4
16	Chinese	1
18	Chinese Cantonese	3
129	Chinese Mandarin	12
3	Farsi	1
87	French	5
158	French Creole	14
72	Greek	6
1,347	Haitian Creole	111
40	Hindi	3
9	Italian	1
12	Korean	1
9	Polish	2
1,593	Portuguese (Brazil)	163
4	Portuguese Creole	1
863	Russian	88
14,263	Spanish	1,462
10	Urdu	1
179	Vietnamese	15
18,928		**1,906**

In addition, a three-month sample of in person appointments for August, September and October 2022 indicates that 86 interviews were conducted in a requested language other than English.

Language	Aug-22	Sep-22	Oct-22
Spanish	10	30	22
Haitian Creole	3	5	2
Cape Verdean	1	2	0
Cantonese	0	1	0
Russian	1	4	1
Vietnamese	1	1	1
Mandarin	0	0	1
Totals	**16**	**43**	**27**

The MBTA will continue to monitor LEP participation in The Ride service from applications for eligibility through service-related data to demonstrate LEP utilization. Ultimately, current language access efforts and data tracking sources suggest that LEP individuals are effectively reaching out to and communicating with The RIDE.

Conclusions for Factor 2

Though LEP people represent a small percentage of all riders on the MBTA system, significant numbers of Spanish-speaking LEP customers request translation services through MBTA customer information channels, including the website and customer communications call center. The frequency of contact among the other top language groups is significantly lower than for Spanish speaking LEP individuals. For the smaller LEP safe-harbor language groups, there are also indications that a number of individuals, including international visitors and/or residents within the MBTA service area, make recurring contact with the MBTA based on their browser language selection preferences in coming to the MBTA website.

There are also strong indications of recurring reliance on the MBTA website among Massachusetts-based LEP individuals, though this does not directly indicate a high frequency of contact but rather an effective website translation as a mechanism to address these low-volume and infrequent multilingual needs. While the MBTA's web-based information is not translated exactly, the repeated visits and the lack of customer complaints indicate that this resource plays an important role in communicating with MBTA customers, while interpretation and translation services continue to be needed, based on the vital nature of the information to be conveyed. Further, the MBTA has established a strategy for outreach, based on our understanding that can lead to improving communication with all MBTA customers.

Factor 3: The Importance to LEP Persons of the Program, Activity, or Service Provided by the MBTA

The MBTA sought feedback from internal and external stakeholders to identify issues that LEP customers encountered while riding on the MBTA. This showed the services that were deemed the most critical to LEP persons: fares and tickets, routes and schedules, and safety and security. These areas were chosen because language barriers could limit a person's ability to fully benefit from MBTA services or, in some cases, they could place a person in physical danger.

LEP customers experience frustrations similar to those of other MBTA riders, but are at risk of experiencing specific difficulties if they are unable to find assistance from MBTA staff (the data from Factor 2 suggests that MBTA staff do not often have difficulty assisting LEP customers). LEP customers in particular are susceptible to having problems when something unusual happens or when a service is changed to respond to an incident, and only an operator's audio announcement is made. Examples of this are when a bus or train switches to express service or drop-off only, or when a bus replacement service is deployed. LEP customers could potentially become endangered or lost if they are unable to understand emergency announcements.

The last several language assistance plans were focused on implementing language assistance strategies that met these needs. To confirm, and or update, these priorities the MBTA is actively pursuing the potential of hosting a series of staff focus groups from various operating areas within the organization. This approach will offer the opportunity to engage in more detailed conversations with front line staff on their interactions with LEP riders.

Conclusions for Factor 3

It is apparent that the MBTA has an important role to play in the lives of people with limited proficiency in English, many of whom are transit dependent. The top priorities for critical information remain fares and tickets, routes and schedules, and safety and security.

Factor 4: The Resources Available to the MBTA and Costs of Providing a Program, Activity, or Service

The fourth and final factor looks at associated costs and resources available to the MBTA to provide language assistance services. The MBTA has demonstrated its ability to allocate the necessary resources for successfully implementing a multi-year Language Access Plan (LAP). Under this plan, the MBTA has been able to translate and disseminate vital documents across program areas and still allocate sufficient resources to respond to individual language assistance requests beyond the commitments made in the LAP. The MBTA continues to follow a decentralized approach to allocating resource to this task, meaning each department (especially those with public facing responsibilities) has an annual budget line item dedicated to covering the costs of language services. Anecdotally, we have found over the last couple of years that these departments tend to spend on average about $5,000 per year, whereas the civil rights office allocates additional funds to adequately cover these costs, typically in the range of $20,000 - $30,000.

This decentralized approach to budgeting for language assistance allows the MBTA to adapt to new developments, and effectively communicate with LEP customers in the event of an emergency or unexpected scenario. As one example, the MBTA took steps to ensure understanding among LEP customers at the outset of the Orange Line shutdown from August 19 to September 18, 2022, to complete five years' worth of track and signal replacement and maintenance as well as other projects to bring the line into a state of good repair in an unprecedented 30-day timeframe. The purpose was to improve safety, increase reliability, and provide smoother trips for riders.

The MBTA enlisted the services of UMass Translation Center and Global Link to provide written translations for certain materials such as Riders Guides discussed further herein, flyers, one-pagers, and digital and A-frame signage at all stops along the Orange Line. The languages selected for translation of the Rider's Guide and flyers reflected commitments made in the MBTA Language Access Plan to provide vital information in the top languages in the service area as well as responses to specific requests for additional language support. For instance, the Rider's Guide was translated to Nepali as requested by the City of Somerville. The full list of languages provided included Simplified and Traditional Chinese, Portuguese, French, Haitian Creole, Arabic, Vietnamese, Cabo Verdean Creole, Somali, Nepali, and Spanish. The translated flyers are available on www.boston.gov/departments/mayors-office/orange-line-shutdown-boston.

Additionally, the City of Boston provided a multilingual Accessibility Guide for the Orange Line shutdown in English, Spanish, Haitian Creole, Simplified Chinese, and Traditional Chinese. Lastly, using Google Translate, website visitors had the ability to translate the project-specific website into thirteen non-English languages.

Conclusions for Factor 4

The MBTA's current language access strategy for written communications consists of two key prongs – providing basic system-access related information into all safe-harbor languages in the service area and making additional important information available in top LEP languages and/or those languages implicated by local service and/or project-related activities. This strategy to written information sharing is further bolstered by the MBTA's additional investment in real-time telephonic translation and the availability of interpreters to address not only the variety of in-person interactions the LEP customers may have with the MBTA, but to also provide an additional strategy for conveying written information, through interpreters, to LEP customers. There are significant costs associated with this multi-disciplinary approach to language access and there are instances where language access related investments need to be distributed across more than one fiscal year. However, this does not prevent the MBTA from taking reasonable steps to provide meaningful access to LEP individuals, it simply requires a coordinated and sustained effort over time to achieve a maximum level of effectiveness.

Concluding Remarks

The MBTA continues to rely on the qualitative and quantitative analyses that inform the Authority's "four factor analysis." The results of this analysis inform the MBTA's current, multi-faceted, approach to addressing written and verbal multi-lingual communication needs of customers. Key features of this approach include disseminating vital information for accessing MBTA services in all safe-harbor languages as well as providing additional key information in top LEP languages. These written communication strategies are further enhanced by flexible verbal communication resources, such as real-time telephonic interpretation and the provision of interpreters. Informal language strategies, like machine translation, are not relied upon for communicating vital information to the public, but usage statistics indicate that customers are consistently and successfully accessing information through these mechanisms. And lastly, the MBTA continues to train project managers to provide localized language supports to LEP populations impacted by capital projects. The MBTA continues to rely on community partnerships to assist in disseminating vital information to LEP populations and for providing feedback on the effectiveness of various language access strategies. While current funding strategies appear to be sustainable to support this approach to language access, the MBTA will continue to monitor these resources and consider adjustments and/or efficiencies if presented.

The remainder of this document describes:

- Methods and measures the MBTA uses to communicate with customers with limited proficiency in English.
- Training programs for educating staff about the Authority's Title VI obligations, including providing accessible service to customers who are not proficient in English.
- Methods the Authority uses to provide notice to the public of the Authority's Title VI obligations, including providing language assistance to customers who are not proficient in English.
- MBTA's plans for monitoring and updating the Language Assistance Plan.

II. Language Assistance Measures

Language assistance and staffing support available at the MBTA to minimize barriers for transit service access to customers with limited proficiency in English include the following:

- Call Center staff training on use of Language Line real-time telephonic interpretation in 200+ languages, including all safe-harbor languages in the MBTA service area.
- Deployment of privately contracted Transit Ambassadors, some of whom are multilingual, to provide customer assistance at key transit stations. These contractors, and in-house customer service assistants, are equipped with computer tablets that can access the MBTA website, have "I speak" cards that can be used with customers and can contact the Call Center to access Language Line real time assistance for limited English proficient customers.
- A number of Transit Ambassadors speak a second language, including Arabic, Cape Verdean Creole, French, French Creole, German, Haitian Creole, Kriollo, Patois, Polish, Portuguese and Spanish. These contracted employees are strategically deployed, as resources and scheduling permits, so that their location will provide linkages to the LEP communities the MBTA services.
- MBTA Customer Service Attendants, some of whom are multilingual, directly engage with customers, and have access to the Call Center and Language Line in real time.
- Provision of notice for on-demand translation and interpretation service contracts for meetings, and interpretation and translation of written materials on timely requests, depending on the nature of the event or initiative.
- Electronic applications for the MBTA's free/reduced fare program (Senior, Transportation Access Pass, Youth Pass, and Blind Access), are available in Portuguese, Simplified Chinese, Traditional Chinese, and Spanish.
- The paper application for the Transportation Access Pass is available in Spanish, French, Haitian Creole, Portuguese, Simplified Chinese, Traditional Chinese, and Vietnamese.
- MBTA employee training programs for new hires and existing employees, which include modules on Title VI Responsibilities, LEP Policies and Procedures, and Anti-discrimination and Harassment Prevention.
- "Engage" mapping software that allows MBTA staff and outreach coordinators to make instant comparisons of construction projects, transportation services, demographics (including populations of LEP individuals), and the proximity of accessible meeting places. This software is important to assess community impact and to assist with public participation planning.
- Sustained communications and ongoing relationships with a number of community organizations that directly serve LEP populations and have working knowledge of neighborhood conditions and specific needs. These can be important resources in communicating with LEP individuals and engaging minority and low-income groups in MBTA policy-making and planning initiatives.
- Machine-translated content for the MBTA's website via Google Translate and highlighted on the MBTA home page. Google's machine-based translation provides translations for all the "safe harbor" languages in the MBTA's service area. The MBTA recognizes the inaccuracies of machine-based translations and therefore does not rely on it to provide vital information to the public.
- The MBTA has created a dedicated **webpage** for customers to understand how we provide language assistance. This webpage can be accessed directly from the MBTA homepage.

- Blue Line station announcements provide service and courtesy information in Spanish aurally and visually via LED signs.
- Safety and security information, including wayfinding, is provided at stations using universal symbols.
- Automated fare collection kiosks provide fare media and information in Spanish and Chinese, in addition to English.
- Service diversion notices are posted in those languages indicated by a four-factor analysis of local impacts of the change.
- Major-service- and fare-change information that has systemwide impacts is distributed in multiple languages, including Spanish, Portuguese, Chinese, Haitian Creole, and Vietnamese. For major service and fare change information that impacts a segment of the service area, translations are determined based on the presence of LEP populations in the impacted area.
- The MBTA Transit Police has contracted with vendor, Language Line to provide interpreter services. All officers, including Transit Police dispatchers, have 24-hour access to the service, which provides immediate translation service in more than 200 languages.
- Notices of Title VI rights, complaint forms, and complaint procedures are translated in Arabic, Chinese (simplified and traditional), French, Haitian Creole, Italian, Khmer, Portuguese, Russian, Spanish, and Vietnamese, and are available on the MBTA website. Additional languages are available upon request. A condensed version of the Notice is posted across the MBTA service area, subject to current space limitations.
- Interpretation and translated materials are provided at public meetings. Public meetings covering topics with systemwide impacts proactively offer ASL, Chinese, and Spanish interpretation services, and additional languages are available upon request. Contact information for requesting language and accessibility accommodations are part of all public meeting notices.
- MBTA departments have been advised of the responsibility to obtain work orders with private vendors that provide translation services, when needed. MBTA staff is advised to make arrangements for translator services at least five business days prior to an event.
- The MBTA provides outreach, including notice and press information using local media. Publications are selected based on the impacted area and include media publications serving minority and non-English speaking communities.
- Beyond the website as an information access point for LEP persons, a number of mobile transit applications (apps) for accessing and navigating the MBTA transit system have been developed by third-party developers. The MBTA publishes authoritative data that many app developers use and make available to riders in multiple languages. For example, the "TransitApp" software application is available in English, French, German, Italian, Portuguese, and Spanish. The Transit App is used by around 60,000 MBTA riders every weekday and offers passengers real-time updates for buses and trains, step-by-step navigation, trip planning, transit schedules, and city maps. This app has also integrated methods of accessing bike-sharing, carsharing, and ride hailing when public transit is unavailable.
- The Office of Diversity and Civil Rights (ODCR) actively provides technical assistance and guidance to all departments on Title VI issues, including assistance in serving LEP customers.

Strategy to Improve Communication and Support to Smaller Safe Harbor Groups

The MBTA Office of Diversity and Civil Rights worked closely with the Massachusetts Office for Refugees and Immigrants (MORI) to form a new vital document explaining how to utilize MBTA services, including access to language assistance. MORI suggested on a one-page flyer on the basics of how to ride the different services the MBTA provides such as the bus/train transit systems.

The flyer idea was adopted and professionally translated to provide accessibility to the LEP population. The translated flyer is available in all languages that reach the safe harbor threshold of 5% or 1,000 persons, totaling forty-four languages. The flyers are available on the MBTA website, and a distribution strategy for announcing the availability of the flyer to community partners is currently being developed and will be implemented once the strategy is finalized.

MBTA's mission is to provide accessible, non-discriminatory, fair, and safe public transportation. Through this flyer, the MBTA is informing the public, including those who have limited English skills, about basic details of riding the T. Riders are assisted, whomever they may be, to ride the bus and train systems comfortable and effectively, as well as understand their rights. This flyer is the embodiment of the mission and the distribution of the flyer will connect and spread awareness to the public.

MBTA Vital Materials for Translation

Vital materials are defined as information or documents that are critical for accessing MBTA programs, services, and activities, and they are prioritized for translation and distribution. Additional materials considered non-vital may be translated by MBTA departments upon request. The MBTA has prioritized documents and other communications for translation across the following three tiers:

- Tier 1: Safety, Security, and Legal Rights Information
- Tier 2: Vital Customer Access Information
- Tier 3: Information Critical to Customer Involvement and Outreach

The languages selected in each Tier either represent the vast majority of LEP populations in the service area, or are tailored to meet identified language needs. For example, the MBTA Basics flyer was translated into all safe harbor languages because the flyer was designed to provide critical information to all LEP riders. In addition to these standardized translation strategies, the MBTA provides notification that documents can be translated into additional languages upon request. For additional information or to request language assistance, the public can visit the MBTA's language assistant services at www.mbta.com/language-services. ODCR monitors complaints, call center statistics, and website analytics which all suggest this is an effective strategy.

Tier 1—Safety, Security, and Civil Rights:

The documents listed in Tier 1 have been prioritized because the information to be shared is considered critical for customer safety and for exercising one's rights.

This includes:

- Emergency Instructions, Announcements, and Postings
- Title VI Notice to the Public
- Title VI Complaint Procedures
- Title VI Complaint Forms

The Title VI Notice to the Public, Title VI Complaint Procedures, and Title VI Complaint Form have been translated into Spanish, Portuguese, Haitian Creole, French, Simplified and Traditional Chinese, Vietnamese, Russian, Arabic, Italian, and Khmer.

In the event of an emergency, including unplanned disruptions, instructions (both audio and physical postings) are translated based on the LEP populations impacted by the emergency. An analysis of LEP population data by line and mode has been performed and is available for reference.

Tier 2—Information Critical to Access:

Tier 2 includes materials that are critical to support customer access to the MBTA's transit system. These documents include information about the MBTA, fare information, major service and fare change related information, routes and schedules, service alerts, and paratransit information.

The MBTA has defined the following materials as providing system access information:

- "MBTA Basics" flyer – services, fares, hours of operation, emergencies, reduced fare programs, paratransit, etc. The flyer has been translated into forty-four safe harbor languages.
- Major service and fare change information: For major service and fare changes, documents and meeting materials are translated based on the LEP populations impacted by the changes. For systemwide changes, translations are provided in the top five LEP languages including Spanish, Portuguese, Haitian Creole, Chinese, and Vietnamese. In all cases, additional translations are provided upon request, and public meeting notifications include instructions for requesting additional language assistance.
- The Transit Access Pass Application is available both electronically and in hard copy. The electronic application is available in Spanish, Portuguese, and Chinese. The paper version is available in Spanish, Portuguese, Chinese, French, Haitian Creole, Portuguese, and Vietnamese.
- THE RIDE acceptance letter is translated based on the language needs of the applicant which are determined during the in person in take process.
- The RIDE application is available in Spanish, Russian, Haitian Creole, Portuguese, Vietnamese, Chinese, and other languages upon request.
- Notification of planned disruptions are translated into languages based on the presence of LEP populations in the impacted service area. To assist in the identification of LEP populations an analysis of LEP population data by line and mode has been performed and is available for reference.

Tier 3—General Information for Customer Involvement:

Tier 3 relates to information important to encourage or invite customer participation in decision-making processes to improve the MBTA's system and services. These documents help customers play a role in decision-making processes that can empower community groups to voice their opinions or concerns. Outreach materials are made available in the languages of those populations impacted by the project. For projects with systemwide impacts, the MBTA translates materials into at least the top five languages in the service area.

III. Training Programs for MBTA Personnel

The MBTA's Title VI training strategy provides tailored training at four distinct levels: one for all frontline staff with direct contact with the public, one for high-level managers, one for project managers, and one for any Title VI or civil rights liaisons. The objective of these trainings is to fit the specific needs of each department to ensure the message is delivered and internalized by staff and subsequently applied in a meaningful way as they carry out their daily job functions.

The following section provides a summary outline of the training programs that the MBTA has in place. Training is facilitated with the overall goal of informing, supporting, and providing the necessary information, tools, and guidance in understanding and appreciating the Title VI requirements.

New-Hire Orientation

The MBTA's Human Resources Department provides orientation training for all new MBTA employees. Included within the orientation is a presentation by the ODCR of the Authority's policies and obligations to promote fairness, diversity, and inclusion for all employees and customers to ensure compliance with federal and state civil rights laws and regulations, including Executive Order #13166.

The Office of Diversity and Civil Rights training for new MBTA employees covers the Authority's policies and federal and state civil rights obligations related to diversity, nondiscrimination, inclusive public engagement, and workplace practices. New hires are trained in the importance of being professional, sensitive, and responsive, as well as on the need to treat all customers with equal respect regardless of language spoken. The Title VI element of the presentation includes a focus on staff responsibilities to eliminate language barriers for LEP customers looking to access the system.

Anti-Discrimination and Harassment Prevention (ADHP)

The MBTA's ADHP training focuses on civil rights and MBTA policies. One goal of the training is to have employees gain an understanding of supervisors' responsibilities, employees' rights and responsibilities, and customers' rights under the laws and MBTA policies. Another goal is to develop skills and best practices for focusing on legitimate reasons for all employment decisions, and accountability regarding the same; to review best practices for maintaining excellence in customer service; and to learn when to seek assistance and/or partner with ODCR and/or other appropriate representatives at the MBTA.

This mandatory training is offered in separate sessions for supervisors and non-supervisory employees. Managers and supervisors are required to take the training every two years; all frontline employees must complete the one-day training every three years. The training includes a discussion of workplace scenarios, including interactions with customers who are unable to speak English.

Training of Customer Service Representatives

The MBTA trains Call Center Representatives about their nondiscrimination responsibilities and the tools and protocols in place to assist passengers with limited English proficiency. The MBTA utilizes a private vendor, called Exela Technologies, to operate the Call Center. The Call Center has access to Language Line, which offers real-time interpretation in over 200 languages to help customers who are LEP.

The objective of this training is to help raise Call Center Representatives' awareness of the policies and procedures regarding Title VI requirements.

This training provides practical tips and tools for supervisors to develop best-practice skills in areas of Title VI language access, anti-discrimination, and harassment prevention regulations. Participants gain hands-on experience in how to recognize and handle caution areas, the rules for maintaining a discrimination-free workplace, and an awareness of the LEP customer environment.

This training provides Call Center Representatives with the necessary awareness and best-practice skills for providing excellent customer service. Representatives learn the LEP policies and procedures for working with customers with limited English language skills. Employees are also taught how to identify Title VI concerns and make appropriate referrals to connect customers with ODCR. In addition, this training raises their understanding and sensitivity to their responsibilities in helping to provide meaningful access to information and services to all customers.

MBTA Title VI Training for Transit Ambassadors

Transit Ambassadors play a vital role to help transform the customer experience by using technology and other resources to assist riders with fare products, scheduling, and navigating the system. However, before being deployed into stations, Transit Ambassadors participate in a robust training curriculum that involves a comprehensive presentation on preventing discrimination and assisting persons with limited English proficiency.

The Title VI training module concentrates on two core areas that Transit Ambassadors are likely to encounter in the train station. The first is an introduction to Title VI and handling discrimination complaint situations, where they are given instructions on routing discrimination complaints from the public to the Office of Diversity and Civil Rights. The second core area focuses on assisting LEP customers using the tools they have available to communicate with customers who speak a different language.

In 2022 training modules were updated to include information on the MBTA's obligations for providing language assistance, including the requirement to perform a four-factor analysis and data on the presence of LEP populations in the MBTA service area.

MBTA Title VI Training for Customer Service Agents, Instructors, and Hub Monitors

ODCR participates in the recertification-training curriculum for Customer Service Agents, Training Instructors, and Hub Monitors. Each of these roles involves providing customer service and interacting with diverse passengers in stations across the service area. The Title VI training program is similar to the one offered to Transit Ambassadors and CSAs on handling discrimination complaints and assisting LEP customers. However, some positions such as the Hub Monitors and Training Instructors do not carry tablets and cannot access the MBTA's Civil Rights webpage or utilize Google Translate to help them in the field with short interactions. Instead, the personnel in these roles use printed versions of the "I speak" card to identify the customer's spoken language and then connect with via landline phones in the stations to contact the Call Center and Language Line assistance.

IV. Providing Notice to LEP Persons

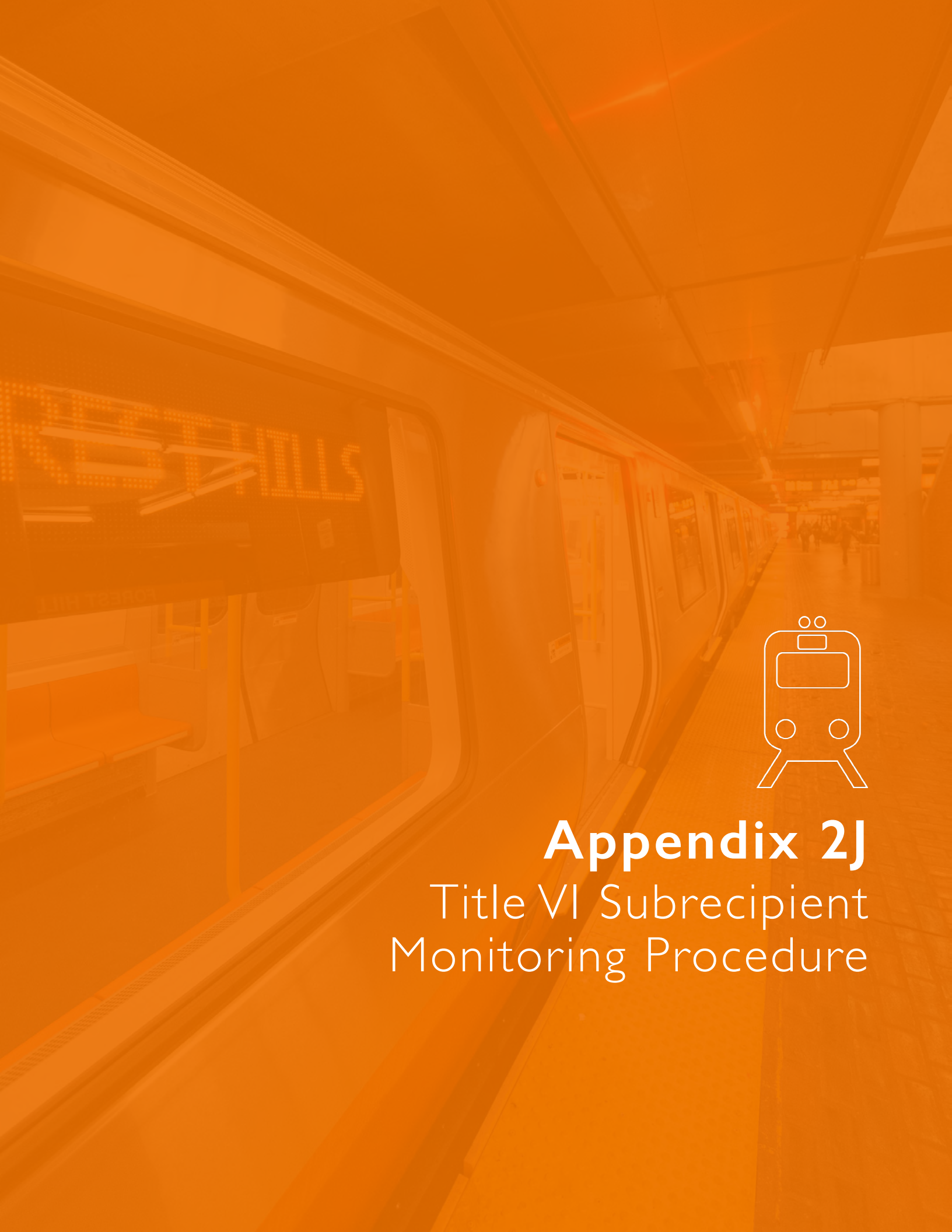
The MBTA relies on a variety of methods and media in communicating its notice and the availability of language assistance to customers and the general public. These include:

- Public meetings and hearing notices;
- Postings on www.mbta.com;
- Major publications, including but not limited to the Capital Investment Plan, Public Engagement Plan, and Service and Fare Equity Analyses;
- Station and stop postings;
- Schedules and system maps;
- Distribution through community-based neighborhood organizations including those serving or representing minority and low-income groups;
- Call Center phone line;
- Transit Police dispatch phone line; and
- Press releases, including distribution to outlets serving minority and low-income neighborhoods.

V. Monitoring and Updating the Language Assistance Plan

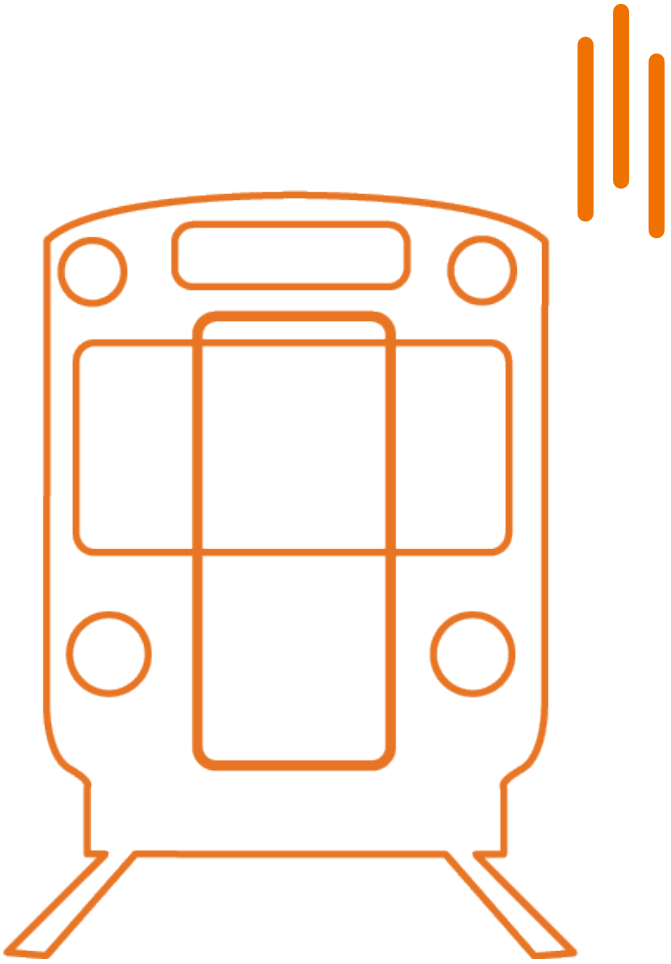
On an ongoing basis, the MBTA reviews the effectiveness of the Language Assistance Plan using strategies that may include, but are not limited to the following:

- Solicit direct feedback from CBOs and other stakeholders by distributing a questionnaire or holding focus group sessions on communicating with LEP individuals;
- Assess the demographic composition of the MBTA service area using the most current census data or data collected from community organizations;
- Measure the actual frequency of contact by LEP persons by collecting information from the Customer Care Call Center, the MBTA website translation, and frontline operations staff interviews;
- Partnering with other Boston-region organizations and participation in regional forums and events focused on issues of diversity and social equity. Such regional collaborations include the MetroFuture planning workshops and task forces headed by the Metropolitan Area Planning Council; and
- Changes by the MBTA to this Language Assistance Plan as needed; at a minimum every three years. The three-year update will coincide with the MBTA's Title VI Program submittal to the FTA.



Appendix 2J

Title VI Subrecipient Monitoring Procedure



Title VI Subrecipient Monitoring

INTRODUCTION

Pursuant to Title 49, Section 21.9 (b), of the Code of Federal Regulations (49 C.F.R .§ 21.9 (b)), all subrecipients of federal financial assistance are required to comply with the nondiscrimination obligations in Title VI of the Civil Rights Act of 1964. Primary recipients of federal financial assistance that pass funds to third parties, thereby making them subrecipients, are required to ensure subrecipient compliance with Title VI requirements, including by providing technical assistance to achieve compliance when necessary.

Common Title VI compliance requirements for subrecipients are as follows:

- Title VI notice
- Title VI complaint form
- Title VI complaint procedures
- Title VI complaint log
- Public participation plan
- Language access plan

Additional compliance requirements may exist depending on the nature of the subrecipient organization. For example, metropolitan planning organizations and regional transit authorities may have particular reporting requirements).[1]

Oversight activities of primary recipients are as follows:

- Establish a Title VI program reporting cycle for subrecipient compliance
- Coordinate with project managers for record keeping related to the federally funded activities of subrecipients
- Provide technical assistance for compliance deliverables
- Report to the Federal Transit Administration on subrecipient Title VI compliance through a triennial reporting obligation

MBTA SUBRECIPIENT MONITORING METHODOLOGY

At the Massachusetts Bay Transportation Authority (MBTA), primary day-to-day oversight of subrecipient's compliance with Title VI is the responsibility of the project manager, or designee, assigned to monitor the federally funded program, service, or activity. Project managers are trained on Title VI obligations and how to demonstrate compliance. They conduct routine audits to ensure that project administration meets applicable federal and state laws, including Title VI. The

[1] See Federal Transit Administration Title VI Circular 4702.1B, Chapters II-2, 5, and III-10.

MBTA's Title VI Specialist and the Massachusetts Department of Transportation and MBTA's Director of Title VI and Accessibility play an active role in ensuring that the subrecipient's Title VI-related requirements are monitored through coordination with the project manager. Their role is to explain the requirement, set a timeframe for the submission of required Title VI documentation, and provide support to ensure that subrecipients comply with federally mandated reporting requirements, as outlined above.

Project Initiation

As part of the federal funding award and obligation process, the MBTA project manager organizes an initial meeting with the MBTA's Title VI Specialist, or designee, to review the administrative requirements and procedures for a particular project and to discuss the Title VI reporting needs that must be addressed by the subrecipient. Each subrecipient is then asked to assign a Title VI Coordinator to prepare the organization's Title VI documentation, which is submitted to the project manager and the Office of Diversity and Civil Rights (ODCR), based on an agreed upon schedule. As part of this discussion, subrecipients are provided with an explanation of Title VI/Nondiscrimination requirements and are sent a sample of the Subrecipient Monitoring Checklist used by MBTA staff to ensure compliance.

MBTA staff who specialize in Title VI offer technical training for subrecipients and provide clarification regarding compliance requirements. The purpose of these one-on-one interactions is to provide the subrecipient with guidance on Title VI program adoption, development, customization, and implementation.

Review of Draft and Final Title VI Program

Once ODCR receives the subrecipient's proposed Title VI program documents, a review will be completed within 60 days. If there are any Title VI program elements that are not compliant, ODCR will ask the subrecipient resubmit those components to align with the governing directives. This follow-up process may be conducted informally over the phone or in person, as appropriate, or through formal written correspondence.

Modifications to Monitoring Protocol

Certain occurrences during the project delivery cycle may affect the subrecipient monitoring protocol. These procedures are intended to be flexible and thereby allow the MBTA to enhance and/or modify monitoring activities based on the following:

- Title VI complaints

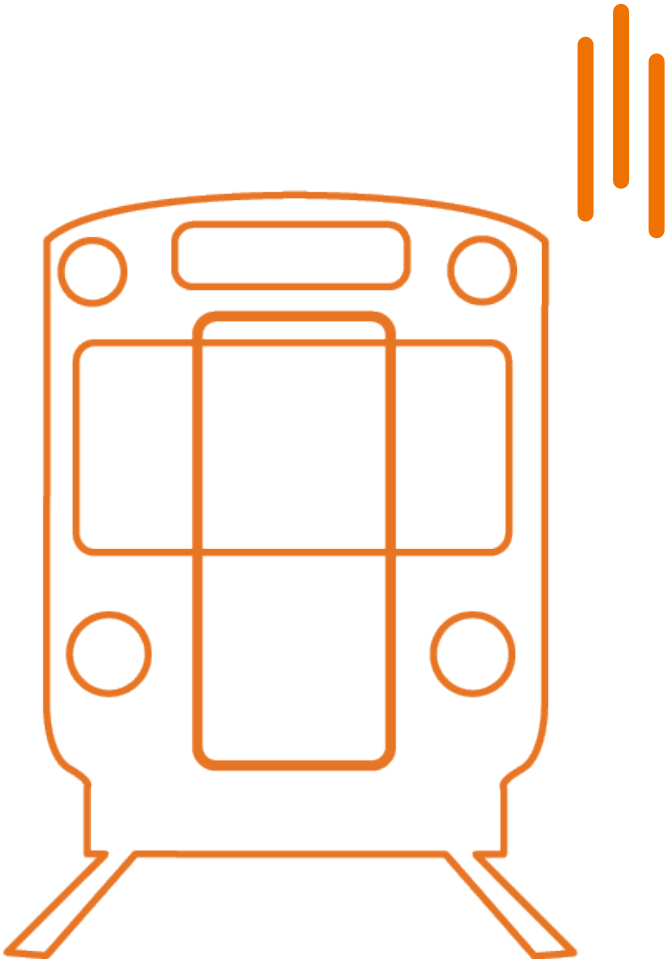
- Staff changes
- Patterns of noncompliance

In the event that an issue does arise, ODCR will assess the need for technical assistance and provide guidance to the subrecipient on addressing the matter, or undertake to address the situation under ODCR's investigative and/or compliance authority, if needed.

Subrecipient and Contractor Corrective Actions

If a subrecipient or contractor is found to be noncompliant with Title VI and fails or refuses to comply, ODCR will take one or more of the following actions:

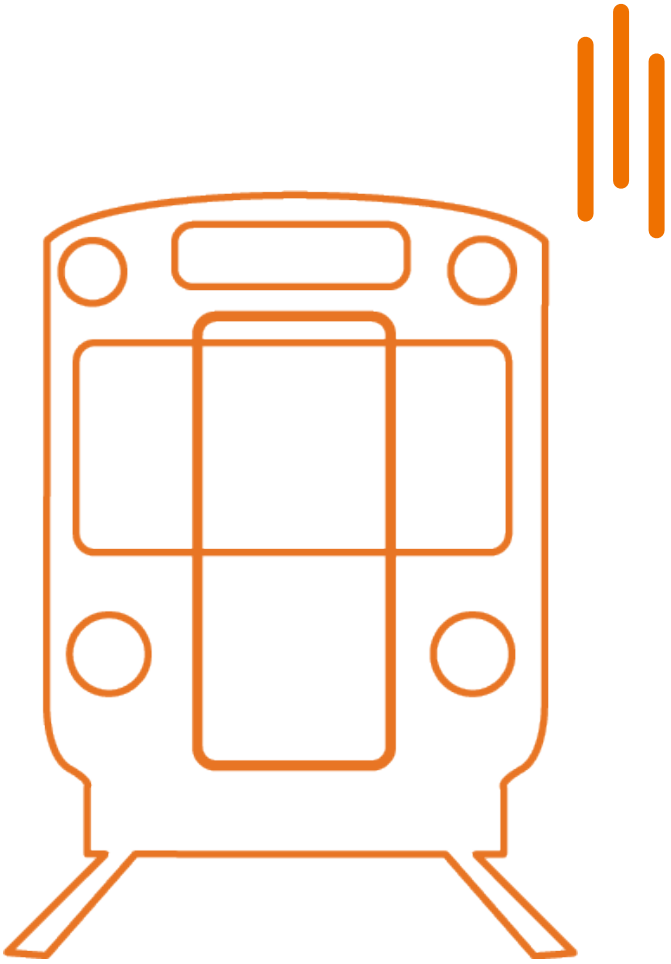
- Resolve the noncompliance or potential noncompliance through a voluntary compliance agreement with the subrecipient or contractor
- Where voluntary compliance efforts are unsuccessful, the MBTA may condition further financial assistance on the achievement of compliance
- Consult with the Federal Transit Administration regarding possible federal intervention, depending on the severity of noncompliance





Appendix 2K

Quincy Bus Maintenance Facility Equity Analysis



TITLE VI EQUITY AND ENVIRONMENTAL JUSTICE ASSESSMENT

New Quincy Bus Maintenance Facility

Quincy, MA

July 2020

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1. INTRODUCTION

This document assesses the Environmental Justice (EJ) and Title VI impacts and benefits from the potential relocation of the existing Quincy Bus Maintenance Facility in the City of Quincy, Norfolk County, MA, (see **Appendix A**). The Massachusetts Bay Transportation Authority (MBTA) conducted a preliminary Selection Evaluation for a new Quincy Bus Maintenance Facility that evaluated the existing site and four potential relocation sites.

As a recipient of federal funds, the MBTA completed a Title VI equity analysis according to *Federal Transit Administration Recipients Circular 4702.1b on October 1, 2012 (*Title VI Circular 4702.1B*)*. The statute and regulation, provides that "no person in the United States shall, on the ground of race, color, or national origin be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." Title 49 CFR Section 21.9(b)(3) also states, "In determining the site or location of facilities, a recipient or applicant may not make selections with the purpose or effect of excluding persons from, denying them the benefits of, or subjecting them to discrimination under any program to which this regulation applies, on the grounds of race, color, or national origin; or with the purpose or effect of defeating or substantially impairing the accomplishment of the objectives of the Act or this part."

Consistent with this language and MBTA practices and policies, the analysis evaluated whether the various siting of alternatives would result in disparate impacts to minority populations or a disproportionate burden to low-income populations. FTA defines a disparate impact as "a facially neutral policy or practice that disproportionately affects members of a group identified by race, color, or national origin, where the recipient's policy or practice lacks a substantial legitimate justification and where there exists one or more alternatives that would serve the same legitimate objectives but with less disproportionate effect on the basis of race, color, or national origin (FTA C 4702.1B Chapter I-2)." For this document, "disparate impact" when speaking of impacts to minorities, and the phrase, "disproportionate burden," when speaking of impacts to low-income persons will be used.

MBTA completed an Environmental Justice Assessment (EJ Assessment) as required under the *FTA Environmental Justice Policy Guidance for Federal Transit Administration Recipients 4073.1 on August 15, 2012 and the National Environmental Policy Act (NEPA) Act of 1969* for recipients of federal funding. The foundational definition and principles of EJ are expressed in Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, which "requires the U.S. Department of Transportation (DOT) and the Federal Transit Administration (FTA), to make EJ part of our mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of our programs, policies, and activities on minority populations and/or low-income populations (collectively "EJ populations")." EJ at FTA includes incorporating environmental justice and non-discrimination principles into transportation planning and decision-making processes as well as project-specific environmental reviews.

MBTA works to engage members of the public, alongside local and regional stakeholders, in its planning, project development, and project delivery through its Public Engagement Plan. The Public Engagement Plan is based on federal and state requirements and guidance for encouraging and ensuring community participation, and aims for early, continuous, and meaningful opportunities for engagement of all people. The Public Engagement Plan identifies minority populations, low-income populations, and Limited English Proficiency (LEP) persons and explains strategies developed to ensure that communities are provided the opportunity to provide input on the planning and design of the Quincy Bus Maintenance Facility. The results of the analysis were used to conclude whether the preferred Quincy Bus Maintenance Facility would result in disproportionately high and adverse impacts on EJ populations. Overall, the purpose of the

Title VI equity analysis and EJ Assessment is to ensure nondiscrimination principles are applied to prohibit recipients of federal funding from intentionally or unintentionally discriminating against Environmental Justice and Title VI populations.

1.1 BACKGROUND

Massachusetts transportation has seen a tipping point for congestion, enduring some of the worst rush-hour traffic in the nation. Massachusetts grew from 6.5 million to 6.9 million residents from 2010 to 2018 (more than 350,000 people) and is projected to grow to more than 7.3 million people by 2035. From 2018 to 2019 alone, the number of employed people in Massachusetts grew 3 percent, with 44 percent of jobs concentrated in the Boston Metro Region (MassDOT, 2019).

The Boston Metro Region is ranked as the 10th largest metro area in the United States by population and is one of the most important economic regions in the country with a thriving and expanding workforce. In general, population and labor force growth typically lead to greater travel and traffic in key locations (MassDOT, 2019).

The aging transit system in Massachusetts has decreased reliability, putting the economy at risk. The anticipated inflow of workers and residents will put further strain on the often-overextended Massachusetts transportation network. Therefore, investment in transit infrastructure is essential to the reliability of current operation and support of growing ridership (MassDOT, 2020).

The MBTA, known as "the T," is the public agency responsible for operating the majority of public transport in Greater Boston, MA (the Region) and is a division of the Massachusetts Department of Transportation (MassDOT). MBTA is the 5th largest public transit agency in the United States by daily ridership, providing a variety of transit services for more than 1.3 million trips on a weekday average. The MBTA operates fixed route bus, heavy rail lines, light rail service, trackless trolley lines, commuter rail lines, commuter ferry routes, and paratransit (MBTA, 2020a).

The MBTA bus network operates four primary service types: Silver Line, Key Bus Routes, Express, and Local, and account for 30 percent of all MBTA passenger trips. The bus system is critical to the Region's transportation network, serving neighborhoods and connecting to the rail network. The bus network includes 8,000 stops along 170 routes across 44 cities and towns. The bus network carries 446,000 passengers on an average weekday. In terms of equity, the proportion of MBTA bus riders who are minority or low-income is significantly higher than it is on other modes, including rapid transit, commuter rail, and ferry. The MBTA bus network plays an important role in efficiently and effectively providing a mobility option to residents, workers, and visitors to Massachusetts.

The Better Bus Project is a major step in the MBTA effort to improve bus service and the system as a whole. The Better Bus Project is the MBTA's partnership with more than 50 municipalities and MassDOT, which operate the roads the buses use. It is a key part of the systemwide $8 billion, 5-year capital investment program that began July 1, 2018. The MBTA is working to expand and modernize its fleet to run more service more frequently. The ability to increase and upgrade the existing fleet is limited by the capability to house and maintain them (MBTA, 2020b).

MBTA's Bus Garage Infrastructure consists of 10 Maintenance Garages, including Everett Heavy Maintenance (see ***Figure 1***). Currently, the facilities are an average of 54 years old and in marginal condition, with some functionality obsolete (e.g., capacity, ceiling heights, door heights). The facilities have significant capacity constraints and are at or beyond capacity with ranges from 28 to 254 buses. FTA

considers Useful Life Benchmark (ULB) of bus of 14-years (FTA, 2017). Currently, most MBTA buses are 7-12 years old and will need to be replaced within the next six years. The MBTA is initiating the Bus Facilities Modernization Program to replace and renovate aging facilities to support the future fleet and better serve the riding public while fostering a well-maintained system as defined by FTA state of good repair policies and best practices that meet performance goals reported annually to FTA.



Figure 1: MBTA Bus Garage Infrastructure

As part of the Better Bus Project, the Bus Facility Modernization program will improve the garages used to store and maintain the MBTA fleet of buses. Starting with the Quincy Bus Facility, MBTA will redesign the garages to:

1) Create modern, efficient work environments for our employees
2) Expand system capacity for more buses and extra service
3) Be able to accommodate a zero-emissions fleet of battery-electric buses

1.2 PROJECT PURPOSE AND NEED

In support of the Bus Facility Modernization Program, the MBTA is proposing the construction, renovation, and expansion of bus maintenance and storage facilities throughout the MBTA service area. MBTA has identified the replacement of its Quincy Bus Maintenance Facility as an operational priority, due to its age, condition, and inability to effectively support the maintenance and operations of the newer vehicles in the MBTA bus fleet. The purpose of the proposed improvements is to construct a facility that provides a modern work space, accommodates newer MBTA buses, has expanded capacity, and has the ability to support battery electric vehicles.

The facility is located at 954 Hancock Street in Quincy and was built in the early 1900s. The existing building is approximately 44,000 square feet, with yard space of approximately 179,000 square feet (additional area on the parcel is unusable due to grade and/or wetlands). The existing facility is functionally obsolete due to height restrictions, is in poor condition, and is too small to efficiently support the current fleet.

MBTA currently maintains and stores a fleet of 86 buses at the Quincy Bus Maintenance Facility. The only vehicles that are able to be maintained at the existing Quincy Bus Maintenance Facility are the oldest diesel vehicles in the MBTA fleet due to critical building height restrictions. These diesel fuel vehicles are 10’3” in height and were procured in 2008. Because the average service life of a bus is 12-15 years, the Quincy fleet will reach the end of its serviceable life by 2023.The MBTA has procurements to replace the aging fleet in the coming years but will not be able to do so without a facility that can accommodate the height of the new fleet, which is between 10’8 and 11’1.

The proposed new Quincy Bus Maintenance Facility would increase reliable service to Quincy residents and help meet growing ridership demand by allowing the MBTA to house newer vehicles, including hybrid vehicles with lower emissions, and expanding capacity. All storage and maintenance, including fueling, washing, maintenance, support, administrative, and management capabilities would occur inside the proposed new Quincy Bus Maintenance Facility, improving the working conditions for employees.

2. COMMUNITY PROFILE

The search for feasible sites for the new Quincy Bus Maintenance Facility encompassed Quincy and Braintree using criteria to be discussed further in **Section 3. Alternative Locations**. Therefore, localized impacts and benefits for each site were compared to the city in which each potential site would be located (Quincy or Braintree). This section provides an overview of the land uses and population and demographic data for Quincy and Braintree.

2.1 LAND USE AND TRANSPORTATION OVERVIEW

The below provides the baseline known to-date summary of the land use and transportation conditions with the Cities of Quincy and Braintree

2.1.1 HISTORY

Quincy was settled in 1625 as Mount Wollaston after Captain Richard Wollaston and became the north precinct of Braintree in 1640 for Braintree, County Essex, England. Quincy, named after Colonel John Quincy, became a separate town in 1792, and a city in 1888 (Hobart, 1992).

Quincy is known as the "City of Presidents," and is the birthplace of John Adams and John Quincy Adams. It is also the birthplace of John Hancock, the first signed of the Declaration of Independence, a President of the Continental Congress, and the first and third governor of Massachusetts (Hobart, 1992).

In 1826, Solomon Willard chose West Quincy granite for the Bunker Hill Monument and became the "Father of the Granite Industry" by developing techniques making Quincy granite practical for building stone. Quincy then became a successful granite industry with 54 true quarries and built the Granite Railway (1826), the first commercial railway in the US. The majority of skilled worker and operators were of Irish, Scottish, Swedish, German, Finnish, or Italian descent. The granite industry transformed Quincy from a rural town to a thriving city. The last quarry, Swingle's, ceased operations in 1963 (Hobart, 1992).

Shipbuilding became increasingly important to the Quincy economy through the 19th century. The Fore River Shipyard, founded by Thomas Watson, was the South Shore's largest industry for many years and central to wartime manufacturing. In 1845, the Old Colony Railroad spurred the development of residential communities around the railroad stations, primarily for Boston commuters (Hobart, 1992).

A number of successful enterprises were founded in Quincy in the late 19th and early 20th centuries, including Howard Johnson's and Dunkin' Donuts. Howard Johnson opened his first ice cream shop within the city. In 1950, William Rosenburg opened the first Dunkin Donuts (Encarnacao, 2014).

To the south, Braintree, Norfolk County, MA is a suburb of the Greater Boston area and has access to Boston via the MBTA Red Line. Sections of Braintree later formed separated municipalities, including Quincy, Randolph, and Holbrook. Because Braintree included Quincy until Quincy split off in 1792, it is also the birthplace of Presidents John Adams and John Quincy Adams, as well as statesman John Hancock and General Sylvanus Thayer (Town of Braintree, 2020).

2.1.2 LAND USES AND DEVELOPMENT TRENDS

Quincy, Norfolk County, MA is located immediately south of Boston within the Greater Boston Area. Greater Boston is typically understood to include Essex, Middlesex, Suffolk, Norfolk, and Plymouth counties in Massachusetts, and Rockingham and Strafford counties in New Hampshire. Quincy has a total of 16.6 square miles of land and a population of 5,568 per square mile according to the 2010 Census. Quincy is surrounded by Milton to the west, Boston to the north separated by the Neponset River, Quincy Bay to the east, and Braintree and Randolph to the south, and Weymouth to the southeast. It is the largest

city on the South Shore and in Norfolk County, MA.

As part of the Greater Boston Area, Quincy has access to a number of transportation facilities, including rapid transit (e.g., four Quincy MBTA Red Line stations), MBTA fixed route bus service, and Commuter rail (Old Colony Line). Additionally, it has access to and from Routes 3, 3A, 93, and 128, (City of Quincy, 2020).

Quincy is home to two colleges and provides access to the many colleges and universities in the Boston area. Historical sites, including Adams National Historic Park, attract more than 250,000 visitors annually and the city supports Discover Quincy in promoting the city as a tourist destination. Quincy's Thomas Crane Public Library is a substantial regional resource that serves residents and businesses (City of Quincy, 2020).

Quincy has a number of business parks located throughout the city (Crown Colony, Marina Bay, Batterymarch Park, President's Place, and State Street South Office Complex). Large employers include financial services (Boston Financial Data Services), insurance (Arabella Insurance Group), and health care industries (Blue Cross Blue Shield of Massachusetts). Quincy is also the headquarters of the Patriot Ledger, the South Shore's largest regional newspaper (City of Quincy, 2020).

Quincy Center is located along Hancock Street and includes downtown Quincy. The area is a bustling part of town that has several landmarks (City Hall, United First Parish Church with John Adams and John Quincy Adams graves and a memorial to World War I), office buildings, and retail stores. It is served by an MBTA station which includes subway access, bus service, and a large parking garage. Quincy Center is currently undergoing one of the largest urban revitalization efforts in Massachusetts encompassing more than 50 acres of mixed-use development. A number of residences and commercial business have opened in the last several years. A new park, the Hancock-Adams Green is currently under construction between the historic First Parish Church and the Old City Hall (City of Quincy, 2020).

Quincy Bay in the northeastern portion of the city is part of the Boston Harbor and Massachusetts Bay. There are a number of beaches along Quincy Bay's 27 miles of shoreline including the largest Boston Harbor beach, Wollaston Beach. Marina Bay is the state's largest marina and waterfront entertainment destination (City of Quincy, 2020).

While Quincy is largely urban, the Blue Hills Reservation located to the southwest and managed by the Massachusetts Department of Conservation stretches over 7,000 acres from Quincy to Dedham, Milton to Randolph. It is a population destination for hikers from the Greater Boston Area (Mass.gov, 2020).

Braintree, Norfolk County, MA is adjacent to the south of Quincy and is also part of the Greater Boston area. It has a total of 13 square miles of land and a population of 2,500 per square mile according to the 2010 Census. Braintree also includes portions of the Blue Hills Reservation, as well as Pond Meadow Park and Sunset Lake. The community is a mix of established neighborhoods, small clusters of new homes, and multi-family dwellings. Braintree also has a number of professional office parks, a regional shopping center, manufacturing/commercial parks and three distinct Town centers. The South Shore Plaza located south of the I-93/Route 3 interchange (Braintree Split) is one of the largest regional shopping centers in the northwest (Town of Braintree).

As part of the Greater Boston metropolitan region of New England, Quincy and Braintree are within the Metropolitan Area Planning Council (MAPC) planning region. The MAPC is the "regional planning agency serving the people who live and work in the 101 cities and towns of Metro Boston" (MAPC, 2020).

2.1.3 MODES OF TRANSPORTATION

Quincy is part of Metro Boston and has access to the many associated transportation facilities. State highways and the Interstate system connect the Greater Boston area to the airport, port, and intermodal facilities of Boston. Quincy is largely surrounded by water, bordered by the Neponset River to the north, the Weymouth Fore River to the south, and Quincy Bay to the east. As such, certain key bridges serve as vital connections, including the Neponset Bridge that provides drivers and pedestrians access to and from Boston.

Four regional subway stops along the MBTA Red Line in Quincy provide important connections within the city and between surrounding communities, including North Quincy Station, Wollaston Station, Quincy Center Station, and Quincy Adams Station. MBTA bus routes run along most major roadways in Quincy, including arterial streets.

Bicycle and pedestrian facilities within Quincy include connections to its MBTA stations, recreational and historical amenities, the downtown revitalization project area, and its neighbors, Milton, Braintree, Weymouth and especially the City of Boston.

Braintree is also part of the Greater Boston area and has access to several transportation facilities. I-93 forms the northwestern border of the city, and Route 3 runs northwest to southeast through Braintree. Routes 37 and 53 are other major roadways running northwest to southeast through Braintree. Commuter rail service and the MBTA Red Line to South Station is available from the Braintree Red Line/Commuter Rail Station located on Union Street. Rail service on the Greenbush Line is available from the Weymouth Landing/East Braintree station. MBTA bus routes run along a number of major roadways, including Route 3, 37, and 53.

2.2 POPULATIONS AND DEMOGRAPHICS

The following sections describe the population trends and demographics of the communities of Braintree, Quincy, Norfolk County, Boston–Cambridge–Newton, MA–NH Metropolitan Statistical Area (MSA), and the State of Massachusetts as deemed appropriate. Quincy and Braintree are within Norfolk County, and Boston is within Suffolk County. Boston–Cambridge–Newton, MA–NH MSA defined by the United States Office of Management and Budget consists of counties within three metropolitan divisions, including Boston, MA Metropolitan Division (Norfolk, Plymouth, and Suffolk counties); Cambridge-Newton-Framingham, MA Metropolitan Division (Essex County and Middlesex County); and Rockingham County Metropolitan Division, NH (Rockingham County and Strafford County).

2.2.1 POPULATION TRENDS AND PROJECTIONS

As shown in **Table 1** below, the rate of growth in Quincy and Braintree surpassed the rate of growth for Norfolk County and for the State of Massachusetts between 2000 and 2010.

Table 1: Regional Population Trends, 1990–2010

Year	State of Massachusetts	Norfolk County	Boston City	Quincy City	Braintree City
1990	6,016,426	616,087	574,283	84,985	32,832
Percent Change 1990-2000	5.2	5.3	2.5	3.5	2.6
2000	6,349,097	650,308	589,141	88,025	33,698
Percent Change 2000-2010	3.0	3.1	4.6	4.6	5.7
2010	6,547,629	670,784	617,660	92,271	35,744

Source: US Census Bureau. 1990, 2000, and 2010 Census. Table Profile of General Population and Housing Characteristics: 1990, 2000, 2010 (2000 SF1 100-percent Data).

Projections from the University of Massachusetts at Amherst Donahue Institute (UMDI) estimate both Quincy and Braintree will grow approximately 26 percent by 2035 (26.4 and 25.9, respectively), far surpassing the growth for the county (14.7 percent) and statewide (10.5 percent) for the same period. See **Table 2**.

Table 2: Regional Population Projections, 2010 - 2035					
Year	**State of Massachusetts**	**Norfolk County**	**Boston City**	**Quincy City**	**Braintree City**
2010*	6,547,629	670,850	617,594	92,271	35,744
2015	6,792,591	705,106	651,824	100,183	38,712
2020	6,950,668	729,296	688,212	107,183	41,481
2025	7,105,878	752,774	724,166	114,528	43,973
2030	7,231,126	771,889	752,196	120,717	46,286
2035	7,319,469	786,274	772,503	125,379	48,297
Percent Change 2010 - 2035	**10.5**	**14.7**	**20.1**	**26.4**	**25.9**
Percent Average Annual Growth Projection	**2.2**	**3.1**	**4.4**	**5.9**	**5.8**

*Discrepancies for 2010 population counts in Norfolk County and Boston are the result of revised counts that occurred after this data was compiled.

Sources: UMDI Massachusetts Population Program: Population Projections, 2015

2.2.2 HOUSING

Housing in Quincy is primarily single-family residences built before 2000. The proportion of owner-occupied homes is greater in Quincy and Norfolk County as compared to the state of Massachusetts (see **Table 3**).

Table 3: Housing, 2014					
Municipality	**Housing Units**	**Owner-Occupied (%)**	**Average Household Size (owner-occupied)**	**Average Household Size (renter-occupied)**	**Median Home Value ($)**
Quincy	41,901	94.6	2.67	1.99	342,600
Braintree	13,729	96.3	2.98	2.09	368,100
Boston	273,665	91.8	2.50	2.29	379,500
Norfolk County	271,803	95.2	2.82	2.01	393,500
Boston-Cambridge-Newton, MA-NH Metro Area (Boston Metro Area)	1,890,680	93.3	2.73	2.24	363,600
Massachusetts	2,816,875	90.1	2.70	2.24	329,900

Source: US Census Bureau. 2014 Table DP04 SELECTED HOUSING CHARACTERISTICS (2010-2014 ACS 5-Year Estimates).

2.2.3 EMPLOYMENT STATUS AND INCOME

Employment status gives an indication of the strength of the job market. As shown in **Table 4** below, Quincy has an unemployment rate that is similar to Boston Metro Area. Both Boston and Quincy have unemployment rates that are higher than the statewide average. Quincy has both a median household income and a per capita income below the statewide amounts. The unemployment rate in Braintree is similar to the statewide unemployment rate. The median household income and per capita income in Braintree exceed the statewide averages.

Table 4: Employment Status and Income, 2014			
City	**Unemployment Rate (%)**	**Median Household Income ($)**	**Per Capita Income ($)**
Quincy	6.6	62,710	33,932
Braintree	5.8	87,500	37,301

Table 4: Employment Status and Income, 2014			
City	**Unemployment Rate (%)**	**Median Household Income ($)**	**Per Capita Income ($)**
Boston	6.8	54,485	34,770
Norfolk County	5.2	86,469	45,375
Boston-Cambridge-Newton, MA-NH Metro Area	5.5	93,912	39,572
Massachusetts	5.7	67,846	36,441

Source: US Census. 2014 Table DP03 SELECTED ECONOMIC CHARACTERISTICS (2010-2014 ACS 5-year estimates).

2.2.4 COMMUTING TO WORK

In Quincy, the proportion of workers using transit (26.2 percent) is nearly three times more that of the entire state, and slightly lower than the proportion in Boston (33.3 percent). Fewer workers in Braintree travel to work via transit than in Quincy or Boston. In both Quincy and Braintree, few workers walk or bicycle to work. See **Table 5**.

Table 5: Region Travel to Work Data for Workers 16 and Over, 2014							
Municipality	**Workers 16 years and over**	**Transit (percent)**	**Drive (percent)**	**Walk (percent)**	**Bicycle (percent)**	**Taxicab, motorcycle, or other means (percent)**	**Worked at home**
Quincy	49,182	26.2	68.5	2.3	0.1	0.7	2.2
Braintree	18,376	13.5	82.4	0.8	0.2	0.9	2.2
Boston	327,640	33.3	45.5	14.7	1.9	0.9	3.7
Norfolk County	344,517	13.1	77.7	3.4	0.6	0.7	4.5
Boston-Cambridge-Newton, MA-NH Metro Area	2,362,298	12.3	75.9	5.3	0.9	1.0	4.6
Massachusetts	3,284,998	9.5	79.7	4.7	0.8	0.9	4.4

Source: US Census. 2014 Table S0801 COMMUTING CHARACTERISTICS BY SEX (2010-2014 ACS 5-Year Estimates).

As shown in **Table 6** below, a higher proportion of worker's places of business are located outside of their county of residence in Quincy (59.5) and Braintree (50.1), than for the entire state (30.7). This is attributed to workers in Quincy and Braintree traveling to Boston to reach their place of business. The projected population growth in Quincy and Braintree will require increasing the capacity of existing transportation facilities to meet growing demand.

Table 6: Region Place of Work Data for Workers 16 and Over, 2014				
Municipality	**Population**	**Worked in county of residence (percent)**	**Worked outside county of residence (percent)**	**Worked outside state of residence (percent)**
Quincy	49,182	39.6	59.5	0.9
Braintree	18,376	48.6	50.1	1.4
Boston	327,640	68.9	29.7	1.4
Norfolk County	344,517	44.7	52.8	2.5
Boston-Cambridge-Newton, MA-NH Metro Area	2,362,298	61.2	34.3	4.5
Massachusetts	3,284,998	65.3	30.7	4.0

Source: US Census. 2014 Table S0801 COMMUTING CHARACTERISTICS BY SEX (2010-2014 ACS 5-Year Estimates).

3 MAINTENANCE FACILITY ALTERNATIVE SITES

The Massachusetts Bay Transportation Authority (MBTA) undertook a site selection process to identify and evaluate sites with the potential to address the functionally obsolete existing Quincy Bus Maintenance Facility on Hancock Street in Quincy, Massachusetts. When the MBTA must acquire property to improve the region's public transportation system, it is done so with the goal of minimizing the displacement of existing businesses due to the higher costs for the taxpayer and MBTA customer, schedule implications for the project, and the disruption to business owners, their employees, and their customers. The MBTA's evaluation of potential sites for a new Quincy facility began with this principle in mind and identified several potentially suitable sites in Braintree and Quincy that were either vacant, for lease, or for sale.

The MBTA searched for available sites that met the following factors chosen to limit impacts to existing bus routes, the environment, and general population:

- Vacant, available for lease or for sale
- Ten usable acres (plus or minus)
- Proximity to Quincy Center, the starting point for many bus routes using the Quincy garage

The initial search produced four sites for further evaluation: 599 Burgin Parkway, 1800 Crown Colony Drive, 360 Wood Road, and 10-40 Plain Street (see **Figure 2**).

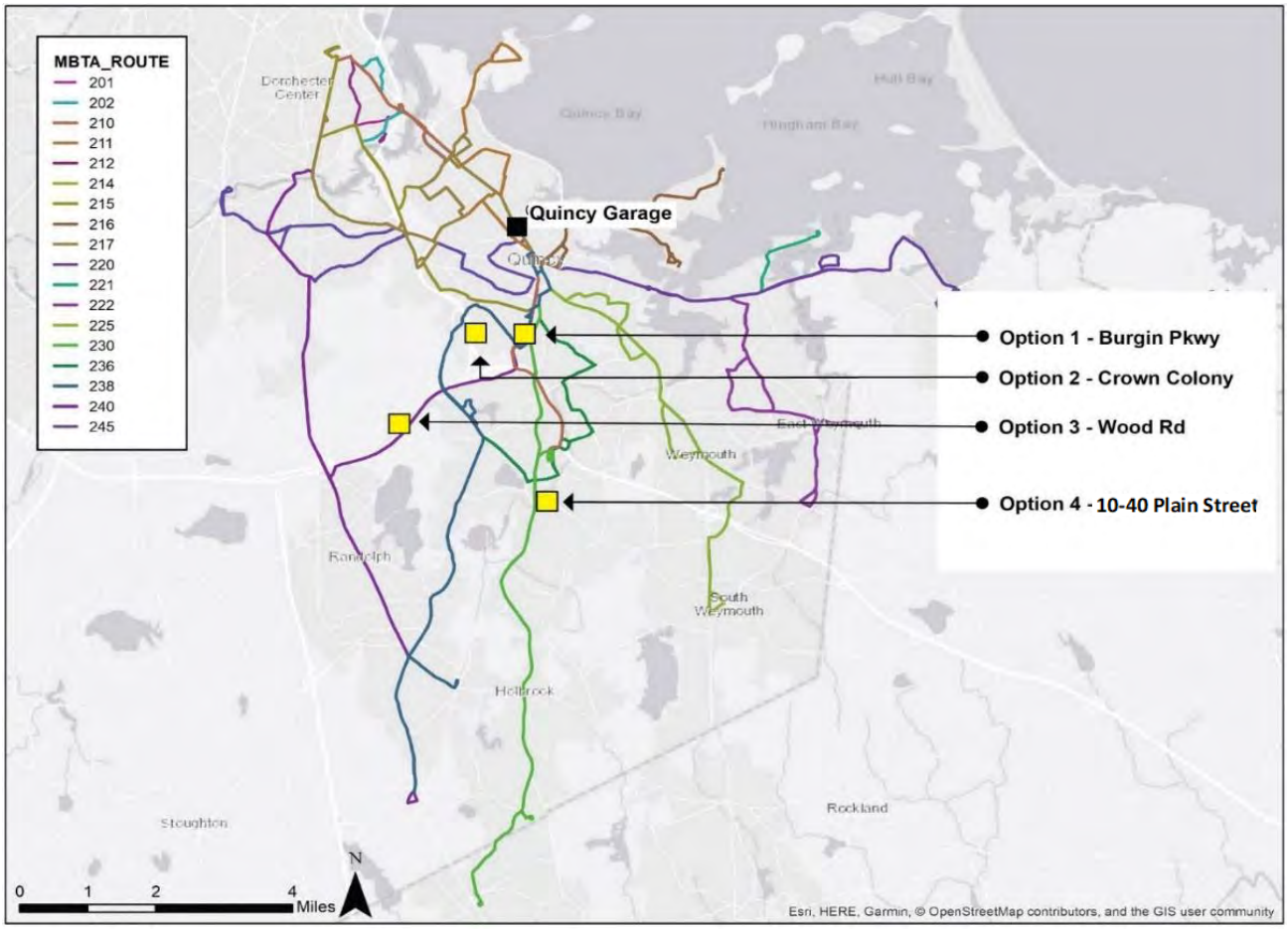


Figure 2: Maintenance Facility Alternative Sites

3.1 ALTERNATIVE SITES EVALUATION

MBTA developed selection criteria defined by need factors that include addressing aging infrastructure and accommodating an expanded fleet to meet growing ridership demand and account for additional flexibility in advance of the anticipated conversion to new vehicle technology (battery electric buses). The following site characteristics and system outcomes were taken into consideration when analyzing the ability of each site to meet the purpose of the project included:

- Vacant or available for lease or sale
- Parcel size and ability to accommodate an expanded bus fleet
- Deadhead (non-revenue) miles to Quincy Center
- Access to and from the site
- Adjacent road network/traffic control
- Internal site circulation
- Topography
- Potential environmental concerns
- Zoning
- Consistency with land use
- Site development risk

The MBTA ranked the ability of each site criteria to meet the need factors as either low, medium, or high as shown in **Appendix C**. The current Quincy Bus Maintenance Facility on Hancock Street was included for comparison purposes. The results of the site selection evaluation are summarized below.

3.1.1 954 HANCOCK STREET

One alternative would demolish the existing building and rebuild on the same parcel (see ***Figure 3***). Approximately 3.76 acres, the site is about one-half mile from Quincy Center. The new building would be limited to a similar footprint as the existing building since the remaining areas of the parcel are unusable due to grade and/or wetlands. This alternative would address aging infrastructure by addressing structural deficiencies and accommodating a modernized fleet. It could be equipped for the transition to BEBs. However, a new facility at the existing site would not accommodate the capacity needs and would not improve maintenance capabilities. This alternative would make minimal improvements to the site circulation and would still require the use of surrounding streets.

In the alternative that would expand at 954 Hancock Street, adjacent parcels were evaluated for potential acquisition to enlarge the site. The existing site at 954 Hancock Street is too small and constrained by park and wetlands to accommodate the proposed Project even if it were expanded to about 4.5 acres by acquiring adjacent parcels. Ten or more acres are needed to accommodate the expanding MBTA fleet, improved maintenance capabilities and circulation on the site. In addition, the level of construction effort that would be needed to bring the facility into compliance with current building, life safety, and accessibility codes, as well as to upgrade it to have power upgrades to allow for the charging of a large number of BEB's, makes upgrading this facility infeasible. The 954 Hancock Street site did not meet the purpose of and need for the project it was eliminated from further consideration.



Figure 3: 954 Hancock Street

3.1.2 599 BURGIN PARKWAY

This option is located at 599 Burgin Parkway (see ***Figure 4***). The site is vacant and is approximately 12.81 acres. The site is 1.4 miles from Quincy Center and is bounded by Burgin Parkway to the east, Columbia Street to the west and north, and Penn Street to the south. The site was used as a Lowe's Home Improvement store until 2019. Commercial and residential land uses surround the site and vehicular access is via a major arterial. This alternative would meet the need to address aging infrastructure and accommodate the capacity needs. Building new would accommodate a modernized fleet, would house taller buses and the facility could be equipped for the transition to BEBs. Environmental features on the site include a perennial stream, Town Brook, and its associated floodplain and Riverfront Area, which are Massachusetts regulated wetland resource areas. The site's buildable area, over 10 acres, would accommodate capacity needs; facilitate improved maintenance capabilities; has good internal circulation; has adequate space for maintenance, storage and parking; and, as a result of the Project, would have two access/egress points to help improve systemwide operations.

One environmental issue of concern for this site is that a perennial stream, Town Brook, flows in a culvert under the site. The regulatory floodway mapped by the Federal Emergency Management Agency intersects with a portion of the site, however; since the latest FEMA map the site has been filled, graded



Figure 4: 599 Burgin Parkway

and developed for commercial use. As a result, the current elevation of the site is above the regulatory floodway elevation.

3.1.3 1800 CROWN COLONY DRIVE

This alternative is located at 1800 Crown Colony Drive (see **Figure 5**). The site is vacant and an estimated 16.5 acres. The site is 2.3 miles from Quincy Center and is bounded by I-93 to the west and Crown Colony Drive to the east. Offices surround the parcel to the north and south. However, there is a detention basin on the site that limits the developable site area. While this site is currently vacant, it is surrounded by office units and zoned for heavy industrial use. A new building would address the structural deficiencies present at the existing site and improve the state-of-good-repair (SGR) ratings. The building could be built to house taller buses and could be equipped for the transition to electric buses. Although a new facility on the site would address the aging infrastructure, given the physical limitations of the property, the site could not accommodate capacity needs without structured parking or a reduction in bus fleet size. A reduction would not support ridership demand. Access and egress are restricted to one location also used by office park tenants which could hinder bus movements.



Figure 5: 1800 Crown Colony Drive

3.1.4 360 WOOD ROAD

This site option is located at 360 Wood Road in the Town of Braintree (see ***Figure 6***). The site is vacant and 4.7 miles away from Quincy Center. The site is approximately 14.2 acres and is bounded by I-93 to the south and Wood Road to the east. The property is bounded by wetlands and forests to the north and west. An existing pond on the site would make part of the parcel unusable due to the presence of state and federal wetlands. The site currently contains one large warehouse operated by a corporation. The area is surrounded by other commercial properties and zoned as a highway business district. A new building would address the structural deficiencies present at the existing site and improve the SGR ratings. Although a new facility on the site would address aging infrastructure, the site could not accommodate capacity needs without structured parking or a reduction in fleet size. This site has a single means of access to and from Wood Road, and there would be congestion Wood Road during peak hours. This site also has poor internal circulation. The distance from Quincy Center would increase miles on the buses and increase operating costs.



Figure 6: 360 Wood Road

3.1.5 10-40 PLAIN STREET

This option is located on a large, vacant parcel at the corner of Plain Street, Hancock Street, and John Mahar Highway in the Town of Braintree (see **Figure 7**). This location is 4.7 miles from the Quincy Center. The parcel is bounded by Hancock Street to the west, the MBTA commuter rail line to the north, John Mahar Highway to the east, and Plain Street to the south. There is a row of residences between the existing building and Plain Street. The total parcel is 26.6 acres and contains an old factory. However, about 10 acres of the parcel is unusable due to Hollingsworth Pond and the Monatiquot River. The site contains an old factory and has been remolded into businesses. A new building would address the structural deficiencies present at the existing site and improve the SGR ratings. The building could be built to house taller buses and could be equipped for the transition to electric buses. Although a new facility on the site would address the need to address aging infrastructure and could accommodate the capacity



Figure 7: 10-40 Plain Street

needs, environmental constraints would hinder bus circulation. In addition, this site would require buses to use Route 3 to access Quincy Center. The distance from Quincy Center would increase miles on the buses and increase operating costs. This alternative did not meet the purpose of and need for the project and was eliminated from further consideration.

4 TITLE VI EQUITY ANALYSIS

The below summarizes Title VI equity analysis of the site's disparate impact on minority and disproportionate burden on low- income groups.

4.1 GEOGRAPHIES & DATA SOURCES

This section describes the data sources and areas of study used for the Title VI Equity Analysis.

4.1.1 CENSUS BLOCK GROUPS

The FTA Title VI Circular advises "the choice of dataset should be the smallest geographic area that reasonably has access to the bus or rail stop or station. For example, passengers will generally walk up to one-quarter mile to a bus stop or one-half mile to a light or heavy rail station or drive up to three miles to a commuter rail station. Transit providers may use the data from an entire Census block or block group when a portion of the area is within the walking or driving distance described above." The underlining principle is that the dataset and data derived thresholds will be a reliable measure to assess Title VI compliance.

The FTA EJ Circular advises "the boundaries of the unit of geographic analysis should be large enough to include the area likely to experience adverse effects, but not so large as to artificially dilute the minority population and/or low-income population. Similarly, the geographic analysis should not constrict the boundaries to artificially inflate EJ populations."

In consideration of the FTA Title VI and FTA EJ Circulars, block groups (BGs) boundaries within one-quarter of a mile of the centroid of each site determined the study areas for each site (see **Figure 2** in **Appendix A**). Block Groups are statistical divisions of census tracts, are generally defined to contain between 600 and 3,000 people, and usually cover a contiguous area. Most BGs were delineated by local participants in the Census Bureau's Participant Statistical Areas Program. The use of BGs is consistent with previous Title VI equity analysis and EJ assessments.

4.1.2 STUDY AREA

As described in Section 4.1.1., the boundaries of BGs within 1/4-mile around each site using a centroid analysis form the study area for each site. The study areas reflect recommendations from the FTA for the applicable type of service and are deemed appropriate to capture localized impacts.

4.2 TITLE VI EQUITY DEMOGRAPHICS

This section describes the data collected for use in the Title VI Equity Evaluation.

4.2.1 MINORITY

The MBTA uses the Title VI Circular 4702.1B for defining a minority person as one who identifies as any of the following:

- Black or African American, which refers to people having origins in any of the Black racial groups of Africa.
- American Indian and Alaska Native, which refers to people having origins in any of the original peoples of North and South America (including Central America), and who maintain tribal affiliation or community attachment.
- Asian, which refers to people having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent, including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.
- Native Hawaiian or Other Pacific Islander, which refers to people having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.

- Hispanic or Latino, which includes persons of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race.

FTA Title VI guidance defines a minority population as any readily identifiable group of minority persons who live in geographic proximity and, if circumstances warrant, geographically dispersed/transient populations (such as migrant workers or Native Americans) who will be similarly affected by a proposed DOT program, policy, or activity.

Table 7 shows the minority populations in each study area. Minority persons in Quincy comprise 34.5 percent of the total population, the majority of which are of Asian origin; minority persons in Braintree comprise 14.8 percent of the total population, the majority of which are of Asian origin.

Table 7: Minority Populations, 2010

Location	Total Population	Not Hispanic or Latino							Hispanic or Latino or Any Race	Total Minority Population	Total % Minority Population
		White	Black or African American	American Indian and Alaska Native	Asian	Native Hawaiian and Other Pacific Islander alone	Other Race	Two or More Races			
954 Hancock Street, Quincy	6,509	4,589	198	11	1,426	-	18	105	162	1,920	29.5
599 Burgin Parkway, Quincy	8,536	5,792	521	15	1,482	5	104	202	415	2,744	32.1
1800 Crown Colony Drive, Quincy	5,299	3,459	365	3	976	5	62	139	290	1,840	34.7
360 Wood Road, Braintree	4,142	3,307	132	2	473	-	31	82	115	835	20.2
10-40 Plain Street, Braintree	6,536	5,702	83	9	491	-	47	67	137	834	12.8
Quincy	**92,271**	**60,448**	**3,998**	**137**	**22,124**	**21**	**768**	**1,686**	**3,089**	**31,823**	**34.5**
Braintree	**35,744**	**30,471**	**911**	**46**	**2,687**	**10**	**245**	**484**	**890**	**5,273**	**14.8**

Source: US Census Bureau. 2010 Census. Table P9 HISPANIC OR LATINO, AND NOT HISPANIC OR LATINO BY RACE (2010 Redistricting Data SF (PL 94-171))

4.2.2 LOW-INCOME

FTA Title VI guidance encourages agencies to use a locally developed threshold for identifying low-income populations, as long as they are as inclusive as the Department of Health and Human Services (DHHS) poverty guidelines. MBTA Disparate Impact/Disproportionate Burden (DI/DB) Policy defines a low-income household as "those households with income less than 60 percent of the median household income of the MBTA service area" ($43,415 in 2015, and subject to annual modification). The US Census Bureau 5-year American Community Survey (ACS) block group data (2010-2014) presents the number of households with annual incomes that fall into incremental ranges (e.g., "$10,000-$14,999", "$15,000-$15,999", "$16,000-$19,999", etc.), as well as ranges of "less than $10,000", and "$200,000 or more". Based on the Census

data available, the percentage of low- income households for each study area was determined by the number of households with incomes below $44,999 as compared to the total number of households. Low-Income persons comprise 36 percent of the population in Quincy and 26 percent of the population in Braintree (see **Table 8**).

Table 8: Low-Income Households, 2014			
Location	**Total Households**	**Total Households with Annual Incomes Under $44,999**	**Total % Households with Annual Incomes Under $44,999**
954 Hancock Street	2,927	1,013	34.6
599 Burgin Parkway	3,770	1,416	37.6
1800 Crown Colony Drive	2,397	968	40.4
360 Wood Road	1,653	458	27.7
10-40 Plain Street	1,300	344	26.5
Quincy	**39,643**	**14,268**	**36.0**
Braintree	**13,226**	**3,434**	**26.0**

Source: US Census Bureau. 2014 ACS. Table D03 HOUSEHOLD INCOME IN THE PAST 12 MONTHS (IN 2014 INFLATION-ADJUSTED DOLLARS) and Table B19001 HOUSEHOLD INCOME IN THE PAST 12 MONTHS (IN 2014 INFLATION-ADJUSTED DOLLARS).

4.3 DEFINITION OF DISPARATE IMPACT AND DISPROPORTIONATE BURDEN

The Title VI equity analysis evaluates whether each of the potential site selections for the new Quincy Bus Maintenance Facility would have a Disparate Impact on minority populations or a Disproportionate Burden on low-income populations. For the new Quincy Bus Maintenance Facility, MBTA will use 10 percent DI/DB threshold to evaluate potential impacts of various siting alternatives on minority and low-income populations.

According to the FTA in its Title VI Circular 4702.1B:

- Disparate Impact refers to a facially neutral policy or practice that disproportionately affects members of a group identified by race, color, or national origin, where the recipient's policy or practice lacks a substantial legitimate justification and where there exists one or more alternatives that would serve the same legitimate objectives but with less disproportionate effect on the basis of race, color, or national origin.
- Disproportionate Burden refers to a neutral policy or practice that disproportionately affects low-income populations more than non-low-income populations. A finding of disproportionate burden requires the recipient to evaluate alternatives and mitigate burdens where practicable.

In setting the appropriate threshold for this analysis, the MBTA has referred to transit guidance and previous equity analyses. The FTA Title VI Circular provides only one example for agencies as guidance in selecting a threshold of significance and that example is 10 percent. The US Supreme Court has held that differences of less than 20% when conducting a disparity analysis are within the range of differences that can occur by mere chance. In developing its Disparate Impact/Disproportionate Burden Policy, the MBTA relied on the 20% threshold for analyzing major service changes. The MBTA also relies on the same 20% threshold for monitoring service conditions and amenities and separately for evaluating project development and capital investment decisions. For analyzing fare changes, a 10% threshold was determined to be more effective at identifying possible disparities for MBTA purposes.

For the new Quincy Bus Maintenance Facility, MBTA will use the more conservative 10 percent DI/DB threshold to evaluate potential impacts of various siting alternatives on minority and low-income

populations. For instance, if the difference between the ratio of minority to non-minority populations within the study area as compared to that of the City the siting location is within is more than 1.1 (10 percent) for service changes, then the proposed change would be determined to pose a potential disparate impact or disproportionate burden.

4.4 TITLE VI EVALUATION RESULTS

The critical elements of this analysis involve a determination of whether or not disparate impacts to minority populations or disproportionate burdens to low-income populations would result from the change to a new site. The study found that there is no disparate impact and no disproportionate burden resulting from the any of the four proposed sites based on the analysis performed.

As discussed in **Section 2. Project Description**, localized impacts and benefits for each site were compared to the city in which each potential site would be located. Therefore, the MBTA applied the 10 percent threshold to compare the percentage of minority and low-income populations for each site to the total minority and low-income populations for the city where each site is located. The overall population data for Quincy was applied to the existing site (945 Hancock Street), 599 Burgin Parkway, and 1800 Crown Colony Drive; and the overall population data for Braintree was applied to 360 Wood Road and 10-40 Plain Street. As shown in **Table 9** below and **Appendix B**, none of the potential sites meet the 10 percent threshold for determining a Disparate Impact for minority populations.

Table 9: Minority Population Demographic Assessment

Minority Populations	945 Hancock Street	599 Burgin Parkway	1800 Crown Colony Drive	360 Wood Road	10-40 Plain Street
Total % minority population in study area	29.5	32.1	34.7	20.2	12.8
Total % minority population in city of site	34.5	34.5	34.5	14.8	14.8
Total % Difference	-5.0	-2.4	0.2	5.4	-2.0
Disparate Impact (Yes/No)	No	No	No	No	No

Source: US Census Bureau. 2010 Census. Table P9 HISPANIC OR LATINO, AND NOT HISPANIC OR LATINO BY RACE (2010 Redistricting Data SF (PL 94-171))

Each of the potential sites are well below the 10 percent threshold used to determine whether a project would result in a disproportionate burden for low-income populations as shown in **Table 10** below and **Appendix B**. Out of the potential site locations, none meet the 10 percent Disproportionate Burden threshold.

Table 10: Low-Income Population Demographic Assessment

Low-Income Populations	945 Hancock Street	599 Burgin Parkway	1800 Crown Colony Drive	360 Wood Road	10-40 Plain Street
Total % low-income households in study area	34.6	37.6	40.4	27.7	26.5
Total % low-income households in city of site	36.0	36.0	36.0	26.0	26.0
Total % Difference	-1.4	1.6	4.4	1.7	0.5
Disproportionate Burden (Yes/No)	No	No	No	No	No

Source: US Census Bureau. 2014 ACS. Table B19001: HOUSEHOLD INCOME IN THE PAST 12 MONTHS (IN 2014 INFLATION-ADJUSTED DOLLARS) (2010-2014 ACS 5-Year Estimates).

4.5 SITE ALTERNATIVES EQUITY ANALYSIS

Using the demographic criteria described above, none of the potential sites met the threshold for a Disparate Impact to minority populations or Disproportionate Burden to low-income populations. All storage and maintenance would occur inside the facility, reducing the noise associated with operations

for the surrounding community. In addition, the MBTA is taking steps to enable all operation of buses on the site, whether hybrid of electric buses in the future, to operate in the electric mode, which is quieter than combustion engines. Additionally, none of the potential siting locations would be anticipated to result in displacements of residents or businesses.

While Braintree has a lower percentage of minority populations and low-income populations (14.8 percent 26.0 percent, respectively) as compared to Quincy (34.5 percent and 36.0, respectively), the siting locations in Braintree are further removed from Quincy Center and the primary service area. Both 10-40 Plain Street and 360 Wood Road would increase the number of deadhead miles buses would be required to travel and increase travel times due to congestion. The 10-40 Plain Street site located 4.7 miles from Quincy Center would require buses to travel on Route 3 to access the Quincy Center bus terminal point, further increasing traffic on a route that often experiences congestion. The 360 Wood Street site located 4.7 miles from Quincy Center would require buses to access the Route 128 split, reducing mobility. Additionally, the 360 Wood Street site is at the end of a cul-de-sac, which could reduce mobility to and from the site when compared to other alternatives. Therefore, the 360 Wood Street and 10-40 Plain Street site were removed from further consideration. Requiring buses to travel longer distances between the garage and starting point of service increases operating costs and can reduce frequencies – as schedules need to allow more time for travel to and from service.

The 1800 Crown Colony located 2.3 miles from Quincy Center would impact a similar proportion of minority persons as compared to Quincy (difference of 0.2 percent). The 1800 Crown Colony Drive has the highest proportion of minority populations and low-income population of all the potential sites (34.7 percent and 40.4 percent, respectively). The site is likely too small to accommodate capacity needs, including parking, storage, and maintenance. It is at the end of Crown Colony Drive, a cul-de-sac connecting the driveways of many large businesses and multi-family apartments located on large lots. This option would increase traffic in an area where the community has few, if any, alternative route to reach these driveways the office park is going to be developed at some point and will generate and handle far more traffic than this garage. In consideration of Title VI populations and the ability of the site to meet the goals of the project, it has been removed from further consideration.

The potential 599 Burgin Parkway study area is substantially lower than the disparate impact to minority populations threshold for sites in Quincy with a difference of -2.4 percent. 599 Burgin Parkways would not meet the disproportionate burden threshold for low-income populations with a difference of 1.6 percent for low-income populations. A total of 32.1 percent of the total population of the study area are minority populations, and a total of 37.6 percent of the population are low-income populations. The site, previously occupied by a Lowe's, would be able to meet the project purpose and need for each of the site selection criteria. The site is located along Burgin Parkway, which provides a direct route to Quincy Center. Additionally, the site has the least number of deadhead miles (1.4 miles) in comparison to all sites under consideration. Therefore, this site was retained for further consideration.

4.6 PREFERRED SITE CUMULATIVE ANALYSIS

This section evaluates the locations of the 599 Burgin Parkway location, as well as similar facilities located nearby, to determine potential community impacts and address whether cumulative adverse impacts may occur.

The 599 Burgin Parkway site is in South Quincy on a parcel zoned for planned unit developments (PUD). The proposed main access point for the new Quincy Bus Maintenance Facility would continue to be the southwestern driveway along Penn Street. Drivers turn to and from Burgin Parkway and Penn Street to access the facility.

There is a 180-unit apartment building (Deco) open in 2016 adjacent to the site on the other side of Penn

Street. There is a single-family neighborhood in located to the west and to the north of the parcel. MBTA bus routes operate along Centre Street and Brooks Avenue. There is a single-family neighborhood adjacent to the east, separated by Burgin Parkway and the Red Line and graded above the site. MBTA bus routes operate along Independence Avenue and Franklin Avenue. The Paul Vincent Grasso Memorial Park is adjacent to the 599 Burgin Parkway site's parking lot and is owned by the City of Quincy.

There is another public transportation-related facility to the south of 599 Burgin Parkway, the MBTA Quincy Adams Station, which includes the Red Line, the MBTA Quincy bus stop, and a parking garage. It is separated from 599 Burgin Parkway by a major arterial, Burgin Parkway.

Commercial and industrial land uses to the north include a plumbing supply store and a gravestone manufacturer. Commercial and industrial land uses adjacent to the southwest of the parcel include automotive businesses, a plumbing business, and a printing business, separated by a heavily forested area of the parcel. There is a grocery store on a large lot to the south (BJ's) along Crown Colony Drive, which is separated from 599 Burgin Parkway by the Deco Apartment Complex, a forested area, and Centre Street.

Because 599 Burgin Parkway was previously occupied by a Lowe's, converting the site to a new Quincy Bus Maintenance facility would result in lower traffic levels when compared to previous uses. Additional bus traffic on Burgin Parkway would not be anticipated to impact the cohesiveness of the community as neighborhoods to the east and west likely access each other using Water Street, which is elevated above Burgin Parkway. Buses on deadhead routes would travel to and from the site via Burgin Parkway, preventing the addition of traffic through residential neighborhoods.

Adjacent neighborhoods, businesses, and parks have the potential to experience impacts from the proposed project due to the proximity to the site. The neighborhood along Federal Avenue separated by Burgin Parkway and the Red Line may also experience limited impacts, albeit to a lesser extent due to the physical barriers previously described.

Overall, the site meets the purpose and need due to space and availability to construct the new Quincy Bus Maintenance Facility and central location in the MBTA Quincy service area. Because the site has historically been utilized for industrial/commercial purposes, including a Lowe's, the proposed improvements would not result in a substantial change in use. Additionally, the indoor nature of the bus facility would reduce the potential for impacts to adjacent parcels. The deadhead miles would not result in traffic through residential neighborhoods and would be limited as Quincy Center is 1.4 miles away along the major arterial. In consideration of Title VI and community impacts, locating the new Quincy Bus Maintenance facility at the 599 Burgin Parkway site would not result in cumulative impacts or burdens disproportionately borne by protected populations.

4.7 CONCLUSION AND RECOMMENDATION

Based on the result of the siting analysis, the 599 Burgin Parkway site is the preferred alternative for MBTA's new Quincy Bus Maintenance Facility and is carried forward for Environmental Justice and Community Impact Assessment. 599 Burgin Parkway was determined to provide the most benefits based on the site selection criteria while not resulting in disparate impacts on minority populations, disproportionate burdens on low-income populations, or cumulative impacts on either of these protected populations.

5 ENVIRONMENTAL JUSTICE AND COMMUNITY IMPACTS

The purpose of this section is to evaluate the community and EJ impacts and benefits from siting the new Quincy Bus Maintenance Facility at 599 Burgin Parkway, Quincy, Massachusetts, proximate to the Quincy Adams station on the Red Line. The proposed new Quincy Bus Maintenance Facility had been used as a Lowe's home improvement store until 2019. The existing Lowe's building will be removed to make way for the new bus maintenance facility, which will provide additional capacity to support future service growth, swing space to support other facility projects, and potential changes related to a transition to battery electric buses. The new bus maintenance facility will store and maintain up to 135 buses. The facility will contain fueling, washing, maintenance, support, administrative, and management capabilities required to support a fleet of this size. The building will include 75,000 square feet of warehouse and office space. Transit vehicle maintenance and storage functions will be performed indoors.

The community study area is formed by the geographic boundaries of Block Groups within ¼-mile of 599 Burgin Parkway as determined by the centroid analysis (see **Appendix A** and **Section 4.1.2 Study Area**). The community study area is in the portion of South Quincy located north of the I-93/Route 3 interchange (Braintree Split) and includes those areas that are anticipated to access Burgin Parkway on a regular basis. Moving clockwise, the I-93/Route 3 interchange (Braintree Split) serves as the southern boundary of the community study area. The western boundary follows Willard Street adjacent to the Blue Hills Reservation and West Street. The northern boundary follows Copeland Street, Granite Street, and School Street. The eastern boundary follows Independence Avenue, Payne Street, Phipps Street, and Verchild Street.

The community impact assessment is an iterative process to evaluate the effects of a transportation action on a community and its quality of life. The assessment considers those factors important to the community, including mobility, safety, relocation, isolation, and other community issues. Federal guidance emphasizes the community impact assessment should be applied throughout the transportation decision-making process, from planning through project development and implementation. Several Federal statutes, regulations, executive orders, and policies address impact analysis. Namely, 23 USC 109(h) requires that U.S. DOT "assure that possible adverse economic, social, and environmental effects relating to any proposed project on any Federal-aid system have been fully considered in developing such project, and that the final decisions on the project are made in the best overall public interest, taking into consideration the need for fast, safe and efficient transportation, public services, and the costs of eliminating or minimizing such adverse effects."

The EJ assessment evaluates potential EJ concerns per Executive Order 12898, which requires federal agencies to "make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations." Once the EJ populations have been identified, the assessment will compare the burdens of the activity experienced by EJ populations with those experienced by non-EJ populations. Similarly, it will compare the activity's benefits experienced by EJ populations as compared to non-EJ populations.

5.1 COMMUNITY FACILITIES

The community facilities within the community study area are described in Table 11 below and shown on Figure 3 in Appendix D using high-level desktop research (Google Earth, Google Maps, and Norfolk County CAD).

Table 11: Community Facilities

Name of Facility	Type of Facility	Public or Private?	Serves a specific population?	Additional details
National Fire Protection Association (NFPA)	Nonprofit	Public	No	Training and certification devoted to eliminating death, injury, property, and economic loss due to fire, electrical, and related hazards.
Quincy Young Sang Korean Presbyterian Church	Religious	Private	Korean-speaking persons	-
Paul Vincent Grasso Memorial Park	Recreational	Public	No	Memorial park dedicated to Lance Corporal Grasso.
Bright Horizons at Crown Colony	Daycare	Private	Children	National Association for the Education of Young Children accredited childcare service infants to pre-k.
John Adams HealthCare Center	Healthcare	Private	Elderly persons; persons with disabilities	Healthcare center for rehabilitative care after a stroke, joint replacement surgery, a cardiac procedure, or a serious illness.
Christs' Church Quincy-Episcopal	Religious	Private	No	Historic building is a Tudor Revival structure constructed in 1874; it was listed on the National Register of Historic Places in 1989.
Bradford Street Playground	Recreational	Public	Children	Children's playground equipment and basketball court.
Fallon Ambulance Service	Emergency services; healthcare	Private	No	Longest continuously independent, family-owned and operated ambulance service in Massachusetts. Provides 9-1-1 ambulance service to the cities and towns of Brookline, Dedham, Milton and Weymouth.
Kincaide Park	Recreational	Public	Children	Softball field and baseball field with lights, tennis court, street hockey court and children's playground equipment.
Dhammakaya Meditation Center Boston	Religious; nonprofit	Private	Thai-speaking persons	Buddhist temple that co-operates with the Dhammakaya Foundation in Thailand, a non-governmental organization of the United Nations.
Lincoln-Hancock Elementary School	Educational	Public	Children; low-income populations; LEP populations; minority persons; persons with disabilities.	Quincy Public School District is predominantly minority (53) with 38% Asian; 7% Black; 5% Hispanic; 3% Two or More Races. Their average school ranking is in the top 50% of public schools in Massachusetts. Offers English Learner Education (ELE) Program for LEP Persons and special education programs. Participates in Title I No Child Left Behind Act.
South West Middle School	Educational	Public	Children; low-income	School within the Quincy Public School District.
			populations; LEP populations; minority persons; persons with disabilities.	
Life Community Church	Religious	Private	No	-

Table 11: Community Facilities				
Name of Facility	**Type of Facility**	**Public or Private?**	**Serves a specific population?**	**Additional details**
Shea Park	Recreational	Public	No	Tribute to Quincy's granite industry with over 30 granite benches on 0.3 acres of land.
American Legion Quincy Post 294	Nonprofit	Private	Veterans	Provides local programs and activities, including American Legion Baseball.
Fort Square Presbyterian Church	Religious	Private	Low-income populations	Provides Clothing Ministry that donates clothing to those in need.
First Spiritualist Church	Religious	Private	No	-
Jack 'n' Jill Child Care Center	Daycare	Private	Children	-
Amelio Della Chiesa Early Childhood Center	Educational; daycare	Public	Children; low-income populations; LEP populations; minority persons; persons with disabilities.	School within the Quincy public School District.
Crown Obstetrics & Gynecology	Healthcare	Private	Women; children	Offers obstetric and gynecological services, including free early pregnancy education.
National organization for rare diseases	Healthcare; nonprofit	Public	Persons with disabilities	Federation of voluntary health organizations dedicated to helping people with rare "orphan" diseases and assisting the organizations that serve them.
Liberty Square Park	Recreational	Public	No	A total of 0.4 acres with no public trails
Adams National Historical Park	Historic	Private	No	National Park Services park; The birthplaces of John Adams and John Quincy Adams.
Bauer House Retirement Home	Healthcare	Private	Elderly; persons with disabilities	Assisted living facility.
MVPediatrics	Healthcare	Private	Children	-
Quincy Pediatrics Associates Inc	Healthcare	Private	Children	-

5.2 DISPLACEMENTS

The new bus maintenance facility at 599 Burgin Parkway has been designed and programmed to not result in displacements. A portion (0.29 acres) of a business that manufactures monuments (W. Canniff and Sons, Inc.) would be acquired for the proposed project; however, the MBTA is seeking to minimize the adverse effects to this business as much as possible so that they may continue to operate as they do today. Additionally, the proposed Burgin Parkway and Columbia Street intersection would provide new access to and from Burgin Parkway. Permanent impacts on other businesses, residences, or community facilities would not occur. Temporary easements may be required but have not been determined at this time.

5.3 ACCESS AND TRAVEL PATTERNS

The below summarizes the current access and travel patterns and the permanent changes to access and travel patterns as a result of the new bus maintenance facility at 599 Burgin Parkway.

5.3.1 CURRENT ACCESS AND TRAVEL PATTERNS

Currently, the primary mode of transportation within and through the study area is by car, mass transit, cycling, and walking. Data from the US Census showed the majority of Quincy residences commuted to work by driving (68.5 percent), followed by transit (26.2 percent), walking (2.3 percent), and other means of transportation (0.7). A total of 2.2 percent of people worked from home.

The I-93/Route 3 interchange (Braintree Split) serves as the southern boundary of the community study area with Burgin Parkway via Independence Avenue/Washington Street providing northeast-southwest access across the interchange. The Braintree Split runs north-south through the western portion of the community study area with northeast-southeast access across the interchange via West Street. Drivers access the Braintree Split to travel through the community study area and regionally. Drivers access the Braintree Split to travel through the community study area and regionally.

Water Street and Quarry Street are collector roads that overpass Burgin Parkway. Independence Avenue runs parallel to the east of Burgin Parkway and the MBTA Red Line, serving as a collector road through residential neighborhoods in the eastern portion of the community study area. Centre Street is a collector road running northwest to southeast, providing direct access to Quincy Adams Station.

MBTA bus routes run through the neighborhood along Centre Street, Brooks Avenue, Independence Avenue, Water Street, School Street, and Franklin Street. There is a MBTA bus stop at Quincy Adams Station for buses along routes 210 and 238.

Burgin Parkway, which runs northwest-southwest between Route 3 and Quincy Center, serves as a major arterial within the community study area. The roadway has limited access to and from adjacent streets, with the MBTA Red Line adjacent to the south (separated by Burgin Parkway), several overpasses, and no connecting driveways. Therefore, parcels east and west of Burgin Parkway within the community study area likely access each other via the Water Street and Granite/School Street overpass.

Sidewalks are present along the majority of roadways within the community study area. Burgin Parkway has sidewalks along its east side and at its intersections with Centre Street and Penn Street. Discontinuous sidewalk is present along portions of the site. Sidewalk runs along Columbia Street adjacent to the site. There is a strip of sidewalk on the southern end of the site along Penn Street.

Bicycle signage and dedicated bike lanes were not observed within the community study area. Although facilities for cyclists are not prevalent within the community study area, a number of parked bicycles were observed at Quincy Adams Station using Google Earth.

Traffic patterns from the previous Lowe's at the 599 Burgin site were 65 percent to and from Burgin Parkway (south) and 35 percent to and from Burgin Parkway (north) (Tetra Tech, 2008). Much of the localized traffic near 599 Burgin Parkway is to and from Quincy Adams Station. Two businesses (W. Canniff and Sons, Inc. and PV Sullivan) located north of the site have access easements to the Lowe's property, enabling them to use it to access their sites from Burgin Parkway, which reduces cut through traffic in the neighborhood.

The parked bicycles, cars, buses, and pedestrians visible at Quincy Adams Station show the community uses several modes of transportation within the area near 599 Burgin Parkway. Centre Street is anticipated to be the primary route to and from Quincy Adams station for residents within the western portion of the community study area. With exception, neighborhoods adjacent to 599 Burgin Parkway likely access Quincy Adams Station via Penn Street and the current Lowe's parking lot. Pedestrians at the Deco Apartment Complex adjacent to the south of 599 Burgin Parkway access Quincy Adams Station via Penn Street. Pedestrian from the neighborhoods adjacent to the west and north of 599 Burgin Parkway travel through the site as it is a direct route to access the Quincy Adams station. Pedestrians in the eastern portion of the community study area must access the sidewalk along Burgin Parkway via one of the Burgin Parkway overpasses (e.g., Water Street) and travel at least 0.7 miles to and from Quincy Adams Station.

5.3.2 PERMANENT CHANGES TO ACCESS AND TRAVEL PATTERNS

The proposed new bus maintenance facility at 599 Burgin Parkway would include an outside bus queuing area off Penn Street for approximately 30 buses, gated access from Quincy Adams Station for employees using public transit, as well as onsite employee parking with about 230 parking spaces. The proposed new bus maintenance facility is compatible with existing service routes, though it will result in a slight increase in deadhead miles. Bus routes and scheduling would generally occur before AM peak traffic and after the PM peak traffic; therefore, employee trips would generally not add to AM and PM peak traffic.

MBTA is looking to provide additional parking for the Quincy Adams Station parking garage while construction and maintenance occur at the station by using the existing parking at the proposed site. Parking for vehicles at the Quincy Adams Station garage would resume after the completion of the garage repairs, and 599 Burgin Parkway would not allow for public parking on the premises of a proposed future bus maintenance facility.

Columbia Street would be extended to Burgin Parkway and a new, signalized Columbia Street and Burgin Parkway intersection would accommodate the MBTA need for operational flexibility. New auto access provided by the interchange would be limited to the new Quincy Bus Maintenance Facility and two businesses (PV Sullivan and W. Canniff and Sons, Inc.).

The Columbia Street and Burgin Parkway intersection would have signalized approaches that allow for both left and right turns to and from Columbia Street for the MBTA bus facility and two businesses. These movements would be accommodated by dedicated turn lanes on Burgin Parkway to prevent potential conflicts with through traffic along Burgin Parkway. The highest queue from the project traffic study is about 400 feet on the southbound through lane, which will not impact the flow of southbound traffic through the intersection of Burgin Parkway and Quincy Street.

The new intersection may increase travel times by less than 60 seconds from through traffic having to stop at the signalized intersection. Emergency response time could improve somewhat from additional, limited access to the areas near Columbia Street. Other nearby roadways would continue to provide comparable access, including Quincy Street and Centre Street. Overall, any negative impacts would be minimal and offset by new, limited access onto Columbia Street for businesses and emergency responders.

Current access to the site from the signalized intersection at Penn Street and Burgin Parkway would be maintained. The Burgin Parkway and Penn Street intersection is signalized, with dedicated turn lanes, wide shoulders, and medians separating traffic on either side. The dedicated turn lanes would remove turning buses from the mainlines, allowing traffic to continue to flow through the intersection.

Currently, pedestrians travel through the private property of the Lowe's parking lot to access the adjacent neighborhoods. Access into and out of the Quincy Bus Maintenance facility would be controlled as is necessary to protect and secure the facility. The proposed project is designed to include a shared use path for pedestrians and bicyclists connecting Columbia Street/Grasso Park and Burgin Parkway. It also includes accessibility improvements to the existing sidewalk adjacent to the property along Burgin Parkway. Overall, the proposed project would improve safety and accommodations for pedestrians and cyclists within the vicinity of 599 Burgin Parkway.

Improvements are proposed for pedestrians traveling from the temporary parking lot at 599 Burgin Parkway for Quincy Adams Station to improve safety and egress to Quincy Adams Station. Existing pavement markings are worn, and new crosswalk striping and skip lines will be added. Existing blank-out signs on the signal mast arms that indicate vehicles to yield for pedestrians at crossings are partially burned out at some approaches and would be replaced. Pedestrian pushbuttons would be added mid-block at the crossings on Burgin Parkway to assist pedestrians who may get stuck at median islands.

Operational changes in the pedestrian phasing would be implemented to allow for a lead pedestrian interval of at least 6 seconds before the through-phases for the Quincy Adams Station driveway and Penn Street. Temporary way-finding signage for vehicles looking to access additional parking would be added.

Overall, the proposed improvements would increase operational efficiency to and from the Quincy Bus Maintenance Facility and would make it safer for individuals to access Quincy Adams Station within the community study area. Because the site was previously occupied by a Lowe's, converting the facility to a MBTA bus maintenance facility would not result in substantially higher traffic levels when compared to previous uses. The extension of Columbia Street and introduction of a Burgin Parkway and Columbia Street intersection would meet MBTA's need for flexibility. The intersection could increase travel times for through traffic on Burgin Parkway by less than a minute; however, any negative impacts would be minimal. Emergency response time would change minimally, with similar response times along Burgin Parkway and, in certain instances, improved response times with new access to Columbia Street. The proposed new bus maintenance facility at 599 Burgin Parkway would not adversely impact community facilities and would not results in displacements. Sidewalks for pedestrians would further facilitate alternative modes of travel. The addition of crosswalks would improve safety at major intersections.

5.4 AFFECTED NEIGHBORHOODS AND BUSINESSES

The proposed new bus maintenance facility at 599 Burgin Parkway would potentially result in impacts to nearby businesses, community facilities, and neighborhoods.

Generally, neighborhoods within the community study area are set back from Burgin Parkway and accessed via major intersections (e.g., Centre Street and Quincy Street, and Water Street). Therefore, the majority of neighborhoods would not experience changes in access and travel patterns. With exception, the neighborhoods west of Burgin Parkway between Centre Street and Quincy Street would benefit somewhat from the pedestrian access provided by the proposed Burgin Parkway and Columbia Street intersection.

The Deco Apartment Complex would experience minimal impacts from bus traffic along Penn Street and at the Burgin Parkway and Penn Street intersection. Traffic volumes turning to and from Penn Street would slightly improve as compared to the previous use of the site as a Lowe's. The two lanes on Penn Street separate traffic turning left into the Deco Apartment Complex and traffic turning right into the proposed Quincy Bus Maintenance Facility. The two businesses referenced above would maintain access to their sites via the Columbia Street Extension, which would serve the same purpose as the current access easements.

The MBTA Quincy Adams Station would benefit from the temporary use of the site's parking lot and permanent improvements for pedestrians accessing the facility. Changes along Burgin Parkway would not change the way drivers within the community study area access Quincy Adams Station.

The majority of community facilities are further removed from Burgin Parkway and would not experience impacts from changes in access and travel patterns as a result of the proposed project. Community facilities near the proposed new bus maintenance facility at 599 Burgin Parkway include two parks, the Paul Vincent Grasso Memorial Park and the Liberty Square Park located in the residential neighborhood adjacent to the west of the proposed site. The proposed Burgin Parkway and Columbia Street intersection would not be anticipated to result in additional traffic through the neighborhood. Improved pedestrian access could increase travel to and from the community facility on foot.

5.4.1 COMMUNITY COHESION

Communities may be defined by geographic boundaries, individuals, or a group of individuals that share common norms, values, characteristics, or interests. Cohesion is typically measured by the ability of individuals, or group of individuals, to interact with others and be recognized as one common group. Residents may develop a sense of neighborhood or community cohesion through social interactions, gatherings at local community facilities, or participation in neighborhood organizations. Community facilities, such as schools, hospitals, places of worship, public parks, and activity centers, are common resources that help to develop and sustain community cohesion. However, new transportation facilities can affect community cohesion by introducing barriers, or limiting access, to parts of a community or neighborhood. Potential impacts to community cohesion include the displacement of residences, business, and community facilities; isolation or segmentation of neighborhoods/communities; severing access to local services; and increased noise or visual impacts.

An assessment of the potential impacts to community cohesion was based on a review of demographic data and geographic observations within the community study area to identify concentrations of unique populations, established neighborhoods, the location of public and community facilities, local businesses, typical pedestrian activity, and accessibility to local community facilities and services.

There are varying degrees of community cohesion within the community study area, including in the areas immediately adjacent to the proposed new bus maintenance facility along Burgin Parkway; the areas near Crown Colony Drive; the areas between Centre Street and Water Street; and the areas near Independence Avenue.

Along the existing portion of Burgin Parkway within the community study area, there is one multi-family residence, the Deco Apartment Complex. Community cohesion primarily exists within the apartment complex and not between neighborhoods within the community study area, due to limited access into and out of each neighborhood via Burgin Parkway and lack of sidewalks along the west side of Burgin Parkway south of Penn Street. Residents likely travel to and from the nearest grocery store at the southwestern corner of the Centre Street and Burgin Parkway intersection via Burgin Parkway. Otherwise, based on the limited nearby amenities, it is anticipated residents use Burgin Parkway, Centre Street, or Water Street to access community facilities, grocery stores, and schools in the northern portion of the community study area west of Burgin Parkway.

Residences in the southwestern portion of the community study area along Crown Colony Drive include two multi-family residences (Elevation Apartments and the Village of Crown Colony) with limited access in and out of their respective complexes located within an area with multiple businesses on large lots. Because the area has few amenities, it is likely parcels in the area do not access each other on a regular basis and that a high level of cohesion does not exist in this area.

Residences to the north and west of the site along and between Centre Street and Water Street are primarily single-family homes along loosely gridded streets and with multiple access points. There are a number of community facilities within the area, including schools within the Quincy Public School District (South West Middle School and Lincoln- Hancock Elementary School); daycare centers (Jack ‘n’ Jill Child Care Center and Amelio Della Chiesa Early Childhood Center); parks (Shea Park and Kincaide Park); religious facilities (Life Community Church, Dhammakaya Meditation Center Boston, First Spiritualist Church, and Fort Square Presbyterian Church); a privately owned emergency service (Fallon Emergency Services); and an elderly living facility (Bauer House Retirement Home). Due to the short distance between residences and community facilities and the availability of facilities for alternate modes of transportation, it is anticipated those in the area access each other on a regular basis.

The areas east of Burgin Parkway within the community study area are largely comprised of single-family

homes with several multi-family homes along Independence Avenue. There are several community facilities scattered throughout the community study area including, a daycare center (the Sippy Cup Place); a historic landmark (Adams Historic Park); a rehabilitation center (John Adams HealthCare Center); a park (Bradford Street Playground); and a religious facility (Quincy Young Sang Korean Presbyterian Church). Businesses are concentrated along Independence Avenue and Federal Avenue. Residences within the area likely access each other due to the proximity of homes, multiple access points, and alternative modes of transportation. However, based on the limited number of amenities, it is likely the community study area uses Water Street, which overpasses Burgin Parkway, to access schools and other community facilities in the northwestern portion of the community study area. The area is also anticipated to use Independence Avenue (which turns into Franklin Avenue) to travel north into Quincy Center.

The replacement of the Lowe's with a proposed new bus maintenance facility at 599 Burgin Parkway would not introduce a structure where there wasn't one previously. The proposed improvements along Burgin Parkway would not increase the sense of a barrier from the new intersection as neighborhoods would not be bisected and mobility and safety would be maintained. Within the vicinity of the project, improvements to pedestrian facilities would serve to encourage increased trips on foot to nearby residences, businesses, and community facilities. In general, the proposed new bus maintenance facility at 599 Burgin Parkway would allow the MBTA Bus System to increase capacity and replace the aging fleet with newer hybrid and electric buses, which would improve access and mobility within the entire community study area. Therefore, overall, the proposed new Quincy Bus Maintenance Facility would serve to increase the cohesiveness of the entire community by improving MBTA bus services.

5.5 ENVIRONMENTAL JUSTICE

As defined by the Council on Environmental Quality (CEQ) report, Environmental Justice Guidance Under the National Environmental Policy Act, a minority population should be identified where either: (a) the minority population of the affected area exceeds 50 percent, or (b) the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis. Federal guidance also allows agencies to defer to state or local definitions of environmental justice populations, as long as they are as inclusive as federal definitions. For this EJ assessment, MBTA's locally adopted definition of environmental justice populations were applied. MBTA follows the Massachusetts Environmental Justice Policy to define a minority census geography as one where 25 percent or more of population identifies as minority.

The community study area includes six BGs, located within three Census Tracts. The BGs are comprised of 148 census blocks, and 96 of those blocks are populated. Of the 96 populated blocks, 56 have minority populations of 25 percent or more (see **Figure 4** in **Appendix A** and demographics in **Appendix D**). Most minority persons within the BGs are Asian (54.0 percent); a total of 19.0 percent are Black or African American; a total of 15.1 percent are Hispanic or Latino of any race; a total of 7.4 percent are two or more races; a total of 3.8 percent are some other race; a total of 0.5 percent are American Indian and Alaska Native; and a total of 0.2 percent are Pacific Islander.

Table 12 below includes a summary of the minority populations by BG. For a list of minority populations by block see **Appendix D.** Within the BGs east of Burgin Parkway (BGs 2 and 3 in CT 4180.02), five of the 30 blocks are minority census geographies. Most populated blocks in the remaining BGs in CT 4180.03 and CT 4180.04 are minority census geographies. The 599 Burgin site is location within blocks 1025 and 2010 in BG 2 in CT 1480.04, which do not have reported populations. While block 1025 includes a business, block 1025 does contains an apartment complex (the Deco Apartment Complex). The population within the apartment complex was not accounted for as it was constructed after 2015 and the decennial Census.

Table 12: 599 Burgin Parkway Minority Populations											
Geography	Total Population	Not Hispanic or Latino							Hispanic or Latino or Any Race	Total Minority Population	Total % Minority Population
		White	Black or African American	American Indian and Alaska Native	Asian	Native Hawaiian and Other Pacific Islander alone	Other Race	Two or More Races			
Quincy	92,271	60,448	3,998	137	22,124	21	768	1,686	3,089	31,823	**34.5**
CT 4180.02, BG 2	811	677	9	1	90	-	6	8	20	134	16.5%
CT 4180.02, BG 3	964	803	32	2	73	-	15	16	23	161	16.7%
CT 4180.03, BG 1	2,481	1,713	168	1	351	4	23	68	153	768	**31.0%**
CT 4180.04, BG 1	1,462	853	115	9	343	-	21	39	82	609	**41.7%**
CT 4180.04, BG 2	851	558	38	-	205	-	3	12	35	293	**34.4%**
CT 4180.04, BG 3	1,967	1,188	159	2	420	1	36	59	102	779	**39.6%**
Study Area Total	8,536	5,792	521	15	1,482	5	104	202	415	2,744	**32.1%**

Source: US Census Bureau. 2010 Census. Table P9 HISPANIC OR LATINO, AND NOT HISPANIC OR LATINO BY RACE (2010 Redistricting Data SF (PL 94-171)).

FTA Title VI guidance encourages agencies to use a locally developed threshold for identifying low-income populations, as long as they are as inclusive as the Department of Health and Human Services (DHHS) poverty guidelines. The Massachusetts Environmental Justice Policy defines a low-income BG as one where 25 percent or more of the households have an annual median household income at or below 65 percent of the statewide median household income ($67,846 * 65 percent = $44,100). The Census 5-year ACS block group data (2010-2014) presents the number of households with annual incomes that fall into incremental ranges (e.g., "$10,000-$14,999", "$15,000-$15,999", "$16,000-$19,999", etc.), as well as ranges of "less than $10,000", and "$200,000 or more". Based on the Census data available, the percentage of low-income households for each community study area was determined by the number of households with incomes below $44,999 as compared to the total number of households.

According to data from the 2014 American Community Survey, all but one BG (BG 2 in CT 4180.02) has been identified as low-income (see **Table 13**).

Table 13: 599 Burgin Parkway Low Income Households			
Geography	Total Households	Total Households with Annual Incomes Under $44,999	Total % Households with Annual Incomes Under $44,999
Quincy	39,643	14,268	**36.0**
CT 4180.02, BG 2	226	37	16.4
CT 4180.02, BG 3	459	131	**28.5**
CT 4180.03, BG 1	1,196	418	**34.9**

Table 13: 599 Burgin Parkway Low Income Households			
Geography	**Total Households**	**Total Households with Annual Incomes Under $44,999**	**Total % Households with Annual Incomes Under $44,999**
CT 4180.04, BG 1	688	280	**40.7**
CT 4180.04, BG 2	261	76	**29.1**
CT 4180.04, BG 3	940	474	**50.4**
Study Area Totals	3,770	1,416	**37.6%**

Source: US Census Bureau. 2014 Table DP03 SELECTED ECONOMIC CHARACTERISTICS (2010-2014 ACS 5-year estimates).

Because EJ and low-income census geographies are near the proposed project, the proposed project would impact EJ populations (see **Appendix D and Figure 4 in Appendix A**). The minority populations within the community study area are comprised largely of Asian persons, Black or African American persons, and Hispanic or Latino persons of any origin. Additionally, most BGs within the community study area are low-income census geographies, except for BG 2 in CT 4180.02 located north of Verchild Street and east of Independence Avenue.

The proposed new bus maintenance facility at 599 Burgin Parkway would prevent through traffic from drivers and pedestrians for security purposes. Under the proposed project, pedestrian access to Burgin Parkway would be provided via Columbia Street on the northern edge of the property and access to MBTA Quincy Adams Station would be provided from a new paved path along the southern edge of the property. Additional sidewalks and crosswalks would improve safety for pedestrians nearby, primarily residents within the Deco Apartment Complex and neighborhoods adjacent to the west and north of the project site. Traffic volumes would be lower than, but similar to the previous use of the site as a Lowe's and would not reduce mobility along Burgin Parkway. While the introduction of an intersection would increase travel times for through traffic by less than a minute, impacts would be minimal and offset by improvements to mobility and safety throughout the entire community study area, including in EJ areas. Additionally, the proposed project is designed not to displace any residents or business in EJ areas, and it would not separate any EJ neighborhoods. Therefore, the proposed new bus maintenance facility at 599 Burgin Parkway would not result in disproportionately high and adverse impacts to minority or low-income populations.

5.6 LIMITED ENGLISH PROFICIENCY

Executive Order 13166 "Improving Access to Services for Persons with Limited English Proficiency" requires agencies to examine the services they provide, identify any need for services to those with Limited English Proficiency (LEP), and develop and implement a system to provide those services so that LEP persons can have meaningful access to them. This analysis follows the USDOT's December 2005 guidance concerning services and policies by recipients of federal financial assistance related to LEP persons. The guidance prohibiting national origin discrimination as it affects LEP persons in accordance with Title VI of the Civil Rights Act of 1964 requirements. LEP individuals are those categorized in the US Census Bureau as speaking English less than "very well." The guidance outlines the circumstances that can provide a "safe harbor" for recipients regarding the requirements for translation of written materials:

- A "safe harbor" means that if a recipient provides written translations under these circumstances, such action will be considered strong evidence of compliance with the recipient's written-translation obligations under Title VI.
- Strong evidence of compliance with written-translation obligations are demonstrated by written translations of vital documents for each eligible LEP language group that constitutes 5% or 1,000, whichever is less, of the population of persons eligible to be served or likely to be affected or

encountered. Translation of other documents, if needed, can be provided orally; or (b) If there are fewer than 50 persons in a language group that reaches the 5% trigger in (a), the recipient does not translate vital written materials but provides written notice in the primary language of the LEP language group of the right to receive competent oral interpretation of those written materials, free of cost.

Analyzing the LEP population in the MBTA service area, the following languages meet or exceed the USDOT's "safe harbor" threshold definition of either five percent of the total population or 1,000 individuals, whichever is less:

- Spanish/Creole
- Portuguese/Creole
- Chinese
- French Creole
- Vietnamese
- Russian
- Hebrew
- French
- Italian
- Arabic
- Korean
- Greek
- Polish
- Japanese
- Gujarati
- Hindi
- Armenian
- Tagalog
- Persian
- German
- Urdu
- Serbo-Croatian
- Thai
- Mon-Khmer/Cambodian

The US Census Bureau compiles 2010-2014 ACS data for language groups at the CT level. It is important to note the CTs encompass a larger geographical area than the BGs used for the community study area. Approximately 20.3 percent of the population in the CTs encompassing the community study area speaks English "less than very well" (see **Table 15**).

Of the 2,613 persons that are considered LEP within the CTs, the language most often spoken is Chinese (39.3 percent). A total of 12.1 percent of LEP persons speak Vietnamese, 8.9 percent speak Other Asian Languages, 8.9 percent speak Other Indo-European languages, and 5.9 percent speak Portuguese or Portuguese Creole languages. The language groups that the remainder of LEP persons speak each comprise varying percentages from 0 to 5. The "Safe Harbor" thresholds were met for LEP persons that speak Chinese in each of the three CTS (CT 4180.02, CT 4180.03, and 4180.04). See **Table 14** below.

Table 14: Limited English Persons by Language Group

Speak English less than "very well" by language group	Census Tract 4180.02, Norfolk County, Massachusetts		Census Tract 4180.03, Norfolk County, Massachusetts		Census Tract 4180.04, Norfolk County, Massachusetts	
	#	%	#	%	#	%
Chinese	360	**5.8%**	163	**6.2%**	504	**12.4%**
Vietnamese	122	2.0%	61	2.3%	133	3.3%
Other Asian languages	150	2.4%	83	3.2%	-	0.0%
Greek	102	1.6%	-	0.0%	1	0.0%
Other Indo-European languages	173	2.8%	-	0.0%	60	1.5%
Arabic	-	0.0%	-	0.0%	106	2.6%
Portuguese or Portuguese Creole	-	0.0%	58	2.2%	95	2.3%
Spanish or Spanish Creole	-	0.0%	39	1.5%	10	0.2%
Russian	86	1.4%	-	0.0%	26	0.6%
French (incl. Patois, Cajun)	67	1.1%	-	0.0%	-	0.0%
French Creole	48	0.8%	-	0.0%	-	0.0%
Italian	20	0.3%	-	0.0%	21	0.5%

Table 14: Limited English Persons by Language Group						
Speak English less than "very well" by language group	**Census Tract 4180.02, Norfolk County, Massachusetts**		**Census Tract 4180.03, Norfolk County, Massachusetts**		**Census Tract 4180.04, Norfolk County, Massachusetts**	
	#	**%**	**#**	**%**	**#**	**%**
Gujarati	12	0.2%	-	0.0%	-	0.0%
Hindi	25	0.4%	-	0.0%	-	0.0%
Other Indic languages	39	0.6%	-	0.0%	-	0.0%
Japanese	11	0.2%	9	0.3%	-	0.0%
Korean	29	0.5%	-	0.0%	-	0.0%
Total LEP population	**1,244**	**20.1%**	**413**	**15.8%**	**956**	**23.6%**
Total population speak only English	**3,443**	**55.5%**	**1,651**	**63.2%**	**2,543**	**62.7%**
Total population 5 years and older:	**6,204**	**100.0%**	**2,614**	**100.0%**	**4,059**	**100.0%**

Source: US Census Bureau. 2014 Table B16001 - AGE BY LANGUAGE SPOKEN AT HOME BY ABILITY TO SPEAK ENGLISH FOR THE POPULATION 5 YEARS AND OVER (2010-2014 ACS 5-year estimates).

There are facilities that target or serve LEP persons within the community study area, including Korean-speaking persons (e.g., Quincy Young Sang Korean Presbyterian Church) and Thai-speaking persons (e.g., Dhammakaya Meditation Center Boston). There are LEP populations the three schools in the Quincy Public School District within the community study area (e.g., Amelio Della Chiesa Early Childhood Center, South West Middle School, and Lincoln-Hancock Elementary School). Schools within the Quincy Public School District provide programs for English as a second language.

LEP persons are accommodated during the public involvement process by providing vital materials in both English and Chinese including mailings, meeting advertisements in both English and Chinese-speaking papers, and key meeting materials. Additionally, translation services for Chinese-speaking persons are provided upon request. All interested parties are instructed of the availability of additional language access services, should a request for written materials and/or interpretation be needed in additional languages. All public involvement efforts associated with the project will provide LEP persons with meaningful opportunities to participate in the public process.

5.7 CONSTRUCTION

During construction, the contractor and the MBTA would have control over how demolition and construction waste is managed. Construction activities would be coordinated by the MBTA and the contractor with the City of Quincy, utility companies, and other public and private entities as appropriate. As design is advanced, construction-period assessments would include evaluation of potential construction access locations and laydown areas for construction equipment and building materials.

Construction-period impacts could include air quality, noise and vibration impacts; solid and/or hazardous waste generation; and utility impacts; and would require appropriate management and/or mitigation measures. Construction-period impacts are considered in three categories: offsite, interface, and onsite impacts. Offsite and interface impacts are associated with the delivery of materials, equipment, and personnel to and from the site, while onsite impacts are associated with the actual work being performed at the Project sites. Interface impacts often occur where the contractors' materials, equipment, and personnel enter the Project sites or laydown areas that are used to store materials and equipment. Interface impacts also include temporary parking required for construction and support personnel.

Per MBTA construction best management practices and guidelines, a covered structure for waste and recyclables would be provided onsite. Efforts during construction would include monitoring of the indoor

areas via planning and implementation of air quality controls, as well as proper preparation just prior to occupancy to ensure volatile organic compounds and other air contaminants are not present as occupants move into the facility. Operationally, recyclables would be collected from building occupants and recycled.

The Project proposes to decrease impervious areas by 424 square feet. The potential for erosion and sedimentation impacts during construction would be minimized through the EPA Construction General Permit and development and implementation of a Stormwater Pollution Prevention Plan. In general, the measures are designed to minimize erosion and sedimentation by:

- Work with cities and applicable emergency personnel to ensure appropriate safety measures are incorporated throughout construction.
- Minimizing air quality impacts by following existing MassDEP's Solid Waste and Air Quality Control regulations and MBTA retrofit procedures for construction equipment to reduce emissions. Comply with MassDEP's idling restrictions. Post idling restriction signage on project construction sites.
- Establishing community outreach and information programs such as establishing a project construction office, a protocol for reporting community complaints, a project email address and hotline for public concerns and providing frequent updates to the Project website.
- Developing protocols and controls to limit noise impacts during construction (e.g., locating stationary construction equipment as far away from noise-sensitive receptors to the greatest extent feasible, fitting any air powered equipment with pneumatic silencers, limit the size of generators and their run times to the greatest extent possible, etc.). Nighttime and weekend construction in residential neighborhoods may only occur with full coordination with the communities and abutting neighborhoods.
- Developing and implementing a Stormwater Pollution Protection Plan in accordance with NPDES and MassDEP standards as well as installing and maintaining erosion and sediment control measures during construction. Additionally, protecting Town Brook by redirecting and reducing velocity of runoff.
- Minimizing the quality and duration of soil exposure during construction as well as inspecting and maintaining erosion and sediment controls as necessary until final stabilization is achieved and final inspections have been completed.
- Carefully designing and implementing construction controls to avoid the archaeological and ecological resources downgradient of the site or on adjoining properties.

Construction-period impacts would be minimal. The approximately 10-acre work area is large enough to provide adequate laydown areas onsite, parking for construction personnel, and construction trailers, while maintaining safe and comfortable paths on the perimeter of the site.

5.8 CONCLUSIONS AND RECOMMENDATIONS

The Environmental Justice and Community Impacts assessment evaluated the potential community and socioeconomic impacts proposed new bus maintenance facility at 599 Burgin Parkway in accordance with FTA EJ compliance requirements and Federal regulations for implementing NEPA. The conclusions of the analysis are described herein.

The proposed new bus maintenance facility at 599 Burgin Parkway would replace the existing Lowe's and secure the site by preventing through traffic. The introduction of a Burgin Parkway and Columbia Street intersection and additional sidewalks and crosswalks would reroute pedestrian traffic around the facility, which would improve mobility and safety conditions for residences and businesses in proximity to the project site overall. Emergency response times would change minimally, with similar response times along Burgin Parkway and, in certain instances, improved response times with new access to Columbia Street. Bus traffic to and from the site would not result in substantially higher traffic levels when compared to

the previous Lowe's. The proposed project would not adversely impact community facilities and would not results in displacements.

Although the proposed building would be three stories and occupy a larger footprint, it would exist on a parcel previously occupied by a Lowe's, which would not change the current sense of a barrier. Proposed improvements along Burgin Parkway would maintain mobility and safety, while improving pedestrian access to neighborhoods and businesses along Columbia Street. Improvements to pedestrian facilities would serve to encourage increased trips on foot to nearby residences, businesses, and community facilities. Improvements to the MBTA bus system would increase access and mobility within the entire community study area, providing for a more cohesive community overall.

As the community study area is primarily EJ, the proposed project would impact EJ populations. The project would allow MBTA to increase bus capacity and upgrade existing buses, improving mobility within the community study area, changes that would benefit both EJ and non-EJ populations alike. Additionally, the proposed project would not displace any residents or business in EJ areas, and it would not separate any EJ neighborhoods. In consideration of the impacts to both EJ and non-EJ populations as a result of the proposed project, disproportionately high and adverse impacts to minority or low-income populations would not occur. Because the proposed project would not result in disproportionately high and adverse impacts, further mitigation measures are not required.

Approximately 20.3 percent of the population in the CTs encompassing the community study area are LEP, the majority of which speak Chinese. Public involvement events associated with the proposed project have and will continue to provide meaningful opportunities to all persons for involvement in the environmental process.

Overall, the new Quincy Bus Maintenance Facility would help the MBTA increase service reliability and allow MBTA to increase its capacity to include hybrid and electric buses. These improvements would help alleviate the burden future traffic increases would place on the transportation network due to the rate of growth in Quincy and surrounding communities. The ability to increase capacity would improve links in the transportation network for travel within the Greater Boston region. It would enable MBTA to meet the demand for affordable mobility for those with few other options. All storage and maintenance would occur inside the facility, the new bus maintenance facility at 599 Burgin Parkway has the potential to address the aging infrastructure, accommodate a modernized fleet, improve system operations, and increase capacity of MBTA operations.

6 PUBLIC PARTICIPATION REPORT

Meaningful public engagement is shaped by the principles of inclusion and nondiscrimination at the core of EJ and Title VI obligations. Effective outreach to diverse populations encourages participation in the decision-making processes that impact individuals and communities. Environment equity is a right for all people to experience safe, healthful, and aesthetically pleasing surroundings. Public participation has and will continue to occur in accordance with the Public Engagement Plan (PEP), described further in Section 6.2.

6.1 PUBLIC MEETINGS TO DATE

MBTA presented the initial design concept for the Quincy Bus Facility during a community meeting Wednesday, January 29, 2020 at the South West Middle school, 444 Granite St, Quincy, MA 02169. MBTA conducted public outreach to provide preliminary project information and solicit feedback on potential impacts the project could present to the local community. The opportunity to have this discussion early in the project has proven useful to the team to understand the community's concerns and expectations.

The MBTA project team presented to approximately 70 attendees and responded to 53 questions and concerns involving noise, traffic mitigation, congestion, and site selection. Issues raised by abutters and local residents are outlined in **Table 15** below.

Table 15: Quincy Public Meeting

Community Impacts	Residents/Businesses
Noise/Traffic/Congestion/Safety Mitigation	14
Facility location research	10
Bus Technology	7
Property Tax	5
Property/Eminent Domain	5
Union – PLA Agreement	2
Hours of Operations	2
Project Funding	1
Development/Investment in surrounding area	1
Parking	1

Based on the feedback received, additional sites were evaluated to determine their ability to accommodate the new Quincy Bus Maintenance Facility as shown in **Appendix C** and summarized below:

6.1.1 465 CENTRE STREET

The 465 Centre Street site is located 2 miles from Quincy Center and is zoned for industrial use (see **Figure 8**). It is bounded by Quincy Adams Station to the north, associated train tracks to the east, undeveloped land to the south, and Burgin Parkway to the west. The site is an active Home Depot, requiring a displacement and loss of a local employment source. A new facility on the site would address the need to address aging infrastructure and has good internal circulation that could accommodate capacity needs. However, because the site has an active business, it is undesirable and impractical for the MBTA to pursue. The signalized intersection at Burgin Parkway has a high number of crashes and is a Top 200 Intersection Crash Cluster location for 2014-2016. Environmental features on the site include a perennial stream, Town Brook, floodplain and Riverfront Area, a Massachusetts regulated wetland resource area.



Figure 8: Quincy 2 (465 Centre Street)

6.1.2 125 UNION STREET

This site option is located at 125 Union Street in the town of Braintree (See **Figure 9**). The site is bounded by Union Street to the north, Route 3 to the east, a utility to the south (Covanta Energy), and Ivory Street to the west. It is vacant and was occupied by a motel chain until 2018. It is adjacent to a mix of commercial uses. The capped landfill and Braintree transfer station are to the south. Existing access and egress at the site are limited to Union Street with right in/right out only. Although a new facility on the site would address the need to address aging infrastructure, the site could not accommodate capacity needs without structured parking or a reduction in fleet size. The distance from Quincy Center would increase miles on the buses and increase operating costs.



Figure 9: 125 Union Street

6.1.3 257 IVORY STREET

This site option is located at 257 Ivory Street in the town of Braintree (See **Figure 10**). An active business, Covanta Energy, is located on the parcel. The business includes a recycling drop off center for Braintree residents, resulting in the displacement of a source of local employment. The parcel is bounded by Ivory Street to the west. The site is zoned for commercial land uses and is near the Braintree Station located across Ivory Street to the west. There is a capped landfill east of the site. Existing access and egress at the site is from the Ivory Street/Ivory Plaza road intersection and a signalized intersection at MBTA Braintree Station. Although a new facility on the site would address the need to address aging infrastructure, the site could not accommodate capacity needs without structured parking or a reduction in fleet size. The irregular parcel shape and site grading would create internal circulation challenges. The distance from

Quincy Center would increase miles on the buses and increase operating costs. Further, because the site has an active business it is undesirable and impractical for the MBTA to pursue.



Figure 10: 257 Ivory Street

6.1.4 COMBINATION OF 125 UNION STREET AND 257 IVORY STREET

This option is a combination of 125 Union St and 257 Ivory Street in Braintree as described previously (see **Figure 11**). This option would require the acquisition of three parcels and was considered in order to accommodate the capacity needs. The new facility on the site would address the need to address aging infrastructure and could accommodate capacity needs. This site would require the taking of a parcel with an active business as described above. Internal circulation challenges exist due to the irregular parcel shape and grading of the site. This would require a high level of design to evaluate the potential of the site to accommodate the facility, parking, and maintenance due to the shape and grading. The site is located on a capped landfill. A portion of the site has been graded. There are retaining walls, fence, and guardrail features on the south side of the site.



Figure 11: Combination of 125 Union Street and 257 Ivory Street

6.1.5 SCREENING OF ADDITIONAL ALTERNATIVE SITES IDENTIFIED

After further evaluation, the additional sites were removed from further consideration for the following reasons:

- 465 Centre Street – The site is home to active business.
- 125 Union Street – The site has an insufficient parcel size and is a great distance from Quincy Center in comparison to more feasible options.
- 257 Ivory Street – The parcel has an active business and an insufficient parcel size and is a great distance from Quincy Center in comparison to more feasible options.

- Combination of 125 Union Street and 257 Ivory Street – The site is an active business, there are internal circulation challenges, it would require the acquisition of multiple parcels, and it is a great distance from Quincy Center in comparison to more feasible options.

On June 24, MBTA hosted a virtual public meeting using the GoToWebinar platform to discuss the results of the site selection, present the preferred alternative, and provide Quincy residents, businesses, and stakeholders the opportunity for a question and answer period.

6.2 PUBLIC ENGAGEMENT PLAN

The project's Public Engagement Plan (PEP) presents procedures to engage the public in the planning process of a transportation project in their local community. Steps to promote interest and encourage the public to be part of the process from project inception are outlined in the PEP. The PEP is a dynamic and ongoing process where participation occurs in parallel to the planning phase. The PEP guides community engagement for the Quincy Bus Maintenance Facility project, and will also, serve as the baseline to effectively engage community participation for each additional facility identified for modernization in the Bus Facility Modernization Program.

The MBTA's commitment to preserve public engagement during the COVID-19 outbreak has prompted the agency to adopt innovative approaches to communicate its transportation investments to the public. While the COVID-19 outbreak has suspended in-person public meetings, the MBTA's communication methods to ensure public participation and maintain contact with affected communities include Virtual Public Involvement (VPI), webinars, call-in numbers, conference calls, factsheets, phone, and social media. The MBTA understands access to the internet and other technology may be limited or non-existent for some people and additional communication methods such as telephone and mailings will fill that void to ensure equal participation. As COVID-19 diminishes, steps to resume face-to-face public meetings will be identified.

As of July 2020, the MBTA has developed a training for project managers, staff responsible for public engagement, and third parties involved in MBTA project development to understand how to utilize virtual public engagement technologies and additional available resources to continue striving to achieve diverse and inclusive public engagement that is informed by the principles of Title VI and EJ. The training is mandatory for those staff with public engagement responsibilities and is encouraged for all to understand not only the unique challenges of public engagement during a public health emergency, but also potential opportunities for increased and/or improved engagement facilitated by new technologies that may provide avenues for engagement that we not previously utilized.

The PEP outlines public engagement strategies for the project. In-person public engagement is critical to increase awareness of the Quincy Bus Facility Modernization Project. However, in the era of the COVID-19 outbreak, the MBTA is thinking beyond in-person engagement and is successfully adopting Virtual Public Involvement (VPI) as an additional avenue for public participation. The full menu of components of the PEP includes:

- Virtual Public Involvement (VPI)
- Public Meetings
- Surveys
- Open houses
- Stakeholder Meetings
- One-on-one interaction
- Community Liaison

- Attending or presenting at existing forums
- Attending community meetings
- Attending local events or fairs
- Identifying and equipping neighborhood organizations, advocacy groups for low-income, minority and foreign-born with specific information about the project to disseminate to constituents
- Continuing to build project database including residents and stakeholders contact information
- Informational materials/fact sheets/newsletters available to the public, stakeholders, community organizations, public officials, media
- E-mail blast updates to project database
- Project update via US Mail including comment card to abutters and surrounding neighborhoods
- Amending and updating communication strategies, methods, and tools to best meet the evolving needs of stakeholders before and throughout the duration of the proposed project.

6.2.1 ACCESSIBILITY AND PUBLIC ENGAGEMENT

The MBTA Quincy Bus Facility Modernization Project team supports an open and transparent public engagement process and is committed to ensure that everyone can participate in public meetings and events relating to the project regardless of race and ethnicity, national origin, income, limited English proficiency (LEP), age, sex, disability, or geography. Public meetings for this project are always held in ADA-accessible facilities and in transit-accessible locations, or, in the context of virtual meetings, provided via accessible software platforms with accessibility features, such as video interpretation and real-time captioning, available. Timely public notification of meetings and events requires 14-day prior notice using various methods to notify the public and encourage broad participation. Information and communications shared with the public is provided in accessible formats and members of the public are instructed on how to make requests for reasonable accommodations to fully participate in the process. Based on local demographics, LEP persons are accommodated during the public involvement process by providing vital materials in both English and Chinese including mailings, meeting advertisements in both English and Chinese-speaking papers, and key meeting materials. Additionally, translation services for Chinese-speaking persons are provided upon request. All interested parties are instructed of the availability of additional language access services, should a request for written materials and/or interpretation be needed in additional languages. All public involvement efforts associated with the project will provide LEP persons with meaningful opportunities to participate in the public process.

6.2.2 COMMUNICATION METHODS

Providing access to project information is essential to building a strong, transparent relationship with residents and stakeholders. The following communications tools will be used to inform the public on the progress of the Quincy Bus Facility Maintenance Project and provide access to the most up to date information. Communication methods include:

- *Website*: The Quincy Facility Maintenance Project will a have dedicated website page and comments will be directed to the MBTA Project Team leads. The site will contain up-to-date information and serve as a portal for project material, meeting notices and agendas, information on public involvement, and staff contact information.
- *Social Media*: The project team will send updates and milestones met to the MBTA Social Media for posting.
- *Emails*: The project team will notify via email residents who have provided their email addresses at prior public meetings about upcoming public meetings and opportunities for input.
- *Media Outreach*: MBTA Public Affairs will handle all media requests throughout the entire project. The project team will work cooperatively with MBTA Public Affairs providing project information and

support necessary to assist with the preparation of media briefings, press releases and announcements.

6.2.3 PUBLIC MEETINGS

The PEP includes a schedule for in-person and/or virtual public meetings during the different phases of development. All public meeting activities are Title VI and ADA compliant, adhere to MBTA LEP policy, and support the environmental clearance process.

- **Public Meetings to Date**
  - *Community meeting hosted by the City of Quincy on Wednesday, January 29 at the Southwest Middle School* – the purpose was to discuss the relocation of the Quincy Bus Maintenance Facility from 954 Hancock Street to 599 Burgin Parkway. The MBTA project team presented the authority's vision to approximately 70 attendees and accommodated a question/answer period. See PEP for further information regarding the meeting.
  - *Conceptual design phase (15%) Wednesday, June 24 virtual public meeting using GoToWebinar* - With the COVID-19 outbreak temporarily suspending face-to-face public meetings, the MBTA successfully is holding meetings virtually using GoToMeeting. The MBTA has adopted a new approach to continue providing opportunities for public comment and engagement. As design of the Quincy Bus Maintenance Facility progresses, the project team on Wednesday, June 24, hosted a virtual public meeting using GoToWebinar to provide Quincy residents, businesses, and stakeholders a project update and opportunity for a question and answer period.

- **Planned Public Meetings**
  - *Preliminary design phase (30%)* – host public meeting in an open-house forum to provide project updates.
  - *Final design phase (60%)* – host public meeting in an open-house forum with abutters and key stakeholders on final design, construction phases, and schedules.
  - In addition, the project team will conduct public engagement for State and Federal environmental permitting as applicable.

- **Post Meeting Strategies**
  - Continue relationship building efforts via telephone, virtual meetings, in-person meetings (during and post COVID-19) with Quincy elected officials, neighborhood groups, civic associations to provide them information of any new developments that may directly affect the public and to solicit their feedback and support.
  - Collaboration with officials and local groups with historical knowledge of the new facility location and surrounding area will assist with addressing issues, promoting transparency, and further building community trust.

6.2.4 CONCLUSION

This plan is a collaborative approach to maximize public support of the MBTA Quincy Bus Maintenance Facility Project providing residents, stakeholders, government officials, advocacy groups, and media the necessary transparency to fully understand and appreciate the transportation benefits this significant investment will bring to the Quincy community.

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Appendix 5A

Service Delivery Policy



Massachusetts Bay Transportation Authority

Service Delivery Policy



MBTA Fiscal and Management Control Board
Approved: June 7, 2021

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Chapter 1: Introduction

Purpose

The Service Delivery Policy sets how the MBTA evaluates service quality and allocates transit service to meet the needs of the Massachusetts Bay region. It is consistent with the MBTA's enabling legislation and other external mandates, such as Title VI of the Civil Rights Act of 1964 (Title VI), and the Americans with Disabilities Act of 1990 (ADA). As such, the Service Delivery Policy:

- Establishes the aspects that define service availability and sets parameters for levels of provided service
- Establishes objectives that define the key performance characteristics of quality transit services
- Identifies quantifiable standards that are used to measure whether the MBTA's transit services achieve their objectives, within the context of federal, state, and local regulations
- Outlines a service planning process that applies the service standards in an objective, uniform, and accountable manner
- Sets the priorities for the service planning process by setting minimum levels and targets for the service standards
- Involves the public in the service planning process in a consistent, fair, and thorough manner

Background

This document is the 2021 update of the MBTA's Service Delivery Policy. The 2021 Service Delivery Policy is considered a minor update to the 2017 document, refining the standards that measure the quality of MBTA services while also more explicitly incorporating MBTA strategic priorities (e.g. equity) into the way service is evaluated. At the onset of the COVID-19 pandemic in March 2020, the MBTA saw unprecedented declines in ridership and shifted its service planning approach to prioritize essential service for riders that continued to rely on the system. Going forward into recovery from the pandemic, and to the return of service and ridership, the MBTA is focused on building back an improved transit network. To build back better, the MBTA continues to prioritize transit critical populations that rely on the system, while also utilizing principles from initiatives such as the Bus Network Redesign to better align service with regional travel demand and attract and retain riders. Commuter Rail service is also evolving to meet regional needs, with predictable, all-day schedules. To that end, this iteration of

the Service Delivery Policy introduces two preliminary measures that will help evaluate transit network quality: Trip Coverage, which evaluates how many of the region's trips are served competitively by transit compared to the same trips by car; and Regional Access, which measures whether the MBTA system can be used across the service area to reach critical regional destinations such as Logan Airport and Longwood Medical Area. Beyond the introduction of the two preliminary transit quality measures, this version of the Service Delivery Policy includes updates to the Coverage and Accessibility measures, methodology improvements to align Frequency with industry best practices, and revisions to the Bus Route Benefit-Cost Ratio tool.

This policy is intended to be updated regularly as the MBTA expands its ability to collect and analyze data, build out metrics, and define service parameters and targets. In addition, as priorities for service change, this policy will be updated to reflect these new priorities. Future updates will continue to incorporate input from the public and will be adopted by the MBTA governing board.

Document Structure

Chapter 2 lays out the service *objectives*. The service objectives include service availability, service quality, and network quality. Service availability objectives describe where, when, and how often service is available to residents of the service area, and the accessibility (as related to riders with disabilities) of the MBTA network. Service quality objectives describe the quality of the delivered service, from a passenger perspective whenever possible. Network quality objectives describe how well MBTA services meet the travel needs of the region.

Since the MBTA offers different types of service that play different roles in the overall network, and services also vary by time period during the service day, Chapter 2 also defines each type of service provided by the MBTA and the time periods of the service day.

Chapter 3 sets the quantifiable *standards* used to measure the objectives outlined for service availability, service quality, and network quality. These standards are divided into two categories: service planning standards used in the service planning process to evaluate and allocate service, and accessibility standards that fall outside the service planning process. Both the service planning standards and accessibility standards are evaluated in the Service Monitoring portion of the MBTA Title VI Program. Network quality measures are preliminary service measures introduced in the 2021 Service Delivery Policy and are not evaluated in the Service Monitoring portion of the Title VI Program at this time.

The standards for accessibility that fall outside the service planning process are set within the context of the ADA. These standards are used to inform capital and operating decisions outside of the service planning process.

Each standard has a number of components. The *definition* describes what conditions are considered passing for that standard. Within a single standard, the definition changes depending on the type of service or time period. The pass/fail condition is measured at different levels of aggregation depending on the standard. For example, whether a bus is considered on time is measured at each time point on the route.

All standards are designed in the positive direction, where 100% would be perfect performance. This means improvement is always measured by increasing the percentage. Depending on the standard, performance can be measured at the route level, at the mode level, or for the entire network.

Each standard has a target. The targets provide a medium-term goal for improving service; targets can be updated on a yearly basis as progress is made.

In addition, the bus service planning standards have a *minimum;* since service planning requires trade-offs between standards, the minimums are used to set priorities. If performance at a route or mode level falls below the minimum level on a standard, that standard becomes a priority to address in the service planning process as appropriate. This document includes the 2019 performance of each of the standards to provide context for the minimums and targets. Performance is reported for 2019 as it was the last full year before the pandemic caused shifts in travel behavior and service planning.

The reporting for each standard includes *equity checks*. Equity check results are reported at the mode level for low-income riders and riders of color. The equity checks enable the MBTA to monitor service quality experienced by low-income riders and riders of color on an ongoing basis, and to determine if riders in these groups experience service that meets the standard minimums or targets. The purpose of the equity checks is to provide transparency around levels of service provided to vulnerable populations and to help inform and prioritize future service planning changes.

Chapter 3 also describes the factors used by the MBTA to assess the benefit-cost ratio of bus routes. This tool is used to identify bus routes that are providing a high value for their cost and those providing a low value for their cost. This allows the MBTA to understand the characteristics of high-performing routes to emulate, and identify ways to modify or otherwise improve low-performing routes.

Chapter 4 lays out the service planning process. It includes the quarterly changes, the rolling service plan process, and the annual gap analysis. Within the rolling service planning process, Chapter 4 describes how the service standard minimums and targets are used to prioritize service changes.

The appendices provide additional information used to calculate the standards. Appendix D summarizes the standards and the targets, minimums, and 2019 performance levels.

Chapter 2: Services and Service Objectives

Service Objectives

The MBTA, in collaboration with stakeholders and passengers, identified the following service objectives representing the most important characteristics of a high-quality transit system. These objectives also address the requirements of the MBTA's enabling legislation.

Service Availability
People should be able to use the MBTA to travel throughout the service area at convenient times and frequencies.

Service Quality
Passengers should experience service that is comfortable and reliable throughout the service area.

Network Quality
The MBTA should strive to provide transit service that is well-matched to travel demand and that is competitive with car-based modes.

Accessibility
The MBTA should ensure that its infrastructure and vehicles, as well as its services, are fully accessible to all riders, including those with disabilities. In doing so, the MBTA will meet and exceed requirements laid out in the ADA and other accessibility-related regulations.

Equity
The MBTA strives to improve access to opportunities and service quality for transit critical populations, including low-income people, people of color, seniors, people with disabilities, and those in low- or no-vehicle households.

Reliability
The MBTA should operate the services it schedules.

Passengers should experience consistent headways on frequent services and on-time performance on infrequent services. Passengers should not experience excessive wait times.

Comfort
Passengers should have a reasonable amount of personal space during their trips.

Communication
Passengers should receive accurate and relevant information about the services available to them in languages consistent with the MBTA's Language Access Plan (LAP) in a timely manner and in alternative formats as requested.

Safety and Security
Passengers should experience safe and secure traveling conditions.

The MBTA should operate and maintain the system with the highest regard for the safety of passengers and employees.

Rider Satisfaction
Passengers should be satisfied with the service the MBTA provides.

Environmental Benefit
The MBTA should reduce its own environmental impact and should offer passengers a service experience that supports travel choices other than single-occupancy vehicle trips.

Service Standards

For the service availability, service quality, network quality, and accessibility objectives cited above, the MBTA established quantifiable standards that allow the MBTA to evaluate the performance of its services relative to each objective. Not all objectives are addressed in this Service Delivery Policy.

Specifically, the standards for safety and security are set with the MBTA's state and federal regulatory partners and are monitored and reported outside of this policy.

The MBTA monitors rider satisfaction through a monthly Customer Opinion Panel and other survey efforts. These results are reported on the MBTA Performance Dashboard monthly. The MBTA Environmental and Energy Department monitors the MBTA's environmental impact, including measures of greenhouse gas emissions per unlinked passenger trip and greenhouse gas displacement. These results are published in the MBTA Sustainability Report.

Table 1 summarizes the remaining service objectives and standards, what types of tools the MBTA has to improve them, and the Title VI implications; Chapter 3 discusses the service standards in detail.

Table 1: MBTA Service Objectives and Standards

Service Objective	Standards	Tools to Address	Title VI Implication
Service Availability	Span of Service Frequency of Service Coverage: ● Base Coverage ● Frequent Service Coverage	Service planning	Service monitoring and equity analyses for major service changes
Reliability	Schedule Adherence Passenger Wait Time Service Operated	Service planning, operational changes, municipal partnerships	Service monitoring
Comfort	Vehicle Load	Service planning, operational changes, municipal partnerships	Service monitoring
Accessibility	Station Accessibility Elevator Uptime Platform Accessibility Vehicle Accessibility	Capital budget, operational changes	Service Monitoring (Vehicle Accessibility excluded)
Network Quality	Trip Coverage Regional Access	Service planning, operational changes, municipal partnerships	Excluded from Service Monitoring (preliminary measures)

Source: MBTA.

Services

The MBTA operates a comprehensive set of transit services. This policy addresses all of the MBTA's fixed-route services including bus, light rail, heavy rail, Commuter Rail, and ferry, as described below.[1]

[1] Service standards also apply to all contracted services. The MBTA will take steps in all future contracts to ensure the collection of all data necessary to calculate the standards.

Contracts with the service providers who operate the MBTA's paratransit service include performance standards. Appendix C: Paratransit Service Standards lists these requirements.

Bus

For the purposes of this policy, "bus" includes all rubber-tire vehicles regardless of the vehicle's power source. The MBTA operates several different types of bus services including:

Local Bus Routes provide full weekday service that extends beyond the morning and afternoon peak travel hours. Local Routes are not necessarily designed to target any specific trip purpose. In general, stops on Local Routes are closely spaced, and pick-ups/drop-offs are allowed at all stops across the entire route; however, some Local Routes, such as the Crosstown Routes, operate with limited stops.

Key Bus Routes are similar to Local Routes, but generally operate longer hours and at higher frequencies to meet high levels of passenger demand in high-density travel corridors. Key Bus Routes are identified in maps and schedules.

Silver Line routes meet or exceed the characteristics of Key Bus Routes and operate on dedicated right-of-ways for a portion of the routes.

In concert with light rail and heavy rail (discussed below), the Key Bus Routes ensure geographic coverage of frequent service in the densest areas of Greater Boston's core, and offer intermodal connections to other MBTA services that extend throughout the region.

Commuter Bus Routes provide a limited number of peak-direction trips during periods when commuters would use the services. Commuter Routes include **Express** Bus Routes, which are identified as such in schedules and are characterized by a limited number of stops that are provided only near the ends of the routes. Some stops may be drop-off or pick-up only. Some Commuter Routes include closely spaced stops.

Community Bus Routes provide weekday service between the morning and afternoon peak hours primarily for non-work travel. Stops are closely spaced (where practical) and pick-ups/drop-offs are allowed at all stops across the entire route.

Supplemental Bus Routes either provide limited service early in the morning or are designed to support other bus routes.

Tables showing the route type for each route is in the attached Appendix A: Route Types, which is updated as changes to route designations occur.

Rapid Transit

The MBTA's rapid transit system includes its heavy rail and light rail services, described below. For the purposes of this policy the Silver Line is evaluated on Key Bus Route standards.

Light Rail

The MBTA's primary light rail system, the Green Line, provides local service in outlying areas via its surface operations and core subway services in and around the Boston city center. In addition, the MBTA operates the Mattapan High Speed Line, which serves as a Red Line extension from Ashmont Station to Mattapan Station via light rail.

Heavy Rail

The MBTA operates three heavy rail lines—the Red Line, the Blue Line, and the Orange Line—that provide core subway services.

Commuter Rail/Regional Rail

The MBTA's Commuter Rail lines provides long-haul, commuter-oriented services that link the outer portions of the region with Downtown Boston. In response to evolving travel needs, the MBTA adopted a Regional Rail style schedule, offering more consistent, bi-directional service, with trains departing at regular time intervals where infrastructure allows it.

Ferry

The MBTA provides Inner Harbor Ferry services for travel between destinations in Boston, and Commuter Ferry services from the South Shore to Downtown Boston and Logan Airport.

Paratransit

The MBTA's paratransit program, The RIDE, is mandated under the ADA. It provides door-to-door, public shared-ride transportation to eligible passengers who cannot use fixed-route all or some of the time because of a physical, cognitive, or mental disability. The service area currently covers 58 cities and towns in and around Boston. It is not intended to meet all the transportation needs of persons with disabilities. The program provides ADA trips (trips with origins and destinations within three-quarter miles of a fixed-route service) at one fare rate and non-ADA trips ((when a trip origin and/or destination is greater than three-quarter miles from a fixed route service or for same-day changes, except for trip time negotiation) at a higher fare rate.

Time Periods

The MBTA provides different levels of services depending on the time of day and days of the week. Table 2 provides the time periods for weekdays. Saturdays and Sundays are measured separately for most standards.

This time periods are designed for the purposes of bus service planning. Due to the different nature of the service, Commuter Rail has different time periods. Its AM Peak includes all trains that arrive in their final Boston terminal between 6:00AM to 10:00AM and its PM Peak is all trains that originate in Boston and depart between 3:30PM and 7:00PM.

Table 2: MBTA Weekday Time Period Definitions

Time Period	Definition
Sunrise	3:00 AM – 5:59 AM
Early AM	6:00 AM – 6:59 AM
AM Peak	7:00 AM – 8:59 AM
Midday Base	9:00 AM – 1:29 PM
Midday School	1:30 PM – 3:59 PM
PM Peak	4:00 PM – 6:29 PM
Evening	6:30 PM – 9:59 PM
Late Evening	10:00 PM – 11:59 PM
Night	12:00 AM – 2:59 AM

Source: MBTA.

Chapter 3: Standards and Planning Tools

The service standards perform two important functions. First, they establish the acceptable levels of service that the MBTA must provide to achieve the service objectives. Second, the standards provide a framework for measuring the performance of MBTA services as a part of the service planning process, which is discussed in Chapter 4. Through the service planning process, performance data collected on MBTA services are compared against the service standards to determine whether individual existing services perform at acceptable levels and to evaluate the need for service changes. The service planning process also uses the service standards to prioritize and reallocate resources within the system.

There are a multitude of factors that can impact the performance of MBTA services. Service planning is one of the tools the MBTA uses to improve performance. In addition, the MBTA works with our municipal partners to address factors that are in our mutual control.

The service planning process is designed to use the service standards to help ensure a cost-effective and equitable allocation of service and basic availability throughout the region within the overall amount of operations funding, which is determined through the annual budget process. This policy also provides a service planning tool to measure the cost-efficiency of bus routes. In addition, the service planning process also documents the resource gap between meeting all of the service standards at the target levels and the performance of the operated service each year.

The progress towards the performance targets is reported annually to the public. This allows the MBTA to track progress toward targets regularly and revisit them as necessary. All of the service standard targets and minimums are listed in Appendix D: Service Standard Targets. Appendix D also lists the time frame for all the reported 2019 performance data.

Some of these standards are evaluated over a relatively short period (for example, daily or quarterly), and others are evaluated when the MBTA considers modifying service. How often each standard is evaluated is listed in Table 13.

The following is a discussion of the MBTA service standards, in the context of the service objective to which each applies. These standards address the fixed-route modes as described in Chapter 2.

Service Availability and Quality Standards

The service *availability* standards define the levels of service that will provide meaningful access to the transit system, in terms of the length of the service day (Span

of Service) and the Frequency of Service. Each of these standards varies by mode. In addition, the MBTA measures geographic access to the system using a Coverage standard with two components. The service *quality* standards evaluate the quality of service delivered to passengers in terms of on-time performance (Reliability) and crowding (Comfort). Equity checks using demographic data for each of the availability and quality standards are used to assess the level of service experienced by low-income riders and riders of color, as compared to riders as a whole. Rider demographics are collected through the MBTA Systemwide Passenger Survey, and results of the survey provide the percentages of riders who identify as low-income or as people of color by bus route or subway line. Because Coverage is a residence-based standard, demographic information for equity checks comes from the American Community Survey (ACS) conducted by the U.S. Census Bureau.

Many of the service standards differ depending on the time of day the service is offered. Table 2 defines the weekday service time periods. Because weekend travel patterns differ from weekdays, specific periods are not defined for Saturdays and Sundays.

Span of Service

Span of Service refers to the hours during which service is available. The MBTA has established Span of Service standards that define the expected hours that any given service will operate. This provides passengers with the confidence that particular types of services will be available throughout the day. The MBTA may extend a service's span beyond the expected hours in response to customer demand.

The Span of Service standards, stated in Table 3 below, vary by mode and by day of the week, reflecting the predominant travel flows in the region. The standards require that the first trip in the morning in the peak direction of travel must arrive in downtown Boston, or the route terminal if the route does not serve downtown Boston, at or before the beginning span of service time (for example, 7:00 AM for Local Bus). At the end of the service day, the last trip in the evening in the peak direction of travel must depart downtown Boston, or the route terminal if the route does not serve downtown Boston, at or after the ending span of service time (for example, 7:00 PM for Local Bus).

For example, the Orange Line serves downtown Boston, so the standard requires that the first northbound and southbound trips must each reach Downtown Crossing by 6:00 AM. On the other hand, Key Bus Route 66 does not serve downtown Boston, and more passengers travel towards Harvard in the AM Peak period, so the standard requires that the first trip in the morning must arrive at Harvard before 6:00 AM. If it is determined there is no peak direction for a bus route based on ridership, span of service may be evaluated in both directions.

If Table 3 does not specify an expected span of service for a mode or time period, then there is no respective standard. Service hours are set based on demand.

Table 3: Span of Service

Mode	Day	Expected Span of Service
Bus		
Local	Weekday	7:00 AM – 8:00 PM
	Saturday	8:00 AM – 6:30 PM
	Sunday	10:00 AM – 6:30 PM
Community	Weekday	10:00 AM – 4:00 PM
Commuter	Weekday	7:00 AM – 9:00 AM 4:00 PM – 6:30 PM
Supplemental	Weekday	No minimum span
Key Bus Routes	Weekday	6:00 AM – midnight
	Saturday	6:00 AM – midnight
	Sunday	7:00 AM – midnight
Heavy Rail	Weekday	6:00 AM – midnight
	Saturday	6:00 AM – midnight
	Sunday	7:00 AM – midnight
Light Rail	Weekday	6:00 AM – midnight
	Saturday	6:00 AM – midnight
	Sunday	7:00 AM – midnight
Commuter Rail	Weekday	7:00 AM – 10:00 PM
	Saturday	8:00 AM – 6:30 PM
Ferry	Weekday	7:00 AM – 6:30 PM
	Saturday[1]	8:00 AM – 6:30 PM

[1] Memorial Day–Columbus Day

Source: MBTA.

ADA paratransit service generally operates from 5:00 AM to 1:00 AM, seven days a week. The MBTA provides premium paratransit service to areas outside of 0.75 miles distance from fixed-route service. The operating hours for premium service are determined by the Commuter Rail schedule and the times of the first and last trains in and out of the paratransit service area, but will not start earlier or end later than the operating hours for ADA paratransit service. During the service planning process, the MBTA will evaluate vehicle loads at the beginning and end of the service day to determine whether expanding the span of service is warranted.

The MBTA's performance on this measure is weighted by ridership; passenger trips taken on services that operate at least during the expected span are counted as "passing", while trips taken on services that operate less than the expected span are

counted as “failing”. This weighting prioritizes meeting the expected span of service on routes and services with high ridership. Performance is evaluated for each mode along with the corresponding equity checks for low-income riders and riders of color.

Table 4: Span of Service Targets and Performance

Standard	Minimum	Target	2019 Weekday Performance: Overall	2019 Weekday Performance: Low-Income	2019 Weekday Performance: Riders of Color
Bus	90%	95%	95%	94%	94%
Heavy Rail	—	100%	100%	100%	100%
Light Rail	—	100%	100%	100%	100%
Commuter Rail	—	100%	100%	100%	100%
Ferry	—	100%	100%	100%	100%

Bus performance data from Fall 2019.
Source: MBTA.

Frequency of Service

To maintain access to the transportation network within a reasonable waiting time, the MBTA established expected frequency of service levels for each mode, by time of day. On less heavily-traveled services, these expected levels set the standard for the frequency of service, regardless of customer demand. Frequency of Service standards are measured using either headway (minutes between trips) or frequency (trips per time period).

If Table 5 does not specify an expected frequency for a mode or time period, then there is no respective standard. Frequencies for these services are set based on demand.

Table 5: Service Frequency

Mode	Weekday Time Periods	Expected Frequency or Headway
Bus	AM and PM Peak	Every 30 minutes
Local, Community	All other periods	Every 60 minutes
	Saturday and Sunday	Every 60 minutes
Commuter	AM Peak	3 trips in the peak direction
	PM Peak	3 trips in the peak direction
Key Bus Routes	AM and PM Peak	Every 10 minutes
	Early AM and Midday Base/School	Every 15 minutes

	Evening and Late Evening	Every 20 minutes
	Saturday and Sunday	Every 20 minutes
Rapid Transit	AM and PM Peak	Every 10 minutes
	All other periods	Every 15 minutes
	Saturday and Sunday	Every 15 minutes
Commuter Rail	AM Peak	3 trips in peak direction
	PM Peak	4 trips in peak direction
	All other periods	Every 3 hours in each direction
	Saturday	Every 3 hours in each direction
Ferry	AM and PM Peak	3 trips in the peak direction
	Off-Peak periods	Every 3 hours

Note: Frequency is only evaluated for periods within the service's required Span of Service. AM Peak and PM Peak are defined differently for Commuter Rail.
Source: MBTA.

The frequency of service levels may not be sufficient to meet passenger demand on heavily used services or on services with peak ridership that is outside the traditional peak hours. When load levels indicate that additional service is warranted on a particular route, as defined in the crowding standard, the MBTA may increase that service's frequency or provide larger vehicles with sufficient capacity to accommodate passenger demand.

The MBTA's performance on this measure is based on scheduled service and is weighted by ridership at the route/direction/time period level. Passenger trips taken on services that operate at the expected frequency or better are counted as "passing" while trips taken on services that operate at less than the expected frequency are counted as "failing." This weighting prioritizes meeting the expected frequency during peak time periods and on services with high ridership. Performance is evaluated for each mode along with the corresponding equity checks for low-income riders and riders of color.

Table 6: Service Frequency Targets and Performance

Standard	Minimum	Target	2019 Weekday Performance: Overall	2019 Weekday Performance: Low-Income	2019 Weekday Performance: Riders of Color
Bus	90%	95%	92%	91%	91%
Rapid Transit	—	100%	100%	100%	100%
Commuter Rail			100%	100%	100%
Ferry	—	100%	100%	100%	100%

Performance data from Fall 2019.
Source: MBTA.

Coverage

An important aspect of providing the region with adequate access to transit services is the system's geographic coverage. The MBTA recognizes that coverage means different things to different populations. To address these different groups, the MBTA measures coverage in two ways, with corresponding equity checks:

- Base Coverage
- Frequent Service Coverage

Because of constraints such as topography and street network restrictions, it is not always possible to achieve uniform geographic coverage. In addition, demand for transit does not exist uniformly across the service area; factors such as high population and employment density, as well as high proportions of low-income and low-vehicle households, create higher demand and need for transit access. Close proximity to transit service is especially critical for residents who have limited access to a car or would spend a high proportion of their income on car ownership.

The MBTA prioritizes providing frequent service in areas with high population and employment density and areas where high proportions of low-income and low-vehicle households are located, while maintaining an acceptable level of Base Coverage. For the Coverage standard, the MBTA will set a minimum for Base Coverage and a target for Frequent Service Coverage.[2]

The MBTA will monitor the effect of proposed service modifications on both components of the Coverage standard as part of its service planning process, described in Chapter 4.

Coverage is measured within the cities and towns of the MBTA's service area that are not served by a regional transit authority (RTA), based on residents' walking distances from bus stops, rapid transit stations, Commuter Rail stations, and ferry docks. Reasonable walking distance is defined as one half-mile along the street network, or about 10 minutes.

Base Coverage

Residents of the region expect the MBTA to provide a basic level of coverage throughout the service area. Base Coverage assesses the geographic extent of all MBTA services, some of which may be relatively infrequent for some or all of the service day.

[2] Base Coverage will be evaluated as part of the Title VI Service Monitoring.

The MBTA will measure the:

> *Percent of the population that lives within 0.5 miles of a bus stop, rapid transit station, Commuter Rail station, or ferry dock in the MBTA service area, excluding municipalities that are members of a regional transit authority (RTA).*

As the equity check for Base Coverage, the MBTA will also measure the percent of low-income households, and the percent of residents of color, that live within 0.5 miles of an MBTA transit stop in the service area, to determine if residents in these groups experience a similar level of service as the region as a whole.

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. Along with areas of high population and employment density, frequent service is also prioritized for areas with high proportions of people more likely to use or rely on transit. In these areas, residents should be reasonably sure that if they want to make a trip, they will have convenient access to frequent transit service.

For Coverage, frequent service is defined by the frequency of service experienced at each individual MBTA stop or station. For example, if multiple bus routes serve the same bus stop, the headways between any bus service at the stop would determine the stop's frequency. An MBTA stop or station is considered to receive frequent service if the effective wait time of scheduled service at the stop from 6:00 AM to 10:00 PM does not exceed 15 minutes on weekdays and 20 minutes on Saturdays and Sundays.

The MBTA will measure the:

> *Percent of the population that lives within 0.5 miles of frequent MBTA service in census block groups within the service area that either:*
>
> - *have combined population and employment densities of at least 15,000 people and jobs per square mile, or*
> - *have combined population and employment densities of at least 7,500 people and jobs per square mile, and combined proportions of low-income and low-vehicle households above the service area mean, excluding census block groups within municipalities that are members of an RTA.*

For the equity check for Frequent Service Coverage, the MBTA will also measure the percent of low-income households, and the percent of residents of color, that live within 0.5 miles of frequent MBTA service in these areas, to determine if residents in these groups experience a similar level of service as the region as a whole.

The goal of this standard is to identify high-priority areas in the MBTA service area that are most likely to need and support frequent transit services. Census block groups with high combined population and employment densities (at least 15,000 people and jobs per square mile), or minimum combined population and employment densities (at least 7,500 people and jobs per square mile) plus high proportions of low-income or low-vehicle households, identifies core areas that are mostly contiguous and inclusive of areas of new development. The combination of qualifying factors incorporates dense areas likely to create demand through transit-supportive land use, as well as populations most likely to utilize and rely on frequent service.

Table 7: Summary of Coverage Standards

	Numerator	Denominator	Minimum/ Target	2019 Weekday Performance
Base Coverage	Population living within 0.5 miles of an MBTA stop or station	Population living in census block groups within the MBTA service area	Minimum 75%	Overall: 82% Low-Income: 88% People of Color: 91%
Frequent Service Coverage	Population living within 0.5 miles of frequent MBTA service	Population living in census block groups within the MBTA service area that have combined population and employment densities of at least 15,000 per square mile, or combined population and employment densities of at least 7,500 per square mile and combined proportions of low-income and low-vehicle households above the service area mean	Target 70%	Overall: 64% Low-Income: 64% People of Color: 67%

Performance data from Fall 2019.

Note: For Coverage standards, the measured service area is the MBTA service area, excluding municipalities that are members of an RTA. The Frequent Service Coverage target was

adjusted to 70% to reflect the updated definition of this standard, and this target will be considered throughout the MBTA's Bus Network Redesign initiative.
Source: MBTA.

Paratransit Coverage

The Americans with Disabilities Act requires transit agencies to provide paratransit service within 3/4-mile of Local Bus Routes and rail transit stops (not including Commuter Rail). The MBTA goes beyond this minimum required coverage and provides paratransit service to "premium" areas outside the ADA-requirement, extending to the outer limits of the 58 communities in the paratransit service area. Changes to fixed-route service will be evaluated for their impact on paratransit service.

Accessibility Standards

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.

The MBTA will measure structural Station Accessibility in two ways: unweighted and ridership-weighted.

First, the MBTA will measure the:

> *Percent of MBTA stations that are accessible.*

Station Accessibility performance will also be evaluated using ridership weighting, thereby prioritizing the accessibility of stations with high ridership.

The MBTA will also measure the:

> *Percent of riders boarding at MBTA stations that are accessible.*

The MBTA will also measure the percent of low-income riders, and the percent of riders of color, boarding at MBTA stations that are accessible.

Both Station Accessibility measures include all rapid transit stations (including surface Green Line), Silver Line stops and stations, and Commuter Rail stations.[3] The ridership-weighted measure will exclude stations for which reasonably accurate and current ridership data is not available. The minimum for both measures will always be set as the

[3] Commuter Rail stations in Rhode Island are currently excluded due to differences in demographic data sources.

current annual performance, and the MBTA will continue to measure progress toward this standard.

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. Station elevators should be operational at all times service is offered, though some regular elevator maintenance is required.

The MBTA will measure the:

> *Percent of total elevator-hours[4] in which elevators are operational.*

If an elevator is out of service due to maintenance or an unplanned outage, it is considered non-operational for the duration of the outage regardless of the number of platforms it services or any redundant elevators. This measure encompasses the elevators at rapid transit and Commuter Rail stations that are owned and maintained by the MBTA. Instances of long-term planned outages in which accessible shuttle alternatives are provided (typically when an elevator is being completely rebuilt) are excluded from the measure.

Platform Accessibility

Riders should also be able to access the *platforms* in each accessible station at all times service is offered. Platform Accessibility is an alternative measure of Elevator Uptime that evaluates access to platforms.

The MBTA will measure the:

> *Percent of total platform-hours[5] that are accessible via elevators.*

A platform is considered accessible during those service hours when passengers can reach the street and any transfer platforms without using stairs or escalators. This measure encompasses the platforms at rapid transit and Commuter Rail stations with elevators that are owned and maintained by the MBTA. There are times in which an elevator outage may not affect access to station platforms due to redundant elevators, or conversely, times in which a single elevator outage could hinder access to multiple

[4] One hour of revenue service provided by one elevator at a station.

[5] One hour of revenue service offered to trains traveling each direction at a station. For each hour of service, a station can provide two accessible platform-hours, one hour for trains traveling in each direction. Stations with multiple platforms serving multiple branches or lines can have more than two accessible platform-hours per hour.

platforms at once. Instances of planned outages in which accessible shuttle alternatives are provided are considered accessible platform-hours.

Vehicle Accessibility

Even from an accessible platform, customers can encounter barriers boarding some transit vehicles. The MBTA should provide at least one ADA-compliant vehicle on each trip it operates.

The MBTA will measure the:

> *Percent of trips that the MBTA provides with at least one ADA-compliant vehicle.*

Trips on the Green Line are considered compliant if at least one of the vehicles in a train set is ADA-compliant. A trip on Commuter Rail is considered compliant if at least one ADA-compliant car or coach in the train set matches the location of each high-level platform at stations served by the trip. ADA-compliant Commuter Rail coaches must include ADA-compliant restrooms.

Bus trips are not measured since ramps can be deployed manually. All heavy rail vehicles are accessible today and therefore not included within this metric.

The RIDE dedicated paratransit fleet includes a substantial number of accessible vehicles. Through the trip reservation process, vehicles are assigned to trips based on customers' accessibility needs so that all trips requiring an accessible vehicle are provided one.

Table 8: Accessibility Standards Targets and Performance

Standard	Minimum	Target	2019 Performance	Data Period
Station Accessibility (Unweighted)	76%	100%	76%	Fall 2019
Station Accessibility (Ridership-Weighted)	94%	100%	94% Low-Income: 94% Riders of Color: 95%	Fall 2019
Elevator Uptime	99.4%	100%	99.5%	Jul 2019–Jun 2020
Platform Accessibility	99.4%	100%	99.4%	Jul 2019–Jun 2020
Vehicle Accessibility (Green Line)	100%	100%	100%	Oct–Dec 2020

Source: MBTA.

Reliability Service Standards

Reliability standards vary by mode and provide tools to evaluate the on-time performance of individual MBTA lines and routes. Reliability standards also vary based on frequency of service; passengers using high-frequency services generally are more interested in regular vehicle arrivals than in strict adherence to published timetables, whereas passengers who use less-frequent services expect arrivals/departures to occur as published.

Bus Reliability

Bus Timepoint Tests

To determine whether a bus is on time at an individual timepoint, such as the beginning of a route, end of a route, or a scheduled point in between, the MBTA uses two different tests based on the scheduled frequency of the service:

> **Scheduled-Departure Service:** A trip is considered to provide scheduled-departure service when it operates with a headway longer than 15 minutes. For scheduled-departure services, passengers generally time their arrivals at bus stops to correspond with the specific published departure times.
>
> **Frequent Service:** A trip is considered to provide frequent service when it operates with a headway of 15 minutes or shorter. For frequent service, passengers can arrive at a stop without looking at a schedule and expect a reasonably short wait. Key Bus Routes, whose passengers use the services as if they were frequent services despite occasional longer than 15 minute headways, are always evaluated using the frequent service definition even when their headways exceed 15 minutes.

Routes other than Key Bus Routes might operate entirely with frequent service, entirely with scheduled-departure service, or with a combination of both throughout the day. Because any given route may have both types of service, each trip is considered individually to determine whether it represents scheduled-departure service or frequent service, and each timepoint crossed on that trip is measured accordingly. Therefore, there are two separate timepoint tests:

On Time Test for Scheduled-Departure Timepoints

To be considered on time at a timepoint, any trip evaluated using the scheduled-departure standard must meet one of the conditions cited below.

> **Origin timepoint:** The trip must *depart* its origin timepoint between 0 minutes before and 3 minutes after its scheduled departure time.
>
> **Mid-route timepoint:** The trip must *leave* the mid-route timepoint(s) between 1 minute before and 6 minutes after its scheduled departure time.

Destination timepoint: The trip must *arrive* at its destination timepoint no later than 5 minutes after its scheduled arrival time.

This standard allows vehicles to arrive early at their mid-route timepoints and at their destinations. The MBTA's communication standards will assesses the accuracy and timeliness of vehicle arrival predictions in order to make sure passengers have information on early mid-route arrivals.

On-Time Test for Timepoints on Frequent Services

Origin or mid-route timepoint: To be considered on time at a timepoint, a trip evaluated using the frequent service standard must leave its origin timepoint or mid-route timepoint no later than the scheduled headway plus 3 minutes.

For example, if “trip A” is scheduled to depart at 7:00 AM and the route’s next trip, “trip B,” is scheduled to depart at 7:07 AM, trip B has a 7-minute scheduled headway. Therefore, trip B must depart no more than 10 minutes (3 minutes more than the scheduled headway) after trip A actually depart for the origin timepoint to be considered on time. If trip A departs at 7:05 (5 minutes after its scheduled departure time), trip B can depart no later than 7:15 (10 minutes after trip A’s actual departure) to be considered on time.

Destination timepoint: The actual run time from the origin timepoint to the destination timepoint must be no more than 120 percent of the scheduled run time for the trip to be considered on time at the destination timepoint.

Treatment of Dropped Trips in the Bus Reliability Standard

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.

Bus Route Test

Bus Reliability is calculated as the:

Percent of each route's timepoints that meet the above definitions.

The numerator is the number of time points that met the above definitions and the denominator is the number of total time points.

Table 9: Summary of the Bus Reliability Timepoint and Route Tests

	Origin	Mid-Route	Destination
Scheduled Departures (Headways > 15 min.)			
Standard	Depart 0 min. early to 3 min. late	Depart 1 min. early to 6 min. late	Arrive no more than 5 min. late
Arrival Standard	—	—	A ≤ 5.0
Departure Standard	0.0 ≤ D ≤ 3.0	-1.0 ≤ D ≤ 6.0	—
Frequent Service Departures (Headways ≤ 15 min.)			
Standard	Depart no later than the scheduled headway plus 3 minutes		Actual run time is no more than 120% of the scheduled running time
Standard	$h_a \leq h_s$ + *3 minutes*		$t_a \leq 1.2 \times t_s$

Source: MBTA.

Where:

$A = arrival\ time$
$D = departure\ time$
$h_s = schedule\ headway$
$h_a = actual\ headway$
$t_s = scheduled\ running\ time$
$t_a = actual\ running\ time$

Exceptions:

The first trip of the day on *each* route, which does not have a leading headway, is considered a scheduled-departure trip. All Key Bus Routes are considered frequent services at all times, except for their first trip of the day.

Heavy and Light Rail Reliability

Passenger Wait Time
As with frequent bus services, passengers on light rail and heavy rail do not rely on printed schedules; rather, they expect trains to arrive at consistent headways. Therefore, schedule adherence for light rail and heavy rail is measured based on the proportion of a line's passengers who wait the scheduled headway, or less, for a train to arrive.

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.*

For people traveling in the trunk section of the Green Line, the headway is defined as 3 minutes.

On-Time Test for Stations on the Mattapan Line
The Mattapan Line is currently separate from the other light rail lines because the systems do not exist to evaluate the line using the passenger wait and travel time standards.[6] The Mattapan Line is evaluated using the On-Time Test for Timepoints on Frequent Services standard, used to measure the on-time performance of frequent bus services, with station departures corresponding to timepoint crossings.

Mattapan Line Reliability is measured by the:

> *Percent of all station departures (or arrivals for terminal stations) on the Mattapan Line over the entire service day that pass their on-time tests.*

Commuter Rail Reliability
Commuter Rail passengers expect to arrive at their destination station at the time posted in the schedule. The MBTA will measure the number of trains that arrive at the destination terminal no later than 5 minutes after the time published in the schedule.

Commuter Rail Reliability is measured as the:

> *Percent of trains that arrive at their destination station on time.*

[6] Once the technology systems necessary to evaluate Mattapan Trolley service are finished being implemented, the service will switch over to the same standard as heavy and light rail.

The MBTA and its Commuter Rail operator are working to develop passenger weighted measures for Commuter Rail Reliability.

Ferry Reliability

Ferry passengers expect to arrive at their destination dock at the time posted in the schedule. The MBTA will measure the number of boats that arrive at the destination terminal no later than 5 minutes after the time published in the schedule.

Ferry Reliability is measured as the:

> *Percent of boats that arrive at their destination dock on time.*

Paratransit Reliability

The MBTA measures Reliability using the On-Time Performance metric (OTP). OTP is the percentage of all trips performed on-time, defined as pick-up based trips that occur up to 6 minutes prior to and 16 minutes after the scheduled pick-up time plus drop-off based trips that occur up to 6 minutes after the drop-off (appointment) time, plus customer no-show trips.

Service Operated Standard

The MBTA intends to operate all of the service it schedules. A multitude of factors, including equipment failure, lack of personnel, and unforeseen delays like medical and police emergencies, can sometimes prevent the MBTA from operating scheduled service.

The MBTA will measure the:

> *Percent of scheduled service that is actually provided for each mode of service, including bus, light rail, heavy rail, Commuter Rail, and ferry.*

Planned heavy rail, light rail, and Commuter Rail outages where the MBTA offers substitute service do not count against this standard. For bus, this standard will also be examined at the route level to determine if some bus routes have higher dropped trips rates, so steps can be taken to address significant imbalances.

Table 10: Reliability Standards and Performance

Standard	Minimum	Target	2019 Performance: Overall	2019 Performance: Low-Income	2019 Performance: Riders of Color
Bus Reliability	70%	75%	68%	68%	68%
Rapid Transit Passenger Wait Times	—	90%	90%	89%	89%
Commuter Rail Reliability	Contract requires 92% adjusted		93.8% (adjusted)	85%	85%
Ferry Reliability	—	99%	98%	97%	97%
The RIDE Reliability	—	90%	90.6%	—	—
Bus Service Operated	—	99.5%	98.6%	—	—
Light Rail Service Operated	—	99.5%	96.2%*	—	—
Heavy Rail Service Operated	—	99.5%	97.6%*	—	—
Commuter Rail Service Operated	Contract sets fines for canceled service		99.6%	—	—
Ferry Service Operated	Contract sets fines for canceled service		99.9%	—	—

* Data subject to change with improvements in data collection methodologies.
Reliability and Wait Times performance data from Fall 2019 weekdays. Service Operated performance data from Jan – Dec 2019.
Source: MBTA.

Comfort Standards

Passenger comfort is influenced by the number of people on the vehicle and whether or not 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.

As indicated in the Frequency of Service standard, the level of service provided by the MBTA is primarily a function of demand, as demonstrated by the number of passengers using the service at different times during the day. On weekends and some weekday periods, most MBTA services operate with sufficient frequency to provide every passenger with a seat. However, at the heaviest weekday travel times or locations, some passengers will need to stand.

During periods when some passengers will be standing, the MBTA strives to provide sufficient service so that people are reasonably comfortable. The purpose of the Passenger Comfort standard is to define the levels of crowding that are acceptable by mode and time period. The periods used by the MBTA for all modes, for both Frequency of Service and vehicle load standards, are defined earlier in this chapter (see Table 2).

There are a number of different types of vehicles in the MBTA's fleets at any given time, and the fleets change over time. Hence, the actual seating capacity and maximum number of passengers allowed by the Comfort standards for each mode changes periodically. These load standards are included in Appendix B: Vehicle Load, which is updated as the fleets change.

The MBTA calculates its Comfort metric for each mode for all passengers, along with Comfort for low-income passengers and for riders of color.

Bus

The MBTA will measure the passenger hours of travel experienced by comfortable bus passengers during each time period. The maximum comfortable load is expressed as a ratio of the number of passengers on the vehicle to the number of seats on the vehicle. The maximum comfortable loads are set based on Department of Public Utility (DPU) Regulation 220 CMR 155.02 (26), which states "passengers in excess of 40 percent above the seating capacity of a motor bus shall not habitually be carried… ."

The above standard was temporarily superseded by a more restrictive threshold during the COVID-19 pandemic.

High-Volume Time Periods

The maximum comfortable passenger-to-seat ratio for high-volume travel periods is 140%. At loads of 140% or less of seated capacity, all passengers are considered comfortable. No passengers are considered comfortable when the vehicle load exceeds 140% of seated capacity.[7]

[7] Appendix B: Vehicle Load contains the number of seats and the loading thresholds for each vehicle type.

Low-Volume Time Periods

The maximum comfortable passenger-to-seat ratio for lower-volume travel periods is 125%. At loads up to 125% of seated capacity, all passengers are considered comfortable; above 125% and up to 140% of seated capacity, seated passengers are considered comfortable; and no passengers are considered comfortable when the vehicle load exceeds 140% of seated capacity.

The MBTA will measure the:

> *Percent of passenger travel time experienced in comfortable conditions.*[8]

Table 11: Passenger Comfort Standard Targets and Performance

Standard	Minimum	Target	2019 Weekday Performance: Overall	2019 Weekday Performance: Low-Income	2019 Weekday Performance: Riders of Color
Bus Passenger Minutes in Comfortable Conditions	92%	96%	92%	92%	93%

Data from average weekday September 1 – December 21, 2019
Source: MBTA.

Subway, Commuter Rail, and Ferry

The MBTA currently lacks the data to accurately measure passenger loads on heavy and light rail vehicles. Until heavy and light rail vehicles with Automatic Passenger Counters (APCs) are procured, the MBTA is developing a capacity metric for heavy and light rail that compares the number of people entering stations over 30-minute time periods to the capacity of the number of trains operated in that time period. This capacity metric will identify segments in the system that need additional service to address overcrowding.

The MBTA currently lacks the data to accurately measure passenger loads on Commuter Rail coaches and is working with its Commuter Rail operator to collect this type of data. The contract does set expectations on the number of seats the operator should provide based on expected loads.

For ferry, federal laws prohibit boats from carrying more than their certified capacity—boats will leave people behind before they exceed their capacity. The MBTA will monitor

[8] For bus routes without enough data to model the passenger time in comfortable conditions, the proxy variable of maximum load will be used for all service planning decisions.

if passengers are being regularly left behind to determine if additional capacity is necessary.

Paratransit

MBTA's ADA paratransit vehicles are prohibited by Federal and State regulations from carrying more passengers than their certified capacity. Because of these limitations, and the fact that RIDE trips are booked in advance, the MBTA does not have crowding-based comfort standards for The RIDE.

Network Quality Standards

The Network Quality standards evaluate travel demand in the region and whether travel needs are met competitively by the transit network as compared to car-based modes. The current standards of Span, Frequency, and Coverage focus on measuring whether a transit option is available by time and location. These Network Quality standards go beyond the current standards to measure the quality of scheduled service. Scheduled service quality is determined by evaluating whether scheduled transit trips can get riders to destinations in a manner competitive with car trips. These measures use trips as a unit of analysis,[9] with the assumption that the transit network should create connections between where people are and where people want to go. Quality of transit compared to car-based modes is determined by evaluating total travel time on both modes, in addition to other factors that influence perceptions of transit convenience: transit frequency, walk distance, wait time, and number of transfers.

The Network Quality measures are based on the fundamental assumption that transit riders make a mode choice for each trip. Therefore, the MBTA should strive to align the transit network with demand and provide service that is competitive with car-based modes in order to retain and attract riders to the transit system. At the time of the 2021 Service Delivery Policy update, the Network Quality measures are being tested and refined through the Bus Network Redesign initiative, and therefore are being introduced with no minimum standards and targets. As a result, these measures will not be included in the Service Monitoring section of the Service Delivery Policy. The MBTA will use these measures to evaluate its network going forward, and develop minimums and targets for these measures in the future.

There are two measures that evaluate transit network quality: Trip Coverage and Regional Access.

[9] Location-based services (LBS) data is used for trip-level analyses in the Network Quality measures. Trips include trips that are currently being made, or trips to important regional destinations.

Trip Coverage

The Trip Coverage measure takes into account all trips, regardless of mode, and determines 1) whether there is a transit option for the trip, and 2) whether there is competitive transit service available for that trip.

The MBTA will measure the:

> *Percent of the region's trips that have a competitive transit option.*

Data on trips made in the region comes from location-based services data and includes demographic information that allows for equity checks. Using this demographic information, the MBTA can evaluate whether the transit network is covering trips by low-income people or people of color at least as well as it is covering all trips as a whole. The Trip Coverage measure is aggregated to the network level to assess how well-matched the MBTA network is to actual travel demand. Trip Coverage can be used to evaluate the transit network's performance in particular contexts, such as examining travel at certain times of day, for specific locations, or for particular groups such as low-income people or people of color.

Regional Access

In addition to serving trips currently being made, the transit network should provide access to important regional destinations for all residents in the service area, even if those trips are not currently being made. The Regional Access measure identifies important regional destinations and evaluates the availability and quality of the transit network in serving those destinations from each residence. Regional Access measures 1) whether transit is available from a residence to regional destinations, and 2) whether competitive transit service is available from the residence to regional destinations.

The MBTA will measure the:

> *Percent of residents in the service area that can reach regional destinations with a competitive transit option.*

Regional Access complements the residential Coverage measures by evaluating access to specific destinations, and complements the Trip Coverage measure by evaluating transit competitiveness for certain trips, even if few people are currently making those trips. For example, Regional Access would assess which residents of the region can reach Longwood Medical Area with a competitive transit option. Regional Access can be used to evaluate residents' access to regional destinations using transit in particular contexts, such as for a certain regional destination or residential location, for a certain time of day, or for particular groups such as low-income residents or residents of color.

Regional destinations are identified through an iterative process using location-based services data that reflects changes in travel demand and can elevate new regional destinations as they arise. The process to identify regional destinations currently takes into account the number of unique origins traveling to a destination; shared importance between traveler groups, including low-income people and people of color; and population and employment densities. This process and the resulting regional destinations are vetted through public input in the MBTA Customer Opinion Panel, outreach for the Bus Network Redesign, and other avenues of engagement.

Service Planning Tools

In addition to service standards, the MBTA can and should use diagnostic tools as part of its service planning process. For example, the MBTA needs to be able to evaluate the cost-effectiveness of its bus routes, even without establishing a cost standard. This Bus Route Benefit-Cost Ratio Tool will be used to determine the cost-efficiency of the service provided and to identify service changes to improve performance.

Bus Route Benefit-Cost Ratio

Services may be important for different reasons; while carrying many passengers is an important characteristic, it is not the only factor that determines whether a service is effective or valuable. The MBTA considers three primary characteristics, or aspects, when evaluating whether a service is valuable to the system:

- **Ridership:** The total number of boardings; the number of riders of color, low-income riders, and riders with limited vehicle access using the service; and the number of riders transferring to other services.
- **Seniors and People with Disabilities using Reduced Fares:** The percentage of riders using Senior CharlieCards, Transportation Access Passes (TAP), RIDE CharlieCards, and Blind Access CharlieCards on the service.
- **Access to the Network:** Whether a service provides access to the greater network and the region. Using location-based services data, Access to the Network assesses how many trips currently being made in the region (by any mode), and how many trips being made by transit-critical populations, can be made using a given service.

Each bus route receives a benefit score for each of these aspects. Table 12 has the current weights.

Table 12: Weighting of Components of Bus Route Benefit

	Ridership	Reduced Fare Users	Access to the Network
Weight	70%	15%	15%

After calculating the overall benefit score from the scores for each aspect, the overall benefit score is divided by the operating cost (vehicle revenue hours) to develop a benefit-cost ratio.

Routes with high benefit-cost ratios will be analyzed to understand characteristics of high performing routes. Routes with low benefit-cost ratios will be reviewed to identify ways to improve the route's performance. Routes with high benefit that come at a high cost can be evaluated to see if the benefit can be provided at a lower cost (e.g. with the introduction of transit priority on the route to reduce the vehicle revenue hours needed to operate the same level of service).

Frequency of Analysis

The MBTA measures all of the standards at different frequencies depending on the availability of data and the use of the specific metric. Table 13 shows often each of the standards are measured.

Table 13: Frequency at Which Each Standard is Typically Measured

Standard	Daily	Quarterly	Annual/ Service Plan
Availability			
Span of Service	☐	■	■
Frequency	☐	■	■
Coverage	☐	■	■
Accessibility			
Station Accessibility	☐	■	■
Elevator Uptime	☐	■	■
Platform Accessibility	☐	■	■
Vehicle Accessibility	☐	■	■
Reliability			
Bus and Rail Reliability	■	■	■
Ferry Reliability	☐	■	■
Service Operated	☐	■	■
Comfort			

Crowded Passenger Minutes	☐	■	■
Service Planning Metric			
Bus Route Benefit-Cost Ratio	☐	☐	■

Source: MBTA.

Chapter 4: Service Planning Process

The MBTA regularly evaluates performance of its services and recommends and implements service changes through the service planning process. The service planning process strives to ensure that the MBTA uses resources in the most effective manner by developing strategies to improve performance and/or to allocate service within the system. Additionally, the process also identifies the gap between actual service levels and the targets set in this policy. The service planning process includes system-wide quarterly changes, ongoing rolling Service Plan changes, and an annual evaluation to inform the MBTA's budget process. Service planning changes may also have implications for the MBTA's paratransit service coverage.

This chapter focuses on planning for bus and subway modes; many of the processes described in this chapter may be used in planning for Commuter Rail and ferry modes.

Service Planning Process

The service planning process takes place on two levels. One is the quarterly evaluation and implementation of incremental service changes. The other is an annual review of system performance along with rolling service plans focused on development of proposals for more substantial service changes in particular regions or on individual routes.

The primary differences between the quarterly service changes and the rolling service plans include:

- Magnitude of service changes considered (as defined below)
- Extent and type of analysis used
- Level of public participation

Quarterly service changes to transit services can be implemented with existing equipment, within the adopted budget, and without significantly affecting route structure or service delivery.

Rolling Service Plan changes have a notable effect on passengers, resource requirements, route structure, or service delivery.

Table 14: Quarterly and Service Plan Changes

Magnitude	Resource Implications	Type
Quarterly	Changes that can be implemented with existing equipment and within the adopted budget	Running time adjustments
		Departure time adjustments
		Headway changes to match ridership and service levels (provided the frequency and comfort minimums are still met)
		Changes to stop locations
		Route alignment changes
		Span of service changes within 1 hour or less
		Route extensions of 1 mile or less
		Route variation modifications
Service Plan	Changes that will have a significant effect on resources, and may potentially have a significant effect on passengers	Major service restructuring
		Implementation of new routes or services
		Elimination of a route or service
		Elimination of part of a route greater than 1 mile
		Span of service changes greater than 1 hour
		Route extensions greater than 1 mile

Source: MBTA.

Initiation of Service Planning Ideas

Service changes may be initiated in a variety of ways, including, but not limited to:

- Service requests and/or comments from the public, including municipalities and organizations through various media (public meetings or workshops, written correspondence, MBTA website, MBTA customer call center, email, Twitter, etc.)
- Proposals made by MBTA staff (Service Planning; Operations staff such as drivers, inspectors, or garage superintendents)
- Studies completed by regional entities or municipalities
- Gaps identified between provision of MBTA services and performance targets established in this document. If, during the Quarterly or Rolling Service Plan process, a route is found to fall below the minimum on one of the established standards, it should be prioritized.

Quarterly Service Planning Process

The MBTA Service Planning Department screens potential service changes to determine whether they should be evaluated and implemented as part of the Quarterly process or Service Plan process. Potential changes are considered with respect to their impact on Service Delivery Policy standards.

Proposed changes are presented to the Service Committee, which includes representatives of the following departments:

- Service Planning
- Schedules
- Operations
- System-wide Accessibility
- Office of Performance Management and Innovation
- Office of Transportation Access (Paratransit)
- Other departments, as appropriate

Quarterly changes are approved by the Service Committee and implemented within the adopted budget as soon as practical.

Rolling Service Plans Process

Two inputs inform the Service Plan process, which will be performed on a continuous rolling basis in particular areas or on certain routes.

- Current service performance measured against performance targets
- Recommendations for service changes that improve route or network performance

The priorities for the rolling service plan are determined by which service planning standards fall below their minimum level. Depending on the standard, the analysis is done at the network, mode, and/or route level. If the performance level of a mode falls below the minimum on any standard, that standard must be prioritized. Since there are tradeoffs between standards, allocating resources to address priority standards can impact other standards. After suggested changes, the performance levels on all standards must be re-evaluated to determine if the changes lowered performance on any other standards below the minimum levels (at the route, mode, and/or network level). Since Comfort and Reliability can only be measured for operated service, proxy variables can be used to model the impact of the proposed changes.

During the Rolling Service Planning process, the routes are evaluated using the Benefit-Cost Ratio tool corresponding to the most recent data available. Routes that have a low

ratio are flagged for analysis. The tool is used to determine which aspect(s) of the service are driving the low ratio and could be addressed to improve the service, or how the cost could be lowered, up to and including route elimination. Routes that perform with high ratios will also be evaluated to consider which aspect(s) may have contributed to extraordinary performance and whether they can be emulated in other services.

The Service Committee recommends service proposals to include in the Preliminary Service Plan. Each Preliminary Service Plan is made available to the public for review and comment. A list of final recommendations are then submitted to the MBTA governing board for approval before the changes are implemented, along with Title VI and environmental justice service equity analyses, if necessary.

As with the Quarterly service planning process, a goal in developing service plans is to ensure that the MBTA uses available resources effectively. However, the rolling planning process also can identify service changes and enhancements that have merit, but which cannot be provided within the existing operating budget. In such cases, additional operating funds may be requested, and the service(s) may be implemented when sufficient resources become available.

With seven bus districts and four heavy rail or light rail districts, the MBTA anticipates that the rolling process will take 2-3 years to complete an entire cycle. The MBTA may consider substantial service changes for a specific route or corridor either individually or grouped with other routes, areas, or bus districts.

Annual Service Evaluation

Once a year, the MBTA will publish a summary report of mode and network performance according to the standards included in the Service Delivery Policy. Included in this report will be an analysis of the “gap” between the level of service that the MBTA is currently providing and the levels of service the MBTA would need to provide to reach the performance targets set in the Service Delivery Policy.

The MBTA will quantify gaps and identify potential actions to close the gaps. Options include those internal to the Service Planning process, such as shifting resources to benefit one service or standard over another without dropping below the minimum on any standards. The gap analysis will also consider external measures, such as securing additional operating funds, future capital investments, or more inter-governmental cooperation. Both internal and external measures will give policymakers, MBTA officials, and the public a better sense of the tradeoffs inherent in budget-constrained service planning and suggest how additional resources could be used to provide service according to Service Delivery Policy performance targets.

Public Participation

Public participation in the general service planning process occurs both on an on-going basis and as part of the Service Plan-specific process. The purpose of public involvement in the service planning process is to promote regular dialogue with existing and potential passengers, elected officials, and communities regarding their service needs.

Public participation is always required for a Service Plan. In addition, specific changes, for example route elimination, require public participation regardless of when the change takes place.

Ongoing Public Outreach

The MBTA provides avenues for ongoing communication through its website, customer phone line, social media outlets, standing committees, and comments sent to individual MBTA officials. Service-related comments and requests are directed to the appropriate department for consideration and response. Upon request, MBTA staff also attend public meetings held by municipalities or with public officials to address specific service issues. From time to time, the MBTA may conduct specific market or route-based meetings to gather direct feedback on potential service changes. This ongoing public outreach informs both the quarterly service planning process and the rolling service plan process.

Rolling Service Plan Public Outreach

Once a Preliminary Service Plan is complete, the MBTA schedules one or more public meetings in appropriate locations. At these open meetings, the MBTA presents the analysis and issues behind the proposed service changes and solicits public comments on them. MBTA staff then assesses and analyzes the suggestions made through the public comments and, as appropriate, incorporates them into the final recommendations that go to the Board of Directors for approval.

All Service Plan public notifications and meetings conform to ADA and Title VI requirements and MBTA policies associated with these laws.

Table 15: Summary of Service Planning Processes

	Quarterly Service Planning Process	Rolling Service Plan Process
Initiation of changes:	Requests/comments from public, including public and non-profit entities	Requests/comments from public, including public and non-profit entities
	Bus Operations feedback	Bus Operations feedback
	Service Planning staff	Service Planning staff
	Service studies	Service studies
		Public meetings
Evaluation of changes:	Route-level analysis using the evaluation criteria	Area or district-level analysis using the evaluation criteria including performance review of all services using service standards
	Review by Service Committee	Comparative evaluation of proposed service changes and possible new services
		Review by Service Committee
		Public review and comment
		Title VI and Environmental Justice analysis as needed
Implementation of changes:	Quarterly with regular schedule changes	Rolling, upon approval of the Service Plan by the MBTA governing board

Source: MBTA.

Glossary of Terms and Acronyms

ADA: Americans with Disabilities Act of 1990, and as amended in 2008.

Automated Fare Collection (AFC) System: The specific instruments, such as faregates and fareboxes, and back-end infrastructure the MBTA uses to collect fares.

AVL: Automatic Vehicle Locator.

Boston Region MPO: Boston Region Metropolitan Planning Organization. The Boston Region Metropolitan Planning Organization, staffed by CTPS, is responsible for conducting the federally required metropolitan transportation-planning process (often called the 3C—continuing, cooperative, and comprehensive—process) for the Boston metropolitan area. The MPO uses this process to develop a vision for the region, then decides how to allocate federal and state transportation funds to programs and projects—roadway, transit, bicycle, and pedestrian—that support that vision.

Coverage: People living within the geographic area served by the MBTA system.

CTPS: Central Transportation Planning Staff (to the Boston Region MPO).

Dual Mode: Buses that can operate using electrical power from overhead catenary wires or a diesel engine to power the electric traction motors that turn the wheels.

Fixed-Route Service: Services that operate on designated routes with published timetables including all light rail, heavy rail, Commuter Rail, ferry, and bus services. (The RIDE, the MBTA's paratransit service, is not a fixed-route service.)

Frequency of Service: The number of trips per hour provided on a route (for example, a route that operates every 15 minutes has a frequency of four trips per hour).

Headway: The number of minutes between scheduled trips on a route (for example, a route that operates four trips per hour has a 15-minute headway).

Heavy Rail Services: Red Line, Orange Line, and Blue Line.

Key Routes: Key Bus Routes are similar to Local routes, but have policy standards for a longer span and higher frequency of service.

Language Access Plan (LAP): Includes the MBTA's language access needs assessment, based on the US Department of Transportation "four-factor analysis" and it prescribes:

- Methods and measures the MBTA uses to communicate with passengers with limited proficiency in English
- Training programs for educating staff about the Authority's Title VI obligations, including providing accessible services to passengers who are not proficient in English

- Methods the Authority uses to provide notice to the public of the Authority's Title VI obligations, including providing language assistance to passengers who are not proficient in English
- Plans for monitoring and updating the Language Assistance Plan.

Leading Headway: The number of minutes between a trip and the trip before it.

Light Rail Services: Green Line and Mattapan High Speed Line.

Limited English Proficiency (LEP): Individuals who have a limited ability to read, write, speak, or understand English are limited English proficient, or 'LEP. According to the American Community Survey (ACS), those who indicated they spoke English "well," "not well," or "not at all" were considered to have difficulty with English—identified also as people who speak English "less than very well."

MPO: Metropolitan Planning Organization.

Paratransit: A transit mode operating with flexible schedules and without fixed routes. Generally, paratransit operators use cars, vans, or small buses to serve passengers. The MBTA's ADA paratransit service is known as The RIDE.

Peak Direction: The direction in which most commuters are traveling on a route during the peak period (for example, toward Boston in the morning and away from Boston in the afternoon).

Public Participation Plan: The Public Participation Plan, or PPP, serves to guide agency public participation efforts, including populations that have been underserved by the transportation system and/or have lacked access to the process. The PPP guides in its efforts to offer early, continuous, and meaningful opportunities for the public to help identify social, economic, and environmental impacts of proposed transportation policies, projects and initiatives across MassDOT/MBTA.

Schedule Adherence: An indication of on-time performance, or how reliably services adhere to published schedules. Schedule adherence is the service standard that is used to measure progress toward achieving the Reliability service objective.

Shared Segment: A portion of the bus network that is used by multiple bus routes.

Span of Service: Refers to the hours during which service is accessible and is defined by the times that a service begins in the morning and ends in the evening. Span of Service is one of the service standards that are used to measure progress toward achieving the availability service objective.

Timepoint: A bus stop for which the MBTA lists the scheduled arrival time on its schedules. Timepoints are frequently found at major intersections along a route. There is neither a set distance between timepoints nor a specific number of timepoints for a route.

Timepoint Crossing: The act of passing a timepoint.

Title VI: Title VI of the Civil Rights Act of 1964 requires that transit agencies that receive federal funding demonstrate that they do not discriminate based on race, color, or national origin in providing services.

Vehicle Load: Defines the level of passenger crowding that is acceptable for a safe and comfortable ride. Vehicle Load is expressed as a ratio of the number of passengers on the vehicle to the number of seats on the vehicle. Vehicle load is used to calculate the service standard for measuring progress toward achieving the comfort service objectives.

Appendix A: Route Types

Table A1: Local Bus Routes

7	City Point – Otis and Summer Streets
8	Harbor Point – Kenmore Station
9	City Point – Copley Square via Broadway Station
10	City Point – Copley Square Via South Bay Center
11	Bayview – 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
27	Mattapan Station – Ashmont Station
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 – Nubian 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
62	Bedford V.A. Hospital – Alewife Station
64	Oak Square – University Pk. Cambridge
65	Brighton Center – Kenmore Station
68	Harvard Square – Kendall MIT Station
69	Harvard Square – Lechmere Station
70/70A	Cedarwood – University Pk. Cambridge
72	Aberdeen and Mt. Auburn – Harvard Station
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
79	Arlington Heights – Alewife Station
80	Arlington Center – Lechmere Station
83	Rindge Ave. – 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 – Assembly Station
91	Sullivan Station – Central Square, Cambridge
92	Sullivan Station – 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
105	Malden Station – Sullivan Station Via Main Street
106	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
136/137	Reading Depot – Malden Station
201/202	Adams & Gallivan or Keystone Apartments – 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
230	Quincy Center Station – Montello Station
236	Quincy Center Station – South Shore Plaza
238	Quincy Center Station – Holbrook/Randolph Comm. Rail St
240	Avon Square – 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 Humphrey St.
450	Salem Depot – Haymarket or Wonderland Station via Western Ave **(Partially Express)**
455	Salem Depot – Wonderland Station
465	Danvers Square – Salem Depot
553	Roberts – Downtown Boston **(Partially Express)**
554	Waverley Square – Downtown Boston **(Partially Express)**
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
712/713	Point Shirley, Winthrop – Orient Heights (Private Carrier)

Table A2: Key Bus Routes

1	Harvard Square – Nubian 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 – Nubian Station via Allston
71	Watertown Square – Harvard Station
73	Waverley Square – Harvard Station
77	Arlington Heights – Harvard Station
111	Woodlawn or Cary Square – Haymarket Station
114/116/117	Wonderland Station – Maverick Station
SL1 (741)	Logan Airport – South Station
SL2 (742)	Boston Design Center – South Station
SL3 (743)	Chelsea – South Station
SL4 (751)	Nubian Station – South Station
SL5 (749)	Nubian Station – Downtown

Table A3: Commuter Bus Routes

4	North Station – Tide Street
67	Turkey Hill – Alewife Station
84	Arlmont Loop – Alewife Station
85	Spring Hill – Kendall MIT Station
121	Wood Island Station – Maverick Station
131	Melrose Highlands – Oak Grove Station
325	Elm Street – Haymarket Station **(Express)**
326	West Medford – Haymarket Station **(Express)**
351	EMD Serono/Bedford Woods – Alewife Station **(Express)**
352/354	Burlington – State Street **(Express)**
424	Eastern and Essex – Wonderland
428	Oaklandvale – Haymarket Station via Cliftondale **(Express)**
451	North Beverly – Salem Depot
501	Brighton Center – Downtown Boston **(Express)**
502	Watertown Yard – Copley Square **(Express)**
503	Brighton Center – Copley **(Express)**
504	Watertown Yard – Downtown Boston **(Express)**
505	Waltham Center – Downtown Boston **(Express)**
556	Waltham Highlands – Downtown Boston **(Express)**
558	Riverside – Downtown Boston **(Express)**

Table A4: Community Bus Routes

18	Ashmont Station – Andrew Station
55	Queensberry Street – Copley or Park and Tremont Streets
456	Salem Depot – Central Square Lynn
710	North Medford – Medford Square Meadow Glen Mall or Wellington Station (Private Carrier)
714	Pemberton Pt., Hull – Station St., Hingham (Private Carrier)
716	Cobbs Corner – Mattapan Station via Canton Center (Private Carrier)

Table A5: Supplemental Bus Routes

170	Waltham – Nubian Station (Limited Service) **(Express)**
171	Nubian Station – Logan Airport via Andrew Station
195	Shattuck Hospital – Temple Place
212	Quincy Center Station – North Quincy Station
217	Quincy Center Station – Ashmont Station
221	Quincy Center Station – Fort Point
434	Peabody Square – Haymarket Station via Goodwins Circle **(Express)**
439	Bass Point Nahant – Central Square Lynn

Appendix B: Vehicle Load

Table B1: Bus and Trackless Trolley

Vehicle Type	No. of Seats	Off-Peak Standard	Off-Peak Max Load	Peak Load Standard	Peak Max Load
RTS 40' Diesel	40	125%	50	140%	56
Neoplan 40' Emission Controlled Diesel	38	125%	47	140%	53
New Flyer 40' Emission Contr. Diesel	39	125%	48	140%	54
Neoplan 60' Compressed Natural Gas	57	125%	71	140%	79
Neoplan 60' Dual-Mode Articulated	47	140%	65	140%	65
Neoplan 60' Airport Dual-Mode Artic.	38	140%	53	140%	53
New Flyer 60' Diesel-Electric Hybrid	57	125%	71	140%	79
New Flyer XDE60	53	125%	66	140%	74
New Flyer XDE60 XRBattery	51	140%	72	140%	72
New Flyer XE60	53	140%	74	140%	74
New Flyer 40' XDE40	37	125%	46	140%	51
New Flyer XN40	36	125%	45	140%	50
New Flyer XDE40	36	125%	45	140%	50
Neoplan 40' Electric Trolley Bus	31	140%	43	140%	43

Note: Dual-mode vehicles used in Silver Line tunnels, electric trolley buses, and battery electric buses are always evaluated using the Peak Load Standard because of the operating characteristics of that service and because those vehicles have more standing room per seat.
Source: MBTA.

Table B2: Vehicle Load on Light Rail and Heavy Rail

Vehicle Type	No. of Seats	Floor Area (sq. ft.)	Total Passengers			
			Early AM/ AM Peak	Midday Base	Midday School/ PM Peak	Evenings and Weekends
Green Line 7/8/9	46/44	207	100	66	100	66
Mattapan Line	41	120	73	53	73	53
Red Line 1	62	306	165	94	165	94
Red Line 2	61	297	161	92	161	92
Red Line 3	50	338	163	84	163	84
Orange Line 1	58	249	141	83	141	83
Blue Line	35	154	86	50	86	50

Table B3: Commuter Rail

Vehicle Type	Fleet ID	Number of Seats	Peak Load Standard	Peak Max Load
Pullman	200–258	114	110%	125
Bombardier	350–389	127	110%	140
Bombardier	600–653	122	110%	134
Bombardier	1600–1652	122	110%	134
Kawasaki	700–749	185	110%	204
Kawasaki	750–781	182	110%	200
Kawasaki	900–932	178	110%	196
Kawasaki	1700–1724	175	110%	193
MBB	500–532	94	110%	103
MBB	1500–1533	96	110%	106
Rotem	800–846	179	110%	197
Rotem	1800–1827	173	110%	190

Source: MBTA.

Table B4: Commuter Boat (MBTA-Owned)

Vessel Name	Vessel Type	Max Load
Flying Cloud	Catamaran	149
Lightning	Catamaran	149

Source: MBTA.

Table B5: RIDE Vehicles (MBTA-Owned)

Vehicle Type	Seating Capacity	Wheelchair Capacity
Ford Flex	3	0
Ford Transit	3	0
Ford E350 Cutaway	4 - 8	0 - 2

Source: MBTA.

Appendix C: Paratransit Service Standards

The MBTA monitors The RIDE contractors using performance metrics. If a contractor fails to meet standards set in the contracts, as well as FTA ADA requirements, they incur monetary penalties.

On-Time Performance

On-time Performance (OTP) is the percentage of all trips performed on-time, defined as pick-up based trips that occur up to 6 minutes prior to and 16 minutes after the scheduled pick-up time plus drop-off based trips that occur up to 6 minutes after the drop-off (appointment) time, plus customer no-show trips.

Productivity

Productivity is the ratio of completed trips to the number of revenue hours.

Excessively Late Pick-Ups

Excessively late pick-ups are measured in two buckets: pick-ups that occur between 61 and 120 minutes late, and those that are more than 120 minutes late.

Excessively Late Drop-Offs

Excessively late drop-offs (for appointment-based trips) are measured in two buckets: drop-offs that occur between 31 and 60 minutes late, and those that are more than 60 minutes late.

Customer Satisfaction

Complaints

The complaint rate is the number of valid, RIDE-related complaints received by the MBTA and is reported as a rate per 1,000 completed trips.

Complaint Response Time

RIDE vendors are required to provide responses to valid, RIDE-related complaints within 10 days from the date of receipt. The complaint response time standard is measured as the number of complaints sent after more than 10 days, per 1,000 completed trips.

Call Center – Reservations

Reservations call center performance is measured as the share of incoming calls answered within 90 seconds, excluding calls that are abandoned within the first 10 seconds.

Call Center – Dispatch

Dispatch call center performance is measured as the share of incoming calls answered within 45 seconds, excluding calls that are abandoned within the first 10 seconds.

Table C1: Paratransit Service Standards

Standard	Minimum	Target	2019 Performance	2019 Data
On-time Performance	—	90%	91%	Sep-Dec 2019
Productivity	—	1.15	1.11	
Excessively late pick-ups, 61-120 minutes, per 1,000 trips.	—	0	2.2	
Excessively late pick-ups, greater than 120 minutes, per 1,000 trips.	—	0	0.2	
Excessively late drop-offs, 31 – 60 minutes, per 1,000 trips.	—	0	3.9	
Excessively late drop-offs, greater than 60 minutes, per 1,000 trips.	—	0	0.9	
Customer Satisfaction				
Complaints, per 1,000 trips TRAC DSPs	—	 1.0 1.2	 1.5 1.2	Sep-Dec 2019
Complaint Response Time, per 1,000 trips	—	0	0.3	
Call Center – Reservations, percent of calls answered within 90 seconds	—	80%	81%	
Call Center – Dispatch, percent of calls answered within 45 seconds	—	80%	79%	

Appendix D: Service Standard Minimums and Targets

Table D1: All Service Standards

Standard	Minimum	Target	2019 Performance: Overall	2019 Performance: Low-Income	2019 Performance: Riders of Color	2019 Data
Span of Service Standards (minimums, targets, and 2019 performance apply to weekdays only)						
Bus	90%	95%	95%	94%	94%	Fall 2019
Heavy Rail	—	100%	100%	100%	100%	Fall 2019
Light Rail	—	100%	100%	100%	100%	Fall 2019
Commuter Rail	—	100%	100%	100%	100%	Fall 2019
Ferry	—	100%	100%	100%	100%	Fall 2019
Service Frequency Standards (minimums, targets, and 2019 performance apply to weekdays only)						
Bus	90%	95%	92%	91%	91%	Fall 2019
Rapid Transit	—	100%	100%	100%	100%	Fall 2019
Ferry	—	100%	100%	100%	100%	Fall 2019
Coverage Standards						
Base Coverage	75%	—	82%	88%	91%	Fall 2019
Frequent Service Coverage	—	70%	64%	64%	67%	Fall 2019
Accessibility Standards						
Station Accessibility (Unweighted)	76%	100%	76%	—	—	Fall 2019
Station Accessibility (Ridership-Weighted)	94%	100%	94%	94%	95%	Fall 2019
Elevator Uptime	99.4%	100%	99.5%	—	—	Jul 2019 – Jun 2020
Platform Accessibility	99.4%	100%	99.4%	—	—	Jul 2019 – Jun 2020
Vehicle Accessibility (Green Line)	100%	100%	100%	—	—	Oct – Dec 2020

Table D1 continues on next page

Table D1: All Service Standards (continued)

Standard	Minimum	Target	2019 Performance: Overall	2019 Performance: Low-Income	2019 Performance: Riders of Color	2019 Data
Reliability Standards						
Bus Reliability	70%	75%	68%	68%	68%	Fall 2019
Rapid Transit Passenger Wait Times	—	90%	90%	89%	89%	Fall 2019
Commuter Rail Reliability	Contract requires 92% (adjusted)		93.8% (adjusted)	85%	85%	Fall 2019
Ferry Reliability	—	99%	98%	98%	98%	Fall 2019
The RIDE Reliability	—	90%	90.6%	—	—	
Bus Service Operated	—	99.5%	98.6%	—	—	Jan-Dec 2019
Light Rail Service Operated	—	99.5%	96.2%	—	—	Jan-Dec 2019
Heavy Rail Service Operated	—	99.5%	97.6%	—	—	Jan-Dec 2019
Commuter Rail Service Operated	Contract sets fines for canceled service		99.6%	—	—	Jan-Dec 2019
Ferry Service Operated	Contract sets fines for canceled service		99.9%	—	—	Jan-Dec 2019
Passenger Comfort Standards						
Bus Passenger Minutes in Comfortable Conditions	92%	96%	92%	92%	93%	Fall 2019

* Data subject to change with improvements in data collection methodologies

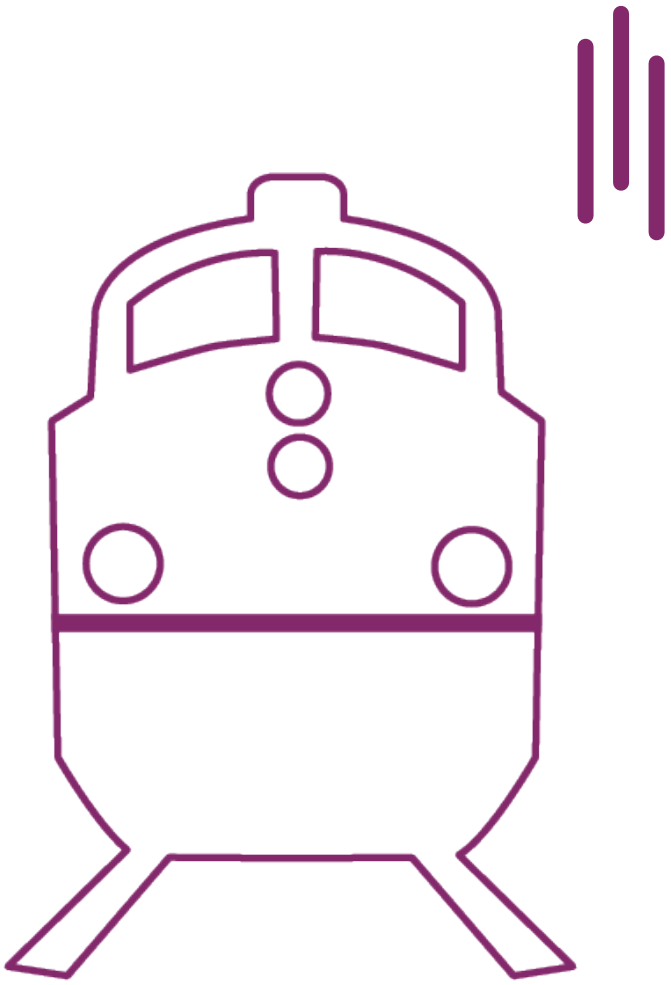
Source: MBTA





Appendix 6A

Minority Classifications of MBTA Services



Minority Classifications of MBTA Services

The classifications shown in tables 6A-1 through 6A-4 are based on the Massachusetts Bay Transportation Authority (MBTA) 2022 System-Wide Passenger Survey.

Table 6A-1
MBTA Bus Route Minority Classification

Route	Route Name	Classification
1	Harvard Station—Nubian Station	Minority
4	North Station—Tide Street	Nonminority
7	City Point—Otis Street and Summer Street	Nonminority
8	Harbor Point—Kenmore Station	Minority
9	City Point—Copley Station	Nonminority
10	City Point—Copley Square	Minority
11	City Point—Chauncy Street and Summer Street	Nonminority
14	Roslindale Square—Heath Street	Minority
15	Fields Corner Station or Kane Square—Ruggles Station	Minority
16	Forest Hills Station—Andrew Station or Harbor Point	Minority
17	Fields Corner Station—Andrew Station	Minority
18	Ashmont Station—Andrew Station	Minority
19	Fields Corner Station—Kenmore or Ruggles Station	Minority
21	Ashmont Station—Forest Hills Station	Minority
22	Ashmont Station—Ruggles Station via Talbot Ave	Minority
23	Ashmont Station—Ruggles Station via Washington Street	Minority
24	Wakefield Avenue and Truman Parkway—Ashmont Station	Minority
26	Ashmont Station—Norfolk Street Loop	Minority
28	Mattapan Station—Ruggles Station	Minority
29	Mattapan Square—Jackson Square Station	Minority
30	Mattapan Station—Forest Hills Station via Cummins Hwy. and Roslindale Sq.	Minority
31	Mattapan Square—Forest Hills Station via Morton Street	Minority
32	Wolcott or Cleary Square—Forest Hills Station	Minority
33	River Street and Milton Street—Mattapan Station	Minority
34	Dedham Square—Forest Hills Station	Minority
34E	Walpole Center—Forest Hills Station	Minority
35	Dedham Mall or Stimson Street—Forest Hills Station	Minority
36	Millennium Park or VA Hospital—Forest Hills Station	Minority
37	Baker Street and Vermont Street—Forest Hills Station	Minority
38	Wren Street—Forest Hills Station	Minority
39	Forest Hills Station—Back Bay Station	Minority
40	Georgetowne—Forest Hills Station	Minority
41	Centre Street and Elliott Street—JFK/UMass Station	Minority
42	Forest Hills Station—Nubian Square	Minority

Route	Route Name	Classification
43	Ruggles Station—Park Street Station	Minority
44	Jackson Square Station—Ruggles Station	Minority
45	Franklin Park—Ruggles Station	Minority
47	Central Square, Cambridge—Broadway Station	Nonminority
50	Cleary Square—Forest Hills Station	Minority
51	Reservoir Station—Forest Hills Station	Minority
52	Dedham Mall—Watertown Yard	Nonminority
55	Jersey Street and Queensbury Street—Copley Station	Minority
57	Watertown Yard—Kenmore Square	Nonminority
59	Needham Junction—Watertown Square	Nonminority
60	Chestnut Hill—Kenmore Station	Nonminority
61	North Waltham—Waltham Center	Minority
62	Bedford VA Hospital—Alewife Station	Nonminority
64	Oak Square—University Park or Kendall/MIT Station	Nonminority
65	Brighton Center—Kenmore Station	Nonminority
66	Harvard Square—Nubian Station	Minority
67	Turkey Hill—Alewife Station	Nonminority
68	Harvard Square—Kendall/MIT Station	Nonminority
69	Harvard Square—Lechmere Station	Nonminority
70	Market Place Drive or Waltham Center—University Park	Minority
71	Watertown Square—Harvard Station	Nonminority
73	Waverly Square—Harvard Station	Nonminority
74	Belmont Center—Harvard via Concord Avenue	Nonminority
75	Belmont Center—Harvard via Huron Avenue	Nonminority
76	Lincoln Lab—Alewife Station	Nonminority
77	Arlington Heights—Harvard Station	Nonminority
78	Arlmont Village—Harvard Station	Nonminority
80	Arlington Center—Lechmere Station	Nonminority
83	Rindge Avenue—Central Square, Cambridge	Nonminority
85	Spring Hill—Kendall/MIT Station	Nonminority
86	Sullivan Square Station—Reservoir Station	Nonminority
87	Clarendon Hill or Arlington Center—Lechmere Station	Nonminority
88	Clarendon Hill—Lechmere Station	Nonminority
89	Clarendon Hill or Davis Station—Sullivan Square Station	Nonminority
90	Davis Station—Assembly Row	Nonminority
91	Sullivan Square Station—Central Square, Cambridge	Nonminority
92	Sullivan Square Station—Downtown via Main Street	Minority
93	Sullivan Square Station—Downtown via Bunker Hill Street	Minority
94	Medford Square—Davis Square	Nonminority
95	West Medford or Arlington Center—Sullivan Square Station	Minority
96	Medford Square—Harvard Station	Nonminority
97	Malden Center Station—Wellington Station	Minority
99	Woodland Road—Wellington Station	Minority

Route	Route Name	Classification
100	Elm Street—Wellington Station	Minority
101	Malden Center Station—Sullivan Square Station via Winter Hill	Nonminority
104	Malden Center Station—Sullivan Square Station via Ferry Street	Minority
105	Malden Center Station—Sullivan Square Station via Newland Street Housing	Minority
106	Lebanon Loop—Wellington Station	Minority
108	Linden Square—Wellington Station	Minority
109	Linden Square—Sullivan Square Station	Minority
110	Wonderland Station—Wellington Station	Minority
111	Woodlawn—Haymarket Station	Minority
112	Wellington Station—Wood Island Station	Nonminority
114	Market Basket—Maverick Station	Minority
116	Wonderland Station—Maverick Station via Revere Street	Minority
117	Wonderland Station—Maverick Station via Beach Street	Minority
119	Northgate Shopping Center—Beachmont Station	Nonminority
120	Orient Heights Station—Jeffries Point	Nonminority
121	Wood Island Station—Maverick Station	Nonminority
131	Melrose Highlands—Oak Grove or Malden Center Station	Minority
132	Redstone Shopping Center—Malden Center Station	Minority
134	North Woburn—Wellington Station	Minority
137	Reading Depot—Malden Center Station	Minority
171	Logan Airport Terminals—Nubian Station	Minority
191	Mattapan—Haymarket via Ashmont, Fields Corner and Dudley	Minority
192	Cleary Square—Haymarket via Forest Hills and Copley	Minority
193	Watertown—Haymarket via Kenmore	Nonminority
194	Clarendon Hill—Haymarket via Sullivan	Nonminority
201	Fields Corner Loop via Neponset Avenue	Minority
202	Fields Corner Loop via Adams Street	Minority
210	Quincy Center Station—Fields Corner Station	Minority
211	Quincy Center Station—Squantum	Minority
215	Quincy Center Station—Ashmont Station via West Quincy	Minority
216	Houghs Neck—Quincy Center Station via Germantown	Minority
217	Quincy Center Station—Ashmont Station via Wollaston Station	Minority
220	Hingham Depot—Quincy Center Station	Nonminority
222	East Weymouth—Quincy Center Station	Nonminority
225	Weymouth Landing—Quincy Center Station	Nonminority
226	Columbian Square—Braintree Station	Nonminority
230	Montello Station—Quincy Center Station	Minority
236	South Shore Plaza—Quincy Center Station	Minority
238	Holbrook/Randolph Station—Quincy Center Station	Minority
240	Avon Square—Ashmont Station	Minority
245	Quincy Center Station—Mattapan Station	Minority
350	North Burlington—Alewife Station	Nonminority
351	Bedford Woods Drive—Third Avenue	Minority

Route	Route Name	Classification
354	North Burlington—State Street, Boston	Nonminority
411	Kennedy Drive or Jack Satter House—Malden Center Station	Minority
424	Eastern Avenue and Essex Street—Wonderland Station	Minority
426	Central Square, Lynn—Haymarket or Wonderland Station	Minority
428	Oaklandvale—Haymarket Station	Minority
429	Northgate Shopping Center—Central Square	Minority
430	Saugus Center—Malden Center Station	Minority
435	Liberty Tree Mall—Central Square, Lynn via Peabody Square	Minority
436	Liberty Tree Mall—Central Square, Lynn via Goodwin Circle	Minority
439	Nahant—Wonderland Station	Minority
441	Marblehead—Wonderland Station via Paradise Road	Minority
442	Marblehead—Haymarket via Central Square and Humphrey Street	Minority
450	Salem Depot—Wonderland or Haymarket Station	Minority
451	North Beverly Station—Salem Depot	Minority
455	Salem Depot—Wonderland Station	Minority
456	Salem Depot—Central Square, Lynn	Minority
501	Express: Brighton Center—Federal Street and Franklin Street	Nonminority
504	Express: Watertown Yard—Federal Street and Franklin Street	Nonminority
505	Express: Waltham Center—Federal Street and Franklin Street	Nonminority
553	Roberts—Newton Corner	Nonminority
554	Waverly Square—Newton Corner	Nonminority
556	Waltham Highlands—Newton Corner	Nonminority
558	Riverside Station—Newton Corner	Nonminority
627	62/76: Bedford VA Hospital—Alewife Station via Hanscom Airport	Nonminority
708	CT3: Beth Israel Deaconess—Andrew Station	Minority
712	Point Shirley—Orient Heights Station via Revere Street	Nonminority
713	Point Shirley—Orient Heights Station via Winthrop Center	Nonminority
714	Pemberton Point, Hull—Station Street, Hingham	Nonminority
716	Cobbs Corner—Mattapan Station	Minority
747	CT2: Sullivan Station—Ruggles Station	Nonminority

Table 6A-2
Rapid Transit, Commuter Rail, and Ferry Lines Minority Classification

Line	Classification
Rapid Transit—Heavy Rail	
Red Line—Total	Nonminority
Red Line—Shared Trunk	Nonminority
Red Line—Ashmont Branch	Minority
Red Line—Braintree Branch	Minority
Blue Line	Nonminority
Orange Line	Minority
Rapid Transit—Light Rail	
Green Line—Total	Nonminority

Green Line—Shared Trunk	Nonminority
Green Line—B Branch	Nonminority
Green Line—C Branch	Nonminority
Green Line—D Branch	Nonminority
Green Line—E Branch	Nonminority
Mattapan (Red)	Minority
Rapid Transit—Silver Line	
SL1/SL2 Waterfront	Nonminority
SL3 Chelsea	Minority
SL4/SL5 Washington Street	Minority
Commuter Rail	
Fairmount	Minority
Fitchburg	Nonminority
Framingham/Worcester	Nonminority
Franklin	Nonminority
Greenbush	Nonminority
Haverhill/Reading	Nonminority
Lowell	Nonminority
Middleborough/Lakeville	Nonminority
Needham	Nonminority
Newburyport/Rockport	Nonminority
Plymouth/Kingston	Nonminority
Providence/Stoughton	Nonminority
Ferry	
Charlestown Ferry	Nonminority
Hingham/Hull Ferry	Nonminority

Table 6A-3
MBTA Rapid Transit Station Minority Classification

Station	Classification
Transfer Stations	
Ashmont—Red Line and Mattapan Line platforms	Minority
Downtown Crossing—Red Line and Orange Line platforms	Nonminority
Government Center—Blue Line and Green Line platforms	Nonminority
Haymarket—Orange Line and Green Line platforms	Nonminority
North Station—Orange Line and Green Line platforms	Nonminority
Park Street—Red Line and Green Line platforms	Nonminority
South Station—Red Line and Silver Line platforms	Nonminority
State—Orange Line and Blue Line platforms	Nonminority
Red Line	
Alewife	Nonminority
Davis	Nonminority
Porter	Nonminority
Harvard	Nonminority
Central	Nonminority
Kendall/MIT	Nonminority
Charles/MGH	Nonminority
Park Street—Red Line platform only	Nonminority
Downtown Crossing—Red Line platform only	Nonminority
South Station—Red Line platform only	Nonminority
Broadway	Nonminority
Andrew	Nonminority
JFK/UMass	Minority
Savin Hill	Minority
Fields Corner	Minority
Shawmut	Minority
Ashmont—Red Line platform	Minority
North Quincy	Minority
Wollaston	Minority
Quincy Center	Minority
Quincy Adams	Nonminority
Braintree	Nonminority
Mattapan High-Speed Line	
Ashmont—Mattapan Line platform only	Minority
Cedar Grove	Minority
Butler	Minority
Milton	Minority
Central Avenue	Minority
Valley Road	Minority
Capen Street	Minority
Mattapan	Minority

Station	Classification
Orange Line	
Oak Grove	Minority
Malden	Minority
Wellington	Minority
Assembly Square	Nonminority
Sullivan Square	Nonminority
Community College	Nonminority
North Station—Orange Line platform only	Nonminority
Haymarket—Orange Line platform only	Nonminority
State—Orange Line platform only	Nonminority
Downtown Crossing—Orange Line platform only	Minority
Chinatown	Minority
Tufts Medical Center	Nonminority
Back Bay	Nonminority
Massachusetts Avenue	Nonminority
Ruggles	Minority
Roxbury Crossing	Minority
Jackson Square	Minority
Stony Brook	Nonminority
Green Street	Nonminority
Forest Hills	Minority
Blue Line	
Wonderland	Minority
Revere Beach	Minority
Beachmont	Nonminority
Suffolk Downs	Nonminority
Orient Heights	Nonminority
Wood Island	Nonminority
Airport	Nonminority
Maverick	Minority
Aquarium	Nonminority
State—Blue Line platform only	Minority
Government Center—Blue Line platform only	Nonminority
Bowdoin	Nonminority
Green Line Shared Trunk	
Lechmere	Nonminority
Science Park	Nonminority
North Station—Green Line platform only	Nonminority
Haymarket—Green Line platform only	Minority
Government Center—Green Line platform only	Nonminority
Park Street—Green Line platform only	Nonminority
Boylston	Nonminority
Arlington	Nonminority

Station	Classification
Copley	Nonminority
Hynes Convention Center	Nonminority
Kenmore	Nonminority
Green Line–B	
Blandford Street	Nonminority
BU East	Nonminority
BU Central	Nonminority
BU West	Nonminority
St. Paul Street	Nonminority
Pleasant Street	Nonminority
Babcock Street	Nonminority
Packards Corner	Nonminority
Harvard Avenue	Nonminority
Griggs Street	Nonminority
Allston Street	Nonminority
Warren Street	Nonminority
Washington Street	Nonminority
Sutherland Road	Nonminority
Chiswick Road	Nonminority
Chestnut Hill Avenue	Nonminority
South Street	Nonminority
Boston College	Nonminority
Green Line–C	
St. Marys Street	Nonminority
Hawes Street	Nonminority
Kent Street	Nonminority
St. Paul Street	Nonminority
Coolidge Corner	Nonminority
Summit Avenue	Nonminority
Brandon Hall	Nonminority
Fairbanks Street	Nonminority
Washington Square	Nonminority
Tappan Street	Nonminority
Dean Road	Nonminority
Englewood Avenue	Nonminority
Cleveland Circle	Nonminority
Green Line–D	
Union Square	Nonminority
Fenway	Nonminority
Longwood	Nonminority
Brookline Village	Nonminority
Brookline Hills	Nonminority
Beaconsfield	Nonminority

Station	Classification
Reservoir	Nonminority
Chestnut Hill	Nonminority
Newton Centre	Nonminority
Newton Highlands	Nonminority
Eliot	Nonminority
Waban	Nonminority
Woodland	Nonminority
Riverside	Nonminority
Green Line–E	
Medford/Tufts	Nonminority
Ball Square	Nonminority
Magoun Square	Nonminority
Gilman Square	Nonminority
East Somerville	Nonminority
Prudential	Nonminority
Symphony	Nonminority
Northeastern	Nonminority
Museum of Fine Arts	Nonminority
Longwood Medical	Nonminority
Brigham Circle	Nonminority
Fenwood Road	Nonminority
Mission Park	Nonminority
Riverway	Nonminority
Silver Line Waterfront and Washington Street	
South Station—Silver Line platform only	Nonminority
Court House	Nonminority
World Trade Center	Nonminority
Nubian Station	Minority
Washington Street @ Melnea Cass Blvd	Minority
Washington Street @ Lenox Street	Minority
Washington Street @ Massachusetts Avenue	Minority
Washington Street @ Worcester Street	Minority
Washington Street @ E Newton Street	Minority
Washington Street @ W Newton Street	Minority
Washington Street @ Union Park	Minority
Washington Street @ E Berkeley Street	Minority
Washington Street @ Herald Street	Minority
Silver Line SL3—Chelsea	
Chelsea	Minority
Bellingham Square	Minority
Box District	Minority
Eastern Avenue	Minority
Airport	Minority

Table 6A-4
Commuter Rail Station Minority Classification

Station	Classification
Multiline Stations	
North Station—passengers on all lines	Nonminority
South Station—passengers on all lines	Nonminority
Back Bay—passengers on all lines	Nonminority
Ruggles—passengers on all lines	Nonminority
JFK/UMass—passengers on all lines	Nonminority
Quincy Center—passengers on all lines	Nonminority
Braintree—passengers on all lines	Nonminority
Hyde Park—passengers on all lines	Nonminority
Readville—passengers on all lines	Nonminority
Newburyport/Rockport	
Rockport	Nonminority
Gloucester	Nonminority
West Gloucester	Nonminority
Manchester	Nonminority
Beverly Farms	Nonminority
Montserrat	Nonminority
Newburyport	Nonminority
Rowley	Nonminority
Ipswich	Nonminority
Hamilton/Wenham	Nonminority
North Beverly	Nonminority
Beverly	Nonminority
Salem	Nonminority
Swampscott	Nonminority
Lynn	Nonminority
River Works	Nonminority
Chelsea	Nonminority
North Station—Newburyport/Rockport passengers only	Nonminority
Haverhill	
Haverhill	Nonminority
Bradford	Nonminority
Lawrence	Nonminority
Andover	Nonminority
Ballardvale	Nonminority
North Wilmington	Nonminority
Reading	Nonminority
Wakefield	Nonminority
Greenwood	Nonminority
Melrose Highlands	Nonminority
Melrose/Cedar Park	Nonminority
Wyoming Hill	Nonminority

Station	Classification
Malden Center	Nonminority
North Station—Haverhill passengers only	Nonminority
Lowell	
Lowell	Nonminority
North Billerica	Nonminority
Wilmington	Nonminority
Anderson/Woburn	Nonminority
Winchester Center	Nonminority
Wedgemere	Nonminority
West Medford	Nonminority
North Station—Lowell passengers only	Nonminority
Fitchburg	
Wachusett	Nonminority
Fitchburg	Nonminority
North Leominster	Nonminority
Shirley	Nonminority
Ayer	Nonminority
Littleton/Route 495	Nonminority
South Acton	Nonminority
West Concord	Nonminority
Concord	Nonminority
Lincoln	Nonminority
Kendal Green	Nonminority
Brandeis/Roberts	Nonminority
Waltham	Nonminority
Waverley	Nonminority
Belmont	Nonminority
Porter Square	Nonminority
North Station—Fitchburg passengers only	Nonminority
Framingham/Worcester	
Worcester	Nonminority
Grafton	Nonminority
Westborough	Nonminority
Southborough	Nonminority
Ashland	Nonminority
Framingham	Nonminority
West Natick	Nonminority
Natick	Nonminority
Wellesley Square	Nonminority
Wellesley Hills	Nonminority
Wellesley Farms	Nonminority
Auburndale	Nonminority
West Newton	Nonminority

Station	Classification
Newtonville	Nonminority
Boston Landing	Nonminority
Lansdowne	Nonminority
Back Bay—Framingham/Worcester passengers only	Nonminority
South Station—Framingham/Worcester passengers only	Nonminority
Needham	
Needham Heights	Nonminority
Needham Center	Nonminority
Needham Junction	Nonminority
Hersey	Nonminority
West Roxbury	Nonminority
Highland	Nonminority
Bellevue	Nonminority
Roslindale Village	Nonminority
Forest Hills	Nonminority
Ruggles—Needham passengers only	Nonminority
Back Bay—Needham passengers only	Nonminority
South Station—Needham passengers only	Nonminority
Franklin	
Forge Park/495	Nonminority
Franklin	Nonminority
Norfolk	Nonminority
Foxboro	Nonminority
Walpole	Nonminority
Windsor Gardens	Nonminority
Norwood Central	Nonminority
Norwood Depot	Nonminority
Islington	Nonminority
Dedham Corp. Center	Nonminority
Endicott	Nonminority
Readville	Nonminority
Hyde Park	Nonminority
Ruggles—Franklin passengers only	Nonminority
Back Bay—Franklin passengers only	Nonminority
Providence/Stoughton	
Wickford Junction	Nonminority
T.F. Green	Nonminority
Providence	Nonminority
South Attleboro	Nonminority
Attleboro	Nonminority
Mansfield	Nonminority
Sharon	Nonminority
Stoughton	Nonminority

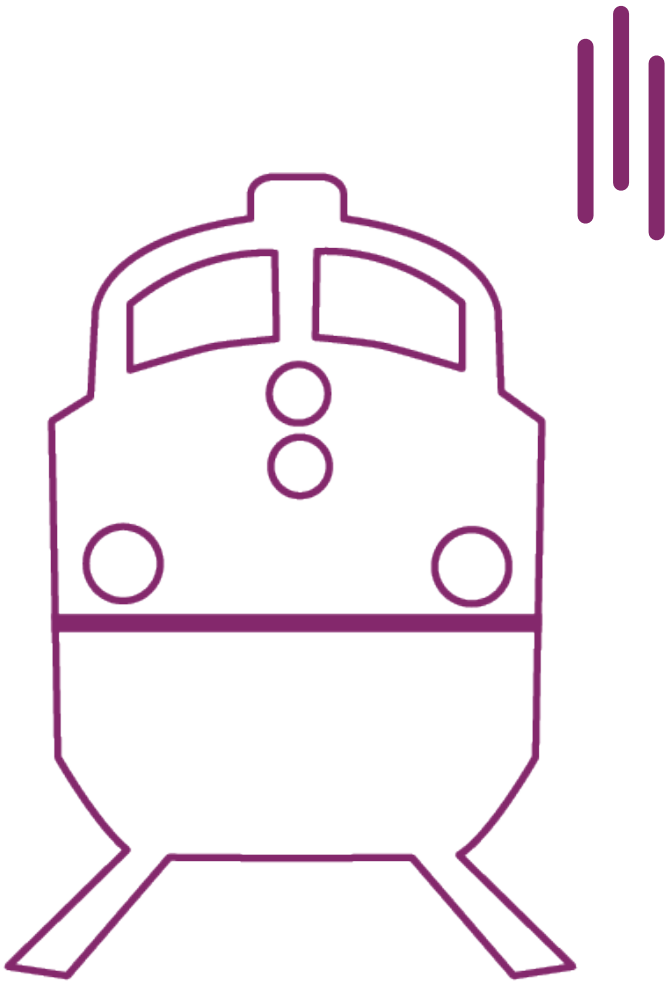
Station	Classification
Canton Center	Nonminority
Canton Junction	Nonminority
Route 128	Nonminority
Hyde Park	Nonminority
Ruggles—Providence/Stoughton passengers only	Nonminority
Back Bay—Providence/Stoughton passengers only	Nonminority
South Station—Providence/Stoughton passengers only	Nonminority
Fairmount	
Readville	Nonminority
Fairmount	Minority
Blue Hill Avenue	Minority
Morton Street	Minority
Talbot Ave	Minority
Four Corners	Minority
Uphams Corner	Minority
Newmarket	Minority
South Station—Fairmount passengers only	Minority
Middleborough	
Middleboro/Lakeville	Nonminority
Bridgewater	Nonminority
Campello	Nonminority
Brockton	Nonminority
Montello	Nonminority
Holbrook/Randolph	Nonminority
Braintree	Nonminority
Quincy Center	Nonminority
JFK/UMass	Nonminority
South Station—Middleboro/Lakeville passengers only	Nonminority
Kingston/Plymouth	
Kingston	Nonminority
Halifax	Nonminority
Hanson	Nonminority
Whitman	Nonminority
Abington	Nonminority
South Weymouth	Nonminority
Braintree	Nonminority
JFK/UMass	Nonminority
South Station—Plymouth/Kingston passengers only	Nonminority
Greenbush	
Greenbush	Nonminority
North Scituate	Nonminority
Cohasset	Nonminority
Nantasket Junction	Nonminority

Station	Classification
West Hingham	Nonminority
East Weymouth	Nonminority
Weymouth Landing/East Braintree	Nonminority
Quincy Center	Nonminority
JFK/UMass	Nonminority
South Station—Greenbush passengers only	Nonminority



Appendix 6B

2023 Service and Fare Change Equity Policy



Massachusetts Bay Transportation Authority

POLICY/PROCEDURE		
SUBJECT: Service and Fare Change Equity Policy	**DATE OF ISSUE:** April 19, 2023, amended October 24, 2023	**APPROVED BY:** Board of Directors, April 19, 2023, amended October 24, 2023

MBTA Service and Fare Change Equity Policy

Introduction

Under the authority of Title VI of the Civil Rights Act of 1964 ("Title VI"), Federal Transit Administration ("FTA") Circular 4702.1B ("FTA Circular" or "Circular") directs transit providers to define and set standards for analyzing the potential adverse effects of proposed major service changes and all proposed fare changes on protected populations. An equity analysis is conducted prior to implementing any such service or fare change to evaluate whether the proposed change is likely to have a disparate impact on populations protected on the basis of race or ethnicity[1], or place a disproportionate burden on low-income[2] populations. The Massachusetts Bay Transportation Authority ("MBTA") follows this Service and Fare Change Equity Policy ("Policy") in accordance with chapter IV, section 7 of the FTA Circular to assist with equitable and transparent decision-making and with the goal of fairly distributing the adverse impacts of and any burdens associated with fare and major service changes.

Scope and Applicability

This Policy applies to proposed changes to the MBTA's fixed-route modes, including bus, light rail, heavy rail, commuter rail, and ferry. This Policy does not extend to paratransit service or any other demand-response mode that may be provided by or for the MBTA.

While analyses conducted pursuant to this Policy are intended to aid the MBTA in equitably distributing the adverse impacts of, and burdens associated with, fare and major service changes, the MBTA recognizes that equity is not inherent in the status quo. Consistent with federal requirements, the MBTA does not factor into its Title VI fare and service equity analyses induced demand, the benefits of quality improvements such as vehicle comfort, or the impact of fare increases relative to household income, notwithstanding the likelihood of such events. During the service planning process, however, the MBTA conducts "equity checks" to provide consistent monitoring of service levels provided to protected populations and to help inform and prioritize future service planning.

[1] FTA Circular 4702.1B provides that any individual who identifies as belonging in any one or more of the following US census categories is a member of a population that is protected from discrimination on the basis of race and/or ethnicity: American Indian and Alaska Native; Asian; Black or African American; Hispanic or Latino (of any race); Native Hawaiian or Other Pacific Islander.

[2] The MBTA defines low-income populations as those in which the median household income is less than 80% of the median household income for the MBTA service area (approximately $82,000 in 2023 and subject to annual modification).

Definition of Major Service Change

The MBTA defines a Major Service Change as any addition, reduction, suspension or change in service lasting longer than 12 months consecutive and meeting one or more of the following criteria:

- A change of at least 10% in Revenue Vehicle Hours[3] (RVH) per week by mode;
- A change of at least 25% in RVH per week by route[4]; or
- A change of at least 0.30% of the population covered by the entire network according to the base coverage standard established in the MBTA's Service Delivery Policy.[5]

These criteria are selected as most likely to yield a meaningful result in light of the MBTA's system characteristics. A Major Service Change occurs when one or more of the above thresholds are met within a single service change proposal, or within a package of concurrently proposed changes to be considered in the aggregate.

Disparate Impact or Disproportionate Burden

Before implementing a major service change or a fare change, the MBTA will conduct an equity analysis to determine whether the adverse effects of the proposed change will be borne unfairly by populations protected on the basis of race or ethnicity or by low-income populations.

The MBTA measures the adverse effects of a proposed service change involving either:

- An increase or decrease in the amount of service scheduled as measured by changes to weekly RVH; or
- An increase or decrease in base coverage as measured by changes to the percent of the population that lives within 0.5 miles of an MBTA stop or station.

The MBTA uses the following thresholds[6] to determine whether the adverse effects of a proposed change will have a disparate impact or place a disproportionate burden on protected populations. The adverse effects of proposed service changes are measured as both the anticipated benefits (e.g., increases in service) and burdens (e.g., decreases in service) expected to accrue to protected and non-protected populations.

- **For major service changes**, a disparate impact or disproportionate burden will be deemed to have occurred if the ratio between the percentage change in service for protected and non-protected populations is greater than 1.20x for a service decrease or less than 0.80x for a service increase.

[3] The total number of hours per week in which transit vehicles operate in revenue service.

[4] Supplemental service that adds trips along pre-existing transit routes, such as school trips or weekend variations, are counted as part of the parent route.

[5] The geographic extent of all MBTA services, some of which may be relatively infrequent for some or all of the service day as measured by the percent of the population that lives within 0.5 miles of a bus stop, rapid transit station, Commuter Rail station, or ferry dock in the MBTA service area, excluding municipalities that are members of a regional transit authority (RTA). The MBTA's Service Delivery Policy can be found at: https://www.mbta.com/policies

[6] The non-zero DI/DB thresholds are meant to prevent false positives attributable to uncertainties in the data source, regardless of whether the data source is the US Census or most recent MBTA passenger survey.

$$\frac{\textit{\% change for protected population}}{\textit{\% change for non-protected population}} > 1.2 \text{ for a decrease in service}$$

$$\frac{\textit{\% change for protected population}}{\textit{\% change for non-protected population}} < 0.8 \text{ for an increase in service}$$

For example, if a major service change yields a 15% increase in service for riders protected on the basis of race or ethnicity and a 20% increase in service for non-protected riders, the ratio would be 0.75x, which is below the 0.80x threshold. This change would result in a disparate impact finding because it proposes to materially increase service more for non-protected populations than for protected populations.

- **For fare changes**, a disparate impact or disproportionate burden will be deemed to have occurred if the ratio between the percentage change in fares for protected riders and overall riders is greater than 1.10x for a fare increase or less than 0.90x for a fare decrease.

$$\frac{\textit{\% change for protected riders}}{\textit{\% change for overall riders}} < 0.9 \text{ for a decrease in fare}$$

$$\frac{\textit{\% change for protected riders}}{\textit{\% change for overall riders}} > 1.1 \text{ for an increase in fare}$$

For example, if a fare change yields a 20% increase in fares for riders protected on the basis of race or ethnicity and a 10% increase in fares for overall riders, the ratio would be 2.00x, which is above the 1.10x threshold. This change would result in a disparate impact finding because it proposes to materially increase fares more for protected riders than for overall riders.

Finding of Disparate Impact: Consistent with the FTA Circular, if the proposed change will have a disparate impact on riders or potential riders who are protected on the basis of race or ethnicity, the MBTA may only adopt the change upon demonstrating: (1) a substantial legitimate justification for the change; (2) there are no comparably effective alternatives that would result in less-disparate impacts; and (3) the justification for the change is not a pretext for discrimination.

Finding of Disproportionate Burden: If the proposed change will disproportionately affect low-income populations, whether by benefit or burden, the MBTA may only adopt the change if further mitigation measures or alternatives that would reduce the disproportionately high and adverse effects are not practicable. In determining whether a mitigation measure or alternative is practicable, the social, economic, and environmental effects of avoiding or mitigating the adverse effects shall be taken into account.

Service Equity Analysis

Due to the varying nature of proposed service and fare changes, the appropriate data to analyze in a given instance may vary from case to case. For a given service equity analysis, the MBTA will identify the data needed for analysis and the techniques and technologies used to collect the data, and the methodologies used in the Service Equity Analysis calculation. The MBTA may use, for example, the rider census to compare the ridership of the affected route(s) with the ridership of the system. The MBTA may seek technical assistance from the FTA as needed based on the circumstances.

Fare Equity Analysis

The MBTA will conduct a fare equity analysis before implementing any proposed change that would increase or decrease individual or system-wide fares, fares by mode, or fares by fare payment type or fare media.

A fare equity analysis compares the percentage change in the average fare for riders protected on the basis of race or ethnicity and overall riders and for low-income and overall riders. For changes resulting in a fare increase or decrease, the MBTA will assess whether protected riders are more likely to use the affected fare type, media, or mode than overall riders and what the potential cost impact would be to these riders. Concurrently proposed fare changes are considered in the aggregate.

The MBTA will not conduct a fare equity analysis for the following:

- "Spare the air" days or similar when the MBTA permits all passengers to ride for free;
- A temporary fare reduction offered as a mitigating measure for another action (e.g., a service diversion or construction activity that may close a route or part of a route);
- A promotional fare change that lasts less than 6 months;
- An administrative or process change in fare collection (e.g., transition to a new fare collection system) that will not yield an increase or decrease in fares.

Public Participation

Consistent with the MBTA's Public Engagement Plan[7], the MBTA will provide meaningful opportunity for public comment on:

- Proposed fare and major service changes and their respective equity analyses;
- Any proposed mitigation measures where potential adverse impacts are identified, including the less discriminatory alternatives that may be available;
- Proposed changes to this Policy.

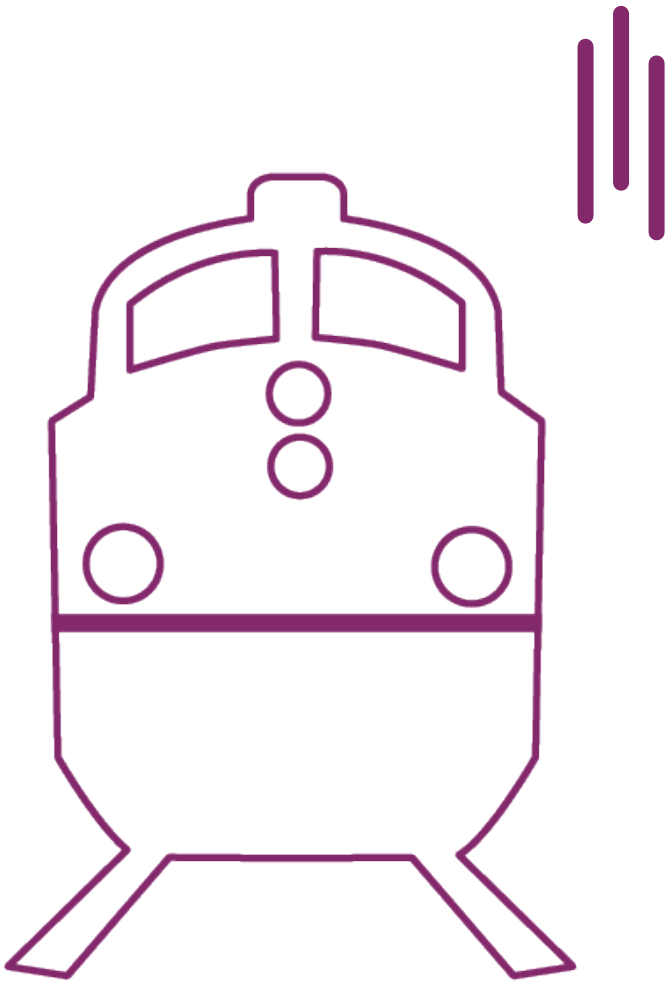
When presenting an equity analysis for public comment, the MBTA will make efforts to explain the basis for its findings in a clear and accessible way, understanding the information presented is often complex.

[7] The MBTA's Public Engagement Plan can be found at: www.mbta.com/policies/public-engagement

Board Approval

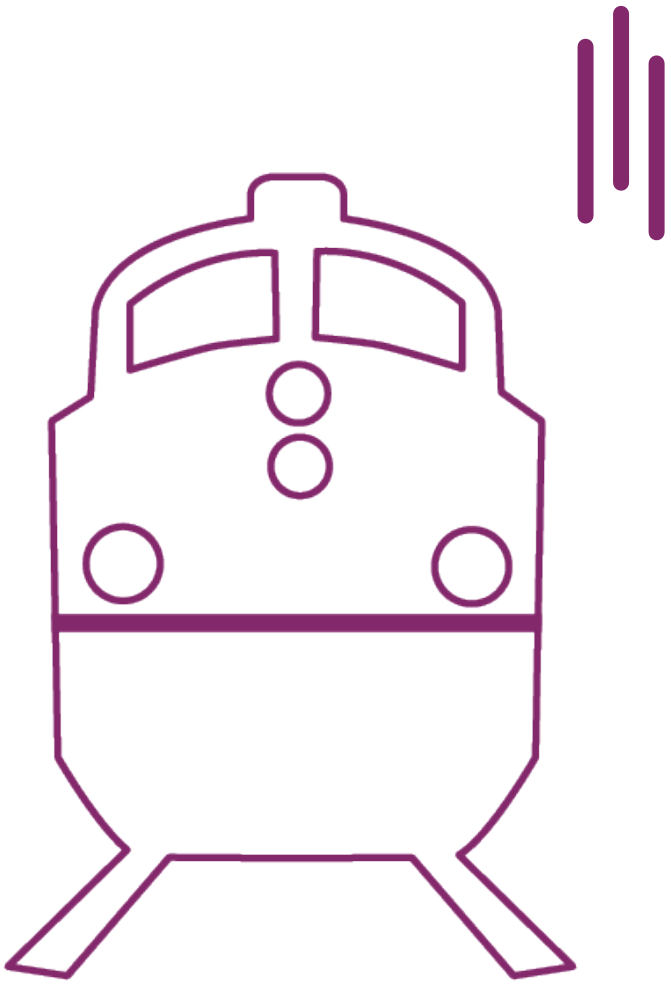
Title VI equity analyses shall be presented to the Board of Directors of the MBTA for their consideration, awareness, and approval prior to the implementation of any proposed fare or major service change.

The Board of Directors provided its consideration, awareness, and approval of this Policy on April 19, 2023 and as amended on October 24, 2023. Future revisions to this Policy shall be presented to the Board in the same manner.





Appendix 6C
Detailed Results of MBTA Service Monitoring



Detailed Results of MBTA Service Monitoring

Through its service monitoring program, the Massachusetts Bay Transportation Authority (MBTA) analyzed the service it provides using 88 different metrics. The MBTA found that 82 of those metrics showed no disparate impact. The details of those analyses are provided in this appendix. There are also some analyses which either do not apply or for which the MBTA does not have sufficient data, and those analyses are also discussed below.

SERVICE STANDARDS (FTA C 4702.1B, IV-3.a.(2).(c))

Vehicle Load (FTA C 4702.1B, IV-4.a.(1))

Bus

The MBTA assessed each bus route for adherence to its target for bus vehicle load (see Appendix 5A, page 28). For each bus route, the number of passenger hours experienced in comfortable (non-crowded) conditions was divided by the total number of passenger hours, yielding an average comfort percentage for each route. The MBTA's target is for 96 percent of bus passenger hours to be in comfortable conditions. Table 6C-1 shows that on weekdays, 92 out of 95 minority-classified routes (96.8 percent) met the target and 54 out of 55 nonminority-classified routes (98.2 percent) met the target. The ratio of minority routes that met the target to nonminority routes that met the target is 0.99. This ratio is greater than 0.80, so no disparate impact is found.

Table 6C-1
Bus Vehicle Load—Weekday

Route Classification	Number of Routes	Number of Routes Meeting the Target	Percentage of Routes Meeting the Target
Minority	95	92	96.8%
Nonminority	55	54	98.2%
Ratio of minority to nonminority			0.99
Disparate impact threshold			0.80
Result of disparate impact analysis			**No Disparate Impact**

Note: The data pertain to weekdays between August 29 and December 18, 2021, excluding holidays.
Source: MBTA service planning.

Table 6C-2 shows that on Saturdays all minority-classified routes met the target and 41 out of 42 nonminority-classified routes (97.6 percent) met the target. The ratio of minority lines that met the target to nonminority lines that met the target is 1.02. This ratio is greater than 0.80, so no disparate impact is found.

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Table 6C-2
Bus Vehicle Load—Saturday

Route Classification	Number of Routes	Number of Routes Meeting the Target	Percentage of Routes Meeting the Target
Minority	82	82	100%
Nonminority	42	41	97.6%
Ratio of minority to nonminority			1.02
Disparate impact threshold			0.80
Result of disparate impact analysis			**No Disparate Impact**

Note: The data pertain to Saturdays between August 29 and December 18, 2021, excluding holidays.
Source: MBTA service planning.

Table 6C-3 shows that all routes met the target on Sundays, so no disparate impact is found.

Table 6C-3
Bus Vehicle Load—Sunday

Route Classification	Number of Routes	Number of Routes Meeting the Target	Percentage of Routes Meeting the Target
Minority	68	68	100%
Nonminority	34	34	100%
Ratio of minority to nonminority			1.00
Disparate impact threshold			0.80
Result of disparate impact analysis			**No Disparate Impact**

Note: The data pertain to Sundays between August 29 and December 18, 2021, excluding holidays.
Source: MBTA service planning.

Heavy and Light Rail

Currently, the MBTA is unable to assess passenger comfort adherence between minority-classified heavy and light rail lines and nonminority-classified heavy and light rail lines. The MBTA is limited in its ability to estimate passenger loads on board heavy and light rail vehicles because few vehicles are currently equipped with automatic passenger counters (APC). New APC-equipped vehicles have entered service on the Green, Orange, and Red Lines, and the MBTA will assess passenger comfort adherence once enough APC-equipped vehicles are in service on all heavy and light rail lines and resulting data has been compiled for a full fiscal year.

Commuter Rail

At this time, the MBTA is unable to directly assess passenger-comfort adherence between minority-classified commuter rail lines and nonminority-classified commuter rail lines because few commuter rail vehicles are equipped with functioning APCs. The MBTA is working to equip more commuter rail coaches

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with APCs. In the meantime, the MBTA conducted a supplemental assessment of vehicle load based on the percentage of trainsets on each line that had the required number of seats for the expected loads, as mandated by the contract with its commuter rail operator. To compare adherence to the required number of seats between minority-classified lines and nonminority-classified lines, the MBTA compared the performance of each line to the overall performance of the system.

On weekdays, the systemwide percentage of trainsets with the required number of seats was 99.991 percent.[1] Table 6C-4 shows that on weekdays the one minority-classified line performed above the systemwide average and 8 out of 11 nonminority-classified lines (72.7 percent) performed above the systemwide average. The ratio of above-average minority lines to above-average nonminority lines is 1.38. This ratio is greater than 0.80, so no disparate impact is found.

Table 6C-4
Commuter Rail Vehicle Load—Weekday

Line Classification	Number of Lines	Number of Lines Performing above Average	Percentage of Lines Performing above Average
Minority	1	1	100%
Nonminority	11	8	72.7%
Ratio of minority to nonminority			1.38
Disparate impact threshold			0.80
Result of disparate impact analysis			**No Disparate Impact**

Note: The data pertain to weekdays between July 1, 2021, and June 30, 2022, excluding holidays.
Source: Keolis Commuter Services.

Table 6C-5 shows that all trains had the required number of seats on Saturdays, so no disparate impact is found.

[1] The systemwide average was calculated by taking the average of each route's performance.

Table 6C-5
Commuter Rail Vehicle Load—Saturday

Line Classification	Number of Lines	Number of Lines Performing at Average	Percentage of Lines Performing at Average
Minority	1	1	100%
Nonminority	11	11	100%
Ratio of minority to nonminority			1.00
Disparate impact threshold			0.80
Result of disparate impact analysis			**No Disparate Impact**

Note: The data pertain to Saturdays between July 1, 2021, and June 30, 2022.
Source: Keolis Commuter Services.

Table 6C-6 shows that all trains had the required number of seats on Sundays, so no disparate impact is found.

Table 6C-6
Commuter Rail Vehicle Load—Sunday

Line Classification	Number of Lines	Number of Lines Performing at Average	Percentage of Lines Performing at Average
Minority	1	1	100%
Nonminority	11	11	100%
Ratio of minority to nonminority			1.00
Disparate impact threshold			0.80
Result of disparate impact analysis			**No Disparate Impact**

Note: The data pertain to Sundays between July 1, 2021, and June 30, 2022.
Source: Keolis Commuter Services.

Vehicle Headway (FTA C 4702.1B, IV-4.a.(2))

Bus

The MBTA uses its standards for bus frequency to assess scheduled bus vehicle headway (see Appendix 5A, pages 13–14).[2] To calculate how often each bus route met the frequency standard, the number of passengers who rode buses that were meeting the frequency standard was divided by the total number of passengers riding the route. The MBTA's target is for 95 percent of bus passengers to ride at a time when their bus is meeting its frequency standard. Table 6C-7 shows that on weekdays 42 out of 75 minority-classified routes (56 percent) met the target and 21 out of 39 nonminority-classified routes (53.8 percent) met the target. The ratio of minority routes that met the target to nonminority routes that met the target is 1.04. This ratio greater than 0.80, so a no disparate impact is found.

[2] As stated in the Service Delivery Policy, frequency of service standards are measured by either headway (minutes between trips) or frequency (trips per time period).

Table 6C-7
Bus Vehicle Headway—Weekday

Route Classification	Number of Routes	Number of Routes Meeting the Target	Percentage of Routes Meeting the Target
Minority	75	42	56.0%
Nonminority	39	21	53.8%
Ratio of minority to nonminority			1.04
Disparate impact threshold			0.80
Result of disparate impact analysis			**No Disparate Impact**

Note: The results are based on the MBTA's weekday transit schedule from August 29 to December 18, 2021.
Source: MBTA Office of Performance Management and Innovation.

Heavy and Light Rail

The MBTA uses its standards for rapid transit frequency to assess scheduled heavy and light rail vehicle headway (see Appendix 5A, pages 13-15). The MBTA's target is for all rapid transit passengers to ride at times when the service is meeting its frequency standard. Table 6C-8 shows that on weekdays, all lines met the target, so no disparate impact is found.

Table 6C-8
Heavy and Light Rail Vehicle Headway—Weekday

Line Classification	Number of Lines	Number of Lines Meeting the Target	Percentage of Lines Meeting the Target
Minority	2	2	100%
Nonminority	6	6	100%
Ratio of minority to nonminority			1.00
Disparate impact threshold			0.80
Result of disparate impact analysis			**No Disparate Impact**

Note: The results are based on the MBTA's weekday transit schedule from August 29 and December 18, 2021.
Source: MBTA Office of Performance Management and Innovation.

Commuter Rail

The MBTA uses its standards for commuter rail frequency to assess scheduled commuter rail vehicle headway (see Appendix 5A, pages 13-15). Table 6C-9 shows that on weekdays, all lines met the standards, so no disparate impact is found.

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Table 6C-9
Commuter Rail Vehicle Headway—Weekday

Line Classification	Number of Lines	Number of Lines Meeting the Standards	Percentage of Lines Meeting the Standards
Minority	1	1	100%
Nonminority	11	11	100%
Ratio of minority to nonminority			1.00
Disparate impact threshold			0.80
Result of disparate impact analysis			**No Disparate Impact**

Note: The results are based on the MBTA's weekday transit schedule from August 29 and December 18, 2021.
Source: MBTA Office of Performance Management and Innovation.

On-Time Performance (FTA C 4702.1B, IV-4.a.(3))

Bus

The MBTA uses its standards for bus reliability to assess bus on-time performance (see Appendix 5A, pages 20-22). For each bus route, the timepoints at which a vehicle was on time were summed for all trips on that route and divided by the total number of timepoints across all trips on that route, yielding an average on-time performance for that route. The MBTA's target is for 75 percent of bus timepoints to be on time.

Table 6C-10 shows that on Saturdays, 23 out of 81 minority-classified routes (28.4 percent) met the target and 14 out of 41 nonminority-classified routes (34.1 percent) met the target. The ratio of minority routes that met the target to nonminority routes that met the target is 0.83. This ratio is greater than 0.80, so no disparate impact is found.

Table 6C-10
Bus On-Time Performance—Saturday

Route Classification	Number of Routes	Number of Routes Meeting the Target	Percentage of Routes Meeting the Target
Minority	81	23	28.4%
Nonminority	41	14	34.4%
Ratio of minority to nonminority			0.83
Disparate impact threshold			0.80
Result of disparate impact analysis			**No Disparate Impact**

Note: The data pertain to Saturdays between July 1, 2021, and June 30, 2022.
Source: MBTA Open Data Portal.

Heavy and Light Rail

The MBTA uses its standards for rapid transit passenger wait times to assess on-time performance on heavy and light rail (see Appendix 5A, page 24). The

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MBTA's target is for 90 percent of rapid transit passengers to wait no longer than the scheduled headway. Table 6C-11 shows that on weekdays both minority-classified lines met the target and 2 out of 6 nonminority-classified lines (33.3 percent) met the target. The ratio of minority lines that met the target to nonminority lines that met the target is 3.00. This ratio is greater than 0.80, so no disparate impact is found.

Table 6C-11
Heavy and Light Rail On-Time Performance—Weekday

Line Classification	Number of Lines	Number of Lines Meeting the Target	Percentage of Lines Meeting the Target
Minority	1	1	100%
Nonminority	6	2	33.3%
Ratio of minority to nonminority			3.00
Disparate impact threshold			0.80
Result of disparate impact analysis			**No Disparate Impact**

Note: The data pertain to weekdays between July 1, 2021, and June 30, 2022.
Source: MBTA Open Data Portal.

Commuter Rail

The MBTA uses its standards for commuter rail reliability to assess on-time performance (see Appendix 5A, page 24). The MBTA's contract with its commuter rail operator requires 92 percent of trains to arrive on time. Table 6C-12 shows that on weekdays the one minority-classified line met the target and 5 out of 11 nonminority-classified lines (45.5 percent) met the target. The ratio of minority lines that met the target to nonminority lines that met the target is 2.20. This ratio is greater than 0.80, so no disparate impact is found.

Table 6C-12
Commuter Rail On-Time Performance—Weekday

Line Classification	Number of Lines	Number of Lines Meeting the Target	Percentage of Lines Meeting the Target
Minority	1	1	100%
Nonminority	11	5	45.5%
Ratio of minority to nonminority			2.20
Disparate impact threshold			0.80
Result of disparate impact analysis			**No Disparate Impact**

Note: The data pertain to weekdays between July 1, 2021, and June 30, 2022.
Source: MBTA Open Data Portal.

Table 6C-13 shows that on Saturdays the one minority-classified line met the target and 5 out of 11 nonminority-classified lines (45.5 percent) met the target. The ratio of minority lines that met the target to nonminority lines that met the target is 2.20. This ratio is greater than 0.80, so no disparate impact is found.

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Table 6C-13
Commuter Rail On-Time Performance—Saturday

Line Classification	Number of Lines	Number of Lines Meeting the Target	Percentage of Lines Meeting the Target
Minority	1	1	100%
Nonminority	11	5	45.5%
Ratio of minority to nonminority			2.20
Disparate impact threshold			0.80
Result of disparate impact analysis			**No Disparate Impact**

Note: The data pertain to Saturdays between July 1, 2021, and June 30, 2022.
Source: MBTA Open Data Portal.

Table 6C-14 shows that on Sundays the one minority-classified line met the target and 8 out of 11 nonminority-classified lines (72.7 percent) met the target. The ratio of minority lines that met the target to nonminority lines that met the target is 1.38. This ratio is greater than 0.80, so no disparate impact is found.

Table 6C-14
Commuter Rail On-Time Performance—Sunday

Line Classification	Number of Lines	Number of Lines Meeting the Target	Percentage of Lines Meeting the Target
Minority	1	1	100%
Nonminority	11	8	72.7%
Ratio of minority to nonminority			1.38
Disparate impact threshold			0.80
Result of disparate impact analysis			**No Disparate Impact**

Note: The data pertain to Sundays between July 1, 2021, and June 30, 2022.
Source: MBTA Open Data Portal.

Service Availability (FTA C 4702.1B, IV-4.a.(4))

To monitor its base level of transit coverage, the MBTA measured the percentage of the population that lives no more than one-half mile from a bus stop, rapid transit station, commuter rail station, or boat dock in the municipalities of the core service area, excluding municipalities that are members of another regional transit authority (see Appendix 5A, pages 15-16).

Table 6C-15 shows that on weekdays 89.7 percent of the minority population has access to transit, while 74.8 percent of the nonminority population has access to transit, as defined by the MBTA's base level of transit coverage standard. The ratio of the percentage of the minority population with access to transit to the percentage of the nonminority population with access to transit is 1.20. This ratio is greater than 0.80, so no disparate impact is found.

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Table 6C-15
Service Availability—Weekday

Population	Total Population	Population with Access to MBTA Transit	Percentage of Population with Access to MBTA Transit
Minority	1,066,289	956,935	89.7%
Nonminority	1,615,129	1,207,582	74.8%
Ratio of minority to nonminority			1.20
Disparate impact threshold			0.80
Result of disparate impact analysis			**No Disparate Impact**

Note: The service data pertain to weekdays in the MBTA's schedule for spring 2022. The demographic data are from the 2020 US Census.

Table 6C-16 shows that on Saturdays 87.7 percent of the minority population has access to transit, while 71.4 percent of the nonminority population has access to transit, as defined by the MBTA's base level of transit coverage standard. The ratio of the percentage of the minority population with access to transit to the percentage of the nonminority population with access to transit is 1.23. This ratio is greater than 0.80, so no disparate impact is found.

Table 6C-16
Service Availability—Saturday

Population	Total Population	Population with Access to MBTA Transit	Percentage of Population with Access to MBTA Transit
Minority	1,066,289	934,968	87.7%
Nonminority	1,615,129	1,152,725	71.4%
Ratio of minority to nonminority			1.23
Disparate impact threshold			0.80
Result of disparate impact analysis			**No Disparate Impact**

Note: The service data pertain to Saturdays in the MBTA's schedule for spring 2022. The demographic data are from the 2020 US Census.

Table 6C-17 shows that on Sundays 85.4 percent of the minority population has access to transit while 67.9 percent of the nonminority population has access to transit, as defined by the MBTA's base level of transit coverage standard. The ratio of the percentage of the minority population with access to transit to the percentage of the nonminority population with access to transit is 1.26. This ratio is greater than 0.80, so no disparate impact is found.

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Table 6C-17
Service Availability—Sunday

Population	Total Population	Population with Access to MBTA Transit	Percentage of Population with Access to MBTA Transit
Minority	1,066,289	910,237	85.4%
Nonminority	1,615,129	1,096,476	67.9%
Ratio of minority to nonminority			1.26
Disparate impact threshold			0.80
Result of disparate impact analysis			**No Disparate Impact**

Note: The service data pertain to Sundays in the MBTA's schedule for spring 2022. The demographic data are from the 2020 US Census.

Span of Service

Bus

The MBTA assessed each bus route for adherence to its standards for span of service (see Appendix 5A, pages 11-12). Table 6C-18 shows that on weekdays 66 out of 83 minority-classified routes (79.5 percent) met the standard and 41 out of 52 nonminority-classified routes (78.8 percent) met the standard. The ratio of minority routes that met the standard to nonminority routes that met the standard is 1.01. This ratio is greater than 0.80, so no disparate impact is found.

Table 6C-18
Bus Span of Service—Weekday

Route Classification	Number of Routes	Number of Routes Meeting the Standard	Percentage of Routes Meeting the Standard
Minority	83	66	79.5%
Nonminority	52	41	78.8%
Ratio of minority to nonminority			1.01
Disparate impact threshold			0.80
Result of disparate impact analysis			**No Disparate Impact**

Note: The results are based on the MBTA's weekday transit schedule from August 29 and December 18, 2021.
Source: MBTA Office of Performance Management and Innovation.

Table 6C-19 shows that on Saturdays 67 out of 74 minority-classified routes (90.5 percent) met the standard and 37 out of 38 nonminority-classified routes (94.4 percent) met the standard. The ratio of minority routes that met the standard to nonminority routes that met the standard is 0.93. This ratio is greater than 0.80, so no disparate impact is found.

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Table 6C-19
Bus Span of Service—Saturday

Route Classification	Number of Routes	Number of Routes Meeting the Standard	Percentage of Routes Meeting the Standard
Minority	74	67	90.5%
Nonminority	38	37	97.4%
Ratio of minority to nonminority			0.93
Disparate impact threshold			0.80
Result of disparate impact analysis			**No Disparate Impact**

Note: The results are based on the MBTA's Saturday transit schedule from August 29 and December 18, 2021.
Source: MBTA Office of Performance Management and Innovation.

Table 6C-20 shows that on Sundays 53 out of 62 minority-classified routes (85.5 percent) met the standard and 30 out of 32 nonminority-classified routes (93.8 percent) met the standard. The ratio of minority routes that met the standard to nonminority routes that met the standard is 0.92. This ratio is greater than 0.80, so no disparate impact is found.

Table 6C-20
Bus Span of Service—Sunday

Route Classification	Number of Routes	Number of Routes Meeting the Standard	Percentage of Routes Meeting the Standard
Minority	62	53	85.5%
Nonminority	32	30	93.8%
Ratio of minority to nonminority			0.92
Disparate impact threshold	blank		0.80
Result of disparate impact analysis			**No Disparate Impact**

Note: The results are based on the MBTA's Sunday transit schedule from August 29 and December 18, 2021.
Source: MBTA Office of Performance Management and Innovation.

Heavy and Light Rail

The MBTA assessed each heavy and light rail line for adherence to its standards for span of service (see Appendix 5A, pages 11-12). Table 6C-21 shows that all lines met the standard on weekdays, so no disparate impact is found.

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Table 6C-21
Heavy and Light Rail Span of Service—Weekday

Line Classification	Number of Lines	Number of Lines Meeting the Standard	Percentage of Lines Meeting the Standard
Minority	2	2	100%
Nonminority	6	6	100%
Ratio of minority to nonminority			1.00
Disparate impact threshold			0.80
Result of disparate impact analysis			**No Disparate Impact**

Note: The results are based on the MBTA's weekday transit schedule from August 29 and December 18, 2021.
Source: MBTA Office of Performance Management and Innovation.

Table 6C-22 shows that all lines met the standard on Saturdays, so no disparate impact is found.

Table 6C-22
Heavy and Light Rail Span of Service—Saturday

Line Classification	Number of Lines	Number of Lines Meeting the Standard	Percentage of Lines Meeting the Standard
Minority	2	2	100%
Nonminority	6	6	100%
Ratio of minority to nonminority			1.00
Disparate impact threshold			0.80
Result of disparate impact analysis			**No Disparate Impact**

Note: The results are based on the MBTA's Saturday transit schedule from August 29 and December 18, 2021.
Source: MBTA Office of Performance Management and Innovation.

Table 6C-23 shows that all lines met the standard on Sundays, so no disparate impact is found.

Table 6C-23
Heavy and Light Rail Span of Service—Sunday

Line Classification	Number of Lines	Number of Lines Meeting the Standard	Percentage of Lines Meeting the Standard
Minority	2	2	100%
Nonminority	6	6	100%
Ratio of minority to nonminority			1.00
Disparate impact threshold			0.80
Result of disparate impact analysis			**No Disparate Impact**

Note: The results are based on the MBTA's Sunday transit schedule from August 29 and December 18, 2021.
Source: MBTA Office of Performance Management and Innovation.

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Commuter Rail

The MBTA assessed each commuter rail line for adherence to its standards for span of service (see Appendix 5A, pages 11-12). Table 6C-24 shows that all lines met the standard on weekdays, so no disparate impact is found.

Table 6C-24
Commuter Rail Span of Service—Weekday

Line Classification	Number of Lines	Number of Lines Meeting the Standard	Percentage of Lines Meeting the Standard
Minority	1	1	100%
Nonminority	11	11	100%
Ratio of minority to nonminority			1.00
Disparate impact threshold			0.80
Result of disparate impact analysis			**No Disparate Impact**

Note: The results are based on the MBTA's weekday transit schedule from August 29 and December 18, 2021.
Source: MBTA Office of Performance Management and Innovation.

Table 6C-25 shows that all lines met the standard on Saturdays, so no disparate impact is found.

Table 6C-25
Commuter Rail Span of Service—Saturday

Line Classification	Number of Lines	Number of Lines Meeting the Standard	Percentage of Lines Meeting the Standard
Minority	1	1	100%
Nonminority	11	11	100%
Ratio of minority to nonminority			1.00
Disparate impact threshold			0.80
Result of disparate impact analysis			**No Disparate Impact**

Note: The results are based on the MBTA's Saturday transit schedule from August 29 and December 18, 2021.
Source: MBTA Office of Performance Management and Innovation.

The MBTA has no standard for span of service for commuter rail on Sundays.

Platform Accessibility

Gated Rapid Transit Stations

The MBTA uses its standard for platform accessibility to assess the amount of time that platforms are accessible for all gated heavy rail, light rail, and Silver Line Waterfront stations (see Appendix 5A, pages 19-20). The MBTA's target is for station platforms to be accessible during all service hours. Table 6C-26 shows that 5 out of 19 minority-classified stations (26.3 percent) met the target and 12

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out of 37 nonminority-classified stations (32.4 percent) met the target. The ratio of minority stations that met the target to nonminority stations that met the target is 0.81. This ratio is greater than 0.80, so no disparate impact is found.

Table 6C-26
Platform Accessibility—Gated Rapid Transit Stations with Elevators

Station Classification	Number of Stations	Number of Stations Performing Above Average	Percentage of Stations Performing Above Average
Minority	19	5	26.3%
Nonminority	37	12	32.4%
Ratio of minority to nonminority			0.81
Disparate impact threshold			0.80
Result of disparate impact analysis			**No Disparate Impact**

Note: The data pertain to the period from August 29 to December 18, 2021.
Source: MBTA Office of Performance Management and Innovation.

Commuter Rail Stations

Because most MBTA commuter rail stations are located at surface level and very few have elevators, the MBTA compares platform accessibility between minority and nonminority commuter rail stations by comparing the percentage of minority stations that are built to be accessible to the percentage of nonminority stations that are built to be accessible.[3] Table 6C-27 shows that all commuter rail stations that are classified as minority are built to be accessible, and 100 out of 126 commuter rail stations (79.4 percent) that are classified as nonminority are built to be accessible. The ratio of the percentage of minority-classified stations built to be accessible to the percentage of nonminority-classified stations built to be accessible is 1.26. This ratio is greater than 0.80, so no disparate impact is found.

[3] A station that is built to be accessible has either a full-high level platform or a mini-high level platform.

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Table 6C-27
Platform Accessibility—Commuter Rail Stations

Station Classification	Number of Stations	Number of Stations Built to be Accessible	Percentage of Stations Built to be Accessible
Minority	7	7	100.0%
Nonminority	126	100	79.4%
Ratio of minority to nonminority			1.26
Disparate impact threshold			0.80
Result of disparate impact analysis			**No Disparate Impact**

Note: This information reflects commuter rail station accessibility as of June 30, 2022.
Source: CTPS.

Vehicle Accessibility

Bus

All MBTA buses are fully accessible, so no equity analysis is needed. As part of operator inspections each day, ramps are cycled on each bus to ensure they are functional before leaving the garage.

Heavy and Light Rail

A comparison of vehicle accessibility between minority- and nonminority-classified heavy and light rail lines is not applicable. Each of the three heavy rail lines (the Red, Blue, and Orange Lines) operates with dedicated equipment, so the equipment on one line is not interchangeable with equipment on any of the other lines. The Mattapan Line operates as a short, stand-alone, light-rail extension of the Red Line's Ashmont Branch and also operates with a dedicated fleet. While the Green Line is an extensive light rail system with four surface branches and a central subway portion, each branch is classified as nonminority. Therefore, there are no comparisons to be made between minority- and nonminority-classified lines for vehicle accessibility.

Commuter Rail

At this time, the MBTA lacks the data to assess full commuter rail vehicle accessibility (as measured by the percentage of stops where the accessible bathroom-equipped coaches can line up at an accessible boarding location). The MBTA is currently working to develop tools to accurately collect this data and expects to have the data to conduct an analysis during the next reporting period.

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Service Operated

Bus

The MBTA aims to operate all of the service it schedules, so it measures the percent of scheduled service that is actually provided on each bus route to assess the amount of bus service operated (see Appendix 5A, page 25). The MBTA's target for bus service operated is 99.5 percent. Table 6C-28 shows that on weekdays, 48 out of 94 minority-classified routes (51.1 percent) met the target and 25 out of 56 nonminority-classified routes (44.6 percent) met the target. The ratio of minority routes that met the target to nonminority routes that met the target is 1.14. This ratio is greater than 0.80, so no disparate impact is found.

Table 6C-28
Bus Service Operated—Weekday

Route Classification	Number of Routes	Number of Routes Meeting the Target	Percentage of Routes Meeting the Target
Minority	94	48	51.1%
Nonminority	56	25	44.6%
Ratio of minority to nonminority			1.14
Disparate impact threshold			0.80
Result of disparate impact analysis			**No Disparate Impact**

Note: The data pertain to weekdays between July 1, 2021, and June 30, 2022.
Source: MBTA service planning.

Table 6C-29 shows that on Sundays 47 out of 67 minority-classified routes (70.1 percent) met the target and 26 out of 34 nonminority-classified routes (76.5 percent) met the target. The ratio of minority routes that met the target to nonminority routes that met the target is 0.96. This ratio is greater than 0.80, so no disparate impact is found.

Table 6C-29
Bus Service Operated—Sunday

Route Classification	Number of Routes	Number of Routes Meeting the Target	Percentage of Routes Meeting the Target
Minority	67	47	70.1%
Nonminority	34	26	76.5%
Ratio of minority to nonminority			0.96
Disparate impact threshold			0.80
Result of disparate impact analysis			**No Disparate Impact**

Note: The data pertain to weekdays between July 1, 2021, and June 30, 2022.
Source: MBTA service planning.

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Commuter Rail

The MBTA aims to operate all the service it schedules, so it measures the percent of scheduled service that is actually provided on each commuter rail line to assess the amount of commuter rail service operated (see Appendix 5A, page 25). On weekdays, 99.8 percent of scheduled commuter rail service was operated. Table 6C-30 shows that on weekdays the one minority-classified line performed above the systemwide average, and seven out of 12 nonminority-classified lines (58.3 percent) performed above the systemwide average. The ratio of above-average minority lines to above-average nonminority lines is 1.71. This ratio is greater than 0.80, so no disparate impact is found.

Table 6C-30
Commuter Rail Service Operated—Weekday

Line Classification	Number of Lines	Number of Lines Performing above Average	Percentage of Lines Performing above Average
Minority	1	1	100%
Nonminority	12	7	58.3%
Ratio of minority to nonminority			1.71
Disparate impact threshold			0.80
Result of disparate impact analysis			**No Disparate Impact**

Note: The data pertain to weekdays between July 1, 2021, and June 30, 2022.
Source: MBTA Open Data Portal.

On Sundays, 99.9 percent of scheduled commuter rail service was operated. Table 6C-31 shows that on Sundays the one minority-classified line performed above the systemwide average, and five out of 11 nonminority-classified lines (45.5 percent) performed above the systemwide average. The ratio of above-average minority lines to above-average nonminority lines is 2.20. This ratio is greater than 0.80, so no disparate impact is found.

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Table 6C-31
Commuter Rail Service Operated—Sunday

Line Classification	Number of Lines	Number of Lines Performing above Average	Percentage of Lines Performing above Average
Minority	1	1	100%
Nonminority	11	5	45.5%
Ratio of minority to nonminority			2.20
Disparate impact threshold			0.80
Result of disparate impact analysis			**No Disparate Impact**

Note: The data pertain to Sundays between July 1, 2021, and June 30, 2022.
Source: MBTA Open Data Portal.

SERVICE POLICIES (FTA C 4702.1B, IV-3.a.(2).(c))

Distribution of Transit Amenities (FTA C 4702.1B, IV-4.b.(1))

Bus Shelter and Bench Placement

Shelter Placement

According to the MBTA's Bus Stop Design Guidelines, any bus stop that has more than 70 average daily boardings is automatically eligible for consideration for a shelter, any stop with between 25 and 69 average daily boardings may be considered for a shelter, and stops that have fewer than 25 average daily boardings are not eligible for a shelter. To assess the placement of shelters in minority areas compared to nonminority areas, the MBTA conducted two analyses: one of stops with more than 70 average daily boardings, and another of stops with more than 25 average daily boardings.

The first analysis compared the percentage of minority-classified bus stops with more than 70 average daily boardings that have shelters to the percentage of nonminority-classified bus stops with more than 70 average daily boardings that have shelters. Table 6C-32 shows that 219 of the 455 bus stops (48.1 percent) that have more than 70 average daily boardings and are classified as minority had shelters, and 62 of the 154 bus stops (40.3 percent) that have more than 70 average daily boardings and are classified as nonminority had shelters. The ratio of the percentage of minority bus stops with more than 70 average daily boardings that have a shelter to the percentage of nonminority bus stops with more than 70 average daily boardings that have a shelter is 1.20. This ratio is greater than 0.80, so no disparate impact is found.

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Table 6C-32
Shelter Placement—Bus Stops with More than 70 Average Daily Boardings

Stop Classification	Number of Stops	Number of Stops with Shelters	Percentage of Stops with Shelters
Minority	455	219	48.1%
Nonminority	154	62	40.3%
Ratio of minority to nonminority			1.20
Disparate impact threshold			0.80
Result of disparate impact analysis			**No Disparate Impact**

Note: The results reflect bus stop shelter locations and average daily boardings on weekdays as of fall 2021.
Source: CTPS.

The second analysis compared the percentage of minority-classified bus stops with more than 25 average daily boardings that have shelters to the percentage of nonminority-classified bus stops with more than 25 average daily boardings that have shelters. Table 6C-33 shows that 307 of the 959 bus stops (32.0 percent) that have more than 25 average daily boardings and are classified as minority had shelters, and 115 of the 462 bus stops (24.9 percent) that have more than 25 average daily boardings and are classified as nonminority had shelters. The ratio of the percentage of minority-classified bus stops with more than 25 average daily boardings that have a shelter to the percentage of nonminority-classified bus stops with more than 25 average daily boardings that have a shelter is 1.29. This ratio is greater than 0.80, so no disparate impact is found.

Table 6C-33
Shelter Placement—Bus Stops with More than 25 Average Daily Boardings

Stop Classification	Number of Stops	Number of Stops with Shelters	Percentage of Stops with Shelters
Minority	959	307	32.0%
Nonminority	462	115	24.9%
Ratio of minority to nonminority			1.29
Disparate impact threshold			0.80
Result of disparate impact analysis			**No Disparate Impact**

Note: The results reflect bus stop shelter locations and average daily boardings on weekdays as of fall 2021.
Source: CTPS.

Bench Placement

According to the MBTA's Bus Stop Design Guidelines, any bus stop that has more than 50 average daily boardings and does not have a shelter should have a bench. To assess the placement of benches in minority areas compared to nonminority areas, the MBTA conduced two analyses: one of stops with no shelter and more than 50 average daily boardings, and another of all stops with no shelter.

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The first analysis compared the percentage of minority-classified bus stops without a shelter and more than 50 average daily boardings that have benches to the percentage of nonminority-classified bus stops without a shelter and more than 50 average daily boardings that have benches. Table 6C-34 shows that 117 of the 341 bus stops (34.3 percent) without a shelter and more than 50 average daily boardings that are classified as minority had benches and 64 of the 163 bus stops (39.3 percent) without a shelter and more than 50 average daily boardings that are classified as nonminority had benches. The ratio of the percentage of minority-classified bus stops without a shelter and more than 50 average daily boardings that have a bench to the percentage of nonminority-classified bus stops without a shelter and more than 50 average daily boardings that have a bench is 0.87. This ratio is above 0.80, so no disparate impact is found.

Table 6C-34
Bench Placement—Bus Stops without a Shelter and More than 50 Average Daily Boardings

Stop Classification	Number of Stops	Number of Stops with Benches	Percentage of Stops with Benches
Minority	341	117	34.3%
Nonminority	163	64	39.3%
Ratio of minority to nonminority			0.87
Disparate impact threshold			0.80
Result of disparate impact analysis			**No Disparate Impact**

Note: The results reflect bus stop bench locations as of May 2019 and average daily boardings on weekdays as of fall 2021.
Source: MBTA Department of System-Wide Accessibility.

The second analysis compared the percentage of all minority-classified bus stops without a shelter that have benches to the percentage of all nonminority-classified bus stops without a shelter that have benches. Table 6C-35 shows that 222 of the 2,819 bus stops (7.9 percent) without a shelter that are classified as minority had benches and 232 of the 3,427 bus stops (6.8 percent) without a shelter that are classified as nonminority had benches. The ratio of the percentage of minority-classified bus stops without a shelter that have a bench to the percentage of nonminority-classified bus stops without a shelter that have a bench is 1.16. This ratio is greater than 0.80, so no disparate impact is found.

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Table 6C-35
Bench Placement—All Bus Stops without a Shelter

Stop Classification	Number of Stops	Number of Stops with Benches	Percentage of Stops with Benches
Minority	2,819	222	7.9%
Nonminority	3,427	232	6.8%
Ratio of minority to nonminority			1.16
Disparate impact threshold			0.80
Result of disparate impact analysis			**No Disparate Impact**

Note: The results reflect bus stop bench locations as of May 2019.
Source: MBTA Department of System-Wide Accessibility.

Bus Shelter Amenities

To monitor the presence of amenities at bus shelters, the MBTA relies on CTPS to assess every bus shelter in the system. CTPS field staff visited every bus shelter in the system between June and October 2021 and recorded the presence of seating, bus maps, and streetside signs.[4] Table 6C-36 shows that the ratios of the percentage of minority-classified bus shelters with each amenity to the percentage of nonminority-classified bus shelters with each amenity are all above the MBTA's disparate impact threshold of 0.80, and no disparate impacts are found.

Table 6C-36
Bus Shelter Amenities

Stop Classification	Percentage with Seating Fixtures	Percentage with Bus Maps	Percentage with Streetside Signs
Minority	97.1%	61.8%	80.8%
Nonminority	96.9%	37.7%	68.6%
Ratio of minority to nonminority	1.00	1.64	1.18
Disparate impact threshold	0.80	0.80	0.80
Result of disparate impact analysis	**No Disparate Impact**	**No Disparate Impact**	**No Disparate Impact**

Note: Each shelter was inspected once between June 30 and October 29, 2021.
Source: CTPS.

Bus Shelter Conditions

To monitor the conditions of bus shelters, the MBTA relies on CTPS to perform observations. CTPS field staff visited every bus shelter in the system between June and October 2021 and recorded the structural condition of the shelter, the presence of vandalism, and degree of cleanliness. Table 6C-37 shows that the ratios of the percentage of minority-classified bus shelters with acceptable conditions of each component to the percentage of nonminority-classified bus

[4] As stated in the MBTA's Bus Stop Design Guidelines, seating for at least three people shall be located within a bus shelter.

shelters with acceptable conditions of each component are all above the MBTA's disparate impact threshold of 0.80, and no disparate impacts are found.

Table 6C-37
Bus Shelter Conditions

Stop Classification	Percentage with Structure Condition Acceptable	Percentage with Vandalism Acceptable	Percentage with Cleanliness Acceptable
Minority	96.7%	93.3%	95.2%
Nonminority	94.8%	94.2%	94.2%
Ratio of minority to nonminority	1.02	0.99	1.01
Disparate impact threshold	0.80	0.80	0.80
Result of disparate impact analysis	**No Disparate Impact**	**No Disparate Impact**	**No Disparate Impact**

Note: Each shelter was inspected once between June 30 and October 29, 2021.
Source: CTPS.

Gated Rapid Transit Station Amenities

To monitor the distribution of gated rapid transit station amenities, the MBTA relies on CTPS to record the presence of each amenity. CTPS field staff visited each gated rapid transit station in August and September 2022 and recorded the presence of each amenity in station lobbies and on platforms.

Gated Rapid Transit Station Lobby Amenities

In gated rapid transit station lobbies, CTPS monitors the presence of trash receptacles, recycling receptacles, seating fixtures, system maps, neighborhood maps, and bicycle parking. Table 6C-38 shows that the ratios of the percentage of minority-classified gated rapid transit stations with each lobby amenity to the percentage of nonminority-classified gated rapid transit stations with each lobby amenity are all above the MBTA's disparate impact threshold of 0.80, and no disparate impacts are found.

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Table 6C-38
Gated Rapid Transit Station Lobby Amenities

Station Classification	Percentage with Trash Receptacles	Percentage with Recycling Receptacles	Percentage with Seating Fixtures	Percentage with System Map	Percentage with Neighborhood Map	Percentage with Bicycle Parking
Minority	100%	42.1%	89.5%	89.5%	84.2%	94.7%
Nonminority	88.4%	14.0%	69.8%	97.7%	86.0%	53.5%
Ratio of minority to nonminority	1.13	3.02	1.28	0.92	0.98	1.77
Disparate impact threshold	0.80	0.80	0.80	0.80	0.80	0.80
Result of disparate impact analysis	**NDI**	**NDI**	**NDI**	**NDI**	**NDI**	**NDI**

Note: Each gated rapid transit station was inspected once between August 9 and September 23, 2022.
NDI = No disparate impact.
Source: CTPS.

Gated Rapid Transit Station Platform Amenities

On gated rapid transit station platforms, CTPS monitors the presence of trash receptacles, recycling receptacles, seating fixtures, system maps, and line maps. Table 6C-39 shows that the ratios of the percentage of minority-classified gated rapid transit stations with each platform amenity to the percentage of nonminority-classified gated rapid transit stations with each platform amenity are all above the MBTA's disparate impact threshold of 0.80, and no disparate impacts are found.

Table 6C-39
Gated Rapid Transit Station Platform Amenities

Station Classification	Percentage with Trash Receptacles	Percentage with Recycling Receptacles	Percentage with Seating Fixtures	Percentage with System Map	Percentage with Line Map
Minority	100%	0%	100%	94.7%	100%
Nonminority	97.7%	0%	97.7%	100%	93.0%
Ratio of minority to nonminority	1.02	NA	1.03	0.95	1.08
Disparate impact threshold	0.80	0.80	0.80	0.80	0.80
Result of disparate impact analysis	**NDI**	**NDI**	**NDI**	**NDI**	**NDI**

Note: Each gated rapid transit station was inspected once between August 9 and September 23, 2022.
NA = not applicable.
NDI = No disparate impact.
Source: CTPS.

Amenities at Gated Rapid Transit Stations with Bus Connections

In gated rapid transit stations that have connections to local bus routes, CTPS monitors the presence of bus transfer maps and variable-message signs displaying bus arrival information. Table 6C-40 shows that the ratios of the percentage of minority-classified gated rapid transit stations with each amenity to

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the percentage of nonminority-classified gated rapid transit stations with each amenity are each above the MBTA's disparate impact threshold of 0.80, and no disparate impacts are found.

Table 6C-40
Amenities at Gated Rapid Transit Stations with Bus Connections

Station Classification	Percentage with Bus Transfer Maps	Percentage with VMSs Displaying Bus Arrival Information
Minority	86.7%	33.3%
Nonminority	70.6%	35.3%
Ratio of minority to nonminority	1.23	0.94
Disparate impact threshold	0.80	0.80
Result of disparate impact analysis	**No Disparate Impact**	**No Disparate Impact**

Note: Each gated rapid transit station was inspected once between August 9 and September 23, 2022.
VMS = Variable-message sign.
Source: CTPS.

Gated Rapid Transit Station Conditions

The MBTA regularly inspects all gated rapid transit stations in order to identify and correct cleanliness and maintenance issues as they arise. MBTA cleaning and maintenance staff review multiple items every time they inspect a station, including the condition of floors and furniture, staircases, escalators, elevators, and busways. Staff score each item, yielding an overall score for each station every time it is inspected. An average score was calculated for each station, based on the overall scores from every time it was visited in SFY 2022.

The MBTA's target score for each station is 70 percent. Table 6C-41 shows that all stations met the target, so no disparate impact is found.

Table 6C-41
Gated Rapid Transit Station Conditions

Station Classification	Number of Stations	Number of Stations Meeting the Target	Percentage of Stations Meeting the Target
Minority	21	21	100%
Nonminority	42	42	100%
Ratio of minority to nonminority			1.00
Disparate impact threshold			0.80
Result of disparate impact analysis			**No Disparate Impact**

Note: The data pertain to the period between July 1, 2021 and June 30, 2022.
Source: MBTA Engineering and Maintenance.

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Surface Rapid Transit Station Amenities

To monitor the distribution of surface rapid transit station amenities, the MBTA relies on CTPS to record the presence of each amenity. CTPS field staff visited each surface rapid transit station between August and December 2022 and recorded the presence of each amenity.

For surface rapid transit stations, CTPS monitors the presence of trash receptacles, recycling receptacles, seating fixtures, system maps, line maps, neighborhood maps, and bicycle parking. Table 6C-42 shows that the ratios of the percentage of minority-classified surface rapid transit stations with each amenity to the percentage of nonminority-classified surface rapid transit stations with each amenity are all above the MBTA's disparate impact threshold of 0.80, and no disparate impacts are found.

Table 6C-42
Surface Rapid Transit Station Amenities

Station Classification	Percentage with Trash Receptacles	Percentage with Recycling Receptacles	Percentage with Seating Fixtures	Percentage with System Map	Percentage with Line Map	Percentage with Neighborhood Map	Percentage with Bicycle Parking
Minority	95.0%	10.0%	100%	100%	65.0%	95.0%	55.0%
Nonminority	75.0%	6.7%	81.7%	56.7%	43.3%	23.3%	38.3%
Ratio of minority to nonminority	1.27	1.50	1.22	1.76	1.50	4.07	1.43
Disparate impact threshold	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Result of disparate impact analysis	**NDI**	**NDI**	**NDI**	**NDI**	**NDI**	**NDI**	**NDI**

Note: Each surface rapid transit station was inspected once between August 19 and December 14, 2022.
NDI = No disparate impact. PDI = Potential disparate impact.
Source: CTPS.

Surface Rapid Transit Station Conditions

The MBTA regularly inspects all surface rapid transit stations to identify and correct cleanliness and maintenance issues as they arise. MBTA cleaning and maintenance staff review multiple items when they inspect a station, including the condition of platforms, benches, and shelters. Staff score each item, yielding an overall score for each station every time it is inspected. An average score was calculated for each station, based on the overall scores from every time it was visited in SFY 2022.

The MBTA's target score for each station is 70 percent. Table 6C-43 shows that 19 out of 21 minority-classified stations (90.5 percent) met the target and 51 out of 52 nonminority-classified stations (98.1 percent) met the target. The ratio of minority-classified stations that met the target to nonminority-classified stations

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that met the target is 0.92. This ratio is greater than 0.80, so no disparate impact is found.

Table 6C-43
Surface Rapid Transit Station Conditions

Station Classification	Number of Stations	Number of Stations Meeting the Target	Percentage of Stations Meeting the Target
Minority	21	19	90.5%
Nonminority	52	51	98.1%
Ratio of minority to nonminority			0.92
Disparate impact threshold			0.80
Result of disparate impact analysis			**No Disparate Impact**

Note: The data pertain to the period between July 1, 2021 and June 30, 2022.
Source: MBTA Engineering and Maintenance.

Commuter Rail Station Amenities

To monitor the distribution of commuter rail station amenities, the MBTA relies on CTPS to record the presence of each amenity. CTPS field staff visited each commuter rail station between August and October 2022 and recorded the presence of each amenity.

For commuter rail stations, CTPS monitors the presence of trash receptacles, seating fixtures, system maps, line schedules, Title VI notices, and bicycle parking. Table 6C-44 shows that the ratios of the percentage of minority-classified commuter rail stations to the percentage of nonminority-classified commuter rail stations with each amenity are all above the MBTA's disparate impact threshold of 0.80, and no disparate impacts are found.

Table 6C-44
Commuter Rail Station Amenities

Station Classification	Percentage with Trash Receptacles	Percentage with Seating Fixtures	Percentage with System Map	Percentage with Line Schedule	Percentage with Title VI Notice	Percentage with Bicycle Parking
Minority	100%	100%	100%	100%	100%	100%
Nonminority	100%	99.2%	88.8%	95.2%	95.2%	82.4%
Ratio of minority to nonminority	1.00	1.01	1.13	1.05	1.05	1.21
Disparate impact threshold	0.80	0.80	0.80	0.80	0.80	0.80
Result of disparate impact analysis	**NDI**	**NDI**	**NDI**	**NDI**	**NDI**	**NDI**

Note: Each commuter rail station was inspected once between August 9 and October 19, 2022.
NDI = No disparate impact.
Source: CTPS.

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Commuter Rail Station Conditions

Keolis staff inspect each commuter rail station at least quarterly in order to identify and correct cleanliness and maintenance issues as they arise. Staff review as many as 35 elements every time they inspect a station, including platform surface, station fencing, pedestrian walkways and ramps, and stairs and handrails. Staff rate each element on a scale of 1 (worst condition) to 5 (best condition). For each station, the scores from each inspection during SFY 2022 were averaged, and the average of the station averages was 3.85.

Table 6C-45 shows that all of the minority-classified stations and 86 out of 127 nonminority-classified stations (67.7 percent) had average scores that exceeded the average score across all commuter rail stations. The ratio of above-average minority-classified stations to above-average nonminority-classified stations is 1.49. This ratio is above 0.80, so no disparate impact is found.

Table 6C-45
Commuter Rail Station Conditions

Station Classification	Number of Stations	Number of Stations Performing Above Average	Percentage of Stations Performing Above Average
Minority	7	7	100%
Nonminority	127	86	67.7%
Ratio of minority to nonminority			1.49
Disparate impact threshold			0.80
Result of disparate impact analysis	blank		**No Disparate Impact**

Note: Each station was inspected at least quarterly between July 1, 2021, and June 30, 2022.
Source: Keolis Commuter Services

Automated Fare Collection

Faregates

To assess faregate operability between minority-classified stations and nonminority-classified stations, the MBTA compared faregate performance at each station to the overall performance of the system. The systemwide percentage of time that faregates were operable was 97.2 percent.[5] Table 6C-46 shows that 13 of 21 stations (61.9 percent) that are classified as minority performed above the systemwide average and 31 of 42 stations (73.8 percent) that are classified as nonminority performed above the systemwide average. The ratio of above-average minority stations to above-average nonminority stations is 0.84. This ratio is greater than 0.80, so no disparate impact is found.

[5] The systemwide average was calculated by taking the average of each station's performance.

Table 6C-46
Faregate Operability

Station Classification	Number of Stations	Number of Stations Performing above Average	Percentage of Stations Performing above Average
Minority	21	13	61.9%
Nonminority	42	31	73.8%
Ratio of minority to nonminority			0.84
Disparate impact threshold			0.80
Result of disparate impact analysis			**No Disparate Impact**

Note: The data pertain to the period between July 1, 2021, and June 30, 2022.
Source: MBTA automated fare collection.

Fare Vending Machines

To assess fare vending machine operability between minority-classified stations and nonminority-classified stations, the MBTA conducted two analyses. The first analysis assessed the opportunity for customers to purchase fare media with cash at stations equipped with full-service fare vending machines that accept cash. This analysis was conducted by comparing the percentage of time customers could purchase fare media with cash at each station equipped with full-service fare vending machines to the systemwide average amount of time customers could purchase fare media with cash at any station equipped with full-service fare vending machines that accept cash, which was 99.2 percent of the time. Table 6C-47 shows that 18 of 21 stations (85.7 percent) that are classified as minority performed above the systemwide average and 43 of 59 stations (72.9 percent) that are classified as nonminority performed above the systemwide average. The ratio of above-average minority stations to above-average nonminority stations is 1.18. This ratio is greater than 0.80, so no disparate impact is found.

Table 6C-47
Availability of Full-Service Fare Vending Machines

Station Classification	Number of Stations	Number of Stations Performing above Average	Percentage of Stations Performing above Average
Minority	21	18	85.7%
Nonminority	59	43	72.9%
Ratio of minority to nonminority			1.18
Disparate impact threshold			0.80
Result of disparate impact analysis			**No Disparate Impact**

Note: The data pertain to the period between July 1, 2021, and June 30, 2022.
Source: MBTA automated fare collection.

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The second analysis assessed the opportunity for customers to purchase fare media with cash or credit at stations equipped with both full-service and cashless fare vending machines. This analysis was conducted by comparing the percentage of time customers could purchase fare media using cash or credit at stations equipped with fare vending machines to the systemwide average amount of time customers could purchase fare media using cash or credit at any station equipped with fare vending machines, which was 99.6 percent of the time. Table 6C-48 shows that 18 of 21 stations (85.7 percent) that are classified as minority performed above the systemwide average and 52 of 62 stations (83.9 percent) that are classified as nonminority performed above the systemwide average. The ratio of above-average minority stations to above-average nonminority stations is 1.02. This ratio is greater than 0.80, and so no disparate impact is found.

Table 6C-48
Availability of All Fare Vending Machines (Full-Service and Cashless)

Station Classification	Number of Stations	Number of Stations Performing above Average	Percentage of Stations Performing above Average
Minority	21	18	85.7%
Nonminority	62	52	83.9%
Ratio of minority to nonminority			1.02
Disparate impact threshold			0.80
Result of disparate impact analysis			**No Disparate Impact**

Note: The data pertain to the period between July 1, 2021, and June 30, 2022.
Source: MBTA automated fare collection.

CharlieCard Retail Sales Terminals

CharlieCard retail sales terminals are found at a variety of locations ranging from supermarkets and convenience stores to banks and check-cashing agencies. To assess the placement of retail sales terminals in minority areas compared to nonminority areas, the MBTA calculated the demographic makeup living within one-quarter mile of each retail sales terminal using 2020 US Census data. Table 6C-49 shows that 9.5 percent of the total minority population in the MBTA's service area has access to a retail sales terminal within one-quarter mile of their home location, while 5.0 percent of the total nonminority population in the MBTA's service area has access to a retail sales terminal within one-quarter mile of their home location. The ratio of the percentage of the minority population with access to retail sales terminals to the percentage of the nonminority population with access to retail sales terminals is 1.90. This ratio is greater than 0.80, so no disparate impact is found.

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Table 6C-49
Populations Served by CharlieCard Retail Sales Terminals

Population	Total Population in MBTA Service Area	Population within One-Quarter Mile of an RST	Percentage of Population within One-Quarter Mile of an RST
Minority	1,838,072	174,106	9.5%
Nonminority	3,420,192	170,657	5.0%
Ratio of minority to nonminority			1.90
Disparate impact threshold			0.80
Result of disparate impact analysis			**No Disparate Impact**

Note: The results reflect retail sales terminal locations as of fall 2021.
RST = Retail sales terminal.
Source: 2020 US Census.

Escalator Operability

To assess escalator operability between minority-classified stations and nonminority-classified stations, the MBTA compared escalator performance at each station to the overall performance of the system. The systemwide percentage of time that escalators were operable was 97.9 percent.[6] Table 6C-50 shows that 11 of 16 stations (68.8 percent) that are classified as minority performed above the systemwide average and 27 of 40 stations (67.5 percent) that are classified as nonminority performed above the systemwide average. The ratio of above-average minority stations to above-average nonminority stations is 1.02. This ratio is greater than 0.80, so no disparate impact is found.

Table 6C-50
Escalator Operability

Station Classification	Number of Stations	Number of Stations Performing above Average	Percentage of Stations Performing above Average
Minority	16	11	68.8%
Nonminority	40	27	67.5%
Ratio of minority to nonminority			1.02
Disparate impact threshold			0.80
Result of disparate impact analysis			**No Disparate Impact**

Note: The data pertain to the period between July 1, 2021, and June 30, 2022.
Source: MBTA Engineering and Maintenance.

[6] The systemwide average was calculated by taking the average of each station's performance.

Vehicle Assignment (FTA C 4702.1B, IV-4.b.(2))

Bus Vehicle Age and Air Conditioning Operability

The MBTA is committed to maintaining a fleet with an average age of 7.5 years or less. To assess bus vehicle age between minority-classified routes and nonminority-classified routes, the MBTA compared the percentage of minority routes that had an average bus age of less than 7.5 years to the percentage of nonminority routes that had an average bus age of less than 7.5 years. Table 6C-51 shows that 52 of the 94 bus routes (55.3 percent) that are classified as minority had an average bus age of less than 7.5 years and 28 of the 55 bus routes (50.9 percent) that are classified as nonminority had an average bus age of less than 7.5 years. The ratio of the percentage of minority-classified bus routes that had an average bus age of less than 7.5 years to the percentage of nonminority-classified bus routes that had an average bus age of less than 7.5 years is 1.09. This ratio is greater than 0.80, so no disparate impact is found.

Table 6C-51
Bus Vehicle Age

Route Classification	Number of Routes	Number of Routes with Average Bus Age Less than 7.5 Years	Percentage of Routes with Average Bus Age Less than 7.5 Years
Minority	94	52	55.3%
Nonminority	55	28	50.9%
Ratio of minority to nonminority			1.09
Disparate impact threshold			0.80
Result of disparate impact analysis			**No Disparate Impact**

Note: The results reflect vehicle assignments on August 26, 2021.
Source: Office of Performance Management and Innovation.

To assess bus air conditioning operability between minority-classified routes and nonminority-classified routes, the MBTA compared air conditioning performance on each route for a hot day in the summer to the overall performance of the system. The systemwide percentage of trips that operated with functioning air conditioning was 99.8 percent.[7] Table 6C-52 shows that 89 of 94 routes (94.7 percent) that are classified as minority performed above the systemwide average, and all nonminority routes performed above the systemwide average. The ratio of above-average minority-classified routes to above-average nonminority routes is 0.95. This ratio is greater than 0.80, so no disparate impact is found.

[7] The systemwide average was calculated by taking the average of each route's performance.

Table 6C-52
Bus Air Conditioning Operability

Route Classification	Number of Routes	Number of Routes Performing Above Average	Percentage of Routes Performing Above Average
Minority	94	89	94.7%
Nonminority	55	55	100%
Ratio of minority to nonminority			0.95
Disparate impact threshold			0.80
Result of disparate impact analysis			**No Disparate Impact**

Note: The results reflect vehicle assignments on August 26, 2021.
Source: MBTA vehicle maintenance logs.

Heavy and Light Rail Vehicle Age

A comparison of vehicle age between minority- and nonminority-classified heavy and light rail lines is not applicable. Each of the three heavy rail lines (the Red, Blue, and Orange Lines) operates with dedicated equipment, so the equipment on one line is not interchangeable with equipment on any of the other lines. The Mattapan Line operates as a short, stand-alone, light-rail extension of the Red Line's Ashmont Branch and also operates with a dedicated fleet. While the Green Line is an extensive light rail system with four surface branches and a central subway portion, each branch is classified as nonminority; so, vehicle age cannot be compared between minority- and nonminority-classified lines.

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Appendix 7A

Approval of 2023 Service and Fare Change Equity Policy



This is a true and accurate copy of the action taken by the Board of Directors of the Massachusetts Bay Transportation Authority on April 19, 2023.

VOTED:
To approve the Service and Fare Change Equity (Disparate Impact/ Disproportionate Burden) Policy as presented during the April 19, 2023 meeting and to authorize the General Manager, or his designee, to take all necessary steps to implement said Policy, in the name and on behalf of the Massachusetts Bay Transportation Authority; and

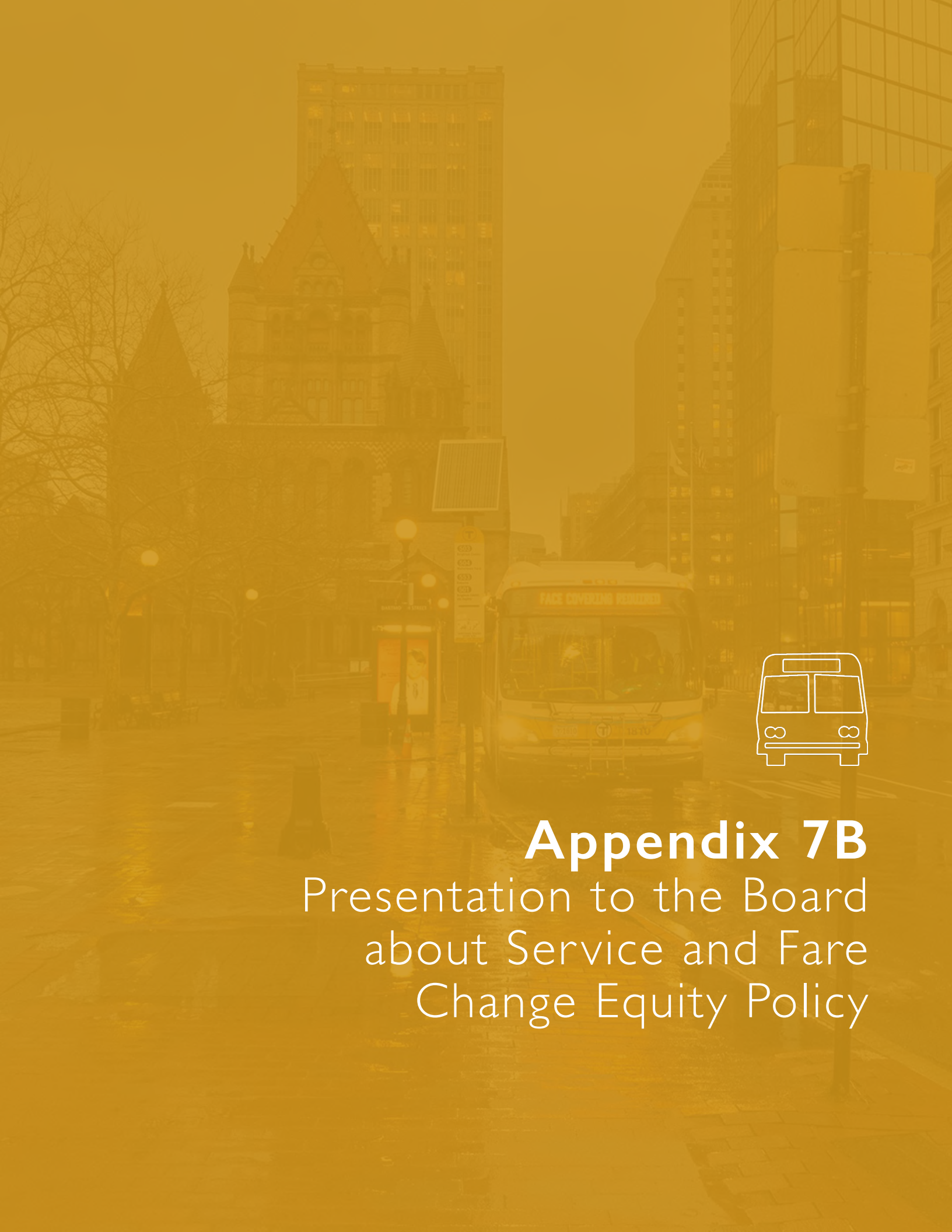
To approve the Public Engagement Plan as presented during the April 19, 2023 meeting and to authorize the General Manager, or his designee, to take all necessary steps to implement said Plan, in the name and on behalf of the Massachusetts Bay Transportation Authority.



Kevin Scanlon

Kevin Scanlon, Chief Counsel





Appendix 7B

Presentation to the Board about Service and Fare Change Equity Policy



Massachusetts Bay Transportation Authority

Summary of Proposed Title VI Policy Changes and Recommendation for Board Approval

Presentation to MBTA Board of Directors
April 19, 2023

For Discussion & Policy Purposes Only

Updates Proposed to two Title VI Policies

1. **Service and Fare Change Equity Policy (aka DI/DB Policy)**
   How the MBTA evaluates the equity impacts of proposed service and fare changes.

2. **Public Engagement Plan**
   The principles and procedures that guide the MBTA's engagement with the public about projects and decisions in development.

For Discussion & Policy Purposes Only

Service and Fare Change Equity Policy
(formerly known as DI/DB Policy)

How the MBTA evaluates the equity impacts of proposed service and fare changes.

For Discussion & Policy Purposes Only

Overview and Purpose of Policy Change

- As required by FTA through Title VI of the Civil Rights Act of 1964, MBTA maintains a disparate impact/disproportionate burden ("DI/DB") policy to measure the equity impacts of fare and major service changes on protected populations, including defining "major service change."
- DI/DB policy was last updated in 2017. Under current version, equity analyses often produce unreliable results, including:
  - Definition of major service change does not allow for consideration of network effects; does not clarify when equity analyses are *not* required.
  - Misplaced reliance on absolute change ratio when determining impacts of proposed changes. Methodology does not account for proportionality in populations being compared.

For Discussion & Policy Purposes Only

Preparation for Policy Update

- MBTA submitted comment in response to FTA for potential updates to Title VI Circular in December 2021.
- CTPS conducted a nine-month study of MBTA challenges and reviewed policies of 8 peer transit agencies to identify best practices.
- CTPS tested alternative service equity metrics; made recommendations to update major service change definition and equity analysis process within the bounds of the FTA circular.
- MBTA staff held internal working group of stakeholders including Service Planning, Office of Performance Management & Innovation (OPMI), and Office of Diversity & Civil Rights (ODCR).
- Conducted outreach to include voices from communities served, including:
  - 2 stakeholder meetings with external Policy Development Working Group representing diverse interests and communities (17 organizations invited, 10 participated)
  - 3 public meetings held in Boston, Quincy, and Chelsea (55 total attendees)

For Discussion & Policy Purposes Only

Proposed: Six Key Changes to the DI/DB Policy

Substantive Changes

1. Redefine “major service change” to account for network-wide effects and to clarify exemptions.
2. Adjust methodology of equity analyses to improve reliability.

Clarifying/Language Updates

3. Replacing references to “minority populations” with more inclusive language to reflect communities served.
4. Clearly stating circumstances that require a fare equity analysis.
5. Clearly describing the public engagement and board approval process for any major service change or fare change.
6. Rename the document “Service and Fare Change Equity Policy” to better convey its purpose. (Formerly titled “Disparate Impact/Disproportionate Burden Policy”)

For Discussion & Policy Purposes Only

1. Defining Major Service Change

Old Definition

Mode-level change: A change in Revenue Vehicle Hours (RVH) per week of at least 10% by mode

Route-level change:

- For all routes, a change in route length of at least 25% or 3 miles
- For routes with at least 80 RVH per week, a change in RVH per week of at least 25%

Complete elimination of an existing route or the addition of a new route is always a Major Service Change.

Proposed Definition

Any addition, reduction, suspension or change in service lasting longer than 12 months and meeting one or more of the following criteria:

- **Mode-level:** A change of at least 10% in Revenue Vehicle Hours (RVH) per week by mode; or
- **Route-level:** A change of at least 25% in RVH per week by route; or
- **Base coverage:** A change of at least 0.30% of the population covered by the entire network according to the base coverage standard established in the T's Service Delivery Policy

Proposed definition is in line with peer agencies reviewed by CTPS.

Defining Major Service Change: Exemptions

- Current policy does not address closures or diversions for construction, repairs, or emergencies.
- The peer agencies reviewed each approach exemptions differently. Examples for comparison:
  - LA Metro exempts experimental, demonstration or emergency service changes lasting more than a year if service is replaced by a different route, mode or operator providing service with the same headways, fare, transfer options, span of service and stops.
  - Metro Transit exempts elimination of a transit route with alternate fixed route replacement. Also exempts route changes caused by an emergency, including major construction, with no stated time limit.
- **MBTA's proposed new policy language:** Any service change lasting longer than 12 months that meets one or more of the criteria set forth above and that is necessary to complete construction or repairs for reasons of safety, security or sustainability shall not be considered a Major Service Change and shall not require a service equity analysis so long as the MBTA is providing alternative service, using fixed routes where practicable, or the MBTA is not providing alternative service, but can demonstrate that there are no comparably effective alternatives and no mitigation measures that are practicable.

2. Improve Equity Analysis Methodologies

Improve equity analysis methodologies so that we may consider more riders with low-income and have more reliable results by:

- Increasing low-income threshold from 60% to 80% median household income in MBTA service area. 60% as of 2015 was $43,415. 80% in 2021 is approx. $77,600. Median income is subject to annual modification.
- Discontinuing reliance on calculations using the absolute change to compare differently sized populations.

For Discussion & Policy Purposes Only

Proposed: Clarifying Language

3. Replace federal term “minority populations” with more inclusive language to reflect communities served; substitute “populations protected on the basis of race or ethnicity” where applicable.
4. Clearly state the circumstances that require a fare equity analysis and those that do not.
   - Required: Any fare increase/decrease; any change to fare media or fare payment type if such change may result in a fare increase or decrease.
   - Not required: Temporary diversion mitigations, promotional fares lasting less than 6 months, and administrative process changes.
5. Describe the public engagement and board approval process followed for any major service change or fare change, and for any change to the policy.
6. Rename the document “Service and Fare Change Equity Policy” to more clearly state the policy’s purpose and enhance understanding.

For Discussion & Policy Purposes Only

Public Engagement Plan

The principles and procedures that guide the MBTA's engagement with the public about projects and decisions in development.

For Discussion & Policy Purposes Only

What is Public Engagement?

- Public engagement is the opportunity for riders to influence what happens at the MBTA, from service and projects, to fares.
- Understanding the diverse wants and needs of MBTA riders will allow the MBTA to better serve its customers and deliver on critical projects.
- By soliciting and incorporating customer input early, projects are strengthened.
- Further, as part of our Title VI Program the MBTA is required to have a **Public Engagement Plan** that details outreach strategies designed to achieve diverse and inclusive public engagement.
- Public Engagement team is growing to facilitate opportunities for riders to provide feedback, etc.



For Discussion & Policy Purposes Only

MBTA Public Engagement Plan

- In May 2020, the MBTA developed a Public Engagement Plan with input from the public, to guide authority-wide public engagement.
- The Plan provides guidance for how to conduct outreach, notification, and engagement with external stakeholders.
- The Plan sets forth the baseline requirements for public engagement at the MBTA. Projects can go above and beyond this baseline, but these standards set the requirements for all MBTA engagement.



For Discussion & Policy Purposes Only

Proposed Changes to the Public Engagement Plan

We are proposing a set of relatively minor edits to modernize and clarify, and to address one FTA finding. Changes include:

1. Updated references to MBTA Board of Directors, and not the FMCB.
2. Clarified "Guiding Principles" to name equity as a basis for strategies to reach diverse members of the community.
3. Added "Community Meetings" as a common type of engagement.
4. Expanded section on "Virtual Public Engagement" to reflect MBTA's increased use of virtual engagement strategies following the COVID-19 pandemic.
5. ~~Expanded "Accessibility and Public Engagement" section with updated information on accessible public meetings.~~
6. Added clearer language for soliciting and considering public comments prior to a fare increase or major service reduction. ***Requested by FTA in most recent Triennial Audit***.
7. Added link to MBTA's Service and Fare Change Equity Policy for definitions of major service change (including major service reduction).

For Discussion & Policy Purposes Only

2023 Public Engagement Processes for these Policies

For Discussion & Policy Purposes Only

Public Engagement Conducted

- Two stakeholder meetings with Policy Development Working Group representing diverse interests and communities.
  - 17 organizations invited, 10 participated
- MBTA webpage provided context, draft policies, and summary of changes, including translations into 6 total languages.
- Press release providing details for public comment, including the list of scheduled public meetings.
- Public meeting flyers emailed to 2,500 community/municipal contacts.
- Public meetings promoted on MBTA social media and 5 local newspapers.
- 3 public meetings held in Boston (hybrid), Quincy (in-person) and Chelsea (in-person).
  - 55 total attendees
- Brief presentation at virtual Riders' Transportation Access Group (R-TAG) general meeting on 3/30.
- Table and materials at in-person CIP Open House in Boston on 4/4.
- Public comments accepted through 4/14.

For Discussion & Policy Purposes Only

Summary of Public Comment & Responses

- A handful of relevant comments received.
- Acknowledge MBTA Advisory Board jurisdiction to review proposed changes after public comment
  - Response: Added language in PEP that says any proposed systemwide fare change or systemwide decrease in service of 10% is submitted to Advisory Board for review
- MSC should include shorter-term changes, use access-based metrics, and account for cumulative changes
  - Response: MBTA is exploring cumulative lookback approach and access-based metrics, and evaluating potential for conducting such analyses in the future. Evaluating service changes that are less than 12 months is inconsistent with the Circular.
- Proposed MSC exception that any alternative service must be of equal or better service and frequency
  - Response: Not practicable (e.g., shuttle buses for subway or Commuter Rail)
- Use alternative term for "minority"
  - Response: MBTA will refer to populations protected on the basis of race or ethnicity, and specify the particular population(s) where possible
- General appreciation for language access and equity goals

For Discussion & Policy Purposes Only

Vote (1 of 2)

WHEREAS, the Massachusetts Bay Transportation Authority ("MBTA") maintains a disparate impact/disproportionate burden ("DI/DB") policy as required by the FTA through Title VI of the Civil Rights Act of 1964; and

WHEREAS, equity analyses under the current DI/DB policy often produce unreliable results; and

WHEREAS, the MBTA submitted comment to the FTA for potential updates in December 2021; and

WHEREAS, CTPS conducted a nine-month study of MBTA challenges and reviewed policies of 8 peer transit agencies to identify best practices; and

WHEREAS, CTPS tested alternative service equity metrics and made recommendations to update major the service change definition and equity analysis process within the bounds of the FTA circular; and

WHEREAS, MBTA staff held an internal working group of stakeholders including Service Planning, Office of Performance Management & Innovation (OPMI), and Office of Diversity & Civil Rights (ODCR); and

WHEREAS, the MBTA conducted public outreach as required by Title VI regulations soliciting input from protected groups as it relates to the DI/DB policy; and

WHEREAS, MBTA staff have briefed the Board of Directors on the proposed changes to the DI/DB policy; it is hereby

RESOLVED, that the Board of Directors approves the Service and Fare Change Equity (Disparate Impact/Disproportionate Burden) Policy as presented during the April 19, 2023 meeting and authorizes the General Manager, or his designee, to take all necessary steps to implement said Policy, in the name and on behalf of the Massachusetts Bay Transportation Authority.

For Discussion & Policy Purposes Only

Vote (2 of 2)

WHEREAS, the MBTA is required by the FTA through Title VI of the Civil rights Act of 1964 to have a Public Engagement Plan detailing outreach strategies designed to achieve diverse and inclusive public engagement; and

WHEREAS, the MBTA Public Engagement Plan developed in May 2020 requires modernization and clarification of several elements; and

WHEREAS, the FTA requested clearer language for soliciting and considering public comments prior to a fare increase or major service reduction in the most recent Triennial Audit; and

WHEREAS, the MBTA conducted extensive public outreach regarding the proposed updates to the Public Engagement Plan; and

WHEREAS, MBTA staff have briefed the Board of Directors on the proposed changes to the Public Engagement Plan, it is hereby

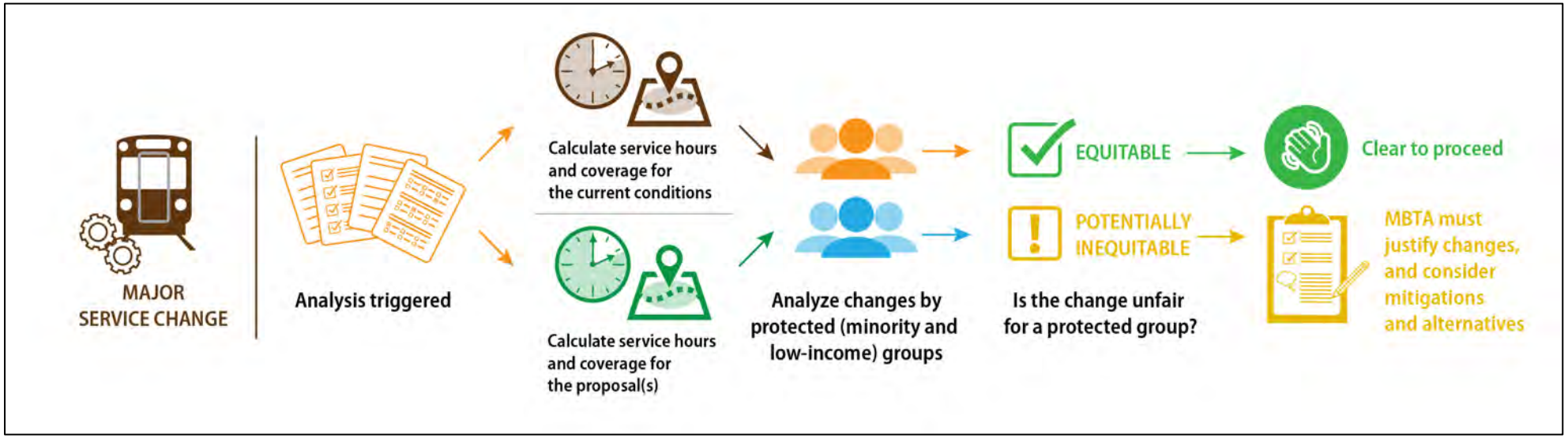
RESOLVED, that the Board of Directors approves the Public Engagement Plan as presented during the April 19, 2023 meeting and authorizes the General Manager, or his designee, to take all necessary steps to implement said Plan, in the name and on behalf of the Massachusetts Bay Transportation Authority.

For Discussion & Policy Purposes Only

Appendix

For Discussion & Policy Purposes Only

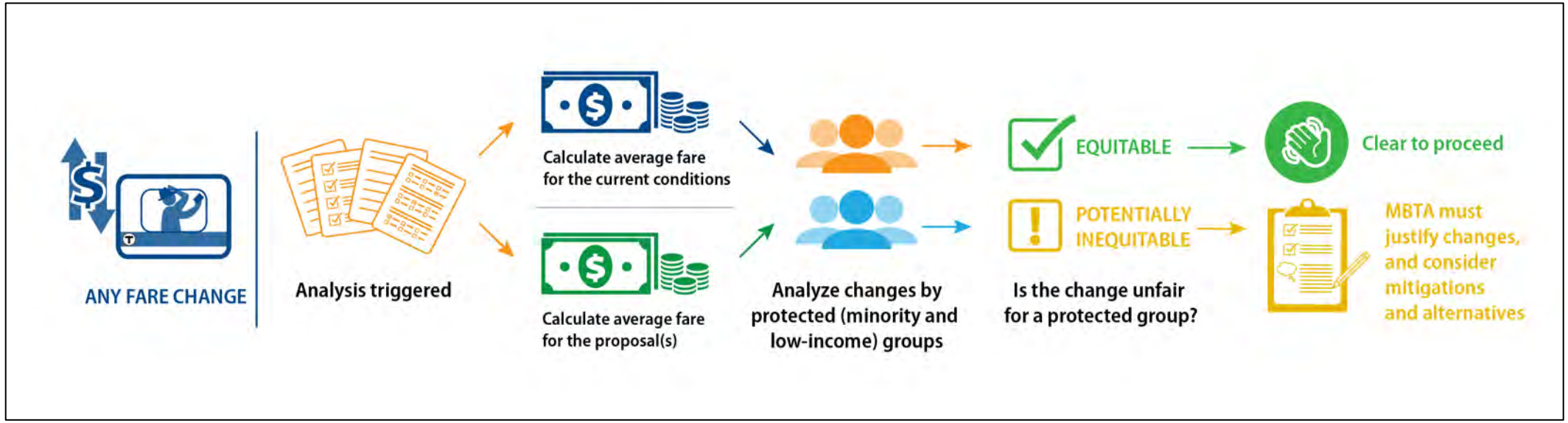
Overview: Service Equity Analysis



- A service equity analysis is required for any “major service change” as defined in the policy.
- The right data to analyze depends on the proposed change. For example, the MBTA may use its rider census to compare the ridership of the affected route(s) with the ridership of the system. Or we may use U.S. Census data when considering adding new service, such as GLX.
- The analysis is published in a report that states the data used, how the data was collected, and the methods and calculations used in the analysis itself.

For Discussion & Policy Purposes Only

Overview: Fare Equity Analysis



- A fare equity analysis compares the percentage change in the average fare for riders of color and overall riders and for low-income and overall riders. For fare-type changes and mode-shift induced changes across all modes, the MBTA will assess whether persons of color and low-income riders are more likely to use the affected fare type, media, or mode than overall riders and what the potential cost impact would be to these riders.
- The MBTA conducts an equity analysis before making any change that would increase or decrease individual or system-wide fares, or fares by mode, fare payment type or fare media.

For Discussion & Policy Purposes Only

Overview: Equity Analysis Results

- **Finding of disparate impact:** If a proposed change will have a disparate impact on POC/minority populations[1], the MBTA may only adopt the change upon demonstrating: (1) a substantial legitimate justification for the change; (2) there are no comparably effective alternatives that would result in less-disparate impacts; and (3) the justification for the change is not a pretext for discrimination.
- **Finding of disproportionate burden:** If the proposed change will disproportionately affect low-income populations[2], whether by benefit or burden, the MBTA may only adopt the change if further mitigation measures or alternatives that would reduce the disproportionately high and adverse effects are not practicable. In determining whether a mitigation measure or alternative is practicable, the social, economic and environmental effects of avoiding or mitigating the adverse effects shall be taken into account.

[1] Federal law uses the term "minority", defined as one who identifies as belonging in one or more of the following US census categories: American Indian and Alaska Native; Asian; Black or African American; Hispanic or Latino (of any race); Native Hawaiian or other Pacific Islander.

[2] MBTA defines low-income populations as those in which the median household income is less than 80% of the median household income for the MBTA service area (approximately $77,660 in 2021 and subject to annual modification).

For Discussion & Policy Purposes Only

Defining “Major Service Change”: Peer-comparison

CTPS performed a peer review of 8 U.S. transit agencies:

1. CTA (Chicago)
2. LA Metro (Los Angeles)
3. WMATA (Washington D.C.)
4. King County Metro (Seattle)
5. Regional Transportation District (Denver)
6. Metro Transit (Minneapolis-Saint Paul)
7. TriMet (Portland, OR)
8. SFMTA (San Francisco)

For Discussion & Policy Purposes Only



Appendix 7C

2017 Disparate Impact and Disproportionate Burden Policy



Massachusetts Bay Transportation Authority

POLICY/PROCEDURE

SUBJECT:	DATE OF ISSUE:	APPROVED BY:
Equity Analysis for Major Service and Fare Changes	**January 30, 2017**	**Signature on Original** **Brian Shortsleeve, Acting General Manager**

Disparate Impact/Disproportionate Burden (DI/DB) Policy

Requirement

The Federal Transit Administration's (FTA) Title VI Circular 4702.1B, issued in October 2012, under the authority of Title VI of the Civil Rights Act of 1964 (Title VI), directs transit providers to study proposed major service changes and all fare changes for possible disparities in impacts on minority and low-income riders/communities.

This requirement is part of the Massachusetts Bay Transportation Authority's (MBTA) Title VI assurance that no person shall, on the basis of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity receiving Federal financial assistance. 42 U.S.C. § 2000d et seq., and the Civil Rights Restoration Act of 1987 (P.L. 100.259).

Purpose

This policy satisfies FTA's requirement under Title VI Circular 4702.1B, chapter IV, section 7, to evaluate, prior to implementation, any and all service changes that exceed the MBTA's major service change threshold, as well as all fare changes, to determine whether those changes may have a discriminatory impact based on the finding of an adverse effect linked to race, color, or national origin, and/or a disproportionate burden, based on the finding of an adverse effect linked to minority or low-income status. All FTA requirements for conducting equity analyses are listed in Chapter IV, Section 7 of C4702.1B, and are addressed within this policy, including the definition of Major Service Change, Adverse Effects, Disparate Impact, and Disproportionate Burden. Explanations for all relevant terms and concepts related to this policy are provided in the Definitions section, below.

It is important to note that the unique nature of transit fare and service changes and the data used in given instances - - for example the appropriate population or ridership data -- will vary in order to ensure statistical reliability and significance. For this reason, MBTA exercises the discretion, as needed, to consult with FTA representatives for technical assistance. FTA's

guidance recognizes that there must be flexibility in the selection of data for analysis, as "one size does not fit all" circumstances of possible transit fare and service changes. The guidance is further structured to ensure that a combination of timely and reasonable analyses, vetted through public input and Board approval, will ultimately result in equitable decision-making.

Scope

The requirement to analyze service and fare changes at the MBTA applies to proposed changes to the Authority's fixed-route modes; these analyses are not required for demand-response modes, including paratransit.

Service Equity Analysis

Major Service Change Policy

Per FTA's Title VI Circular 4702.1B, the MBTA is required to evaluate the impacts on minority and/or low-income populations of proposed "major" service changes to the Authority's fixed-route services. Whether a proposed service change will be considered "major" depends on whether the proposal meets one or more of the following conditions:

Major Service Change at the Modal Level –

- A change in Revenue Vehicle Hours (RVH) per week of at least 10% by mode.

Major Service Change at the Route-Level –

- For all routes, a change in route length of at least 25% or 3 miles; or

  For routes with at least 80 RVH per week, a change in RVH per week of at least 25%.

Note: Once a major service change is triggered by either the modal or route-level definition described above, the equity analysis must consider all concurrently proposed changes in the aggregate.

For the purposes of this policy:

- The MBTA's fixed-route modes consist of: fixed-route bus (including electric trolley buses), heavy rail (Red Line, Orange Line, Blue Line), light rail (Green Line, Mattapan Trolley), commuter rail, and ferry.
- The MBTA's non-bus routes are identified as each commuter rail line, each heavy rail or light rail line and each ferry line.
- Supplemental service that adds trips along pre-existing transit routes (e.g. school trips, weekend variations) will be counted as part of the parent route.

- The complete elimination of existing routes or addition of new routes, by definition, constitutes major service changes.
- Changes in RVH and/or route length produced by quarterly service adjustments will be categorized under one of two labels: (1) Summer Quarter or (2) All Other Quarters. In determining whether these changes qualify as "major" under this policy, changes to Summer Quarter service will be compared to the previous Summer Quarter's service and changes to any other quarter will be compared to the most recent non-Summer quarter's service (fall is compared to spring, winter is compared to fall, and spring is compared to winter).
- Change in route length includes changes in alignment.
- Changes to RVH and/or route length will be analyzed as a percentage change and as an absolute change.
- Making a service change to more than 25% or 3 miles of a primary variation's length would trigger the "major service change" designation.
- Making a service change to more than 25% or 3 miles of the combined segments of all variants (counting overlapping segments only once) would trigger the "major service change" designation.

Definition of Adverse Effects

The MBTA defines adverse effects of service changes as:

- For routes with at least 80 revenue vehicle hours per week, an increase or decrease in the amount of service scheduled, by route and by mode (as measured by changes to weekly RVH)
- An increase or decrease in the access to service, by route (as measured by changes to route length, in miles)

For the purposes of evaluating the degree of adverse impacts resulting from major service change proposals, the MBTA will measure and compare the extent of the loss or the gain among minority and nonminority populations and among low-income and non-low-income populations when conducting the equity analysis.

Disparate Impact/Disproportionate Burden Policy for Service Changes

The MBTA's threshold for determining when adverse effects of major service changes may result in disparate impacts on minority and/or disproportionate burdens on low-income populations is 20%. If the ratio of the impact on minority to non-minority populations or low-income to non-low-income populations is more than 1.20 (or 20%), then the proposed change would be determined to pose a potential disparate impact or disproportionate burden.

Upon finding a potential disparate impact on minority populations from a proposed major service change, the MBTA will analyze alternatives/revisions to the proposed change in order to avoid, minimize, or mitigate the potential adverse effects from the change. Any proposed alternative would also be subject to a service equity analysis. The MBTA will implement any proposal in accordance with then current FTA guidance.

When potential disparate impacts are identified, the MBTA will provide a meaningful opportunity for public comment on any proposed mitigation measures, including the less discriminatory alternatives that may be available.

Upon finding a potential disproportionate burden on low-income populations from a proposed major service change, the MBTA may take steps to avoid, minimize, or mitigate these impacts, where practicable, and will describe alternatives available to the low-income passengers affected by the service changes.

Fare Equity Analysis

For all fare changes, the MBTA will compare the percentage change in the average fare for minority and overall riders and for low-income and overall riders. For fare-type changes across all modes, the MBTA will assess whether minority and low-income customers are more likely to use the affected fare type or media than overall riders. Any or all proposed fare changes will be considered in the aggregate and results evaluated using the fare DI/DB threshold, below.

Disparate Impact/Disproportionate Burden Policy for Fare Changes

The MBTA's threshold for determining when fare changes may result in disparate impacts or disproportionate burdens on minority or low-income populations, respectively, is 10%.

Upon finding a potential disparate impact on minority populations from a proposed fare change, the MBTA will analyze alternatives/revisions to the proposed change that meet the same goals of the original proposal. Any proposed alternative fare change would be subject to a fare equity analysis. The MBTA will implement any proposal in accordance with then current FTA guidance.

Where potential disparate impacts are identified, the MBTA will provide a meaningful opportunity for public comment on any proposed mitigation measures, including any less discriminatory alternatives that may be available.

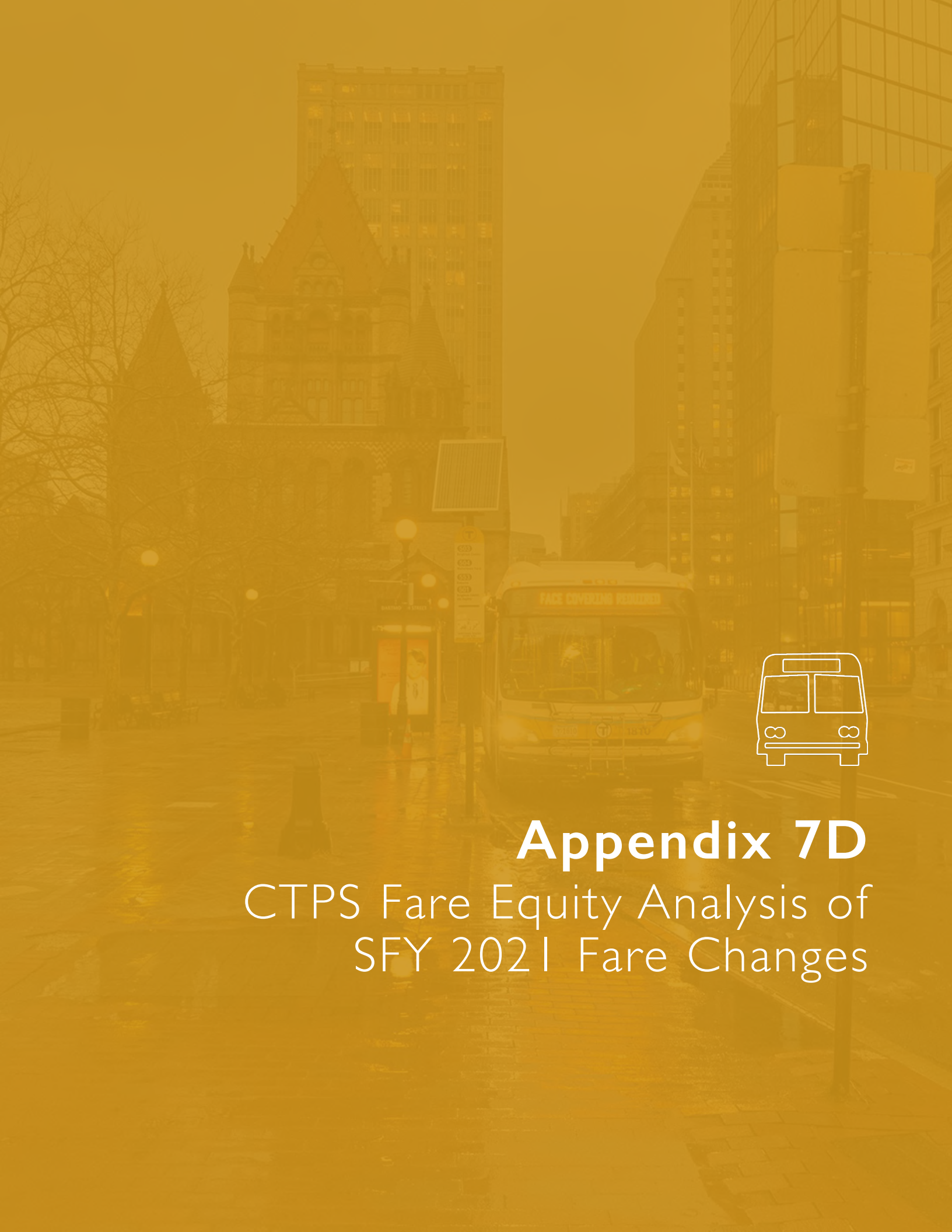
Upon finding a potential disproportionate burden on low-income populations from a proposed fare change, the MBTA may take steps to avoid, minimize, or mitigate these impacts, where practicable.

Definitions

(Note: These definitions are drawn from a broader set of definitions provided by the FTA in its Title VI Circular 4702.1B)

- Demand response system: Any non-fixed route system of transporting individuals that requires advanced scheduling including services provided by public entities, non-profits, and private providers. An advance request for service is a key characteristic of demand response service.
- Discrimination: refers to any action or inaction, whether intentional or unintentional, in any program or activity of a Federal-aid recipient, subrecipient, or contractor that results in disparate treatment, disparate impact, or perpetuating the effects of prior discrimination based on race, color, or national origin.
- Disparate Impact: refers to a facially neutral policy or practice that disproportionately affects members of a group identified by race, color, or national origin, where the recipient's policy or practice lacks a substantial legitimate justification and where there exists one or more alternatives that would serve the same legitimate objectives but with less disproportionate effect on the basis of race, color, or national origin.
- Disproportionate Burden: refers to a neutral policy or practice that disproportionately affects, whether by benefit or burden, low-income populations more than non-low-income populations, related to a major service change or fare modification proposal. A finding of disproportionate burden requires the recipient to evaluate alternatives and mitigate burdens where practicable.
- Disparate Treatment: refers to actions that result in circumstances where similarly situated persons are intentionally treated differently than others because of their race, color, or national origin.
- Fixed Route: refers to public transportation service provided in vehicles operated along pre-determined routes according to a fixed schedule.
- Low-Income Household: those households with income less than 60 percent of the median household income of the MBTA service area.
- Low-Income Census Tract: one in which the median household income is less than 60% of the median household income for the MBTA service area ($43,415 in 2015, and subject to annual modification).
- Low-Income Population: any readily identifiable group of low-income persons who live in geographic proximity, and, if circumstances warrant, geographically dispersed/transient persons (such as migrant workers or Native Americans) who will be similarly affected by a proposed MBTA program, policy, or activity.
- Minority Individual: one who identifies as belonging in any one or more of the following US census categories: American Indian and Alaska Native; Asian; Black or African American; Hispanic or Latino (of any race); Native Hawaiian or Other Pacific Islander.

- Minority Census Tracts: one in which the minority percentage exceeds the systemwide average (26.19% in 2015, and subject to annual modification).
- Minority Population: any readily identifiable group of minority persons who live in geographic proximity, and, if circumstances warrant, geographically dispersed/transient persons (such as migrant workers or Native Americans) who will be similarly affected by a proposed MBTA program, policy, or activity.
- Revenue Vehicle Hours (per week): the total number of hours per week in which transit vehicles operate in revenue service.
- Route Length: the physical length of a transit route, as measured in miles.



Appendix 7D

CTPS Fare Equity Analysis of SFY 2021 Fare Changes



TECHNICAL MEMORANDUM

DATE: **May 21, 2020**
TO: **Steve Poftak, General Manager, Massachusetts Bay Transportation Authority**
FROM: **Steven Andrews, Central Transportation Planning Staff**
RE: **SFY 2021: Fare Equity Analysis Results**

When considering changes to fares, the Massachusetts Bay Transportation Authority (MBTA) undertakes a process to evaluate the impacts of the proposed changes. The analysis for state fiscal year (SFY) 2021 was conducted with the assistance of the Central Transportation Planning Staff (CTPS), which is the staff of the Boston Region Metropolitan Planning Organization (MPO). CTPS examined the impacts of proposed fare changes on revenue and fare equity.

CTPS used an elasticity-based spreadsheet model known as the Fare Elasticity, Ridership, and Revenue Estimation Tool (FERRET) along with ad-hoc analyses to estimate the effects of the fare changes. This document, while providing information on revenue impacts, is focused on fulfilling the MBTA's responsibility to conduct a fare equity analysis, as required by Title VI of the Civil Rights Act of 1964 (Title VI), to determine if the fare changes would result in disparate impacts for minority populations or disproportionate burdens for low-income populations.

In CTPS's fare equity analysis, which was completed without consideration of the changes to travel patterns resulting from the COVID-19 pandemic, staff compared the relative fare decreases between riders who are classified as minorities and all riders, and between riders who are classified as low-income and all riders. **CTPS applied the MBTA's disparate-impact and disproportionate-burden policies and found neither the presence of a disparate impact nor a disproportionate burden.**

Assuming riders do not substantially change their travel patterns when activities resume in the period of recovery from COVID-19, CTPS expects the proposed changes to decrease future annual fare revenue by less than $7 million when elasticity of demand with respect to fares is accounted for. While ridership is likely to increase as a result of the proposed fares, CTPS does not expect it to grow substantially.

Civil Rights, nondiscrimination, and accessibility information is on the last page.

1 FARE CHANGE PROPOSAL

The MBTA is planning three changes to its fares and fare structure:

1. Lowering CharlieTicket and cash fares to the same level as CharlieCard fares (eliminating the CharlieTicket and cash fare differential)
2. Allowing step-up transfers between the Fairmount Line (commuter rail) and the bus and rapid transit systems (at South Station)
3. Offering reduced fares for commuter rail trips inside Zone 1A for Youth Pass holders

Eliminating the CharlieTicket and cash fare differential is a step toward preparing for the MBTA's new automatic fare collection (AFC) system. The other two proposed changes are designed to increase the usage of the Fairmount Line with integrated fare media.

2 FARE EQUITY ANALYSIS

2.1 Requirements

Title VI of the Civil Rights Act of 1964 prohibits discrimination, either intentionally or unintentionally, by recipients of federal financial assistance based on race, color, or national origin. To comply with Title 49 of the Code of Federal Regulations (CFR) Section 21.5(b) (2), 49 CFR Section 21.5(b) (7), and Appendix C to 49 CFR Part 21, the MBTA must evaluate any fare changes to fixed-route modes prior to implementation to determine if the proposed changes would have a discriminatory effect. The Federal Transit Administration (FTA) provides guidance for conducting fare equity analyses in FTA Circular 4702.1B ("Circular"), Section IV.7.b. Prior to a fare change, the MBTA must analyze any available information generated from ridership surveys that indicates whether minority and/or low-income riders would be disproportionately more likely than overall riders to use the mode of service, payment type, or payment media that would be subject to a fare change. In addition, the MBTA must describe the datasets and collection methods used in its analysis.

The Circular states that the transit provider shall:

- Determine the number and percentage of users of each fare media subject to change
- Review fares before and after the change
- Compare the relative cost burden impacts of the proposed fare change between minority and overall users for each fare media
- Compare the relative cost burden impacts of the proposed fare change between low-income and overall users for each fare media

Under Title VI and other directives, the FTA requires that transit agencies develop a policy to assess whether a proposed fare change would have a disparate impact on minority populations or disproportionate burden on low-income populations. The FTA Title VI guidelines define *disparate impact* as "a facially neutral policy or practice that disproportionately affects members of a group identified by race, color, or national origin, where the recipient's policy or practice lacks a substantial legitimate justification and where there exists one or more alternatives that would serve the same legitimate objectives, but with less disproportionate effects on the basis, of race, color, or national origin." The guidelines define *disproportionate burden* as "a neutral policy or practice that disproportionately affects low-income populations more than non-low income populations."

2.2 MBTA Title VI Disparate Impact/Disproportionate Burden Policy

2.2.1 Policy Thresholds

The MBTA's January 30, 2017, Disparate Impact/Disproportionate Burden (DI/DB) Policy explains the methodology to be used for fare equity analyses.

> For all fare changes, the MBTA will compare the percentage change in the average fare for minority and overall riders and for low-income and overall riders. For fare-type changes across all modes, the MBTA will assess whether minority and low-income customers are more likely to use the affected fare type or media than overall riders. Any or all proposed fare changes will be considered in the aggregate and results evaluated using the fare DI/DB threshold, below.
>
> The MBTA's threshold for determining when fare changes may result in disparate impacts or disproportionate burdens on minority or low-income populations, respectively, is 10%.
>
> *MBTA Disparate Impact/Disproportionate Burden (DI/DB) Policy*

The policy thresholds are encapsulated in the following equations.

A disparate impact would be found if the average fare decrease for minorities is less than 90 percent of the average fare decrease for all riders, or if the average fare increase for minorities is greater than 110 percent of the average increase for all riders:

$$\text{Minority Average Fare Decrease} < 90\% \times \text{All-Rider Average Fare Decrease}$$
$$\text{Minority Average Fare Increase} > 110\% \times \text{All-Rider Average Fare Increase}$$

A disproportionate burden would be found if the average fare decrease for low-income riders is less than 90 percent of the average fare decrease for all riders, or if the average fare increase for low-income riders is greater than 110 percent of the average increase for all riders:

$$\text{Low-income Average Fare Decrease} < 90\% \times \text{All-Rider Average Fare Decrease}$$
$$\text{Low-income Average Fare Increase} > 110\% \times \text{All-Rider Average Fare Increase}$$

The DI/DB Policy also describes the steps the MBTA will take when disparate impacts or disproportionate burdens are identified.

> Upon finding a potential disparate impact on minority populations from a proposed fare change, the MBTA will analyze alternatives/revisions to the proposed change that meet the same goals of the original proposal. Any proposed alternative fare change would be subject to a fare equity analysis. The MBTA will implement any proposal in accordance with then current FTA guidance.
>
> Where potential disparate impacts are identified, the MBTA will provide a meaningful opportunity for public comment on any proposed mitigation measures, including any less discriminatory alternatives that may be available.
>
> Upon finding a potential disproportionate burden on low-income populations from a proposed fare change, the MBTA may take steps to avoid, minimize, or mitigate these impacts, where practicable.
>
> *MBTA Disparate Impact/Disproportionate Burden (DI/DB) Policy*

2.2.2 Demographics and Definitions

Demographics

The systemwide demographic profile in Table 1 shows how the MBTA's ridership characteristics, in terms of minority and low-income status, vary by mode. Minority and low-income profile data of the MBTA's ridership are from the 2015–17 MBTA Systemwide Passenger Survey report published in May 2018.

Table 1
Demographic Profiles of MBTA Riders by Mode

Mode	Minority	Non-Minority	Low-Income	Non-Low-Income
Rapid Transit	30.8%	69.2%	26.5%	73.5%
Bus and Trackless Trolley	48.0%	52.0%	41.5%	58.5%
Silver Line	41.7%	58.3%	24.9%	75.1%
Commuter Rail	14.6%	85.4%	6.8%	93.2%
Commuter Ferry and Boat	1.7%	98.3%	3.7%	96.3%
Total	**34.3%**	**65.7%**	**28.8%**	**71.2%**

Source: 2015–17 MBTA Systemwide Passenger Survey.

Minority and Low-Income Populations

Respondents to the 2015–17 MBTA Systemwide Passenger Survey were classified as having minority status if they self-identified as a race other than white and/or were Hispanic or Latino/Latina. Respondents whose household income is less than $43,500—the income category from the survey that most closely matched 60 percent of the median household income for the MBTA service area from the 2013 American Community Survey—were classified as low-income.

2.3 Datasets, Data Collection Efforts, and Descriptions

CTPS used two primary datasets in the fare equity analysis:

- CTPS FERRET output
- 2015–17 MBTA Systemwide Passenger Survey

FERRET is an elasticity-based spreadsheet model. CTPS has used this model in the past to provide inputs to the fare-increase analysis process. FERRET takes existing ridership in the form of unlinked trips by mode, fare-payment type, and fare media as inputs. The MBTA provides CTPS with ridership data from the automated fare collection system. For modes that are not part of the AFC system, the MBTA provides data (most notably, sales data for transit passes) to estimate ridership. For the version of FERRET used in this analysis, CTPS used the output data from the SFY 2020 fare change analysis as the input data. Using these input data, FERRET employs elasticities and diversion factors to model a range of possible impacts resulting from changes in the MBTA's fares.

The 2015–17 MBTA Systemwide Passenger Survey report, published in May 2018, included all of the transit modes provided by the MBTA—the heavy rail Red, Blue, and Orange Lines; the light rail Green Line and Mattapan Trolley; the Silver Line bus rapid transit line; the commuter rail system; the bus system; and

the ferry system. The survey did not capture riders of the MBTA's purchased-service bus routes; the MBTA is currently planning to conduct a supplemental survey effort to collect data about these routes. The survey asked questions regarding trip origins and destinations, and—most important to this equity analysis—fare payment method, trip frequency, race, ethnicity, and income.

CTPS first launched the survey online and advertised its availability throughout the MBTA system. When the response rate to the online survey slowed, staff distributed the survey on paper forms at stations/stops and on vehicles. To compensate for differences in response rates among services, responses from each unlinked trip segment were weighted in proportion to the number of typical daily boardings for a corresponding station, group of stations, route, or route segment. The systemwide survey results were used in conjunction with FERRET to estimate the number of trips made by riders using each fare type, and the magnitude of the fare changes for low-income, minority, and all riders.

Because the model's ridership values are in trips and the survey's values are in riders, CTPS used the survey responses for the frequency of travel, fare type, and minority/income status to translate surveyed riders into trips per surveyed rider by fare type and by minority status and income status. Table 2 provides a snapshot of fare type usage by demographic group.

2.4 Equity Analysis and Results

2.4.1 Analysis of Fare Changes

The analysis of the proposed fare changes was completed in three parts using FERRET and the 2015–17 MBTA Systemwide Passenger Survey.

The MBTA's policy is to measure the relative difference in the existing and proposed average fares. CTPS used FERRET to estimate the existing average fare by rider classification (minority/nonminority and low-income/non-low-income). Then, CTPS progressively adjusted the average fare to account for each change.

Eliminating the CharlieTicket and Cash Fare Differential

Using data from the 2015–17 MBTA Systemwide Survey along with output from FERRET, staff estimated the number of trips made by riders using CharlieTickets and cash to pay their fare. CTPS multiplied the savings per trip by the number of trips using that fare to estimate the total savings by rider classification and concomitant revenue decreases. Table 3 presents a summary of these calculations.

By subtracting this revenue from the total revenue by rider classification, CTPS was able to estimate the change in the average fare by rider classification. Table 6, shown at the end of this section, includes the results of estimating the effects of all of the changes on the average fare.

Table 2
Minority, Low-Income, and All Riders Using Each Principal Fare-Payment Type

Fare-Payment Type	Price		Change		Annual Usage in Unlinked Trips			Annual Usage Share of Group Total		
	Existing	Proposed SFY 2021	Absolute	Percent	Minority	Low-Income	All Riders	Minority	Low-Income	All Riders
Local Bus										
Local Bus Pass	$ 55.00	$ 55.00	$ 0.00	0.0%	2,441,000	1,876,000	4,651,000	1.8%	1.5%	1.3%
Local Bus (Adult)	$ 1.70	$ 1.70	$ 0.00	0.0%	6,622,000	5,725,000	13,714,000	4.8%	4.7%	3.8%
Local Bus (Senior)	$ 0.85	$ 0.85	$ 0.00	0.0%	1,357,000	2,308,000	3,245,000	1.0%	1.9%	0.9%
Local Bus (Student)	$ 0.85	$ 0.85	$ 0.00	0.0%	1,145,000	969,000	1,501,000	0.8%	0.8%	0.4%
Local Bus (CharlieTicket)	$ 2.00	$ 1.70	$ (0.30)	-15.0%	394,000	477,000	718,000	0.3%	0.4%	0.2%
Local Bus (Cash)	$ 2.00	$ 1.70	$ (0.30)	-15.0%	856,000	1,045,000	1,676,000	0.6%	0.9%	0.5%
Express Bus										
Inner Express Pass	136.00	136.00	0.00	0.0%	728,000	344,000	2,090,000	0.5%	0.3%	0.6%
Inner Express (Adult)	4.25	4.25	0.00	0.0%	171,000	183,000	488,000	0.1%	0.2%	0.1%
Inner Express (Senior)	2.10	2.10	0.00	0.0%	26,000	31,600	69,600	0.0%	0.0%	0.0%
Inner Express (Student)	2.10	2.10	0.00	0.0%	22,000	31,600	34,600	0.0%	0.0%	0.0%
Inner Express (CharlieTicket)	5.25	4.25	(1.00)	-19.0%	8,700	10,800	14,900	0.0%	0.0%	0.0%
Inner Express (Cash)	5.25	4.25	(1.00)	-19.0%	23,500	39,100	61,900	0.0%	0.0%	0.0%
Outer Express Pass	168.00	168.00	0.00	0.0%	125,000	17,900	359,000	0.1%	0.0%	0.1%
Outer Express (Adult)	5.25	5.25	0.00	0.0%	11,000	7,700	95,800	0.0%	0.0%	0.0%
Outer Express (Senior)	2.60	2.60	0.00	0.0%	NR	NR	15,300	0.0%	0.0%	0.0%
Outer Express (Student)	2.60	2.60	0.00	0.0%	NR	NR	1,100	0.0%	0.0%	0.0%
Outer Express (CharlieTicket)	7.00	5.25	(1.75)	-25.0%	NR	NR	2,400	0.0%	0.0%	0.0%
Outer Express (Cash)	7.00	5.25	(1.75)	-25.0%	NR	NR	3,900	0.0%	0.0%	0.0%
Bus and Rapid Transit										
Bus and Rapid Transit (Adult)	2.40	2.40	0.00	0.0%	2,776,000	2,308,000	6,679,000	2.0%	1.9%	1.9%
Bus and Rapid Transit (Senior)	1.10	1.10	0.00	0.0%	474,000	824,000	1,347,000	0.3%	0.7%	0.4%
Bus and Rapid Transit (Student)	1.10	1.10	0.00	0.0%	360,000	313,000	483,000	0.3%	0.3%	0.1%
Bus and Rapid Transit (CharlieTicket)	4.90	4.10	(0.80)	-16.3%	4,000	4,900	7,900	0.0%	0.0%	0.0%
Rapid Transit										
LinkPass	90.00	90.00	0.00	0.0%	27,279,000	19,430,000	79,588,000	19.8%	15.9%	22.2%
Senior/TAP Pass	30.00	30.00	0.00	0.0%	5,516,000	7,230,000	12,225,000	4.0%	5.9%	3.4%
Youth Pass	30.00	30.00	0.00	0.0%	716,000	653,000	1,000,000	0.52%	0.54%	0.28%
Student 7-Day	30.00	30.00	0.00	0.0%	8,582,000	7,628,000	11,813,000	6.2%	6.3%	3.3%
1-Day Pass	12.75	12.75	0.00	0.0%	625,000	582,000	783,000	0.5%	0.5%	0.2%
7-Day Pass	22.50	22.50	0.00	0.0%	24,550,000	23,361,000	36,022,000	17.8%	19.2%	10.0%
Rapid Transit (Adult)	2.40	2.40	0.00	0.0%	10,801,000	8,287,000	32,996,000	7.9%	6.8%	9.2%
Rapid Transit (Senior)	1.10	1.10	0.00	0.0%	906,000	1,668,000	3,714,000	0.7%	1.4%	1.0%
Rapid Transit (Student)	1.10	1.10	0.00	0.0%	918,000	873,000	1,331,000	0.7%	0.7%	0.4%
Rapid Transit (CharlieTicket)	2.90	2.40	(0.50)	-17.2%	4,028,000	4,799,000	12,509,000	2.9%	3.9%	3.5%
Rapid Transit (Cash)	2.90	2.40	(0.50)	-17.2%	40,100	40,800	194,000	0.0%	0.0%	0.1%
Commuter Rail										
Zone 1A–10 Pass	$90.00–$426.00	$90.00–$426.00	$0.00–$0.00	0.0%–0.0%	5,581,000	2,174,000	31,124,000	4.1%	1.8%	8.7%
Zone 1A	$ 90.00	$ 90.00	$ 0.00	0.0%	1,492,000	676,000	4,604,000	1.1%	0.6%	1.3%
Zone 1	214.00	214.00	0.00	0.0%	372,000	37,800	1,853,000	0.3%	0.0%	0.5%
Zone 2	232.00	232.00	0.00	0.0%	580,000	204,000	4,526,000	0.4%	0.2%	1.3%
Zone 3	261.00	261.00	0.00	0.0%	703,000	261,000	4,723,000	0.5%	0.2%	1.3%
Zone 4	281.00	281.00	0.00	0.0%	729,000	216,000	4,380,000	0.5%	0.2%	1.2%
Zone 5	311.00	311.00	0.00	0.0%	392,000	215,000	2,400,000	0.3%	0.2%	0.7%
Zone 6	340.00	340.00	0.00	0.0%	670,000	272,000	4,343,000	0.5%	0.2%	1.2%
Zone 7	360.00	360.00	0.00	0.0%	341,000	128,000	2,034,000	0.2%	0.1%	0.6%
Zone 8	388.00	388.00	0.00	0.0%	292,000	151,000	2,196,000	0.2%	0.1%	0.6%
Zone 9	406.00	406.00	0.00	0.0%	6,400	8,400	43,000	0.0%	0.0%	0.0%
Zone 10	426.00	426.00	0.00	0.0%	3,500	4,500	23,300	0.0%	0.0%	0.0%

Fare-Payment Type	Price		Change		Annual Usage in Unlinked Trips			Annual Usage Share of Group Total		
	Existing	Proposed SFY 2021	Absolute	Percent	Minority	Low-Income	All Riders	Minority	Low-Income	All Riders
Zone 1A–10 Single Ride	$2.40–$13.25	$2.40–$13.25	$0.00–$0.00	0.0%–0.0%	1,323,000	862,000	10,749,000	1.0%	0.8%	3.0%
Interzone 1–10 Pass	$90.00–$237.00	$90.00–$237.00	$0.00–$0.00	0.0%–0.0%	20,100	8,400	126,700	0.0%	0.0%	0.0%
Interzone 1–10 Single Ride	$2.75–$6.75	$2.75–$6.75	$0.00–$0.00	0.0%–0.0%	44,400	28,900	360,500	0.0%	0.0%	0.1%
Ferry										
Commuter Boat Pass	$329.00	$329.00	$0.00	0.0%	12,900	19,600	352,000	0.0%	0.0%	0.1%
F1: Hingham	9.75	9.75	0.00	0.0%	5,600	NR	433,000	0.0%	0.0%	0.1%
F2: Boston	9.75	9.75	0.00	0.0%	13,800	20,800	285,000	0.0%	0.0%	0.1%
F2: Cross Harbor	9.75	9.75	0.00	0.0%	NR	NR	1,200	0.0%	0.0%	0.0%
F2: Logan	9.75	9.75	0.00	0.0%	NR	NR	31,200	0.0%	0.0%	0.0%
F4: Inner Harbor	3.70	3.70	0.00	0.0%	NR	700	257,000	0.0%	0.0%	0.1%
Free Transfers and Other Fares										
In-station Transfers	No Cost	No Cost			17,422,000	15,796,000	45,989,000	12.7%	13.0%	12.8%
AFC Noninteraction[1]	No Cost	No Cost			7,712,000	7,712,000	22,260,000	5.6%	6.3%	6.2%
Free trips[2]	No Cost	No Cost			1,153,000	1,608,000	3,845,000	0.8%	1.3%	1.1%
Short fares[3]	Variable	Variable			1,393,000	1,685,000	2,935,000	1.0%	1.4%	0.8%

Notes: Values greater than 100,000 are rounded to the nearest 1,000. Values less than 100,000 are rounded to the nearest 100. Percentages are calculated using unrounded values. NR indicates that no riders from a given classification responded to the survey.
[1] AFC noninteraction is an estimate of the number of riders who do not interact with the AFC system. The noninteraction categories include children aged 11 or younger, who are not required to pay a fare when riding with an adult; MBTA employees who are waved onto vehicles or otherwise bypass the AFC equipment; passengers who are allowed by MBTA employees to enter the paid area of a station without interacting with the AFC equipment; passengers who show an operator a valid pass rather than interacting with the farebox; passengers who board certain vehicles via the rear door; and passengers who simply do not pay a fare (not all of these categories apply to every mode).
[2] Free trips include people who are not required to pay a fare. Some of these people pay with the Blind Access Card.
[3] Short fares are fares paid less than the full fare.
AFC = Automated fare collection. NR = No responses to the 2015–17 MBTA Systemwide Passenger Survey. SFY = State fiscal year. TAP = Transportation Access Pass.
Source: Central Transportation Planning Staff.

Table 3
Revenue Changes from Lowering CharlieTicket and Cash Fares to the Same Level as CharlieCard Fares

Rider Classification	Mode	Fare	Existing Fare	Proposed Fare	Trip Estimate	Change of Revenue
Minority	Bus	CT	$2.00	$1.70	394,497	-$118,349
Minority	Bus	Cash	$2.00	$1.70	856,368	-$256,910
Minority	RT	CT	$2.90	$2.40	4,027,902	-$2,013,951
Minority	RT	Cash	$2.90	$2.40	40,116	-$20,058
Minority	Bus and RT	CT	$4.90	$4.10	4,028	-$3,223
Minority	IEX	CT	$5.25	$4.25	8,685	-$8,685
Minority	IEX	Cash	$5.25	$4.25	23,452	-$23,452
Minority	OEX	CT	$7.00	$5.25	0	$0
Minority	OEX	Cash	$7.00	$5.25	0	$0
Subtotal						**-$2,444,628**
Low Income	Bus	CT	$2.00	$1.70	477,255	-$143,177
Low Income	Bus	Cash	$2.00	$1.70	1,044,922	-$313,477
Low Income	RT	CT	$2.90	$2.40	4,799,350	-$2,399,675
Low Income	RT	Cash	$2.90	$2.40	40,795	-$20,397
Low Income	Bus and RT	CT	$4.90	$4.10	4,871	-$3,897
Low Income	IEX	CT	$5.25	$4.25	10,788	-$10,788
Low Income	IEX	Cash	$5.25	$4.25	39,126	-$39,126
Low Income	OEX	CT	$7.00	$5.25	0	$0
Low Income	OEX	Cash	$7.00	$5.25	0	$0
Subtotal						**-$2,930,537**
All Riders	Bus	CT	$2.00	$1.70	718,291	-$215,487
All Riders	Bus	Cash	$2.00	$1.70	1,676,431	-$502,929
All Riders	RT	CT	$2.90	$2.40	12,508,757	-$6,254,379
All Riders	RT	Cash	$2.90	$2.40	193,794	-$96,897
All Riders	Bus and RT	CT	$4.90	$4.10	7,904	-$6,323
All Riders	IEX	CT	$5.25	$4.25	14,903	-$14,903
All Riders	IEX	Cash	$5.25	$4.25	61,936	-$61,936
All Riders	OEX	CT	$7.00	$5.25	2,362	-$4,134
All Riders	OEX	Cash	$7.00	$5.25	3,908	-$6,839
Subtotal						**-$7,163,827**

CT = CharlieTicket. RT = Rapid Transit. IEX = Inner Express. OEX = Outer Express.
Source: Central Transportation Planning Staff.

Allowing Step-Up Transfers between the Fairmount Line and the Bus and Rapid Transit Systems

To estimate the impacts of allowing step-up transfers—that is, transfers where a rider only pays the difference between the more expensive fare and the less expensive fare—between the Fairmount Line and the bus and rapid transit systems, CTPS generated unique queries to apply to the 2015–17 MBTA Systemwide Passenger Survey.

CTPS identified the proportion of surveyed respondents who used the Fairmount Line, transferred to or from a bus route or the rapid transit system, and used a pay-per-ride fare (approximately 5 percent of Fairmount Line riders).[1] These riders would save either $1.70 when transferring to or from a bus route or $2.40 when transferring to or from the rapid transit system under the proposed fares.[2] CTPS multiplied the percentage of trips meeting these criteria in each rider classification by an estimate of the total number of annual Fairmount Line trips (690,098). The result of multiplying the savings per trip by the estimated number of trips by riders who would benefit yields the net savings.

Table 4 presents a summary of these calculations. Table 6, shown at the end of this section, includes the results of estimating the effects of all of the changes on the average fare.

[1] This share is expected to increase as a result of the change in the transfer policy; however, this fare equity analysis focuses on the impacts to current riders rather than potential riders.

[2] A bus trip to the Fairmount Line currently costs $4.10 ($1.70 + $2.40). Regardless of direction, this trip would cost $2.40 under the proposal. A rapid transit trip to the Fairmount Line currently costs $4.80 ($2.40 + $2.40). This trip would cost $2.40 under the proposal.

Table 4
Revenue Changes from Allowing Step-up Transfers Between the Fairmount Line and the Bus and Rapid Transit Systems

Rider Classification	Transfer Type	Per Trip Savings	Share of Trips	Trip Estimate	Change in Revenue
Minority	None	NA	33.0%	227,396	$0
Minority	Free	$0.00	15.8%	109,014	$0
Minority	Bus	$1.40	0.0%	0	$0
Minority	Rapid Transit	$2.40	1.5%	10,177	-$24,424
Subtotal					**-$24,424**
Nonminority	None	NA	32.5%	224,293	$0
Nonminority	Free	$0.00	13.4%	92,463	$0
Nonminority	Bus	$1.70	1.3%	8,737	-$14,853
Nonminority	Rapid Transit	$2.40	2.6%	18,019	-$43,245
Subtotal					**-$58,097**
Total					**-$82,521**
Low-income	None	NA	8.9%	61,879	$0
Low-income	Free	$0.00	4.6%	31,702	$0
Low-income	Bus	$1.70	0.5%	3,698	-$6,287
Low-income	Rapid Transit	$2.40	0.5%	3,698	-$8,876
Subtotal					**-$15,162**
Non-Low-Income	None	NA	58.4%	404,392	$0
Non-Low-Income	Free	$0.00	22.8%	155,561	$0
Non-Low-Income	Bus	$1.70	0.9%	5,827	-$9,906
Non-Low-Income	Rapid Transit	$2.40	3.4%	23,342	-$56,021
Subtotal					**-$65,927**
Total					**-$81,089**

Note: If the value in the "Per Trip Savings" column is equal to "$0.00," this indicates that the rider used a pass that provides free transfers.
Source: 2015–17 MBTA Systemwide Passenger Survey. MBTA Fairmount Line ridership estimates.

Offering Reduced Fares for Commuter Rail Trips Inside Zone 1A for Youth Pass Holders

The survey data is inadequate regarding Youth Pass holders who would use Zone 1A commuter rail stations, so CTPS conducted this analysis using data from the 2015–17 MBTA Systemwide Passenger Survey on all 21-year-old or younger Zone 1A commuter rail riders, regardless of whether they used a Youth Pass. Given the limited market penetration of the Youth Pass program, the population of riders included in this analysis is almost certainly greater than the

population that would actually benefit. The scale of the results of the analysis suggest that obtaining a more precise estimate of the number of these riders using a Youth Pass would not affect the conclusions of this study.

Staff estimated the proportion of Zone 1A commuter rail riders who were 21 years old or younger by rider classification. Staff multiplied these proportions by the number of Zone 1A commuter rail trips to estimate the number of trips made by riders in each classification. Multiplying the number of trips by the savings per trip ($2.40 - $1.10 = $1.30) yields the total savings by riders in each rider classification.[3]

Table 5 presents a summary of these calculations. Table 6, shown at the end of this section, includes the results of estimating the effects of all of the changes on the average fare.

Table 5
Revenue Changes from Offering Reduced Fares for Commuter Rail Trips Inside Zone 1A for Youth Pass Holders

Rider Classification	Age	Trip Estimate	Change in Revenue
Minority	Under 18	22,689	-$29,495
Minority	18 to 21	20,616	-$26,801
Subtotal			**-$56,297**
Nonminority	Under 18	12,381	-$16,095
Nonminority	18 to 21	10,270	-$13,351
Subtotal			**-$29,446**
Total			**-$85,742**
Low-income	Under 18	0	$0
Low-income	18 to 21	11,371	-$14,782
Subtotal			**-$14,782**
Non-low-income	Under 18	25,028	-$32,537
Non-low-income	18 to 21	31,710	-$41,222
Subtotal			**-$73,759**
Total			**-$88,542**

Source: 2015–17 MBTA Systemwide Passenger Survey.

[3] This savings per rider result is based on the assumption that every rider uses a pay-per-ride fare product to receive the maximum benefit per trip. Along with the artificially large population pool, this assumption increases the change in revenue value and produces a result that is higher than it will actually be.

Summary of All Changes

One can estimate the proposed average fare by rider classification for these proposals by subtracting the change in revenue from the existing revenue by rider classification and dividing the result by the number of trips made by riders in the corresponding rider classification. Table 6 contains the result of this calculation.

Table 6
Change of Revenue by Fare Change and for All Fare Changes

Rider Classification	Existing Average Fare	Existing Number of Trips	Existing Revenue	Change of Revenue: Eliminate Differential	Change of Revenue: Fairmount Line Transfers	Change of Revenue: Youth Pass Zone 1A	Total Revenue Change	Proposed Revenue	Proposed Average Fare	Percent Change: Average Fare
Minority	$1.456	137,421,282	$200,063,207	-$2,444,628	-$24,424	-$56,297	-$2,525,348	$197,537,859	$1.437	-1.3%
Low Income	$1.294	122,318,315	$158,231,645	-$2,930,537	-$15,162	-$14,782	-$2,960,481	$155,271,164	$1.269	-1.9%
All Riders	$1.935	353,018,725	$683,250,081	-$7,163,827	-$82,521	-$88,542	-$7,334,890	$675,915,192	$1.915	-1.1%

Note: When an analysis would provide different estimates of the “All Riders” change of revenue, largely because some respondents did not respond to every survey question, staff chose the more conservative, larger “All Rider” revenue change estimate.
Source: Central Transportation Planning Staff.

2.4.2 Results from Applying the Disparate-Impact and Disproportionate-Burden Policy Thresholds

The results of the equity analysis, shown in Table 7, show that there is no disparate impact on minority riders and no disproportionate burden on low-income riders when considering the relative fare changes.

Table 7
Existing and Proposed Average Fares and Price Change

Rider Classification	Existing Average Fare	Proposed Average Fare	Percentage Price Change
Minority	$1.456	$1.437	-1.3%
Low-income	$1.294	$1.269	-1.9%
All Riders	$1.935	$1.915	-1.1%

Note: The values in this table are rounded to the nearest cent or the nearest tenth of a percent. All calculations were performed using unrounded values.
Source: Central Transportation Planning Staff.

Application of the disparate-impact policy threshold shows the relative decrease (or the change taken as a percentage of the initial fare) in the average fare for minority riders is 118 percent of the relative decrease in the average fare for all riders.

Application of the disproportionate-burden policy threshold shows the relative decrease in the average fare for low-income riders is 174 percent of the relative decrease in the average fare for all riders.

Because the average fare decreases for minority and low-income riders are greater than 90 percent of the average fare decrease for all riders, the threshold defined by the Disparate Impact/Disproportionate Burden Policy, CTPS does not find a disparate impact on minority populations or disproportionate burden for low-income populations.

The Boston Region Metropolitan Planning Organization (MPO) operates its programs, services, and activities in compliance with federal nondiscrimination laws including Title VI of the Civil Rights Act of 1964 (Title VI), the Civil Rights Restoration Act of 1987, and related statutes and regulations. Title VI prohibits discrimination in federally assisted programs and requires that no person in the United States of America shall, on the grounds of race, color, or national origin (including limited English proficiency), be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination under any program or activity that receives federal assistance. Related federal nondiscrimination laws administered by the Federal Highway Administration, Federal Transit Administration, or both, prohibit discrimination on the basis of age, sex, and disability. The Boston Region MPO considers these protected populations in its Title VI Programs, consistent with federal interpretation and administration. In addition, the Boston Region MPO provides meaningful access to its programs, services, and activities to individuals with limited English proficiency, in compliance with U.S. Department of Transportation policy and guidance on federal Executive Order 13166.

The Boston Region MPO also complies with the Massachusetts Public Accommodation Law, M.G.L. c 272 sections 92a, 98, 98a, which prohibits making any distinction, discrimination, or restriction in admission to, or treatment in a place of public accommodation based on race, color, religious creed, national origin, sex, sexual orientation, disability, or ancestry. Likewise, the Boston Region MPO complies with the Governor's Executive Order 526, section 4, which requires that all programs, activities, and services provided, performed, licensed, chartered, funded, regulated, or contracted for by the state shall be conducted without unlawful discrimination based on race, color, age, gender, ethnicity, sexual orientation, gender identity or expression, religion, creed, ancestry, national origin, disability, veteran's status (including Vietnam-era veterans), or background.

A complaint form and additional information can be obtained by contacting the MPO or at http://www.bostonmpo.org/mpo_non_discrimination. To request this information in a different language or in an accessible format, please contact

Title VI Specialist
Boston Region MPO
10 Park Plaza, Suite 2150
Boston, MA 02116
civilrights@ctps.org
857.702.3700 (voice)
617.570.9193 (TTY)





Appendix 7E

Approval of Fare Equity Analysis of SFY 2021 Fare Changes



WHEREAS, the Authority has proposed a set of fare reductions to eliminate differential between CharlieCard and CharlieTicket/cash fares and to increase usage of the Fairmount Line with integrated fare media; and

WHEREAS, under Title VI of the Civil Rights Act of 1964, all recipient agencies of federal funds, including the Authority, are prohibited from discrimination based on race, color or national origin in delivering services; and

WHEREAS, Title VI of the Civil Rights Act of 1964 requires the Authority to conduct and equity analysis of any fare or service change so as to ensure that impacts of service and fare changes are not discriminatory to minority and low-income populations; and

WHEREAS, an equity analysis of the fare proposal has been completed and concluded that neither a disproportionate burden on low-income communities nor a disparate impact on minority populations would ensue from adoption of the new MBTA fares; and

NOW, THEREFORE, BE IT VOTED by the members of the Fiscal and Management Control Board, as follows:

The Board hereby approves the Authority's FY2021 Fare Proposal as follows:

- The single ride bus and rapid transit CharlieTicket and cash fares shall be equal to the single ride bus and rapid transit CharlieCard fares, such equalization of fares to become effective upon the implementation of upgrades to the existing fare collection system scheduled for Fall 2020; and
- Free transfers between Fairmount Line trips within Zone 1A and rapid transit shall be permitted at South Station, and "step-up" transfers between Fairmount Line trips within Zone 1A and bus trips shall be permitted on CharlieCards, such issuance of free and discounted transfers to become effective upon the commencement of the Fairmount Line Pilot,
- Youth Pass card holders shall be eligible for reduced fares on Zone 1A Commuter Rail trips, effective upon the commencement of the Fairmount Line Pilot

A true copy,
Attest: May 21, 2020

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY ESTABLISHED 1964

Joseph Aiello, Chair
Fiscal and Management Control Board





Appendix 7F

CTPS Fare Equity Analysis of Fare Sales Network



BOSTON REGION METROPOLITAN PLANNING ORGANIZATION

Jamey Tesler, Acting MassDOT Secretary and CEO and MPO Chair
Tegin L. Teich, Executive Director, MPO Staff

TECHNICAL MEMORANDUM

DATE: **March 4, 2021**

TO: **Anna Sangree, Andy Stuntz, and Anthony Thomas, Massachusetts Bay Transportation Authority**

FROM: **Steven Andrews, Emily Domanico, and Bradley Putnam, Central Transportation Planning Staff**

RE: **Fare Transformation Proposed Sales Network Analysis**

As part of its Fare Transformation initiative, the Massachusetts Bay Transportation Authority (MBTA) is proposing a new network of fare sales locations. The new network would greatly expand the number of sales terminals, but riders would no longer be able to pay cash onboard buses, light rail vehicles, or commuter rail trains. The Central Transportation Planning Staff (CTPS) analyzed the equity implications of these proposed changes and found no disparate impact on minority populations and no disproportionate burden on low-income populations.

1 BACKGROUND

Under the current fare system on the MBTA's bus and rapid transit network, riders can use a fare card to board buses at any stop, to board light rail vehicles at surface stops, or to enter gated rapid transit stations. Customers can also pay cash to board a bus or light rail vehicle at surface stops. Customers can reload fare cards at fareboxes onboard buses or light rail vehicles (cash only), at fare vending machines, at retail sales terminals, or on the MBTA's website. Most fare vending machines are located at entrances to rapid transit stations, and most retail sales terminals are located at convenience stores. Fare cards are not accepted on commuter rail trains or ferries, so riders on those modes must either buy a ticket or pass before riding, pay using a smartphone app, or pay cash onboard.

As part of its Fare Transformation initiative, the MBTA aims to allow riders to pay by smartphone, by contactless credit and debit card, and with a fare card on all modes while removing the option of paying cash onboard vehicles. These changes will make paying fares more convenient for many riders. However, paying fares may become less convenient for riders who only pay with cash, and so the MBTA proposes to add new fare sales terminals throughout its service

Civil Rights, nondiscrimination, and accessibility information is on the last page.

area. The MBTA 2015–17 systemwide passenger survey indicated that low-income riders are more likely to pay with cash than non-low-income riders, and that minority riders are more likely to pay with cash than nonminority riders; removing the option of paying cash onboard could have a greater impact on minority or low-income riders than on nonminority or non-low-income riders.[1]

This memorandum presents an analysis of whether the proposed elimination of the option to pay a fare with cash onboard vehicles together with the proposed changes to the network of fare sales locations might result in a potential disparate impact on minority populations in the MBTA service area or a potential disproportionate burden on low-income populations. According to the MBTA's Disparate Impact and Disproportionate Burden policy, a fare change that results in a ratio of low-income to non-low-income burden or minority to nonminority burden greater than 1.1 would suggest a potential disparate impact or a potential disproportionate burden.[2]

2 METHODOLOGY

First, CTPS assembled a list of locations where riders can currently pay fares by cash. This list includes

- fare vending machines, including all gated rapid transit stations;
- retail sales terminals, which are mostly located in convenience stores;
- all bus stops using the farebox onboard the vehicle;
- all surface light rail stations using the farebox onboard the vehicle; and
- all commuter rail stations, purchasing from the conductor.

Second, the MBTA provided a list of the proposed fare sales locations where riders would be able to pay cash to reload fare cards as part of the Fare Transformation initiative. This list includes

- all current fare vending machine locations;
- all current retail sales terminals;
- over 900 bus stops;
- over 100 commuter rail stations;
- over 40 surface light rail stations; and
- all ferry docks.

At this stage of planning, the MBTA has not determined whether the proposed fare sales locations at bus stops, commuter rail stations, surface light rail stations, and ferry docks will be fare vending machines or nearby retail sales

[1] Detailed results of the MBTA 2015–17 systemwide passenger survey can be found at https://www.ctps.org/apps/mbtasurvey2018/index.html#.

[2] The MBTA's Disparate Impact and Disproportionate Burden policy can be found at https://www.mbta.com/policies/fair-service-fair-fares.

terminals. For the purpose of this analysis, these locations are all treated the same.

Third, CTPS calculated the number of people classified as minority, nonminority, low-income, and non-low-income within the MBTA's service area living within a quarter mile of a location where cash can be used to pay fares either currently or under the proposed fare sales network. CTPS used Geographic Information System software to calculate quarter-mile buffers around each location and then used demographic proportion data from the 2015–19 American Community Survey (ACS) applied to population totals from the 2010 decennial census to calculate the population numbers by demographic category.

CTPS used census data instead of MBTA ridership data in order to capture the geographic dimensions of the proposed fare sales network. Ridership demographic data does not have sufficient precision at the stop level to analyze sales locations.

2.1 Definitions of Minority and Low-Income Populations

CTPS applied demographic proportions from the ACS estimates to population totals from the 2010 decennial census to find the minority and nonminority population size in each census tract. CTPS used the 2015–19 ACS Table B03002 (Hispanic or Latino Origin by Race) to find the percent of minority and nonminority residents within a census tract. Residents who were classified as "white alone, not Hispanic or Latino" were classified as nonminority residents; all others were classified as minority residents. CTPS used the 2010 decennial census Table P001001 (Total Population) to find the total population by census tract. The total population for each census tract was multiplied by the ACS minority percentage to find the minority population and the ACS nonminority percentage to find the nonminority population.

Similarly, CTPS applied demographic proportions from the ACS estimates to population totals from the 2010 decennial census to find the number of low-income and non-low-income households in each census tract. CTPS used the 2015–19 ACS Table B19001 (Household Income in the Past 12 Months) to find the percentage of households within a census tract that are low income. Households were classified as low-income if the household earned less than 60 percent of the median household income for the MBTA service area (a threshold

of $53,382).[3, 4] Household counts by income status were found by multiplying the total occupied housing units for each census tract from the 2010 decennial census Table H002002 (Total Occupied Housing Units) by the percentage of low-income households to find the number of low-income households and by the percentage of non-low-income households to find the number of non-low-income households.

2.2 Assigning Census Demographics to the Service Area

CTPS used the following methodology to estimate the demographics of populations within the MBTA service area:

Determine the geographic area

1) Create a quarter-mile buffer around all fare sales point locations
2) Dissolve the buffer so that overlapping regions are not double-counted

Calculate proportions of each census tract in the buffer

3) For each census tract that is included in the buffer, calculate the length of roads within the buffer
4) For each census tract that is included in the buffer, calculate the total length of roads in the census tract
5) Calculate the percentage of total road length within the buffer in each census tract

Calculate demographics within the buffer

6) For each census tract, multiply the percentage of road length within the buffer by the number of people or households in each population group (minority, nonminority, low-income, and non-low-income)
7) Sum the number of people in each population group for all census tracts within the service area

[3] The median household income was derived from 2015–19 ACS household income distribution data by (1) finding the number of households in each census-based income category for the entire MBTA service area, (2) finding which income category for the service area contained at least 50 percent of households, and (3) calculating how far into that category the median is, assuming that incomes are evenly distributed along each category. Following this approach, CTPS found the median household income in the MBTA service area to be $88,970. The low-income threshold is 60 percent of the median household income, which is $53,382.

[4] All households earning less than $50,000 were classified as low income, and all households earning $60,000 or more were classified as non-low income. Households in the census category "$50,000 to $59,999" were separated into each population group by multiplying the number of households in that category by 0.34, a value derived by the following equation: ($53,382 – 50,000) / (59,999 – 50,000) = 34%. The equation distributes the households in the category based on how far the threshold extends into the category. The equation assumes household incomes are distributed equally within the category.

CTPS used road lengths instead of land area because road lengths are a proxy for population density within a census tract, whereas calculating by land area would assume uniform population density across a tract. When calculating the length of roads in a census tract or buffer, CTPS used road geometries from the 2019 US Census TIGER/Line Shapefiles.

3 RESULTS

Table 1 shows that eliminating the ability to pay fares with cash onboard buses, surface light rail vehicles, and commuter rail trains and switching from the current sales network to the proposed sales network would cause 66,022 low-income households in the MBTA service area to lose quarter-mile proximity to sales locations, while 159,482 non-low-income households would lose quarter-mile proximity. Likewise, 172,693 minority residents would lose quarter-mile proximity, as would 391,137 nonminority residents.

Table 1
Households and Populations Living within One-quarter Mile of a Fare Sales Location

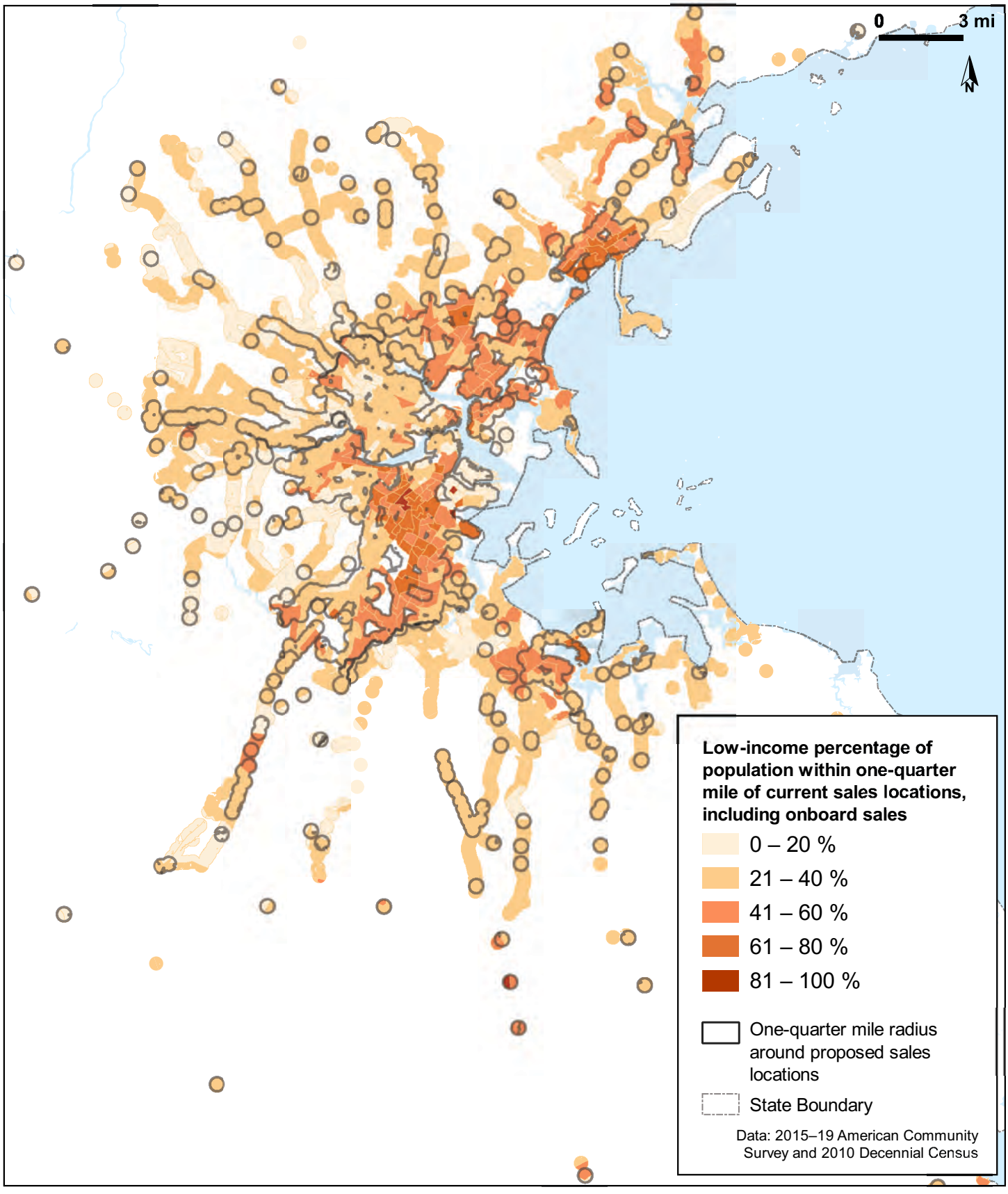
	Low-income households	Non-low-income households	Minority population	Nonminority population
Current sales network	257,585	478,046	758,840	1,054,353
Proposed sales network	191,564	318,564	586,147	663,216
Change	-66,022	-159,482	-172,693	-391,137
Percent change	-25.6%	-33.4%	-22.8%	-37.1%
Ratio		0.77[a]		0.61[b]

Note: Values displayed in this table are rounded; calculations were performed using unrounded values.
[a]This value is the ratio of the percentage change in low-income households to the percentage change in non-low-income households.
[b]This value is the ratio of the percentage change in minority population to the percentage change in nonminority population.
Source: Central Transportation Planning Staff and the Massachusetts Bay Transportation Authority.

Table 1 also shows that the ratio of the percentage loss to low-income households (25.6 percent) to the percentage loss to non-low-income households (33.4 percent) is 0.77, and that the ratio of the percentage loss to minority residents (22.8 percent) to the percentage loss to nonminority residents (37.1 percent) is 0.61. According to the MBTA's Disparate Impact and Disproportionate Burden policy, a fare change that results in a ratio of low-income to non-low-income loss or minority to nonminority loss greater than 1.1 would suggest a potential disparate impact or a potential disproportionate burden. Since both ratios are less than 1.1, no disparate impact or disproportionate burden is found.

Figures 1a and 1b show the percentage of low-income households in areas that would lose quarter-mile proximity to the ability to pay cash. Figure 1a shows the MBTA bus service area and Figure 1b shows the commuter rail service area. Both figures show that areas that would lose quarter-mile proximity have relatively low percentages of low-income households.

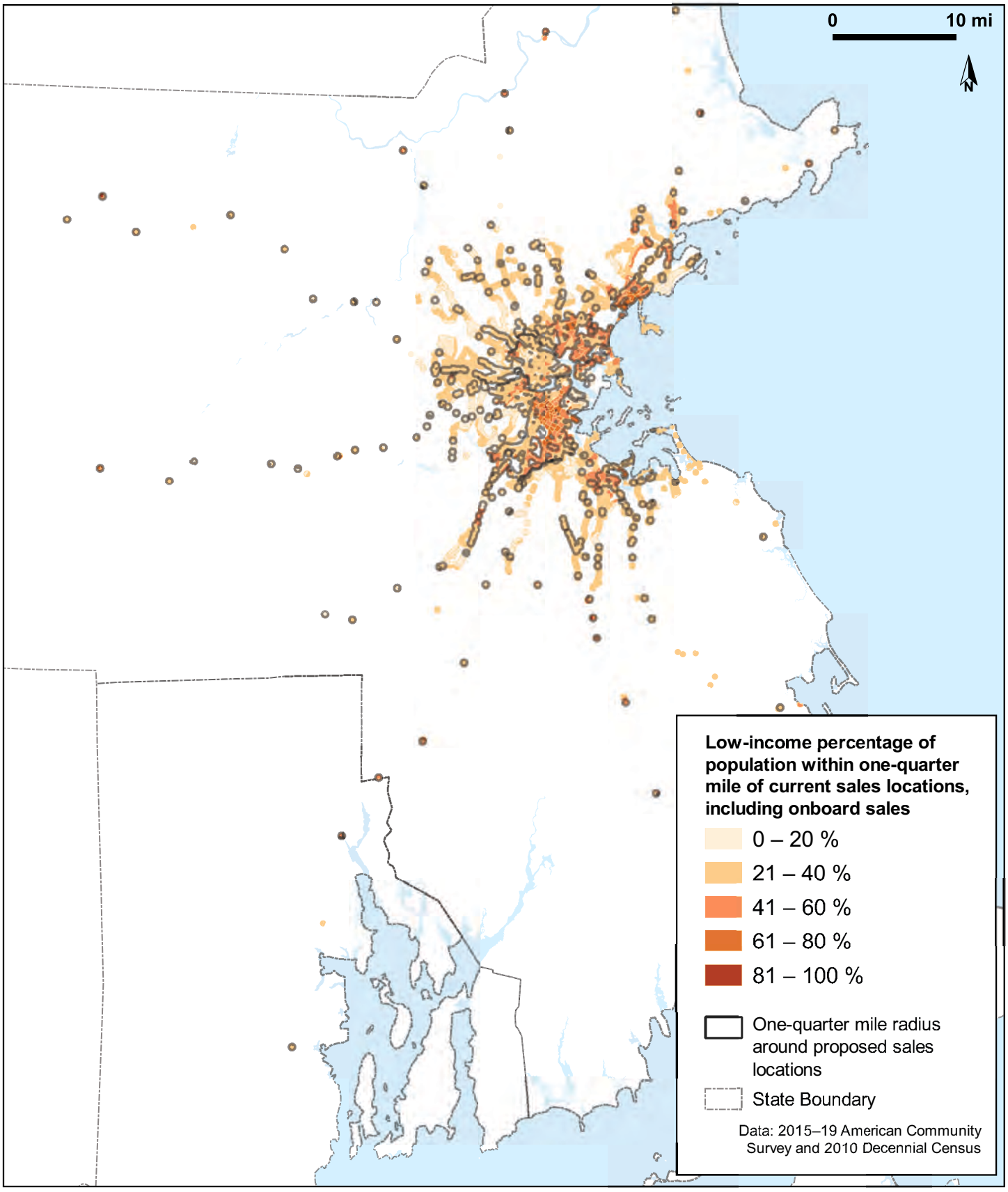
Figures 2a and 2b show the percentage of minority population in areas that would lose quarter-mile proximity to the ability to pay cash. Figure 2a shows the MBTA bus service area and Figure 2b shows the commuter rail service area. Both figures show that areas that would lose quarter-mile proximity have relatively low percentages of minority population.



CTPS

FIGURE 1A
Low-income Populations Living within One-quarter Mile of Fare Sales Locations in the MBTA Bus Service Area

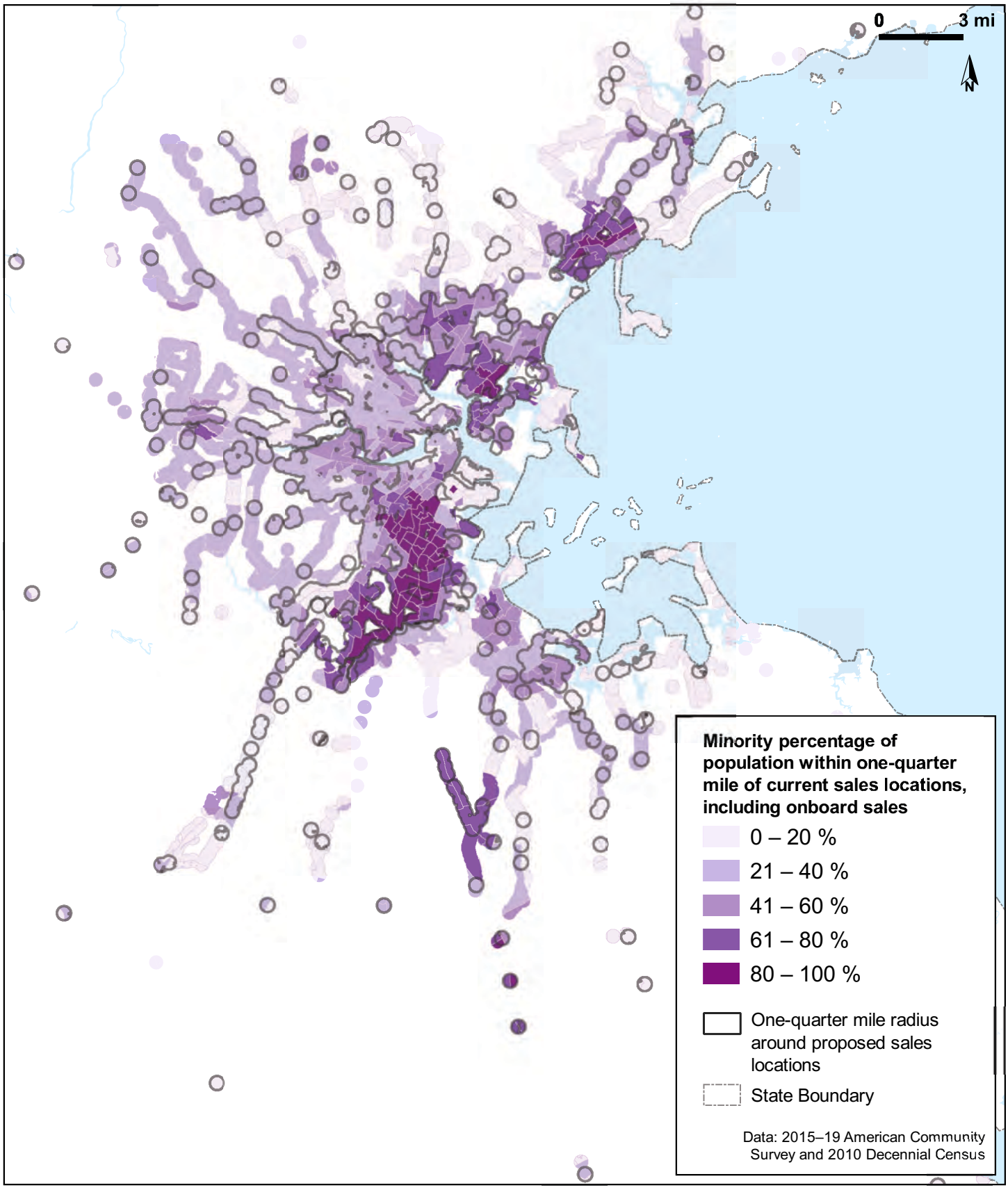
Fare Transformation Sales Network Analysis



CTPS

FIGURE 1B
Low-income Populations Living within One-quarter Mile of Fare Sales Locations in the Commuter Rail Service Area

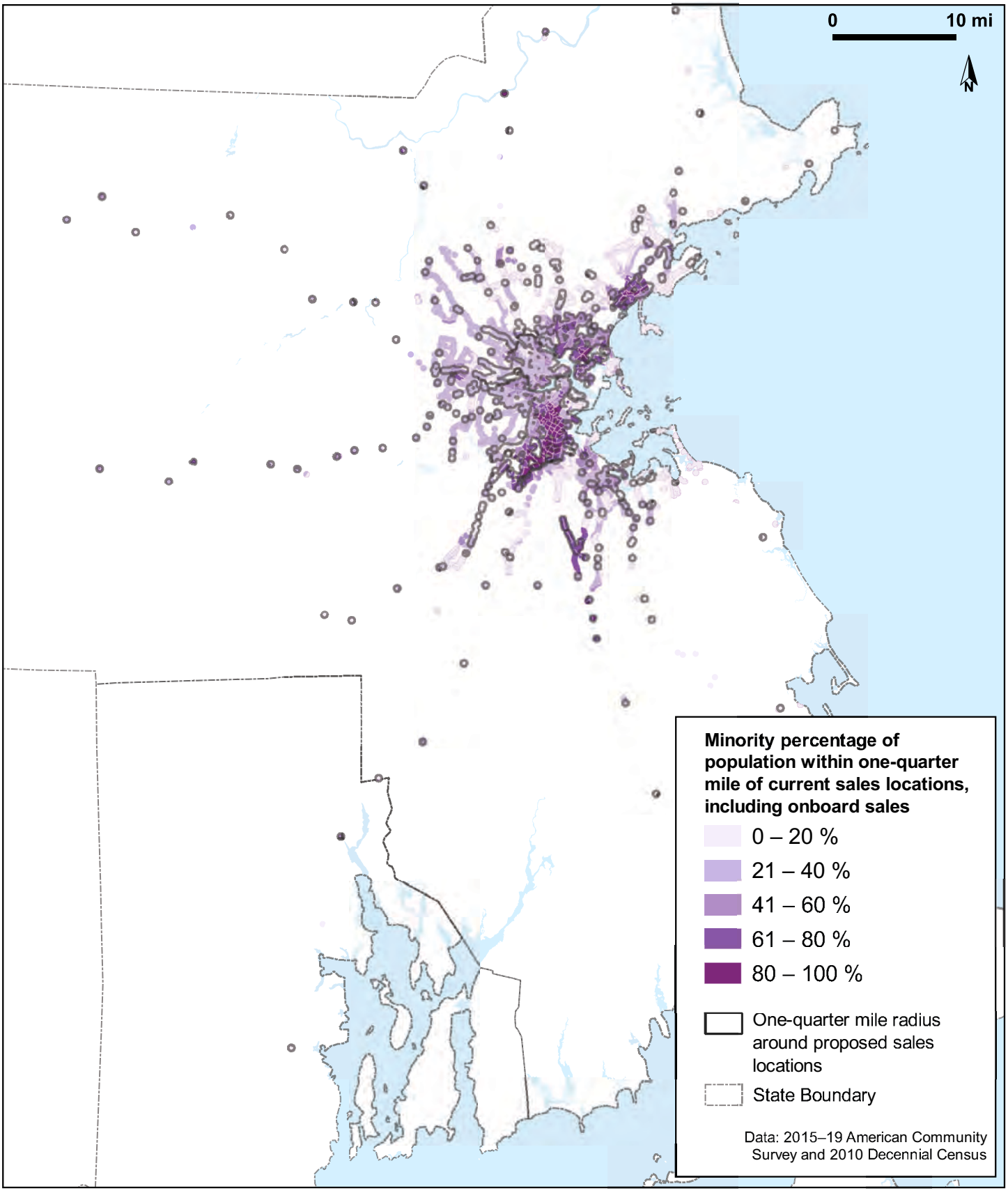
Fare Transformation Sales Network Analysis



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FIGURE 2A
Minority Populations Living within One-quarter Mile of Fare Sales Locations in the MBTA Bus Service Area

Fare Transformation Sales Network Analysis



CTPS

FIGURE 2B
Minority Populations Living within One-quarter Mile of Fare Sales Locations in the Commuter Rail Service Area

Fare Transformation Sales Network Analysis

The Boston Region Metropolitan Planning Organization (MPO) operates its programs, services, and activities in compliance with federal nondiscrimination laws including Title VI of the Civil Rights Act of 1964 (Title VI), the Civil Rights Restoration Act of 1987, and related statutes and regulations. Title VI prohibits discrimination in federally assisted programs and requires that no person in the United States of America shall, on the grounds of race, color, or national origin (including limited English proficiency), be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination under any program or activity that receives federal assistance. Related federal nondiscrimination laws administered by the Federal Highway Administration, Federal Transit Administration, or both, prohibit discrimination on the basis of age, sex, and disability. The Boston Region MPO considers these protected populations in its Title VI Programs, consistent with federal interpretation and administration. In addition, the Boston Region MPO provides meaningful access to its programs, services, and activities to individuals with limited English proficiency, in compliance with U.S. Department of Transportation policy and guidance on federal Executive Order 13166.

The Boston Region MPO also complies with the Massachusetts Public Accommodation Law, M.G.L. c 272 sections 92a, 98, 98a, which prohibits making any distinction, discrimination, or restriction in admission to, or treatment in a place of public accommodation based on race, color, religious creed, national origin, sex, sexual orientation, disability, or ancestry. Likewise, the Boston Region MPO complies with the Governor's Executive Order 526, section 4, which requires that all programs, activities, and services provided, performed, licensed, chartered, funded, regulated, or contracted for by the state shall be conducted without unlawful discrimination based on race, color, age, gender, ethnicity, sexual orientation, gender identity or expression, religion, creed, ancestry, national origin, disability, veteran's status (including Vietnam-era veterans), or background.

A complaint form and additional information can be obtained by contacting the MPO or at http://www.bostonmpo.org/mpo_non_discrimination. To request this information in a different language or in an accessible format, please contact

Title VI Specialist
Boston Region MPO
10 Park Plaza, Suite 2150
Boston, MA 02116
civilrights@ctps.org
857.702.3700 (voice)
617.570.9193 (TTY)





Appendix 7G

CTPS Service Equity Analysis of Forging Ahead



TECHNICAL MEMORANDUM

DATE: **March 3, 2021**
TO: **Kat Benesh, Massachusetts Bay Transportation Authority**
FROM: **Steven Andrews, Central Transportation Planning Staff**
Blake Acton, Central Transportation Planning Staff
RE: **Forging Ahead: Title VI Service Equity Analysis**

Due to the COVID-19 pandemic, the Massachusetts Bay Transportation Authority (MBTA) is planning to adjust its service levels to better address the significant drop in ridership that has occurred and to hold resources in reserve to ensure that the MBTA is able to continue to provide key service to critical workers who have continued to rely on transit during the course of the pandemic.

The MBTA will make significant service reductions beginning in spring 2021 and plans to make an additional set of changes in summer 2021. These combined changes, part of the Forging Ahead initiative, will exceed the MBTA's major service change threshold.

As a recipient of federal funds through the Federal Transit Administration (FTA), the MBTA is required to comply with Title VI of the Civil Rights Act of 1964 (Title 49, part 21, Code of Federal Regulations). The FTA provides guidance to its subrecipients for carrying out Title VI obligations in Circular 4702.1B. This circular includes a requirement for large transit providers to conduct a Title VI service equity analysis to evaluate, prior to implementing any major service change, whether the planned change would have a discriminatory impact on the basis of race, color, or national origin.

Although low-income populations are not a protected class under Title VI, the FTA also requires transit providers to determine whether low-income populations would bear a disproportionate burden from a proposed major service reduction. Traditionally, the Central Transportation Planning Staff (CTPS) of the Boston Region MPO has conducted service equity analyses for the MBTA.

Civil Rights, nondiscrimination, and accessibility information is on the last page.

Summary of Service Equity Analysis Results

The results of the service equity analysis indicate that implementation of the combined changes through summer 2021 Forging Ahead service changes will not result in disparate impacts to minority populations, disparate benefits to nonminority populations, disproportionate burdens to low-income populations, or disproportionate benefits to non-low-income populations.

The remainder of this memo documents the detailed results, assumptions, and methodology used to support these conclusions.

1 PLANNED SERVICE LEVEL CHANGES AND THE PUBLIC PROCESS

A detailed description of the service change proposal and how the MBTA derived the proposed changes can be found in the "Forging Ahead: Service Proposal" presented at the Fiscal and Management Control Board's (FMCB) December 14, 2020 meeting.[1] The following is a summary of the proposed changes to the MBTA's fixed-route modes:

Bus	• Suspend 20 routes, consolidate 16, shorten four, and operate a few routes during peak times only (many of these changes are already in effect as part of COVID schedules) • 20 percent frequency reduction to non-essential routes • Five percent frequency reduction to essential routes
Rapid Transit	• 20 percent frequency reduction to Green, Orange, and Red Lines • As much as five percent frequency reduction to Blue Line
Commuter Rail	• Maintain partial weekend service on the Worcester, Providence, Newburyport/Rockport, Middleboro and Fairmount branches; suspend weekend service on all other branches • End weekday service at 9:00 PM • Reduce peak and weekday service • Close five stations (Plimptonville, Prides Crossing, Silver Hill, Hastings, and Plymouth)
Ferry	• Suspend Charlestown and Hingham direct service • Reduce weekday Hingham/Hull ferry service

[1] www.mbta.com/events/2020-12-14/fiscal-and-management-control-board-meeting *and* cdn.mbta.com/sites/default/files/2020-12/2020-12-14-fmcb-F-forging-ahead-service-proposal.pdf

These changes were informed by a public process following a presentation on November 9, 2020, of the Forging Ahead service changes. The MBTA held ten virtual public meetings and a virtual public hearing on an initial set of service changes. The MBTA also reached out to more than 200 community organizations and collected nearly 7,000 public comments. More detailed information about the public engagement program and its findings can be found at www.mbta.com/forging-ahead-comments.

2 TITLE VI SERVICE EQUITY ANALYSIS: FRAMEWORK

2.1 The MBTA's Disparate Impact/Disproportionate Burden Policy

The FTA's Title VI Circular 4702.1B, issued in October 2012, under the authority of Title VI of the Civil Rights Act of 1964, directs transit providers to study proposed major service changes and all fare changes for possible disparities in impacts on minority and low-income riders and communities.

This requirement is part of the MBTA's Title VI assurance that no person shall, on the basis of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity receiving federal financial assistance.

The MBTA's Disparate Impact/Disproportionate Burden (DI/DB) Policy describes the general procedure for conducting service and fare equity analyses. Appendix C contains the full text of the current January 30, 2017, version of the MBTA's DI/DB Policy.[2] This service equity analysis was performed using the information contained in the DI/DB Policy.

2.2 The Need to Conduct a Service Equity Analysis

The MBTA must conduct a service equity analysis when it is proposing a major service change. The MBTA defines a *major service change* in its DI/DB Policy as a service change that meets one or more of the following conditions:

- A change in revenue-vehicle hours (RVH) per week of at least 10 percent by mode
- For routes with at least 80 RVH per week, a change in RVH per week of at least 25 percent
- For all routes, a change in route length of at least 25 percent or three miles

Major service changes also include elimination of existing routes or the addition of new routes. If there is a major service change on any route in a package of

[2] http://www.mbta.com/policies/fairness

changes, the equity analysis must consider all concurrently proposed changes in the aggregate.

Because the MBTA is proposing to eliminate entire routes, among other major RVH reductions, the MBTA's Forging Ahead service changes are considered a major service change.

2.3 Evaluation of Adverse Impacts

The MBTA defines adverse effects as changes to

- the amount of service scheduled, by route and by mode, as measured by changes to weekly RVH; and
- access to the service, by route, as measured by changes to route length.

In accordance with the MBTA's DI/DB Policy, the MBTA analyzes the changes to RVH and route length as relative and absolute changes.[3] CTPS also measures the relative share of the burden, which compares the protected population group's share of the net benefit or burden relative to its existing share of the metric.

The MBTA's threshold for determining when adverse effects of major service changes may result in disparate impacts on minority and/or disproportionate burdens on low-income populations is 20 percent. If the ratio of the impact on minority to non-minority populations or low-income to non-low-income populations is more than 1.20 (or 20 percent), then the proposed change would be determined to pose a potential disparate impact or disproportionate burden.

2.4 Datasets and Definitions

Demographic Datasets

CTPS, in consultation with the MBTA, chose to use the 2015–17 MBTA Systemwide Passenger Survey dataset instead of the United States Census Bureau's American Community Survey and census data because the vast majority of the changes the MBTA is proposing are changes to service levels rather than route structure. Many of the route structure changes are route eliminations. Route structure changes largely affect existing riders, which the survey represents well.

More detail about the 2015–17 MBTA Systemwide Passenger Survey, the results, and data collection methodologies may be found at www.ctps.org/apps/mbtasurvey2018/index.html.

[3] Massachusetts Bay Transportation Authority, *MBTA Disparate Impact/Disproportionate Burden (DI/DB) Policy*, January 30, 2017.

Definitions of Minority and Low-Income Populations

Minority status was determined based on the answers to the race and ethnicity survey questions. Respondents were classified as having minority status if they self-identified as a race other than white and/or as Hispanic or Latino/Latina. Respondents were classified as not having minority status if they self-identified solely as white and not Hispanic or Latino/Latina. All other respondents could not be classified and were not included in the calculation of minority percentages. The systemwide survey minority percentage was 34 percent.

Low-income status was determined for respondents who provided their household income. Household incomes of less than $43,500 were classified as low income. The low-income threshold was set at 60 percent of the median household income for the MBTA service area from the 2013 American Community Survey. Respondents who did not answer the household income question or selected “prefer not to say” could not be classified and were not included in the calculation of low-income percentages. The systemwide survey low-income percentage was 29 percent.

The Comparison Population

In this analysis, the comparator is the amount of each metric, RVH, and route-miles of service, attributed to each population.

The Effects of COVID-19 on Rider Demographics

The impact of the COVID-19 pandemic on ridership varies by demographics and mode. While the 2015–17 MBTA Systemwide Passenger Survey is the premier dataset for rider demographics, it describes pre-pandemic rider demographics and may no longer be representative of current riders. To address this issue, the demographics of riders on each route were assigned in two ways.

The first method (“proportionate allocation”) uses demographic data directly from the survey and allocates a metric (revenue-vehicle hours or route-miles) by the percent of a demographic by route. For example, every week Route 1 operated 1,325 RVH and 37 percent of its riders were classified as minorities. For this route, 490 RVH (1,325 * 0.37) were allocated to riders classified as minorities.

The second method (“full allocation”) assigns each route a classification based on whether it is above or below the systemwide average for each demographic. All of a given metric is attributed to the group. Continuing the above example, according to the 2015–17 MBTA Systemwide Passenger Survey, 34 percent of systemwide riders were classified as minority riders. Because the ratio of riders classified as minority riders on Route 1 (37 percent) is greater than 34 percent,

all 1,325 RVH were allocated to minority riders. Under the full allocation method, Route 1 would be classified as a minority route.

The proportionate allocation method allows the allocation of route metrics to vary between routes and more precisely captures each route's unique demographic profile. However, this method is limited by the, likely false, assumption that the COVID-19 pandemic has not significantly altered rider demographics since the survey was conducted. The full allocation method addresses this limitation by acknowledging that while the precise demographics of current riders are unknown, route *classifications* are likely to remain stable. Most pre-COVID low-income and minority routes will probably remain low-income and minority routes post-COVID. This method sacrifices some precision by "hiding" the variation within low-income and minority routes, but since the accuracy of this variation is questionable the results are likely a better representation of reality.

3 TITLE VI SERVICE EQUITY ANALYSIS RESULTS

3.1 Change in Weekly Revenue-Vehicle Hours

Using the proportionate allocation method described above, CTPS estimated the existing RVH by rider classification and the change in RVH from the planned, pre-COVID spring 2020 schedule to the proposed summer 2021 schedule, as shown in Table 1.

Table 9, at the end of the document, presents the RVH changes on a route-by-route basis.

Table 1
Net Change in Weekly Revenue-Vehicle Hours for Each Population Group: Proportionate Allocation

Population Group	Existing Hours	Share of Existing Hours	Net Change	Share of Net Change	Percent Change
Minority	28,381.6	41.4%	-3,325.1	30.9%	-11.7%
Nonminority	40,200.7	58.6%	-7,445.4	69.1%	-18.5%
Low-Income	24,903.0	36.3%	-2,973.4	27.6%	-11.9%
Non-Low-Income	43,679.3	63.7%	-7,797.1	72.4%	-17.9%

Note: Values in this table differ from those published in a January 29, 2021, Air Quality and Environmental Justice Analysis. Revenue-vehicle hour reductions for several commuter rail routes were inadvertandtly underreported.

Sources: MBTA revenue-vehicle hour spreadsheets as processed by CTPS and 2015–17 MBTA Systemwide Passenger Survey.

Using the full allocation method described above, CTPS performed the same analysis, as shown in Table 2.

Table 2
Net Change in Weekly Revenue Vehicle Hours for Each Population Group: Full Allocation

Population Group	Existing Hours	Share of Existing Hours	Net Change	Share of Net Change	Percent Change
Minority	37,698.1	55.0%	-4,003.4	37.2%	-10.6%
Nonminority	30,884.2	45.0%	-6,767.1	62.8%	-21.9%
Low-Income	39,401.6	57.5%	-4,144.2	38.5%	-10.5%
Non-Low-Income	29,180.7	42.5%	-6,626.3	61.5%	-22.7%

Note: Values in this table differ from those published in a January 29, 2021, Air Quality and Environmental Justice Analysis. Revenue-vehicle hour reductions for several commuter rail routes were inadvertandtly underreported.

Sources: MBTA revenue vehicle hour spreadsheets as processed by CTPS and 2015–17 MBTA Systemwide Passenger Survey.

Weekly Revenue Vehicle Hours: Disparate Impact/Disproportionate Burden Analysis

Table 3 summarizes the results of the service equity analysis relating to RVH changes according to the proportionate allocation methodology. As shown in Table 3, the results do not indicate a disparate impact to minority populations or a disproportionate burden to low-income populations.

Table 3
Summary of DI/DB Results Relating to Revenue-Vehicle Hour Changes: Proportionate Allocation

Analysis Method	Impacts on Minority Populations	Impacts on Low-Income Populations
Absolute Change (Protected / Nonprotected)	**No Disparate Impact** Ratio: -3,325 / -7,445 < 120%	**No Disproportionate Burden** Ratio: -2,973 / -7,797 < 120%
Relative Change (Protected / Nonprotected)	**No Disparate Impact** Ratio: -11.7% / -18.5% < 120%	**No Disproportionate Burden** Ratio: -11.9% / -17.9% < 120%
Protected Share of Change / Protected Share of Existing Hours	**No Disparate Impact** Ratio: 30.9% / 41.4% < 120%	**No Disproportionate Burden** Ratio: 27.6% / 36.3% < 120%

Note: Values correspond to Table 1.

DI/DB = disparate impact/disproportionate burden.

Source: CTPS.

Table 4 summarizes the results of the service equity analysis relating to RVH changes according to the full allocation methodology. As shown in Table 4, the results do not indicate a disparate impact to minority populations or a disproportionate burden to low-income populations.

Table 4
Summary of DI/DB Results Relating to Revenue-Vehicle Hour Changes: Full Allocation

Analysis Method	Impacts on Minority Populations	Impacts on Low-Income Populations
Absolute Change (Protected / Nonprotected)	**No Disparate Impact** Ratio: -4,003 / -6,767 < 120%	**No Disproportionate Burden** Ratio: -4,144 / -6,626 < 120%
Relative Change (Protected / Nonprotected)	**No Disparate Impact** Ratio: -10.6% / -21.9% < 120%	**No Disproportionate Burden** Ratio: -10.5% / -22.7% < 120%
Protected Share of Change / Protected Share of Existing Hours	**No Disparate Impact** Ratio: 37.2% / 55.0% < 120%	**No Disproportionate Burden** Ratio: 38.5% / 57.5% < 120%

Note: Values correspond to Table 2.
DI/DB = disparate impact/disproportionate burden.
Source: CTPS.

3.4 Change in Route Length

Base Route Length

When calculating each route's length CTPS used the shapes contained in the planned spring 2020 General Transit Feed Specification (GTFS) schedule. CTPS grouped all of the variations of a route travelling in the same direction (inbound or outbound) and calculated the length of the route including each distinct portion of the alignment only once. This step was repeated for the other direction and the lengths were summed to determine the total route length. For the weekday schedules, CTPS used a "no school" schedule to eliminate some of the MBTA's exceptionally unusual variations from the calculations.

Changes to Route Length

The MBTA's service planning department provided a GTFS file for its proposed spring 2021 schedule—the schedule for which the planned route length changes will take place. For each route that the MBTA was planning to change, the route lengths were calculated and compared to the planned pre-COVID spring 2020 route lengths.

The largest portion of route length changes came from the elimination of services (approximately 90 percent of the net loss of miles). Routes that were consolidated—Routes 24 and 27, 136 and 137, and 214 and 216—were excluded from the analysis because coverage was maintained. Because Route 79 can be viewed as a short-turn variant of Route 77 and the MBTA maintained coverage at all of the route's stops, its elimination was treated as a loss of 1.4 miles rather than the full route length. Given the demographics of the route, which has a lower proportion of minority riders and low-income riders, from an equity perspective, this is a conservative choice.

Using the proportionate allocation method described above, CTPS estimated the existing route length by rider classification and the change in route length from the planned pre-COVID spring 2020 schedule to the proposed summer 2021 schedule, as shown in Table 5.

Table 10, at the end of the document, presents the route length changes on a route-by-route basis.

Table 5
Net Change in Weekly Route Length for Each Population Group: Proportionate Allocation

Population Group	Existing Miles	Share of Existing Miles	Net Change	Share of Net Change	Percent Change
Minority	7,369	33.1%	-938	27.1%	-12.7%
Nonminority	14,867	66.9%	-2,517	72.9%	-16.9%
Low-Income	6,356	28.6%	-810	23.4%	-12.7%
Non-Low-Income	15,880	71.4%	-2,645	76.6%	-16.7%

Sources: MBTA GTFS files and descriptions of proposed changes as processed by CTPS and 2015–17 MBTA Systemwide Passenger Survey.

Using the full allocation method described above, CTPS performed the same analysis, as shown in Table 6.

Table 6
Net Change in Weekly Route Length for Each Population Group: Full Allocation

Population Group	Existing Miles	Share of Existing Miles	Net Change	Share of Net Change	Percent Change
Minority	9,779	44.0%	-1,216	35.2%	-12.4%
Nonminority	12,457	56.0%	-2,239	64.8%	-18.0%
Low-Income	9,877	44.4%	-939	27.2%	-9.5%
Non-Low-Income	12,359	55.6%	-2,516	72.8%	-20.4%

Sources: MBTA GTFS files and descriptions of proposed changes as processed by CTPS and 2015–17 MBTA Systemwide Passenger Survey.

Weekly Route Length: Disparate Impact/Disproportionate Burden Analysis

Table 7 summarizes the results of the service equity analysis relating to route length changes according to the proportionate allocation methodology. As shown in Table 7, the results do not indicate a disparate impact to minority populations or a disproportionate burden to low-income populations.

Table 7
Summary of DI/DB Results Relating to Route Length Changes: Proportionate Allocation

Analysis Method	Impacts on Minority Populations	Impacts on Low-Income Populations
Absolute Change (Protected / Nonprotected)	**No Disparate Impact** Ratio: -938 / -2,517 < 120%	**No Disproportionate Burden** Ratio: -810 / -2,645 < 120%
Relative Change (Protected / Nonprotected)	**No Disparate Impact** Ratio: -12.7% / -16.9% < 120%	**No Disproportionate Burden** Ratio: -12.7% / -16.7% < 120%
Protected Share of Change / Protected Share of Existing Hours	**No Disparate Impact** Ratio: 27.1% / 33.1% < 120%	**No Disproportionate Burden** Ratio: 23.4% / 28.6% < 120%

Note: Values correspond to Table 5.
DI/DB = disparate impact/disproportionate burden.
Source: CTPS.

Table 8 summarizes the results of the service equity analysis relating to route length changes according to the full allocation methodology. As shown in Table 8, the results do not indicate a disparate impact to minority populations or a disproportionate burden to low-income populations.

Table 8
Summary of DI/DB Results Relating to Route Length Changes: Full Allocation

Analysis Method	Impacts on Minority Populations	Impacts on Low-Income Populations
Absolute Change (Protected / Nonprotected)	**No Disparate Impact** Ratio: -1,216 / -2,239 < 120%	**No Disproportionate Burden** Ratio: -939 / -2,516 < 120%
Relative Change (Protected / Nonprotected)	**No Disparate Impact** Ratio: -12.4% / -18.0% < 120%	**No Disproportionate Burden** Ratio: -9.5% / -20.4% < 120%
Protected Share of Change / Protected Share of Existing Hours	**No Disparate Impact** Ratio: 35.2% / 44.0% < 120%	**No Disproportionate Burden** Ratio: 27.2% / 44.4% < 120%

Note: Values correspond to Table 6.
DI/DB = disparate impact/disproportionate burden.
Source: CTPS.

Appendix: Tables 9 and 10

The Boston Region Metropolitan Planning Organization (MPO) operates its programs, services, and activities in compliance with federal nondiscrimination laws including Title VI of the Civil Rights Act of 1964 (Title VI), the Civil Rights Restoration Act of 1987, and related statutes and regulations. Title VI prohibits discrimination in federally assisted programs and requires that no person in the United States of America shall, on the grounds of race, color, or national origin (including limited English proficiency), be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination under any program or activity that receives federal assistance. Related federal nondiscrimination laws administered by the Federal Highway Administration, Federal Transit Administration, or both, prohibit discrimination on the basis of age, sex, and disability. The Boston Region MPO considers these protected populations in its Title VI Programs, consistent with federal interpretation and administration. In addition, the Boston Region MPO provides meaningful access to its programs, services, and activities to individuals with limited English proficiency, in compliance with U.S. Department of Transportation policy and guidance on federal Executive Order 13166.

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A complaint form and additional information can be obtained by contacting the MPO or at http://www.bostonmpo.org/mpo_non_discrimination. To request this information in a different language or in an accessible format, please contact

Title VI Specialist
Boston Region MPO
10 Park Plaza, Suite 2150
Boston, MA 02116
civilrights@ctps.org
857.702.3700 (voice)
617.570.9193 (TTY)

Table 9: Weekly Revenue-Vehicle Hour Changes by Day of the Week

Route	Mode	Existing RVH	Change in RVH	Minority Percentage	Low Income Percentage	Minority RVH Change	Nonminority RVH Change	Low-Income RVH Change	Non-Low-Income RVH	Minority Route	Low Income Route	Minority Route RVH	Nonminority Route RVH	Low Income Route RVH	Non-Low-Income Route
1	Bus	1,325.0	-148.1	37%	34%	-54.3	-93.7	-50.2	-97.9	1	1	-148.1	0.0	-148.1	0.0
4	Bus	82.4	-20.4	14%	7%	-2.8	-17.7	-1.4	-19.0	0	0	0.0	-20.4	0.0	-20.4
7	Bus	371.5	-146.7	9%	6%	-12.9	-133.8	-8.3	-138.4	0	0	0.0	-146.7	0.0	-146.7
8	Bus	528.8	-25.6	54%	38%	-13.8	-11.8	-9.8	-15.8	1	1	-25.6	0.0	-25.6	0.0
9	Bus	680.7	-24.4	11%	15%	-2.7	-21.7	-3.7	-20.7	0	0	0.0	-24.4	0.0	-24.4
10	Bus	426.7	-21.9	32%	25%	-7.1	-14.8	-5.5	-16.4	0	0	0.0	-21.9	0.0	-21.9
11	Bus	504.5	-115.4	9%	11%	-10.2	-105.1	-13.0	-102.3	0	0	0.0	-115.4	0.0	-115.4
14	Bus	206.3	-12.1	86%	57%	-10.4	-1.6	-6.8	-5.2	1	1	-12.1	0.0	-12.1	0.0
15	Bus	740.5	-6.9	75%	67%	-5.2	-1.7	-4.6	-2.3	1	1	-6.9	0.0	-6.9	0.0
16	Bus	564.6	118.6	74%	50%	87.8	30.8	59.3	59.3	1	1	118.6	0.0	118.6	0.0
17	Bus	248.2	4.3	78%	69%	3.4	1.0	3.0	1.4	1	1	4.3	0.0	4.3	0.0
18	Bus	112.7	-112.7	81%	62%	-91.6	-21.1	-69.4	-43.4	1	1	-112.7	0.0	-112.7	0.0
19	Bus	288.1	-18.8	67%	34%	-12.6	-6.2	-6.3	-12.4	1	1	-18.8	0.0	-18.8	0.0
21	Bus	348.0	-20.0	87%	48%	-17.4	-2.6	-9.6	-10.4	1	1	-20.0	0.0	-20.0	0.0
22	Bus	869.3	28.0	91%	70%	25.4	2.6	19.5	8.5	1	1	28.0	0.0	28.0	0.0
23	Bus	1,124.9	19.7	85%	59%	16.7	3.0	11.6	8.1	1	1	19.7	0.0	19.7	0.0
24	Bus	187.1	32.3	92%	56%	29.8	2.5	18.1	14.2	1	1	32.3	0.0	32.3	0.0
26	Bus	154.8	0.4	86%	67%	0.4	0.1	0.3	0.1	1	1	0.4	0.0	0.4	0.0
27	Bus	76.9	-76.9	93%	60%	-71.1	-5.8	-46.1	-30.8	1	1	-76.9	0.0	-76.9	0.0
28	Bus	1,233.8	70.0	92%	65%	64.6	5.4	45.5	24.5	1	1	70.0	0.0	70.0	0.0
29	Bus	234.4	-28.6	91%	70%	-26.0	-2.7	-19.9	-8.7	1	1	-28.6	0.0	-28.6	0.0
30	Bus	217.8	7.9	70%	43%	5.6	2.4	3.4	4.5	1	1	7.9	0.0	7.9	0.0
31	Bus	569.7	-45.7	93%	58%	-42.3	-3.4	-26.4	-19.3	1	1	-45.7	0.0	-45.7	0.0
32	Bus	836.2	12.9	76%	43%	9.7	3.2	5.5	7.4	1	1	12.9	0.0	12.9	0.0
33	Bus	129.6	-0.7	92%	56%	-0.6	-0.1	-0.4	-0.3	1	1	-0.7	0.0	-0.7	0.0
34	Bus	381.2	-34.4	42%	37%	-14.3	-20.1	-12.7	-21.7	1	1	-34.4	0.0	-34.4	0.0
34E	Bus	506.1	20.6	42%	37%	8.6	12.0	7.6	13.0	1	1	20.6	0.0	20.6	0.0
35	Bus	290.6	4.2	33%	24%	1.4	2.8	1.0	3.2	0	0	0.0	4.2	0.0	4.2
36	Bus	362.0	2.8	37%	33%	1.0	1.8	0.9	1.9	1	1	2.8	0.0	2.8	0.0
37	Bus	185.8	1.2	32%	31%	0.4	0.8	0.4	0.8	0	1	0.0	1.2	1.2	0.0
38	Bus	135.4	-0.3	39%	24%	-0.1	-0.2	-0.1	-0.2	1	0	-0.3	0.0	0.0	-0.3
39	Bus	1,147.2	-271.1	36%	27%	-97.6	-173.6	-74.3	-196.8	1	0	-271.1	0.0	0.0	-271.1
40	Bus	153.4	2.0	51%	33%	1.0	1.0	0.7	1.4	1	1	2.0	0.0	2.0	0.0
41	Bus	311.0	-34.1	68%	63%	-23.3	-10.8	-21.4	-12.7	1	1	-34.1	0.0	-34.1	0.0
42	Bus	247.6	-8.7	91%	66%	-7.9	-0.8	-5.7	-2.9	1	1	-8.7	0.0	-8.7	0.0
43	Bus	220.1	-81.7	51%	44%	-42.1	-39.6	-35.6	-46.1	1	1	-81.7	0.0	-81.7	0.0
44	Bus	381.5	-53.5	91%	66%	-48.7	-4.8	-35.3	-18.2	1	1	-53.5	0.0	-53.5	0.0
45	Bus	418.5	-58.2	87%	70%	-50.3	-7.8	-40.4	-17.7	1	1	-58.2	0.0	-58.2	0.0
47	Bus	607.9	-76.5	33%	26%	-25.0	-51.5	-20.2	-56.4	0	0	0.0	-76.5	0.0	-76.5
50	Bus	118.8	3.3	51%	33%	1.7	1.6	1.1	2.2	1	1	3.3	0.0	3.3	0.0
51	Bus	192.4	0.4	42%	23%	0.2	0.3	0.1	0.3	1	0	0.4	0.0	0.0	0.4
52	Bus	138.8	-138.8	35%	27%	-48.7	-90.2	-37.4	-101.5	1	0	-138.8	0.0	0.0	-138.8
55	Bus	168.4	-168.4	34%	24%	-56.8	-111.5	-39.7	-128.7	0	0	0.0	-168.4	0.0	-168.4
57	Bus	1,049.3	-133.2	28%	43%	-37.9	-95.3	-56.9	-76.3	0	1	0.0	-133.2	-133.2	0.0
59	Bus	218.7	-47.3	42%	36%	-19.9	-27.4	-17.1	-30.3	1	1	-47.3	0.0	-47.3	0.0
60	Bus	267.2	-62.2	43%	32%	-26.8	-35.4	-19.8	-42.5	1	1	-62.2	0.0	-62.2	0.0
61	Bus	128.3	-37.0	35%	36%	-12.8	-24.1	-13.3	-23.7	1	1	-37.0	0.0	-37.0	0.0
62	Bus	179.7	59.0	25%	26%	14.6	44.4	15.6	43.4	0	0	0.0	59.0	0.0	59.0
64	Bus	257.3	-23.9	30%	25%	-7.1	-16.8	-5.9	-17.9	0	0	0.0	-23.9	0.0	-23.9
65	Bus	232.8	26.4	28%	28%	7.3	19.1	7.3	19.0	0	0	0.0	26.4	0.0	26.4
66	Bus	1,367.9	91.8	40%	40%	36.7	55.2	36.8	55.1	1	1	91.8	0.0	91.8	0.0
67	Bus	93.3	-50.6	22%	10%	-11.4	-39.2	-5.3	-45.3	0	0	0.0	-50.6	0.0	-50.6
68	Bus	61.6	-61.6	36%	25%	-22.1	-39.5	-15.2	-46.4	1	0	-61.6	0.0	0.0	-61.6
69	Bus	259.7	-29.0	36%	32%	-10.3	-18.7	-9.3	-19.7	1	1	-29.0	0.0	-29.0	0.0
70	Bus	913.0	33.2	35%	36%	11.5	21.7	12.0	21.3	1	1	33.2	0.0	33.2	0.0
71	Bus	632.2	-145.3	24%	21%	-35.0	-110.3	-30.6	-114.7	0	0	0.0	-145.3	0.0	-145.3
72	Bus	20.8	-20.8	20%	17%	-4.1	-16.7	-3.4	-17.3	0	0	0.0	-20.8	0.0	-20.8
73	Bus	736.2	-254.0	19%	21%	-49.5	-204.6	-52.2	-201.8	0	0	0.0	-254.0	0.0	-254.0
74	Bus	168.7	-62.1	32%	15%	-19.8	-42.3	-9.6	-52.5	0	0	0.0	-62.1	0.0	-62.1
75	Bus	177.0	-32.5	32%	21%	-10.3	-22.2	-6.8	-25.7	0	0	0.0	-32.5	0.0	-32.5
76	Bus	165.0	-165.0	40%	10%	-66.0	-99.0	-16.4	-148.6	1	0	-165.0	0.0	0.0	-165.0
77	Bus	1,110.4	-411.9	24%	35%	-98.9	-313.0	-144.4	-267.4	0	1	0.0	-411.9	-411.9	0.0
78	Bus	243.6	1.9	34%	20%	0.7	1.3	0.4	1.5	0	0	0.0	1.9	0.0	1.9
79	Bus	129.6	-129.6	22%	19%	-29.1	-100.5	-25.2	-104.4	0	0	0.0	-129.6	0.0	-129.6
80	Bus	291.0	5.3	28%	24%	1.5	3.8	1.3	4.1	0	0	0.0	5.3	0.0	5.3
83	Bus	252.2	-37.5	29%	35%	-10.9	-26.6	-13.2	-24.3	0	1	0.0	-37.5	-37.5	0.0
84	Bus	28.6	-28.6	17%	8%	-4.9	-23.7	-2.4	-26.2	0	0	0.0	-28.6	0.0	-28.6
85	Bus	71.3	-21.2	34%	13%	-7.1	-14.0	-2.9	-18.3	0	0	0.0	-21.2	0.0	-21.2
86	Bus	600.0	63.7	26%	36%	16.4	47.4	22.7	41.0	0	1	0.0	63.7	63.7	0.0
87	Bus	390.2	-43.7	22%	25%	-9.6	-34.1	-11.0	-32.7	0	0	0.0	-43.7	0.0	-43.7
88	Bus	370.3	-40.2	25%	24%	-10.2	-29.9	-9.5	-30.7	0	0	0.0	-40.2	0.0	-40.2
89	Bus	333.8	-10.1	25%	24%	-2.6	-7.6	-2.4	-7.7	0	0	0.0	-10.1	0.0	-10.1
90	Bus	164.9	-21.5	25%	24%	-5.5	-16.0	-5.1	-16.4	0	0	0.0	-21.5	0.0	-21.5
91	Bus	201.1	-49.9	32%	48%	-15.9	-33.9	-23.9	-26.0	0	1	0.0	-49.9	-49.9	0.0
92	Bus	217.3	-88.1	23%	30%	-20.2	-67.9	-26.7	-61.4	0	1	0.0	-88.1	-88.1	0.0
93	Bus	388.4	-89.7	23%	30%	-20.6	-69.1	-27.2	-62.5	0	1	0.0	-89.7	-89.7	0.0
94	Bus	230.2	-40.7	28%	29%	-11.4	-29.3	-11.9	-28.9	0	1	0.0	-40.7	-40.7	0.0
95	Bus	249.2	-18.6	41%	42%	-7.6	-11.0	-7.9	-10.8	1	1	-18.6	0.0	-18.6	0.0
96	Bus	293.3	-51.3	23%	28%	-11.7	-39.6	-14.4	-36.9	0	0	0.0	-51.3	0.0	-51.3
97	Bus	112.1	-1.0	48%	54%	-0.5	-0.5	-0.6	-0.5	1	1	-1.0	0.0	-1.0	0.0
99	Bus	179.0	-10.8	47%	37%	-5.1	-5.7	-3.9	-6.9	1	1	-10.8	0.0	-10.8	0.0
100	Bus	144.9	-15.3	49%	27%	-7.6	-7.8	-4.1	-11.2	1	0	-15.3	0.0	0.0	-15.3
101	Bus	495.0	-99.4	31%	40%	-30.9	-68.4	-40.2	-59.2	0	1	0.0	-99.4	-99.4	0.0
104	Bus	388.1	149.9	56%	56%	83.9	66.0	84.1	65.8	1	1	149.9	0.0	149.9	0.0
105	Bus	123.0	17.7	52%	45%	9.1	8.5	8.0	9.6	1	1	17.7	0.0	17.7	0.0
106	Bus	278.7	17.4	46%	40%	8.0	9.4	7.0	10.3	1	1	17.4	0.0	17.4	0.0
108	Bus	302.3	28.1	45%	57%	12.5	15.5	15.9	12.2	1	1	28.1	0.0	28.1	0.0
109	Bus	378.9	97.7	38%	61%	37.6	60.1	59.8	37.9	1	1	97.7	0.0	97.7	0.0
110	Bus	348.0	26.7	51%	43%	13.5	13.2	11.5	15.2	1	1	26.7	0.0	26.7	0.0
111	Bus	1,206.2	214.5	63%	60%	134.2	80.3	128.1	86.4	1	1	214.5	0.0	214.5	0.0
112	Bus	249.9	17.4	47%	64%	8.2	9.3	11.1	6.3	1	1	17.4	0.0	17.4	0.0
114	Bus	36.6	0.0	60%	55%	0.0	0.0	0.0	0.0	1	1	0.0	0.0	0.0	0.0
116	Bus	554.2	77.9	60%	55%	46.6	31.2	43.0	34.9	1	1	77.9	0.0	77.9	0.0
117	Bus	498.9	57.7	60%	55%	34.6	23.1	31.9	25.8	1	1	57.7	0.0	57.7	0.0
119	Bus	151.8	-21.1	47%	68%	-9.8	-11.2	-14.3	-6.8	1	1	-21.1	0.0	-21.1	0.0
120	Bus	290.6	-30.1	45%	53%	-13.6	-16.6	-15.9	-14.2	1	1	-30.1	0.0	-30.1	0.0
121	Bus	31.6	0.0	45%	53%	0.0	0.0	0.0	0.0	1	1	0.0	0.0	0.0	0.0
131	Bus	91.7	-26.0	12%	10%	-3.2	-22.8	-2.5	-23.5	0	0	0.0	-26.0	0.0	-26.0
132	Bus	136.7	-18.4	22%	29%	-4.0	-14.4	-5.4	-13.0	0	1	0.0	-18.4	-18.4	0.0
134	Bus	317.6	-70.3	45%	49%	-31.7	-38.6	-34.7	-35.6	1	1	-70.3	0.0	-70.3	0.0
136	Bus	196.8	-196.8	20%	24%	-38.9	-157.9	-46.6	-150.2	0	0	0.0	-196.8	0.0	-196.8
137	Bus	172.9	158.2	21%	39%	32.4	125.7	61.6	96.5	0	1	0.0	158.2	158.2	0.0
170	Bus	27.4	-27.4	69%	54%	-19.0	-8.4	-14.8	-12.7	1	1	-27.4	0.0	-27.4	0.0
201	Bus	212.0	-125.8	46%	47%	-58.3	-67.4	-58.6	-67.2	1	1	-125.8	0.0	-125.8	0.0
202	Bus	154.0	-117.0	46%	47%	-54.3	-62.7	-54.5	-62.5	1	1	-117.0	0.0	-117.0	0.0

Table 9: Weekly Revenue-Vehicle Hour Changes by Day of the Week

Route	Mode	Existing RVH	Change in RVH	Minority Percentage	Low Income Percentage	Minority RVH Change	Nonminority RVH Change	Low-Income RVH Change	Non-Low-Income RVH	Minority Route	Low Income Route	Minority Route RVH	Nonminority Route RVH	Low Income Route RVH	Non-Low-Income Route
210	Bus	231.9	-115.9	52%	51%	-60.6	-55.3	-58.8	-57.1	1	1	-115.9	0.0	-115.9	0.0
211	Bus	229.9	-124.1	41%	40%	-50.8	-73.3	-49.1	-75.0	1	1	-124.1	0.0	-124.1	0.0
212	Bus	64.8	-64.8	52%	51%	-33.9	-30.9	-32.9	-32.0	1	1	-64.8	0.0	-64.8	0.0
214	Bus	190.3	-200.8	38%	39%	-75.9	-124.9	-79.3	-121.6	1	1	-200.8	0.0	-200.8	0.0
215	Bus	422.1	-194.7	46%	60%	-89.4	-105.3	-117.3	-77.4	1	1	-194.7	0.0	-194.7	0.0
216	Bus	297.6	-99.3	38%	39%	-37.6	-61.8	-39.2	-60.1	1	1	-99.3	0.0	-99.3	0.0
217	Bus	50.3	-25.3	49%	39%	-12.4	-12.9	-9.9	-15.4	1	1	-25.3	0.0	-25.3	0.0
220	Bus	496.5	-232.1	28%	43%	-65.9	-166.2	-99.1	-133.0	0	1	0.0	-232.1	-232.1	0.0
221	Bus	34.8	-34.8	28%	43%	-9.9	-24.9	-14.9	-20.0	0	1	0.0	-34.8	-34.8	0.0
222	Bus	460.3	-248.8	34%	40%	-85.3	-163.5	-99.5	-149.3	1	1	-248.8	0.0	-248.8	0.0
225	Bus	542.7	-247.5	47%	41%	-116.7	-130.8	-102.6	-144.9	1	1	-247.5	0.0	-247.5	0.0
226	Bus	255.5	-151.5	47%	41%	-71.4	-80.1	-62.8	-88.7	1	1	-151.5	0.0	-151.5	0.0
230	Bus	516.9	-227.9	49%	39%	-112.6	-115.3	-88.9	-139.0	1	1	-227.9	0.0	-227.9	0.0
236	Bus	189.7	-70.4	44%	36%	-31.0	-39.4	-25.2	-45.2	1	1	-70.4	0.0	-70.4	0.0
238	Bus	438.8	-178.7	44%	36%	-78.7	-99.9	-63.9	-114.7	1	1	-178.7	0.0	-178.7	0.0
240	Bus	744.0	-345.9	72%	57%	-247.4	-98.4	-195.5	-150.4	1	1	-345.9	0.0	-345.9	0.0
245	Bus	183.0	-150.9	49%	39%	-74.1	-76.8	-59.2	-91.7	1	1	-150.9	0.0	-150.9	0.0
325	Bus	90.3	-90.3	15%	5%	-13.1	-77.2	-4.7	-85.7	0	0	0.0	-90.3	0.0	-90.3
326	Bus	110.9	-110.9	17%	2%	-18.3	-92.6	-2.5	-108.4	0	0	0.0	-110.9	0.0	-110.9
350	Bus	317.3	24.7	38%	36%	9.4	15.3	8.9	15.8	1	1	24.7	0.0	24.7	0.0
351	Bus	33.8	-33.8	48%	18%	-16.1	-17.7	-6.2	-27.6	1	0	-33.8	0.0	0.0	-33.8
352	Bus	69.4	-69.4	25%	3%	-17.2	-52.2	-1.9	-67.5	0	0	0.0	-69.4	0.0	-69.4
354	Bus	175.5	-49.4	18%	10%	-8.7	-40.7	-4.8	-44.6	0	0	0.0	-49.4	0.0	-49.4
411	Bus	137.0	-14.6	50%	38%	-7.3	-7.3	-5.5	-9.1	1	1	-14.6	0.0	-14.6	0.0
424	Bus	36.9	-7.4	48%	58%	-3.6	-3.9	-4.3	-3.1	1	1	-7.4	0.0	-7.4	0.0
426	Bus	373.2	-141.3	32%	28%	-45.0	-96.3	-40.0	-101.3	0	0	0.0	-141.3	0.0	-141.3
428	Bus	30.8	-30.8	32%	28%	-9.8	-21.0	-8.7	-22.1	0	0	0.0	-30.8	0.0	-30.8
429	Bus	290.9	-51.3	45%	73%	-23.0	-28.3	-37.5	-13.8	1	1	-51.3	0.0	-51.3	0.0
430	Bus	149.1	-8.0	50%	38%	-4.0	-4.0	-3.0	-5.0	1	1	-8.0	0.0	-8.0	0.0
434	Bus	13.4	-13.4	44%	66%	-5.9	-7.5	-8.8	-4.6	1	1	-13.4	0.0	-13.4	0.0
435	Bus	201.8	-10.3	44%	66%	-4.6	-5.7	-6.7	-3.6	1	1	-10.3	0.0	-10.3	0.0
436	Bus	171.3	-28.1	44%	66%	-12.4	-15.6	-18.4	-9.7	1	1	-28.1	0.0	-28.1	0.0
439	Bus	23.3	-5.0	11%	33%	-0.6	-4.4	-1.7	-3.3	0	1	0.0	-5.0	-5.0	0.0
441	Bus	207.8	-30.4	47%	68%	-14.4	-16.0	-20.8	-9.6	1	1	-30.4	0.0	-30.4	0.0
442	Bus	433.1	82.4	38%	54%	31.7	50.7	44.7	37.7	1	1	82.4	0.0	82.4	0.0
450	Bus	333.8	-39.5	48%	58%	-18.9	-20.6	-23.0	-16.6	1	1	-39.5	0.0	-39.5	0.0
451	Bus	57.3	-57.3	18%	70%	-10.3	-47.0	-40.3	-16.9	0	1	0.0	-57.3	-57.3	0.0
455	Bus	596.8	2.5	52%	60%	1.3	1.2	1.5	1.0	1	1	2.5	0.0	2.5	0.0
456	Bus	44.1	-44.1	48%	58%	-21.1	-23.0	-25.6	-18.5	1	1	-44.1	0.0	-44.1	0.0
465	Bus	113.6	-113.6	18%	70%	-20.4	-93.2	-80.0	-33.6	0	1	0.0	-113.6	-113.6	0.0
501	Bus	257.1	-61.3	21%	13%	-12.9	-48.4	-8.2	-53.1	0	0	0.0	-61.3	0.0	-61.3
502	Bus	104.8	-104.8	23%	10%	-24.5	-80.3	-10.8	-93.9	0	0	0.0	-104.8	0.0	-104.8
503	Bus	67.8	-67.8	28%	15%	-18.9	-48.9	-10.1	-57.7	0	0	0.0	-67.8	0.0	-67.8
504	Bus	262.2	-32.2	23%	7%	-7.5	-24.7	-2.2	-29.9	0	0	0.0	-32.2	0.0	-32.2
505	Bus	214.7	-214.7	23%	7%	-49.9	-164.8	-14.9	-199.8	0	0	0.0	-214.7	0.0	-214.7
553	Bus	204.3	-43.7	26%	25%	-11.5	-32.2	-10.8	-32.9	0	0	0.0	-43.7	0.0	-43.7
554	Bus	148.8	-104.7	39%	35%	-40.3	-64.4	-36.2	-68.5	1	1	-104.7	0.0	-104.7	0.0
556	Bus	103.1	-64.0	31%	13%	-19.8	-44.2	-8.6	-55.4	0	0	0.0	-64.0	0.0	-64.0
558	Bus	84.3	-42.2	37%	23%	-15.8	-26.4	-9.6	-32.6	1	0	-42.2	0.0	0.0	-42.2
627	Bus	25.6	-25.6	31%	20%	-8.0	-17.6	-5.0	-20.6	0	0	0.0	-25.6	0.0	-25.6
708	Bus	182.8	-28.0	44%	25%	-12.4	-15.6	-7.0	-21.0	1	0	-28.0	0.0	0.0	-28.0
712	Bus	171.5	0.0	19%	26%	0.0	0.0	0.0	0.0	0	0	0.0	0.0	0.0	0.0
713	Bus	177.8	0.0	19%	26%	0.0	0.0	0.0	0.0	0	0	0.0	0.0	0.0	0.0
741	Bus	711.0	-163.0	24%	14%	-38.7	-124.3	-23.0	-140.0	0	0	0.0	-163.0	0.0	-163.0
742	Bus	418.3	-45.0	24%	14%	-10.7	-34.3	-6.4	-38.6	0	0	0.0	-45.0	0.0	-45.0
743	Bus	790.3	22.9	60%	58%	13.8	9.1	13.2	9.7	1	1	22.9	0.0	22.9	0.0
746	Bus	202.6	-93.9	24%	14%	-22.3	-71.6	-13.3	-80.6	0	0	0.0	-93.9	0.0	-93.9
747	Bus	266.2	-61.3	33%	21%	-20.3	-41.1	-12.7	-48.6	0	0	0.0	-61.3	0.0	-61.3
749	Bus	701.4	-4.3	61%	36%	-2.6	-1.7	-1.5	-2.7	1	1	-4.3	0.0	-4.3	0.0
751	Bus	479.1	-25.6	61%	36%	-15.6	-10.1	-9.2	-16.4	1	1	-25.6	0.0	-25.6	0.0
Fairmount Line	Comm. Rail	180.4	17.2	53%	16%	9.1	8.1	2.8	14.5	1	0	17.2	0.0	0.0	17.2
Fitchburg Line	Comm. Rail	331.5	-74.5	17%	9%	-12.8	-61.8	-6.4	-68.1	0	0	0.0	-74.5	0.0	-74.5
Franklin Line	Comm. Rail	199.8	-25.5	12%	6%	-3.1	-22.4	-1.5	-24.0	0	0	0.0	-25.5	0.0	-25.5
Greenbush Line	Comm. Rail	153.1	-8.5	5%	3%	-0.5	-8.0	-0.3	-8.2	0	0	0.0	-8.5	0.0	-8.5
Haverhill Line	Comm. Rail	214.7	-49.1	12%	7%	-5.8	-43.2	-3.4	-45.6	0	0	0.0	-49.1	0.0	-49.1
Kingston/Plymouth Line	Comm. Rail	164.8	-29.8	5%	6%	-1.5	-28.2	-1.7	-28.1	0	0	0.0	-29.8	0.0	-29.8
Lowell Line	Comm. Rail	230.1	-65.6	15%	7%	-9.6	-56.0	-4.8	-60.8	0	0	0.0	-65.6	0.0	-65.6
Middleborough/Lakeville Line	Comm. Rail	154.0	13.5	24%	7%	3.2	10.3	1.0	12.5	0	0	0.0	13.5	0.0	13.5
Needham Line	Comm. Rail	130.4	-39.1	12%	4%	-4.5	-34.6	-1.6	-37.5	0	0	0.0	-39.1	0.0	-39.1
Newburyport/Rockport Line	Comm. Rail	429.3	-122.2	9%	8%	-11.5	-110.7	-10.3	-111.9	0	0	0.0	-122.2	0.0	-122.2
Providence/Stoughton Line	Comm. Rail	423.3	-50.7	15%	5%	-7.7	-43.0	-2.6	-48.2	0	0	0.0	-50.7	0.0	-50.7
Worcester Line	Comm. Rail	406.2	-151.2	19%	8%	-28.5	-122.8	-11.9	-139.3	0	0	0.0	-151.2	0.0	-151.2
Hingham - Long Wharf	Ferry	224.2	-92.7	2%	4%	-1.5	-91.2	-3.4	-89.3	0	0	0.0	-92.7	0.0	-92.7
Hingham Shipyard - Rowes Wharf	Ferry	149.5	-149.5	2%	4%	-2.5	-147.0	-5.5	-143.9	0	0	0.0	-149.5	0.0	-149.5
Long Wharf - Charlestown Navy Yard	Ferry	114.3	-114.3	2%	4%	-1.9	-112.4	-4.2	-110.0	0	0	0.0	-114.3	0.0	-114.3
Blue Line	Heavy Rail	1,039.5	-64.4	37%	33%	-24.0	-40.4	-21.4	-43.0	1	1	-64.4	0.0	-64.4	0.0
Orange Line	Heavy Rail	1,594.7	-309.2	35%	28%	-109.1	-200.1	-85.4	-223.7	1	0	-309.2	0.0	0.0	-309.2
Red Line	Heavy Rail	2,576.6	-446.8	28%	23%	-127.3	-319.5	-101.8	-345.1	0	0	0.0	-446.8	0.0	-446.8
Green Line	Light Rail	6,945.1	-1,068.3	27%	28%	-285.1	-783.2	-298.9	-769.4	0	0	0.0	-1,068.3	0.0	-1,068.3
Mattapan Trolley	Light Rail	385.1	16.0	57%	35%	9.1	6.9	5.7	10.4	1	1	16.0	0.0	16.0	0.0
Total Change						**-3,325.1**	**-7,445.4**	**-2,973.4**	**-7,797.1**			**-4,003.4**	**-6,767.1**	**-4,144.2**	**-6,626.3**

RVH = revenue-vehicle hours.

Source: MBTA Revenue-Vehicle Hour Estimates.

Table 10: Route Length Changes by Day of the Week

Route	DOW	Mode	Weekly Length Spring 2020	Weekly Length Change	Minority Percentage	Low-Income Percentage	Minorty Length Change	Nonminority Length Change	Low-Income Length Change	Non-Low-Income Length Change	Minority Route	Low-Income Route	Minorty Length Change	Nonminority Length Change	Low-Income Length Change	Non-Low-Income Length Change
18	Weekday	Bus	39.3	-39.3	81%	62%	-31.9	-7.4	-24.2	-15.1	**100%**	**100%**	-39.3	0.0	-39.3	0.0
18	Saturday	Bus	7.9	-7.9	81%	62%	-6.4	-1.5	-4.8	-3.0	**100%**	**100%**	-7.9	0.0	-7.9	0.0
52	Weekday	Bus	106.6	-106.6	35%	27%	-37.3	-69.2	-28.7	-77.9	**100%**	0%	-106.6	0.0	0.0	-106.6
55	Weekday	Bus	28.5	-28.5	34%	24%	-9.6	-18.9	-6.7	-21.8	0%	0%	0.0	-28.5	0.0	-28.5
55	Saturday	Bus	3.5	-3.5	34%	24%	-1.2	-2.3	-0.8	-2.7	0%	0%	0.0	-3.5	0.0	-3.5
55	Sunday	Bus	3.5	-3.5	34%	24%	-1.2	-2.3	-0.8	-2.7	0%	0%	0.0	-3.5	0.0	-3.5
62	Weekday	Bus	126.8	71.1	25%	26%	17.6	53.5	18.8	52.3	0%	0%	0.0	71.1	0.0	71.1
68	Weekday	Bus	22.0	-22.0	36%	25%	-7.9	-14.1	-5.4	-16.6	**100%**	0%	-22.0	0.0	0.0	-22.0
72	Weekday	Bus	2.5	-2.5	20%	17%	-0.5	-2.0	-0.4	-2.1	0%	0%	0.0	-2.5	0.0	-2.5
74	Weekday	Bus	39.0	-2.3	32%	15%	-0.7	-1.5	-0.3	-1.9	0%	0%	0.0	-2.3	0.0	-2.3
74	Saturday	Bus	7.8	-0.5	32%	15%	-0.1	-0.3	-0.1	-0.4	0%	0%	0.0	-0.5	0.0	-0.5
75	Weekday	Bus	44.1	2.1	32%	21%	0.7	1.4	0.4	1.7	0%	0%	0.0	2.1	0.0	2.1
75	Saturday	Bus	8.8	-0.5	32%	21%	-0.1	-0.3	-0.1	-0.4	0%	0%	0.0	-0.5	0.0	-0.5
75	Sunday	Bus	8.8	-0.5	32%	21%	-0.1	-0.3	-0.1	-0.4	0%	0%	0.0	-0.5	0.0	-0.5
76	Weekday	Bus	149.2	-149.2	40%	10%	-59.7	-89.5	-14.8	-134.3	**100%**	0%	-149.2	0.0	0.0	-149.2
78	Weekday	Bus	83.0	-8.0	34%	20%	-2.7	-5.3	-1.6	-6.4	0%	0%	0.0	-8.0	0.0	-8.0
78	Saturday	Bus	15.0	0.0	34%	20%	0.0	0.0	0.0	0.0	0%	0%	0.0	0.0	0.0	0.0
78	Sunday	Bus	15.0	0.0	34%	20%	0.0	0.0	0.0	0.0	0%	0%	0.0	0.0	0.0	0.0
79	Weekday	Bus	7.0	-7.0	22%	19%	-1.6	-5.4	-1.4	-5.6	0%	0%	0.0	-7.0	0.0	-7.0
80	Weekday	Bus	66.6	-4.6	28%	24%	-1.3	-3.3	-1.1	-3.5	0%	0%	0.0	-4.6	0.0	-4.6
80	Saturday	Bus	13.3	-0.9	28%	24%	-0.3	-0.7	-0.2	-0.7	0%	0%	0.0	-0.9	0.0	-0.9
80	Sunday	Bus	13.3	-0.9	28%	24%	-0.3	-0.7	-0.2	-0.7	0%	0%	0.0	-0.9	0.0	-0.9
88	Weekday	Bus	40.9	0.0	25%	24%	0.0	0.0	0.0	0.0	0%	0%	0.0	0.0	0.0	0.0
88	Saturday	Bus	8.2	0.0	25%	24%	0.0	0.0	0.0	0.0	0%	0%	0.0	0.0	0.0	0.0
88	Sunday	Bus	8.2	0.0	25%	24%	0.0	0.0	0.0	0.0	0%	0%	0.0	0.0	0.0	0.0
170	Weekday	Bus	210.7	-210.7	69%	54%	-145.9	-64.8	-113.5	-97.2	**100%**	**100%**	-210.7	0.0	-210.7	0.0
195	Weekday	Bus	32.3	-32.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
195	Saturday	Bus	6.5	-6.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
195	Sunday	Bus	6.5	-6.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
212	Weekday	Bus	29.1	-29.1	52%	51%	-15.2	-13.9	-14.8	-14.3	**100%**	**100%**	-29.1	0.0	-29.1	0.0
212	Saturday	Bus	5.8	-5.8	52%	51%	-3.0	-2.8	-3.0	-2.9	**100%**	**100%**	-5.8	0.0	-5.8	0.0
221	Weekday	Bus	57.4	-57.4	28%	43%	-16.3	-41.1	-24.5	-32.9	0%	**100%**	0.0	-57.4	-57.4	0.0
325	Weekday	Bus	127.2	-127.2	15%	5%	-18.5	-108.6	-6.6	-120.6	0%	0%	0.0	-127.2	0.0	-127.2
326	Weekday	Bus	84.9	-84.9	17%	2%	-14.0	-70.8	-1.9	-83.0	0%	0%	0.0	-84.9	0.0	-84.9
351	Weekday	Bus	205.0	-205.0	48%	18%	-97.5	-107.5	-37.6	-167.4	**100%**	0%	-205.0	0.0	0.0	-205.0
354	Weekday	Bus	212.3	-2.8	18%	10%	-0.5	-2.3	-0.3	-2.5	0%	0%	0.0	-2.8	0.0	-2.8
428	Weekday	Bus	134.6	-134.6	32%	28%	-42.9	-91.7	-38.1	-96.5	0%	0%	0.0	-134.6	0.0	-134.6
434	Weekday	Bus	178.6	-178.6	44%	66%	-79.2	-99.4	-117.0	-61.6	**100%**	**100%**	-178.6	0.0	-178.6	0.0
451	Weekday	Bus	83.8	-83.8	18%	70%	-15.1	-68.7	-59.0	-24.8	0%	**100%**	0.0	-83.8	-83.8	0.0
456	Weekday	Bus	75.6	-75.6	48%	58%	-36.2	-39.4	-43.9	-31.7	**100%**	**100%**	-75.6	0.0	-75.6	0.0
465	Weekday	Bus	123.9	-123.9	18%	70%	-22.3	-101.6	-87.2	-36.7	0%	**100%**	0.0	-123.9	-123.9	0.0
465	Saturday	Bus	18.1	-18.1	18%	70%	-3.3	-14.8	-12.7	-5.4	0%	**100%**	0.0	-18.1	-18.1	0.0
505	Weekday	Bus	140.7	-140.7	23%	7%	-32.7	-108.0	-9.8	-130.9	0%	0%	0.0	-140.7	0.0	-140.7
553	Weekday	Bus	163.2	-88.3	26%	25%	-23.3	-65.0	-21.9	-66.4	0%	0%	0.0	-88.3	0.0	-88.3
553	Saturday	Bus	14.8	0.1	26%	25%	0.0	0.1	0.0	0.1	0%	0%	0.0	0.1	0.0	0.1
554	Weekday	Bus	198.0	-108.8	39%	35%	-41.9	-66.9	-37.6	-71.2	**100%**	**100%**	-108.8	0.0	-108.8	0.0
556	Weekday	Bus	130.9	-102.9	31%	13%	-31.8	-71.0	-13.8	-89.0	0%	0%	0.0	-102.9	0.0	-102.9
558	Weekday	Bus	159.7	-77.9	37%	23%	-29.1	-48.7	-17.6	-60.2	**100%**	0%	-77.9	0.0	0.0	-77.9
710	Weekday	Bus	62.9	-62.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Boat-F1	Weekday	Ferry	106.5	-106.5	2%	4%	-1.8	-104.7	-4.0	-102.5	0%	0%	0.0	-106.5	0.0	-106.5
Boat-F2H	Saturday	Ferry	47.4	-47.4	2%	4%	-0.8	-46.6	-1.8	-45.6	0%	0%	0.0	-47.4	0.0	-47.4
Boat-F2H	Sunday	Ferry	47.4	-47.4	2%	4%	-0.8	-46.6	-1.8	-45.7	0%	0%	0.0	-47.4	0.0	-47.4
Boat-F4	Weekday	Ferry	12.4	-12.4	2%	4%	-0.2	-12.2	-0.5	-11.9	0%	0%	0.0	-12.4	0.0	-12.4
Boat-F4	Saturday	Ferry	2.5	-2.5	2%	4%	0.0	-2.4	-0.1	-2.4	0%	0%	0.0	-2.5	0.0	-2.5
Boat-F4	Sunday	Ferry	2.5	-2.5	2%	4%	0.0	-2.4	-0.1	-2.4	0%	0%	0.0	-2.5	0.0	-2.5
CR-Fitchburg	Saturday	Comm. Rail	107.0	-107.0	17%	9%	-18.3	-88.6	-9.2	-97.7	0%	0%	0.0	-107.0	0.0	-107.0
CR-Fitchburg	Sunday	Comm. Rail	107.0	-107.0	17%	9%	-18.3	-88.6	-9.2	-97.7	0%	0%	0.0	-107.0	0.0	-107.0
CR-Franklin	Saturday	Comm. Rail	60.8	-60.8	12%	6%	-7.4	-53.4	-3.5	-57.3	0%	0%	0.0	-60.8	0.0	-60.8
CR-Franklin	Sunday	Comm. Rail	60.8	-60.8	12%	6%	-7.4	-53.4	-3.5	-57.3	0%	0%	0.0	-60.8	0.0	-60.8
CR-Greenbush	Saturday	Comm. Rail	55.5	-55.5	5%	3%	-2.9	-52.5	-1.9	-53.6	0%	0%	0.0	-55.5	0.0	-55.5
CR-Greenbush	Sunday	Comm. Rail	55.5	-55.5	5%	3%	-2.9	-52.5	-1.9	-53.6	0%	0%	0.0	-55.5	0.0	-55.5
CR-Haverhill	Saturday	Comm. Rail	65.8	-65.8	12%	7%	-7.8	-58.0	-4.6	-61.2	0%	0%	0.0	-65.8	0.0	-65.8
CR-Haverhill	Sunday	Comm. Rail	65.8	-65.8	12%	7%	-7.8	-58.0	-4.6	-61.2	0%	0%	0.0	-65.8	0.0	-65.8
CR-Kingston	Saturday	Comm. Rail	74.2	-74.2	5%	6%	-3.8	-70.4	-4.2	-70.0	0%	0%	0.0	-74.2	0.0	-74.2
CR-Kingston	Sunday	Comm. Rail	74.2	-74.2	5%	6%	-3.8	-70.4	-4.2	-70.0	0%	0%	0.0	-74.2	0.0	-74.2
CR-Lowell	Saturday	Comm. Rail	50.5	-50.5	15%	7%	-7.4	-43.1	-3.7	-46.8	0%	0%	0.0	-50.5	0.0	-50.5
CR-Lowell	Sunday	Comm. Rail	50.5	-50.5	15%	7%	-7.4	-43.1	-3.7	-46.8	0%	0%	0.0	-50.5	0.0	-50.5
CR-Needham	Saturday	Comm. Rail	27.3	-27.3	12%	4%	-3.1	-24.1	-1.1	-26.1	0%	0%	0.0	-27.3	0.0	-27.3
CR-Newburyport	Saturday	Comm. Rail	105.7	-105.7	12%	4%	-12.2	-93.5	-4.3	-101.3	0%	0%	0.0	-105.7	0.0	-105.7
CR-Newburyport	Sunday	Comm. Rail	105.7	-105.7	9%	8%	-10.0	-95.7	-8.9	-96.7	0%	0%	0.0	-105.7	0.0	-105.7
Total Change							**-937.6**	**-2517.5**	**-809.8**	**-2645.3**			**-1216.3**	**-2238.7**	**-938.9**	**-2516.2**

Note: Weekday route lengths are multiplied by five to obtain a weekly value.
CR = commuter rail. DOW = Day of the week.
Sources: Planned, Pre-COVID Spring 2020 MBTA GTFS and Spring 2021 MBTA GTFS.





Appendix 7H

Approval of Service Equity Analysis of Forging Ahead



This is a true and accurate copy of the action taken by the Fiscal and Management Control Board of the Massachusetts Bay Transportation Authority on March 8, 2021

WHEREAS, on December 14, 2020, the FMCB approved certain service changes for Fiscal Year 2021 (the "Service Changes") as part of the Forging Ahead process, an effort that the MBTA initiated as a result of the effects of the COVID-19 pandemic to focus its limited resources on its most transit-critical riders; and

WHEREAS the Service Changes are considered a major service change pursuant to the Federal Transit Administrator (FTA) Title VI Circular 4702.1B, triggering a Service Equity Analysis (the "Equity Analysis") to determine whether the implementation of the proposed service changes will result in disparate impacts to minority populations or disproportionate burdens to low-income populations; and

WHEREAS the FMCB's approval on those Service Changes was subject to, among other things, the Authority's submission of an environmental notification form as required under M.G.L. ch. 161A, s. 5(d) (the "ENF") and the Authority's completion of and the FMCB's approval of such Equity Analysis; and

WHEREAS the Authority submitted the ENF; and

WHEREAS the Equity Analysis has been completed for the Service Changes in accordance with the Authority's Disproportionate Impact/Disproportionate Burden Policy; and

WHEREAS the results of the Equity Analysis found that the implementation of the Service Changes will not result in disparate impacts to minority populations, disparate benefits to nonminority populations, disproportionate burdens to low-income populations, or disparate benefits to non-low-income populations; and

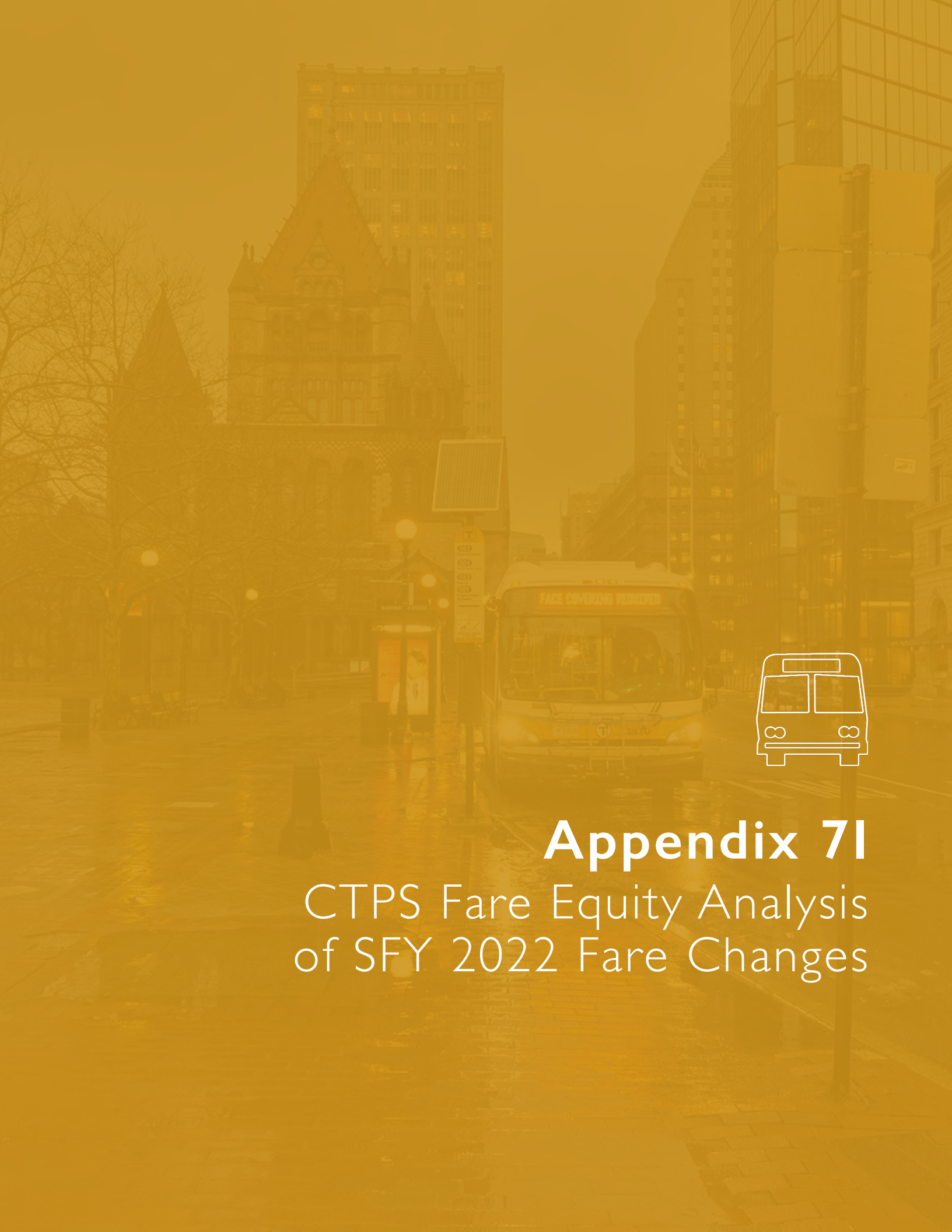
WHEREAS the FMCB is aware of and has considered the Equity Analysis for the Service Changes;

NOW, THEREFORE, IT IS VOTED THAT:

The FMCB hereby approves the Title VI Service Equity Analysis for the Service Changes and directs the Authority, through the General Manager, to take all steps necessary to provide notice of such acceptance to FTA, as appropriate.

Marie Breen 3/9/2021
Marie Breen, General Counsel





Appendix 7I

CTPS Fare Equity Analysis of SFY 2022 Fare Changes



TECHNICAL MEMORANDUM

DATE: **April 26, 2021**
TO: **Steve Poftak, General Manager, Massachusetts Bay Transportation Authority**
FROM: **Steven Andrews, Central Transportation Planning Staff**
RE: **SFY 2022: Fare Equity Analysis Results**

When considering changes to fares, the Massachusetts Bay Transportation Authority (MBTA) undertakes a process to evaluate the impacts of the proposed changes. The analysis for state fiscal year (SFY) 2022 was conducted with the assistance of the Central Transportation Planning Staff (CTPS), which is the staff of the Boston Region Metropolitan Planning Organization (MPO). CTPS examined the impacts of proposed fare changes on fare equity.

CTPS used an elasticity-based spreadsheet model known as the Fare Elasticity, Ridership, and Revenue Estimation Tool (FERRET) along with ad hoc analyses to estimate the effects of the fare changes. This document, while providing some information on revenue impacts, is focused on fulfilling the MBTA's responsibility to conduct a fare equity analysis, as required by Title VI of the Civil Rights Act of 1964 (Title VI), to determine if the fare changes would result in disparate impacts for minority populations or disproportionate burdens for low-income populations.

In CTPS's fare equity analysis, which was completed using pre-pandemic ridership levels, or intra-pandemic levels scaled to pre-pandemic levels, CTPS compared the relative fare decreases between riders who are classified as minorities and all riders, and between riders who are classified as low-income and all riders. **CTPS applied the MBTA's disparate-impact and disproportionate-burden policies and identified a disproportionate benefit to non-low-income riders. CTPS did not identify a disproportionate impact to minority riders.**

1 FARE CHANGE PROPOSAL

The MBTA is planning three changes to its fares and fare structure:

1. lowering the Outer Express bus fares to match the Inner Express bus fares
2. providing Youth Pass riders access to discounted express bus fares

Civil Rights, nondiscrimination, and accessibility information is on the last page.

3. providing Youth Pass riders access to discounted commuter rail and ferry fares

Few Outer Express bus routes remain in the MBTA's system and setting the fares to those of the Inner Express routes simplifies the MBTA's fare structure. Expanding Youth Pass user access to commuter services will correspondingly expand the ability of those riders to access more of the MBTA system.

2 FARE EQUITY ANALYSIS

2.1 Requirements

Title VI of the Civil Rights Act of 1964 prohibits discrimination, either intentionally or unintentionally, by recipients of federal financial assistance based on race, color, or national origin. To comply with Title 49 of the Code of Federal Regulations (CFR) Section 21.5(b) (2), 49 CFR Section 21.5(b) (7), and Appendix C to 49 CFR Part 21, the MBTA must evaluate any fare changes to fixed-route modes prior to implementation to determine if the proposed changes would have a discriminatory effect. The Federal Transit Administration (FTA) provides guidance for conducting fare equity analyses in FTA Circular 4702.1B ("Circular"), Section IV.7.b. Prior to a fare change, the MBTA must analyze any available information generated from ridership surveys that indicates whether minority and/or low-income riders would be disproportionately more likely than overall riders to use the mode of service, payment type, or payment media that would be subject to a fare change. In addition, the MBTA must describe the datasets and collection methods used in its analysis.

The Circular states that the transit provider shall

- determine the number and percentage of users of each fare media subject to change;
- review fares before and after the change;
- compare the relative cost burden impacts of the proposed fare change between minority and overall users for each fare media; and
- compare the relative cost burden impacts of the proposed fare change between low-income and overall users for each fare media.

Under Title VI and other directives, the FTA requires that transit agencies develop a policy to assess whether a proposed fare change would have a disparate impact on minority populations or disproportionate burden on low-income populations. The FTA Title VI guidelines define *disparate impact* as "a facially neutral policy or practice that disproportionately affects members of a group identified by race, color, or national origin, where the recipient's policy or practice lacks a substantial legitimate justification and where there exists one or more alternatives that would serve the same legitimate objectives, but with less

disproportionate effects on the basis, of race, color, or national origin." The guidelines define *disproportionate burden* as "a neutral policy or practice that disproportionately affects low-income populations more than non-low income populations."

2.2 MBTA Title VI Disparate Impact/Disproportionate Burden Policy

2.2.1 Policy Thresholds

The MBTA's January 30, 2017, Disparate Impact/Disproportionate Burden (DI/DB) Policy explains the methodology to be used for fare equity analyses.

> For all fare changes, the MBTA will compare the percentage change in the average fare for minority and overall riders and for low-income and overall riders. For fare-type changes across all modes, the MBTA will assess whether minority and low-income customers are more likely to use the affected fare type or media than overall riders. Any or all proposed fare changes will be considered in the aggregate and results evaluated using the fare DI/DB threshold, below.
>
> The MBTA's threshold for determining when fare changes may result in disparate impacts or disproportionate burdens on minority or low-income populations, respectively, is 10%.
>
> *MBTA Disparate Impact/Disproportionate Burden (DI/DB) Policy*

The policy thresholds are encapsulated in the following equations. A disparate impact would be found if the average fare decrease for minorities is less than 90 percent of the average fare decrease for all riders, or if the average fare increase for minorities is greater than 110 percent of the average increase for all riders:

Minority Average Fare Decrease < 90% × All-Rider Average Fare Decrease
Minority Average Fare Increase > 110% × All-Rider Average Fare Increase

A disproportionate burden would be found if the average fare decrease for low-income riders is less than 90 percent of the average fare decrease for all riders, or if the average fare increase for low-income riders is greater than 110 percent of the average increase for all riders:

Low-income Average Fare Decrease < 90% × All-Rider Average Fare Decrease
Low-income Average Fare Increase > 110% × All-Rider Average Fare Increase

The DI/DB Policy also describes the steps the MBTA will take when disparate impacts or disproportionate burdens are identified.

> Upon finding a potential disparate impact on minority populations from a proposed fare change, the MBTA will analyze alternatives/revisions to the proposed change that meet the same goals of the original proposal. Any proposed alternative fare change would be subject to a fare equity analysis. The MBTA will implement any proposal in accordance with then current FTA guidance.
>
> Where potential disparate impacts are identified, the MBTA will provide a meaningful opportunity for public comment on any proposed mitigation measures, including any less discriminatory alternatives that may be available.
>
> Upon finding a potential disproportionate burden on low-income populations from a proposed fare change, the MBTA may take steps to avoid, minimize, or mitigate these impacts, where practicable.
>
> *MBTA Disparate Impact/Disproportionate Burden (DI/DB) Policy*

2.2.2 Demographics and Definitions

Demographics

The systemwide demographic profile in Table 1 shows how the MBTA's ridership characteristics, in terms of minority and low-income status, vary by mode. Minority and low-income profile data of the MBTA's ridership are from the 2015–17 MBTA Systemwide Passenger Survey report published in May 2018.

Minority and Low-Income Populations

Respondents to the 2015–17 MBTA Systemwide Passenger Survey were classified as having minority status if they self-identified as a race other than white and/or were Hispanic or Latino/Latina. Respondents whose household income was less than $43,500—the income category from the survey that most closely matched 60 percent of the median household income for the MBTA service area from the 2013 American Community Survey—were classified as low-income.

Table 1
Demographic Profiles of MBTA Riders by Mode

Mode	Minority	Nonminority	Low-Income	Non-Low-Income
Rapid Transit	30.8%	69.2%	26.5%	73.5%
Bus and Trackless Trolley	48.0%	52.0%	41.5%	58.5%
Silver Line	41.7%	58.3%	24.9%	75.1%
Commuter Rail	14.6%	85.4%	6.8%	93.2%
Commuter Ferry and Boat	1.7%	98.3%	3.7%	96.3%
Total	**34.3%**	**65.7%**	**28.8%**	**71.2%**

MBTA = Massachusetts Bay Transportation Authority.
Source: 2015–17 MBTA Systemwide Passenger Survey.

2.3 Datasets, Data Collection Efforts, and Descriptions

CTPS used three primary datasets in the fare equity analysis:

- CTPS FERRET output
- 2015–17 MBTA Systemwide Passenger Survey
- 2021 MBTA Youth Pass User Survey

FERRET is an elasticity-based spreadsheet model. CTPS has used this model in the past to provide inputs to the fare-increase analysis process. FERRET takes existing ridership in the form of unlinked trips by mode, fare-payment type, and fare media as inputs. The MBTA provides CTPS with ridership data from the automated fare collection (AFC) system. For modes that are not part of the AFC system, the MBTA provides data (most notably, sales data for transit passes) to estimate ridership. CTPS used the output data from the SFY 2021 fare change analysis to estimate the base revenue, ridership, and average fares.

The 2015–17 MBTA Systemwide Passenger Survey report, published in May 2018, included all of the transit modes provided by the MBTA—the heavy rail Red, Blue, and Orange Lines; the light rail Green Line and Mattapan Trolley; the Silver Line bus rapid transit line; the commuter rail system; the bus system; and the ferry system. The survey asked questions regarding trip origins and destinations, and (most important to this equity analysis) fare payment method, trip frequency, race, ethnicity, and income.

CTPS first launched the survey online and advertised its availability throughout the MBTA system. When the response rate to the online survey slowed, staff distributed the survey on paper forms at stations/stops and on vehicles. To compensate for differences in response rates among services, responses from each unlinked trip segment were weighted in proportion to the number of typical daily boardings for a corresponding station, group of stations, route, or route

segment. The systemwide survey results were used in conjunction with FERRET to estimate the number of trips made by riders using each fare type, and the magnitude of the fare changes for low-income, minority, and all riders.

Because the model's ridership values are in trips and the survey's values are in riders, CTPS used the survey responses for the frequency of travel, fare type, and minority/income status to translate surveyed riders into trips per surveyed rider by fare type and by minority status and income status. Table 2 provides a snapshot of fare type usage by demographic group. A more complete accounting of the demographics of riders using affected fares is included within each fare change section.

The 2021 MBTA Youth Pass User Survey was distributed to 2,091 Youth Pass holders in March 2021; 499 Youth Pass users responded to the survey. This survey asked Youth Pass users about the modes they use and their travel patterns. The overwhelming majority of Youth Pass respondents were classified as either riders who were minorities or riders who lived in low-income households. This survey used the same income thresholds and rider classifications as those used in the systemwide passenger survey.

Table 2
Minority, Low-Income, and All Riders Using Each Principal Fare-Payment Type

Fare-Payment Type	Price	Annual Usage in Unlinked Trips			Annual Usage Share of Group Total		
	Existing	Minority	Low-Income	All Riders	Minority	Low-Income	All Riders
Local Bus							
Local Bus Pass	$ 55.00	2,441,000	1,876,000	4,651,000	1.8%	1.5%	1.3%
Local Bus (Adult)	$ 1.70	6,622,000	5,725,000	13,714,000	4.8%	4.7%	3.8%
Local Bus (Senior)	$ 0.85	1,357,000	2,308,000	3,245,000	1.0%	1.9%	0.9%
Local Bus (Student)	$ 0.85	1,145,000	969,000	1,501,000	0.8%	0.8%	0.4%
Local Bus (CharlieTicket)	$ 2.00	409,000	495,000	745,000	0.3%	0.4%	0.2%
Local Bus (Cash)	$ 2.00	888,000	1,084,000	1,739,000	0.6%	0.9%	0.5%
Express Bus							
Inner Express Pass	136.00	728,000	344,000	2,090,000	0.5%	0.3%	0.6%
Inner Express (Adult)	4.25	171,000	183,000	488,000	0.1%	0.1%	0.1%
Inner Express (Senior)	2.10	26,000	31,600	69,600	0.0%	0.0%	0.0%
Inner Express (Student)	2.10	22,000	31,600	34,600	0.0%	0.0%	0.0%
Inner Express (CharlieTicket)	5.25	9,100	11,300	15,600	0.0%	0.0%	0.0%
Inner Express (Cash)	5.25	24,600	41,000	64,900	0.0%	0.0%	0.0%
Outer Express Pass	168.00	125,000	17,900	359,000	0.1%	0.0%	0.1%
Outer Express (Adult)	5.25	11,000	7,700	95,800	0.0%	0.0%	0.0%
Outer Express (Senior)	2.60	NR	NR	15,300	0.0%	0.0%	0.0%
Outer Express (Student)	2.60	NR	NR	1,100	0.0%	0.0%	0.0%
Outer Express (CharlieTicket)	5.25	NR	NR	2,500	0.0%	0.0%	0.0%
Outer Express (Cash)	5.25	NR	NR	4,200	0.0%	0.0%	0.0%
Bus and Rapid Transit							
Bus and Rapid Transit (Adult)	2.40	2,776,000	2,308,000	6,679,000	2.0%	1.9%	1.9%
Bus and Rapid Transit (Senior)	1.10	474,000	824,000	1,347,000	0.3%	0.7%	0.4%
Bus and Rapid Transit (Student)	1.10	360,000	313,000	483,000	0.3%	0.3%	0.1%
Bus and Rapid Transit (CharlieTicket)	4.90	4,000	4,900	7,900	0.0%	0.0%	0.0%
Rapid Transit							
LinkPass	90.00	27,279,000	19,430,000	79,588,000	19.8%	15.9%	22.1%
Senior/TAP Pass	30.00	5,516,000	7,230,000	12,225,000	4.0%	5.9%	3.4%
Youth Pass	30.00	716,000	653,000	1,000,000	0.5%	0.5%	0.3%
Student 7-Day	30.00	8,582,000	7,628,000	11,813,000	6.2%	6.2%	3.3%
1-Day Pass	12.75	625,000	582,000	783,000	0.5%	0.5%	0.2%
7-Day Pass	22.50	24,550,000	23,361,000	36,022,000	17.8%	19.1%	10.0%
Rapid Transit (Adult)	2.40	10,801,000	8,287,000	32,996,000	7.8%	6.8%	9.2%
Rapid Transit (Senior)	1.10	906,000	1,668,000	3,714,000	0.7%	1.4%	1.0%
Rapid Transit (Student)	1.10	918,000	873,000	1,331,000	0.7%	0.7%	0.4%
Rapid Transit (CharlieTicket)	2.90	4,203,000	5,008,000	13,054,000	3.0%	4.1%	3.6%
Rapid Transit (Cash)	2.90	42,000	42,700	203,000	0.0%	0.0%	0.1%
Commuter Rail							
Zone 1A–10 Pass	$90.00–$426.00	5,581,000	2,174,000	31,124,000	4.0%	1.8%	8.7%
Zone 1A	$ 90.00	1,492,000	676,000	4,604,000	1.1%	0.6%	1.3%
Zone 1	214.00	372,000	37,800	1,853,000	0.3%	0.0%	0.5%
Zone 2	232.00	580,000	204,000	4,526,000	0.4%	0.2%	1.3%
Zone 3	261.00	703,000	261,000	4,723,000	0.5%	0.2%	1.3%
Zone 4	281.00	729,000	216,000	4,380,000	0.5%	0.2%	1.2%
Zone 5	311.00	392,000	215,000	2,400,000	0.3%	0.2%	0.7%
Zone 6	340.00	670,000	272,000	4,343,000	0.5%	0.2%	1.2%
Zone 7	360.00	341,000	128,000	2,034,000	0.2%	0.1%	0.6%
Zone 8	388.00	292,000	151,000	2,196,000	0.2%	0.1%	0.6%
Zone 9	406.00	6,400	8,400	43,000	0.0%	0.0%	0.0%
Zone 10	426.00	3,500	4,500	23,300	0.0%	0.0%	0.0%

Fare-Payment Type	Price	Annual Usage in Unlinked Trips			Annual Usage Share of Group Total		
	Existing	Minority	Low-Income	All Riders	Minority	Low-Income	All Riders
Zone 1A–10 Single Ride	$2.40–$13.25	1,323,000	862,000	10,749,000	1.0%	0.8%	3.0%
Interzone 1–10 Pass	$90.00–$237.00	20,100	8,400	126,700	0.0%	0.0%	0.0%
Interzone 1–10 Single Ride	$2.75–$6.75	44,400	28,900	360,500	0.0%	0.0%	0.1%
Ferry							
Commuter Boat Pass	$329.00	12,900	19,600	352,000	0.0%	0.0%	0.1%
F1: Hingham	9.75	5,600	NR	433,000	0.0%	0.0%	0.1%
F2: Boston	9.75	13,800	20,800	285,000	0.0%	0.0%	0.1%
F2: Cross Harbor	9.75	NR	NR	1,200	0.0%	0.0%	0.0%
F2: Logan	9.75	NR	NR	31,200	0.0%	0.0%	0.0%
F4: Inner Harbor	3.70	NR	700	257,000	0.0%	0.0%	0.1%
Free Transfers and Other Fares					1.8%	1.5%	1.3%
In-station Transfers	No Cost	2,441,000	1,876,000	4,651,000	4.8%	4.7%	3.8%
AFC Noninteraction[1]	No Cost	6,622,000	5,725,000	13,714,000	1.0%	1.9%	0.9%
Free trips[2]	No Cost	1,357,000	2,308,000	3,245,000	0.8%	0.8%	0.4%
Short fares[3]	Variable	1,145,000	969,000	1,501,000	0.3%	0.4%	0.2%

Notes: Values greater than 100,000 are rounded to the nearest 1,000. Values less than 100,000 are rounded to the nearest 100. Percentages are calculated using unrounded values. NR indicates that no riders from a given classification responded to the survey.
[1] AFC noninteraction is an estimate of the number of riders who do not interact with the AFC system. The noninteraction categories include children aged 11 or younger, who are not required to pay a fare when riding with an adult; MBTA employees who are waved onto vehicles or otherwise bypass the AFC equipment; passengers who are allowed by MBTA employees to enter the paid area of a station without interacting with the AFC equipment; passengers who show an operator a valid pass rather than interacting with the farebox; passengers who board certain vehicles via the rear door; and passengers who simply do not pay a fare (not all of these categories apply to every mode).
[2] Free trips include people who are not required to pay a fare. Some of these people pay with the Blind Access Card.
[3] Short fares are fares paid less than the full fare.
AFC = Automated fare collection. NR = No response. SFY = state fiscal year. TAP = Transportation Access Pass.
Source: Central Transportation Planning Staff.

2.4 Equity Analysis and Results

2.4.1 Analysis of Fare Changes

The analysis of the proposed fare changes was completed in three parts, one for each of the proposed fare changes, based on output from the SFY 2021 iteration of FERRET, the 2015–17 MBTA Systemwide Passenger Survey, and the 2021 MBTA Youth Pass User Survey.

The MBTA's policy is to measure the relative difference in the existing and proposed average fares. CTPS used output from the SFY 2021 iteration of FERRET to estimate the existing average fare by rider classification (minority/nonminority and low-income/non-low-income). Then, CTPS progressively adjusted the average fare to account for each proposed fare change component.

Eliminating the Outer Express/Inner Express Fare Differential

Using data from the 2015–17 MBTA Systemwide Survey along with output from FERRET, staff estimated the pre-pandemic number of trips made by Outer Express bus riders by fare type. CTPS multiplied the savings per trip by the

number of trips using that fare to estimate the total savings by rider classification. Table 3 presents a summary of these calculations.[1] By subtracting this revenue from the total revenue by rider classification, CTPS was able to estimate the pre-pandemic change in the average fare by rider classification.

Table 3
Pre-Pandemic Revenue Changes from Lowering Outer Express Bus Fares to the Same Level as Inner Express Bus Fares

Rider Classification Fare Type	Existing Fare	Proposed Fare	Change	Sales Estimate	Change of Revenue
Minority Riders					
Outer Express Pass (in units sold)	$168.00	$136.00	-$32.00	3,203	-$102,495
Outer Express (Adult)	$5.25	$4.25	-$1.00	10,994	-$10,994
Outer Express (Senior)	$2.60	$2.10	-$0.50	NR	$0
Outer Express (Student)	$2.60	$2.10	-$0.50	NR	$0
Outer Express (CharlieTicket)	$5.25	$4.25	-$1.00	NR	$0
Outer Express (Cash)	$5.25	$4.25	-$1.00	NR	$0
Subtotal					**-$113,489**
Low Income Riders					
Outer Express Pass (in units sold)	$168.00	$136.00	-$32.00	460	-$14,714
Outer Express (Adult)	$5.25	$4.25	-$1.00	7,682	-$7,682
Outer Express (Senior)	$2.60	$2.10	-$0.50	NR	$0
Outer Express (Student)	$2.60	$2.10	-$0.50	NR	$0
Outer Express (CharlieTicket)	$5.25	$4.25	-$1.00	NR	$0
Outer Express (Cash)	$5.25	$4.25	-$1.00	NR	$0
Subtotal					**-$22,396**
All Riders					
Outer Express Pass (in units sold)	$168.00	$136.00	-$32.00	9,217	-$294,950
Outer Express (Adult)	$5.25	$4.25	-$1.00	95,757	-$95,757
Outer Express (Senior)	$2.60	$2.10	-$0.50	15,350	-$7,675
Outer Express (Student)	$2.60	$2.10	-$0.50	1,123	-$561
Outer Express (CharlieTicket)	$5.25	$4.25	-$1.00	2,510	-$2,510
Outer Express (Cash)	$5.25	$4.25	-$1.00	4,152	-$4,152
Subtotal					**-$405,606**

NR = No response.
Source: SFY 2021 FERRET output. Central Transportation Planning Staff.

[1] Table 6, shown at the end of this section, includes the results of estimating the effects of all of the changes on the average fare.

Providing Youth Pass Riders Access to Discounted Express Bus Fares

To estimate the effects of providing Youth Pass riders access to discounted express bus fares, CTPS used records from the MBTA's AFC system coupled with data from the 2021 MBTA Youth Pass User Survey.

CTPS began by tallying the number of Youth Pass riders who used the Inner or Outer Express bus routes for express bus travel between July 2019 and February 2020 (just before the COVID-19 pandemic significantly affected travel patterns). CTPS estimated the fare savings per trip associated with the proposed change by subtracting the full price from the discounted price. When conducting this analysis, CTPS reclassified the discounted and full priced Outer Express fares as Inner Express fares to control for some double counting between portions of the analysis. In order to create a base year that reflected pre-COVID-19 travel behavior, CTPS scaled the ridership and revenue values to represent what Youth Pass ridership may have been for the remainder of SFY 2020 if the pandemic did not occur. Finally, the demographics of the 2021 MBTA Youth Pass User Survey respondents who reported using express buses were used to distribute the revenue to the four rider classifications (minority, nonminority, low-income, and non-low-income).

Table 4 presents a summary of these calculations.[2]

Table 4
Pre-Pandemic Revenue Changes from Providing Youth Pass Riders Access to Discounted Express Bus Fares

Rider Classification	Percent of Trips	Annual Trips	Discounted Revenue	Full-Fare Revenue	Change of Revenue
Minority	95.3%	3,088	$5,950	$12,589	-$6,639
Nonminority	4.7%	152	$293	$620	-$327
Low-income	87.9%	2,848	$5,487	$11,610	-$6,123
Non-low-income	12.1%	392	$756	$1,599	-$843
All Riders	100.0%	3,240	$6,243	$13,209	-$6,966

AFC = automated fare collection. MBTA = Massachusetts Bay Transportation Authority.
Source: MBTA AFC system output: July 2019 to Febraury 2020. 2021 MBTA Youth Pass User Survey.

Providing Youth Pass Riders Access to Discounted Commuter Rail and Ferry Fares

To estimate the effects of providing Youth Pass riders access to discounted commuter rail and ferry fares, approximately half of the price of the full-priced

[2] Table 6, shown at the end of this section, includes the results of estimating the effects of all of the fare changes on the average fare.

fares, CTPS used mTicket activation records from the MBTA's Youth Pass Commuter Rail pilot program coupled with data from the 2021 MBTA Youth Pass User Survey. Because the pilot for this fare change was started during the COVID-19 pandemic when riders were travelling less often and fewer people were participating in the Youth Pass program, these values were scaled to represent travel levels prior to the pandemic.

CTPS began by calculating the number of Youth Pass riders and associated revenue savings for those who made commuter rail trips between July 2020 and March 2021. CTPS estimated the revenue savings per trip by subtracting the equivalent full price from the discounted price. Because Youth Pass users already pay a discounted fare on Zone 1A travel, these trips were excluded from the analysis. CTPS scaled the partial year data to estimate total annual travel, used the 2021 MBTA Youth Pass User Survey to scale up the mTicket fares to represent all fare types (that is, cash or ticket window purchase), and used the 2021 MBTA Youth Pass User Survey to estimate the ratio of Youth Pass ferry trips to Youth Pass commuter rail trips. Finally, the demographics of 2021 MBTA Youth Pass User Survey respondents who reported using the commuter rail or ferry systems were used to distribute the revenue to the four different rider classifications.

CTPS, attempting to scale the ridership and revenue values to a "pre-COVID-19" base, scaled the result to represent what Youth Pass ridership may have been in a typical, non-pandemic year. This scaling was based on the decrease in ridership between the first halves of SFY 2020 and SFY 2021—the only months available with comparable overlapping data.

Table 5 presents a summary of these calculations.[3]

[3] Table 6, shown at the end of this section, includes the results of estimating the effects of all of the changes on the average fare.

Table 5
Providing Youth Pass Riders Access to
Discounted Commuter Rail and Ferry Fares

Rider Classification	Percent of Trips	Annual Trips	Discounted Revenue	Full-Fare Revenue	Change of Revenue
Unscaled (Pandemic)					
Minority	93.2%	3,704	$15,901	$32,199	-$16,298
Nonminority	6.8%	270	$1,159	$2,347	-$1,188
Low-income	99.4%	3,951	$16,959	$34,343	-$17,383
Non-low-income	0.6%	23	$100	$203	-$103
All Riders	100.0%	3,240	$17,060	$34,546	-$17,486
Scaled to Pre-Pandemic					
Minority	93.2%	13,310	$57,136	$115,701	-$58,565
Nonminority	6.8%	970	$4,164	$8,433	-$4,268
Low-income	99.4%	14,196	$60,940	$123,403	-$62,463
Non-low-income	0.6%	84	$361	$731	-$370
All Riders	100.0%	14,280	$61,301	$124,134	-$62,833

Note: Scaled values are scaled up by 3.59 to represent a “pre-COVID-19” baseline that matches the other fare changes. This value is based on Youth Pass user ridership changes before and during the pandemic.
AFC = automated fare collection. MBTA = Massachusetts Bay Transportation Authority.
Sources: MBTA mTicket data: July 2020 to March 2021. MBTA AFC data: Youth Pass user travel quantities by month: July 2019 to December 2021. 2021 Youth Pass User Survey.

Summary of All Changes

CTPS estimated the proposed average fare by rider classification for the fare change proposals by subtracting the change in revenue from the existing revenue by rider classification and dividing the result by the number of trips made by riders in the corresponding rider classification. Table 6 contains the result of this calculation. CTPS chose to use a pre-pandemic base year for this equity analysis to ensure the validity of the results after the pandemic ends. This is expected to be a conservative choice. If the analysis had been conducted using a pandemic base year, the pandemic Youth Pass commuter rail and ferry estimates would need to be combined with pandemic estimates of express bus ridership and revenue. The MBTA reports a ridership decrease of about 90 percent on Outer Express Bus routes due in part to service reductions and suspensions (from about 1,640 rides per weekday in February 2020 to about 157 rides per weekday in February 2021). This is larger than the estimated 77 percent decrease in Youth Pass ridership on commuter rail and ferry during the pandemic (from 14,280 to 3,240 as shown in Table 5). As a result, the equity analysis results would potentially be more favorable using a pandemic base year, with a smaller relative benefit to Outer Express bus riders and a larger relative benefit to Youth Pass commuter rail riders.

Table 6
Pre-Pandemic Change of Revenue by Fare Change and for All Fare Changes

Rider Classification	Existing Number of Trips	Existing Revenue	Existing Average Fare	Change of Revenue: Decrease Fares on Express Bus	Change of Revenue: Youth Fares on Express Bus	Change of Revenue: Youth Fares on CR/Ferry	Total Revenue Change	Proposed Revenue	Proposed Average Fare	Percent Change: Average Fare
Minority	137,400,000	$197,500,000	$1.4374	-$113,489	-$6,639	**-$58,565**	-$178,693	$197,321,307	$1.4361	-0.09%
Low-Income	122,300,000	$155,300,000	$1.2698	-$22,396	-$6,123	**-$62,463**	-$90,982	$155,209,018	$1.2691	-0.06%
All Riders	353,000,000	$675,900,000	$1.9147	-$405,606	-$6,966	**-$62,833**	-$475,405	$675,424,595	$1.9134	-0.07%

Note: Existing number of trips and existing revenue are based on the values reported in the CTPS memorandum "*SFY 2021: Fare Equity Analysis Results,*" dated May 21, 2020. Scaled values (*Change of Revenue: Youth Fares on CR/Ferry*) are scaled up by 3.59 to represent a "pre-COVID-19" baseline that matches the other fare changes. This value is based on Youth Pass user ridership changes before and during the pandemic.
CR = Commuter Rail. CTPS = Central Transportation Planning Staff. SFY = state fiscal year.
Source: Central Transportation Planning Staff.

2.4.2 Results from Applying the DI/DB Policy Thresholds

The results of the equity analysis, shown in Table 7, show that there is no disparate impact on minority riders and a potential disproportionate benefit to non-low-income riders when considering the relative fare changes.

Table 7
Pre-Pandemic Existing and Proposed Average Fares and Price Change

Rider Classification	Existing Average Fare	Proposed Average Fare	Percentage Price Change	DI/DB Ratio
Minority	$1.4374	1.4361	-0.09%	129%
Low-Income	$1.2698	1.2691	-0.06%	**83%**
All Riders	$1.9147	1.9134	-0.07%	—

DI/DB = disparate impact and disproportionate burden.
Source: Central Transportation Planning Staff.

Application of the disparate-impact threshold to the combined pre-pandemic results shows that the relative decrease in the average fare for minority riders is 129 percent of the relative decrease in the average fare for all riders. Application of the disproportionate-burden threshold shows that the relative decrease in the average fare for low-income riders is 83 percent of the relative decrease in the average fare for all riders.

Because the average fare decreases for minority riders are greater than 90 percent of the average fare decrease for all riders—the threshold defined by the DI/DB Policy—CTPS does not find a potential disparate impact on minority populations. However, because the average fare decreases for low-income riders are less than 90 percent of the average fare decrease for all riders, CTPS finds a potential disproportionate benefit for non-low-income populations.

The Boston Region Metropolitan Planning Organization (MPO) operates its programs, services, and activities in compliance with federal nondiscrimination laws including Title VI of the Civil Rights Act of 1964 (Title VI), the Civil Rights Restoration Act of 1987, and related statutes and regulations. Title VI prohibits discrimination in federally assisted programs and requires that no person in the United States of America shall, on the grounds of race, color, or national origin (including limited English proficiency), be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination under any program or activity that receives federal assistance. Related federal nondiscrimination laws administered by the Federal Highway Administration, Federal Transit Administration, or both, prohibit discrimination on the basis of age, sex, and disability. The Boston Region MPO considers these protected populations in its Title VI Programs, consistent with federal interpretation and administration. In addition, the Boston Region MPO provides meaningful access to its programs, services, and activities to individuals with limited English proficiency, in compliance with U.S. Department of Transportation policy and guidance on federal Executive Order 13166.

The Boston Region MPO also complies with the Massachusetts Public Accommodation Law, M.G.L. c 272 sections 92a, 98, 98a, which prohibits making any distinction, discrimination, or restriction in admission to, or treatment in a place of public accommodation based on race, color, religious creed, national origin, sex, sexual orientation, disability, or ancestry. Likewise, the Boston Region MPO complies with the Governor's Executive Order 526, section 4, which requires that all programs, activities, and services provided, performed, licensed, chartered, funded, regulated, or contracted for by the state shall be conducted without unlawful discrimination based on race, color, age, gender, ethnicity, sexual orientation, gender identity or expression, religion, creed, ancestry, national origin, disability, veteran's status (including Vietnam-era veterans), or background.

A complaint form and additional information can be obtained by contacting the MPO or at http://www.bostonmpo.org/mpo_non_discrimination. To request this information in a different language or in an accessible format, please contact

Title VI Specialist
Boston Region MPO
10 Park Plaza, Suite 2150
Boston, MA 02116
civilrights@ctps.org
857.702.3700 (voice)
617.570.9193 (TTY)





Appendix 7J

Approval of Fare Equity Analysis of SFY 2022 Fare Changes



This is a true and accurate copy of the action taken by the Fiscal and Management Control Board of the Massachusetts Bay Transportation Authority on May 10, 2021

WHEREAS, the Massachusetts Bay Transportation Authority ("MBTA") has proposed to make two changes to its tariff, including the following: (1) Extending the validity of the Youth Pass to Commuter Rail, Express Bus, and Ferry; and (2) Converting all Outer Express Bus routes to Inner Express Bus routes (together, the "Tariff Changes"); and

WHEREAS the Tariff Changes are fare changes that will last longer than six months; and

WHEREAS the Federal Transit Administrator ("FTA") Title VI Circular 4702.1B requires the MBTA to conduct a fare equity analysis for fare changes that last longer than six months to evaluate the impacts of such fare changes and determine whether such fare changes would have a discriminatory impact based on race, color, or national origin; low-income populations would bear disproportionate burdens of the fare changes; or non-low-income populations would receive disproportionate benefits because of the fare changes; and

WHEREAS the Tariff Changes are fare changes requiring a fare equity analysis under FTA Title VI Circular 4702.1B; and

WHEREAS a fare equity analysis as to the Tariff Changes was completed (the "Title VI Equity Analysis"); and

WHEREAS the Title VI Equity Analysis demonstrates that the Tariff Changes, taken together, do not have a discriminatory impact on race, color, or national origin; and

WHEREAS the Title VI Equity Analysis further demonstrates that, under the MBTA's Disparate Impact/Disproportionate Burden Policy ("DI/DB Policy"), non-low-income populations may receive disproportionate benefits from the Tariff Changes because the conversion of Outer Express Bus routes to Inner Express Bus routes tends to benefit riders with higher incomes; and

WHEREAS, pursuant to the MBTA's DI/DB Policy and FTA Title VI Circular 4702.1B, such disproportionate benefits to non-low-income riders will be mitigated by actively recruiting new Youth Pass municipal partners, which may increase the level of participation in the program and thereby increase access to reduced fares among low-income populations; and

WHEREAS the Fiscal and Management Control Board ("FMCB") has considered and reviewed the Title VI Equity Analysis and the proposed mitigation;

NOW, THEREFORE, IT IS VOTED THAT:

The FMCB hereby approves the Title VI Equity Analysis for the Tariff Changes and directs the Authority, through the General Manager, to take all steps necessary to provide notice of such acceptance to FTA, as appropriate.

IT IS FURTHER VOTED THAT:

The FMCB hereby approves the Tariff Changes as presented at its meeting of May 10, 2021 and as set out herein.

Marie Breen

Marie Breen, General Counsel





Appendix 7K

CTPS Service Equity Analysis of Green Line Extension



TECHNICAL MEMORANDUM

DATE: **May 12, 2021**
TO: **Kat Benesh, Massachusetts Bay Transportation Authority**
FROM: **Steven Andrews, Central Transportation Planning Staff**
Blake Acton, Central Transportation Planning Staff
RE: **Green Line Extension: Title VI Service and Fare Equity Analysis**

The Massachusetts Bay Transportation Authority (MBTA) is currently in the final stages of building the Green Line Extension (GLX) through Somerville.

As a recipient of federal funds through the Federal Transit Administration (FTA), the MBTA is required to comply with Title VI of the Civil Rights Act of 1964 (Title 49, part 21, Code of Federal Regulations). The FTA provides guidance to its subrecipients for carrying out Title VI obligations in Circular 4702.1B. This circular includes a requirement for large transit providers to conduct a Title VI service and fare equity analysis to evaluate, prior to implementing any new fixed guideway capital project, whether the planned change would have a discriminatory impact on the basis of race, color, or national origin. Changes to parallel or connecting service will be examined as well.

Because the MBTA is not altering local bus service at this time, CTPS is not considering the addition of the Green Line as a de facto fare increase for local riders.

Although low-income populations are not a protected class under Title VI, the FTA also requires transit providers to determine whether low-income populations would bear a disproportionate burden from a proposed major service change.

Summary of Service Equity Analysis Results

The results of the service equity analysis indicate that implementation of the combined changes associated with GLX result in disparate benefits to nonminority populations and disproportionate benefits to non-low-income populations.

Civil Rights, nondiscrimination, and accessibility information is on the last page.

The remainder of this memorandum documents the detailed results, assumptions, and methodology used to support these conclusions.

1 PLANNED SERVICE LEVEL CHANGES AND THE PUBLIC PROCESS

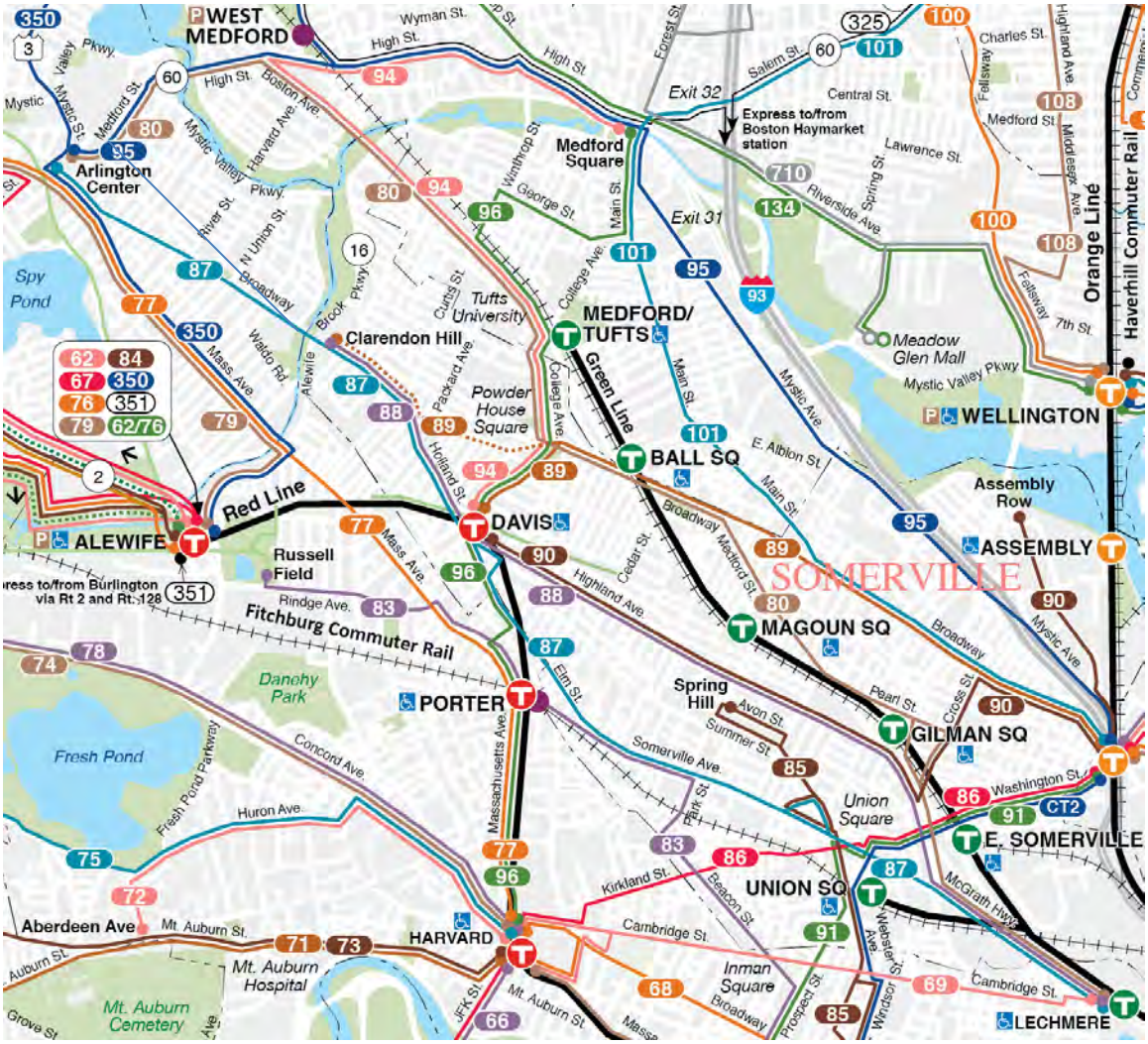
While GLX is primarily the addition of two Green Line branches with six stations in Somerville, it features additional small changes to the existing terminals for the B and C branches.

B: Change the terminus from Park Street to Government Center
C: Change the terminus from North Station to Government Center
D: Change the terminus from Government Center to Union Square Station (new)
E: Change the terminus from Lechmere to Medford/Tufts (new)

Figure 1 presents a map of the new stations and surrounding MBTA services. Appendix A presents the alignment changes of each route.

While the idea of extending the Green Line through Somerville has existed for decades, GLX finally moved towards construction in December 2017 by awarding the design-build contract to *GLX Constructors*. This began a new public process, which can be found at: https://www.mass.gov/lists/glx-public-meetings-documents.

Figure 1
The Green Line Extension and Nearby Transit Services



Source: MBTA

2 TITLE VI SERVICE EQUITY ANALYSIS: FRAMEWORK

2.1 The MBTA's Disparate Impact/Disproportionate Burden Policy

The FTA's Title VI Circular 4702.1B, issued in October 2012, under the authority of Title VI of the Civil Rights Act of 1964, directs transit providers to study proposed major service changes and all fare changes for possible disparities in impacts on minority and low-income riders and communities.

This requirement is part of the MBTA's Title VI assurance that no person shall, on the basis of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity receiving federal financial assistance.

The MBTA's Disparate Impact/Disproportionate Burden (DI/DB) Policy describes the general procedure for conducting service and fare equity analyses.[1] This service equity analysis was performed in accordance with the MBTA's DI/DB Policy.

2.2 The Need to Conduct a Service and Fare Equity Analysis

According to the FTA's Title VI Circular 4702.1B, the MBTA must conduct a service and fare equity analysis six months prior to the beginning of revenue service for new fixed guideway capital projects. The analysis is required even if the change does not rise to the MBTA's definition of a "major service change," which is the typical trigger for equity analyses.

2.3 Prior Environmental Justice Work

In 2014, the MBTA delivered a Triennial Title VI report to the FTA. In the report, the MBTA included in its appendices an April 2011 memo regarding service and fare equity analysis for the Green Line Extension project that discussed an analysis from the Central Transportation Staff's (CTPS) October 2010 "Green Line Extension Environmental Justice Analysis" (henceforth, 2010 GLX EJ analysis).[2]

The major conclusion of the service and fare equity analysis is repeated here:

> The [Environmental Assessment]'s Environmental Justice analysis determined that the Green Line Extension scenario improves accessibility, mobility, congestion, and environmental conditions relative to the No-Build scenario for both environmental justice populations and non–environmental justice populations. This is not surprising given that the project does not reduce nor eliminate service, but rather extends the Green Line rapid transit service to areas that currently are only served by buses. This provides more options to all classes of populations in the study area. Furthermore, environmental justice TAZs[3] slightly outperform the non–environmental justice population zones in garnering mobility, congestion, and environmental benefits, while non–environmental justice population zones best environmental justice population

[1] http://www.mbta.com/policies/fairness
[2] Massachusetts Bay Transportation Authority. MBTA Title VI Report. Appendix I, Service and Fare Equity Analysis for the Green Line Extension Project. 2014. https://cdn.mbta.com/sites/default/files/2017-11/2014-APPENDICES-FINAL_0.pdf
[3] Transportation Analysis Zone (TAZ) is an aggregation of census geography based on population and estimated trip volumes

zones in accessibility improvements. Thus, compliance is met with the non-process-related elements of the Federal Transit Administration (FTA) Title VI Regulations, defined at 49 CFR Section 21.7.

In the 2010 GLX EJ analysis, the definition of an Environmental Justice (EJ) TAZ was based on the demographics of the entire MPO population. At that time, 21.4 percent of the MPO population were classified as minorities. TAZs with greater than a 21.4 percent minority population were considered “minority TAZs.” While the definition of who is classified as a minority rider remains the same, the current analysis uses the population living near transit services to develop its demographic profile. The 2010 analysis views the GLX corridor relative to the entire region, while the current analysis views the corridor relative to populations living near MBTA services.

Additional methodological differences between the 2010 and present analysis include:

- The low-income designation was based on 80 percent of the area median income instead of 60 percent.
- An entire TAZ was classified as EJ if it met the criteria as either minority and/or low-income. The current analysis evaluates each population separately and allocates minority and low-income proportionally.
- Utilized 2000 Census demographic data while the current analysis relies on demographic data from the 2015-19 ACS
- The 2010 GLX EJ analysis measured many metrics contained within three major categories: accessibility to needed services and jobs, mobility and congestion, and environmental impacts instead of measuring the effects of the changes on revenue-vehicle hours (RVH) and route length.

Overall, the 2010 GLX Environmental Justice analysis found the Green Line Extension did not impose a disproportionate burden on environmental justice populations or a disproportionate benefit to non-environmental justice populations. While at first glance this conclusion may appear to conflict with the present analysis, these studies have significant differences in methodology and objectives which preclude a straightforward comparison. The 2010 analysis measured impacts of GLX on accessibility, congestion, and the environment while the present analysis measures the impact of GLX on service hours and route length. Essentially, both studies use different methods to answer different questions. As a result, the present analysis does not necessary conflict with the conclusion of the 2010 GLX EJ analysis.

3 TITLE VI SERVICE EQUITY ANALYSIS

3.1 Datasets and Definitions

Evaluation of Adverse Impacts

The MBTA defines adverse effects as changes to the amount of service scheduled, by route and by mode, as measured by changes to weekly RVH and access to the service, by route, as measured by changes to route length.

In accordance with the MBTA's DI/DB Policy, the MBTA analyzes the changes to RVH and route length as both relative and absolute changes.[4] CTPS then measures the relative share of the benefit or burden, which compares the protected population group's share of the net benefit or burden relative to its existing share of the metric.

The MBTA's threshold for determining when adverse effects of major service changes may result in disparate impacts on minority and/or disproportionate burdens on low-income populations is 20 percent. If the ratio of the impact on minority to nonminority populations or low-income to non-low-income populations is more than 1.20 (or 20 percent), then the proposed change would be determined to pose a potential disparate impact or disproportionate burden.

Demographic Datasets

CTPS selected the US Census Bureau's American Community Survey (ACS) dataset instead of the 2015–17 MBTA Systemwide Passenger Survey because the MBTA is proposing both changes in RVH and route alignments. The passenger survey does not contain demographic data for the potential riders of the new light rail service.

Employing census data instead of passenger survey data has important ramifications in interpreting results. This analysis measures the impact on transit service availability to nearby residents while an analysis using survey data measures the impact on existing transit riders. As a result, this analysis examines whether areas with a proportion of minority or low-income residents greater than the systemwide average are receiving more burden or less benefit from the proposed transit service changes than areas with a lower proportion of minority or low-income residents.

The 2015–19 ACS's five-year estimates provided demographic information about the people living near transit services. The 2010 US Census Summary File 1 (Table P001001: total population) provided the total population for each census

[4] Massachusetts Bay Transportation Authority, *MBTA Disparate Impact/Disproportionate Burden (DI/DB) Policy*, January 30, 2017.

tract. The 2010 US Census Summary File 1 (Table H003002: total occupied housing units) provided the total number of households for each census tract. CTPS opted to use the demographics of census tracts rather than block groups or other smaller geometries because the census tract estimates are more precise.

Definitions of Minority and Low-Income Populations

CTPS used the 2015–19 ACS Tables B03002003–B03002009 and B03002012 (Hispanic or Latino origin by race) and the associated Table B03002001 (total population) to assign minority status to residents living in census tracts. Residents who were classified as "white alone, not Hispanic or Latino" were classified as nonminority residents; all others were classified as minority residents. Within the MBTA service area, 30.6 percent of the population is classified as minority residents.

CTPS used the 2015–19 ACS Tables B19001002–B19001017 (household income in the past 12 months) and the associated Table B19001001 (total households) to assign low-income status to households in census tracts. Households were classified as low-income if they earned less than 60 percent of the median household income for the MBTA service area (a threshold of $53,382).[5] Within the MBTA service area, 31.9 percent of the population is classified as living in low-income households.

Using ACS Data to Assign Demographics to Routes

CTPS used the following methodology to estimate the demographics attributable to a given route alignment:

Determine the geographic area that has access to transit services.

1) Create an access buffer around all stops used by common variations of a route.[6]

[5] The median household income was derived from 2015–19 ACS household income distribution data by (1) finding the number of households in each census-based income category for the entire MBTA service area, (2) finding which income category for the service area contained at least 50 percent of households, and (3) calculating how far into that category the median is, assuming that incomes are evenly distributed along each category. Following this approach, CTPS found the median household income in the MBTA service area to be $88,970. The low-income threshold is 60 percent of the median household income, which is $53,382.

[6] For buses, a quarter-mile buffer is used. For rapid transit, a half-mile buffer is used. For outer terminal commuter rail stations (including Providence and excluding Wickford Junction) and Hingham and Hull ferry terminals, a five-mile buffer is used. For Fairmount Line Zone 1A stations, excluding South Station, a half-mile buffer is used. For Zone 1A, Zone 1, and Zone 2

2) Dissolve the buffer such that overlapping areas are not double counted.

Calculate proportions of each census tract in the buffer.

3) For each census tract that is included in the buffer, calculate the length of roads within the buffer.[7]
4) For each census tract that is included in the buffer, calculate the total length of roads in the census tract.
5) Calculate the percentage of total road length within the buffer in each census tract.

Calculate demographics within the buffer for each route.

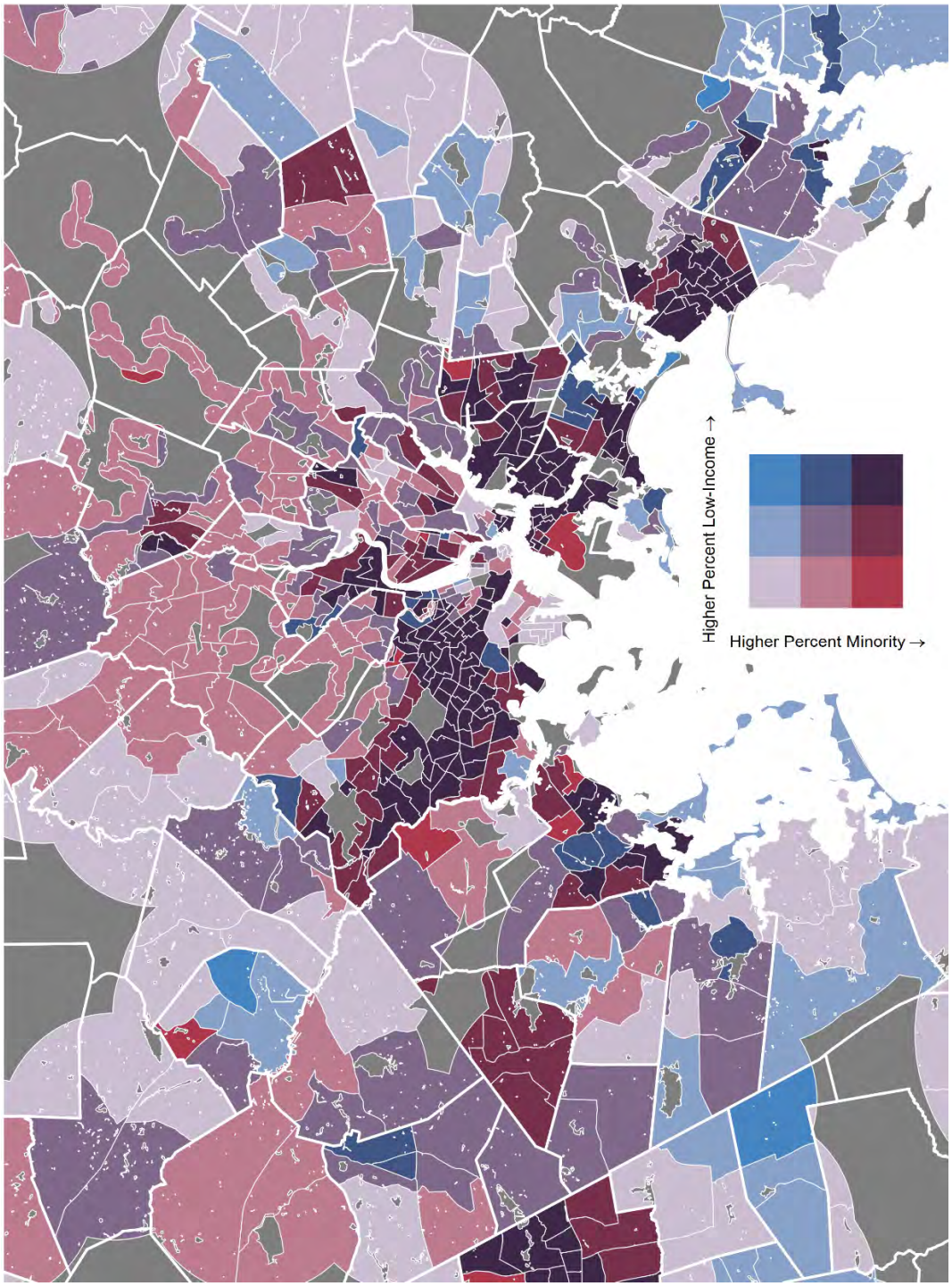
6) For each census tract, multiply the percentage of road length within the buffer by the number of people (or households) in each population group (minority, nonminority, low-income, and non-low-income) in the tract.
7) Sum the number of people (or households) in each population group within the buffer for all census tracts near the route.
8) Calculate the percentage of people (or households) in each population group for the route.

The total number of residents in each population group in a census tract was obtained by multiplying the total number of people (or households) in each tract from the 2010 US Census by the demographic percentages derived from the 2015–19 ACS. Figures 2 and 3 present the resulting demographic data used in the service equity analysis.

through Zone 10 stations with greater walk access shares than the entire commuter rail system as detailed in the 2015–17 MBTA Systemwide Passenger Survey, a one-mile buffer is used. For all other commuter rail stations, a three-mile buffer is used.

[7] Staff uses roadway length as a proxy for population density within a census tract.

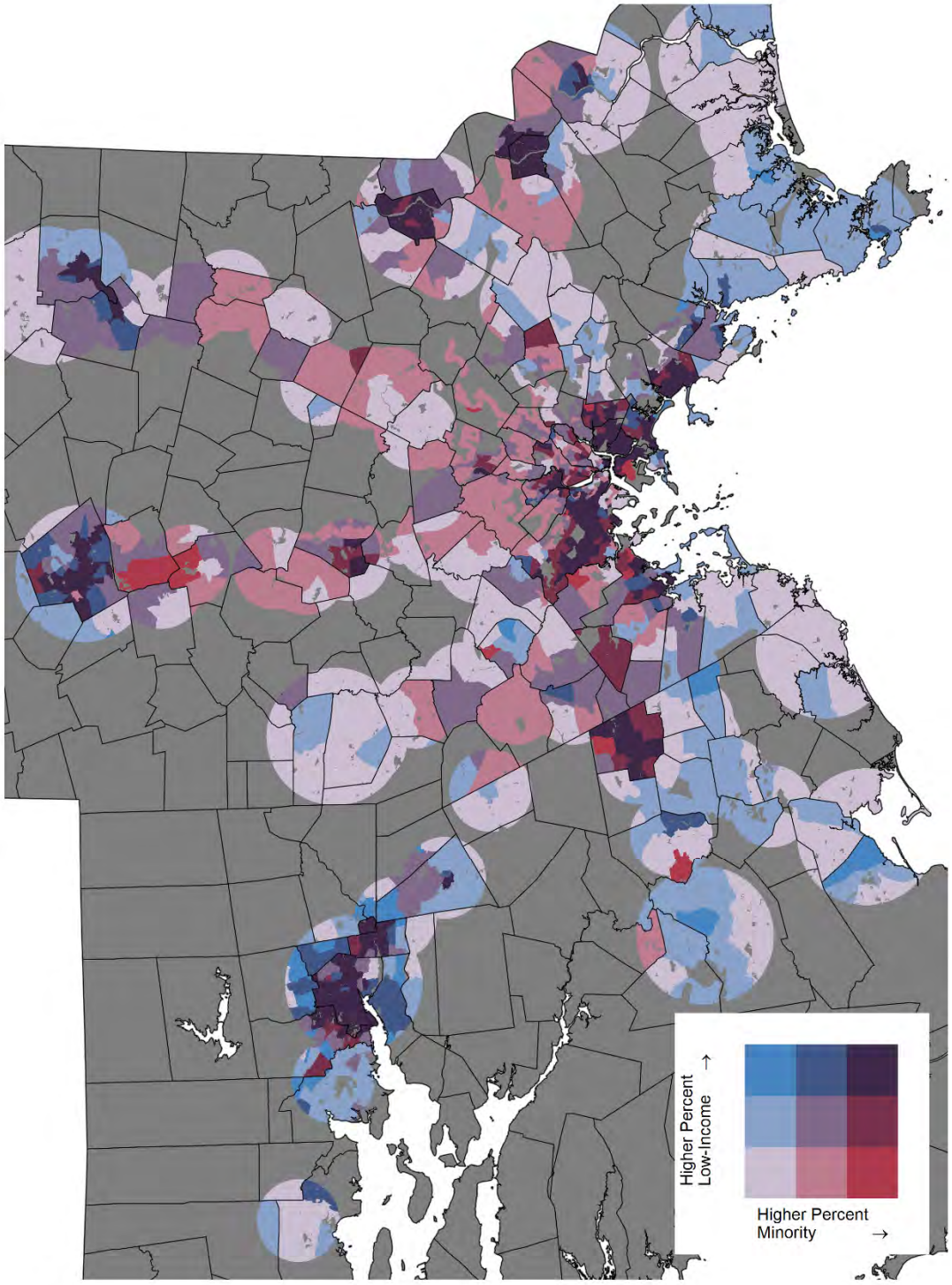
Figure 2
Demographic Profile of People Living Near Transit in the Bus and Rapid Transit Service Area



Note: The scale was generated by dividing the minority and low-income percentages of census tracts served by any transit into thirds. If a census tract was in the top third for both minoirity percentage and low-income percentage, that tract is displayed as “purple.” If a census tract was in the top third for minoriy percentage and the bottom third for low-income percenage, that tract is shaded “red.”

Sources: Spring 2021 MBTA GTFS, 2010 US Census, and 2015–19 ACS.

Figure 3
Demographic Profile of People Living Near Transit in the Entire MBTA Service Area



Sources: Spring 2021 MBTA GTFS, 2010 US Census, and 2015–19 ACS.

3.2 Change in Weekly Revenue-Vehicle Hours

CTPS estimated the impact of GLX on service equity by comparing the RVH by rider classification between an adjusted winter 2020 baseline and a post-GLX schedule derived from the baseline. The pre-GLX dataset is a winter 2020 schedule with adjusted run-times to account for temporary COVID-19 related service changes. The post-GLX schedule is derived by applying the adjusted winter 2020 service levels to the extended post-GLX network. By employing these datasets, this analysis isolates the impact of GLX on service equity and controls for the on-going and rapidly changing service schedules related to GLX construction and COVID-19.[8] GLX is a physical extension of the Green Line, so overall service hours will increase as the MBTA adds resources to serve a longer system. Weekly RVH changes and demographics by route are presented in Table 1, which shows a 1,038 weekly RVH increase across all Green Line branches. Maps detailing route changes and residential demographics near each affected route are in Appendix A.

Table 1
Weekly Revenue-Vehicle Hour Changes and Existing Demographics of Affected Routes

Branch	Before	After	Change	Pct. Minority	Pct. Low-Income
Green-B	1,741	1,824	83	37.4%	37.7%
Green-C	1,461	1,297	-164	32.9%	33.9%
Green-D	1,784	2,438	654	33.6%	33.3%
Green-E	1,573	2,038	466	39.1%	37.7%
Total	**6,558**	**7,597**	**1,038**		

Source: MBTA revenue-vehicle hour spreadsheets as processed by CTPS and 2010 US Census and 2015–19 ACS.

Table 2 reports the weekly RVH changes allocated to protected and nonprotected groups. RVH are allocated to population groups through *proportionate allocation* which allocates a metric (revenue-vehicle hours or route-miles) by the percentage of each demographic within the service area of the route. For example, Route 1 operates 1,190 RVH each week, and 47 percent of residents within a quarter mile are classified as minority. For this route, 559.3 RVH (1,190 × 0.47) are assigned minority and the remaining 630.7 RVH are

[8] CTPS also conducted an additional service equity analysis comparing pre-GLX summer 2021 and post-GLX fall 2021 Green Line schedules with adjustments to account for GLX related construction. The results of this analysis are similar to the one presented here with the same conclusions.

assigned nonminority. The same methodology is applied to low-income and non-low-income groups.

The results in Table 2 show that existing systemwide RVH is nearly equivalent between minority (48 percent) and nonminority (52 percent) residents, with the nonminority population receiving a slightly higher share of service hours. This difference is more pronounced between low-income and non-low-income populations with the non-low-income group receiving 61 percent of RVH and low-income receiving 39 percent of RVH. Nonminority and non-low-income groups receive the majority of the additional service hours—69 percent and 74 percent, respectively. Absolute service hour changes are similar for both protected groups, but the minority share of existing hours is greater than the low-income share.

Table 2
Systemwide Net Change in Weekly Revenue-Vehicle Hours by Population Group: Proportionate Allocation

Population Group	Existing Hours	Share of Existing Hours	Net Change	Share of Net Change	Percent Change
Minority	29,241	48.2%	320	30.8%	1.1%
Nonminority	31,444	51.8%	719	69.2%	2.3%
Low-Income	23,665	39.0%	276	26.5%	1.2%
Non-Low-Income	37,020	61.0%	763	73.5%	2.1%

Sources: MBTA revenue-vehicle hour spreadsheets as processed by CTPS and 2010 US Census and 2015–19 ACS.

Weekly Revenue-Vehicle Hours: Disparate Impact/Disproportionate Burden Analysis

Table 3 summarizes the results of the service equity analysis relating to RVH changes according to the proportionate allocation methodology. A change ratio of 100 percent indicates equal impact between protected and nonprotected groups. In this analysis, an impact ratio of less than 100 percent means that the protected group is receiving a lower relative benefit and, likewise, a ratio greater than 100 percent means that the protected group is receiving a larger relative benefit. Any ratios less than 80 percent indicate a potential disparate benefit or disproportionate benefit. This threshold is derived from the MBTA DI/DB policy, which describes a benefit less than 0.80 or 80 percent as indicating a disparate benefit or disproportionate benefit. To account for statistical error within the datasets used in the analysis, the policy does not consider a ratio greater than 80 percent as a disparate benefit or disproportionate benefit.

The final service equity analysis results indicate a disparate benefit to nonminority populations and a disproportionate benefit to non-low-income populations. This conclusion is determined by all three analysis methods as presented in Table 3. *Absolute Change* (first row of Table 3) is a ratio of additional service hours by population group. *Relative Change* (second row of Table 3) and *Share of Net Change by Share of Existing Hours* (third row of Table 3) are relative metrics that account for change relative to pre-existing service. All six ratios are below the 80 percent DI/DB threshold, which indicates a disparate benefit to nonminority populations and a disproportionate benefit to non-low-income populations.

Table 3
Summary of DI/DB Results Relating to Revenue-Vehicle Hour Changes: Proportionate Allocation

Analysis Method	Impacts on Minority Populations	Impacts on Low-Income Populations
Absolute Change (Protected / Nonprotected)	**Disparate Benefit** Ratio: 320 / 719 < 80%	**Disproportionate Benefit** Ratio: 276 / 763 < 80%
Relative Change (Protected / Nonprotected)	**Disparate Benefit** Ratio: 1.1% / 2.3% < 80%	**Disproportionate Benefit** Ratio: 1.2% / 2.1% < 80%
Protected Share of Change / Protected Share of Existing Hours	**Disparate Benefit** Ratio: 30.8% / 48.2% < 80%	**Disproportionate Benefit** Ratio: 26.5% / 39.0% < 80%

Note: Values correspond to Table 2.
DI/DB = disparate impact/disproportionate burden.
Source: CTPS.

3.3 Change in Route Length

Base Route Length

When calculating each route's length, CTPS used the shapes contained in the spring 2021 General Transit Feed Specification (GTFS) schedule. CTPS grouped all of the variations of a route travelling in the same direction (inbound or outbound) and calculated the length of the route including each distinct portion of the alignment only once. This step was repeated for the opposite direction and the lengths were summed to determine the total route length. CTPS attempted to eliminate school trips and other exceptionally unusual variations.[9]

[9] Defined as variations used by 10 or fewer trips or that made up 10 percent or less of the total trips. Using this definition, a variation with four out of eight total trips would be kept because those trips make up more than 10 percent of the route's total trips.

Changes to Route Length

The MBTA provided a GTFS file for its current spring 2021 schedule. After creating new and modified route alignments and stop locations reflective of the changes associated with the GLX opening, CTPS calculated the route lengths for the MBTA's existing and proposed services and compared the proposed route lengths to the spring 2021 route lengths.

In previous service equity analyses, the Green Line has been treated as a single service—the length of the subway section of the Green Line was only counted once. Here, because of the various changes to each branch, each branch was considered its own route.

Table 4 presents the route length changes by population group. Maps displaying the route alignments and demographics of the populations living near each route affected by GLX changes are found in Appendix B.

Table 4
Net Change in Weekly Route Length for Each Population Group: Proportionate Allocation

Population Group	Existing Miles	Share of Existing Miles	Net Change	Share of Net Change	Percent Change
Minority	7,768	42%	26	33%	0.34%
Nonminority	10,545	58%	53	67%	0.51%
Low-Income	6,716	37%	23	29%	0.34%
Non-Low-Income	11,597	63%	57	71%	0.49%

Sources: MBTA Spring 21 GTFS files and descriptions of proposed changes as processed by CTPS and 2010 US Census and 2015–19 ACS.

Weekly Route Length: Disparate Impact/Disproportionate Burden Analysis

Table 5 summarizes the results of the service equity analysis relating to route length changes according to the proportionate allocation methodology. As shown in Table 5, the results indicate a disparate benefit to minority populations and a disproportionate benefit to non-low-income populations.

Table 5
Summary of DI/DB Results Relating to Route Length Changes: Proportionate Allocation

Analysis Method	Impacts on Minority Populations	Impacts on Low-Income Populations
Absolute Change (Protected / Nonprotected)	**Disparate Benefit** Ratio: 26 / 53 < 80%	**Disproportionate Benefit** Ratio: 23 / 57 < 80%
Relative Change (Protected / Nonprotected)	**Disparate Benefit** Ratio: 0.34% / 0.51% < 80%	**Disproportionate Benefit** Ratio: 0.34% / 0.49% < 80%
Protected Share of Change / Protected Share of Existing Hours	**Disparate Benefit** Ratio: 33% / 42% < 80%	**Disproportionate Benefit** Ratio: 29% / 37% < 80%

Note: Values correspond to Table 4.
DI/DB = disparate impact/disproportionate burden.
Source: CTPS.

Appendix A: Route Structure Changes
Appendix B: Route-by-Route Revenue-Vehicle Hour and Route Length Changes

The Boston Region Metropolitan Planning Organization (MPO) operates its programs, services, and activities in compliance with federal nondiscrimination laws including Title VI of the Civil Rights Act of 1964 (Title VI), the Civil Rights Restoration Act of 1987, and related statutes and regulations. Title VI prohibits discrimination in federally assisted programs and requires that no person in the United States of America shall, on the grounds of race, color, or national origin (including limited English proficiency), be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination under any program or activity that receives federal assistance. Related federal nondiscrimination laws administered by the Federal Highway Administration, Federal Transit Administration, or both, prohibit discrimination on the basis of age, sex, and disability. The Boston Region MPO considers these protected populations in its Title VI Programs, consistent with federal interpretation and administration. In addition, the Boston Region MPO provides meaningful access to its programs, services, and activities to individuals with limited English proficiency, in compliance with U.S. Department of Transportation policy and guidance on federal Executive Order 13166.

The Boston Region MPO also complies with the Massachusetts Public Accommodation Law, M.G.L. c 272 sections 92a, 98, 98a, which prohibits making any distinction, discrimination, or restriction in admission to, or treatment in a place of public accommodation based on race, color, religious creed, national origin, sex, sexual orientation, disability, or ancestry. Likewise, the Boston Region MPO complies with the Governor's Executive Order 526, section 4, which requires that all programs, activities, and services provided, performed, licensed, chartered, funded, regulated, or contracted for by the state shall be conducted without unlawful discrimination based on race, color, age, gender, ethnicity, sexual orientation, gender identity or expression, religion, creed, ancestry, national origin, disability, veteran's status (including Vietnam-era veterans), or background.

A complaint form and additional information can be obtained by contacting the MPO or at http://www.bostonmpo.org/mpo_non_discrimination. To request this information in a different language or in an accessible format, please contact

Title VI Specialist
Boston Region MPO
10 Park Plaza, Suite 2150
Boston, MA 02116
civilrights@ctps.org

By Telephone:
857.702.3702 (voice)

For people with hearing or speaking difficulties, connect through the state MassRelay service:

- **Relay Using TTY or Hearing Carry-over:** 800.439.2370
- **Relay Using Voice Carry-over:** 866.887.6619
- **Relay Using Text to Speech: 8**66.645.9870

For more information, including numbers for Spanish speakers, visit https://www.mass.gov/massrelay

Appendix A: Route Structure Changes

Figure A1
Demographic Profile of People Living Near the Green Line (B Branch)

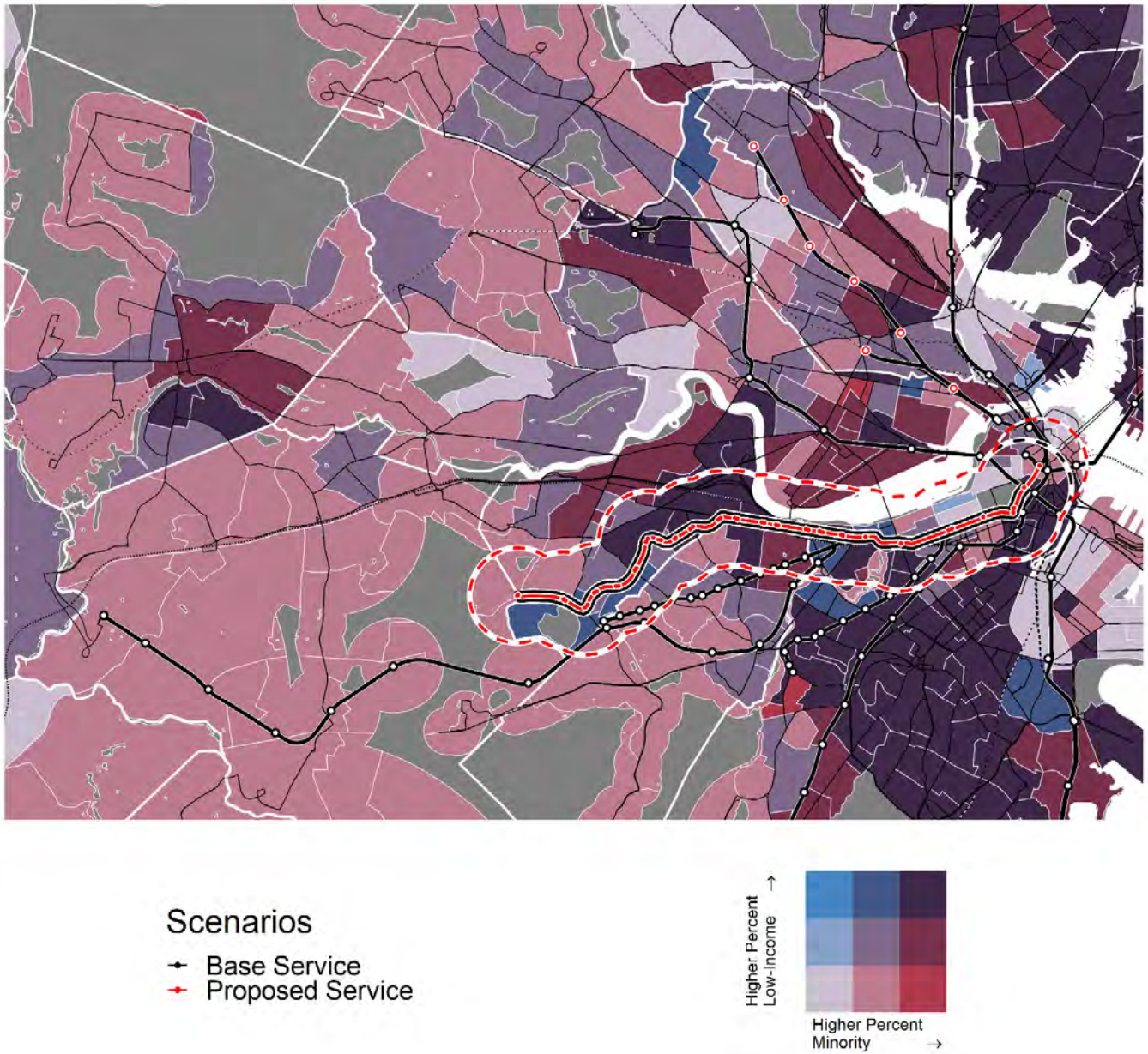


Figure A2
Demographic Profile of People Living Near the Green Line (C Branch)

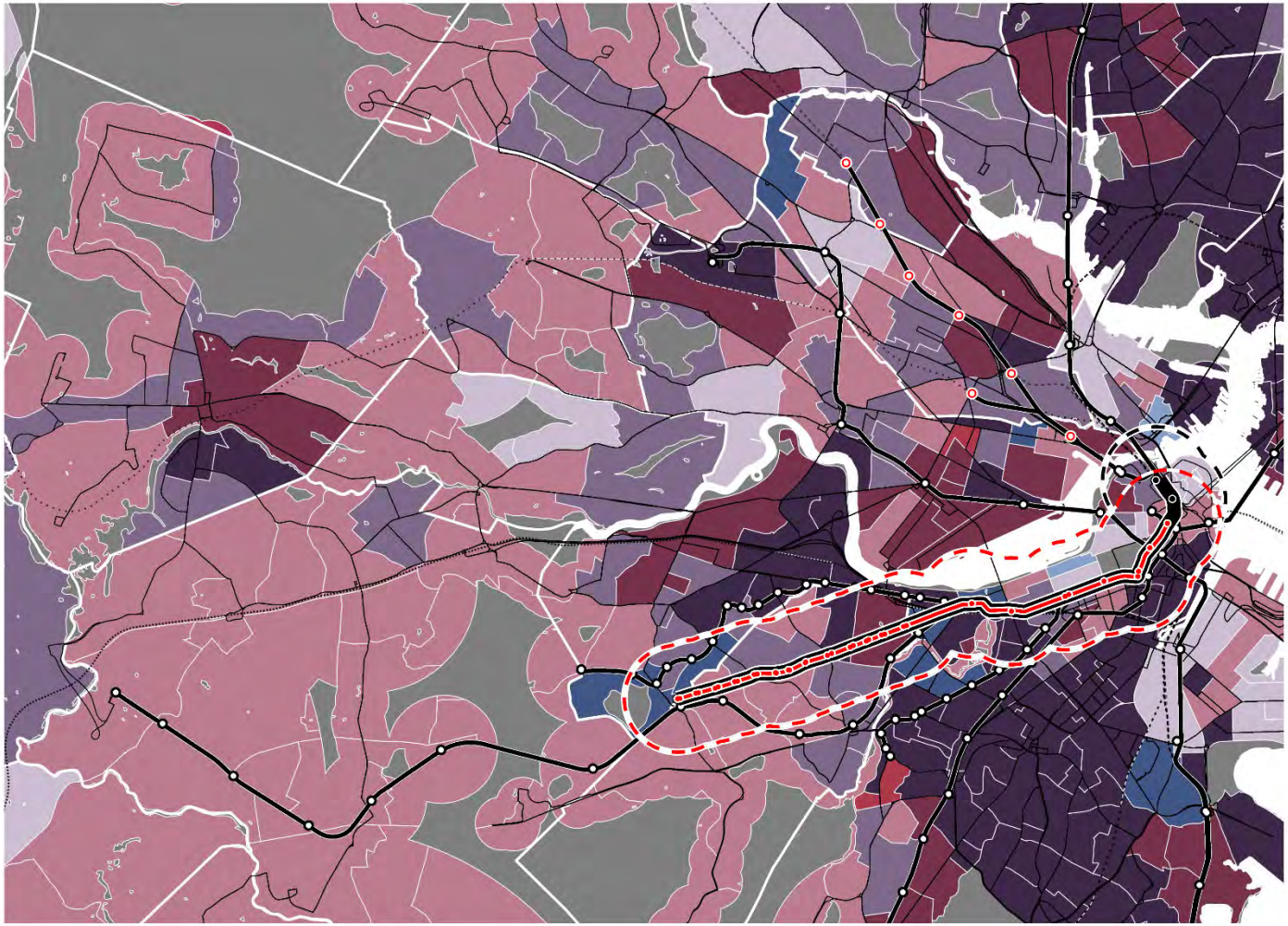


Figure A3
Demographic Profile of People Living Near the Green Line (D Branch)

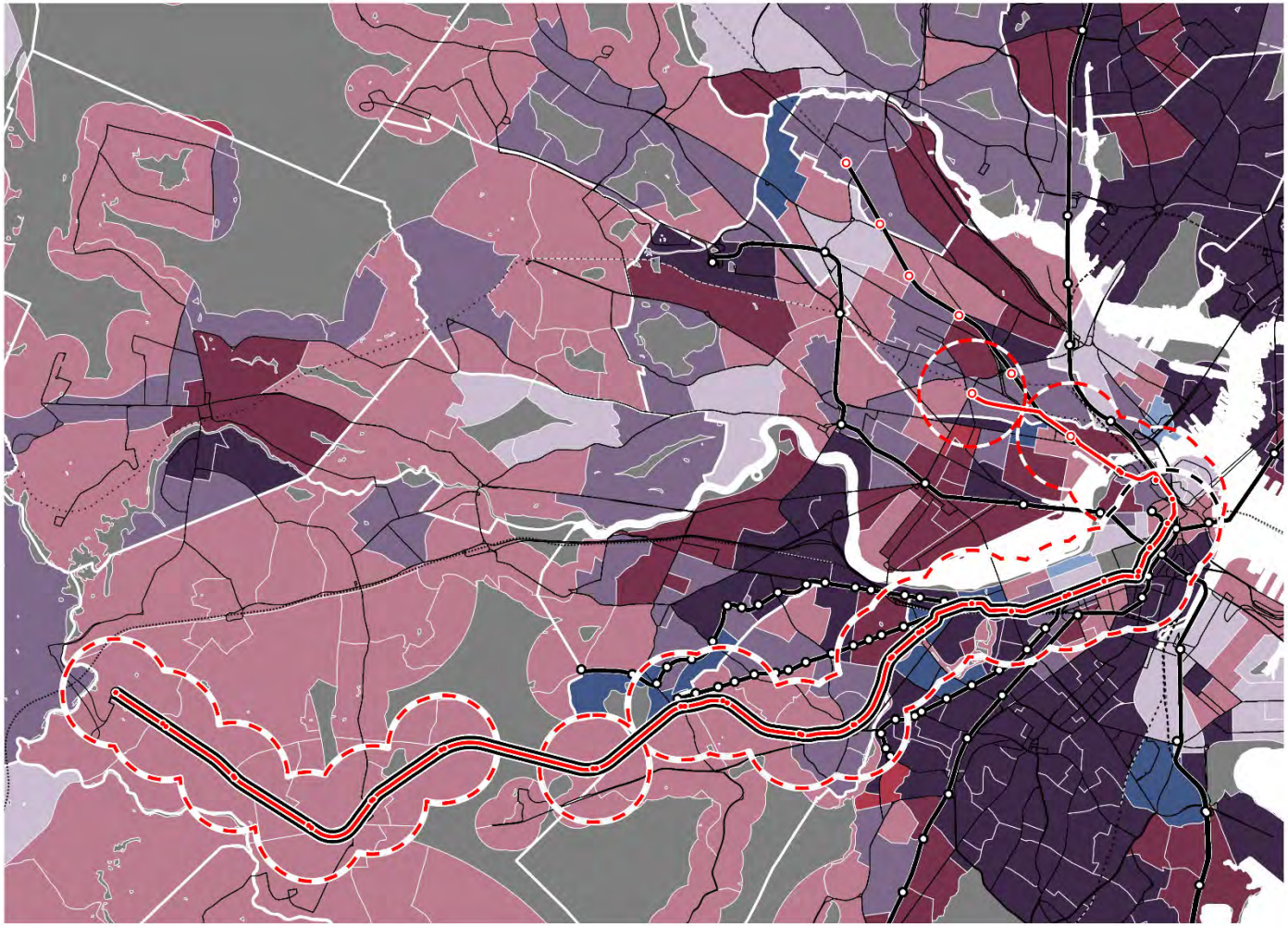
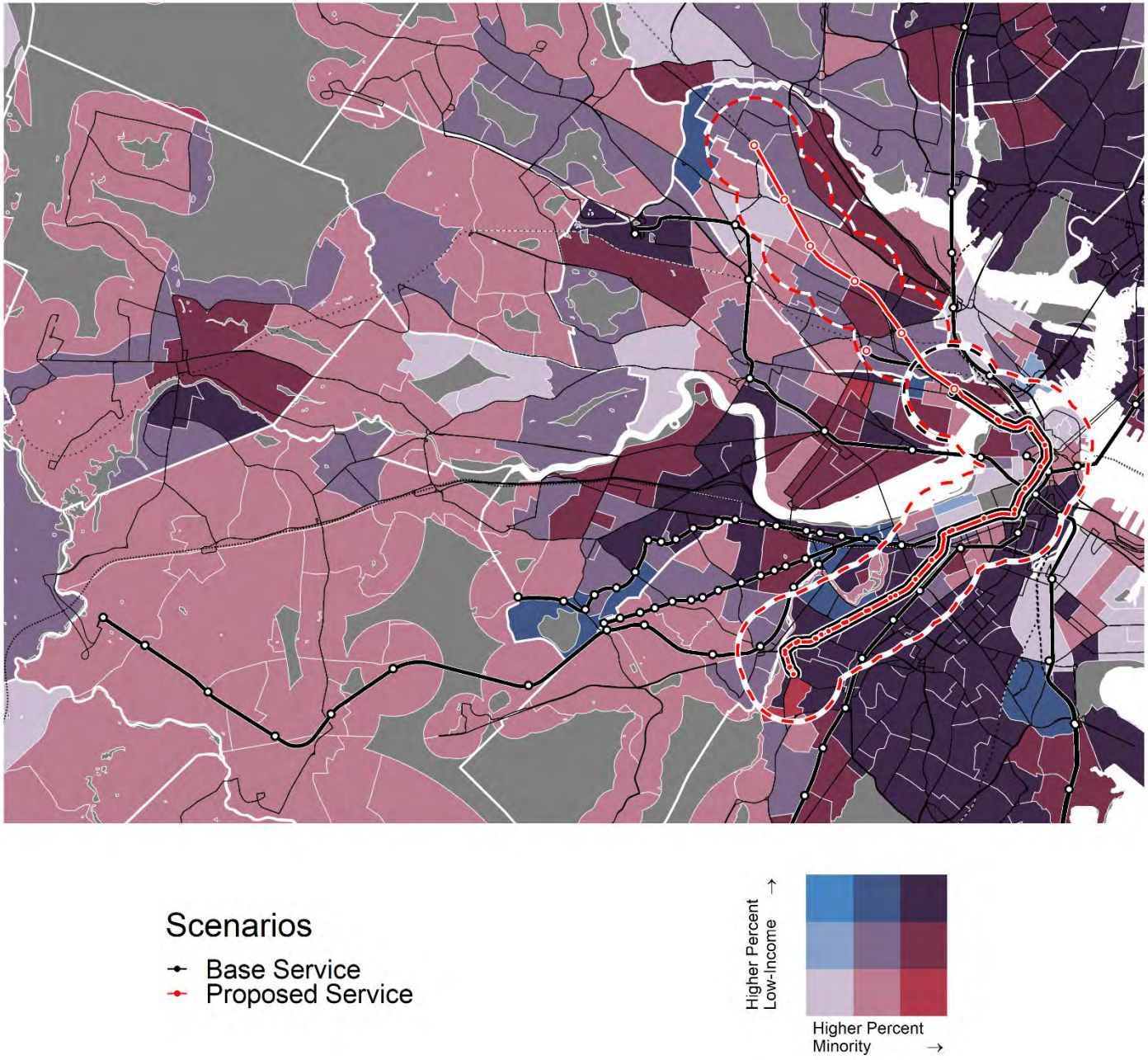


Figure A4
Demographic Profile of People Living Near the Green Line (E Branch)



Appendix B: Route-by-Route Revenue-Vehicle Hour and Route Length Changes

Table B1
Change in Weekly Revenue-Vehicle Hours by Route and Day of the Week

Route	DOW	Existing Weekly RVH	Change in Weekly RVH	Existing Minority Percentage	Existing Low-Income Percentage	Proposed Minority Percentage	Proposed Low-Income Percentage	Minority RVH Change	Nonminority RVH Change	Low-Income RVH Change	Non-Low-Income RVH Change
Green-B	WD	1,326.7	70.3	37.4%	37.7%	36.3%	36.6%	11.2	59.1	11.0	59.4
Green-B	SA	216.6	7.4	37.4%	37.7%	36.3%	36.6%	0.4	7.1	0.3	7.1
Green-B	SU	197.9	4.9	37.4%	37.7%	36.3%	36.6%	-0.4	5.2	-0.4	5.3
Green-C	WD	1,096.5	-119.8	32.9%	33.9%	33.6%	34.5%	-32.4	-87.4	-34.8	-85.0
Green-C	SA	200.5	-25.4	32.9%	33.9%	33.6%	34.5%	-7.1	-18.3	-7.6	-17.9
Green-C	SU	163.8	-18.9	32.9%	33.9%	33.6%	34.5%	-5.2	-13.7	-5.5	-13.4
Green-D	WD	1,411.2	518.2	33.6%	33.3%	33.5%	32.4%	171.7	346.4	154.9	363.3
Green-D	SA	207.3	77.8	33.6%	33.3%	33.5%	32.4%	25.8	52.0	23.3	54.5
Green-D	SU	165.4	58.1	33.6%	33.3%	33.5%	32.4%	19.3	38.9	17.3	40.8
Green-E	WD	1,258.7	363.8	39.1%	37.7%	36.9%	34.8%	105.8	258.1	90.6	273.3
Green-E	SA	183.6	50.4	39.1%	37.7%	36.9%	34.8%	14.4	35.9	12.3	38.1
Green-E	SU	130.3	51.6	39.1%	37.7%	36.9%	34.8%	16.1	35.5	14.2	37.4

DOW = day of the week. RVH = revenue-vehicle hour. SA = Saturday. SU = Sunday. WD = weekday.

Sources: MBTA revenue-hour spreadsheets, Spring 2021 MBTA GTFS, 2010 US Census, and 2015-19 ACS.

Table B2
Change in Weekly Route Length by Route and Day of the Week

Route	DOW	Existing Weekly Route Length	Change in Weekly Length	Existing Minority Percentage	Existing Low-Income Percentage	Proposed Minority Percentage	Proposed Low-Income Percentage	Minority Length Change	Nonminority Length Change	Low-Income Length Change	Non-Low-Income Length Change
Green-B	WD	61.8	2.6	37.4%	37.7%	36.3%	36.6%	0.3	2.3	0.3	2.3
Green-B	SA	12.3	0.5	37.4%	37.7%	36.3%	36.6%	0.1	0.5	0.1	0.5
Green-B	SU	12.3	0.5	37.4%	37.7%	36.3%	36.6%	0.1	0.5	0.1	0.5
Green-C	WD	56.2	-5.0	32.9%	33.9%	33.6%	34.5%	-1.3	-3.7	-1.4	-3.6
Green-C	SA	11.2	-1.0	32.9%	33.9%	33.6%	34.5%	-0.3	-0.7	-0.3	-0.7
Green-C	SU	11.2	-1.0	32.9%	33.9%	33.6%	34.5%	-0.3	-0.7	-0.3	-0.7
Green-D	WD	119.1	25.5	33.6%	33.3%	33.5%	32.4%	8.4	17.1	7.2	18.3
Green-D	SA	23.8	5.1	33.6%	33.3%	33.5%	32.4%	1.7	3.4	1.4	3.7
Green-D	SU	23.8	5.1	33.6%	33.3%	33.5%	32.4%	1.7	3.4	1.4	3.7
Green-E	WD	53.1	33.7	39.1%	37.7%	36.9%	34.8%	11.2	22.4	10.2	23.5
Green-E	SA	10.6	6.7	39.1%	37.7%	36.9%	34.8%	2.2	4.5	2.0	4.7
Green-E	SU	10.6	6.7	39.1%	37.7%	36.9%	34.8%	2.2	4.5	2.0	4.7

DOW = day of the week. SA = Saturday. SU = Sunday. WD = weekday.

Sources: Spring 2021 MBTA GTFS, 2010 US Census, and 2015-19 ACS.



Appendix 7L

Approval of Service Equity Analysis of Green Line Extension



This is a true and accurate copy of the action taken by the Fiscal and Management Control Board of the Massachusetts Bay Transportation Authority on May 24, 2021.

WHEREAS, the Massachusetts Bay Transportation Authority ("MBTA") is in the final stages of constructing the Green Line Extension ("GLX"); and

WHEREAS the Federal Transit Administration ("FTA") Title VI Circular 4702.1B requires the MBTA to conduct a service and fare equity analysis within six months prior to the beginning of revenue service for a new fixed guideway capital project to determine whether such service would have a discriminatory impact based on race, color, or national origin; low-income populations would bear disproportionate burdens of the planned changes; or non-minority or non-low-income populations would receive disproportionate benefits because of the planned changes; and

WHEREAS GLX will be a revenue service requiring a fare and service equity analysis under FTA Title VI Circular 4702.1B; and

WHEREAS a fare and service equity analysis as to GLX was completed (the "Title VI Equity Analysis"); and

WHEREAS the Title VI Equity Analysis did not find that GLX will have a disproportionate burden or adverse impact on low-income or minority riders; and

WHEREAS the Title VI Equity Analysis further demonstrates that, under the MBTA's Disparate Impact/Disproportionate Burden Policy ("DI/DB Policy"), GLX may provide a potential disproportionate benefit to non-low-income and non-minority riders; and

WHEREAS the MBTA considers a disproportionate benefit to non-low-income or non-minority riders to be a disproportionate impact on low-income and minority riders;

WHEREAS pursuant to the MBTA's DI/DB Policy, upon finding a potential disparate impact on minority populations, the MBTA must consider alternatives or revisions to the proposed service change to avoid, minimize or mitigate the potential adverse effect from the change; and upon finding a potential disproportionate impact on low-income populations, the MBTA must take steps to avoid, minimize, or mitigate such impacts, where practicable;

WHEREAS the MBTA considered alternatives and revisions to the proposed change and steps to avoid, minimize or mitigate such impacts; and

WHEREAS the MBTA determined that there were no practicable near-term alternatives or changes to GLX to mitigate such impacts;

WHEREAS the MBTA therefore proposes to mitigate the potential disproportionate impact through its Bus Network Redesign, which program is underway and due for adoption in 2022, and which program should benefit low-income and minority riders in the future;

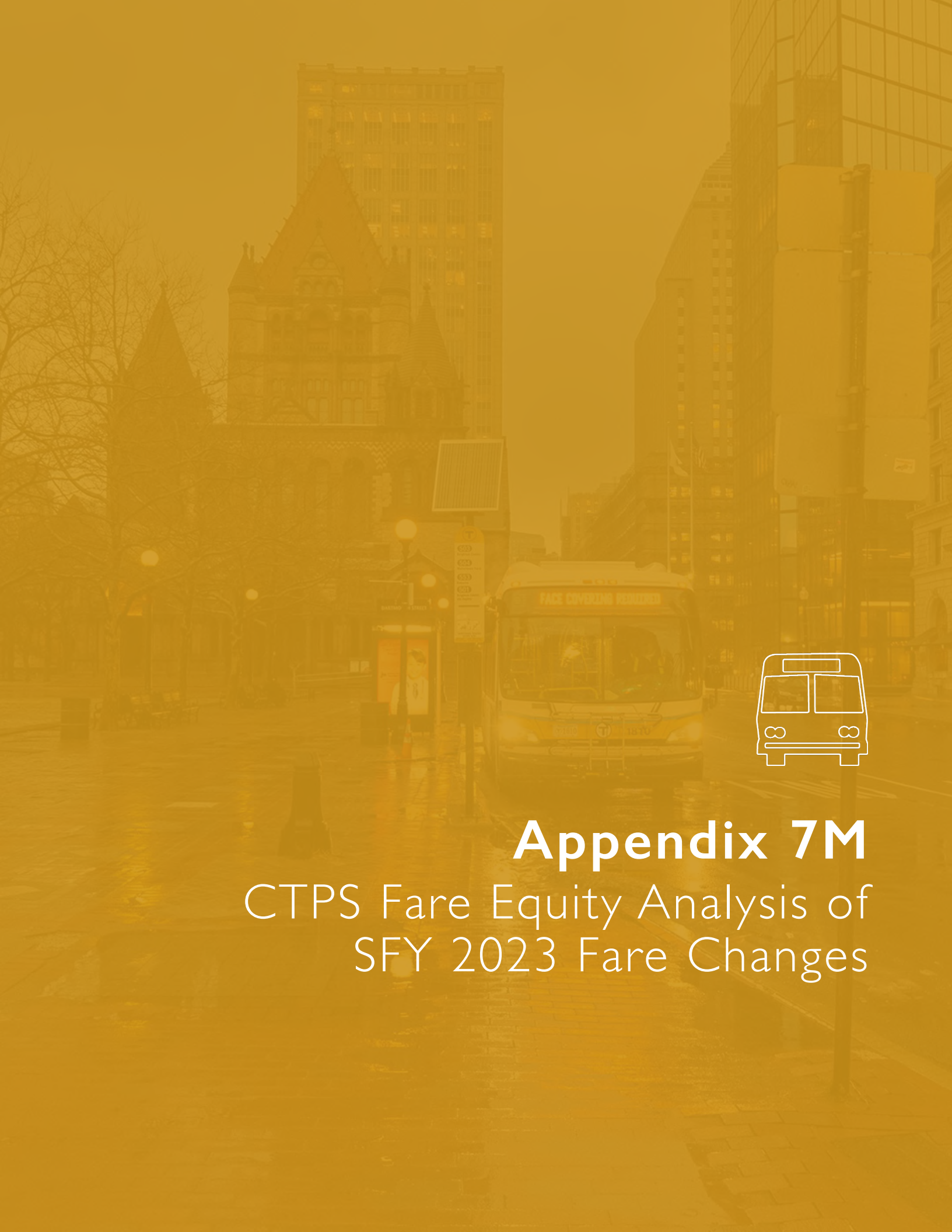
WHEREAS the Fiscal and Management Control Board ("FMCB") has considered and reviewed the Title VI Equity Analysis and the proposed mitigation;

NOW, THEREFORE, IT IS VOTED THAT: The FMCB hereby approves the Title VI Equity Analysis and directs the Authority, through the General Manager, to take all steps necessary to provide notice of such acceptance to FTA, as appropriate.

Marie Breen

Marie Breen, General Counsel





Appendix 7M

CTPS Fare Equity Analysis of SFY 2023 Fare Changes



TECHNICAL MEMORANDUM

DATE: **March 9, 2022**
TO: **Lynsey Heffernan and Steven Povich, Massachusetts Bay Transportation Authority**
FROM: **Emily Domanico, Central Transportation Planning Staff**
Blake Acton, Central Transportation Planning Staff
Bradley Putnam, Central Transportation Planning Staff
RE: **SFY 2023: Fare Equity Analysis Results**

When considering changes to fares, the Massachusetts Bay Transportation Authority (MBTA) undertakes a process to evaluate the equity impacts of the proposed changes. The Central Transportation Planning Staff (CTPS), which serves as staff to the Boston Region Metropolitan Planning Organization (MPO), examined the equity impacts of the state fiscal year (SFY) 2023 fare and fare structure changes. CTPS used an agent-based ridership model based on the systemwide ridership survey accompanied by ad hoc analyses to estimate the effects of the fare changes (for further description see section 5.1).

This document fulfills the MBTA's responsibility to conduct a fare equity analysis, as required by Title VI of the Civil Rights Act of 1964 (Title VI). The objective of this analysis was to determine if the fare changes would result in disparate impacts for minority populations or disproportionate burdens for low-income populations. In this analysis, CTPS compared the impacts of relative fare changes between riders who are classified as minorities to all riders and between riders who are classified as low-income to all riders, using pre-pandemic ridership levels. CTPS applied the MBTA's disparate-impact and disproportionate-burden policies and found neither a disparate impact to minority riders nor a disproportionate burden to low-income riders.

1 FARE CHANGE PROPOSAL

The MBTA is planning the following changes to its fares and fare structure:

1. Make 5-day FlexPasses on commuter rail a permanent fare product[1]
1. Reduce the price of a 1-Day LinkPass from $12.75 to $11.00
2. Introduce 7-day LinkPasses for reduced-fare riders for $10.00
3. Introduce monthly passes for reduced-fare riders on commuter rail, express bus, and ferry services
4. Make reduced LinkPasses valid on commuter rail Zone 1A and Charlestown ferry
5. Change transfer rules to allow 1) a second free transfer on bus and subway, and 2) one free transfer between express buses

Overall, the proposed changes result in fare decreases for select pass travel. Additionally, the proposed changes expand the discounted fare products available to reduced-fare riders. As shown in Table 1A, the proposed fare changes affecting single-ride fares are due to the proposed transfer rules. Table 1B shows a list of existing and proposed fares for fare products along with the percentage change from existing to proposed price, including the new products offered with the proposed changes. For the full list of pass prices, see Appendix Table 8.

[1] The FlexPass was introduced on the mTicket app on July 1, 2020, as a promotional fare product. The FlexPass is a bundle of five 1-day passes for a 10 percent discount compared to standard round-trip commuter rail fares. It expires 30 days after its purchase date.

Table 1A
Key Single-Ride Prices: Existing and Proposed

Fare Product	Existing Fare	Proposed Fare	Absolute Change	Percent Change
Bus and Rapid Transit				
Local Bus	$1.70	$1.70	$0.00	0%
Rapid Transit	$2.40	$2.40	$0.00	0%
Express Bus	$4.25	$4.25	$0.00	0%
Local Bus + Local Bus	$1.70	$1.70	$0.00	0%
Local Bus + Rapid Transit	$2.40	$2.40	$0.00	0%
Local Bus + Express Bus	$4.25	$4.25	$0.00	0%
Express Bus + Express Bus	$8.50	$4.25	-$4.25	-50%
Local Bus + Rapid Transit + Local Bus	$2.40	$2.40	$0.00	0%
Local Bus + Local Bus + Rapid Transit	$4.10	$2.40	-$1.70	-41%
Rapid Transit + Local Bus + Local Bus	$4.10	$2.40	-$1.70	-41%
Local Bus + Local Bus + Local Bus	$3.40	$1.70	-$1.70	-50%
Local Bus (Reduced)	$0.85	$0.85	$0.00	0%
Rapid Transit (Reduced)	$1.10	$1.10	$0.00	0%
Express Bus (Reduced)	$2.10	$2.10	$0.00	0%
Commuter Rail				
Zone 1A–10	$2.40–$13.25	$2.40–$13.25	$0.00	0%
Interzone 1–10	$2.75–$7.25	$2.75–$7.25	$0.00	0%
Zone 1A–10 (Reduced)	$1.10–$6.50	$1.10–$6.50	$0.00	0%
Interzone 1–10 (Reduced)	$1.25–$3.50	$1.25–$3.50	$0.00	0%
Ferry				
Charlestown Ferry	$3.70	$3.70	$0.00	0%
Hingham/Hull Ferry	$9.75	$9.75	$0.00	0%
Charlestown Ferry (Reduced)	$1.85	$1.85	$0.00	0%
Hingham/Hull Ferry (Reduced)	$4.85	$4.85	$0.00	0%

Note: Key single ride prices for bus and rapid transit transfers included in the table reflect available transfers on CharlieCards.
Source: MBTA.

Table 1B
Pass Prices: Existing and Proposed

Fare Product	Existing Fare	Proposed Fare	Absolute Change	Percent Change
Bus and Rapid Transit				
1-Day LinkPass	$12.75	$11.00	-$1.75	-14%
7-Day LinkPass	$22.50	$22.50	$0.00	0%
Local Bus Pass	$55.00	$55.00	$0.00	0%
Monthly LinkPass	$90.00	$90.00	$0.00	0%
Monthly Express Bus Pass	$136.00	$136.00	$0.00	0%
Monthly LinkPass (Reduced)	$30.00	$30.00	$0.00	0%
7-Day LinkPass (Reduced)	Not offered	$10.00		New Product
Express Bus Pass (Reduced)	Not offered	$67.00		New Product
Commuter Rail				
Monthly Pass Zone 1A–10	$90.00–$426.00	$90.00–$426.00	$0.00	0%
Monthly Pass Interzone 1–10	$90.00–$257.00	$90.00–$257.00	$0.00	0%
mTicket Monthly Pass Zone 1A–10	$80.00–$416.00	$80.00–$416.00	$0.00	0%
mTicket Monthly Pass Interzone 1–10	$80.00–$247.00	$80.00–$247.00	$0.00	0%
Weekend Pass	$10.00	$10.00	$0.00	0%
FlexPass Zone 1A–10	Promotional Product	$21.60–$119.25		New Product
FlexPass Interzone 1–10	Promotional Product	$24.75–$65.25		New Product
Monthly Pass Zone 1A–10 (Reduced)	Not Offered	$30.00–$209.00		New Product
Monthly Pass Interzone 1–10 (Reduced)	Not Offered	$41.00–$124.00		New Product
mTicket Monthly Pass Zone 1A–10 (Reduced)	Not Offered	$30.00–$204.00		New Product
mTicket Monthly Interzone 1–10 (Reduced)	Not Offered	$36.00–$119.00		New Product
FlexPass Zone 1A–10 (Reduced)	Not Offered	$9.90–$58.50		New Product
FlexPass Interzone 1–10 (Reduced)	Not Offered	$11.25–$31.50		New Product

Fare Product	Existing Fare	Proposed Fare	Absolute Change	Percent Change
Ferry				
Commuter Ferry Pass	$329.00	$329.00	$0.00	0%
mTicket Charlestown Ferry Pass	$80.00	$80.00	$0.00	0%
mTicket Commuter Ferry Pass	$319.00	$319.00	$0.00	0%
Commuter Ferry Pass (Reduced)	Not Offered	$164.00		New Product
mTicket Commuter Ferry Pass (Reduced)	Not Offered	$159.00		New Product

Source: MBTA.

2 REQUIREMENTS

Title VI of the Civil Rights Act of 1964 prohibits discrimination, either intentionally or unintentionally, by recipients of federal financial assistance based on race, color, or national origin. To comply with Title 49 of the Code of Federal Regulations (CFR) Section 21.5(b) (2), 49 CFR Section 21.5(b) (7), and Appendix C to 49 CFR Part 21, the MBTA must evaluate any fare changes to fixed-route modes prior to implementation to determine if the proposed changes would have a discriminatory effect. The Federal Transit Administration (FTA) provides guidance for conducting fare equity analyses in FTA Circular 4702.1B ("Circular"), Section IV.7.b. Prior to a fare change, the MBTA must analyze any available information generated from ridership surveys that indicates whether minority and/or low-income riders would be disproportionately more likely than overall riders to use the mode of service, payment type, or payment media that would be subject to a fare change. In addition, the MBTA must describe the datasets and collection methods used in its analysis.

The Circular states that the transit provider shall

- determine the number and percentage of users of each fare media subject to change;
- review fares before and after the change;
- compare the relative cost burden impacts of the proposed fare change between minority and overall users for each fare media; and
- compare the relative cost burden impacts of the proposed fare change between low-income and overall users for each fare media.

Under Title VI and other directives, the FTA requires that transit agencies develop a policy to assess whether a proposed fare change would have a disparate impact on minority populations or disproportionate burden on low-income populations. The FTA Title VI guidelines define disparate impact as "a facially neutral policy or practice that disproportionately affects members of a group identified by race, color, or national origin, where the recipient's policy or practice lacks a substantial legitimate justification and where there exists one or more alternatives that would serve the same legitimate objectives, but with less disproportionate effects on the basis, of race, color, or national origin." The guidelines define disproportionate burden as "a neutral policy or practice that disproportionately affects low-income populations more than non-low income populations."

3 MBTA TITLE VI DISPARATE IMPACT/ DISPROPORTIONATE BURDEN POLICY

3.1 Policy Thresholds

The MBTA's January 30, 2017, Disparate Impact/Disproportionate Burden (DI/DB) Policy[2] explains the methodology to be used for fare equity analyses:

> "For all fare changes, the MBTA will compare the percentage change in the average fare for minority and overall riders and for low-income and overall riders. For fare-type changes across all modes, the MBTA will assess whether minority and low-income customers are more likely to use the affected fare type or media than overall riders. Any or all proposed fare changes will be considered in the aggregate and results evaluated using the fare DI/DB threshold, below. The MBTA's threshold for determining when fare changes may result in disparate impacts or disproportionate burdens on minority or low-income populations, respectively, is 10%."
> *MBTA Disparate Impact/Disproportionate Burden (DI/DB) Policy*

The policy thresholds are encapsulated in the following equations. A disparate impact would be found if the average fare decrease for minorities is less than 90 percent of the average fare decrease for all riders, or if the average fare increase for minorities is greater than 110 percent of the average increase for all riders:

Minority Average Fare Decrease < 90% × All-Rider Average Fare Decrease
Minority Average Fare Increase > 110% × All-Rider Average Fare Increase

A disproportionate burden would be found if the average fare decrease for low-income riders is less than 90 percent of the average fare decrease for all riders, or if the average fare increase for low-income riders is greater than 110 percent of the average increase for all riders:

Low-income Average Fare Decrease < 90% × All-Rider Average Fare Decrease
Low-income Average Fare Increase > 110% × All-Rider Average Fare Increase

The DI/DB Policy also describes the steps the MBTA will take when disparate impacts or disproportionate burdens are identified:

> "Upon finding a potential disparate impact on minority populations from a proposed fare change, the MBTA will analyze alternatives/revisions to the proposed change that meet the same goals of the original proposal. Any proposed alternative fare change would be subject to a fare equity analysis. The MBTA will implement any proposal in accordance with the current FTA guidance. Where potential disparate impacts are identified, the MBTA will provide a meaningful opportunity for public comment on any

[2] Massachusetts Bay Transportation Authority, "Disparate Impact/Disproportionate Burden (DI/DB) Policy" (2017). https://cdn.mbta.com/sites/default/files/2017-11/1-30-17%20-%20MBTA%20DIDB%20Policy%20-%20Final.docx.

> proposed mitigation measures, including any less discriminatory alternatives that may be available. Upon finding a potential disproportionate burden on low-income populations from a proposed fare change, the MBTA may take steps to avoid, minimize, or mitigate these impacts, where practicable."
>
> *MBTA Disparate Impact/Disproportionate Burden (DI/DB) Policy*

3.2 Minority and Low-Income Populations

Respondents to the 2015–17 MBTA Systemwide Passenger Survey were classified as having minority status if they self-identified as a race other than White or as Hispanic or Latino/Latina. Respondents whose household income was less than $43,500—the income category from the survey that most closely matched 60 percent of the median household income for the MBTA service area from the 2013 American Community Survey—were classified as low-income.

4 DATASETS, DATA COLLECTION EFFORTS, AND DESCRIPTIONS

CTPS used three primary datasets in the fare equity analysis:

- 2015–17 MBTA Systemwide Passenger Survey
- MBTA ridership and revenue data
- mTicket FlexPass usage survey, September–October 2021

4.1 2015-17 MBTA Systemwide Passenger Survey

The 2015–17 MBTA Systemwide Passenger Survey report,[3] published in May 2018, includes all of the transit modes provided by the MBTA—the heavy rail Red, Blue, and Orange Lines; the light rail Green Line and Mattapan Trolley; the bus rapid transit Silver Line; the commuter rail system; the bus system; and the ferry system. The survey asked questions regarding trip origins and destinations, fare payment method, trip frequency, race, ethnicity, and income.

CTPS first launched the survey online and advertised its availability throughout the MBTA system. When the response rate to the online survey slowed, staff distributed the survey on paper forms at stations and stops and on vehicles. To compensate for differences in response rates among services, responses from each unlinked trip segment were weighted in proportion to the number of typical daily boardings for a corresponding station, group of stations, route, or route segment.

4.2 MBTA Ridership and Revenue Data

The MBTA provided CTPS with ridership data from its automated fare collection (AFC) system from SFY 2018. These data included unlinked trips by mode, fare-

[3] Central Transportation Planning Staff, "2015–17 MBTA Systemwide Passenger Survey" (2018). https://www.ctps.org/dv/mbtasurvey2018/2015_2017_Passenger_Survey_Final_Report.pdf.

payment type, and fare media. For modes that are not part of the AFC system, the MBTA provided other data, such as monthly pass sales data. CTPS also used output data from the SFY 2022 fare change analysis to estimate the base revenue, ridership, and average fares.[4] These ridership and revenue data were used in conjunction with systemwide passenger survey data to estimate (1) the number of trips made by riders using each fare type and mode, and (2) the magnitude of the fare changes for low-income passengers, minority passengers, and all passengers.

Additionally, the MBTA provided transaction-level data from the AFC system from October 2019 so that CTPS could analyze the impact of changing transfer rules on bus and rapid transit travel.

4.3 mTicket FlexPass Usage Survey

In September–October 2021, the MBTA distributed a FlexPass Usage Survey to a sample of 7,645 mTicket passengers by email and received 1,365 completed responses; 758 of those respondents had purchased a FlexPass. The intent of this survey was to attach demographic classifications to data for actual trips made on commuter rail using different fare products and study the effect that the FlexPass had on commuter rail travel.

5 OVERVIEW OF ANALYSIS METHODS

5.1 Agent-Based Ridership Model

In recent years, CTPS has used an elasticity-based spreadsheet model known as the Fare Elasticity, Ridership, and Revenue Estimation Tool (FERRET) to analyze the impacts of fare changes on demographic population groups. However, the present proposed fare changes extend outside of the scope of what can be efficiently analyzed in FERRET, given the quantity of new fare products that are proposed. As a result, CTPS developed an agent-based fare equity analysis methodology derived primarily from responses to the 2015–17 MBTA Systemwide Passenger Survey. CTPS built the agent-based ridership model from the foundations of FERRET, but we adapted the process to prioritize equity reporting and to be more flexible so that it can more efficiently analyze new fare products.

To make the agent-based ridership model CTPS matched survey responses with annual MBTA ridership and revenue. Within the model, we distribute unlinked trips from the base ridership year across systemwide survey responses through the survey weighting process. Then, we estimate the number of passengers–or agents–each survey represents based on the trip-making patterns reported in the survey response, and we identify fare products used, modes traveled on, and the reported trip frequency.

[4] This analysis is described in the CTPS memorandum “SFY 2022: Fare Equity Analysis Results,” dated April 26, 2021.

Individual agents in the model approximate passenger behavior, as individual agents are assumed to make the same trip with the same fare product at a constant trip frequency the entire year. However, the total trips made in the model by all agents equals the total amount of unlinked trips observed in the base ridership year. Additionally, the amount of money agents spend on their travel equals the amount of fare revenue anticipated for the most recent fare structure.

5.1.1 Survey Weighting by Fare Product and Mode

To develop the agent-based model from the systemwide ridership survey, CTPS determined that survey responses should be reweighted by annual unlinked boardings by fare product and mode.[5] CTPS staff reweighted the travel reported in survey responses to observed boardings by fare product and mode for SFY 2018. Survey responses were excluded from the analysis if

- minority or income status were unreported,
- all fare payment information was missing,
- a fare product could not be assigned because fare questions were incomplete, or
- trip frequency was unreported.

Multiple proposed fare changes apply to commuter rail travel, so CTPS further balanced weighted trips on commuter rail to match peak and off-peak travel patterns. After commuter rail trips were weighted to annual boardings, survey trips were then balanced to match the proportion of boardings occurring during peak and off-peak periods by commuter rail line.[6]

The survey weighting process allocates observed boardings from the base ridership year across survey responses.[7] Table 2 displays the demographic split between equity populations across modes after weighting the systemwide survey to fare product use by mode to SFY 2018 ridership.[8] Additionally, Table 3 provides a snapshot of fare type usage by demographic group after the survey travel was weighted to fare-product usage by mode.

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[5] The systemwide passenger survey was originally weighted based solely on ridership. For more details see the report: https://www.ctps.org/dv/mbtasurvey2018/2015_2017_Passenger_Survey_Final_Report.pdf

[6] Commuter rail peak and off-peak boarding ratios were derived from spring 2018 commuter rail counts using peak and off-peak period data from the MBTA Service Delivery Policy. See the commuter rail counts database: https://mbta-massdot.opendata.arcgis.com/datasets/mbta-commuter-rail-ridership-by-trip-season-route-line-and-stop/explore and https://mbta-massdot.opendata.arcgis.com/datasets/mbta-service-delivery-policy-time-periods/explore.

[7] In this analysis, the term *boarding* represents an unlinked trip: any time a passenger boards a transit vehicle is considered a boarding.

[8] Differences from Table 2 in previous service equity analyses are due to the reweighting of the survey. https://cdn.mbta.com/sites/default/files/2021-04/2021-proposed-fare-change-title-vi-equity-analysis.pdf

Table 2
Demographic Profiles of MBTA Riders by Mode

Mode	Minority	Nonminority	Low-Income	Non-Low-Income
Bus	46.7%	53.3%	43.0%	57.0%
Commuter Rail	14.4%	85.6%	6.8%	93.2%
Commuter/Ferry Boat	0.8%	99.2%	0.7%	99.3%
Silver Line	36.9%	63.1%	27.0%	73.0%
Subway or Light Rail	35.0%	65.0%	29.2%	70.8%

Source: 2015–17 MBTA Systemwide Passenger Survey, reweighted for Agent-Based Ridership Model by CTPS.

Table 3
Principal Fare Payment Type Used by Minority, Low-income, and All Riders

		Annual Usage in Unlinked Trips			Annual Usage Share of Group Total		
Fare-Payment Type	**Existing Fare**	**Minority**	**Low-Income**	**All Riders**	**Minority**	**Low-Income**	**All Riders**
Local Bus							
Local Bus Pass	$55.00	2,012,000	1,588,000	5,083,000	1.6%	1.5%	1.4%
Local Bus (Adult)	$1.70	9,747,000	9,434,000	24,790,000	7.6%	8.7%	7.0%
Local Bus (Senior)	$0.85	1,588,000	3,276,000	4,815,000	1.2%	3.0%	1.4%
Local Bus (Student)	$0.85	1,384,000	1,059,000	1,948,000	1.1%	1.0%	0.6%
Express Bus							
Express Bus Pass	$136.00	922,000	355,000	2,852,000	0.7%	0.3%	0.8%
Express Bus (Adult)	$4.25	248,000	255,000	934,000	0.2%	0.2%	0.3%
Express Bus (Senior)	$2.10	14,000	NR	103,000	0.0%	0.0%	0.0%
Express Bus (Student)	$2.10	NR	21,000	42,000	0.0%	0.0%	0.0%
Bus and Rapid Transit							
Bus and Rapid Transit (Adult)	$2.40	2,577,000	2,281,000	6,978,000	2.0%	2.1%	2.0%
Bus and Rapid Transit (Senior)	$1.10	421,000	783,000	1,372,000	0.3%	0.7%	0.4%
Bus and Rapid Transit (Student)	$1.10	379,000	333,000	507,000	0.3%	0.3%	0.2%
Rapid Transit							
Monthly LinkPass	$90.00	30,489,000	20,534,000	98,998,000	23.9%	19.0%	28.0%
Senior/TAP LinkPass	$30.00	5,619,000	7,827,000	14,605,000	4.4%	7.2%	4.1%
Student 7-Day/ Youth Pass	$30.00	13,767,000	10,021,000	15,039,000	10.8%	9.3%	4.3%
1-Day LinkPass	$12.75	800,000	816,000	1,010,000	0.6%	0.8%	0.3%
7-Day LinkPass	$22.50	28,616,000	27,101,000	44,104,000	22.4%	25.0%	12.5%
Rapid Transit (Adult)	$2.40	13,187,000	9,834,000	54,610,000	10.3%	9.1%	15.5%
Rapid Transit (Senior)	$1.10	588,000	1,175,000	4,196,000	0.5%	1.1%	1.2%

		Annual Usage in Unlinked Trips			Annual Usage Share of Group Total		
Fare-Payment Type	**Existing Fare**	**Minority**	**Low-Income**	**All Riders**	**Minority**	**Low-Income**	**All Riders**
Rapid Transit (Student)	$1.10	949,000	1,178,000	1,958,000	0.7%	1.1%	0.6%
Commuter Rail							
Zone 1A–10 Pass	$80.00–$426.00	5,575,000	2,164,000	30,143,000	4.4%	2.0%	8.5%
Interzone 1–10 Pass	$80.00–$257.00	32,000	14,000	114,000	0.0%	0.0%	0.0%
Zone 1A–10 Single Ride	$2.40–$13.25	1,612,000	980,000	15,591,000	1.3%	0.9%	4.4%
Interzone 1–10 Single Ride	$2.75–$6.75	57,000	201,000	606,000	0.0%	0.2%	0.2%
Ferry							
Commuter Ferry Pass	$329.00	20,000	24,000	329,000	0.0%	0.0%	0.1%
Hingham/Hull Ferry	$9.75	NR	NR	678,000	0.0%	0.0%	0.2%
Charlestown Ferry	$3.70	NR	NR	NR	0.0%	0.0%	0.0%
Free Transfers and Other Fares							
In-station Transfers	No Cost	6,028,000	5,425,000	17,539,000	4.7%	5.0%	5.0%
Free trips	No Cost	922,000	1,573,000	4,180,000	0.7%	1.4%	1.2%

Notes: Values are rounded to the nearest 1,000. Percentages are calculated using unrounded values. NR indicates that insufficient riders from a given classification responded to the survey. The figures for free trips include people who are not required to pay a fare. Some of these people pay with the Blind Access Card.
NR = No response or insufficient responses. TAP = Transportation Access Pass.
Source: Central Transportation Planning Staff.

5.1.2 Rationale for Weighting to Ridership from a Pre-Pandemic Year

While 2020 ridership numbers were available, CTPS chose to use 2018 ridership numbers for the following reasons:

1) Ridership numbers from 2018 better match the demographics from the systemwide ridership survey.
2) The pandemic potentially altered the demographic profile of the MBTA's ridership. Updating ridership to intra-pandemic quantities without updating demographic inputs would result in an analysis insensitive to potentially inconsistent demographic shifts both in travel patterns and fare purchasing decisions.
3) For the proposed fare changes that result in less expensive travel options on commuter rail, using pre-pandemic ridership is the more conservative approach for an equity analysis.

The COVID-19 pandemic precipitated a large decrease in ridership throughout the MBTA, but proportionally the decrease was greatest on commuter rail. Historically, the majority of passengers on commuter rail have been non-low-income and nonminority passengers. Therefore, scaling pre-pandemic demographics to more recent ridership patterns would make an equity analysis artificially easier to pass, as the quantity of trips being made by non-protected populations would decrease at a greater rate than trips made on modes more heavily used by protected populations. The result would be a DI or DB ratio that is less sensitive to an impact on protected populations. Without a more recent systemwide survey to collect demographic data for fare product usage, it is more conservative to conduct equity analyses with pre-pandemic ridership data that matches the available fare product usage data.[9]

5.1.3 Pricing Survey Travel and Estimating Revenue from Fares

CTPS calculated the annual cost of reported travel in the passenger survey dataset based on the pricing structure that was in place as of July 1, 2021.[10] Fare products in the survey that no longer carry a price difference were consolidated (such as inner and outer express buses). To find annual costs for travel, CTPS assumed that each survey respondent would travel at the reported frequency for the entire SFY; so, we scaled up each person's trip frequency accordingly. For example, if a respondent reported purchasing a monthly LinkPass for $90, then that person was assumed to have purchased the same pass every month, for a total of $1,080 spent on fares that year. Alternatively, if a respondent paid for travel on a per-ride basis, the travel costs were calculated as the total cost of the linked trip at the estimated scaled trip frequency. For example, if travel included a rapid transit trip with a step-up transfer to bus service three-to-four days a week, each linked trip would cost $2.40 and the person would make this trip

[9] The MBTA has begun the process of collecting updated ridership survey data that will be available to use in future analyses.

[10] Prices were found at https://cdn.mbta.com/sites/default/files/2021-06/2021-07-01-mbta-combined-tariff.pdf.

approximately 29.7 times a month or 357 times a year.[11] In total, this per-ride travel would cost $856.73 per year.

CTPS estimated the number of passengers represented by each survey response by dividing the total weighted boardings per survey response by the boardings per passenger associated with the reported survey travel.

$$Passengers\ represented\ per\ survey = \frac{Weighted\ boardings}{Boardings\ per\ passenger\ in\ survey\ response}$$

CTPS estimated the revenue per survey response as the number of passengers represented per survey multiplied by the cost of yearly travel per passenger.

$$\begin{aligned} &Revenue\ per\ survey \\ &\quad = (Cost\ of\ yearly\ travel\ per\ passenger) \\ &\quad \times (Passengers\ represented\ per\ survey) \end{aligned}$$

This process was used to calculate the revenue and total trips associated with minority, low-income, and all riders for the current fare structure. Next, CTPS found how travel costs would change under the proposed fare structure. To identify the change in price for fare changes made to existing fare products, CTPS priced survey travel using the proposed pricing structure. For example, the cost of a 1-Day LinkPass was set to $11.00 as opposed to $12.75. However, for new fare products, CTPS identified the riders with travel patterns that will be best served by the new fare product and shifted them to the new product.

5.1.4 Introducing New Fare Products to Agent-Based Model

Within the agent-based model, whether or not passengers shift to a new fare product and what fare product they switch to depend on 1) the cost of their travel under the proposed fare structure, 2) what alternative fare products cover their travel, and 3) how efficiently their reported fare product covered the trip-making patterns in the survey response.

To determine if a survey respondent would switch to a new fare product within the agent-based model, CTPS uses the following methodology:

1) Find the price for the reported travel using all possible fare products, including the per-ride price and all passes that cover the modes indicated in the survey response.

[11] When the survey frequency was collected as a range, CTPS took the weekly midpoint (i.e., "three-to-four days a week" is equivalent to 3.5 days per week). To calculate monthly and yearly frequencies, CTPS scaled by 4.33 weeks in a month and 12 months in a year. Additionally, the return trip rate is set to 1.96, which was found by calibrating the agent-based model to the annual fares revenue from the most recent Fare Equity Analysis: "SFY 2022: Fare Equity Analysis Results," dated April 26, 2021.

2) Identify the most cost-efficient fare option for reported travel based on the trip-making information provided in the survey.
3) Determine how likely the survey respondent is to switch to a new fare product by assigning a sensitivity threshold to each survey response. (See the next section for further discussion.)
4) Find the percent change in cost between the reported fare product and all possible fare products in the proposed fare structure.
5) Switch passengers to a new fare product if the cost savings exceed their sensitivity threshold.

5.1.5 Estimating Survey Respondents' Sensitivity to Change

The ridership survey represents an incomplete snapshot of a passenger's travel, as it asked respondents to report their fare payment and travel for their most recent MBTA trip. For example, a passenger could have an Express Bus Pass, but the passenger's most recent MBTA trip reported in the survey was a rapid transit trip. As a result, not every survey response is matched to the most efficient fare product for the reported travel patterns. Indeed, 32 percent of survey respondents are "overpaying" by an average of $42.03 per month.

To address this issue, we estimate a sensitivity threshold to describe how sensitive a given respondent is to a price change, based on how appropriate the reported fare product is for the passenger's travel. Then, when introducing new fare products, CTPS projects a fare product switch if the cost savings exceed the sensitivity threshold. If we find a respondent is purchasing the lowest cost fare product in the baseline, then we assume that person is more sensitive to a price change than someone who could potentially be saving tens to hundreds of dollars per month.

To determine whether a survey respondent will switch to a lower cost fare product, we classified respondents into three sensitivity categories: *very sensitive*, *somewhat sensitive*, and *insensitive*:

- ***Very sensitive*** respondents are purchasing the lowest cost fare product available in the baseline. *Very sensitive* respondents comprise about 68 percent of survey respondents. Respondents in this category will switch to a new fare product if switching would result in a five percent cost savings or more.
- ***Somewhat sensitive*** respondents are not purchasing the lowest cost fare product available, but their potential savings are less than their sensitivity threshold. *Somewhat sensitive* respondents make up 19 percent of survey responses.
- ***Insensitive*** respondents are not purchasing the lowest cost fare product available, and their potential savings are greater than the weighted average of potential savings for similar riders. *Insensitive* respondents make up 13 percent of survey responses. In the model, these riders will not switch to a new fare product regardless of the potential cost savings,

as we assume their choice of fare product is minimally related to the fare product cost.

CTPS found the sensitivity threshold to distinguish between *somewhat sensitive* and *insensitive* survey respondents by finding the average percent respondents "overpaid" for similar travel. Among survey respondents who were not already purchasing the most cost-efficient fare product, commuter rail and/or ferry riders purchasing single-ride fares paid an average of 26 percent more than their most efficient fare product; commuter rail and/or ferry riders traveling on a pass paid 24 percent more. Bus and/or rapid transit riders purchasing single-ride fares paid an average of 17 percent more than their most efficient fare product, and bus and/or rapid transit riders traveling on a pass paid 54 percent more. For example, if rapid transit and bus riders were paying $101.88 per month in the baseline with standard one-way fares, they could save approximately 12 percent if they switched to a $90 Monthly LinkPass. The average savings for rapid transit and bus riders paying with one-way fares is about 17 percent. Since the potential savings is below the average, these respondents are classified as *somewhat sensitive*. As a result, they will only switch to a new fare product if it offers more than a 17 percent savings or if the monthly pass price is below $84.56.

5.2 Estimating Equity of Changing Transfer Rules

CTPS analyzed the equity impacts for the proposed transfer rule changes independent of the agent-based ridership model analysis due to sample size limitations of the MBTA passenger survey and the opportunity afforded by transaction-level AFC data. The AFC system records the location and mode of every instance where a CharlieCard or CharlieTicket interacts with the AFC system, which currently includes local bus, rapid transit, and express bus fares. The current transfer policy allows riders using stored value within the AFC system to transfer to *one* additional transit service (with a few exceptions) and pay only for the trip with the greatest fare. The proposed transfer rule change would expand this policy to allow passengers using stored value *a free second transfer* on bus and subway and *one free transfer* between express buses.

CTPS estimated the equity of the proposed transfer rule by calculating the change in revenue when the proposed transfer rules are applied to a sample of AFC transactions. Then, CTPS estimated demographic classifications for passengers making those trips based on the transaction locations. CTPS first identified how much passengers using stored value CharlieCards or CharlieTickets spent per trip under the current transfer rules. CTPS compared this baseline revenue to how much these passengers would spend under the proposed transfer rules. Next, we assigned each AFC transaction a location based on the most frequent rapid transit station or bus route used by each holder of a distinct fare CharlieCard or CharlieTicket. Demographic estimates were then joined to ridership and revenue estimates using the MBTA passenger survey summary demographics for routes and stations. Finally, these demographic ratios were multiplied by the total trips and revenue values to estimate the

potential equity impacts. This analysis was conducted for one month of pre-pandemic AFC transaction data, and the results were scaled to an annual estimate.[12]

6 RESULTS

6.1 Estimated Revenue Impacts for Proposed Fare Changes

CTPS designed the agent-based model to report on the equity of proposed fare change packages without overestimating the impact of competing fare changes. For example, in the proposed changes, we tested the equity of introducing multiple new fare products for commuter rail reduced-fare riders including FlexPasses and Monthly Passes. As a result, based on the trip-making patterns recorded in the survey response, some riders will shift to FlexPasses to cover their travel and another subset will shift to monthly passes. In the planning process, it is also helpful to assess the impact of fare changes on an individual basis. Table 4 summarizes revenue impact by individual fare change and as a package for each population. Note, the final column in Table 4 presents the revenue change for the package of changes. The preceding revenue change columns do not sum exactly to the packaged primary model run, as some passengers have competing options for travel when the fare changes are packaged together.

CTPS combined the revenue changes from the primary model with the revenue impact estimates from the proposed transfer rule changes found from the AFC transaction level data. Table 5 shows the change in revenue and projected change in average fares associated with the proposed revenue changes for the primary model and off-model analysis combined.

[12] AFC transaction data from October 2019 was scaled to an annual amount by finding the ratio of annual rapid transit boardings from 2019 to rapid transit boardings from October 2019. The resulting scaling factor is 11.11906.

Table 4
Summary of Revenue Changes by Population for Proposed Fare Changes Analyzed in the Agent-Based Model

Rider Classification	Existing Number of Trips	Existing Revenue	Change of Revenue: Lower 1-Day LinkPass to $11*	Change of Revenue: Reduced 7-Day LinkPass at $10*	Change of Revenue: mTicket FlexPass as Permanent Fare Product*	Change of Revenue: Reduced Monthly Passes on All Modes*	Change of Revenue: Primary Model
Minority	127,600,000	$165,300,000	-$350,919	-$455,530	-$241,466	-$54,656	**-$1,137,798**
Low-Income	108,300,000	$125,200,000	-$353,400	-$643,404	-$31,806	-$40,991	**-$1,095,450**
All Riders	353,100,000	$675,200,000	-$448,969	-$1,016,432	-$2,237,355	-$1,933,105	**-$5,742,527**

Note: Revenue and ridership figures are based on a pre-COVID-19 year. They are not scaled to reflect ridership recovery scenarios. Reduced monthly passes on all modes includes updating validity rules to make reduced LinkPasses valid on Charlestown ferry and commuter rail Zone 1A.
* Results for proposed fare change run in isolation on the agent-based model.
Source: Central Transportation Planning Staff.

Table 5
Summary of Revenue Changes by Population for All Proposed Fare Changes

Rider Classification	Existing Number of Trips	Existing Revenue	Existing Average Fare	Change of Revenue: Primary Model	Change of Revenue: Bus Transfers	Total Revenue Change	Projected Revenue	Projected Average Fare	Percent Change: Average Fare
Minority	127,600,000	$165,300,000	$1.2956	-$1,137,798	-$316,382	-$1,454,180	$163,854,820	$1.2845	-0.86%
Low-Income	108,300,000	$125,200,000	$1.1564	-$1,095,450	-$261,787	-$1,357,238	$123,842,762	$1.1440	-1.07%
All Riders	353,100,000	$675,200,000	$1.9120	-$5,742,527	-$606,220	-$6,348,746	$668,851,254	$1.8941	-0.94%

Note: Revenue and ridership figures are based on a pre-COVID-19 year. They are not scaled to reflect ridership recovery scenarios.
Source: MBTA Automatic Fare Transactions, processed by Central Transportation Planning Staff.

6.1.1 FlexPass Demographics

The MBTA introduced the FlexPass as an mTicket fare product in July 2020 as a promotional fare product. Notably, this product was introduced after COVID-19 had dramatically affected MBTA transit ridership. However, for the equity analysis of the current proposed fare changes, CTPS reported on equity using a pre-pandemic base ridership year. In the fall of 2021, the MBTA conducted an mTicket survey to capture the demographics of passengers who purchased FlexPasses. The mTicket FlexPass Usage Survey asked active mTicket riders about either their experience using the FlexPass or why it did not serve their travel. Additionally, the survey asked respondents for demographic information including their racial identification and annual household income.

CTPS analyzed the results of this survey; however, when reporting on the equity of making the FlexPass a permanent fare product, we used the results from the agent-based equity model described above that examined introducing the FlexPass. We made this choice to avoid conflating pre-pandemic and intra-pandemic ridership demographics on commuter rail and to prevent double-counting of FlexPass usage. Results from the fall 2021 survey effort are presented here as a point of reference.

When processing survey results, CTPS classified surveyed passengers who reported an annual household income below $53,500 as low-income.[13] Passengers who self-identified as a race other than White or as Hispanic or Latino/Latina were classified as minority passengers. Survey responses were weighted to total mTicket activations. Table 6 shows the demographics of FlexPass passengers from the mTicket survey conducted in fall 2021.

[13] Income of $53,500 is 60 percent of the area median income based on 2015–19 American Community Survey household income distribution data from the US Census. For more on this threshold see the CTPS Memorandum “Fare Transformation Proposed Sales Network Analysis” dated March 4, 2021.

Table 6
Demographics of FlexPass Passengers

Rider Classification	Number of Respondents	Proportion	Margin of Error
Minority	110	15.1%	±4.7%
Low-income	43	7.9%	±3.8%

Note: There were 682 respondents who provided enough information to determine their minority status, and 599 respondents provided enough information to determine their income status. The margin of error is based on a 95 percent confidence level.
Source: MBTA FlexPass Usage Survey (October 2021).

6.2 Summary of All Changes

The results of the equity analysis, shown in Table 7, show that the proposed fare changes would neither produce a disparate impact on minority riders nor a disproportionate burden to low-income riders.

Table 7
Existing and Projected Average Fares and Price Changes

Rider Classification	Existing Average Fare	Projected Average Fare	Percent Price Change	DI/DB Ratio
Minority	$1.2956	$1.2845	-0.86%	91.72%
Low-Income	$1.1564	$1.1440	-1.07%	113.92%
All Riders	$1.9120	$1.8941	0.94%	—

Note: Percent changes in average fares and DI/DB ratios are calculated prior to rounding.
DI/DB = disparate impact and disproportionate burden.
Source: Central Transportation Planning Staff.

Application of the disparate-impact threshold to the combined pre-pandemic results shows that the relative decrease in the average fare for minority riders is 92 percent of the relative decrease in the average fare for all riders. Application of the disproportionate-burden threshold shows that the relative decrease in the average fare for low-income riders is 115 percent of the relative decrease in the average fare for all riders.

Because the average fare decreases for both minority and low-income riders are both greater than 90 percent of the average fare decrease for all riders—the threshold defined by the DI/DB policy—CTPS does not find a disparate impact on minority riders or a disproportionate burden on low-income riders.

Appendix: Table 8

The Boston Region Metropolitan Planning Organization (MPO) operates its programs, services, and activities in compliance with federal nondiscrimination laws including Title VI of the Civil Rights Act of 1964 (Title VI), the Civil Rights Restoration Act of 1987, and related statutes and regulations. Title VI prohibits discrimination in federally assisted programs and requires that no person in the United States of America shall, on the grounds of race, color, or national origin (including limited English proficiency), be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination under any program or activity that receives federal assistance. Related federal nondiscrimination laws administered by the Federal Highway Administration, Federal Transit Administration, or both, prohibit discrimination on the basis of age, sex, and disability. The Boston Region MPO considers these protected populations in its Title VI Programs, consistent with federal interpretation and administration. In addition, the Boston Region MPO provides meaningful access to its programs, services, and activities to individuals with limited English proficiency, in compliance with U.S. Department of Transportation policy and guidance on federal Executive Order 13166.

The Boston Region MPO also complies with the Massachusetts Public Accommodation Law, M.G.L. c 272 sections 92a, 98, 98a, which prohibits making any distinction, discrimination, or restriction in admission to, or treatment in a place of public accommodation based on race, color, religious creed, national origin, sex, sexual orientation, disability, or ancestry. Likewise, the Boston Region MPO complies with the Governor's Executive Order 526, section 4, which requires that all programs, activities, and services provided, performed, licensed, chartered, funded, regulated, or contracted for by the state shall be conducted without unlawful discrimination based on race, color, age, gender, ethnicity, sexual orientation, gender identity or expression, religion, creed, ancestry, national origin, disability, veteran's status (including Vietnam-era veterans), or background.

A complaint form and additional information can be obtained by contacting the MPO or at http://www.bostonmpo.org/mpo_non_discrimination.

To request this information in a different language or in an accessible format, please contact

Title VI Specialist
Boston Region MPO
10 Park Plaza, Suite 2150
Boston, MA 02116
civilrights@ctps.org

By Telephone:
857.702.3702 (voice)

For people with hearing or speaking difficulties, connect through the state MassRelay service:

- **Relay Using TTY or Hearing Carry-over:** 800.439.2370
- **Relay Using Voice Carry-over:** 866.887.6619
- **Relay Using Text to Speech: 8**66.645.9870

For more information, including numbers for Spanish speakers, visit https://www.mass.gov/massrelay.

APPENDIX: TABLE 8

Table 8
Complete Pass Prices: Existing and Proposed

Fare Product	Rider Type	Existing Fare	Proposed Fare	Percent Change
Bus and Rapid Transit				
1-Day LinkPass	Adult	$12.75	$11.00	-14%
7-Day LinkPass	Adult	$22.50	$22.50	0%
Monthly Local Bus	Adult	$55.00	$55.00	0%
Monthly LinkPass	Adult	$90.00	$90.00	0%
Monthly Express Bus	Adult	$136.00	$136.00	0%
Monthly LinkPass	Reduced	$30.00	$30.00	0%
7-Day LinkPass	**Reduced**	**Not offered**	**$10.00**	**New product**
Express Bus	**Reduced**	**Not offered**	**$67.00**	**New product**
Commuter Rail				
Zone 1A	Adult	$90.00	$90.00	0%
Zone 1	Adult	$214.00	$214.00	0%
Zone 2	Adult	$232.00	$232.00	0%
Zone 3	Adult	$261.00	$261.00	0%
Zone 4	Adult	$281.00	$281.00	0%
Zone 5	Adult	$311.00	$311.00	0%
Zone 6	Adult	$340.00	$340.00	0%
Zone 7	Adult	$360.00	$360.00	0%
Zone 8	Adult	$388.00	$388.00	0%
Zone 9	Adult	$406.00	$406.00	0%
Zone 10	Adult	$426.00	$426.00	0%
Interzone 1	Adult	$90.00	$90.00	0%
Interzone 2	Adult	$110.00	$110.00	0%
Interzone 3	Adult	$120.00	$120.00	0%
Interzone 4	Adult	$139.00	$139.00	0%
Interzone 5	Adult	$158.00	$158.00	0%
Interzone 6	Adult	$178.00	$178.00	0%
Interzone 7	Adult	$196.00	$196.00	0%
Interzone 8	Adult	$216.00	$216.00	0%
Interzone 9	Adult	$237.00	$237.00	0%
Interzone 10	Adult	$257.00	$257.00	0%
Zone 1A (mTicket)	Adult	$80.00	$80.00	0%
Zone 1 (mTicket)	Adult	$204.00	$204.00	0%
Zone 2 (mTicket)	Adult	$222.00	$222.00	0%
Zone 3 (mTicket)	Adult	$251.00	$251.00	0%
Zone 4 (mTicket)	Adult	$271.00	$271.00	0%

Fare Product	Rider Type	Existing Fare	Proposed Fare	Percent Change
Zone 5 (mTicket)	Adult	$301.00	$301.00	0%
Zone 6 (mTicket)	Adult	$330.00	$330.00	0%
Zone 7 (mTicket)	Adult	$350.00	$350.00	0%
Zone 8 (mTicket)	Adult	$378.00	$378.00	0%
Zone 9 (mTicket)	Adult	$396.00	$396.00	0%
Zone 10 (mTicket)	Adult	$416.00	$416.00	0%
Interzone 1 (mTicket)	Adult	$80.00	$80.00	0%
Interzone 2 (mTicket)	Adult	$100.00	$100.00	0%
Interzone 3 (mTicket)	Adult	$110.00	$110.00	0%
Interzone 4 (mTicket)	Adult	$129.00	$129.00	0%
Interzone 5 (mTicket)	Adult	$148.00	$148.00	0%
Interzone 6 (mTicket)	Adult	$168.00	$168.00	0%
Interzone 7 (mTicket)	Adult	$186.00	$186.00	0%
Interzone 8 (mTicket)	Adult	$206.00	$206.00	0%
Interzone 9 (mTicket)	Adult	$227.00	$227.00	0%
Interzone 10 (mTicket)	Adult	$247.00	$247.00	0%
Weekend Pass	Adult	$10.00	$10.00	0%
Zone 1A	Reduced	**Not offered**	$30.00	**New product**
Zone 1	Reduced	**Not offered**	$107.00	**New product**
Zone 2	Reduced	**Not offered**	$116.00	**New product**
Zone 3	Reduced	**Not offered**	$130.00	**New product**
Zone 4	Reduced	**Not offered**	$136.00	**New product**
Zone 5	Reduced	**Not offered**	$152.00	**New product**
Zone 6	Reduced	**Not offered**	$170.00	**New product**
Zone 7	Reduced	**Not offered**	$180.00	**New product**
Zone 8	Reduced	**Not offered**	$190.00	**New product**
Zone 9	Reduced	**Not offered**	$199.00	**New product**
Zone 10	Reduced	**Not offered**	$209.00	**New product**
Interzone 1	Reduced	**Not offered**	$41.00	**New product**
Interzone 2	Reduced	**Not offered**	$51.00	**New product**
Interzone 3	Reduced	**Not offered**	$60.00	**New product**
Interzone 4	Reduced	**Not offered**	$65.00	**New product**
Interzone 5	Reduced	**Not offered**	$75.00	**New product**
Interzone 6	Reduced	**Not offered**	$85.00	**New product**
Interzone 7	Reduced	**Not offered**	$94.00	**New product**
Interzone 8	Reduced	**Not offered**	$104.00	**New product**
Interzone 9	Reduced	**Not offered**	$114.00	**New product**
Interzone 10	Reduced	**Not offered**	$124.00	**New product**
Zone 1A (mTicket)	Reduced	**Not offered**	$30.00	**New product**
Zone 1 (mTicket)	Reduced	**Not offered**	$102.00	**New product**
Zone 2 (mTicket)	Reduced	**Not offered**	$111.00	**New product**

Fare Product	Rider Type	Existing Fare	Proposed Fare	Percent Change
Zone 3 (mTicket)	Reduced	**Not offered**	$125.00	**New product**
Zone 4 (mTicket)	Reduced	**Not offered**	$131.00	**New product**
Zone 5 (mTicket)	Reduced	**Not offered**	$147.00	**New product**
Zone 6 (mTicket)	Reduced	**Not offered**	$165.00	**New product**
Zone 7 (mTicket)	Reduced	**Not offered**	$175.00	**New product**
Zone 8 (mTicket)	Reduced	**Not offered**	$185.00	**New product**
Zone 9 (mTicket)	Reduced	**Not offered**	$194.00	**New product**
Zone 10 (mTicket)	Reduced	**Not offered**	$204.00	**New product**
Interzone 1 (mTicket)	Reduced	**Not offered**	$36.00	**New product**
Interzone 2 (mTicket)	Reduced	**Not offered**	$46.00	**New product**
Interzone 3 (mTicket)	Reduced	**Not offered**	$55.00	**New product**
Interzone 4 (mTicket)	Reduced	**Not offered**	$60.00	**New product**
Interzone 5 (mTicket)	Reduced	**Not offered**	$70.00	**New product**
Interzone 6 (mTicket)	Reduced	**Not offered**	$80.00	**New product**
Interzone 7 (mTicket)	Reduced	**Not offered**	$89.00	**New product**
Interzone 8 (mTicket)	Reduced	**Not offered**	$99.00	**New product**
Interzone 9 (mTicket)	Reduced	**Not offered**	$109.00	**New product**
Interzone 10 (mTicket)	Reduced	**Not offered**	$119.00	**New product**
FlexPass Zone 1A	Adult	**Promotional Product**	$21.60	**New product**
FlexPass Zone 1	Adult	**Promotional Product**	$58.50	**New product**
FlexPass Zone 2	Adult	**Promotional Product**	$63.00	**New product**
FlexPass Zone 3	Adult	**Promotional Product**	$72.00	**New product**
FlexPass Zone 4	Adult	**Promotional Product**	$78.75	**New product**
FlexPass Zone 5	Adult	**Promotional Product**	$87.75	**New product**
FlexPass Zone 6	Adult	**Promotional Product**	$94.50	**New product**
FlexPass Zone 7	Adult	**Promotional Product**	$99.00	**New product**
FlexPass Zone 8	Adult	**Promotional Product**	$110.25	**New product**
FlexPass Zone 9	Adult	**Promotional Product**	$114.75	**New product**
FlexPass Zone 10	Adult	**Promotional Product**	$119.25	**New product**
FlexPass Interzone 1	Adult	**Promotional Product**	$24.75	**New product**
FlexPass Interzone 2	Adult	**Promotional Product**	$29.25	**New product**
FlexPass Interzone 3	Adult	**Promotional Product**	$31.50	**New product**
FlexPass Interzone 4	Adult	**Promotional Product**	$38.25	**New product**
FlexPass Interzone 5	Adult	**Promotional Product**	$42.75	**New product**
FlexPass Interzone 6	Adult	**Promotional Product**	$47.25	**New product**
FlexPass Interzone 7	Adult	**Promotional Product**	$51.75	**New product**
FlexPass Interzone 8	Adult	**Promotional Product**	$56.25	**New product**
FlexPass Interzone 9	Adult	**Promotional Product**	$60.75	**New product**
FlexPass Interzone 10	Adult	**Promotional Product**	$65.25	**New product**
FlexPass Zone 1A	Reduced	**Not offered**	$9.90	**New product**
FlexPass Zone 1	Reduced	**Not offered**	$29.25	**New product**

Fare Product	Rider Type	Existing Fare	Proposed Fare	Percent Change
FlexPass Zone 2	Reduced	**Not offered**	$31.50	**New product**
FlexPass Zone 3	Reduced	**Not offered**	$36.00	**New product**
FlexPass Zone 4	Reduced	**Not offered**	$38.25	**New product**
FlexPass Zone 5	Reduced	**Not offered**	$42.75	**New product**
FlexPass Zone 6	Reduced	**Not offered**	$47.25	**New product**
FlexPass Zone 7	Reduced	**Not offered**	$49.50	**New product**
FlexPass Zone 8	Reduced	**Not offered**	$54.00	**New product**
FlexPass Zone 9	Reduced	**Not offered**	$56.25	**New product**
FlexPass Zone 10	Reduced	**Not offered**	$58.50	**New product**
FlexPass Interzone 1	Reduced	**Not offered**	$11.25	**New product**
FlexPass Interzone 2	Reduced	**Not offered**	$13.50	**New product**
FlexPass Interzone 3	Reduced	**Not offered**	$15.75	**New product**
FlexPass Interzone 4	Reduced	**Not offered**	$18.00	**New product**
FlexPass Interzone 5	Reduced	**Not offered**	$20.25	**New product**
FlexPass Interzone 6	Reduced	**Not offered**	$22.50	**New product**
FlexPass Interzone 7	Reduced	**Not offered**	$24.75	**New product**
FlexPass Interzone 8	Reduced	**Not offered**	$27.00	**New product**
FlexPass Interzone 9	Reduced	**Not offered**	$29.25	**New product**
FlexPass Interzone 10	Reduced	**Not offered**	$31.50	**New product**
Ferry				
Charlestown Ferry (mTicket)	Adult	$80.00	$80.00	0%
Commuter Ferry	Adult	$329.00	$329.00	0%
Commuter Ferry (mTicket)	Adult	$319.00	$319.00	0%
Commuter Ferry	Reduced	**Not offered**	$164.00	**New product**
Commuter Ferry (mTicket)	Reduced	**Not offered**	$159.00	**New Product**

Source: MBTA.



Appendix 7N

Approval of Fare Equity Analysis of SFY 2023 Fare Changes



Charles D. Baker, Governor
Karyn E. Polito, Lieutenant Governor
Jamey Tesler, MassDOT Secretary & CEO
Steve Poftak, General Manager

massDOT
Massachusetts Department of Transportation

This is a true and accurate copy of the action taken by the Board of Directors of the Massachusetts Bay Transportation Authority on March 24, 2022.

IT IS VOTED:

WHEREAS, the Massachusetts Bay Transportation Authority ("MBTA") has proposed to make six changes to its tariff including the following: (1) Expanding Monthly Passes to all modes for Reduced Fare Riders (People 65 and over; People with disabilities and Medicare cardholders; certain Middle and High School Students; and People 18-25 with low income); (2) Creating a New 7-day LinkPass for Reduced Fare Riders; (3) Allowing Reduced Fare LinkPass to be Valid on Zone 1A and Inner Harbor Ferry; (4) Lower Price for 1-day LinkPass; (5) Creating Permanent mTicket 5-Day FlexPasses on Commuter Rail; and (6) Allowing Second Transfers on Subway/Bus and Between Express Routes (together, the "Tariff Changes"); and

WHEREAS, the Tariff Changes (together, the "Title VI Fare Changes") are fare changes that will last longer than six months; and

WHEREAS, the Federal Transit Administration ("FTA") Title VI Circular 4702.1B requires the MBTA to conduct a fare equity analysis for fare changes that last longer than six months to evaluate the impacts of such fare changes and determine whether such fare changes would have a discriminatory impact based on race, color, or national origin, low-income populations would bear disproportionate burdens of the fare changes, or non-low-income populations would receive disproportionate benefits because of the fare changes; and

WHEREAS, the Title VI Fare Changes are fare changes requiring a fare equity analysis under FTA Title VI Circular 4702.1B; and

WHEREAS, a fare equity analysis as to the Title VI Fare Changes was completed on March 9, 2022 ("the Title VI Equity Analysis"); and

WHEREAS, the Title VI Equity Analysis demonstrated that the Title VI Fare Changes, taken together, do not have a discriminatory impact on race, color, or national origin; low-income populations would not bear disproportionate burdens of the fare changes; and non-low-income populations would not receive disproportionate benefits because of the fare changes and

WHEREAS, MBTA Board of Directors ("Board") has considered and reviewed the Title VI Equity Analysis;

On motion duly made and seconded, it is by roll call VOTED that:

The Board hereby approves the Title VI Equity Analysis for the Title VI Fare Changes and directs the MBTA, through the General Manager, to take all steps necessary to provide such acceptance to the FTA, as appropriate.

And further that the Board hereby approves the Tariff Changes as set forth herein.

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY ESTABLISHED 1964

Marie Breen

Marie Breen, General Counsel

Massachusetts Bay Transportation Authority
Ten Park Plaza, Boston, MA 02116
www.mbta.com





Appendix 7O

CTPS Fare Equity Analysis of Free Bus Routes 23, 28, 29



TECHNICAL MEMORANDUM

DATE: July 11, 2022
TO: Lynsey Heffernan and Steven Povich, Massachusetts Bay Transportation Authority
FROM: Blake Acton, Central Transportation Planning Staff
Emily Domanico, Central Transportation Planning Staff
Bradley Putnam, Central Transportation Planning Staff
RE: MBTA Boston Free Bus: Fare Equity Analysis Results

When considering changes to fares, the Massachusetts Bay Transportation Authority (MBTA) undertakes a process to evaluate the equity impacts of the proposed changes. At the request of the MBTA, the Central Transportation Planning Staff (CTPS), which serves as staff to the Boston Region Metropolitan Planning Organization (MPO), examined the equity impacts of eliminating fares on MBTA bus Routes 23, 28, and 29. CTPS used an agent-based ridership model based on the systemwide ridership survey, which is described in more detail in section 4.3.

This document fulfills the MBTA's responsibility to conduct a fare equity analysis, as required by Title VI of the Civil Rights Act of 1964 (Title VI). The objective of this analysis is to determine if eliminating fares on these routes would result in disparate impacts for minority populations or disproportionate burdens for low-income populations.

In this analysis, CTPS compared the impacts of relative fare changes between riders classified as minorities and riders classified as low-income to all riders. Since eliminating fares on these routes represents an overall fare decrease, this analysis assesses whether non-minority or non-low-income populations would disproportionately benefit from these changes. CTPS concludes that eliminating fares on Routes 23, 28, and 29 results in neither a disparate impact to minority riders nor a disproportionate burden to low-income riders; therefore, these changes are in accordance with the MBTA's disparate-impact and disproportionate-burden policies.

1 FARE CHANGE PROPOSAL

From March 1, 2022, to February 29, 2024, the MBTA will not charge fares to customers who board bus Routes 23, 28, or 29. This program is funded by the City of Boston and builds on the Route 28 free-fare pilot program that began on August 29, 2021, which was originally set to end on February 28, 2022. The pilot

Civil Rights, nondiscrimination, and accessibility information is on the last page.

will not affect pre-existing transfer rules, so riders who transfer to rapid transit or other MBTA services still pay standard fares. Additionally, users of The RIDE paratransit service who begin and end trips within three quarters of a mile of these three routes will also not be charged a fare. Evaluating the fare equity impacts of eliminating fares on The RIDE is outside the scope of this analysis and is not included in this document.

2 REQUIREMENTS

Title VI of the Civil Rights Act of 1964 prohibits discrimination, either intentionally or unintentionally, by recipients of federal financial assistance based on race, color, or national origin. To comply with Title 49 of the Code of Federal Regulations (CFR) Section 21.5(b) (2), 49 CFR Section 21.5(b) (7), and Appendix C to 49 CFR Part 21, the MBTA must evaluate any fare changes to fixed-route modes prior to implementation to determine if the proposed changes would have a discriminatory effect. The Federal Transit Administration (FTA) provides guidance for conducting fare equity analyses in FTA Circular 4702.1B ("Circular"), Section IV.7.b. Prior to making a permanent fare change, the MBTA must analyze any available information generated from ridership surveys that indicates whether minority and/or low-income riders would be disproportionately more likely than overall riders to use the mode of service, payment type, or payment media that would be subject to a fare change. In addition, the MBTA must describe the datasets and collection methods used in its analysis.

The Circular states that the transit provider shall

- determine the number and percentage of users of each fare media subject to change;
- review fares before and after the change;
- compare the relative cost burden impacts of the proposed fare change between minority and overall users for each fare media; and
- compare the relative cost burden impacts of the proposed fare change between low-income and overall users for each fare media.

Under Title VI and other directives, the FTA requires that transit agencies develop a policy to assess whether a proposed fare change would have a disparate impact on minority populations or disproportionate burden on low-income populations. The FTA Title VI guidelines define disparate impact as "a facially neutral policy or practice that disproportionately affects members of a group identified by race, color, or national origin, where the recipient's policy or practice lacks a substantial legitimate justification and where there exists one or more alternatives that would serve the same legitimate objectives, but with less disproportionate effects on the basis, of race, color, or national origin." The guidelines define disproportionate burden as "a neutral policy or practice that disproportionately affects low-income populations more than non-low-income populations."

3 MBTA TITLE VI DISPARATE IMPACT/DISPROPORTIONATE BURDEN POLICY

3.1 Policy Thresholds

The MBTA's January 30, 2017, *Disparate Impact/Disproportionate Burden (DI/DB) Policy*[1] explains the methodology to be used for fare equity analyses:

> "For all fare changes, the MBTA will compare the percentage change in the average fare for minority and overall riders and for low-income and overall riders. For fare-type changes across all modes, the MBTA will assess whether minority and low-income customers are more likely to use the affected fare type or media than overall riders. Any or all proposed fare changes will be considered in the aggregate and results evaluated using the fare DI/DB threshold, below. The MBTA's threshold for determining when fare changes may result in disparate impacts or disproportionate burdens on minority or low-income populations, respectively, is 10%."
>
> *MBTA Disparate Impact/Disproportionate Burden (DI/DB) Policy*

The policy thresholds are encapsulated in the following equations. A disparate impact would be found if the average fare decrease for minorities is less than 90 percent of the average fare decrease for all riders, or if the average fare increase for minorities is greater than 110 percent of the average increase for all riders:

$$\text{Minority Average Fare Decrease} < 90\% \times \text{All-Rider Average Fare Decrease}$$
$$\text{Minority Average Fare Increase} > 110\% \times \text{All-Rider Average Fare Increase}$$

A disproportionate burden would be found if the average fare decrease for low-income riders is less than 90 percent of the average fare decrease for all riders, or if the average fare increase for low-income riders is greater than 110 percent of the average increase for all riders:

$$\text{Low-income Average Fare Decrease} < 90\% \times \text{All-Rider Average Fare Decrease}$$
$$\text{Low-income Average Fare Increase} > 110\% \times \text{All-Rider Average Fare Increase}$$

The DI/DB Policy also describes the steps the MBTA will take when disparate impacts or disproportionate burdens are identified:

> "Upon finding a potential disparate impact on minority populations from a proposed fare change, the MBTA will analyze alternatives/revisions to the proposed change that meet the same goals of the original proposal. Any proposed alternative fare change would be subject to a fare equity analysis. The MBTA will implement any proposal in accordance with the current FTA guidance. Where potential disparate impacts are identified, the MBTA will provide a meaningful opportunity for public comment on any

[1] Massachusetts Bay Transportation Authority, "Disparate Impact/Disproportionate Burden (DI/DB) Policy" (2017). https://cdn.mbta.com/sites/default/files/2017-11/1-30-17%20-%20MBTA%20DIDB%20Policy%20-%20Final.docx.

> proposed mitigation measures, including any less discriminatory alternatives that may be available. Upon finding a potential disproportionate burden on low-income populations from a proposed fare change, the MBTA may take steps to avoid, minimize, or mitigate these impacts, where practicable."
>
> *MBTA Disparate Impact/Disproportionate Burden (DI/DB) Policy*

3.2 Minority and Low-Income Populations

Respondents to the 2015–17 MBTA Systemwide Passenger Survey were classified as having minority status if they self-identified as a race other than White or as Hispanic or Latino/Latina. Respondents whose household income was less than $43,500—the income category from the survey that most closely matched 60 percent of the median household income for the MBTA service area from the 2013 American Community Survey—were classified as low-income.

4 METHODS

4.1 Study Area

Routes 23, 28, and 29 have similar north-south alignments that connect the Roxbury, Dorchester, Mattapan, and nearby neighborhoods with many other MBTA transit services. Connecting MBTA services include the rapid transit routes of the Orange Line, Red Line, and Mattapan Trolley, and the Silver Line, as well as the commuter rail routes of the Fairmount Line, Providence/Stoughton Line, and Franklin/Foxboro Line.

Table 1 presents the demographics of Routes 23, 28, and 29. According to the 2015–17 MBTA Systemwide Passenger Survey, the proportions of minority and low-income riders on these routes represent a much greater proportion of riders than on the MBTA system overall. When combined, riders on these routes are approximately 89.8 percent minority and 59.9 percent low-income compared to the systemwide average of 25.9 percent minority and 20.5 percent low-income. Although the age of the MBTA passenger survey and the relatively low sample sizes (presented as "N" in Table 1) are potential weaknesses of our methodology, we believe the current demographics of these routes have not shifted enough to alter the outcome of this analysis. Furthermore, fare equity analyses are insensitive to small demographic changes since they are pass-fail tests. So, as long as the demographic profile of the no-fare routes have remained more minority and low-income than the systemwide average, the results would remain unaffected.

Evidence that demographics have not significantly changed can be found in the results of the City of Boston's Fare-Free Pilot Program survey in Table 1. Compared to the MBTA passenger survey, the Boston survey exhibits a minor decline of 3.8 percent in the proportion of minority riders and a moderate increase of 11.7 percent in the proportion of low-income riders. Nevertheless, for the purposes of a fare equity analysis these are minor demographic differences

which suggest that the 2015–17 MBTA Systemwide Passenger Survey is sufficient for this analysis.

Table 1
Rider Demographics by Route

Route	N	Minority	Nonminority	Low-Income	Non-Low-Income
2015–17 MBTA Systemwide Passenger Survey					
Route 23	116	87.8%	12.2%	56.1%	43.9%
Route 28	86	92.1%	7.9%	61.9%	38.1%
Route 29	31	90.9%	9.1%	68.2%	31.8%
Routes 23, 28, 29	229	89.8%	10.2%	59.9%	40.1%
Systemwide	37,642	25.9%	74.1%	20.5%	79.5%
Fall 2021 City of Boston Route 28 Fare-Free Pilot Survey					
Route 28	239	88.3%	11.7%	73.6%	26.4%

Note: These results exclude survey respondents who chose to not report their race or income.
N = number of survey respondents.
Source: 2015–17 MBTA Systemwide Passenger Survey, reweighted for the Agent-Based Ridership Model by Central Transportation Planning Staff.

Additionally, Table 4 in the appendix provides the systemwide unlinked passenger trips and fare type usage by demographic group after reweighting the passenger survey. Also, in the appendix Table 5 presents the same information, but only includes surveys that are affected by the proposed fare change.

4.2 2015-17 MBTA Systemwide Passenger Survey

The 2015–17 MBTA Systemwide Passenger Survey report[2], published in May 2018, includes a survey of all of the transit modes provided by the MBTA—the heavy rail Red, Blue, and Orange Lines; the light rail Green Line and Mattapan Trolley; the bus rapid transit Silver Line; the commuter rail system; the bus system; and the ferry system. The survey asked questions regarding trip origins and destinations, fare payment method, trip frequency, race, ethnicity, and income.

CTPS first launched the survey online and advertised its availability throughout the MBTA system. When the response rate to the online survey slowed, staff distributed the survey on paper forms at stations and stops and on vehicles. To compensate for differences in response rates among services, responses from each unlinked trip segment were weighted in proportion to the number of typical daily boardings for a corresponding station, group of stations, route, or route segment.

[2] Central Transportation Planning Staff, "2015–17 MBTA Systemwide Passenger Survey" (2018). https://www.ctps.org/dv/mbtasurvey2018/2015_2017_Passenger_Survey_Final_Report.pdf.

4.3 Agent-Based Ridership Model

For this analysis, CTPS utilized the agent-based fare equity model that we developed for the state fiscal year (SFY) 2023 fare equity analysis.[3] This memorandum briefly describes the fundamentals of the agent-based model followed by a description of changes to the model that are unique to this analysis. Refer to the *SFY 2023: Fare Equity Analysis Results* technical memorandum for a comprehensive description of the model.

The model primarily relies on self-reported travel patterns and demographics from the 2015–17 MBTA Systemwide Passenger Survey and estimates the impact of fare changes to existing riders and, therefore, does not consider induced demand when projecting trips and revenue associated with fare changes. The agent-based model estimates the annual travel costs of each survey then assigns them weights that represent the number of annual passenger trips they represent. Survey weights are determined using SFY 2018 ridership and revenue values followed by adjustments to reduce the potential impact of poor sampling. Next, the model determines the total revenue by demographic by multiplying annual travel costs by the weight. Finally, annual revenue is divided by the number of annual passenger trips to find the average fare by demographic.

For this analysis, CTPS modified two components of the agent-based model as presented in the *SFY 2023: Fare Equity Analysis Results* memorandum. First, CTPS removed the step of estimating survey respondents' sensitivity to changed fare products. This was done because the elimination of fares is an automatic savings for single-ride payers and provides a transparent and attractive option for pass-holders who only ride free bus routes to discontinue their transit passes. CTPS also estimated savings for riders who could potentially reduce their monthly travel costs by switching from a pass to a single-ride payment. These are pass-holding riders who report using at least one of the no-fare routes and whose potential cost savings of switching to single-ride payment increases due to the elimination of fares. Due to the very small number of survey respondents who fit these criteria, these surveys were manually allocated outside of the sensitivity switching model framework, with final revenue savings comprising approximately 6 percent of the total.

The second change to the agent-based model was to rebalance survey weights to match the ratio of ridership between fare and no-fare routes using fall 2021 bus ridership.[4] This rebalancing better represents ridership on Routes 23, 28, and 29 in the passenger survey by boosting the survey weights of no-fare riders by a factor of 2.6 and the reducing weights of fare riders by a factor of 0.95. The difference between factors indicates that no-fare routes are underrepresented in

[3] CTPS technical memorandum "SFY 2023: Fare Equity Analysis Results," dated March 9, 2022.

[4] MBTA "Automated Passenger Counter (APC) Composite Day", dated Fall 2021.

the survey, meaning that if the rate of survey responses more closely matched bus ridership by route, then we would expect approximately two and half times more survey responses from those who ride Routes 23, 28, and 29.

Finally, to create a more consistent and accurate baseline, ridership for Route 28 was reduced since fares were eliminated on Route 28 in August 2021, thereby inflating its fall 2021 ridership levels. Route 28 ridership was adjusted by assuming its ridership between 2019 and 2021 recovered at the same rate as the systemwide average across all MBTA bus routes. This adjustment had the effect of reducing Route 28's fall 2021 ridership by approximately 28 percent.

5 RESULTS

Table 2 summarizes the approximate annual revenue impact of eliminating fares on Routes 23, 28, and 29 by protected population and for all riders. Results show a decline in annual revenue and the average fare across all populations. Average fares for minority riders exhibit an overall 0.95 percent decline with a slightly greater decline of 1 percent among low-income riders. This contrasts with the significantly lower decline of 0.26 percent exhibited among all riders.

Table 2
Summary of Revenue Changes by Population for Proposed Fare Change

Rider Classification	Existing Number of Trips	Existing Revenue	Existing Average Fare	Total Revenue Change	Projected Revenue	Projected Average Fare	Percent Change: Average Fare
Minority	129,800,000	$169,900,000	$1.3093	-$1,614,944	$168,285,056	$1.2969	-0.95%
Low-Income	110,000,000	$130,000,000	$1.1720	-$1,306,521	$127,693,479	$1.1603	-1.00%
All Riders	353,100,000	$675,200,000	$1.9120	-$1,747,851	$673,452,149	$1.9071	-0.26%

Note: Revenue and ridership figures are based on a pre-COVID-19 year. They are not scaled to reflect ridership recovery scenarios.
Source: MBTA Automatic Fare Transactions, processed by Central Transportation Planning Staff.

The results of the equity analysis, presented in Table 3, show that the proposed fare changes would neither produce a disparate impact on minority riders nor a disproportionate burden to low-income riders. Additionally, there is not a disproportionate benefit to all riders relative to minority or low-income riders.

Application of the disparate-impact threshold shows that the relative decrease in the average fare for minority riders is 367 percent of the relative decrease in the average fare for all riders. Application of the disproportionate-burden threshold shows that the relative decrease in the average fare for low-income riders is 388 percent of the relative decrease in the average fare for all riders. The average fare decrease for both minority and low-income riders is greater than 90 percent of the average fare decrease for all riders—the threshold defined by the DI/DB Policy. Therefore, CTPS concludes the elimination of fares on these routes will

not have a disparate impact on minority riders or a disproportionate burden on low-income riders.

Table 3
Existing and Projected Average Fares and Price Changes

Rider Classification	Existing Average Fare	Projected Average Fare	Percent Price Change	DI/DB Ratio
Minority	$1.3093	$1.2969	-0.95%	367%
Low-Income	$1.1720	$1.1603	-1.00%	388%
All Riders	$1.9120	$1.9071	-0.26%	—

Note: Percent changes in average fares and DI/DB ratios are calculated prior to rounding.
DI/DB = disparate impact and disproportionate burden.
Source: Central Transportation Planning Staff.

Appendix: Tables 4 and 5

The Boston Region Metropolitan Planning Organization (MPO) operates its programs, services, and activities in compliance with federal nondiscrimination laws including Title VI of the Civil Rights Act of 1964 (Title VI), the Civil Rights Restoration Act of 1987, and related statutes and regulations. Title VI prohibits discrimination in federally assisted programs and requires that no person in the United States of America shall, on the grounds of race, color, or national origin (including limited English proficiency), be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination under any program or activity that receives federal assistance. Related federal nondiscrimination laws administered by the Federal Highway Administration, Federal Transit Administration, or both, prohibit discrimination on the basis of age, sex, and disability. The Boston Region MPO considers these protected populations in its Title VI Programs, consistent with federal interpretation and administration. In addition, the Boston Region MPO provides meaningful access to its programs, services, and activities to individuals with limited English proficiency, in compliance with U.S. Department of Transportation policy and guidance on federal Executive Order 13166.

The Boston Region MPO also complies with the Massachusetts Public Accommodation Law, M.G.L. c 272 sections 92a, 98, 98a, which prohibits making any distinction, discrimination, or restriction in admission to, or treatment in a place of public accommodation based on race, color, religious creed, national origin, sex, sexual orientation, disability, or ancestry. Likewise, the Boston Region MPO complies with the Governor's Executive Order 526, section 4, which requires that all programs, activities, and services provided, performed, licensed, chartered, funded, regulated, or contracted for by the state shall be conducted without unlawful discrimination based on race, color, age, gender, ethnicity, sexual orientation, gender identity or expression, religion, creed, ancestry, national origin, disability, veteran's status (including Vietnam-era veterans), or background.

A complaint form and additional information can be obtained by contacting the MPO or at http://www.bostonmpo.org/mpo_non_discrimination.

To request this information in a different language or in an accessible format, please contact

Title VI Specialist
Boston Region MPO
10 Park Plaza, Suite 2150
Boston, MA 02116
civilrights@ctps.org

By Telephone:
857.702.3702 (voice)

For people with hearing or speaking difficulties, connect through the state MassRelay service:

- **Relay Using TTY or Hearing Carry-over:** 800.439.2370
- **Relay Using Voice Carry-over:** 866.887.6619
- **Relay Using Text to Speech:** 866.645.9870

For more information, including numbers for Spanish speakers, visit https://www.mass.gov/massrelay

APPENDIX: TABLE 4

Table 4
Systemwide Fare Payment Type and Unlinked Trips by Group

	Annual Usage in Unlinked Trips			Annual Usage Share of Group Total		
Fare-Payment Type	**Minority**	**Low-Income**	**All Riders**	**Minority**	**Low-Income**	**All Riders**
Local Bus						
Local Bus Pass	2,383,000	1,758,000	5,200,000	1.8%	1.6%	1.5%
Local Bus (Adult)	9,739,000	9,405,000	24,060,000	7.5%	8.5%	6.8%
Local Bus (Senior)	1,828,000	3,520,000	5,004,000	1.4%	3.2%	1.4%
Local Bus (Student)	1,455,000	1,142,000	1,999,000	1.1%	1.0%	0.6%
Express Bus						
Express Bus Pass	922,000	350,000	2,800,000	0.7%	0.3%	0.8%
Express Bus (Adult)	237,000	244,000	895,000	0.2%	0.2%	0.2%
Express Bus (Senior)	14,000	1,000	99,000	0.0%	0.0%	0.0%
Express Bus (Student)	NR	20,000	40,000	0.0%	0.0%	0.0%
Bus and Rapid Transit						
Bus and Rapid Transit (Adult)	3,005,000	2,715,000	7,275,000	2.3%	2.5%	2.1%
Bus and Rapid Transit (Senior)	415,000	768,000	1,346,000	0.3%	0.7%	0.4%
Bus and Rapid Transit (Student)	371,000	327,000	497,000	0.3%	0.3%	0.1%
Rapid Transit						
LinkPass	30,710,000	20,749,000	98,458,000	23.7%	18.8%	27.9%
Senior/TAP Pass	5,960,000	8,115,000	14,773,000	4.6%	7.4%	4.2%
Student 7-Day/ Youth Pass	14,042,000	10,435,000	15,568,000	10.8%	9.5%	4.4%
1-Day Pass	742,000	691,000	1,007,000	0.6%	0.6%	0.3%
7-Day Pass	28,967,000	27,276,000	44,381,000	22.3%	24.8%	12.6%
Rapid Transit (Adult)	13,179,000	9,754,000	54,572,000	10.2%	8.9%	15.4%
Rapid Transit (Senior)	588,000	1,175,000	4,186,000	0.4%	1.1%	1.2%
Rapid Transit (Student)	949,000	1,178,000	1,951,000	0.7%	1.1%	0.6%
Commuter Rail						
Zone 1A–10 Pass	5,545,000	2,152,000	30,091,000	4.3%	2.0%	8.5%
Zone 1A–10 Single Ride	1,693,000	1,121,000	15,616,000	1.3%	1.0%	4.4%
Interzone 1–10 Single Ride	54,000	172,000	559,000	0.0%	0.2%	0.2%
Interzone 1–10 Pass	31,000	13,000	112,000	0.0%	0.0%	0.0%
Ferry						
Commuter Boat Pass	20,000	23,000	330,000	0.0%	0.0%	0.1%
F1 and F2: Outer Harbor	NR	NR	678,000	0.0%	0.0%	0.2%
F4: Inner Harbor	NR	NR	NR	0.0%	0.0%	0.0%
Free Transfers and Other Fares						
In-station Transfers	6,000,000	5,402,000	17,479,000	4.6%	4.9%	5.0%
Free trips	914,000	1,550,000	4,149,000	0.7%	1.4%	1.2%

Notes: Values are rounded to the nearest 1,000. Percentages are calculated using unrounded values. The figures for free trips include people who are not required to pay a fare. Riders who pay with a Blind Access Card are categorized as free trips.
NR = No response or insufficient responses. TAP = Transportation Access Pass.
Source: Central Transportation Planning Staff.

APPENDIX: TABLE 5

Table 5
Affected Riders Fare Payment Type and Unlinked Trips by Group

	Annual Usage in Unlinked Trips			Annual Usage Share of Group Total		
Fare-Payment Type	**Minority**	**Low-Income**	**All Riders**	**Minority**	**Low-Income**	**All Riders**
Local Bus						
Local Bus Pass	110,000	73,000	110,000	7.6%	6.5%	7.4%
Local Bus (Adult)	204,000	96,000	204,000	14.1%	8.6%	13.7%
Local Bus (Senior)	135,000	135,000	135,000	9.3%	12.0%	9.1%
Express Bus						
Express Bus Pass	10,000	10,000	10,000	0.7%	0.9%	0.7%
Express Bus (Adult)	NR	NR	NR	0.0%	0.0%	0.0%
Rapid Transit						
LinkPass	90,000	28,000	127,000	6.2%	2.5%	8.6%
Senior/TAP Pass	145,000	146,000	146,000	10.0%	12.9%	9.8%
Student 7-Day/ Youth Pass	479,000	479,000	479,000	33.1%	42.6%	32.2%
7-Day Pass	274,000	159,000	274,000	18.9%	14.1%	18.4%
Commuter Rail						
Zone 1A–10 Pass	2,000	NR	2,000	0.1%	0.0%	0.1%

Notes: Values are rounded to the nearest 1,000. Percentages are calculated using unrounded values.
NR = No response or insufficient responses. TAP = Transportation Access Pass.
Source: Central Transportation Planning Staff.





Appendix 7P

Approval of Fare Equity Analysis of Free Bus Routes 23, 28, 29



Charles D. Baker, Governor
Karyn E. Polito, Lieutenant Governor
Jamey Tesler, MassDOT Secretary & CEO
Steve Poftak, General Manager

massDOT
Massachusetts Department of Transportation

This is a true and accurate copy of the action taken by the Board of Directors of the Massachusetts Bay Transportation Authority on July 19, 2022.

WHEREAS, the Massachusetts Bay Transportation Authority ("MBTA") has proposed to make Bus Routes 23, 28, and 29 fare-free from March 1, 2022 through February 29, 2024 in partnership with the City of Boston (together, the "Fare-Free Bus Routes"); and

WHEREAS, the Fare-Free Bus Routes (together, the "Fare-Free Bus Routes") are fare changes that will last longer than six months; and

WHEREAS, the Federal Transit Administration ("FTA") Title VI Circular 4702.1B requires the MBTA to conduct a fare equity analysis for fare changes that last longer than six months to evaluate the impacts of such fare changes and determine whether such fare changes would have a discriminatory impact based on race, color, or national origin, low-income populations would bear disproportionate burdens of the fare changes, or non-low-income populations would receive disproportionate benefits because of the fare changes; and

WHEREAS, the Fare-Free Bus Routes are fare changes requiring a fare equity analysis under FTA Title VI Circular 4702.1B; and

WHEREAS, a fare equity analysis as to the Fare-Free Bus Routes was completed on July 11, 2022 ("the Title VI Equity Analysis"); and

WHEREAS, the City of Boston has agreed to reimburse the MBTA for lost fare revenue and costs associated with the Equity Analysis, as stipulated in the Memorandum of Understanding dated February 10, 2022; and

WHEREAS, the Title VI Equity Analysis demonstrated that the Fare-Free Bus Routes, taken together, do not have a discriminatory impact on race, color, or national origin; that low-income populations would not bear disproportionate burdens of the fare changes; and that non-low-income populations would not receive disproportionate benefits because of the fare changes; and

WHEREAS, MBTA Board of Directors ("Board") has considered and reviewed the Title VI Equity Analysis;

On motion duly made and seconded, it is by roll call **VOTED** that:

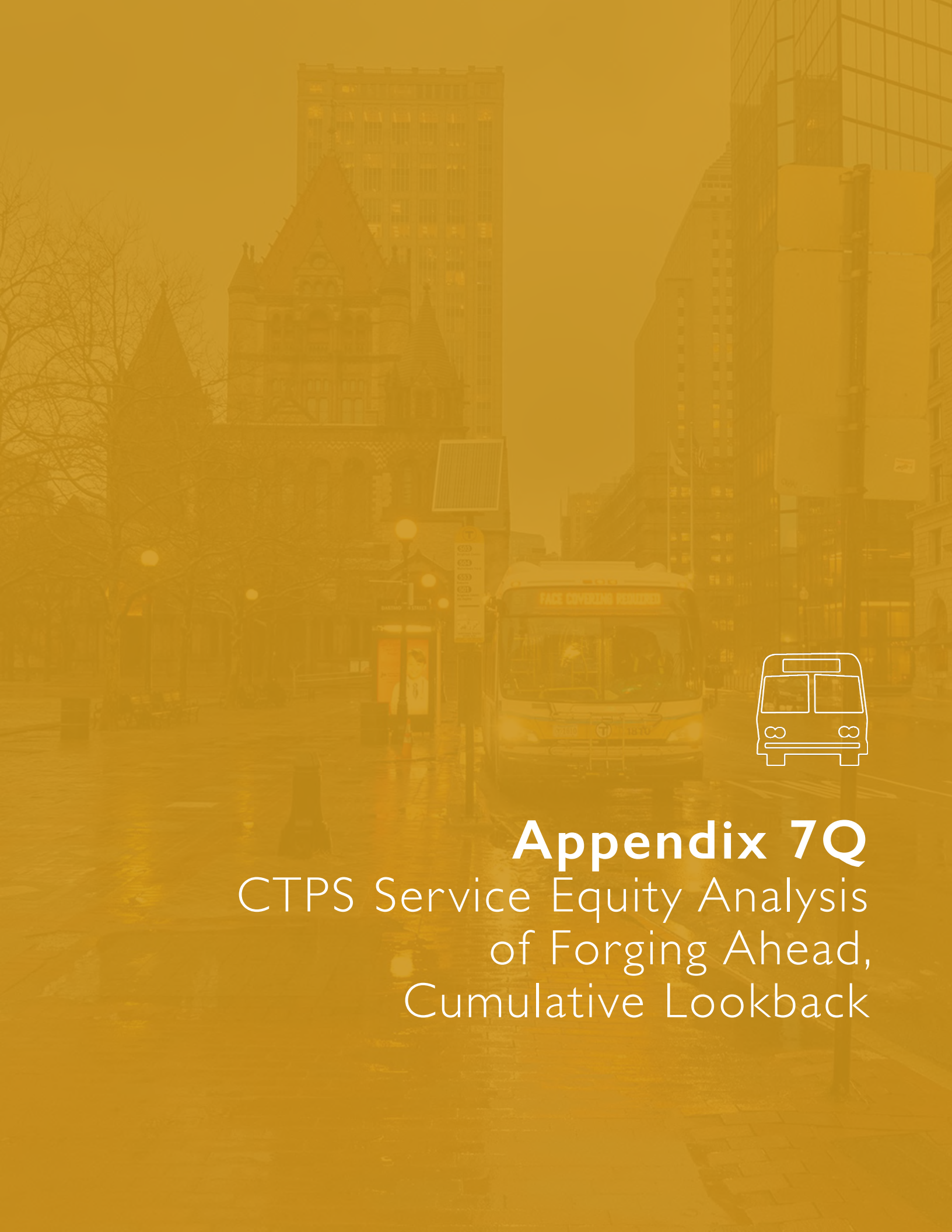
The Board hereby approves the Title VI Equity Analysis for the Fare-Free Bus Routes and directs the MBTA, through the General Manager, to take all steps necessary to provide such acceptance to the FTA, as appropriate.

And further that the Board hereby approves the Fare-Free Bus Routes as set forth herein.

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY ESTABLISHED 1964

Marie Breen, General Counsel





Appendix 7Q

CTPS Service Equity Analysis of Forging Ahead, Cumulative Lookback



TECHNICAL MEMORANDUM

DATE: **August 17, 2022**
TO: **Melissa Dullea, Massachusetts Bay Transportation Authority**
FROM: **Blake Acton, Central Transportation Planning Staff**
RE: **Forging Ahead: Title VI Cumulative Lookback**

In March 2021, the Central Transportation Planning Staff (CTPS) completed a Title VI service equity analysis that evaluates the impact of the then proposed Forging Ahead service changes for the Massachusetts Bay Transportation Authority (MBTA).[1] The Forging Ahead proposal represented a series of significant service reductions in response to the decline of ridership due to the COVID-19 pandemic. If fully implemented, Forging Ahead would have represented an approximate 16 percent systemwide reduction in revenue vehicle hours (RVH) and route length. The original analysis concludes that these proposed service changes would not have resulted in a disparate impact to minority populations or a disproportionate burden to low-income populations.

However, with an infusion of federal assistance the MBTA did not implement many of the proposed service reductions. Instead, after some initial reductions the MBTA began the process of gradually restoring service. Since the original analysis evaluated the impact of an unrealized proposed schedule, it remained unclear whether the actual service changes would have passed a Title VI service equity analysis. This study addresses this question by conducting an abbreviated follow-up Title VI service equity analysis. This study evaluates the cumulative equity impact over an approximate two-year period from a pre-pandemic baseline in March 2020 to March 2022. This analysis finds that the observed reduction in service hours and route length over the study period did not have a disparate impact to minority populations or a disproportionate burden to low-income populations.

1 METHODS

This analysis follows the procedures established by the MBTA's January 30, 2017, *Disparate Impact/Disproportionate Burden (DI/DB) Policy* and replicates

[1] Central Transportation Planning Staff, Technical Memorandum: "Forging Ahead Service Equity Analysis" (March 3, 2021).

Civil Rights, nondiscrimination, and accessibility information is on the last page.

the methods of the 2021 Forging Ahead analysis with one notable difference.[2] The demographics for routes in this analysis are calculated using US Census[3] data instead of the 2015–17 MBTA Systemwide Passenger Survey.[4] This change is due to 1) the addition and suspension of some routes since the passenger survey and 2) the rapid changes in ridership patterns since the beginning of the pandemic reducing the survey's reliability. The process of utilizing US Census data for route demographics is described in the Title VI equity analysis performed for the Green Line Extension, which follows the same methodology. Refer to this study for more information about this method.[5]

1.1 Data

This Title VI service equity analysis was conducted by comparing actual GTFS schedules published by the MBTA over an approximate two-year period.[6] To construct the schedules for this analysis, CTPS selected and combined multiple General Transit Feed Specification (GTFS) files to create schedules that represent ideal levels of service without temporary service disruptions.[7] This step prevents service disruptions that only exist in either the baseline or proposed schedule from impacting the results.

Baseline Schedule

For the baseline schedule, CTPS used a GTFS published on March 2, 2020, before the implementation of emergency pandemic-induced service changes. Within this schedule, March 29 represents the typical weekday, and April 4 and April 5 represent the typical Saturday and Sunday, respectively. On these days however, the commuter rail lines of Worcester, Franklin, Lowell, and Fitchburg experienced temporary service changes due to a mix of Positive Train Control installation and construction related to the Green Line Extension. To address this

[2] Massachusetts Bay Transportation Authority, "Disparate Impact/Disproportionate Burden (DI/DB) Policy" (2017). https://cdn.mbta.com/sites/default/files/2017-11/1-30-17%20-%20MBTA%20DIDB%20Policy%20-%20Final.docx.

[3] Calculated with population counts from the 2020 Decennial Census and demographics from the American Community Survey 5-Year Survey Estimates 2016-2020.

[4] Central Transportation Planning Staff, "2015–17 MBTA Systemwide Passenger Survey" (2018). https://www.ctps.org/dv/mbtasurvey2018/2015_2017_Passenger_Survey_Final_Report.pdf.

[5] Central Transportation Planning Staff, Technical Memorandum: "Green Line Extension: Title VI Service and Fare Equity Analysis" (May 12, 2021).

[6] Massachusetts Bay Transportation Authority. 2018. "MBTA GTFS Archive." https://github.com/mbta/gtfs-documentation/blob/master/reference/gtfs-archive.md.

[7] Temporary service disruptions are defined as instances where the MBTA, at the time of publishing the GTFS, includes alternate schedules to temporarily suspend or significantly reduce usual rail service. The usual service is frequently substituted with shuttle buses that offer service to some or all affected stations.

issue CTPS substituted schedules for these lines from the GTFS published on March 2, 2019.

Proposed Schedule

For the proposed schedule, CTPS selected a GTFS published on March 14, 2022. March 28 represented the typical weekday and the typical Saturday and Sunday was represented by May 7 and May 8, respectively. The proposed schedule includes the additional service offered by the Union Square Branch of the Green Line Extension which opened on March 24, 2022. While the opening of the Union Square Branch is not directly related to Forging Ahead, it has a minimal overall impact on systemwide RVH and route length and does not significantly alter the results of this analysis. Using a schedule prior to March 24 would also be problematic since service to Lechmere Station was provided by shuttle buses, which significantly inflates RVH compared to the rail service it replaces. Finally, the Newburyport and Rockport lines were experiencing service disruptions due to the closure of the Gloucester Drawbridge. To address this issue, schedules for these lines were substituted from a GTFS published on July 12, 2022, after the bridge partially reopened in late spring of 2022.

2 RESULTS

2.1 Change in Weekly Revenue-Vehicle Hours

Results by RVH are presented in Tables 1 and 2. Table 1 exhibits the net change in weekly RVH by population group, which shows that over the two-year study period systemwide RVH declined by 4,358 representing a reduction of approximately 8 percent. Minority and low-income populations experienced a reduction of RVH of 6.6 percent and 7.1 percent, respectively, compared to nonminority and non-low-income populations that experience greater reductions in RVH of 9.3 percent and 8.6 percent, respectively. Consequently, Title VI ratios presented in Table 2 indicate no disparate impact to minority populations and no disproportionate burden to low-income populations for this metric.

Table 1
Net Change in Weekly Revenue-Vehicle Hours by Population Group

Population Group	Existing Hours	Share of Existing Hours	Net Change	Share of Net Change	Percent Change
Minority	25,725	47%	-1,708	39%	-6.6%
Nonminority	28,547	53%	-2,650	61%	-9.3%
Low-Income	20,617	38%	-1,469	34%	-7.1%
Non-Low-Income	33,655	62%	-2,889	66%	-8.6%

Note: Low-income households are those with an annual income of less than $55,340.

Sources: MBTA GTFS files from March 2019, March 2020, March 2022, and July 2022, as processed by CTPS, and 2020 US Census and 2016–20 American Community Survey.

Table 2
Summary of DI/DB Results Relating to Revenue-Vehicle Hour Changes

Analysis Method	Impacts on Minority Populations	Impacts on Low-Income Populations
Absolute Change (Protected / Nonprotected)	**No Disparate Impact** Ratio: -1,708 / -2,650 < 120%	**No Disproportionate Burden** Ratio: -1,469 / -2,889 < 120%
Relative Change (Protected / Nonprotected)	**No Disparate Impact** Ratio: -6.6% / -9.3% < 120%	**No Disproportionate Burden** Ratio: -7.1% / -8.6% < 120%
Protected Share of Change / Protected Share of Existing Hours	**No Disparate Impact** Ratio: 39% / 47% < 120%	**No Disproportionate Burden** 34% / 38% < 120%

Note: Values correspond to Table 1.

DI/DB = disparate impact/disproportionate burden.

Source: CTPS.

2.2 Change in Route Length

Results by route length are presented in Tables 3 and 4. Net change by population group in Table 3 show that systemwide route length declined by 1,270 miles, which represents a reduction of approximately 15 percent. Minority and low-income populations experienced a reduction of route length of 15.3 percent and 15 percent, respectively, while nonminority and non-low-income populations experienced slightly lower reductions of 14.5 percent and 14.8 percent, respectively. While this metric shows that protected groups experienced a

greater reduction in route miles than non-protected groups, the differences are minor; so, they do not exceed the thresholds set by the MBTA's DI/DB policy. As a result, the DI/DB metrics presented in Table 4 indicate no disparate impact to minority populations and no disproportionate burden to low-income populations.

Table 3
Net Change in Weekly Route Length by Population Group

Population Group	Existing Miles	Share of Existing Miles	Net Change	Share of Net Change	Percent Change
Minority	3,715	43%	-567	45%	-15.3%
Nonminority	4,840	57%	-703	55%	-14.5%
Low-Income	3,116	36%	-467	37%	-15.0%
Non-Low-Income	5,439	64%	-803	63%	-14.8%

Note: Low-income households are those with an annual income of less than $55,340.

Sources: MBTA GTFS files from March 2019, March 2020, March 2022, and July 2022, as processed by CTPS, and 2020 US Census and 2016–20 American Community Survey.

Table 4
Summary of DI/DB Results Relating to Route Length Changes

Analysis Method	Impacts on Minority Populations	Impacts on Low-Income Populations
Absolute Change (Protected / Nonprotected)	**No Disparate Impact** Ratio: -567 / -703 < 120%	**No Disproportionate Burden** Ratio: -467 / -803 < 120%
Relative Change (Protected / Nonprotected)	**No Disparate Impact** Ratio: -15.3% / -14.5% < 120%	**No Disproportionate Burden** Ratio: -15.0% / -14.8% < 120%
Protected Share of Change / Protected Share of Existing Hours	**No Disparate Impact** Ratio: 45% / 43% < 120%	**No Disproportionate Burden** Ratio: 37% / 36% < 120%

Note: Values correspond to Table 3.

DI/DB = disparate impact/disproportionate burden.

Source: CTPS.

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Appendix 7R

CTPS Service and Fare Equity Analysis of Bus Network Redesign



Date: December 2, 2022

To: MBTA Board of Directors

From: Justin Antos, Senior Director of Bus Transformation
Steven Povich, Director of Fare Policy & Analytics

Re: **Equity and Title VI Findings from the Bus Network Redesign Service Changes**

Executive Summary

The CTPS equity analysis of the proposed Bus Network Redesign (BNRD) service changes finds that the service proposal raises no major Title VI concerns, and it passes the vast majority of the MBTA's tests designed to identify *potential* disparate impacts or disproportionate burden for our protected population of riders. We are encouraged by this finding, since an over-arching goal of the Bus Network Redesign has been to advance equity first. While Title VI focuses on low-income and minority riders specifically, from the start the Network Redesign has aimed to bring bus service to the transit-critical riders who depend the most on bus service – low-income riders and riders of color, plus those without easy access to a vehicle, seniors, and riders with a disability. For the past two years, the Bus Network Redesign has been prioritizing the travel needs of these populations, and consciously allocating new bus service and resources to them during the design of new services. BNRD calls for a net 25% increase in bus service in the coming years, and it brings those new investments to many transit-critical populations. We are pleased to see that the Title VI Service and Fare Equity Analyses largely confirm the intentions of the Redesign, that:

- While BNRD does not change fares explicitly, the redesign of bus service does change some riders' fares as they change modes or transfer to other routes, but those fare changes have no disparate impact or disproportionate burden on protected populations, specifically minority riders and low-income riders.
- BNRD's reallocation of bus service does not impact minority populations differently than other populations, and thus is not a disparate impact. BNRD passes all six of the Title VI numerical tests in this area as designated by MBTA policy.
- 50% of the new bus service in BNRD will go to minority populations, and 39% will go to low-income populations – slightly exceeding today's allocation of bus service.
- BNRD's proposed service changes do not impact low-income populations differently than other populations on five of the six numerical tests in this area, but it does result in a potential disproportionate benefit to non-low-income riders under one of the six tests required by MBTA policy.

Overall, BNRD passes eleven of the twelve of the Title VI numerical tests for service equity, and the findings confirm our intentional design to increase equity throughout the proposal. BNRD also passes the Title VI metrics for fare equity. We view the one particular ratio where BNRD did not pass as a weak indicator of service equity, and a further discussion is found below on this metric.

Nevertheless, in accordance with FTA Title VI Circular and the MBTA's Disparate Impact/Disproportionate Burden (DI/DB) Policy, MBTA staff have reviewed possible steps to avoid, minimize, or mitigate this potential disproportionate benefit. We are confident that the Bus Network Redesign process successfully incorporated equity throughout the planning process, but did so in a manner not easily quantified by the relatively prescriptive methodology of a Title VI service equity analysis.

MBTA staff recommend that the Board vote on December 15, 2022, to accept the CTPS Fare and Service Equity Analyses of the Bus Network Redesign changes.

Finding of Potential Disproportionate Benefit to Non-Low-Income Riders

In analyzing the equity of proposed service changes, per MBTA policy, CTPS calculates 12 ratios on three different dimensions:

1. Ratios: Relative Change, Share of Change, and Absolute Change
2. Protected Rider Populations: Minority (Disparate Impact) and Low-Income (Disproportionate Benefit/Burden)
3. Service Metrics: Revenue Vehicle Hours (RVH) and Route Length

Of the 12 calculated ratios, CTPS found one non-passing result: a potential Disproportionate Benefit on the Absolute Change Ratio to Non-Low-Income Riders using the Revenue Vehicle Hours Metric.

The Absolute Change Ratio compares the nominal increase in RVH for low-income riders to the nominal increase in RVH for non-low-income riders. In the case of an increase in RVH (as here with BNRD), the Ratio is passing if greater than 0.80x. In other words, the policy states we ought not increase service for low-income riders any less than 80% of the amount of increase for non-low-income riders. Under the proposed plan, the increase in RVH is 4,792 for low-income riders, compared to 7,377 for non-low-income riders, a ratio of 0.65x and under the 0.80x threshold.

Unlike other ratios, the Absolute Change Ratio does not consider the proportions of current service provided to low-income riders or the proportion of service area population that is low-income.

MBTA Response to the Equity Analysis Finding

MBTA staff has reviewed the CTPS equity analysis and recommends the Board vote to accept the analysis for three key reasons: equity was sufficiently central to the BNRD planning process, the MBTA has enhanced our real-time monitoring for service equity, and the Absolute Change Ratio is a weak indicator of service equity that ought to be discounted when reviewing the analysis.

Equity in BNRD

The BNRD team considered equity from the earliest stages of the planning process. We used travel-demand data by low-income residents and people of color to prioritize corridors for

investment and promotion to high-frequency services, and we weighted trips by these populations more heavily to commit bus service to those transit-critical population. We reviewed trip-making using location-based services (LBS) data about where people travel using all modes and all types of trips. This data associated trip-making with a user's home region and demographics, so that as someone travels throughout the region chaining together multiple trips, the demographic data remained associated with those trips. This gave us a fuller understanding of how low-income people or people of color travel throughout the network, which we built into the Network Redesign. Additionally, this data was used to select corridors to upgraded to all-day high-frequency service, at the foundation of the Bus Network Redesign proposal.

Equity in Monitoring Ongoing MBTA Service

The MBTA's Service Delivery Policy is a public document that states the MBTA's objectives for quality transit service to riders and set standards for how success is measured, and the MBTA now releases an Annual Report these service metrics. The MBTA considers several key aspects of service in this evaluation, and most of these standards also incorporate equity checks, evaluating whether the MBTA met its service standards for all riders, for riders of color, and for low-income riders.

Absolute Change Ratio as a Weak Indicator of Service Equity

While CTPS outlines drawbacks with the Absolute Change Ratio in their memo, we elaborate on their discussion below and in the appendix.

The Absolute Change Ratio is a weak indicator of service equity, as it compares nominal increases (or decreases) in service, without taking into account the proportion of the ridership or service area population that is low-income vs. non-low-income. Specifically, the Absolute Change Ratio requires the increase in service to be nearly equal (no less than 80% for an increase) for low-income riders, *even if* they make up a minority of riders or existing service. In the analysis for BNRD, Low-Income riders represent 38% of existing service and 39% of the increase in service. While this appears appropriate, and passes our other ratio tests, this minor increase is not sufficient to pass the Absolute Change Ratio. Please see the appendix for a simplified example.

Unrelated to BNRD, MBTA staff are in the process of revising the DI/DB Policy. The Absolute Change Ratio is a key area we intend to improve upon in the revisions. MBTA staff will return to the board early in calendar year 2023 to review and approve an updated DI/DB Policy, following a public comment process.

Conclusion

MBTA staff recommend that the Board vote on December 15, 2022, to accept the CTPS Fare and Service Equity Analyses of the Bus Network Redesign changes.

Appendix: Example of Absolute Change Ratio

To provide a simpler example to understand the Absolute Change Ratio, MBTA staff have this example, outlined below, which is instructive to understand the weakness in this metric.

Example Scenario

	Low-Income	**Non-Low-Income**	***Low-Income % of Total***
RVH Pre-Change	A: 20	E: 80	*I: 20%*
Change in RVH	B: 10	F: 20	*J: 33%*
RVH Post-Change	C: 30	G: 100	*K: 23%*
% Change in RVH	*D: 50%*	*H: 25%*	

In this scenario, Low-Income riders represent 20% of service before the change (I), receive 33% of the increase in service (J), and represent 23% of service after the change (K). Low-income riders see a 50% increase in service (D), double the 25% increase seen by non-low-income riders (H). We calculate the three key ratios:

1. Relative Change: Compares percent change in service for low-income or minority riders to percent change in service for all other riders. Passing at >0.80x for a service increase.
    a. *D / H:* 50% / 25% = 2.00x
2. Share of Change: Compares the share of the total change for low-income or minority riders to the share of existing service for low-income or minority riders. Passing at >0.80x for a service increase.
    a. *J / I:* 33% / 20% = 1.67x
3. Absolute Change: Compares nominal change in service for low-income or minority riders to nominal change in service for all other riders. Passing at >0.80x for a service increase.
    a. *B / F:* 10 / 20 = 0.50x – does not pass

This result holds the MBTA to an unrealistic standard, as it suggests service increases ought to be equal even in cases where the compared groups are not equivalent. While the ratios are slightly less extreme in the BNRD analysis, we continue to believe that the outcome is an unhelpful indicator of equity in service changes.

TECHNICAL MEMORANDUM

DATE: December 2, 2022
TO: Massachusetts Bay Transportation Authority
FROM: Blake Acton, Central Transportation Planning Staff
Steven Andrews, Central Transportation Planning Staff
Emily Domanico, Central Transportation Planning Staff
RE: Bus Network Redesign: Title VI Service and Fare Equity Analysis

Over the next five years, the Massachusetts Bay Transportation Authority (MBTA) will implement Bus Network Redesign (BNRD) representing a comprehensive redesign of the MBTA's bus network to better align service to where current and potential riders are traveling. This memorandum presents the results of service and fare equity analyses performed by the Central Transportation Planning Staff (CTPS) that fulfill the MBTA's Title VI obligations as outlined in the Federal Transit Administration (FTA) Circular 4702.1B.[1] As a major redesign of the bus network, BNRD qualifies as a "major service change" prompting the completion of a service equity analysis (SEA). While the BNRD does not directly modify fare prices, it could affect the average fares paid by riders representing a de facto fare change for riders who may need to switch to higher or lower fare transit service to access the MBTA network. As a result, this SEA is accompanied by a fare equity analysis (FEA) that identifies and measures the equity impact of secondary changes to average fares from BNRD.

Summary of Title VI Results

CTPS performs Title VI SEAs by evaluating the impact of service changes on minority and low-income populations using two analysis methods: revenue vehicle hours (RVH) and route length. For each method CTPS calculates three ratios to test whether the proposed service change would result in a potential disparate impact to minority populations or disproportionate burden to low-income populations. These ratios are Relative Change, Share of Change, and Absolute Change which each test different metrics to evaluate the ratio of change between protected and non-protected populations. The results are twelve ratios: six evaluating impacts on minority populations and six evaluating impacts on low-income populations.

1 FTA. 2012. "Title VI Requirements and Guidelines for Federal Transit Administration Recipients." FTA Circular 4702.1B. Federal Transit Administration. https://www.transit.dot.gov/regulations-and-guidance/fta-circulars/title-vi-requirements-and-guidelines-federal-transit.

Civil Rights, nondiscrimination, and accessibility information is on the last page.

The results of the service equity analysis indicate that implementation of the combined changes associated with BNRD do not result in disparate impacts to minority populations with all six ratios below their respective thresholds. Results for low-income populations show five of the six ratios indicating no disproportionate burden (or benefit); however, one of the six ratios indicates a potential disproportionate benefit to non-low-income populations. More specifically, this result is indicated by the Absolute Change ratio under the RVH analysis method that tests whether low-income and non-low-income populations are receiving approximately equal share of the additional RVH. In the context of this analysis, Absolute Change is the least informative ratio, because it concludes that non-low-income populations are receiving more RVH than low-income populations although non-low-income populations comprise a majority of existing RVH (62 percent). Further discussion of these results is located in the *Discussion* subsection of Section 3.3.

Finally, results of the FEA show that the effects of the service changes on the average fares would not result in disparate impacts to minority populations or disproportionate burdens to low-income populations.

1 PLANNED SERVICE CHANGES

BNRD is a major reconfiguration of the bus system that aims to provide more frequent and consistent service along key corridors throughout the region by increasing service by 25 percent.[2] The goals of BNRD are the following:

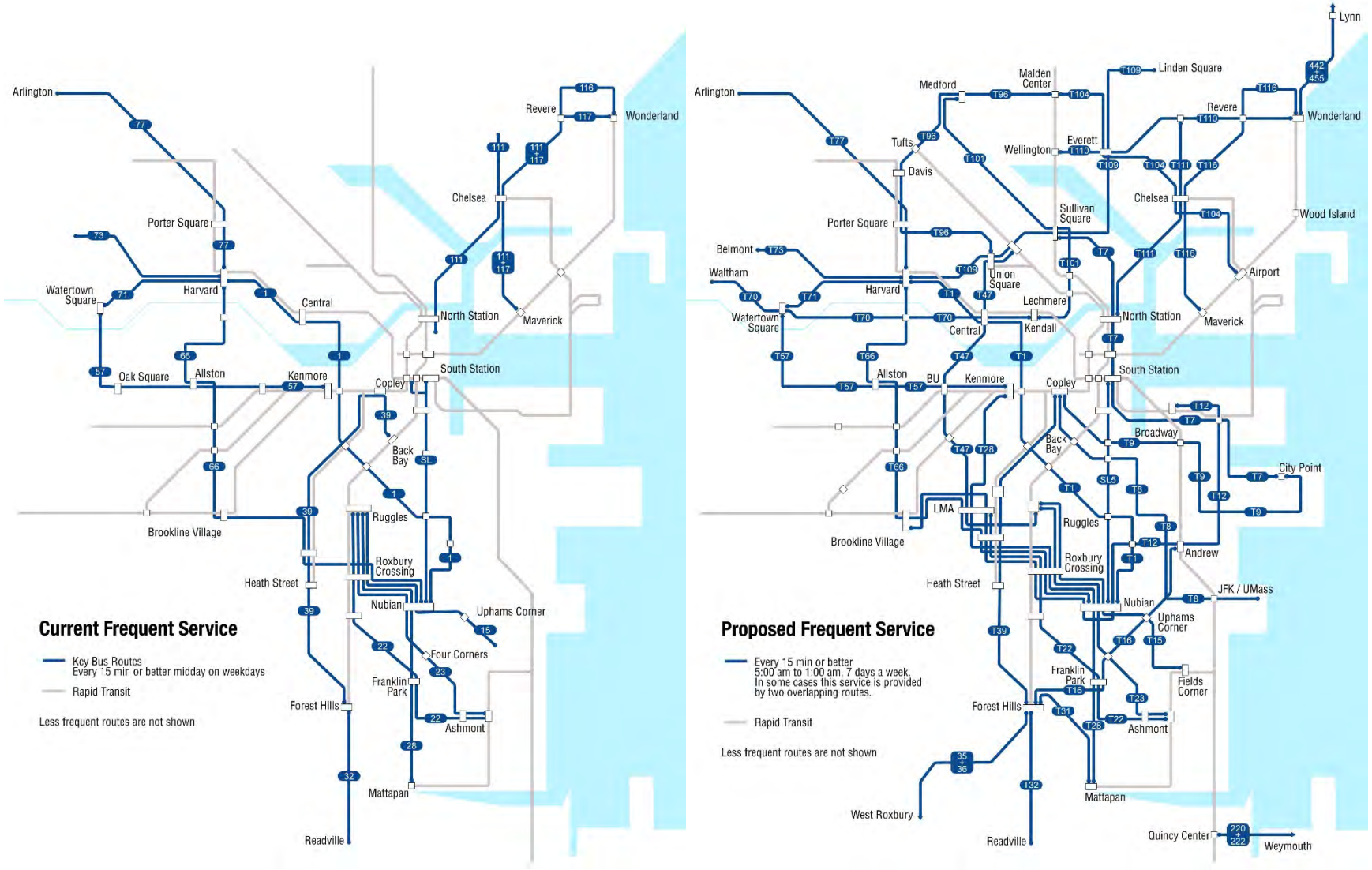
1) Equity first, prioritizing the needs of those who depend on buses and need frequent, reliable service. During the planning of the network, the MBTA defined equity as improving access and quality of service for transit-critical populations (low-income populations, people of color, seniors, people with disabilities, or people who live in households with few or no vehicles)
2) More frequent service in busy neighborhoods
3) More all-day service
4) New connections to more places (including non-downtown centers)
5) A network that is simpler and easier to use

BNRD will significantly improve service for riders traveling during non-peak travel periods, on weekends, and between locations outside of downtown Boston. This is accomplished by connecting the most heavily traveled origins and destinations with a grid-like network of “high-frequency corridors” defined as routes that

[2] MBTA. 2022. “Bus Network Redesign” Massachusetts Bay Transportation Authority. https://www.mbta.com/projects/bus-network-redesign.

provide 15-minute or better frequency all day, seven days per week. BNRD will provide more residents with access to the expanded high-frequency network, which offers greater accessibility to more destinations with a more consistent and reliable transfer experience. Riders can expect to wait fewer than 15 minutes to transfer to other high-frequency routes regardless of when or where along the network they travel. To expand the high-frequency network, BNRD is paired with a systemwide 25 percent increase in service coupled with the consolidation of some parallel or lower-frequency routes. Figure 1 shows the high-frequency bus routes before and after the implementation of BNRD. In summary, BNRD modifies the service of 69 bus routes, consolidates 32 routes, eliminates 14 routes, and creates six new routes reducing the total number of MBTA bus routes from 168 to 128.

FIGURE 1
Current and Proposed High-Frequency Bus Network



Source: MBTA

2 TITLE VI EQUITY ANALYSIS FRAMEWORK

2.1 The MBTA's Disparate Impact/Disproportionate Burden Policy

As a recipient of federal funds through the FTA, the MBTA is required to comply with Title VI of the Civil Rights Act of 1964 (Title 49, part 21, Code of Federal Regulations). The FTA's Title VI Circular 4702.1B, issued in October 2012, under the authority of Title VI of the Civil Rights Act of 1964, directs transit providers to study proposed major service changes and all fare changes for possible disparities in impacts on minority and low-income riders and communities.

This requirement is part of the MBTA's Title VI assurance that no person shall, on the basis of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity receiving federal financial assistance.

The MBTA's Disparate Impact/Disproportionate Burden (DI/DB) Policy describes the general procedure for conducting service and fare equity analyses.[3] This service equity analysis was performed in accordance with the MBTA's DI/DB Policy.

2.2 The Need to Conduct a Service and Fare Equity Analysis

According to the FTA's Title VI Circular 4702.1B, a transit provider must conduct a SEA prior to implementing a proposed service change if it qualifies as a "major service change" as defined by the transit provider in accordance with the FTA. According to the MBTA's DI/DB Policy, a service change is "major" if it meets one or more of the following conditions:

Major Service Change at the Modal Level

- A change in RVH per week of at least 10 percent by mode.

Major Service Change at the Route-Level

- For all routes, a change in route length of at least 25 percent or three miles; or for routes with at least 80 RVH per week, a change in RVH per week of at least 25 percent.

The changes associated with BNRD meet all the above conditions, so it qualifies as a "major service change."

[3] MBTA. 2017. "Disparate Impact/Disproportionate Burden (DI/DB) Policy." Massachusetts Bay Transportation Authority. https://cdn.mbta.com/sites/default/files/2017-11/1-30-17%20-%20MBTA%20DIDB%20Policy%20-%20Final.docx.

The FTA Circular requires a FEA prior to "all fare changes regardless of the amount of increase or decrease." The restructuring of bus routes combined with the MBTA's multitiered fare policy may affect travel costs for some riders. Some riders could be left with a more expensive trip as their only option while others gain additional, lower-priced options. While BNRD does not directly change fares, these secondary effects could be interpreted as a fare change. However, there is no guidance in the FTA Circular 4702.1B or the MBTA's DI/DB Policy on whether a FEA is necessary in these situations or how to conduct such an analysis. However, the FTA has provided guidance that the MBTA must conduct a FEA in this circumstance.

3 TITLE VI SERVICE EQUITY ANALYSIS

3.1 Methods

Data and Analysis

Following are the steps taken to develop Title VI DI/DB ratios:

1) Find percent minority and percent low-income by Census Tract with US Census data.[4,5]
    a. "Percent minority" is defined as the percent of individuals in a Census Tract who report as not being "White alone, not Hispanic or Latino"
    b. "Percent low-income" is defined as the percent of occupied households that report an annual household income below 60 percent of the median household income for the MBTA service area ($55,340).
2) Extract route and stop geometry of the baseline and BNRD schedules from General Transit Feed Specification (GTFS) generated by the MBTA using the Remix Data Platform.
3) Generate buffers around stops/stations that represent the approximate walkshed or driveshed around transit services. These are one-quarter mile for bus, one-half mile for rapid transit, one mile for non-terminal commuter rail stations, and five miles for terminal commuter rail stations.
4) Use stop buffers with demographic data from step one to find the percent minority and low-income by route.
5) Calculate the weekly route length miles by route of the baseline and BNRD schedules using route geometry.

[4] US Census. 2021. "2020 United States Decennial Census." US Census Bureau.
[5] US Census. 2022. "2016–2020 American Community Survey (ACS) 5-Year Estimates." US Census Bureau.

   a. A route length is the total length of a line that the transit vehicle follows including inbound and outbound directions. Final weekly route miles represent weekday miles multiplied by five plus Saturday and Sunday to account for route differences on weekends.

6) Calculate weekly RVH by route using schedules from the MBTA that represent the total number of hours per week a vehicle is in service including layover and recovery time, across all vehicles for each route.
7) Multiply route demographic data with the route length and RVH data for the baseline and BNRD schedules to find the ratio of route miles and RVH allocated to protected groups by route.
8) Compare aggregate baseline and BNRD values and generate Title VI DI/DB ratios.

Determining an Adverse Impact

The MBTA defines adverse effects as disproportionate changes to the amount of service scheduled, by route and by mode, as measured by changes to weekly RVH and access to the service, by route, as measured by changes to route length. Once CTPS calculates how the RVH or route length will be affected by a service proposal, the results are used to generate three change ratios. The values of these ratios determine whether a service proposal would have an adverse impact on protected populations.

1) Relative Change
   a. Ratio of the percent change of the protected group divided by the percent change of the nonprotected group. This ratio compares the percent change between the protected and nonprotected group.
2) Share of Change
   a. Ratio of the protected share of net change divided by the protected share of existing hours/miles. This ratio compares the share of change received by protected groups relative to their existing share and is referred to as “Protected Share of Change/Protected Share of Existing” in prior Title VI analyses.
3) Absolute Change
   a. Ratio of the net change of the protected group divided by the net change of the nonprotected group. This ratio serves as a direct comparison of absolute change between the protected and nonprotected group without considering any existing shares or values.

A change ratio of 1.0 or 100 percent indicates equal impact between protected and nonprotected groups. The ratio threshold that indicates an adverse impact depends on whether there is a net increase or decrease of a particular metric. When RVH or route miles decline, a ratio above 1.20 or 120 percent indicates a potential disparate impact on minority and/or potential disproportionate burden on low-income populations. If there is an overall increase of RVH or route miles, then a ratio below 0.80 or 80 percent indicates a potential disparate benefit to nonminority and/or potential disproportionate benefit to non-low-income populations. In the case of this analysis, BNRD will lead to a decline in systemwide route miles with an increase in RVH. As a result, a ratio above 1.20 would indicate a DI/DB for the route length metric, and a ratio below 0.80 would indicate a DI/DB for the RVH metric.

3.2 Summary of Changes

Change in Weekly Revenue-Vehicle Hours

Net change in weekly RVH by population group is presented in Table 1, which shows that BNRD will add 12,169 additional weekly RVH systemwide, representing an increase of 17.4 percent compared to the existing network. When this increase is evaluated only within the bus system, BNRD represents a 24.4 percent increase in systemwide bus RVH that closely reflects the commonly cited 25 percent increase in service for BNRD. Between minority and nonminority populations this increase is evenly shared with both groups receiving approximately 50 percent of the additional RVH. Minorities currently receive 47 percent of the existing RVH, so this change slightly favors minority groups relative to the status quo. Changes in RVH between low-income and non-low-income populations exhibit a similar pattern to changes between minority and nonminority groups. Low-income populations are allocated about 39 percent of additional RVH, which is slightly above their existing share of 38 percent. This indicates that the changes to RVH associated with BNRD largely reflect the current ratios while slightly favoring low-income groups.

TABLE 1
Net Change in Weekly Revenue-Vehicle Hours by Population Group

Population Group	Existing Hours	Share of Existing Hours	Net Change	Share of Net Change	Percent Change
Minority	32,845	47%	6,045	50%	18%
Nonminority	37,071	53%	6,124	50%	17%
Low-Income	26,422	38%	4,792	39%	18%
Non-Low-Income	43,494	62%	7,377	61%	17%

Low-income households are those with an annual income of less than $55,340.
Sources: Baseline and BNRD MBTA schedule files as processed by CTPS and 2020 US Census and 2016–20 ACS.

Change in Weekly Route Length

Net change in weekly route length by demographic is presented in Table 2. The existing network is 21,670 route miles with 43 percent allocated to minority populations compared to 57 percent to nonminority populations. Furthermore, 36 percent of route miles are allocated to low-income populations compared to 64 percent to non-low-income populations. Changes resulting from BNRD will reduce the total route miles of the MBTA system by 3,062 to 18,608 miles representing a 14 percent reduction from the baseline. This decline of route miles is expected because BNRD expands bus service by consolidating and simplifying routes and the route length metric is sensitive to the number of total routes rather than the service offered by those routes. For example, in a scenario where two 10-mile routes that share the same corridor are consolidated into one 10-mile route, there would be a 50 percent reduction in total route length even if the service offered on the corridor remains the same. Many of the proposed changes in BNRD involve consolidating service into fewer high-frequency routes, thereby resulting in fewer total route miles.

TABLE 2
Net Change in Weekly Route Length by Population Group

Population Group	Existing Miles	Share of Existing Miles	Net Change	Share of Net Change	Percent Change
Minority	9,296	43%	-1,415	46%	-15%
Nonminority	12,373	57%	-1,647	54%	-13%
Low-Income	7,821	36%	-1,172	38%	-15%
Non-Low-Income	13,849	64%	-1,890	62%	-14%

Low-income households are those with an annual income of less than $55,340.
Sources: Baseline and BNRD MBTA schedule files as processed by CTPS and 2020 US Census and 2016–20 ACS.

3.3 Title VI Results

Results by Revenue-Vehicle Hours

Table 3 summarizes the results of the service equity analysis relating to the systemwide increase in RVH associated with BNRD. The final service equity analysis results indicate no disparate benefit to nonminority populations and a potential disproportionate benefit to non-low-income populations. This conclusion is determined through three analysis methods as presented in Table 3, which result in three ratios for each demographic (for a total of six). Relative Change (first row of Table 3) and Share of Change (second row of Table 3) are relative metrics that account for change relative to pre-existing service. Absolute Change (third row of Table 3) is a ratio of additional service hours by population group. The Absolute Change ratio describing impacts on low-income populations, one of the six ratios, is equal to 0.65 (4,792 / 7,377), which is below the DI/DB threshold of 0.80. This indicates a potential disproportionate benefit to non-low-income populations.

TABLE 3
Summary of DI/DB Results Relating to Revenue-Vehicle Hour Changes

Analysis Method	Impacts on Minority Populations	Impacts on Low-Income Populations
Relative Change (Protected/Nonprotected)	**No Disparate Benefit** Ratio: 1.06 > 0.80 ➔ Pass	**No Disproportionate Benefit** Ratio: 1.06 > 0.80 ➔ Pass
Share of Change (Protected Share of Change/Protected Share of Existing)	**No Disparate Benefit** Ratio: 1.06 > 0.80 ➔ Pass	**No Disproportionate Benefit** Ratio: 1.03 > 0.80 ➔ Pass
Absolute Change (Protected/Nonprotected)	**No Disparate Benefit** Ratio: 0.99 > 0.80 ➔ Pass	**Disproportionate Benefit** Ratio: 0.65 < 0.80 ➔ Does Not Pass

Note: Values correspond to Table 1.
DI/DB = disparate impact/disproportionate burden.
Source: Central Transportation Planning Staff.

Results by Route Length

The final DI/DB metrics presented in Table 4 indicate no disparate impact to minority populations and no disproportionate burden to low-income populations. These results can be understood by observing changes in route length by population group in Table 2 which shows that the systemwide decline in route length is shared roughly proportionally to existing ratios with 46 percent of decline in route length experienced by minority populations and low-income groups experiencing 38 percent of total decline. Both minority and low-income populations experience a reduction of route length of approximately 15 percent, while nonminority and non-low-income populations experience slightly lower reductions of 13 percent and 14 percent, respectively. While this metric shows that protected groups experience a greater reduction in route miles than nonprotected groups, the differences are minor; they do not exceed the thresholds set by the MBTA's DI/DB policy.

TABLE 4
Summary of DI/DB Results Relating to Route Length Changes

Analysis Method	Impacts on Minority Populations	Impacts on Low-Income Populations
Relative Change (Protected/Nonprotected)	**No Disparate Impact** Ratio: 1.15 < 1.20 ➔ Pass	**No Disproportionate Burden** Ratio: 1.07 < 1.20 Pass
Share of Change (Protected Share of Change/Protected Share of Existing)	**No Disparate Impact** Ratio: 1.07 < 1.20 ➔ Pass	**No Disproportionate Burden** Ratio: 1.06 < 1.20 ➔ Pass
Absolute Change (Protected/Nonprotected)	**No Disparate Impact** Ratio: 0.86 < 1.20 ➔ Pass	**No Disproportionate Burden** Ratio: 0.62 < 1.20 ➔ Pass

Note: Values correspond to Table 2.
DI/DB = disparate impact/disproportionate burden.
Source: Central Transportation Planning Staff.

Discussion

The results of this Title VI service equity analysis have two outcomes that appear to disagree: (1) Low-income groups will receive slightly more RVH from BNRD than their existing share and (2) the Absolute Change DI/DB ratio indicates a potential disproportionate benefit to non-low-income populations. Every proposed service change is different, and the MBTA DI/DB policy cannot anticipate every possible outcome, so it is important that we examine the context of these results. This outcome is the result of how MBTA's Title VI Service Equity Analysis evaluates the equity of service changes using three different ratios (described in Section 3.1) that each rely on different values. Out of the six ratios used to test for a disproportionate burden (or benefit) to low-income populations only one ratio, the absolute change by RVH metric indicates a potential disproportionate benefit. This outcome by itself may not be too concerning considering how the Absolute Change ratio is calculated and how it interacts with the low-income threshold.

1) The Absolute Change ratio does not consider existing shares.
    a. Unlike the other two DI/DB ratios, the Absolute Change ratio misses important context by not incorporating the share of existing RVH or route length into its calculation. The Absolute Change ratio essentially asks if the proposed change is roughly even (50/50) between groups. This makes the Absolute Change ratio more sensitive to changes as the difference between each group's share of the existing hours or route miles increases. In the case of this

analysis, low-income populations comprise 38 percent of existing RVH and under BNRD low-income populations will receive about 39 percent of the additional RVH. The 39 percent share of additional RVH is too far below 50 percent causing the Absolute Change ratio to indicate a potential a DI/DB.

2) The low-income threshold guarantees an imbalance in the existing share.
    a. The MBTA's DI/DB policy defines a low-income household as one with an income that is less than 60 percent of the median household income for the MBTA service area. This definition guarantees that low-income will almost always be a minority of the existing share of RVH or route length, which increases the probability of a disproportionate benefit to non-low-income populations under the Absolute Change metric. For example, if the low-income threshold were set to 80 percent of the median household income for the MBTA service area, there would not be a DI/DB because the low-income populations would be closer to a 50 percent share of the population.

4 TITLE VI FARE EQUITY ANALYSIS: SPATIAL ANALYSIS OF THE 2015–17 RIDER CENSUS

CTPS, in partnership with the MBTA, developed a spatial analysis to identify the demographics and travel patterns of rider survey respondents who started or ended their trip in locations where they would have the choice to change modes. This analysis follows FTA's guidance to use ridership surveys to complete fare equity analyses. The fundamental question this analysis answers is "what are the equity implications if riders who remain in the MBTA's service area and gain or lose mode options choose the least expensive option available to them?".

As the MBTA updates its DI/DB Policy and continues investigating and refining the methodologies in this subject area, the methodologies, tools, and interpretations of results may evolve.

4.1 Methodology, Datasets, Assumptions, and Simplifications

This methodology uses a combination of a spatial analysis with the MBTA's 2015–17 Rider Census (the MBTA's rider survey) to find locations where survey respondents must switch or would likely switch to a mode with a different fare structure.

The following outlines the general workflow:

1) Create 0.5-mile circular buffers around "base" stops/stations and "BNRD" stops/stations. The distance was selected based on the coverage standard described in the June 2021 MBTA Service Delivery Policy.[6]
2) Identify the areas where there is a change of bus network coverage.
3) Buffer these areas by an extra 0.10 miles to account for error associated with asking for locations "to the nearest intersection." This buffer, in effect, increases the sample sizes associated with the areas that may be affected.
4) Identify where the changes in coverage coincide with rapid transit, commuter rail, or ferry service areas.
5) Identify survey respondents who started or ended their trips in these areas.
6) Identify the fare payment, travel patterns, and demographics of those survey respondents.
7) Calculate the share of respondents who would be affected on a daily and weekly basis.
8) Evaluate whether those impacts present a significant disparity between groups.

Datasets

CTPS used a set of MBTA-derived base and Fall 2022 Bus Network Redesign GTFS schedules to perform these analyses. The rapid transit, commuter rail, and ferry stop locations, the critical part of the analysis, are the same in each dataset. The base file is mostly representative of current service, but does not contain all changes that have been implemented since the planning process for BNRD began.

The GTFS files did not contain the Green Line Extension stops, but CTPS manually added the stop locations based on a Fall 2022 GTFS file.

The 2015–17 Rider Census is used to identify the travel pattern and demographics of riders who may be affected by service changes in the spatial analysis. More information about the survey may be found at the survey website.[7]

[6] MBTA. June 2021. Service Delivery Policy https://cdn.mbta.com/sites/default/files/2021-06/2021-service-delivery-policy.pdf

[7] CTPS. May 2018. MBTA 2015-2017 Systemwide Passenger Survey. https://www.ctps.org/dv/mbtasurvey2018/.

The rider survey's sampling plan was focused on gaining sufficient sample sizes at the route at station levels—representation beyond those levels was not a goal. Area- and subroute-centric summaries may not be representative of the true ridership in an area. Further, the vast majority (95 percent) of survey respondents described a weekday trip. The Saturday and Sunday spatial analyses use the trip patterns from the largely weekday trip making behavior.

For reference, the survey indicated that 34 percent of the riders can be classified as riders who are minority and 29 percent as riders who live in low-income households. Based on a prior MBTA Title VI service equity analysis, riders who can be classified as minority riders contribute approximately 25 percent of the MBTA's fare revenue; riders classified as low-income contribute 19 percent of the MBTA's fare revenue.[8] These values are a useful comparator when evaluating fare equity implications because they account for how each demographic group's collective fare product and travel pattern choices within the available transit network affect the groups' average fares.

The MBTA is currently in the process of updating its ridership survey.

Definition of a Disparate Impact or Disproportionate Burden

CTPS would identify a potential DI or DB if the ratio between a protected group's share of the new revenue and the protected groups' share of the existing revenue, an analogue to the average fare, is greater than 1.10 for a net fare increase or less than 0.90 for a net fare decrease.[9]

Assumptions and Limitations

The fare impact for riders in areas that lose or gain bus service depends on what modes and fare products are used. Tables 5A and 5B summarize the combinations of modes and fare types and how they are treated in the analysis.

[8] CTPS. July 2022 MBTA Boston Free Bus: Fare Equity Analysis Results. https://cdn.mbta.com/sites/default/files/2022-07/Free-Bus-Fare-Equity-Analysis-June-22.pdf

[9] Appendix 1 contains an example showing how the ratio between the change in the average fare between a protected group and all riders (the metric required by the MBTA's DI/DB Policy) and the ratio between a protected groups' share of the new revenue and the protected groups' share of the existing revenue produce the same value.

TABLE 5
Summary of Mode–Fare Product Combinations and Whether the Riders' Fares are Affected by Service Changes

A: Riders who lose access to bus service, but are within 0.5 miles of a rapid transit, commuter rail, or ferry service.

Modes used by passenger	**Reported fare product**	**Potential Impact on fare payment to make trip**
Only Bus	**Single-ride/ Monthly Bus Pass**	**Affected Have to switch to more expensive fare**
Only Bus	Monthly/Weekly/ One-Day LinkPass	Not affected Already pay more expensive fare
Bus and Rapid Transit, Commuter Rail, and/or Ferry	Any fare	Not affected Already pay more expensive fare. This is a simplification of the MBTA fare structure.

Note: If a rider is using a pass product, they are not typically going to be affected by bus network changes because they already are paying using a fare product that provides access to higher priced modes. Surveyed riders who lose service must have used bus service to be affected by the loss of bus service.

B: Riders who gain access to bus service, and are within 0.5 miles of a rapid transit, commuter rail, or ferry service.

Modes used by passenger	**Reported fare product**	**Potential Impact on fare payment to make trip**
Bus	Monthly Bus Pass	Not affected Already pay bus fares
Only Bus	Any fare	Not affected Already use only bus system
Commuter Rail	Any fare	Not affected Trips are not typically possible
Rapid Transit	**Any fare**	**Affected Can switch to cheaper fare**
Ferry	**Any fare**	**Affected Can switch to cheaper fare**

In this analysis, riders may lose access to their bus service, but may be within the service area of some other bus service. This replacement service may not provide service levels or patterns that they experienced on their initial mode, but it would provide access to the system at the same price. This assumption holds for the areas that gain new bus service. If riders can access a less expensive mode despite nonoptimal service levels or patterns, we assume that they do (within the bounds of the previous assumptions about modes and fare product choices). In both cases, riders losing service and riders gaining service, the fact that a service exists means people switch to it is a coarse simplification. In practice, some people who lose service would choose to take the more expensive option (for example, a convenient rapid transit transfer) rather than take a potentially onerous replacement bus trip. Other people would certainly choose the least expensive option. Some people would choose a mix of each day-to-day depending on their specific needs. For people who gain service, it seems highly unlikely that the mere presence of a new bus option would cause all riders boarding near a service to shift to a bus trip. For example, most riders in Kendall Square who gain access to new weekend Route 64 service will likely continue using the Red Line to access their destination.

Some riders lose or gain new service in areas that are not near the rapid transit, commuter rail, or ferry systems. While these riders may be able to travel a long distance to access a new mode and thus pay a higher priced fare, fundamentally they are losing access to the system because of impacts accounted for in the service equity analysis—revenue vehicle hours and route length. These riders are not included in the fare equity analysis.

We assume that riders who use the service on weekends match the demographics of riders who responded to the survey. Minority and low-income populations may be disproportionately more likely to ride on weekends than nonminority and non-low-income populations. This may mean that the weekend values in later tables show fewer riders classified as minority or low-income riders than there likely are on those days.

We also must acknowledge that the COVID-19 pandemic has shifted the demographics of who is using the MBTA's network. Throughout the pandemic, bus routes exhibited the most durable ridership.

4.2 Discussion of Results

Results can be grouped into two broad categories:

1) Impacts to those who must switch to a more expensive service—these riders lose bus service and are near a more expensive rapid transit or commuter rail service.
2) Impacts to those who gain the choice to switch to a new, less expensive service. These riders may choose to continue using their existing service, switch to a less expensive bus service, or make new trips that are served by the new bus route but do not serve as a replacement for their current travel patterns.

Table 6 presents the percentage of each demographic group within each category. The table also presents the number of surveys used to generate the results.

TABLE 6
Weighted Survey Responses for Riders Who Started or Ended Trips Near Rail Service, Gained New Bus Service, and Paid with Certain Fare Products

Category	Group	Weekday	Saturday	Sunday	Weekly
Lost Existing Bus Service					
Minority Status:	Minority	25% (1)	10% (1)	13% (1)	23%
Minority Status:	Nonminority	75% (1)	90% (4)	87% (3)	77%
Income Status:	Low-income	0% (0)	41% (1)	0% (0)	4%
Income Status:	Non-low-income	100% (1)	59% (2)	100% (2)	96%
Gained New Bus Service					
Minority Status:	Minority	26% (18)	22% (118)	25% (253)	26%
Minority Status:	Nonminority	74% (58)	78% (446)	75% (925)	74%
Income Status:	Low-income	36% (20)	17% (68)	24% (199)	33%
Income Status:	Non-low-income	64% (47)	83% (452)	76% (890)	67%

Notes:
Percentages are based on weighted survey results. The weekly percentage is based on a weighted average of each daily percentage. Weekdays were weighted by 83.7 percent, Saturdays by 9.7 percent, and Sundays by 6.6 percent. These percentages are based on weekly ridership shares by type of day based on the MBTA's Composite 2021 Automatic Passenger Counter summary. On Weekdays, Saturdays, and Sundays, the MBTA loses 0.7 percent, 0.5 percent, and 0.4 percent of its existing service area (including extra buffers) and gains 0.8 percent, 2.2 percent, and 3.8 percent of new area (including extra buffers), respectively. Many of the changes are in lower population density areas.
Values in parentheses indicate the number of district survey responses. For reference, nearly 35,000 distinct people responded to the survey. Sample sizes vary between groups because respondents could choose to independently decline to answer race/ethnicity questions and income questions.
All riders who lose service are within the extra buffer added to attempt to account for uncertainty in the starting or ending locations; no riders are within the base, 0.5-mile buffers. Appendix 2 contains a table with these results.

For riders who lost service, very few survey respondents were identified who would be affected. Despite identifying survey respondents who would be negatively affected, the more appropriate takeaway is that an exceedingly small number of riders would be affected at all. For riders who gained new service, we identified more responses, but the results, primarily derived from weekday results, are based on a small number of surveys. The weekend results are

complicated to interpret because the survey respondents were primarily weekday responses.

Title VI Results

Despite the limitations of a very small sample size, a survey that is mostly representative of weekday riders being used to generalize weekend travel, and simplifications to who would switch to a new mode, it still does not appear likely that the proposed service changes would result in fare inequities. CTPS finds that the effects of the service changes on the average fares would not result in either potential disparate impacts to minority populations or potential disproportionate burdens to low-income populations.

To develop a final estimate that CTPS can apply to the thresholds noted in the MBTA's DI/DB policy, we assigned estimated cost changes to each set of weighted results. For riders who lost service, because the affected weekday riders were exclusively in the catchment area of Zone 2 commuter rail stations, we assumed their costs would change from the bus fare to the Zone 2 commuter rail fare ($1.70 to $7.00, an increase of $5.30). For riders that gain service, we assumed fares will change from the rapid transit fare to the bus fare ($2.40 to $1.70, a decrease of $0.70). While there is certainly more nuance to this—reduced fares and monthly passes will decrease the effects—these values are generally representative of the relative magnitudes of the effects.

Overall, the benefits of gaining access to less expensive options outweigh the effects of losing access to bus service. Because the change is a net benefit we test if the ratio is greater than or equal to 0.90 for both minority and low-income populations.

TABLE 7
Final DI/DB Ratios

Population Group	Existing Share of Revenue	Share of Saved Revenue	DI/DB Ratio
Minority	25%	26%	1.0 > 0.9
Low-Income	19%	34%	1.8 > 0.9

Note: Values are based on unrounded calculations.
DI/DB = disproportionate impact/disparate burden.

Appendices

The Boston Region Metropolitan Planning Organization (MPO) operates its programs, services, and activities in compliance with federal nondiscrimination laws including Title VI of the Civil Rights Act of 1964 (Title VI), the Civil Rights Restoration Act of 1987, and related statutes and regulations. Title VI prohibits discrimination in federally assisted programs and requires that no person in the United States of America shall, on the grounds of race, color, or national origin (including limited English proficiency), be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination under any program or activity that receives federal assistance. Related federal nondiscrimination laws administered by the Federal Highway Administration, Federal Transit Administration, or both, prohibit discrimination on the basis of age, sex, and disability. The Boston Region MPO considers these protected populations in its Title VI Programs, consistent with federal interpretation and administration. In addition, the Boston Region MPO provides meaningful access to its programs, services, and activities to individuals with limited English proficiency, in compliance with U.S. Department of Transportation policy and guidance on federal Executive Order 13166.

The Boston Region MPO also complies with the Massachusetts Public Accommodation Law, M.G.L. c 272 sections 92a, 98, 98a, which prohibits making any distinction, discrimination, or restriction in admission to, or treatment in a place of public accommodation based on race, color, religious creed, national origin, sex, sexual orientation, disability, or ancestry. Likewise, the Boston Region MPO complies with the Governor's Executive Order 526, section 4, which requires that all programs, activities, and services provided, performed, licensed, chartered, funded, regulated, or contracted for by the state shall be conducted without unlawful discrimination based on race, color, age, gender, ethnicity, sexual orientation, gender identity or expression, religion, creed, ancestry, national origin, disability, veteran's status (including Vietnam-era veterans), or background.

A complaint form and additional information can be obtained by contacting the MPO or at http://www.bostonmpo.org/mpo_non_discrimination.

To request this information in a different language or in an accessible format, please contact

Title VI Specialist
Boston Region MPO
10 Park Plaza, Suite 2150
Boston, MA 02116
civilrights@ctps.org

By Telephone:
857.702.3700 (voice)

For people with hearing or speaking difficulties, connect through the state MassRelay service:

- **Relay Using TTY or Hearing Carry-over:** 800.439.2370
- **Relay Using Voice Carry-over:** 866.887.6619
- **Relay Using Text to Speech:** 866.645.9870

For more information, including numbers for Spanish speakers, visit https://www.mass.gov/massrelay.

APPENDIX A

COMPARING THE CHANGE IN THE AVERAGE FARE TO THE SHARE OF THE CHANGE IN REVENUE AS IT RELATES TO THE SHARE OF THE BASE REVENUE

In the following example, the average fare for both increases by 20 percent. The disparate impact/disproportionate benefit ratio is 20% ÷ 20% = 1.0 (the average fare increase for the protected group divided by the average fare increase for the entire population). We can also compare how the share of the change compares to the existing share of revenue by group: 20% ÷ 20% = 1.0 (the protected group's share of the change divided by the protected group's existing share of revenue).

Population Group	Num. of Riders	Fare	Revenue	Share of Revenue	New Fare	New Revenue	Change in Revenue	Share of Change	Avg Fare Increase
Protected Group	100	$0.50	$50	20%	$0.60	$60	$10	20%	20%
Nonprotected Group	200	$1.00	$200	80%	$1.20	$240	$40	80%	20%
Total	300	$0.83	$250	100%	$1.00	$300	$50	100%	20%

In this next example, we have increased the fare for the protected group by an additional $0.05. Here, we can again compare the average fare increase, 30% ÷ 22% = 1.364 (the average fare increase for the protected group divided by the average fare increase for the entire population). We can also compare how the share of the change compares to the existing share of revenue by group: 27% ÷ 20% = 1.364 (the protected group's share of the change divided by the protected group's existing share of revenue). These values are identical. This means that we can compare the share of the change in revenue to the share of the existing revenue to estimate whether a change results in disparate impacts or disproportionate burdens.

Population Group	Num. of Riders	Fare	Revenue	Share of Revenue	New Fare	New Revenue	Change in Revenue	Share of Change	Avg Fare Increase
Protected Group	100	$0.50	$50	20%	**$0.65**	**$65**	**$15**	**27%**	**30%**
Nonprotected Group	200	$1.00	$200	80%	$1.20	$240	$40	73%	20%
Total	300	$0.83	$250	100%	$1.02	$305	$55	100%	22%

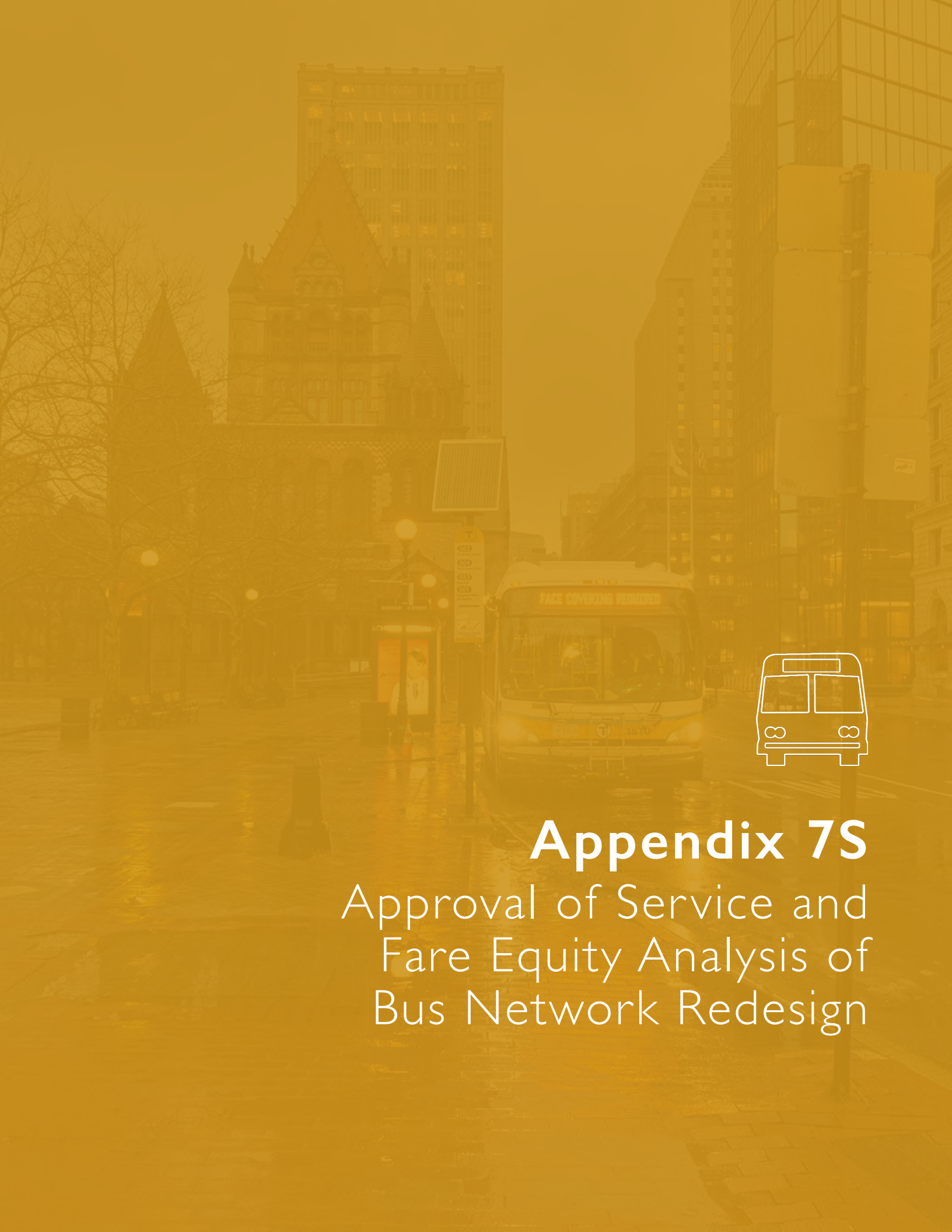
APPENDIX B

RESULTS WITHOUT INCLUDING AN EXTRA 0.1-MILE BUFFER

Table B1 shows that no riders were identified using only 0.5-mile buffers without an extra buffering to account for the imprecision of their identified start and ending locations. The beneficiaries in the areas that gained service are disproportionately people in protected groups.

TABLE B1
Weighted Survey Responses for Riders Who Started or Ended Trips Near Rail Service, Gained New Bus Service and Paid with Certain Fare Products– No Extra Buffer

Category	Group	Weekday	Saturday	Sunday	Weekly
Lost Existing Bus Service					
Minority Status	Minority	0% (0)	0% (0)	0% (0)	NA
Minority Status	Nonminority	0% (0)	0% (0)	0% (0)	NA
Income Status	Low-income	0% (0)	0% (0)	0% (0)	NA
Income Status	Non-low-income	0% (0)	0% (0)	0% (0)	NA
Gained New Bus Service					
Minority Status	Minority	54% (4)	18% (50)	21% (94)	**48%**
Minority Status	Nonminority	46% (8)	82% (208)	79% (392)	52%
Income Status	Low-income	48% (3)	10% (19)	20% (72)	**43%**
Income Status	Non-low-income	52% (5)	90% (219)	80% (372)	57%



Appendix 7S

Approval of Service and Fare Equity Analysis of Bus Network Redesign



This is a true and accurate copy of the action taken by the Board of Directors of the Massachusetts Bay Transportation Authority on December 15, 2022.

WHEREAS, on November 17, 2022, the Massachusetts Bay Transportation Authority ("MBTA") Board of Directors approved certain service changes, and the potential mode-shift and fare changes they may induce for implementation beginning in Fiscal Year 2023 (the "Redesigned Bus Network"); and

WHEREAS, the Redesigned Bus Network contains service changes and potential fare changes that will last longer than six months; and

WHEREAS, the Redesigned Bus Network includes service changes and potential fare changes requiring, pursuant to Federal Transit Administration ("FTA") Title VI Circular 4702.1B, a Service Equity Analysis and a Fare Equity Analysis (the "Title VI Equity Analysis"), to determine whether the implementation of the proposed service and potential fare changes will have a discriminatory impact based on race, color, or national origin, will result in disparate impacts to minority populations or disproportionate burdens to low-income populations; and

WHEREAS, the Title VI Equity Analysis has been completed for the service and potential fare changes in accordance with the Authority's Disproportionate Impact/Disproportionate Burden Policy; and

WHEREAS, the Title VI Equity Analysis demonstrates that the Redesigned Bus Network will not result in discriminatory impacts on race, color, or national origin, disparate impacts to minority populations, disparate benefits to nonminority populations, disproportionate burdens to low-income populations, or disparate benefits to non-low-income populations; and

WHEREAS, the MBTA Board of Directors has considered and reviewed the Title VI Equity Analysis;

On a motion duly made and seconded, it is by roll call VOTED that: The Board of Directors hereby approves the Title VI Equity Analysis for the Redesigned Bus Network.

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY ESTABLISHED 1964

Kevin Scanlon

Kevin Scanlon, Chief Counsel

