



BOSTON REGION METROPOLITAN PLANNING ORGANIZATION

Jamey Tesler, MassDOT Secretary and CEO and MPO Chair
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WORK PROGRAM

MBTA BOSTON FREE BUS FARE EQUITY ANALYSIS

MARCH 31, 2022

Proposed Motion

The Boston Region Metropolitan Planning Organization (MPO) votes to approve this work program.

Project Identification

Unified Planning Work Program (UPWP) Classification

Agency and Other Client Transportation Planning Studies and Technical Analyses

Project Identification

Project Number 14377

Client

Massachusetts Bay Transportation Authority (MBTA)

Client Supervisor: Steven Povich

Project Supervisors

Principal: Paul Christner

Manager: Rose McCarron

Funding Source

Future MBTA Contract

Schedule and Budget

Schedule: 4 months after work commences

Budget: \$29,763

Schedule and budget details are shown in Exhibits 1 and 2, respectively.

Relationship to MPO Work

This study is supported in full with non-MPO funding. Committing MPO staff to this project will not impinge on the quality or timeliness of MPO-funded work.

Background

On March 1, 2022, the MBTA, in collaboration with the City of Boston, launched a two-year fare-free program for MBTA bus Routes 23, 28, and 29. These bus routes run along some of the highest-ridership bus corridors in the City of Boston and provide connections to rail stations and to the broader MBTA network. The fare-free program is an expansion of the six-month fare-free pilot for bus Route 28 that was set to end on February 28, 2022.

The Central Transportation Planning Staff (CTPS) has provided technical assistance to the MBTA related to fare structure and tariff changes for more than 25 years. The MBTA requested that CTPS conduct the federally required fare equity analysis to evaluate whether implementation of the fare-free program would result in a disparate impact (DI) on minority populations or disproportionate burden (DB) on low-income populations as defined in the MBTA's DI/DB policy. This analysis will satisfy the Federal Transit Administration's (FTA's) requirement that transit providers evaluate the effect of fare changes on low-income and Title VI-protected populations.

Objective

Perform a federally required fare equity analysis to assess the impacts of the MBTA's fare-free program on bus Routes 23, 28, and 29.

Work Description

Task 1 Define Analysis Approach

CTPS will review available data sources, including bus ridership data, survey-based ridership models, and ridership surveys obtained during the initial free-fare pilot on bus Route 28. Based on the available data, CTPS will consider how to incorporate pandemic-related changes to bus ridership generally and specific changes on the bus routes included the fare-free program.

In consultation with the MBTA, CTPS will determine which data sets and modeling techniques are most appropriate to estimate how the fare-free program will change the average fare for low-income riders, minority riders, and transit riders as a whole.

Product of Task 1

Fare equity analysis methodology

Task 2 Model Title VI and Environmental Justice Impacts

CTPS will use the methodology identified in Task 1 to analyze the potential effects of fare structure changes on different socioeconomic groups. This work will be done in accordance with the requirements of the FTA Circular 4702.1B *Title VI Requirements and Guidelines for FTA Recipients*.

CTPS will prepare fare equity analysis summary results, which will include an evaluation of the effect of the program on average fares for minority and low-income populations.

Product of Task 2

Fare equity analysis summary results

Task 3 Produce Technical Memorandum on Fare Equity Analysis

CTPS will compose a technical memorandum that outlines the datasets and methods used to perform the fare equity analysis. The memorandum will include the estimated impact on average fares and will apply the MBTA's DI/DB policy to determine if the program will result in an inequitable outcome. 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. 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.

Product of Task 3

A memorandum on the fare equity analysis for the fare-free program

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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>.

Exhibit 1
ESTIMATED SCHEDULE
MBTA Boston Free Bus Fare Equity Analysis

Task	Month			
	1	2	3	4
1. Define Analysis Approach	█			
2. Model the Title VI and Environmental Justice Impacts of the Free-Fare Program		██████████		
3. Prepare Final Memorandum on Fare Equity Analysis			██████████	█ A

Products/Milestones
 A: Memorandum

Exhibit 2
ESTIMATED COST
MBTA Boston Free Bus Fare Equity Analysis

Direct Salary and Overhead									\$29,763
Task	Person-Weeks					Direct Salary	Overhead (109.09%)	Total Cost	
	M-1	P-5	P-4	P-2	Total				
1. Define Analysis Approach	0.2	0.2	1.0	0.5	1.9	\$2,868	\$3,129	\$5,997	
2. Model the Title VI and Environmental Justice Impacts of the Free-Fare Program	0.0	0.2	2.8	1.1	4.1	\$5,738	\$6,260	\$11,998	
3. Prepare Final Memorandum on Fare Equity Analysis	0.9	0.2	2.0	0.5	3.6	\$5,628	\$6,140	\$11,768	
Total	1.1	0.7	5.8	2.1	9.6	\$14,234	\$15,528	\$29,763	
Other Direct Costs									\$0
TOTAL COST									\$29,763

Funding
 Future MBTA Contract