



BOSTON REGION METROPOLITAN PLANNING ORGANIZATION

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

IDENTIFYING TRANSPORTATION INEQUITIES IN THE BOSTON REGION

NOVEMBER 18, 2021

Proposed Motion

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

Project Identification

Unified Planning Work Program (UPWP) Classification

Boston Region MPO Planning Studies and Technical Analyses

Project Number 13315

Client

Boston Region MPO

Project Supervisors

Principal: Jonathan Church

Manager: Betsy Harvey

Funding Source

MPO Combined Planning and §5303 Contract #114674

Schedule and Budget

Schedule: 11 months after work commences

Budget: \$70,000

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

Relationship to MPO Goals

The Boston Region MPO elected to fund this study with its federally allocated metropolitan planning funds during federal fiscal year (FFY) 2022. The work completed through this study will address the following goal area(s) established in the MPO's Long-Range Transportation Plan (LRTP): capacity management and mobility, clean air and clean communities, transportation equity, economic vitality.

Background

The purpose of this study is to develop a baseline assessment of existing transportation inequities in the Boston region for environmental justice (EJ) populations. EJ populations include minority and low-income populations.¹ Existing MPO policies related to equity align with federal civil rights and EJ requirements that focus on preventing future discrimination. This study will further the Boston Region MPO's commitment to equity by seeking to quantify existing transportation inequities among EJ populations when compared to non-EJ populations that have resulted from past investments. The results of this work will support MPO investments and policy decisions by providing comprehensive information about existing transportation inequities in the Boston region.

Because this study overlaps with several areas of the MPO's work, staff will coordinate with managers of the LRTP, performance-based planning and programming, and the Transportation Improvement Program (TIP) to prevent duplication of work and identify ways that this study can support those programs.

Objective

The objective of this study is to select and analyze baseline equity indicators for the Boston region. This study will identify transportation inequities that currently exist for EJ populations, helping the MPO to make more informed decisions in consideration of the equity impacts of its policies and investments.

Work Description

Task 1 Conduct Review of the State of Current Practice and Select Baseline Equity Indicator Metrics

This task will consist of a review of the state of current practice to help identify metrics that will be analyzed as baseline equity indicators in this study, development of a preliminary list of metrics, and a presentation of this list to the MPO board for additional input and feedback prior to conducting the analyses.

Subtask 1.1 Conduct Review of the State of Current Practice

Staff will identify equity-related metrics that have recently been analyzed by the Metropolitan Area Planning Council, the Massachusetts Department of Transportation, the Massachusetts Bay Transportation Authority, and Boston Indicators to avoid duplication and determine where there are gaps that this study could fill. MPO staff will coordinate with relevant staff at these agencies when appropriate. Additionally, staff will examine the methodology and metrics

¹ The minority population are those who identify as Black or African American, Asian, Native Hawaiian or Pacific Islander, American Indian or Alaskan Native, and/or Hispanic. The low-income population are those whose family income is at or below 200 percent of the national poverty level for their family size.

that have been used by other MPOs to identify transportation inequities and assess their relevance and feasibility for this study.

Subtask 1.2 Develop Preliminary List of Baseline Equity Indicator Metrics

Using the results of Subtask 1.1, staff will develop a comprehensive list of possible baseline equity indicator metrics that could be analyzed for this study. From that list, staff will identify a preliminary list of preferred metrics. Staff will meet with several EJ advocacy groups in the Boston region to get their perspectives on the metrics, whether there are any additional metrics that should be included, and possible analytical approaches to ensure the analyses capture the challenges faced by EJ populations in the region. Metrics that are not chosen will be documented for possible inclusion in a future study or MPO program.

At a minimum, baseline equity indicator metrics on the preliminary list will include:

- Baseline equity indicators for the metrics analyzed for the MPO's 2050 LRTP Disparate Impact and Disproportionate Burden analysis. These include travel time metrics for public transit and driving modes, access to opportunities (which include access to healthcare, jobs, education, essential places, and open space) for public transit and driving modes, and exposure to carbon monoxide
- Transportation costs among equity populations compared to their non-equity population counterparts

Subtask 1.3 Update MPO Board

Staff will present to the MPO board the list of metrics chosen as baseline equity indicators and solicit feedback prior to proceeding with the analyses.

Product of Task 1:

Final list of baseline equity indicator metrics

Task 2 Analyze Baseline Equity Indicator Metrics

Under this task, staff will analyze the metrics chosen in Task 1 for existing inequities between EJ populations and their non-EJ counterparts. As these are novel analyses for the MPO, it is anticipated that the development of these analyses will be an iterative process. Therefore, the focus of the work will be developing and documenting replicable analysis methodologies for these metrics and producing results that are useful to the MPO and its Transportation Equity program. Further opportunities for expanding on the study, such as additional metrics to analyze and population groups to include, will be identified. Staff will use a variety of tools to conduct these analyses, depending on the metrics being analyzed. These tools will include, but are not limited to, Conveyal (a destination access tool) and ArcGIS.

Task 3 Develop Final Product

In this task, staff will create a brief report documenting the purpose of the study, the metric selection and analysis methodology, and analysis results. The results will be presented in a visually enhanced, easily digestible manner. The report will also include recommendations for additional research, recommendations for updating these metrics on a regular basis, and a discussion of how the outcomes of this study can be used to support other MPO programs.

Product of Task 3:

Final report

Task 4 Present to the MPO

Staff will present the study findings to the MPO. Staff will share the study results and recommendations for next steps.

Product of Task 4:

Presentation to the MPO

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>

Exhibit 1
ESTIMATED SCHEDULE
Identifying Transportation Inequities in the Boston Region

Task	Month											
	1	2	3	4	5	6	7	8	9	10	11	
1. Conduct Literature Review of the State of Current Practice and Select Baseline Equity Indicator Metrics	A											
2. Analyze Baseline Equity Indicator Metrics			B									
3. Develop Final Product									B			
4. Present to the MPO												C

Products/Milestones

- A: Final list of baseline equity indicator metrics
- B: Final report
- C: Presentation to the MPO

Exhibit 2
ESTIMATED COST
Identifying Transportation Inequities in the Boston Region

Direct Salary and Overhead	\$70,000
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Task	Person-Weeks						Direct Salary	Overhead (109.09%)	Total Cost
	M-1	P-5	P-4	P-3	P-2	Total			
1. Conduct Literature Review of the State of Current Practice and Select Baseline Equity Indicator Metrics	0.3	0.1	1.9	0.6	2.0	4.9	\$6,579	\$7,177	\$13,756
2. Analyze Baseline Equity Indicator Metrics	0.0	0.1	2.4	0.0	9.4	11.9	\$14,270	\$15,568	\$29,838
3. Develop Final Product	2.3	0.0	3.0	0.0	1.0	6.3	\$10,039	\$10,951	\$20,990
4. Present to the MPO	0.3	0.0	1.0	0.0	0.2	1.5	\$2,590	\$2,826	\$5,416
Total	2.9	0.2	8.3	0.6	12.6	24.6	\$33,478	\$36,521	\$70,000

Other Direct Costs	\$0
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TOTAL COST	\$70,000
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Funding
MPO Combined Planning and §5303 Contract #114674