

BOSTON REGION METROPOLITAN PLANNING ORGANIZATION

Monica Tibbits-Nutt, MassDOT Secretary and CEO and MPO Chair Tegin L. Teich, Executive Director, MPO Staff

WORK PROGRAM

PARKING IN BIKE LANES: STRATEGIES FOR SAFETY AND PREVENTION

JANUARY 18, 2024

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 14002

Client

Boston Region MPO

Project Supervisors

Principal: Casey Cooper Manager: Kyle Casiglio

Funding Source

FFY 2024 MPO Combined 3C and PL Contract #123114

Schedule and Budget

Schedule: Six months after work commences

Budget: \$19,998

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) 2024. The work completed through this study will address the following goal areas established in the MPO's Long-Range Transportation Plan: safety, system preservation, capacity management and mobility, clean air and clean communities, transportation equity, economic vitality.

Background

Biking actively in the metropolitan Boston area has witnessed a major increase in recent years. Mobility data firm Streetlight reported that the number of average daily bike trips per 1,000 people in the Boston metropolitan area rose by 9—from 26 to 35—between 2019 and 2022.¹ The increasing adoption and expansion of bikesharing (through Bluebikes) has played a large role in influencing this increase in biking activity. Local municipalities have also tried to support safer biking environments by building bike lanes. For example, the City of Boston has about 76 miles of on- and off-street bike lanes and paths, with ambitious plans to grow both the bike lane network and expand the public bikeshare program.^{2;3} Other municipalities in the inner core are adopting similar measures in increasing recognition of the need to create better and safer environments for bicyclists. These actions also contribute to climate action goals of inducing a mode shift away from trips made by single-occupancy vehicles.

While bike lanes have become more common across the Boston region, the problem of motor vehicles parking in these lanes has also become more widespread. These incidents present safety hazards for both bicyclists and motorists. Blocked bike lanes force people bicycling to merge unexpectedly into mixed traffic. Many bike lanes are not wide enough to accommodate a parked vehicle, creating an obstruction to the adjacent travel lane as well as the bike lane.

This study seeks to address the problems caused when automobile drivers impede onstreet bicycle facilities by researching successful strategies and practices that municipalities have employed to prevent drivers from parking in bike lanes. MPO staff will provide recommendations that can be implemented in the Boston region to reduce the frequency of vehicle drivers parking in on-street bicycle facilities.

The research will include a review of existing policies and programs and may feature interviews with peers to better understand their approaches and challenges. MPO staff may also engage with municipalities in the Boston region to understand the existing policies they have in place, if any, to reduce the occurrence of vehicle-obstructed bike lanes.

¹ Lewis, C., O'Higgins, E., and Adler, E. (2023). *Bike Boom or Bust? Metro and Statewide U.S. Bicycle Activity Trends*. San Francisco: Streetlight Data. Retrieved from https://learn.streetlightdata.com/ranking-us-bicycle-count-trends

² City of Boston. (2022, September 6). Everyone Deserves Safe Streets. Boston, Massachusetts, United States. Retrieved from https://storymaps.arcgis.com/stories/a90bff933db94496b6c4214caf17c706

³ City of Boston. (2022, September 6). Boston's Bike Network and Safer Streets Expanding. Boston, Massachusetts, United States. Retrieved from https://www.boston.gov/news/bostons-bike-network-and-safer-streets-expanding

Objectives

- 1. Identify successful approaches employed by municipalities to prevent vehicle drivers from parking in bike lanes.
- 2. Recommend strategies that Boston region municipalities could implement to dissuade vehicle drivers from parking in bike lanes.

Work Description

Task 1 Identify the Causes and Impacts of Parking in Bike Lanes

MPO staff will begin this project by identifying why motorists park vehicles in bike lanes and the consequences of such behavior. Staff will conduct a literature review, explore existing data, and survey external stakeholders to assess the source of parking demand that leads people driving to park in bike lanes and summarize how such parking habits affect those using the facilities. Our findings will inform what interventions could be most likely to positively address the issue.

Subtask 1.1 Demand Assessment

MPO staff will attempt to better understand the problem of parking in bike lanes. By reviewing literature, exploring existing data, and surveying external stakeholders, staff will identify why people park in bike lanes and what the parking needs are of these users.

Subtask 1.2 Impact Assessment

MPO staff will review the literature, explore existing data, and conduct outreach with existing stakeholders to identify how vehicles parked in bike lanes affect bicyclist safety, behavior, and travel decisions.

Products of Task 1

Needs and Impact Statements

Task 2 Identify Successful Practices to Prevent Parking in Bike Lanes

MPO staff will identify best practices and implementation approaches used by municipalities to prevent people driving from parking in bike lanes. MPO staff will also recommend strategies that can be implemented in the Boston region to reduce the number of vehicles parked in bike lanes.

Subtask 2.1 Literature Review

MPO staff will conduct a literature review of interventions that are aimed at preventing people from parking vehicles in bike lanes. This review will include multiple strategies for intervention including design, enforcement, and policy interventions, and assess their anticipated outcomes and viability as pilots in the Boston region.

Subtask 2.2 Case Studies

MPO staff will conduct a detailed review of select successful interventions to assess their effectiveness and viability as pilot interventions in the Boston region. MPO staff will consider local examples as well as national and/or international examples based on their effectiveness and viability.

Products of Task 2

Draft report outlining research findings and listing recommendations for pilot interventions in the Boston region

Task 3 Document Findings and Recommendations

MPO staff will prepare a web-based StoryMap that will document the study process, findings, and recommendations.

Products of Task 3

Draft StoryMap communicating study process, findings, and recommendations

Task 4 Finalize Study and Prepare for MPO Presentation

After receiving comments on the draft StoryMap from key partners, MPO staff will address these comments and finalize the study. The final study results will be presented to the MPO for approval at the next scheduled MPO meeting.

Subtask 4.1 Stakeholder Comments

MPO staff will disseminate the StoryMap and report to solicit comments from key partners and address these in a final draft of the study deliverables.

Subtask 4.2 Board Presentation

MPO staff will prepare a presentation for the MPO board and present at the next scheduled board meeting for MPO approval.

Products of Task 4

Finalized report, StoryMap, and presentation to the MPO board.

Exhibit 1
ESTIMATED SCHEDULE

Parking in Bike Lanes: Strategies for Safety and Prevention

	Month					
Task	1	2	3	4	5	6
 Identify the Causes and Impacts of Parking in Bike Lanes Identify Successful Practices to Prevent Parking in Bike Lanes Document Findings and Recommendations Finalize Study and Prepare for MPO Presentation 		A		В	С	D

Products/Milestones

A: Needs and Impact Statements

B: Draft Report

C: Draft StoryMap

D: Finalized Report, StoryMap, and Presentation to MPO Board

Exhibit 2
ESTIMATED COST
Parking in Bike Lanes: Strategies for Safety and Prevention

Direct Salary and Overhead								\$19,998
	Person-Weeks by Pay Grade				ade	Direct	Total	
Task	G-9	G-8	G-7	G-5	Total		(120.3%)	Cost
Identify the Causes and Impacts of Parking in Bike Lanes	0.0	0.0	0.1	1.0	1.1	\$1,540	\$1,853	\$3,393
Identify Successful Practices to Prevent Parking in Bike Lanes	0.0	0.1	0.1	3.0	3.3	\$4,924	\$5,924	\$10,848
3. Document Findings and Recommendations	0.0	0.0	0.0	0.8	0.9	\$1,313	\$1,580	\$2,893
Finalize Study and Prepare for MPO Presentation	0.1	0.0	0.1	0.6	0.8	\$1,300	\$1,564	\$2,864
Total	0.1	0.2	0.3	5.4	6.0	\$9,078	\$10,920	\$19,998
Other Direct Costs								\$0
TOTAL COST								\$19,998

Funding

FFY 2024 MPO Combined 3C and PL Contract #123114

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
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For more information, including numbers for Spanish speakers, visit https://www.mass.gov/massrelay.