



BOSTON REGION METROPOLITAN PLANNING ORGANIZATION

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

LEARNING FROM ROADWAY-PRICING EXPERIENCES

JANUARY 26, 2023

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 13807

Client

Boston Region MPO

Project Supervisors

Principal: Rebecca Morgan

Manager: Seth Asante

Funding Source

MPO Combined PL and §5303 Contract #118967

Schedule and Budget

Schedule: Eight months after work commences

Budget: \$45,000

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) 2023. The work completed through this study will address the following goal areas established in the MPO's Long-Range Transportation Plan (LRTP): capacity management and mobility, clean air and clean communities, and economic vitality.

Background

Roadway pricing has been implemented through several methods in the United States for the primary goals of reducing congestion and greenhouse gas emissions, generating funds to maintain highway and public transportation infrastructure, and managing travel demand by encouraging motor-vehicle drivers to shift their trips to alternative travel modes or travel routes, or to travel on off-peak periods.¹ Many regional planning organizations have benefited from incorporating roadway pricing successfully into metropolitan plans, such as the North Central Texas Council of Governments and Puget Sound Regional Council.

While many roadway-pricing projects have been successful in accomplishing these goals others have not been implemented for a variety of reasons, including technological, political, and institutional concerns. Privacy concerns, such as protecting personal data and information, and impacts on transportation equity populations, suburban and rural drivers, and business activities have been raised for some projects.²

The advent of electric and alternative fuel vehicles and incentives to encourage their use are reducing gas tax revenues available for funding transportation projects.³ As a result of these developments, many state and municipal governments are now looking for alternative ways to fund transportation projects. Consequently, roadway pricing is being discussed as a potential funding source. Also, the ever-growing congestion problems facing many metropolitan areas and related air quality issues and quality of life concerns are requiring strategies to reduce congestion.

¹ Victoria Transport Policy Institute, *Online TDM Encyclopedia*, “Road Pricing, Congestion Pricing, Value Pricing, Toll Roads, and HOT Lanes” (Victoria, British Columbia, Canada, September 2019). [Online TDM Encyclopedia - Road Pricing \(vtpi.org\)](https://www.vtpi.org/online-tdm-encyclopedia-road-pricing)

² Tracy C. Miller, Michael Wilt, Ted Bolema, and Thomas Savidge, “Addressing Concerns with Congestion Pricing” (The Mercatus Center at George Mason University, May 2017). [Addressing Concerns with Congestion Pricing | Mercatus Center](#); CDM Smith, “Will a Road Usage Charging (RUC) System Infringe Upon My Privacy” (Boston, MA), accessed December 2022. [Will a Road Usage Charging \(RUC\) System Infringe Upon My Privacy? - CDM Smith](#); and Brian D. Taylor, “Traffic Congestion Pricing: Methodologies and Equity Implications” (Bipartisan Policy Center, September 2010). <https://bipartisanpolicy.org/download/?file=/wp-content/uploads/2019/03/BPC-Pricing-EquityFIN.pdf>

³ Tracy C. Miller, “Improving the Efficiency and Equity of Highway Funding and Management—The Role of VMT Charges” (The Mercatus Center at George Mason University, February 22, 2014). [Improving the Efficiency and Equity of Highway Funding and Management: The Role of VMT Charges | Mercatus Center](#); and Ron Hagquist, “Higher Gas Efficiency Equals Lower Fuel Revenues,” *Public Roads*, Volume 72 Number 3 (FHWA-HRT-08-004, November/December 2008). [Higher Gas Efficiency Equals Lower Fuel Revenues | FHWA \(dot.gov\)](#)

Objectives

The objectives of this study are to identify the political, institutional, and technological challenges, including barriers and opportunities that arise from implementing roadway-pricing strategies, so that they may be considered if roadway pricing is implemented in the Boston region in the future. Also, the objectives are to identify the MPO goals for roadway pricing and how to incorporate roadway pricing into the planning process.

Work Description

This study will address questions about roadway pricing by engaging with planners, policymakers, and other stakeholders who have implemented, or are implementing, roadway-pricing projects.

Task 1 Identify and Select Roadway-Pricing Projects

MPO staff will identify as many as 10 roadway-pricing projects that are operational or to be implemented. Staff will perform a quick review of these programs and select as many as five projects with different roadway-pricing methods for evaluations and interviews. The selection criteria for the candidate projects will include geographical distribution, pricing style, stage of implementation, ownership or management style, and availability of stakeholders for interviews.

Products of Task 1

- List of roadway-pricing projects with brief descriptions about their style of pricing, operations, and management
- List of candidate roadway-pricing projects for detailed assessment

Task 2 Interview Key Personnel of Candidate Roadway-Pricing Projects

MPO staff will identify key personnel associated with each candidate roadway-pricing program and arrange interviews. The interviews will be conducted virtually. A team of as many as four MPO staff will conduct the interviews. Questions to be asked during the interviews will be developed in advance by the interviewing team. Staff will seek information about the following key areas:

- Why was the roadway-pricing program and pricing strategy considered?
- Who were the initiators or advocates for the project?
- What are the goals of roadway pricing for this implementation?
- How was the project incorporated into the metropolitan planning process?
- How was the project implemented, and who were project champions?
- How were the political and public concerns handled, and what processes were followed to gain stakeholder and public support?
- What were the operational challenges and how were they addressed?
- What were the benefits and accomplishments and how were they evaluated?
- What were the takeaways and lessons learned?
- How was equity accounted for in implementation?

Products of Task 2

- List of candidate roadway-pricing programs and key personnel to be interviewed
- List of questions developed for the interview
- Summaries of the interviews

Task 3 Identify the MPO's Goals for Roadway Pricing

As noted previously, roadway-pricing strategies can help reduce traffic congestion, improve air quality, modify travel behavior, and raise the revenue essential to implement a multimodal and sustainable transportation system. In this task, MPO staff will interview MPO board members and conduct a workshop to identify the MPO's goals and objectives for roadway pricing in the Boston region and determine how these objectives support the goals identified in the MPO's LRTP. Staff will provide MPO board members with the results of Tasks 1 and 2 and other materials in advance of the workshop.

Products of Task 3

- The MPO's intended goals for roadway pricing
- Potential roles that roadway pricing may play in the LRTP goals and policy recommendations

Task 4 Explore Roadway Pricing in the MPO Planning Process

MPO staff will review the information gathered from the interviews and workshops to assess how roadway pricing can be incorporated into the MPO's planning processes. Topics that may be considered include the evaluation of pricing concepts; effects on equity populations; and regional modeling studies to assess effects such as changes in travel behavior, air quality benefits, and vehicle-miles traveled and congestion reductions.

Product of Task 4

Summary of ways to incorporate roadway pricing into the various MPO planning processes and recommendations for further analysis.

Task 5 Document Study and Present Results

Staff will prepare a memorandum summarizing the results of the interviews, workshop, and potential roadway-pricing strategies. The document will present takeaways and lessons learned from the study and next steps.

Product of Task 5

A memorandum documenting all the project's tasks, products, and conclusions.

Exhibit 1
ESTIMATED SCHEDULE
Learning from Roadway-Pricing Experiences

Task	Month							
	1	2	3	4	5	6	7	8
1. Identify and Select Roadway-Pricing Projects	█							
2. Interview Key Personnel of Candidate Roadway-Pricing Projects		█						
3. Identify the MPO's Goals for Roadway Pricing			█					
4. Explore Roadway Pricing in the MPO Planning Process				█				
5. Document Study and Present Results	█ A							

Products/Milestones
 A: Study memorandum

Exhibit 2
ESTIMATED COST
Learning from Roadway-Pricing Experiences

Direct Salary and Overhead	\$44,999
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Task	Person-Weeks			Direct Salary	Overhead (119.34%)	Total Cost
	P-5	P-4	Total			
1. Identify and Select Roadway-Pricing Projects	1.0	0.8	1.8	\$3,190	\$3,807	\$6,997
2. Interview Key Personnel of Candidate Roadway-Pricing Projects	1.8	1.0	2.8	\$4,796	\$5,723	\$10,519
3. Identify the MPO's Goals for Roadway Pricing	1.8	0.6	2.4	\$4,246	\$5,067	\$9,312
4. Explore Roadway Pricing in the MPO Planning Process	1.6	1.0	2.5	\$4,459	\$5,322	\$9,781
5. Document Study and Present Results	1.5	0.6	2.1	\$3,825	\$4,565	\$8,390
Total	7.5	4.0	11.5	\$20,515	\$24,483	\$44,999

Other Direct Costs	\$0
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TOTAL COST	\$44,999
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Funding

MPO Combined PL and §5303 Contract #118967

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>.