

APPENDIX A

Other Boston Region Transportation Planning Studies

This appendix consists of brief descriptions of planning studies that will be conducted in the Boston Region Metropolitan Planning Organization (MPO) area by individual agencies, such as the Massachusetts Department of Transportation (MassDOT) and the Massachusetts Bay Transportation Authority (MBTA), during federal fiscal year (FFY) 2023. These studies fall into one of two categories:

- studies supported with federal planning (but not MPO) funds
- studies that MPO and partner agency staff have determined to be of regional significance

MPO discretionary funding will not be used for these studies, although in certain cases, an agency or one of its consultants may contract with MPO staff—the Central Transportation Planning Staff (CTPS)—to prepare an environmental impact report or large-scale study. For these projects, support work that will be conducted by CTPS is described in Chapters 3 through 6. Likewise, the project listings in this appendix indicate whether components of the projects will be conducted by CTPS. The appendix is organized hierarchically: first by type of study, then by geography, then by the entity organizing or leading the study effort.

The projects in this appendix are not subject to the MPO’s public participation process. Rather, they follow their own public processes, parts of which may be required by the Massachusetts Environmental Policy Act. They are included here to provide a more complete picture of the surface-transportation-planning projects occurring in the region. The listings contained in this appendix were provided to CTPS prior to June 23, 2022.

MULTIMODAL OR ROADWAY STUDIES

Statewide Studies

MassDOT

Beyond Mobility: Massachusetts 2050 Statewide Long-Range Transportation Plan

Beyond Mobility, the Massachusetts 2050 Long-Range Transportation Plan, is a planning process that will result in a blueprint for guiding transportation decision-making and investments in Massachusetts in a way that advances MassDOT’s goals and maximizes the equity and resiliency of the transportation system. The Plan will serve as a strategic plan for MassDOT and document the most pressing transportation priorities for MassDOT to address between now and 2050, relying heavily on input from the public.

Impact of Teleworking

The Impact of Teleworking Study is developing plausible future scenarios for teleworking in Massachusetts and will use a modeling approach to understand the effects that teleworking changes may have on the Commonwealth's transportation system. This study will examine how anticipated increases and/or decreases in teleworking could change household and aggregate travel behavior through measures that include overall vehicle-miles traveled, trip attributes, and mode share. The potential macroeconomics impact of these changes in travel behavior will also be analyzed. The modeled projections for each scenario could assist MassDOT in future decision-making by providing information about how the demands on the transportation system will change and how the mix of transportation investment may need to respond.

Understanding the Impacts of COVID-19 on the Massachusetts Freight Network and Freight Planning

Because of pandemic-related shifts in supply chains, consumer buying, e-commerce, and associated distribution networks—all of which have clear implications on freight transportation behaviors and travel patterns—and to prepare the state freight network for present and future disruptions, this study will evaluate the network in light of observed and anticipated effects of COVID-19.

MassDOT National Electric Vehicle Infrastructure (NEVI) Plan

This planning process will develop an Electric Vehicle (EV) Infrastructure Deployment Plan for Massachusetts as required by the NEVI Program. Key activities include modeling EV charging demand on highway corridors in Massachusetts, analyzing economic factors associated with direct carbon fuel cell technology, prioritizing highway corridor segments for investment of NEVI funds, and seeking stakeholder input on key questions to be addressed by the plan. This Plan will enable MassDOT to use federal funds to install fast charging infrastructure on EV Alternative Fuel Corridors in Massachusetts, which may help to ease range anxiety for drivers on long-distance trips.

Regional or Subregional Studies

MassDOT

Wellington Circle Study

The Wellington Circle Study will evaluate the existing and future multimodal transportation conditions at Wellington Circle in the City of Medford, and develop and analyze alternatives that are intended to improve transportation conditions. The study will focus on the redesign of Wellington Circle intended to provide better connectivity and mitigate traffic throughout the area for the City of Medford and other communities in the surrounding region. The study will examine

and evaluate the alternatives to the extent possible in the context of vehicular use, bicycle and pedestrian use, transit use, land use, cost, and the resulting economic, social, and cultural impacts.

MassDOT/Executive Office of Energy and Environmental Affairs/Department of Conservation and Recreation/Boston Planning and Development Authority

Kosciuszko Circle and William T. Morrissey Boulevard Corridor Study

This is a conceptual planning study that will evaluate the existing and future multimodal transportation conditions at Kosciuszko Circle and William T. Morrissey Boulevard in the City of Boston, and develop and analyze alternatives for the corridor that are intended to improve the public realm, mobility, connectivity, safety, and climate resiliency throughout the area for the City and other communities in the surrounding region.

Gilmore Bridge Mobility Improvements Study

MassDOT's Office of Transportation Planning is conducting a study regarding opportunities to implement and improve transit priority and multimodal travel over the Gilmore Bridge in Boston and Cambridge, as well as explore the feasibility of building a new bridge between Charlestown and Cambridge to serve transit, walking, and biking trips.

The Gilmore Bridge Mobility Improvements Study will establish existing mobility and other travel conditions within the study area and evaluate short, medium, and long-term recommendations intended to address the needs of current and anticipated future travelers along the corridor, with a particular emphasis on providing dedicated bus lanes. In addition to exploring opportunities for transit priority measures and active transportation improvements on the Gilmore Bridge, the study will assess the feasibility of constructing a new bridge between Charlestown and Cambridge to serve transit, walking, and biking trips.

Route 1A East Boston Corridor Study

The purpose of this study is to assess the potential uses of the MassDOT and MBTA rail parcels located between Route 1A and the Chelsea Creek in East Boston, and evaluate the Route 1A corridor between Bell Circle and Day Square. The study will identify opportunities to improve walking, biking, and transit conditions, address safety deficiencies for all users, accommodate freight needs and increasing demand on the corridor due to new development, and mitigate potential impacts of climate change.

TRANSIT STUDIES

Statewide Studies

MassDOT

Northern Tier Passenger Rail Study

The Northern Tier Passenger Rail Study is a conceptual planning study assessing rail service alternatives along the North Adams-Greenfield-Boston corridor. The study will examine the benefits, costs, and investments necessary to implement passenger rail service from North Adams to Greenfield and Boston, with the speed, frequency, and reliability necessary to be a competitive option for travel along this corridor.

Regional or Subregional Studies

MassDOT/MBTA

MBTA Bus Network Redesign

This work builds off of the *Focus40* effort and the Better Bus Project to evaluate the overall MBTA bus network and propose an alternate vision for how the bus network can better reflect the travel needs of the region and create a more competitive bus service for current and future bus riders. The consultant team is responsible for conducting an in-depth analysis of the network using location-based systems data and the MBTA's origin-destination-transfer model to better understand travel demand in the region. Given that more than 450,000 MBTA customers rely on the bus network every day, the Network Redesign features a major civic engagement effort to ensure that the feedback from current and potential bus customers is a major input into this process. Stakeholder engagement also involves meeting with a range of municipal, business, and advocacy representatives. The consultant has developed concepts for a redesigned MBTA bus network and recommended a final proposed network. The final network will be implemented in phases. The Redesign will develop a detailed phasing plan for rolling out changes based on vehicle availability, the scale of changes, work to be completed, and political will. Currently, the redesign study is in the public engagement phase to obtain feedback on the proposed network changes.

Silver Line Extension Alternatives Analysis

Building off of the work of the Everett Transit Action Plan and the Lower Mystic Regional Working Group, the purpose of the Silver Line Extension Alternatives Analysis is to assess the feasibility, utility, and cost of various alignment and service frequency options of an extension of the Silver Line, providing high-quality transit from Chelsea through Everett and on to Somerville,

Cambridge, and/or Boston. The analysis will include the development of conceptual designs for alternatives, in addition to modeling how the alternatives would interact with other existing services, parking, and transportation demand management policies. The intended outcome of this effort is a report containing the information necessary for MassDOT/MBTA to select a preferred alternative to move into design.

Red Line TOD District Framework Study

In November 2022, the MBTA received a grant through the Federal Transit Administration’s Pilot Program for Transit-Oriented Development (TOD) Planning to study and plan for TOD along the Red Line subway. This study aims to explore how concentrated development areas along the Red Line could be leveraged through District Improvement Financing or other mechanisms to provide sustainable revenue support for capital improvements necessitated by the increased transit demand generated in these growth areas. The analysis will include a development-focused station area assessment, best practices and policy frameworks, and identification of potential districts. The intended outcome of this study is a report to provide the MBTA with tailored recommendations for each of the selected study locations.

CORRIDOR, AREA, OR GENERAL STUDIES

Regional or Subregional Studies

MassDOT

Route 128 Land Use Study

This study will establish future land use, housing, and economic development assumptions of the segment of Route 128 between Newton and Lexington and make recommendations to improve access to destinations and mobility in the region.

Municipal Studies

City of Boston

Rutherford Avenue—Sullivan Square Design Project

The City of Boston is progressing with the redesign of the Rutherford Avenue corridor in Charlestown, which extends approximately 1.5 miles from the North Washington Street Bridge to Sullivan Square and provides a critical connection between Everett, Somerville, suburbs north and east of Boston, and Boston’s downtown business area. Reconstruction of this corridor is currently programmed in the Transportation Improvement Program beginning in 2022. The

corridor's highway-like design is inconsistent with present-day design preferences and local circumstances, and the function and design of the Sullivan Square rotary is problematic. Pedestrian mobility is limited, and bicycle travel is not compatible with the high-speed road. The corridor is eight- to 10-lanes wide (120 to 140 feet), presenting a significant barrier between areas on either side of the roadway, such as the Bunker Hill Community College, Paul Revere Park, the Hood Business Park employment area, and MBTA rapid transit stations.

There are significant transit-oriented development opportunities along the corridor, and public investment in new infrastructure will support development of commercial and residential uses, whose tenants otherwise probably would not, or could not, locate to the area. A number of major structural elements in the corridor were constructed more than 60 years ago; they are approaching the end of their life cycle and will need to be replaced. With the Central Artery/Tunnel project now complete, more traffic remains on facilities such as Interstate 93 and US Route 1; therefore, reduced traffic volumes along Rutherford Avenue present a unique opportunity to transform the corridor's character from a 1950s-era, automobile-oriented facility to a twenty-first century, multimodal, urban boulevard corridor that will accommodate private development.

MISCELLANEOUS STUDIES AND PLANNING ACTIVITIES

Statewide Studies

MassDOT

Climate Adaptation Vulnerability Assessment

The Climate Adaptation Vulnerability Assessment is a planning-level analysis of which transportation assets are at risk to flooding over the coming century. This study identifies flood exposure for in-state National Highway System roads, bridges, and large culverts; MassDOT- and MBTA-owned rail; MassDOT facilities; and many public-use airports. It assesses damage and repair costs, time estimates for repairs, and considers the consequences from loss of service. Specifically, this study will estimate "do nothing" costs and qualitative consequences of at-risk transportation assets under future conditions assuming no intervention. This information can be used during the capital planning process to prioritize investments that avoid or reduce long-term climatic impacts associated with flooding.

Shared Travel Network

This study will develop recommendations about where and how to leverage existing facilities and resources that could contribute to the development of a shared travel network, as well as where these existing facilities could be expanded and where new facilities and assets could be introduced.

Regional or Subregional Studies

Colleges and Universities

New England University Transportation Center (Region One)

The New England University Transportation Center (Region One) is a research consortium that includes the Massachusetts Institute of Technology (lead university), Harvard University, and the state universities of Massachusetts, Connecticut, and Maine. It is funded by the US Department of Transportation's University Transportation Centers (UTC) Program. The New England UTC conducts multiyear research programs that seek to assess and make improvements for transportation safety as well as develop a systems-level understanding of livable communities. For more information, visit the New England University Transportation Center's website at <http://utc.mit.edu/>.