



## BOSTON REGION METROPOLITAN PLANNING ORGANIZATION

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Stephanie Pollack, MassDOT Secretary and CEO and MPO Chair  
Tegin L. Teich, Executive Director, MPO Staff

### *WORK PROGRAM*

## HAYMARKET STATION REDEVELOPMENT ANALYSIS

FEBRUARY 6, 2020

### Proposed Motion

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

### Project Identification

Unified Planning Work Program (UPWP) Classification

Not listed in federal fiscal year 2020 UPWP

Project Number 11492

#### Client

Massachusetts Bay Transportation Authority (MBTA)

*Client Supervisor: Greg Thompson*

#### Project Supervisors

*Principal: Ed Bromage*

*Manager: Scott Peterson*

#### Funding Source

MBTA Contract

### Schedule and Budget

Schedule: 12 months from notice to proceed

Budget: \$65,000

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

The HYM Investment Group (HYM) is in the process of developing the Bulfinch Crossing project. The Bulfinch Crossing project is a transformation of the Government Center garage into a six building, 2.9 million square foot mixed-use project. The area, known as Bulfinch Triangle, has a total lot area of 4.8 acres spread across two parcels and more than 40,000 square feet of Merrimac and Congress Streets. The full buildout of Bulfinch Crossing is expected to be significant in size and scope, providing more than 800 residential units, 200 hotel rooms, more than one million square feet of office space, and more than 82,000 square feet of retail space. Additionally, the project seeks to improve pedestrian accessibility by creating open air walking routes cutting diagonally across the lot area. The resulting construction will provide the City of Boston with one of its densest mixed-use projects spread across two parcels of land.

However, a temporary closure of the MBTA Haymarket Station and the subsequent rerouting of bus routes is a possibility given the structural engineering requirements and conditions of the Bulfinch Crossing project. This is due to the temporary relocation of the Haymarket bus terminal along with the temporary closure of Congress Street, due to the demolition of the garage above it. Haymarket Station currently serves a significant number of transit routes, including the Orange Line, the Green Line's C and E lines, and eight MBTA bus routes. This work scope will support the MBTA in the ongoing review and coordination of the developer's plan to transform Bulfinch Crossing into a dense mixed-use development that will impact MBTA service in the short- and long-term.

## Objective(s)

The objectives to be addressed in this study are as follows:

- Coordinate with the client and key stakeholders for the life of this project and document the analysis and results of the work being undertaken.
- Support the client with transit service planning to help mitigate the short-term construction impacts.
- Identify what the short-term transportation impacts would be on service and demand due to the demolition of the Government Center garage, and quantify these results to present to the client and key stakeholders.
- Forecast and estimate the demand and usage for the Haymarket bus terminal, Haymarket Station, and surrounding stations in 2040 and 2060.

## Work Description

This study will be completed according to the following tasks:

### Task 1 Project Coordination

The Central Transportation Planning Staff (CTPS) will work with the MBTA on this project for its duration or up to one year from the start of the contract, whichever comes first. CTPS will meet periodically with MBTA staff and the HYM Development group to clarify the project schedule, scope of tasks, and deliverables.

#### ***Product of Task 1***

Meetings, phone calls, and administrative tasks to successfully complete this project within the budgeted funds set aside. The budget will assume one meeting a week for up to one year for a total of 52 internal meetings with the client.

### Task 2 Transit Service Planning Assistance

CTPS will work with the MBTA to provide transit planning assistance to support the short-term construction activities. The transit planning assistance could include examination of bus rerouting due to the closure of Congress Street, relocation of the bus terminal, and/or strategies to mitigate the closure of Haymarket Station.

#### ***Product of Task 2***

Transit service planning support to the client.

### Task 3 Develop Base Year and Future Year Forecasts

In support of the MBTA, CTPS will provide Year 2040 forecasts of demand for Haymarket Station and the adjacent bus routes. These demand estimates will include boardings and alightings for the relevant transit stations, the projected loading profiles, transfer activity, and crowding analysis. These data will be used by both HYM and the Jacobs Engineering Group for their NFPA 130 analyses.

#### ***Subtask 3.1 Verify and Update Land Use Assumptions***

CTPS will examine and document the 2018 base year and future 2040 land use assumptions produced by the Metropolitan Area Planning Council (MAPC). CTPS will coordinate with the client, the developer, and MAPC to verify that the land use assumptions that are being used in the travel demand model are in line with what the developer is planning for the Bulfinch Crossing project.

#### ***Product of Task 3.1***

Land use assumptions containing population, household, and employment data for the study area in 2018 and 2040.

#### ***Subtask 3.2 Develop a 2018 Base Year***

CTPS will calibrate and validate the base year of the travel demand model set. The calibration effort will focus on all roadway and transit modes within 0.5 miles of the Haymarket bus terminal (the study area). The base year will be used to examine short-term transportation impacts and develop future forecasts for transportation demand.

***Product of Task 3.2***

2018 demand estimates for roadway and transit services in the study area.

***Subtask 3.3 Examine 2040 Demand in the Study Area***

CTPS will apply the travel demand model to forecast future demand and activity at and near Haymarket Station in the year 2040. The land use assumption will be consistent with the MAPC land use forecasts developed for the Boston Region's Long-Range Transportation Plan (LRTP), in addition to the planned LRTP infrastructure improvements.

***Product of Task 3.3***

2040 demand forecasts for roadway and transit services in the study area.

**Task 4 Examine Short-term Transportation Impacts**

CTPS will support the MBTA by examining transit and roadway system impacts in the study area due to the construction around Haymarket Station. These construction impacts could consist of bus reroutings due to the bus terminal relocation, and reroutings due to the Congress Street closure and possible Haymarket Station closure. This task could include examining the transit mitigation strategies developed in Task 2, and an examination of diversions to the proposed short-term strategies.

***Product of Task 4***

Data and information to the client on boardings, alightings, transfers, and station access for the transit services in the study area, in addition to possible roadway impacts.

**Task 5 Estimate Haymarket Station Demand in 2060**

The MBTA has requested forecasts of transit demand at Haymarket Station in the year 2060. CTPS does not have the detailed assumptions needed for input into the travel demand model. CTPS can extrapolate potential demand by using a sketch planning approach that looks at historical growth and projects a trend line for demand out from 2040 to the horizon year 2060 by time period—taking into account the current limits on capacity and frequency of the relevant transit modes.

***Product of Task 5***

2060 demand forecasts for Haymarket Station using a sketch planning approach.

**Task 6 Produce Documentation**

CTPS will document all of the information requested by the client in Tasks 1–5. This documentation will be in addition to any reports that the client produces.

***Product of Task 6***

Memorandum documenting CTPS' involvement in the project.

**Exhibit 1**  
**ESTIMATED SCHEDULE**  
**Haymarket Station Redevelopment Analysis**

Task	Month											
	1	2	3	4	5	6	7	8	9	10	11	12
1. Project Coordination	[Task bar]											
2. Transit Service Planning Assistance	[Task bar]											
3. Develop Base Year and Future Year Forecasts	[Task bar with 'A' in month 3]											
4. Examine Short-term Transportation Impacts	[Task bar with 'B' in month 12]											
5. Estimate Haymarket Station Demand in 2060	[Task bar with 'C' in month 4]											
6. Produce Documentation	[Task bar with 'D' in month 12]											

- Products/Milestones
- A: 2040 Forecasts
  - B: Short-term analysis
  - C: 2060 Estimates
  - D: Documentation

**Exhibit 2**  
**ESTIMATED COST**  
**Haymarket Station Redevelopment Analysis**

<b>Direct Salary and Overhead</b>								<b>\$65,000</b>
Task	Person-Weeks					Direct Salary	Overhead (102.11%)	Total Cost
	M-1	P-5	P-4	P-3	Total			
1. Project Coordination	1.5	1.2	0.0	1.5	4.2	\$7,152	\$7,303	\$14,456
2. Transit Service Planning Assistance	0.8	0.0	2.5	2.5	5.8	\$8,159	\$8,331	\$16,490
3. Develop Base Year and Future Year Forecasts	0.5	1.0	0.5	2.1	4.1	\$6,285	\$6,417	\$12,702
4. Examine Short-term Transportation Impacts	1.0	0.5	1.5	2.8	5.8	\$8,549	\$8,729	\$17,278
5. Estimate Haymarket Station Demand in 2060	0.2	0.2	0.2	0.6	1.3	\$2,016	\$2,058	\$4,074
6. Produce Documentation	0.2	0.0	0.8	1.0	2.0	\$2,809	\$2,868	\$5,678
Total	4.2	3.0	5.5	10.4	21.2	\$32,161	\$32,840	\$65,000
<b>Other Direct Costs</b>								<b>\$0</b>
<b>TOTAL COST</b>								<b>\$65,000</b>

**Funding**