



BOSTON REGION METROPOLITAN PLANNING ORGANIZATION

Frank DePaola, Acting MassDOT Secretary and CEO and MPO Chairman
Karl H. Quackenbush, Executive Director, MPO Staff

MEMORANDUM

DATE December 18, 2014
TO Boston Region Metropolitan Planning Organization
FROM Karl H. Quackenbush
CTPS Executive Director
RE Work Program for: Freight Planning Support: FFY 2015

Action Required

Review and approval

Proposed Motion

That the Boston Region Metropolitan Planning Organization vote to approve the work program for Freight Planning Support: FFY 2015, presented in this memorandum.

Project Identification

Unified Planning Work Program Classification

Technical Support/Operations Analysis Projects

CTPS Project Number

11145

Client

Boston Metropolitan Planning Organization

CTPS Project Supervisors

Principal: Mark Abbott

Manager: William S. Kuttner

Funding

MPO Planning Contract #84053

Impact on MPO Work

This is MPO work and will be carried out in conformance with the priorities established by the MPO.

Background

Recognizing the importance of freight transportation and the unique challenges that a comprehensive freight analysis entails, the Boston Region Metropolitan Planning Organization (MPO) established a formal freight-planning program that began in federal fiscal year (FFY) 2014. The MPO anticipates that freight analysis within the framework of this multiyear program will be ongoing.

To this end, staff was directed by the MPO in FFY 2013 to develop an “action plan” for this program that would further the MPO’s freight-planning goals:

- Fulfill the Boston Region MPO’s freight-planning needs
- Complement state and other official planning efforts
- Study specific freight-related issues
- Fulfill new analysis requirements of the current federal surface transportation legislation
- Address the lack of freight data for the MPO region, including developing enhanced technical capabilities for MPO staff to use in estimating freight demand

A memorandum dated September 12, 2013, “Proposed Freight Planning Action Plan for the Boston Region MPO: Meeting the Goals and Addressing the Issues,” presented a several possible studies that would address one or more of these goals and were within the capabilities of MPO staff. These study options are far-reaching and envisioned as ongoing, multiyear efforts.

Several of the topics recommended for study in the Action Plan were investigated during FFY 2014. The proposed study topic for FFY 2015 is truck traffic serving the South Boston Waterfront. This subject is an appropriate next step for several reasons:

- Stakeholders are sponsoring broader transportation studies and have expressed an interest in using new truck-specific analysis.
- Truck traffic findings developed in FFY 2014 are available to build upon.

- The waterfront area is important for regional logistics, and data developed will be utilized in upcoming efforts to improve the treatment of trucks in the MPO's regional travel demand model.

In addition to studying the trucks serving the South Boston Waterfront, this work program anticipates the need to more broadly support freight planning in the Boston Region MPO area. These efforts would include meeting and coordinating with freight stakeholders outside of the South Boston Waterfront study area, collecting truck data suitable for use in the Boston Region MPO's regional travel demand model, and conducting exploratory work to help define future freight studies.

Objectives

The principal objectives of this work program are:

1. To coordinate MPO planning efforts with regional freight stakeholders
2. To study truck trip patterns in the South Boston Waterfront area by land-use type and develop findings relevant to current planning efforts
3. To identify topics that are appropriate for future study as part of the MPO freight-planning program
4. To obtain regionwide freight data for trucking and other modes, and configure data for use in the MPO's model development where possible

Work Description

Task 1 Coordinate MPO Efforts with Freight Stakeholders

MPO staff will maintain an ongoing, collaborative relationship with freight stakeholders affected by freight movement in the Boston Region MPO area. Some of the activities will involve MPO staff attending and making presentations at meetings and conferences, some of them sponsored by the MPO. Recruiting and encouraging regional freight stakeholders to be involved in activities of the MPO and its committee will also be a valuable part of staff outreach. Close coordination with the City of Boston and the Massachusetts Port Authority (Massport) will be a high priority, especially in support of the work in Task 2.

Task 2 Develop a South Boston Waterfront Truck Travel Profile by the Type of Land Use

A study area will be defined in consultation with local planning officials and other stakeholders. Estimates of daily truck traffic into and out of this area will be developed by the type of land use served. Key categories of interest include the study area's industrial sites, such as warehouses and fish processing plants; nonindustrial sites, such as hotels and offices; and, indirectly, overseas sites.

Overseas sites are served by the transfer of goods at Massport's Paul W. Conley Container Terminal, which is an intermodal terminal.

The sizes and patterns of truck flows serving these land-use categories vary significantly. MPO staff will study the truck travel markets individually and develop travel metrics specifically relevant to each truck travel market. A waterfront-area transportation study sponsored by the City of Boston, the Massachusetts Department of Transportation, Massport, and the Massachusetts Convention Center Authority is currently under way; the freight analysis undertaken by the MPO will complement this study with a detailed focus on freight markets and truck flows.

The pattern of regional ocean container distribution through Conley Terminal is a topic of interest to Massport. The alternative to shipping through Boston that is used most often is shipping through New Jersey, which requires that containers be hauled through Connecticut and central Massachusetts on I-84. From a traffic perspective, shipping through Boston may result in fewer truck-miles on the Massachusetts road system.

Products of Task 2

- Technical memorandum about land-use-specific truck flows
- Study area freight data for utilization in model development efforts

Task 3 Identify Freight-Related Topics Appropriate for Future MPO Study

In view of the progress on several freight study tasks suggested in the Action Plan, it is appropriate at this time to identify some additional topics that would be appropriate for study by the MPO. Ongoing consultation with regional stakeholders will serve as an important source of potential topics and will provide useful feedback. Some exploratory data gathering and analysis may be undertaken to identify promising study approaches for work to be done in future years.

Product of Task 3

Technical memorandum describing possible future freight planning studies

Task 4 Collect Freight Data to Support MPO Model Development

Field observations, aerial photos, and industry interviews all have the potential to yield freight volume information for estimating freight travel patterns using the MPO's regional travel model. More detailed travel information about trucks or other freight modes may be obtained on an as-needed basis. MPO staff will also take advantage of opportunities that present themselves to cost-effectively obtain freight data.

Product of Task 4

Regional freight data for utilization in model development efforts

Estimated Schedule

It is estimated that this project will be completed 10 months after work commences. The proposed schedule, by task, is shown in Exhibit 1.

Estimated Cost

The total cost of this project is estimated to be \$40,992. This includes the cost of 13.9 person-weeks of staff time and overhead at the rate of 91.82 percent. A detailed breakdown of estimated costs is presented in Exhibit 2.

KQ/WSK/wsk

Exhibit 2
ESTIMATED COST
Freight Planning Support: FFY 2015

Direct Salary and Overhead	\$40,992
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Task	Person-Weeks						Direct Salary	Overhead (91.82%)	Total Cost
	M-1	P-5	P-4	P-2	SP-1	Total			
1. Coordinate MPO Efforts with Freight Stakeholders	0.2	1.0	0.0	0.0	0.0	1.2	\$2,107	\$1,935	\$4,041
2. Develop South Boston Waterfront Truck Travel Profile by Type of Land Use	1.0	5.8	1.0	0.3	1.2	9.3	\$14,365	\$13,190	\$27,554
3. Identify Freight-Related Topics Appropriate for Future MPO Study	0.2	1.2	0.0	0.0	0.0	1.4	\$2,458	\$2,257	\$4,715
4. Collect Freight Data to Support MPO Model Development	0.0	1.0	0.0	0.0	1.0	2.0	\$2,440	\$2,241	\$4,681
Total	1.4	9.0	1.0	0.3	2.2	13.9	\$21,370	\$19,622	\$40,992

Other Direct Costs	\$0
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TOTAL COST	\$40,992
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Funding

MPO Planning Contract 84053

MPO §5303 Contract 78922 and subsequent MPO §5303 contract