



# BOSTON REGION METROPOLITAN PLANNING ORGANIZATION

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Director, MPO Staff

The Boston Region MPO,  
the federally designated  
entity responsible for  
transportation decision-  
making for the 101 cities  
and towns in the MPO  
region, is composed of:

MassDOT Office of Planning and  
Programming  
City of Boston  
City of Newton  
City of Somerville  
Town of Bedford  
Town of Braintree  
Town of Framingham  
Town of Hopkinton  
Metropolitan Area Planning Council  
Massachusetts Bay Transportation  
Authority Advisory Board  
Massachusetts Bay Transportation  
Authority  
MassDOT Highway Division  
Massachusetts Port Authority  
Regional Transportation Advisory  
Council (nonvoting)  
Federal Highway Administration  
(nonvoting)  
Federal Transit Administration  
(nonvoting)

## MEMORANDUM

**DATE** December 17, 2009  
**TO** Transportation Planning and Programming Committee  
of the Boston Region Metropolitan Planning Organization  
**FROM** Arnold J. Soolman, CTPS Director  
**RE** Work Program for: State Fiscal Years 2010 and 2011 Massport  
Technical Assistance

### ACTION REQUIRED

Review and approval

### PROPOSED MOTION

That the Transportation Planning and Programming Committee of the Boston Region Metropolitan Planning Organization, upon the recommendation of the Massachusetts Port Authority, vote to approve the work program for State Fiscal Years 2010 and 2011 Massport Technical Assistance in the form of the draft dated December 17, 2009.

### PROJECT IDENTIFICATION

Unified Planning Work Program Classification  
Technical Support Projects

CTPS Project Number  
22123

Client  
Massachusetts Port Authority  
*Project Supervisor: Craig Leiner*

CTPS Project Supervisors  
*Principal: Karl Quackenbush*  
*Manager: Scott Peterson*

Funding  
Future Massport Contract

## IMPACT ON MPO WORK

The MPO staff has sufficient resources to complete this work in a capable and timely manner. By undertaking this work the MPO staff will neither delay the completion of nor reduce the quality of other work in the UPWP.

## BACKGROUND

During the past few years, Massport has undertaken studies of regional transportation issues in order to develop immediate and short-term strategies to sustain or improve ground access to Logan Airport and other facilities.

The Massport Logan Airport area studies have included the Airport Intermodal Transit Connector (AITC) Environmental Assessment, the combined Logan Ground Access Generic Environment Impact Report, the Cross Harbor and Regional Transportation Study, the Logan Growth and Impact Control Study, and a series of annual Environmental Data Reports and Environmental Status and Planning Reports. CTPS support of these studies has included geocoding of Logan passenger survey data, preparation of files of selected data from Logan passenger surveys, development and redevelopment of a passenger ground access mode choice model, use of the passenger ground access mode choice model to identify the impacts of specified alternatives, transit and traffic assignment runs with the CTPS regional travel forecasting model, generation of highway and transit travel times between selected origin-destination points, assembling an inventory of on-street and off-street parking facilities, and providing assistance in the preparation of an inventory of Logan Airport ground service equipment. More recently, CTPS has also performed passenger counts on shuttle buses, the Silver Line, and at Airport Station.

## OBJECTIVES

The aim of this project is to continue to provide technical assistance for Massport's ground transportation, regional transportation, and air quality studies. The main objectives of this project are as follows.

1. Assist in Logan Airport ground transportation-related data collection, reconnaissance, and analysis efforts.
2. Provide analytical support for current ground access planning and operations issues, as needed.
3. Provide analytical support for long-range, strategic ground access planning initiatives.

## WORK DESCRIPTION

CTPS will provide technical assistance to Massport's Department of Economic Planning and Development. The services are expected to support Logan Airport ground access planning, and might include data collection and analysis, analysis related to the East Boston–Chelsea Truck Bypass Road, air quality analysis, and support for additional, to-be-determined transportation-planning activities.

CTPS will provide assistance in four areas, as described below. This work may be redirected or modified in response to emerging issues.

### Task 1 Data Collection and Analysis

CTPS will assist with data collection and reconnaissance efforts to support short- and medium-range ground transportation-planning and operations initiatives at Logan Airport, as well as at other Massport facilities. This work may include collecting and analyzing traffic counts and turning movements, collecting and analyzing mode share data, and observing and recording commercial parking utilization. It is likely that most, if not all of the work would entail counting Silver Line riders, and possibly other transit and shuttle bus riders as well.

CTPS may be asked to review, summarize, and analyze data sets generated from surveys of air passengers done by Massport periodically, and to prepare maps using the CTPS GIS.

#### *Products of Task 1*

As appropriate, memoranda, charts, spreadsheets, and graphs documenting data collection and analysis efforts, and presenting and summarizing the results. As appropriate, memoranda, charts, spreadsheets, graphs, and maps related to review and analysis of air passenger survey data.

### Task 2 Modeling and Transportation Systems Analysis

On behalf of the Boston Region MPO, CTPS maintains and applies a regional travel-demand model. CTPS has also developed and maintained the Logan Ground Access Mode Choice Model, which is used to forecast the volumes and modal distributions of travel to Logan Airport. In the past, the ground access model has been used to help assess the various alternatives included in the Airport Intermodal Transit Connector Environmental Assessment. More recently, it was used to assist Massport in evaluating alternative pricing options for Logan Airport parking. As additional analysis needs arise, CTPS may be asked to apply its ground access model to forecast the changes in travel that could result from any proposed network or facility changes, as well as the potential effects of these travel changes on Massport facilities and nearby roadway systems.

*Products of Task 2*

Travel and associated forecasts, as required.

**Task 3 Air Quality Technical Assistance**

CTPS may be asked to provide Massport with technical assistance related to air quality planning. CTPS will be able to integrate Massport efforts that are designed to reduce vehicular pollution into the regional travel model to estimate regional impacts, as well as to test their conformity to the Clean Air Act.

*Products of Task 3*

Memoranda, charts, maps, and graphs presenting results of requested air quality technical assistance.

**Task 4 On-Call Services**

Massport will likely ask CTPS to provide assistance to the Department of Economic Planning and Development with regard to other regional transportation and ground access planning analyses under this contract, but the specific tasks have yet to be identified. These tasks may relate to a variety of Massport properties, including, but not limited to, Logan Airport and various properties in South Boston and East Boston.

*Products of Task 4*

Memoranda, charts, maps, and graphs documenting the work performed by CTPS under this task.

**ESTIMATED SCHEDULE**

It is estimated that this project will be completed 19 months after the notice to proceed is received. The proposed schedule, by task, is shown in Exhibit 1.

**ESTIMATED COST**

The total cost of this project for state fiscal year (SFY) 2010 is estimated to be \$25,498. This includes the cost of 15.2 person-weeks of staff time and overhead at the rate of 88.99 percent. A detailed breakdown of state fiscal year 2010 estimated costs is presented in Exhibit 2. It is expected that supplemental funding, to carry the work through SFY 2011, will be available July 1, 2010.



Exhibit 2

ESTIMATED COST\*

State Fiscal Years 2010 and 2011 Massport Technical Assistance

|                                   |                 |
|-----------------------------------|-----------------|
| <b>Direct Salary and Overhead</b> | <b>\$25,413</b> |
|-----------------------------------|-----------------|

| Task                                | Person-Weeks |     |     |      |      | Total | Direct Salary | Overhead (@ 88.99%) | Total Cost |
|-------------------------------------|--------------|-----|-----|------|------|-------|---------------|---------------------|------------|
|                                     | M-1          | P-5 | P-4 | SP-3 | Temp |       |               |                     |            |
| 1. Data Collection and Analysis     | 0.0          | 0.0 | 1.2 | 1.2  | 8.0  | 10.4  | \$6,482       | \$5,768             | \$12,250   |
| 2. Modeling and Systems Analysis    | 0.2          | 0.6 | 1.4 | 0.0  | 0.0  | 2.2   | \$3,009       | \$2,678             | \$5,686    |
| 3. Air Quality Technical Assistance | 0.2          | 0.0 | 0.2 | 0.0  | 0.0  | 0.4   | \$571         | \$509               | \$1,080    |
| 4. On-Call Services                 | 0.6          | 1.2 | 0.4 | 0.0  | 0.0  | 2.2   | \$3,385       | \$3,012             | \$6,397    |
| Total                               | 1.0          | 1.8 | 3.2 | 1.2  | 8.0  | 15.2  | \$13,447      | \$11,966            | \$25,413   |

|                           |             |
|---------------------------|-------------|
| <b>Other Direct Costs</b> | <b>\$85</b> |
|---------------------------|-------------|

|        |      |
|--------|------|
| Travel | \$85 |
|--------|------|

|                   |                 |
|-------------------|-----------------|
| <b>TOTAL COST</b> | <b>\$25,498</b> |
|-------------------|-----------------|

*Funding*

*Future Massport Contract.*

\*Costs shown are those for SFY 2010. Additional funds will be available July 1, 2010, for SFY 2011.