



## BOSTON REGION METROPOLITAN PLANNING ORGANIZATION

Richard A. Davey, MassDOT Secretary and CEO and MPO Chairman  
Karl H. Quackenbush, Executive Director, MPO Staff

### MEMORANDUM

**DATE** October 4, 2012  
**TO** Boston Region Metropolitan Planning Organization  
**FROM** Karl H. Quackenbush  
CTPS Executive Director  
**RE** Work Program for: SWAP Regional Public Transit Feasibility Study

#### Action Required

Review and approval

#### Proposed Motion

That the Boston Region Metropolitan Planning Organization vote to approve the work program for SWAP Regional Public Transit Feasibility Study in the form of the draft dated October 4, 2012.

#### Project Identification

##### Unified Planning Work Program Classification

Planning Studies

##### CTPS Project Number

42313

##### Clients

Boston Region Metropolitan Planning Organization

##### CTPS Project Supervisors

*Principal:* Annette Demchur

*Manager:* Jonathan Belcher

##### Funding

MPO §5303 Contract # TBD

## Impact on MPO Work

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

## Background

The SouthWest Advisory Planning Committee (SWAP) has requested through the Unified Planning Work Program (UPWP) to have MAPC and CTPS lead a joint effort to analyze the existing public transit network in the subregion and identify opportunities to increase ridership and provide better connections to housing, employment, and commercial centers. Current SWAP transit services are limited to MBTA commuter rail, Greater Attleboro Taunton Regional Transit Authority (GATRA) commuter shuttle services, GATRA in-town services and their support to Councils on Aging, and other in-town transportation services such as veterans' services or volunteer driver programs. This work program prescribes the work that will be undertaken by CTPS; MAPC's participation in the project will be funded outside of this work program.

## Objectives

The project team will assist SWAP in studying the potential for improving transit service within the subregion. The study will include:

1. Evaluation of the travel patterns within and between the SWAP communities in order to identify opportunities for increasing transit options for accomplishing everyday and recreational activities and commuting to and from places of employment.
2. Identification of potential connections among the existing public transit systems in adjacent Massachusetts communities, such as the MBTA, MetroWest Regional Transit Authority, and Greater Attleboro Taunton Regional Transit Authority, and possibly the Rhode Island Public Transit Authority.
3. Exploration of the feasibility of re-establishing express bus service through the SWAP communities to Boston, Worcester, and Providence for daily commuters and weekend travelers.
4. Identification of opportunities for shuttle services between MBTA train stations and major employers in the SWAP subregion.

## Work Description

### Task 1 Establish a Working Group

In this task, the project team will establish a working group comprised of at least one representative from each of the participating towns and representatives from the regional transit authorities (RTAs), should they choose to provide one. It is anticipated that this group will meet up to four times. The initial meeting will help ensure that all relevant issues have been identified, and additional meetings will be held at major project milestones.

#### *Products of Task 1*

The formation of a working group, associated meetings, and notes on comments and concerns raised at the meetings

### Task 2 Inventory Existing Services and Review Existing Plans

The project team will work with the municipalities and the local RTAs to create an inventory of all existing transit and human service transportation services in the subregion. This information will be entered into a spreadsheet and digitized in GIS where possible. Members of the project team will interview existing service providers to determine the potential for coordinating services. The project team will also review existing plans relative to transportation, including, but not limited to, the I-495 Transit Study, Route 126 Corridor Transportation Improvement Study, and 495/MetroWest Compact Plan.

#### *Product of Task 2*

A summary of existing services and plans

### Task 3 Conduct an Assessment of Transit Potential

CTPS will analyze census-tract-level information about the geographical distribution, demographic characteristics, and commuting patterns of the residents of the SWAP area to determine where the potential demand for transit services is expected to be greatest. This task will include the following sub-tasks.

#### *Subtask 3.1 Demographic Analysis*

Areas with the highest population densities and those with the highest concentrations of people who may be transit-dependent are areas where transit services could be targeted. Data concerning household income, auto ownership, age, minority status, English proficiency, disability status, and the locations of low-income and elderly housing will be used to identify populations most likely to be transit-dependent. In this subtask, the project team will develop a tract-level analysis of relevant demographic data to determine where potential transit riders are located.

### ***Subtask 3.2 Activity Generator Analysis***

The project team will identify the locations of the major activity centers in the study area. Employment centers, shopping centers, large commercial centers, and colleges and universities are all trip-generating centers. The team will consider the locations of these and other activity centers, MAPC population and employment forecasts and build-out analyses, and specific development plans, both residential and commercial. As part of evaluating the potential for commuter-based transit services, the team will utilize an employment database to determine the locations of major employers and U.S. Census data to identify employment densities at the tract level.

### ***Subtask 3.3 Commuter Patterns***

The project team will draw on journey-to-work data and any other, more recent available data concerning commuting to determine origin-destination trip patterns for commuters in the subregion.

### ***Subtask 3.4 Needs Assessment***

The project team will produce maps showing the existing transit services and the trip-generator data collected in subtasks 3.1 through 3.3 to better understand where areas of higher population and employment density and transit-dependent populations are located in relation to existing transit services. These overlays will help the project team complete a needs assessment that identifies gaps in service or redundant services.

### ***Product of Task 3***

Maps showing demographics and major trip generators in relation to existing transit services

## **Task 4 Develop Recommendations for Improved Service**

Based on the needs assessment, the project team will make recommendations for improving the existing services within the subregion. This could include any or all of the following types of recommendations:

- RTA, town, and/or privately-funded shuttles connecting residential and employment locations to commuter rail stations
- Additional senior services similar to those provided by Councils on Aging
- Potential express-bus service between the subregion and the Inner Core, Worcester, and Providence
- Better connections among the multiple RTAs serving the SWAP subregion and surrounding subregions
- Express service on the Franklin commuter rail line

This study will conclude with a final report that documents the service inventory, market analysis, identification of transit gaps and redundancies, and recommendations for service improvements. Any cost estimates provided will be based on industry-standard costs. The report will outline clear implementation steps and identify potential funding sources that municipalities or service providers could pursue.

*Product of Task 4*

Final report

## **Estimated Schedule**

It is estimated that this project will be completed nine 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 is estimated to be \$39,911. This includes the cost of 15.1 person-weeks of staff time, overhead at the rate of 96.58 percent and travel. A detailed breakdown of estimated costs is presented in Exhibit 2.

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**Exhibit 1**  
**ESTIMATED SCHEDULE**  
**SWAP Regional Public Transit Feasibility Study**

Task	Month									
	1	2	3	4	5	6	7	8	9	
1. Establish a Working Group	█									
2. Inventory Existing Services and Review Existing Plans	█	█								
3. Conduct an Assessment of Transit Potential			█	█	█	█	█			
4. Develop Recommendations for Improved Service					█	█	█	█	█	█

Products/Milestones

A: Maps

B: Final report

**Exhibit 2**  
**ESTIMATED COST**  
**SWAP Regional Public Transit Feasibility Study**

<b>Direct Salary and Overhead</b>	<b>\$39,811</b>
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Task	Person-Weeks					Direct Salary	Overhead (96.58%)	Total Cost
	M-1	P-5	P-4	P-3	Total			
1. Establish a Working Group	0.2	0.0	0.6	0.0	0.8	\$1,096	\$1,059	\$2,155
2. Inventory Existing Services and Review Existing Plans	0.6	0.0	1.2	1.0	2.8	\$3,578	\$3,456	\$7,034
3. Conduct an Assessment of Transit Potential	0.8	1.3	1.9	2.5	6.5	\$8,553	\$8,260	\$16,813
4. Develop Recommendations for Improved Service	2.1	0.0	2.0	0.9	5.0	\$7,024	\$6,784	\$13,809
Total	3.7	1.3	5.7	4.4	15.1	\$20,252	\$19,559	\$39,811

<b>Other Direct Costs</b>	<b>\$100</b>
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Travel	\$100
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<b>TOTAL COST</b>	<b>\$39,911</b>
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**Funding**  
MPO §5303 Contract # TBD