



BOSTON REGION METROPOLITAN PLANNING ORGANIZATION

Stephanie Pollack, MassDOT Secretary and CEO and MPO Chair
Karl H. Quackenbush, Executive Director, MPO Staff

MEMORANDUM

DATE December 1, 2016
TO Boston Region Metropolitan Planning Organization
FROM Karl H. Quackenbush, Executive Director
RE Work Program for the Middlesex 3 Community Compact Transportation Study

Action Required

Review and approval

Proposed Motion

That the Boston Region Metropolitan Planning Organization (MPO), upon the recommendation of the Metropolitan Area Planning Council (MAPC), vote to approve the work program for the Middlesex 3 Community Compact Transportation Study presented in this memorandum

Project Identification

Unified Planning Work Program Classification

Agency and Other Client Transportation Planning Studies and Technical Analyses

CTPS Project Number

11410

Client

MAPC

Project Supervisors: Eric Bourassa

CTPS Project Supervisors

Principal: Annette Demchur

Manager: Jonathan Belcher

Funding

Town of Bedford

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 any work in the UPWP.

Background

Eight communities in the Middlesex 3 Coalition have entered into a Commonwealth Community Compact to address transportation challenges along the Route 3 corridor, an area of significant commercial and industrial economic activity in the northwestern suburbs of the Boston region. The coalition seeks to create transit connections between communities along the corridor in order to expand access to employment, educational opportunities, and healthcare, and to help alleviate traffic congestion, improve air quality, and reduce wear and tear on the roadway network.

Currently, there are few transit options for residents who commute to Burlington, Bedford, and Lexington from communities in the northern end of the corridor – Billerica, Chelmsford, Lowell, Tewksbury and Tyngsborough. The northerly communities are in the service area of the Lowell Regional Transit Authority (LRTA), while Burlington, Bedford and Lexington are within the service area of the Massachusetts Bay Transportation Authority (MBTA). Transit connections between the LRTA and MBTA service areas are extremely limited, given that federal and state funding allocated to each regional transit authority is generally applied within (not across) service area boundaries.

In support of the Middlesex 3 Coalition's aims, the Northern Middlesex Council of Governments (NMCOG) will lead the Middlesex 3 Community Compact Transportation Study to identify options and outline strategies for improving transit service along the corridor. NMCOG will complete this study under contract with the Town of Bedford. MAPC and the Central Transportation Planning Staff (CTPS) will participate as data providers.

The data contributions from MAPC and CTPS will help to determine the potential demand for transit on the corridor and the possible success of proposed transit services. Factors that underlie the probable success of transit services, include population and employment density, the location of key trip generators and attractors (such as office, retail, and medical facilities), as well as demographic characteristics that indicate potential transit need (such as households without access to an automobile, low-income, and concentrations of young people who may not have a driver's license or access to a vehicle).

Objectives

The purpose of this work is to support NMCOG as it identifies options for expanding access to transit on the Route 3 corridor.

Work Description

This study will be conducted in two phases. Phase 1 will evaluate existing conditions along the corridor, set goals and objectives for the study, and develop evaluation criteria for measuring the effectiveness of potential strategies for addressing transportation needs in the study area. Phase 2 will identify alternatives for new or modified transit services in the corridor and any barriers to initiating those services; evaluate each alternative; and develop strategies for implementing new services.

While NMCOG will carry out the primary activities of the study, the following task descriptions focus on CTPS and MAPC's participation in the study.

Task 1 Existing Conditions Analysis

CTPS and MAPC will provide data for the portion of an existing conditions analysis that addresses the towns in the MBTA service area—Bedford, Burlington, and Lexington. These data will include the following: ridership on MBTA and municipal services; schedules and frequency of transit service; current and projected demographic and journey-to-work data; land-use patterns; trip generators and attractors, including proposed new developments; traveler origin and destination data, if available; congestion level data for Route 3, the Middlesex Turnpike, and Route 3A; an inventory of bicycle and pedestrian facilities; and an inventory of parking conditions at employment sites.

Products of Task 1

Spreadsheets of data that NMCOG will use for an existing conditions analysis

Task 2 Presentation of Task 1 Findings and Development of Goals, Objectives, and Evaluation Criteria

NMCOG and MAPC staff will present the findings of the existing conditions analysis at stakeholder meetings organized by the Middlesex 3 Coalition. CTPS will assist with their presentation to the Boston Region MPO. Then NMCOG will use the stakeholder input to develop goals and objectives for framing and directing the remaining study processes, and to develop evaluation criteria.

Products of Task 2

Support on presentation to the Boston Region MPO

Task 3 Identify Potential Corridors for New or Expanded Transit Service

CTPS will assist in developing proposed alternatives for new or modified transit services in the corridor. Such improvements could include extensions of existing

bus routes; improvements to coordination between existing services; and new express transit services. CTPS also will help estimate the cost of providing service in the MBTA service area for each alternative, including the cost of providing complementary paratransit service, as required under federal regulations.

Products of Task 3

Contributions to a technical memorandum, prepared by NMCOG, describing transit service alternatives and associated costs

Task 4 Identify Barriers to New or Expanded Transit Service

CTPS will assist in reviewing institutional and regulatory barriers to initiating new transit service in the corridor. Consideration will be given to jurisdictional complexity of the study area, state and federal regulations related to service delivery, and the federal and state policies used to distribute transit funding.

Products of Task 4

Contributions to a report, which will be prepared by NMCOG

Task 5 Strategy Evaluation, Recommendations, and Implementation Plan

CTPS will assist in evaluating each potential transit alternative; outlining potential actions needed to address the funding, institutional, and regulatory barriers identified; and developing an implementation strategy outlining next steps.

Products of Task 5

Recommendations for implementation of transit alternatives (or preferred transit alternatives)

Estimated Schedule

It is estimated that this project will be completed 9 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 \$35,000. This includes the cost of 9.7 person-weeks of staff time and overhead at the rate of 102.70 percent. A detailed breakdown of estimated costs is presented in Exhibit 2.

Exhibit 2
ESTIMATED COST
Middlesex 3 Community Compact Transportation Study

Direct Salary and Overhead								\$35,000
Task	Person-Weeks				Direct Salary	Overhead (102.70%)	Total Cost	
	M-1	P-5	P-4	Total				
1. Existing Conditions Analysis	0.5	3.0	1.5	5.0	\$8,485	\$8,714	\$17,199	
2. Presentation of Task 1 Findings and Development of Goals, Objectives, and Evaluation Criteria	0.0	0.5	0.0	0.5	\$930	\$955	\$1,884	
3. Identify Potential Corridors for New or Expanded Transit Service	0.5	1.0	0.0	1.5	\$2,763	\$2,837	\$5,600	
4. Identify Barriers to New or Expanded Transit Service	0.0	0.8	0.0	0.8	\$1,397	\$1,435	\$2,832	
5. Strategy Evaluation, Recommendations, and Implementation Plan	0.5	1.5	0.0	2.0	\$3,692	\$3,792	\$7,485	
Total	1.5	6.8	1.5	9.7	\$17,267	\$17,733	\$35,000	
Other Direct Costs								\$0
TOTAL COST								\$35,000

Funding