



BOSTON REGION METROPOLITAN PLANNING ORGANIZATION

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

MEMORANDUM

DATE March 3, 2016
TO Boston Region Metropolitan Planning Organization
FROM Karl H. Quackenbush
CTPS Executive Director
RE Work Program for: Plan for Accessible Transportation
Infrastructure: Technical Support

Action Required

Review and approval

Proposed Motion

That the Boston Region Metropolitan Planning Organization, upon the recommendation of the Massachusetts Bay Transportation Authority, vote to approve the work program for the Plan for Accessible Transportation Infrastructure: Technical Support, presented in this memorandum

Project Identification

Unified Planning Work Program Classification

Technical Support/Operations Analysis

CTPS Project Number

14349

Client

Massachusetts Bay Transportation Authority
Project Supervisor: Laura Brelsford

CTPS Project Supervisors

Principal: Annette Demchur
Manager: Katie Pincus

Funding

Future MBTA 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 any work in the UPWP.

Background

Since the Americans with Disabilities Act was passed, in 1990, the MBTA has been improving the accessibility of its infrastructure. However, there are still barriers at many stations and stops that preclude the use of those facilities by seniors, people with disabilities, and others. For example, 35 of the 66 Green Line stations and stops (53 percent) are fundamentally inaccessible, as are 33 of the 138 commuter rail stations (24 percent). In addition, a number of other reasonably accessible stations have barriers, such as narrow or uneven paths of travel or places that lack a detectable (tactile) warning, that may present challenges to their use.

The MBTA's goal of expanding access systemwide is constrained by the MBTA's backlog of critical maintenance projects and funding limitations. In recognition of these constraints, the MBTA's Department of System-Wide Accessibility (SWA) is developing a Plan for Accessible Transit Infrastructure (PATI)—a long-term strategic barrier-removal plan that will prioritize accessibility improvements in the context of limited resources. Through this initiative, the MBTA will catalogue barriers to access at each rapid transit, bus rapid transit, and commuter rail station or stop, and at every bus stop. Concurrently with this survey effort, a working group (the PATI Engagement Committee), which is composed of MBTA officials and disability-accessibility stakeholders, will develop a method for prioritizing the removal of the barriers in a manner that is sustainable, while maximizing the positive impact on accessibility.

Objectives

The objectives of this study are to provide the technical support required for the MBTA to develop criteria for determining which accessibility improvements would have the greatest positive impacts on seniors, people with disabilities, and others who rely on accessible infrastructure, while taking into account funding constraints, and to develop an algorithm for prioritizing accessibility improvements that will incorporate selected criteria.

Work Description

Task 1 Gather and Analyze Data for All MBTA Rapid Transit, Bus Rapid Transit, and Commuter Rail Stations and Stops

CTPS will gather the following data for all MBTA rapid transit, bus rapid transit, and commuter rail stations and stops in two phases; first, for the 69 stations the

MBTA has identified as inaccessible, and then for the remaining stations and stops. (These categories of data were defined by SWA.)

- Ridership, using the number of boardings and alightings at each station and stop
- Proximity to an alternate transit station or stop that is accessible, by identifying whether each station is located within one-fourth mile of an accessible transit station or stop
- Population density of seniors and people with disabilities within one-fourth mile of a station or stop
- Proximity to MBTA paratransit (THE RIDE) “hotspots,” by identifying popular RIDE origins and destinations located within one-fourth mile of a station or stop
- Minority and low-income status of each station and stop

Products of Task 1

Tables summarizing the results of this task

Task 2 Gather and Analyze Data for All MBTA Bus Stops

CTPS will gather data for all MBTA bus stops, with categories similar to those used in Task 1. The categories of data to be collected in this task will be defined by SWA.

Products of Task 2

Tables summarizing the results of this task

Task 3 Provide Technical Support to the PATI Engagement Committee

CTPS will provide analytical support to SWA and the PATI Engagement Committee in identifying and evaluating criteria and weights that could be used in an algorithm for prioritizing accessibility improvements at stations and stops. CTPS, in collaboration with the PATI committee, will then develop the algorithm, which will be used to identify accessibility priorities for future capital projects and to inform ongoing accessibility work.

Product of Task 3

An algorithm for prioritizing accessibility improvements at transit stations and stops

Estimated Schedule

It is estimated that this project will be completed 12 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 \$18,370. This includes the cost of 6.0 person-weeks of staff time and overhead at the rate of 98.88 percent. A detailed breakdown of estimated costs is presented in Exhibit 2.

KQ/AD/ad

Exhibit 1
ESTIMATED SCHEDULE
Plan for Accessible Transportation Infrastructure: Technical Support

Task	Month												
	1	2	3	4	5	6	7	8	9	10	11	12	
1. Gather and Analyze Data for All MBTA Rapid Transit, Bus Rapid Transit, and Commuter Rail Stations and Stops													
2. Gather and Analyze Data for All MBTA Bus Stops													
3. Provide Technical Support to the PATI Engagement Committee													

Products/Milestones

- A: Tables summarizing the results of Task 1
- B: Tables summarizing the results of Task 2
- C: Algorithm

Exhibit 2
ESTIMATED COST
Plan for Accessible Transportation Infrastructure: Technical Support

Direct Salary and Overhead							\$18,370
Task	Person-Weeks				Direct Salary	Overhead (98.88%)	Total Cost
	M-1	P-5	P-4	Total			
1. Gather and Analyze Data for All MBTA Rapid Transit, Bus Rapid Transit, and Commuter Rail Stations and Stops	0.3	0.6	0.1	1.0	\$1,743	\$1,723	\$3,466
2. Gather and Analyze Data for All MBTA Bus Stops	0.3	1.0	0.1	1.4	\$2,474	\$2,446	\$4,920
3. Provide Technical Support to the PATI Engagement Committee	0.5	0.1	3.0	3.6	\$5,020	\$4,964	\$9,984
Total	1.1	1.7	3.2	6.0	\$9,237	\$9,133	\$18,370
Other Direct Costs							\$0
TOTAL COST							\$18,370

Funding
 Future MBTA Contract