Green Line Extension Project

Fall 2011

Introduction

The Massachusetts Department of Transportation (MassDOT) and the Massachusetts Bay Transportation Authority (MBTA) are collaborating to extend the MBTA Green Line to the municipalities of Somerville and Medford. Bringing MBTA light rail service to these densely populated cities will address longstanding transportation inequities, result in fewer automobiles on local roads, and help to combat greenhouse gas emissions and other components of air pollution. The Green Line Extension will also support municipal plans for local economic growth and provide residents of Environmental Justice areas and disabled populations with faster rides to jobs, schools, health care, and other destinations.

Information about the Green Line Extension project can be found at: **www.mass.gov/greenlineextension**.

Environmental Assessment Released for Public Review

MassDOT and the MBTA are applying for federal funding to support the costs of designing and constructing the Green Line Extension project. Federal funding requires compliance with the National Environmental Policy Act (NEPA) prior to undertaking any major federal action. NEPA stipulates that consideration must be given to the environment during the project decision-making process. The Federal Transit Administration (FTA), an operating administration within the U.S. Department of Transportation, is the lead federal agency for the Green Line Extension project.

Documentation and distribution of project information supports and complements public involvement and interagency coordination, which are essential components of the NEPA and project development processes. In accordance with FTA policies, an Environmental Assessment (EA) was prepared as the documentation to disclose the results of the analyses and anticipated environmental impacts from the implementation of the Green Line Extension project. The EA provides disclosure to the public and allows others an opportunity to provide input and comment on proposals, alternatives, and environmental impacts so appropriate information can be used to make decisions and final project determinations.

The EA for the Green Line Extension project is now available for public review and comment. **The comment period for the EA will close on November 18, 2011**. See the box on page 2 for information on how to comment.

Much of the information contained in the EA will be familiar to those who participated in the state environmental review and planning process for the Green Line Extension project.[1] The EA recommends the same route for the extended Green Line – to College Avenue in Medford and Union Square in Somerville – using two branches and operating primarily within existing MBTA Commuter Rail rights-of-way. The elements of the project include:

- The widening/relocation of ten existing bridges.
- Construction of utilities, retaining walls, and noise walls in the corridor.
- Relocation of existing MBTA Commuter Rail tracks.

[1]The Green Line Extension project received state environmental approval on July 30, 2010.

- Construction of new Green Line track and related systems (power, signals, and communication equipment).
- Construction of four new viaducts.
- Construction of a light rail vehicle maintenance and storage facility.
- Construction of seven new stations.

In addition, MassDOT has agreed to fully design the extension of the Somerville Community Path from Lowell Street to Inner Belt Road (both in Somerville) as part of the development of the Green Line Extension project. While MassDOT has undertaken the design of the extension of the Community Path, it is not part of the federal environmental review and will not be constructed as part of the Green Line Extension.

What's New in the EA

Since the completion of the state environmental review process, MassDOT has updated and modified a number of elements of the analysis of the Green Line Extension project. In particular, MassDOT has expanded its analysis of several important project issues, including additional evaluation of the anticipated noise and vibration impacts of the Green Line Extension project. This new analysis is included in the EA, which also summarizes the consultation process performed to comply with federal laws and regulations[2] which protect parks, recreational areas, and historic and archaeological resources.

Mitigation commitments are listed in Tables ES-2 and ES-3 in the Executive Summary of the EA.

The updates and modified elements found in the EA include:

- Additional noise and vibration analysis and identification of specific mitigation measures along the Green Line Extension corridor.
- Revisions to the track alignment in the vicinity of Red Bridge and the Brickbottom Artists Building to help minimize noise and visual impacts and improve MBTA Commuter Rail operations.
- Relocation of the Washington Street Station to provide better neighborhood access and minimize property impacts.
- Refinements in station design concepts based on public input received at community meetings and in public workshops.
- Updates to ridership projections to include 2009 MBTA system-wide passenger survey results and a revised set of anticipated future regional projects.
- Summaries of correspondence and consultation sessions with the Massachusetts Historical Commission and the local historical commissions from the Green Line Extension corridor municipalities. As part of these sessions, project impacts to relevant historic, recreational, and archaeological resources were reviewed and evaluated.

Reviewing and Commenting on the EA

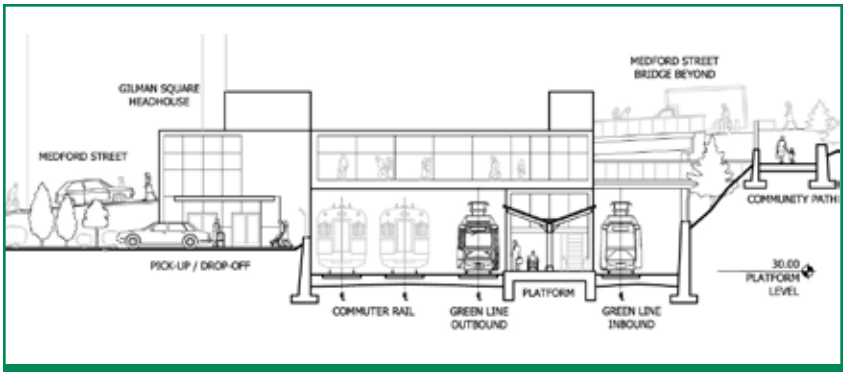
The Environmental Assessment (EA) is available for review on the project website at: www.mass.gov/greenlineextension. It is also available at public libraries and City Clerks' offices in Cambridge, Medford, and Somerville and by request from Regan Checchio (617-357-5772 or rchecchio@reginavilla.com).

To submit a written comment on the document, please write to MassDOT by November 18, 2011:

Massachusetts Department of Transportation
Attention: Katherine Fichter
10 Park Plaza, Room 4150
Boston, MA 02116
katherine.fichter@state.ma.us

[2]Section 106 of the National Historic Preservation Act and Section 4(f) of the U.S. Department of Transportation Act of 1966.

- Updates to the estimated project cost and schedule.
- Revisions to the vehicle maintenance and storage facility site to better serve MBTA operational needs. These revisions include modifications to the vehicle storage yard layout; a revised configuration of the maintenance building; a transportation building that will provide space for operators, line supervision, yard dispatching, and day-to-day supervision of the Green Line; and revised employee parking layouts that include both surface parking and a single-level deck structure.



Typical station elevation

Benefits and Impacts

The projected benefits and impacts from the Green Line Extension are summarized in detail in both the Executive Summary and the body of the EA. Highlights include:

Land Use and Economic Development – Over time, the Green Line Extension is expected to decrease low-intensity commercial and light industrial uses in the project corridor and increase mixed-use, high-density development of various types. By increasing transit access, the Green Line Extension will improve both the potential for sustainable local growth and the ability of area residents to commute to jobs elsewhere.

Land Impacts – The MBTA will need to purchase approximately 15 acres of land from 39 private properties in order to construct the Green Line Extension. Of the 39 properties, eight are "full" acquisitions needed to construct the stations and the vehicle maintenance facility. The displacement and relocation of four active businesses will be required; however, no residences will be displaced. The remaining property acquisitions are small "sliver" takings needed to accommodate the widening of the corridor and the addition of the Green Line track.

Environmental Justice – The Green Line Extension project will increase transit access to employment, education, and health care for Environmental Justice and disability populations.

Traffic – The Green Line Extension will construct roadway and signal modifications at 12 intersections in order to prevent negative changes in traffic patterns and flow. Pedestrian improvements will also be constructed at 29 locations. Bicycle parking will be provided at all of the new Green Line Extension stations to accommodate and encourage commuting by bicycle. Temporary lane closures, traffic detours, and displacement of on street parking in some locations will occur during construction.

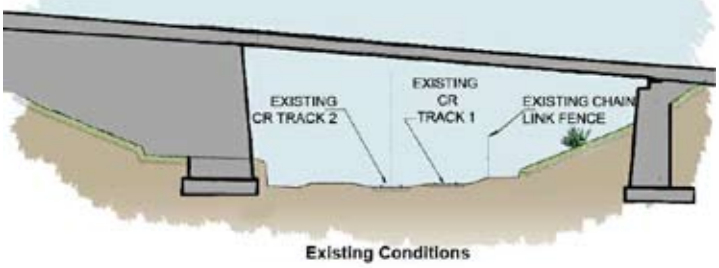
Air Quality – The Green Line Extension will provide important regional air quality benefits, fulfilling a longstanding commitment to incorporate transit projects as an integral element of the Central Artery/Tunnel project. It is projected to reduce daily vehicle miles traveled (VMT) by 25,728, improving air quality and providing new public transit capacity for anticipated growth in the corridor municipalities.

Noise – Although the Green Line Extension will introduce a new noise source, the proposed noise walls, sound insulation, and rail lubrication will be effective in mitigating potential noise increases. For locations along the existing Commuter Rail lines, future noise levels are expected to be lower than existing noise levels due to the installation of new noise barriers. Temporary noise impacts will likely result from construction activities.

Vibration – As with noise, the Green Line Extension project will introduce a new vibration source. However, the proposed vibration mitigation will (1) keep vibration levels caused by Commuter Rail trains at or below existing levels, and (2) reduce vibration caused by new Green Line trains, per established federal impact criteria. Proposed mitigation measures include ballast mats, special track work, resilient ties and fasteners (rubber or other resilient materials in between the tracks and for the fasteners), and maintenance of wheel and rail profiles.

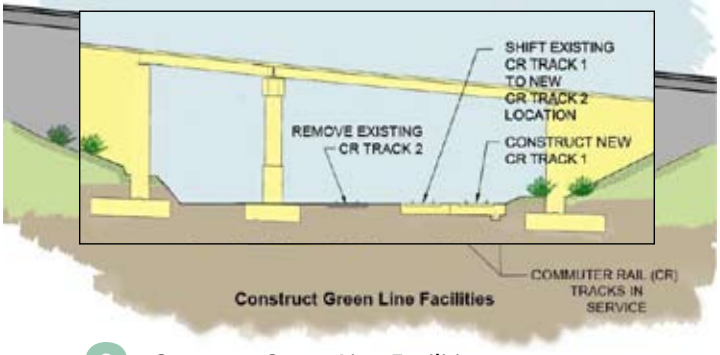
Stormwater – The Green Line Extension will result in an overall net decrease of 1.2 acres of impervious area – paved area through which water cannot flow – in the Green Line Extension corridor. This reduction is accomplished mainly by removing existing structures and impervious parking areas at the site of the future vehicle maintenance and storage facility and replacing them with areas of new track and ballast. Detention/infiltration systems will be installed at each station to maintain existing stormwater discharge flow rates. Stormwater Best Management Practices will be used to minimize

Typical Construction Sequence



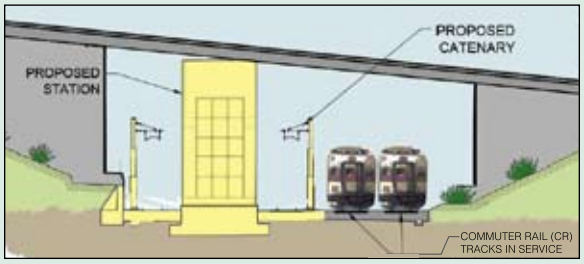
Existing Conditions

1 Construct bridges and Commuter Rail (CR) track after shifting existing track



Construct Green Line Facilities

2 Construct Green Line Facilities



3 Construction Completed

impacts from construction activities, including developing and implementing a Stormwater Pollution Prevention Plan (SWPPP) in accordance with state and federal standards, reinforcing slopes using a hydro-seed mix, use of dewatering controls, and installation of catch basins.

Other Areas

- There are no federal or state-regulated wetlands within the Green Line Extension corridor and the project is not expected to adversely affect fish, wildlife, or plants.
- There are no federal or state-listed endangered or threatened species present within the Green Line Extension corridor.
- As needed, the MBTA will remediate contaminated sites that must be acquired to construct the Green Line Extension.
- Depending on specific circumstances, hazardous materials management protocols used during construction may include special handling of materials, dust control, and management and disposal of contaminated soil and groundwater. Adequate protection to workers and any nearby abutters will also be provided.
- The project would have an adverse effect on seven historic resources listed or eligible for listing on the National Register of Historic Places (Cultural Resources/Section 106 of the National Historic Preservation Act). A Memorandum of Agreement between the FTA, MassDOT, the MBTA, and the Massachusetts Historical Commission specifies measures to mitigate the adverse effects, including archival photographic documentation and the creation of historical interpretation.
- Indirect and cumulative impacts from the Green Line Extension include the potential for zoning changes, infill development, and changes in local and regional growth patterns.

Want more information?

Check out our project website: www.mass.gov/greenlineextension.

The Green Line Extension website has a wealth of project information for anyone wanting to catch up on progress to date.

massDOT