



GREEN LINE EXTENSION PROJECT

Winter 2009



Introduction

The Green Line Extension is a project of the Executive Office of Transportation (EOT) and the Massachusetts Bay Transportation Authority (MBTA) to improve transit service, mobility, and regional access for residents of Cambridge, Somerville, and Medford. Bringing MBTA light rail service to these densely populated cities will address long-standing transportation inequities and meet strong demand for improved transit. The completed project should result in fewer automobiles on local roads and lower levels of greenhouse gas emissions and other components of air pollution.

The Green Line Extension will advance community plans for smart growth and urban redevelopment and provide residents of environmental justice communities with faster rides to jobs and other destinations. The project should help increase mixed-use transit-oriented development, particularly at Union Square, Brickbottom, Ball Square, and Mystic Valley Parkway/Route 16 Stations. Better transit access typically brings socioeconomic benefits to a community.

Project Benefits

EOT is recommending a design that best meets the goals of the project for service, ridership, and environmental improvements. The Green Line Extension will consist of two distinct branches. The “mainline,” the longer of the two lines, will be constructed within the existing MBTA Lowell Commuter Rail Line railroad right-of-way and will travel north from a relocated Lechmere Station to Mystic Valley Parkway/Route 16. The shorter of the two lines will be constructed within the MBTA Fitchburg Commuter Rail Line railroad right-of-way to Union Square. In both branches, the existing commuter rail tracks will be moved to the east and the new Green Line tracks will be located on the west side of the right-of-way.

The recommended alternative — and other options that were studied — will be described in detail in the Draft Environmental Impact Report/Environmental Assessment (DEIR/EA), a combined state and federal document. The DEIR/EA will contain the results of technical information on potential benefits and environmental impacts to the communities. The document will soon be available for public review and comment.

The preferred alternative has a number of benefits:

- It will operate in existing railroad rights-of-way, reducing the need to purchase or take local property and generally limiting construction impacts to the area where the MBTA currently operates (the right-of-way).
- It is anticipated to attract strong ridership.
- North of Lechmere Station, the branches will serve a variety of neighborhoods, opening Somerville’s Inner Belt and Brickbottom neighborhoods to the possibility of new development.
- It will offer universal access, meeting Americans with Disability Act (ADA) standards at all stations.
- It will better connect residents of environmental justice communities to jobs and services.
- It will improve air quality and reduce the number of vehicles on local roads.

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Green Line Extends on



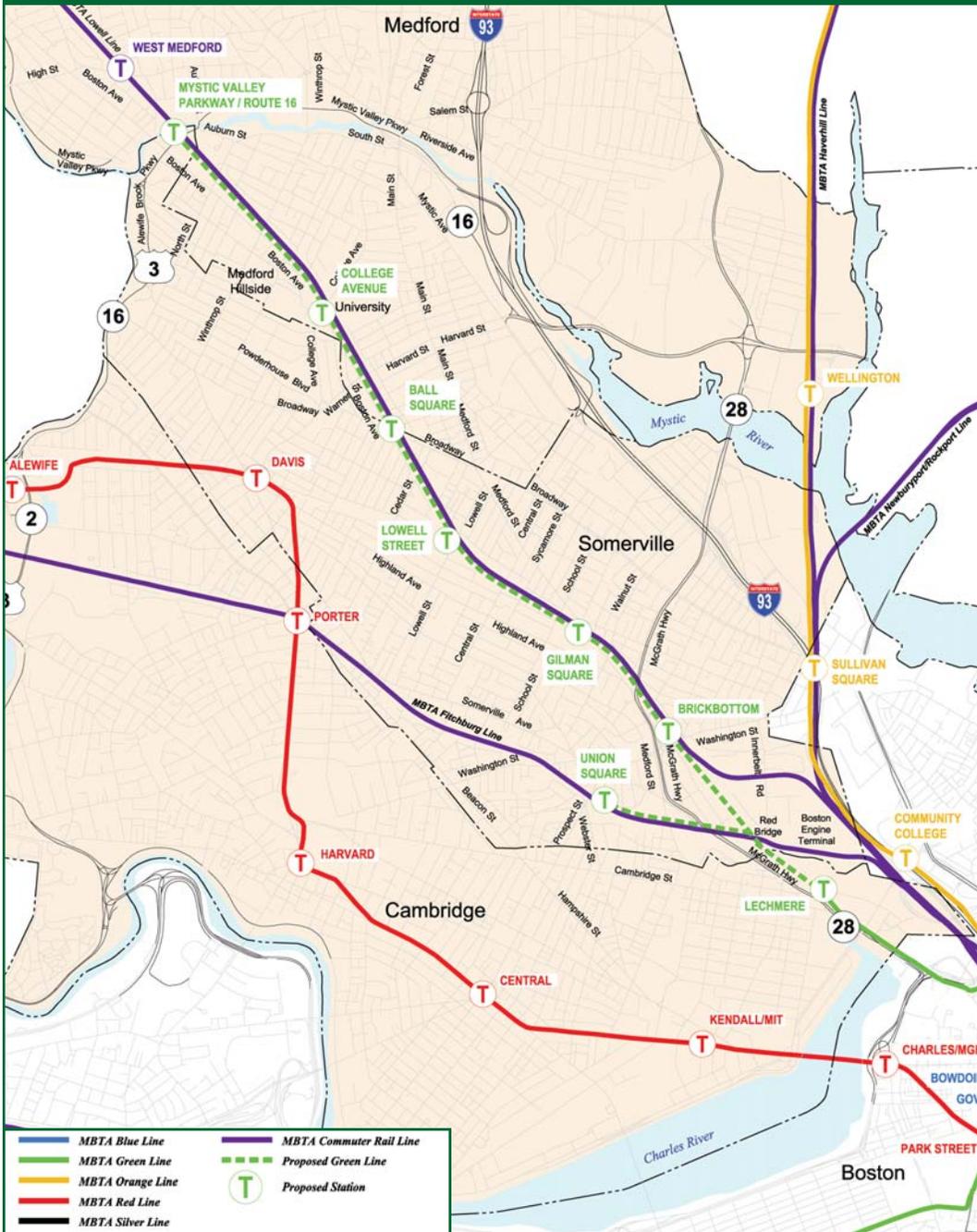
Project Impacts

Construction and operation of a new transportation system in an urban environment bring impacts, such as noise, vibration and changes in traffic patterns. EOT will install noise barriers or walls in many areas where the Green Line Extension could be expected to produce higher noise levels than currently exist.

With these walls in place, future noise levels are expected to be substantially lower than existing noise levels. At locations where noise barriers are not feasible or effective, EOT expects to provide sound insulation for affected buildings. Similar efforts will be directed to moderating vibration where homes or businesses are very close to the rail tracks.

Details on the potential impacts and a description of the mitigation strategies will be in the DEIR/EA.

Preferred Alternative



EOT has to construct a support facility to store and maintain the Green Line vehicles that will serve the Extension. EOT has recommended that a mid-sized maintenance facility be constructed at the "Yard 8" parcel in Somerville, an area that has been in railroad use for more than a century. Of the many locations considered for the support facility, this one is the best operationally and allows EOT to best meet the project schedule. Our *Support Facility Report* is available in the *Current Materials* section on the project website, www.mass.gov/greenlineextension. EOT is committed to mitigating any negative impact — which the project team believes will be minimal — experienced by nearby residents. This location also provides opportunities for new development — commercial, industrial, recreational, etc. — over and around the facility.

EOT is working closely with the City of Somerville to consider the best ways to design a facility that preserves connections between the neighborhoods of Inner Belt and Brickbottom and enhances development possibilities. EOT will also work with residents in the Brickbottom neighborhood to provide needed mitigation.

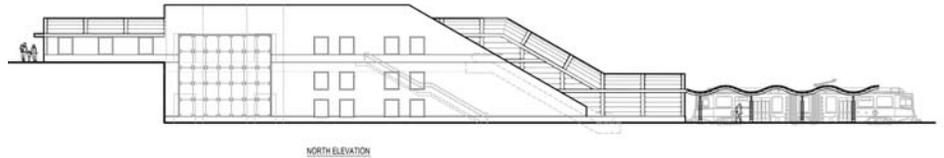
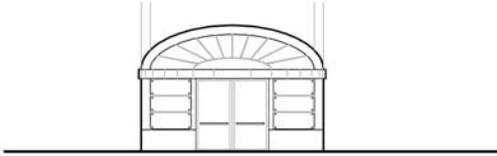
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Green Line Extension



The drawing shows the proposed Lowell Street station, with views from the east and the north.



Project Funding

EOT is working with the Federal Transit Administration to secure federal funding for the project, which would enable full extension of the line to Route 16/Mystic Valley Parkway. While EOT believes the project's benefits will make it competitive for federal funding, the portion of the Green Line to Medford Hillside — the portion of the project to which the Commonwealth is legally committed — is not dependent on federal funding.

Proposed Station Locations

The proposed new stations will be designed to allow residents to access the stations on foot, by bicycle, and — in some locations — by short-term vehicular drop-off/pick-up (also called kiss-and-ride). In this phase of the project, station design is conceptual in nature. More details will be developed during the preliminary engineering phase of the project, beginning in summer 2009. All stations will be completely accessible, meeting standards of the federal Americans with Disabilities Act (ADA). They will include shelters and covered areas for waiting passengers.

More details about the stations will be included in the DEIR/EA.

Lechmere Station: The new Lechmere Station would be relocated to the east side of Monsignor O'Brien highway and elevated. There would be approximately 250 parking spaces at the station for commuter park-and-ride patrons (replacing existing parking).

Brickbottom Station: This station would be located on the east side of Joy Street, south of the intersection of Washington Street. Passengers would enter from Joy Street.

Gilman Square Station: This station would be located along Medford Street, directly behind Somerville High School. Station entrances would be from two locations on Medford Street.

Lowell Street Station: This station would be located north of Lowell Street, along a newly constructed bridge

that would accept automobile pick-up/drop-offs and bicycle traffic. Pedestrian access would be provided along Lowell Street.

Ball Square Station: This station would be located north of the Broadway Bridge, near the corner of Broadway and Boston Avenue. The stations would be reached from Boston Avenue and Broadway.

College Avenue Station: Located on the north side of the intersection of College Avenue and Boston Avenue, this station would serve residential neighborhoods adjacent to the station and the Tufts University community. The station provides two points of access, one from College Avenue and the second along Boston Avenue.

Mystic Valley Parkway/Route 16 Station: This station would be located south of Mystic Valley Parkway/Route 16. Automobile and pedestrian access will be provided via Boston Avenue.

Union Square Station: This station would be located at the intersection of the Fitchburg Line and Prospect Street. Access will be provided at two locations along Prospect Street.

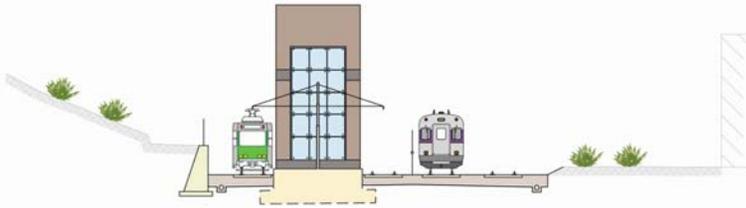
Projected Daily Boardings in the Year 2030 by Station

Station	Daily Boardings
Lechmere	11,100
Brickbottom	2,840
Gilman Square	4,520
Lowell Street	1,260
Ball Square	1,890
College Avenue	2,100
Mystic Valley Parkway/Route 16	2,000
Union Square	2,310



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On the Mystic Valley Parkway/Route 16 branch, Green Line tracks will be located on the east side of the existing commuter rail corridor, on each side of new light rail stations. Existing Commuter Rail tracks will shift to the west to accommodate the new Green Line tracks and stations.

Environmental Review and Next Steps

In the spring of 2009, EOT expects to submit a draft Environmental Impact Report/Environmental Assessment (DEIR/EA) to the Massachusetts Environmental Policy Act Office and the Federal Transit Administration. The DEIR/EA document will provide comprehensive detail and analysis about the transportation and environmental impacts of the Green Line Extension project. The DEIR/EA will evaluate anticipated project benefits and review a wide range of potential impacts including traffic, noise, vibration, and air quality. The document will be available on the project website at www.mass.gov/greenlineextension; in libraries in the project communities; on CD upon request.

Once the document is noticed, there will be a public comment period. During this time, members of the public may comment on the document to the Secretary of Energy and Environmental Affairs through the Commonwealth's Massachusetts Environmental Policy Act (MEPA) process. Information on how to submit comments will be made available on the project website and sent out to the project mailing list. Public comments are an invaluable resource for federal and state regulators reviewing the DEIR/EA. Anyone interested in the project is encouraged to comment.

Following the project comment period, the Secretary of Environmental Affairs will issue a Certificate on the project and the DEIR/EA filing. Based on this filing, EOT expects to proceed through subsequent planning, environmental, and project development stages. These include filing an application for funding through the Federal Transit Administration's New Starts program; undertaking preliminary engineering; conducting final environmental reviews; and developing final designs for the project.

Want more information? Check out our project website, mass.gov/greenlineextension

The Green Line Extension website has a wealth of project information for anyone wanting to catch up on progress to date. A general project overview is on the sidebar under *About the Project*. More detailed information is in our document database under *Reference Materials*. The list below describes some important documents summarizing the project's progress to date.

- **Preferred Alternative Map:** In the *Current Materials* section, the map shows the recommended alternative's route through the project corridor.
- **Green Line Support Facility Report:** In the *Current Materials* section, the *Green Line Support Facility Report* details reviews of 11 different sites recommended by local officials, stakeholders, and members of the public for the project's new support facility. This report also outlines why the Yard 8 parcel was chosen as the recommended site.
- **Consideration of Tunnel Alternatives:** This report can be found in the *Current Materials* section. A number of suggestions for incorporating tunnel alignments into the proposed Green Line Extension project were put forward by members of the Advisory Committee and the general public. This technical memo explains why these tunnel alternatives are not feasible.
- **The Beyond Lechmere Northwest Corridor Study:** The Beyond Lechmere Northwest Corridor Study investigated a variety of Green Line Extension alternatives. The final report, released in 2005, recommended the final alternatives to be studied under the current environmental review process (*Archive*).

Facts and Figures:

- Miles of new service:** approximately 5
- Communities served:** Cambridge, Somerville, and Medford
- Number of new stations:** 8 (including relocated Lechmere Station)
- Projected opening:** December 31, 2014
- New MBTA systemwide transit trips:** 8,600
- Peak headways:** 5 to 6 minutes