



**Massachusetts Department of Transportation**

**Transit Commitments  
March 2010 Status Report**

**March 18, 2010**

**For questions on this document, please contact:**

Katherine S. Fichter  
Massachusetts Department of Transportation  
Office of Transportation Planning  
10 Park Plaza, Room 4150  
Boston, Massachusetts 02116  
katherine.fichter@state.ma.us

## INTRODUCTION

This report is being submitted to the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) to provide an update on the status of the four outstanding State Implementation Plan (SIP) transportation control measure (TCM) projects: (1) improvements to the Fairmount Line, (2) the siting and construction of 1,000 new commuter parking spaces, (3) the design of the Red Line/Blue Line Connector, and (4) the construction of the Green Line Extension to College Avenue (Medford) and Union Square (Somerville). The U.S. Environmental Protection Agency (EPA) approved the projects as part of the SIP on July 31, 2008. A complete description of the process by which those projects were included in the SIP is provided in the Boston Region MPO's long-range transportation plan – JOURNEY TO 2030 Amendment adopted on September 24, 2009 and amended on November 19, 2009. As part of the approval of the JOURNEY TO 2030 Amendment, FHWA and FTA stated:

*“The demonstration of timely implementation of TCMs in the SIP is required for a conformity determination. In order to ensure that the TCMs are completed as scheduled, the Executive Office of Transportation and Public Works shall prepare monthly progress reports to FTA, FHWA, and EPA. In addition to these progress reports EOT (MassDOT after November 1, 2009) shall convene monthly meetings with all interested parties to discuss the status of each TCM. This reporting requirement will be effective starting November 2009.”*

This is the fifth of the required status reports, to be presented at the Boston MPO's Transportation Planning and Programming Committee at their March 18, 2010 meeting. This report builds on the *State Implementation Plan Transit Commitments 2009 Status Report*, submitted to the Massachusetts Department of Environmental Protection on July 1, 2009. This report will be posted on the website of the Massachusetts Department of Transportation.

## **I. FAIRMOUNT LINE IMPROVEMENT PROJECT**

### **Project Description**

The 9.2-mile Fairmount commuter rail line runs from South Station, currently serves four stations (Uphams Corner, Morton Street, Fairmount, and Readville) in the communities of Dorchester, Mattapan, and Hyde Park, and terminates in the Readville section of Boston. The line, which uses right-of-way entirely owned by the MBTA, also includes 41 bridges. It is the only MBTA commuter rail line that exclusively serves neighborhoods within the City of Boston, but ridership has historically been low and passenger facilities along the line do not meet modern standards.

The Fairmount Line Project includes the rehabilitation of the existing Uphams Corner and Morton Street Stations, construction of four new stations – Newmarket, Four Corners, Talbot Avenue, and Blue Hill Avenue – reconstruction of six existing railroad bridges (located over Columbia Road, Quincy Street, Massachusetts Avenue, Talbot Avenue, Woodrow Avenue, and the Neponset River), and construction of a new interlocking and upgraded signal system (required to advance the bridge reconstruction work). These upgrades will enhance future service, allowing for increased frequency on the line.

### **Project Cost**

The total estimate for the Fairmount Line Improvements SIP Project is \$138,105,000.

### **Project Funding**

In August 2007, MassDOT and the MBTA executed a contract to transfer approximately \$39 million in Commonwealth bond funds from MassDOT to the MBTA to support the costs of (1) signal work, (2) reconstructing three major bridges on the line (the Columbia road, Quincy Street, and Massachusetts Avenue bridges), (3) designing three others (the Talbot Avenue, Woodrow Avenue, and Neponset River bridges), and (4) designing the remaining three new stations (the Newmarket, Talbot, and Blue Hill Avenue stations). A supplemental funding agreement providing \$23,756,574 in Commonwealth bond funding has been executed for the cost of construction of the Four Corners Station, and a construction contract was executed by the Acting General Manager during the week of January 11. Another supplemental funding agreement providing \$76 million in Commonwealth funds to the MBTA for the remaining project elements of the Talbot/Newmarket/Blue Hill stations and the three remaining bridges was executed by Secretary Mullan in February 2010.

### **SIP Deadline**

“Before December 31, 2011, construction of the following facilities shall be completed and opened to full public use: Fairmount Line improvements consisting of enhancements of existing stations including without limitation: platform extensions; improved lighting and improved access; a new station in the general location of Four Corners, and a new station in each of the neighborhoods of Dorchester, Mattapan and

Roxbury; and bridge upgrades and other measures to improve service and increase ridership (the Fairmount Line project).”

## **Project Status**

### **Systems**

The upgrades to the interlocking and signal system have been completed and are currently in use, allowing for the reconstruction of structurally deficient bridges along the Fairmount Line.

### **Bridges**

A construction contract to replace the Columbia Road, Quincy Street, and Massachusetts Avenue bridges was awarded in October of 2007. The work was completed and the outbound platform on Track 1 was opened for service on February 1, 2010. Train service resumed on both tracks at that time. The design of the Talbot Avenue, Woodrow Avenue, and Neponset River bridges is 100% complete and construction is expected to begin in the spring of 2010. Talbot Avenue and Woodrow Avenue will be constructed under the same construction contract as the Talbot Avenue Station with the project construction bid advertisement anticipated for March/April 2010. The Neponset River Bridge will be a stand-alone construction project occurring at the same time.

### **Existing Stations**

The MBTA held a station-opening at Uphams Corner on January 23, 2007. The reconstruction of Morton Street was celebrated at a station-opening on July 17, 2007. New elements at both stations include extended high-level passenger platforms, accessible walkways, canopies, benches, windscreens, signage, bicycle racks, variable messages signs, lighting, and landscaping.

### **New Stations**

The MBTA has completed the design of **Four Corners Station**. Construction bids were opened in October 2009. The MBTA Board of directors approved authorization of a \$17.7 million construction contract award to S & R Construction at its December 2009 meeting. The contract was executed by the Acting General Manager during the week of January 11, 2010. The construction of the Four Corners Station will begin in the spring of 2010 and is anticipated to continue for 24 to 27 months. This construction projection suggests that this station will be completed three to six months after the SIP deadline of December 31, 2011.

Currently, **Talbot Avenue Station** is at 100% design and with a MassDOT funding agreement in place, the MBTA is working toward advertising the project element for construction bidding in March/April 2010. This construction package will also include the rehabilitation of the Talbot Avenue and Woodrow Avenue Bridges. An approximately two-year construction period is anticipated. MassDOT and the

MBTA currently estimate that the completion of this station will be delayed past the December 31, 2011 SIP deadline by approximately six to nine months.

**Newmarket Station** is currently at 100% design. The construction of this station will be advertised for bidding in April/May 2010 after the bid opening for the Talbot Avenue station and bridge work. MassDOT and the MBTA currently estimate that the completion of this station will be delayed past the December 31, 2011 SIP deadline by approximately six to nine months.

**Blue Hill Avenue/Cummins Highway** is at 60% design, but concerns raised by abutters about negative local impacts compelled the MBTA to review potential alternative locations for Mattapan Station. A meeting with elected officials from the project area was held on March 1, 2010. The MBTA and MassDOT prepared documents to support this station location that was presented to the elected officials at a March 15, 2010 meeting. The MBTA and MassDOT have directed Design and Construction staff to advance the project element into final design with a center island configuration at the preferred site between Blue Hill Avenue and Cummins Highway. The MBTA hopes to complete final design of a Mattapan station in 2010 and maintain the schedule for meeting the December 2011 deadline.

#### **Potential Challenges**

Should the construction projections for the Four Corners, Talbot, and Newmarket Stations prove accurate, the delay would trigger the need for MassDOT to collaborate with DEP to publicly develop a mitigation proposal for the interim months. In addition, abutter concerns about the preferred location for a Mattapan station may impact the final completion schedule for the overall Fairmount project.

## **II. CONSTRUCTION OF 1,000 NEW PARKING SPACES**

### **Project Description**

The MBTA will construct 1,000 new parking spaces within the area of the Boston Region Metropolitan Planning Organization (MPO) to encourage commuters and other travelers to make use of the public transit network for trips into downtown Boston. MassDOT and the MBTA have identified the Beverly Commuter Rail Station and the Salem Commuter Rail Station as good candidates for new parking structures. The MBTA is also implementing new parking spaces at other locations throughout the area of the Boston Region MPO.

### **Project Cost**

Beverly cost estimate (concept level): \$29,000,000

Salem cost estimate (30%): \$50,000,000

### **Project Funding**

Finance plans are in development involving MassDOT, the Executive Office of Administration and Finance, the MBTA, and the communities.

### **SIP Deadline**

Before December 31, 2011, construction of the following facilities shall be completed and opened to full public use: 1,000 new park and ride parking spaces serving commuter transit facilities within the 101 cities and towns constituting the Boston Metropolitan Planning Organization.

### **Project Status**

#### **Beverly**

On June 8, 2008, the MBTA issued a solicitation for a mixed-use development – to include the parking as well as other uses – for appropriate parcels in the vicinity of the Beverly commuter rail station. Proposals were received by the advertised deadline of August 8, 2008, and based on these proposals, MassDOT and the MBTA selected a preferred location on a series of parcels on Rantoul Street in downtown Beverly. Based on that selection, the MBTA completed the federal environmental review of the project. At its meeting on June 4, 2009, the MBTA Board of Directors voted to acquire the property using state and federal funding. Land acquisition was completed over the summer of 2009.

No responsive bids were received in Fall 2009 for joint public-private development of the garage facility. After considering alternative implementation plans, MassDOT and the MBTA have decided to issue a restructured Invitation for Joint Development Bids/Proposals. The procurement process will incorporate changes based on feedback from the original unsuccessful Fall 2009 offering including allowance of additional time for the prospective developer to secure development permits and financing and adjustment of proposed cost efficiency parameters (cost per parking

space) on the planned garage. A tentative schedule calls for a procurement package to be issued in April 2010 with bid/proposals due in July 2010.

### **Salem**

The parking garage at the Salem commuter rail station would contain approximately 950 spaces in a multi-level structure to be shared proportionately between the MBTA and the Department of Capital Asset Management (DCAM). Currently, DCAM proposes to contribute \$3 million in exchange for the use of 150 spaces to serve the new Essex County Courthouse complex. The project is estimated to cost approximately \$45 million. In addition to the \$3 million in DCAM funding, the FTA has earmarked \$3.375 million for the project.

The contract amendment to advance design of the 950 space Salem parking garage to 30% was approved by the MBTA and work commenced in early June, 2009. The 30% design was completed in December 2009. A community review meeting was held in Salem on February 23, 2010. The funding agreement is pending to complete the final design and the final design contract scope is anticipated to be acted on by the MBTA Board of Directors later this Spring 2010.

### **Other Projects**

In addition to the projects described above, MassDOT and the MBTA will continue to pursue other parking projects that support the SIP requirement, including the construction of parking at Wonderland Station, at Quincy Shipyard (168 new spaces currently under construction and anticipated for completion in 2010), Savin Hill station (30 new spaces completed), and Sullivan Square station (10 new spaces completed). MassDOT and the MBTA will continue to seek out all viable opportunities to add commuter parking to the MBTA system, while also pursuing large projects like those at Salem, Wonderland, and Beverly.

The Wonderland project is worth particular note because it is advancing quickly, in part due to funding from the American Recovery and Reinvestment Act (ARRA). The availability of ARRA funding is making it possible for additional Wonderland parking spaces to be completed more quickly than originally anticipated.

Completion of all of the projects identified here will provide new commuter parking spaces in excess of the 1,000 required by the SIP.

### **Potential Challenges**

The process of identifying appropriate locations in which to construct the required 1,000 new parking spaces has been lengthier than expected. While the effort is now underway and locations for the construction of new large-scale MBTA parking facilities have been identified (to date: the MBTA Commuter Rail stations in Salem and Beverly, as well as a transit-oriented development project at Wonderland Station), the exact timeframe within

which all of the 1,000 spaces will be constructed is not fully defined. Current projections suggest that the Wonderland Station project will be in construction at the time of the required SIP deadline of December 31, 2011, but substantial completion will likely occur several months after the deadline. Likewise, both the Salem and Beverly projects may be completed after the required SIP deadline of December 31, 2011. Should construction estimates project that all 1,000 spaces will likely not be completed by the SIP deadline, the delay would trigger the need for MassDOT to collaborate with DEP to publicly develop a mitigation proposal for the interim months.



### **III. RED LINE-BLUE LINE CONNECTOR - DESIGN**

#### **Project Description**

The proposed Red Line/Blue Line Connector – intended to improve mobility and regional transportation access for residents of East Boston, North Shore communities, residents of Cambridge, and the northwestern suburbs, as well as relieve congestion in the central subway – consists of an extension of the MBTA Blue Line under Cambridge Street to the Red Line station at Charles/MGH. As currently envisioned, the project consists of two major components: (1) a new tunnel extending the Blue Line under Cambridge Street from Joy Street to Charles Circle and (2) a new underground Blue Line station connected to the existing Charles/MGH station. The project will also consider whether and how to make use of the existing Bowdoin Station – which will require significant rehabilitation – including the relocation of underground trackage and platforms at Bowdoin Station. The exact configurations of both the Charles/MGH platform and the new Blue Line station have not yet been determined.

#### **Project Cost**

It is estimated that it will require \$30,000,000 to complete the legal commitment (the current consultant contract is for \$3,000,000 to complete a Draft Environmental Impact Report by June 2010).

#### **Project Funding**

The ‘immediate needs’ Transportation Bond Bill of 2007 provided state bond funding for the design of the Red Line/Blue Line Connector project. The costs of this project will be supported using funds from that source.

#### **SIP Deadline**

Before December 31, 2011, complete final design of the Red Line/Blue Line Connector, from the Blue Line at Government Center to the Red Line at Charles Station.

#### **Project Status**

On September 14, 2007, MassDOT filed an Expanded Environmental Notification Form with the Massachusetts Environmental Policy Act Office. A public scoping session was held on October 17, 2007, and the Secretary of Energy & Environmental Affairs issued a certificate on the project on November 15, 2007. Based on the project scope as defined in the MEPA Certificate, MassDOT issued a Request for Proposals on March 27, 2008 for a consultant to complete the necessary environmental reviews and engineering for the project. MassDOT awarded a consultant contract during the summer of 2008.

MassDOT is completing the necessary environmental reviews and conceptual engineering for the project, as described below.

### **Public Outreach**

- Six Working Group meetings have been held with the most recent one on February 23, 2010. A public meeting on the DEIR is anticipated for May 3, 2010.
- A project website has been launched.

### **Refinement of Alternatives/Conceptual Engineering**

- The refinement of alternatives was performed for three options: (1) a no-build option, (2) a tunnel option with Bowdoin Station remaining open, and (3) a tunnel option with Bowdoin Station eliminated. The refinement of alternatives also included an evaluation of potential construction options (a mined tunnel vs. a cut-and-cover tunnel) and construction phasing schemes.
- The Definition of Alternatives/Conceptual Engineering Report was completed in November 2009.

### **Design Criteria**

- A draft Design Criteria Report was prepared and was included with the Definition of Alternatives Report.

### **Alternatives Analysis**

- A draft Alternatives Analysis Technical Report was submitted to MassDOT on February 1, 2010.

### **Design**

- The conceptual design of the project is underway.

### **Cost Estimates**

- Conceptual cost estimates were included in the Definition of Alternatives Report.

### **Construction Staging and Sequencing Plans**

- Construction Staging and Sequencing Plans were included in the Definition of Alternatives Report.

### **Real Estate Requirements**

- Potential real estate impacts will be identified as part of DEIR/EA.

### **The following major milestones are anticipated over the course of the next year:**

- Draft Environmental Impact Report – March 31, 2010 filing.

By filing an Expanded Environmental Notification Form and having successfully selected a design consultant, MassDOT is advancing the Red Line/Blue Line Connector project. MassDOT currently believes that it is on track to meet the SIP requirement to complete final design for the Red Line/Blue Line Connector by December 31, 2011.

### **Potential Challenges**

There has been some unfavorable press coverage about the Red Line/Blue Line project spending \$3 million on a project that does not currently have capital funds for construction. As updated cost estimates were provided to the working group at the last meeting, concerns were raised about the significant increase in project costs compared to the Expanded Environmental Notification Form cost (\$624 million versus \$264 million) Many members questioned the merit of completing design on the project given the significantly higher design cost (estimated at \$49 million).

#### IV. GREEN LINE EXTENSION TO SOMERVILLE AND MEDFORD

##### Project Description

This project - the purpose of which is to improve corridor mobility, boost transit ridership, improve regional air quality, ensure equitable distribution of transit services, and support opportunities for smart growth initiatives and sustainable development – will extend the Green Line from a relocated Lechmere Station within the MBTA’s Lowell Line commuter rail right-of-way to Medford with a branch line along the MBTA’s Fitchburg Line commuter rail right-of-way to the vicinity of Union Square in Somerville.

Stations are currently proposed to be located in the vicinity of:

- **Mystic Valley Parkway/Route 16** – Located in the vicinity of the intersection of Mystic Valley Parkway/Route 16 and Boston Avenue in Somerville/Medford, south of the Mystic River. The station platform will be located south of the Mystic Valley Parkway/Route 16 undergrade crossing of the MBTA’s Lowell Line commuter rail tracks. Access to the station will be provided via property adjacent to Boston Avenue and Route 16. *This station is proposed to be constructed as part of a second phase of the project, to be completed after the December 31, 2014 legal deadline.*
- **College Avenue/Medford Hillside** – Located at the intersection of College Avenue and Boston Avenue in Medford, adjacent to Tufts University. The station platform will be located on the north side of the College Avenue overgrade bridge crossing of the MBTA’s Lowell Line commuter rail tracks. Access to the station will be provided from both Boston Avenue and College Avenue.
- **Broadway/Ball Square, Medford/Somerville** – Located at the intersection of Broadway and Boston Avenue on the north side of Ball Square (located in both Somerville and Medford). The station platform will be located on the north side of the Broadway overgrade bridge crossing of the MBTA’s Lowell Line commuter rail tracks. Access to the station will be provided from both Boston Avenue and from Broadway.
- **Lowell Street, Somerville** – Located at the Lowell Street bridge overgrade crossing of the MBTA’s Lowell Line commuter rail tracks, adjacent to the proposed Somerville Community Path. The station platform will be located on the north side of the Lowell Street Bridge and access to the station will be provided from Lowell Street.
- **Gilman Square, Somerville** – Located in the vicinity of the Medford Street crossing of the MBTA’s Lowell Line commuter rail tracks, behind Somerville’s City Hall, Public Library, and High School. The station platform will be located on the north side of the Medford Street overgrade bridge crossing of the MBTA’s Lowell Line commuter rail tracks. Access to the station will be provided from Medford Street. The proposed Somerville Community Path will be located in close proximity to the station.

- **Brickbottom, Somerville** – Located in the vicinity of Washington and Joy Streets in Somerville’s Brickbottom/Inner Belt area. The station platform will be located south of Washington Street’s undergrade crossing of the MBTA’s Lowell Line commuter rail tracks. Access to the station will be provided via property on Joy Street, with potential access also to occur from the City’s proposed Inner Belt development on the east. The proposed Somerville Community Path will be located in close proximity to the station.
- **Union Square, Somerville** – Located east of Prospect Street in the vicinity of Union Square in Somerville. The station platform will be located within the MBTA’s Fitchburg Line commuter rail right-of-way east of Prospect Street from both the street and bridge levels. Access to this station will be provided from Prospect Street.

Details of the design of the stations – including the relationship of the stations to the pedestrian and street networks around them – will be developed more fully in the Preliminary Engineering phase.

### **Support Facility**

The Green Line Extension will also require the construction of a new light rail maintenance facility for vehicle care and storage in the vicinity of the Green Line Extension. MassDOT has identified a three-part parcel known as Yard 8 – in the Brickbottom/Inner Belt area of Somerville – as the preferred location within the project corridor for the facility. In addition, MassDOT is currently studying two alternative locations for the maintenance/storage facility, known as ‘Mirror H’ and ‘Option L’. MassDOT has prepared a preliminary analysis of these additional sites, which is available on the Green Line Extension project website ([www.mass.gov/greenlineextension](http://www.mass.gov/greenlineextension)). MassDOT also presented the information at a public meeting on December 16, 2009 in Cambridge. MassDOT anticipates that the complete analysis of the additional sites (‘Mirror H’ and ‘Option L’) will be finished shortly, at which point it will be made available to the public. That analysis will inform MassDOT’s decision about a final preferred alternative for the location of the support facility.

### **Project Cost**

The DEIR/EA includes concept plans (at the 10% level) for the alternative alignments considered for the Green Line Extension project, as well as detailed capital cost estimates for those alternatives. The capital improvements include, but are not limited to: construction of track, station structures, drainage, utilities, property acquisitions and relocations, vehicle acquisitions, and the construction of a vehicle maintenance facility. The project cost also includes relocating the existing Lechmere Station. The total cost is estimated at \$805 million in 2008 dollars, including \$76 million for the purchase of new vehicles. The total estimated costs for the project have been increased to include inflation for the implementation period (Year of Expenditure Dollars or “YOE”). The YOE dollar costs for the project are projected to be \$932.4 million.

### **Project Funding**

MassDOT intends to pursue federal funding – through the competitive New Starts program managed by FTA – to support the construction of the Green Line Extension project. In 2008, the FTA engaged a Project Management Oversight Consultant (PMOC) to undertake a review of the preliminary cost estimate for the Green Line Extension Project. The PMOC review identified a number of issues that introduce risk into this preliminary cost estimate. The most significant issues relate to construction methodology and schedule. As a result, FTA was not able to endorse these cost estimates at that time. MassDOT and FTA have recently initiated more close collaboration on the development of a complete New Starts application for the Green Line Extension project, and that effort is and will be ongoing. Part of that effort will be the refinement of cost and schedule projections.

### **SIP Deadline**

Before December 31, 2014, construction of the following facilities shall be completed and opened to full public use: 1. The Green Line Extension from Lechmere Station to Medford Hillside; 2. The Green Line Union Square spur of the Green Line Extension to Medford Hillside.

### **Project Status**

The following work has been completed or is currently on-going in support of the Green Line Extension project:

#### **Public Outreach**

- Advisory Groups – 11 held
- Station Workshops (February 2008) – 5 held
- Interagency meetings (ongoing) – 31 held so far
- Neighborhood briefings– 16 held so far
- Public agency and local official briefings (ongoing) – 43 held so far
- Institution and business group meetings (ongoing) – 3 held so far
- Public Meetings – 5 held so far
- Advisory Group Tutorials – 3
- Public Hearing – 1 held for DEIR/EA

#### **Refinement of Alternatives**

- Completed

#### **Development of Design Criteria**

- Completed

### **Station Location Program and Siting**

- Completed

### **Support Facility Program and Siting**

- Completed

### **Design of Green Line Vehicles**

- Underway (using funding provide by MassDOT, the MBTA and their consultant are currently developing vehicle specifications). The MBTA intends to advertise for vehicle procurement shortly.

### **Alternatives Analysis**

- Completed

### **Conceptual Engineering**

- Completed

### **Design**

- Completed

### **Cost Estimates**

- Completed, currently being reviewed by FTA

### **Construction Staging and Sequencing Plans**

- Completed, currently being reviewed by FTA

### **Real Estate Requirements**

- Completed, potential real estate impacts have been identified as part of DEIR/EA. MassDOT will continue to work with the project team and the MBTA to investigate opportunities to minimize property impacts during Preliminary Engineering.

### **The following major milestones are anticipated for the next few months:**

- FTA New Starts Application – Spring 2010
- Submission of a Final Environmental Impact Report – June 2010

### **Potential Challenges**

The challenge of siting a northside support facility for the storage and maintenance of Green Line vehicles – a facility integral to the implementation of the Green Line Extension as a whole – has proven formidable. MassDOT is continuing to work on the issue and, with public and municipal input and collaboration, hopes to have a resolution soon.

The schedule established for the Green Line Extension project is an ambitious and challenging one, but the Green Line Extension project team is working daily and diligently to meet it.