

Green Line Extension

Cambridge to Medford, Massachusetts

(November 2021)

The Massachusetts Bay Transportation Authority (MBTA) and the Massachusetts Department of Transportation (MassDOT) are jointly constructing an extension to the existing Green Line Light Rail Transit (LRT) route from a relocated Lechmere Station in Cambridge to College Avenue in Medford and Union Square in Somerville. The Green Line Extension (GLX) will operate on the exclusive right-of-way of the MBTA Commuter Rail System, adjacent to existing commuter rail service. The GLX project consists of a 4.3-mile extension of existing light rail service, construction of approximately 0.1 miles of yard lead track and relocation of approximately 0.3 miles of existing Green Line track. In turn, the total project route construction is 4.7 miles.

The scope includes the relocation of existing commuter/freight railroad tracks, construction of approximately 4.7 miles of light rail double track and systems; construction of a new station at Lechmere and six (6) other new stations; construction of 1.26 miles of viaduct; replacement or rehabilitation of eight (8) bridges; construction of a Vehicle Maintenance and Storage Facility (VMF) and an administration building; implementation of new power, signals, and communications equipment; construction of a community path; and procurement of 24 light rail vehicles.

The GLX project will improve mobility for residents of Cambridge, Somerville and Medford by providing a one-seat transit ride to Downtown Boston and the greater Boston metropolitan area. It will serve some of the region's most densely populated communities not currently served by rail transit. Approximately 75,300 residents live within one-half mile of proposed stations, 26 percent of whom do not own or have access to an automobile. The project will reduce transit travel time in the project corridor by approximately 13 to 17 minutes because it will be built on fully grade-separated right-of-way through congested built-up neighborhoods, eliminating the need for passengers to make bus-to-rail transfers. Hours of operation in the opening year will be from 5:00 a.m. to 1:00 a.m. on weekdays and weekends. Service will be provided every six minutes in the weekday peak period, every eight to 11 minutes in the weekday off-peak periods, every 13 to 14 minutes on weekday evenings, and every eight to 10 minutes on weekends.

The total project cost under the Full Funding Grant Agreement (FFGA) is \$2,297.62 million. The Section 5309 New Starts funding share is \$996.12 million.

Status

Following publication of the draft Alternatives Analysis, "Beyond Lechmere Northwest Corridor Study," the Massachusetts Executive Office of Transportation (now MassDOT) identified the GLX project as the locally preferred alternative in August 2005. The Boston Metropolitan Planning Organization approved the project into the financially constrained long-

range regional transportation plan in September 2009. An Environmental Assessment of the project was published in October 2011, with a Finding of No Significant Impact issued in July 2012. Under SAFETEA-LU, FTA approved the GLX project into preliminary engineering in June 2012. The project was grandfathered into the Engineering phase per the revised steps in the New Starts process outlined in the Moving Ahead for Progress in the 21st Century Act (MAP-21). The MBTA and FTA entered into an FFGA in January 2015, with revenue service date of June 2021. Subsequent reviews of the project showed that the project will cost one billion dollars more than the baseline cost. As a result, the MBTA cancelled a lot of the contracts and redesigned the project at a newly estimated cost of \$2.46 billion with an updated revenue service date of January 2022. FTA finds that the redesigned scope of work is consistent with the project scope as set forth in the FFGA of January 2015. The MBTA has hired some new key personnel, updated the Project Management Plan (PMP) and awarded the redesigned contract in November 2017. To date, 90% of construction work has been completed. However, the opening of the project is expected to be delayed beyond the January 2022 date.

Section 3005 of the Fixing America’s Surface Transportation (“FAST”) Act (Pub. L. 114-94; Dec. 4, 2015) authorized FTA to award Federal major capital investment funds for final design and construction of the GLX project. Through FY 2021, Congress has appropriated a total of \$947.71 million in Section 5309 New Starts funds for the project.

Reported in Year of Expenditure Dollars		
Source of Funds	Total Funding (\$million)	Appropriations to Date
Federal: Section 5309 New Starts	\$996.12	\$947.71 million in total appropriations through FY 2021.
Local: Commonwealth of Massachusetts General Obligation Bonds	\$996.12	
Commonwealth Operating Funds	\$305.38	
Total:	\$2,297.62	

NOTES: The Source of Funds and Total Funding numbers are as established at the signing of the FFGA. The sum of the figures may differ from the total as listed due to rounding.

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