

SILVER LINE PHASE III: SOUTH STATION–BOYLSTON CONNECTOR

Description

This project would construct a new transitway tunnel from South Station to New England Medical Center station with intermediate stops at Boylston and Chinatown stations. The segment would link Phase I of the Silver Line, which runs between New England Medical Center and Dudley, with Phase II from South Station to Logan Airport via the World Trade Center. The Phase III segment would also allow for direct transfers from all segments of the combined Silver Line with the Red Line, Orange Line, and Green Line. Silver Line Phase III is an ACO legal commitment.

Capital Features

Construction of a transitway tunnel with three new underground stations at major transfer points with other rapid transit lines. Purchase of additional dual-mode vehicles.

Capital Cost	\$951.9 million (MBTA Planning Dept. estimate)
Operating Cost	\$2,600 per weekday
Daily Ridership Increase on Mode	20,500
Net Increase in Daily Transit Ridership	4,500
Capital Cost/New Transit Rider	\$210,600
Operating Cost per Wkday/New Transit Rider	\$0.60
Capital Cost/Travel Time Benefit	\$386,700 per hour
Operating Cost/Travel Time Benefit	\$1.00 per hour
Travel Time Savings	2,462 hours per weekday

Assessment

This is a high-priority rapid transit expansion project. The capital cost for this project would be \$951.9 million. This figure is a planning level estimate that includes 50% contingency and inflation based on a projected year of expenditure with completion by 2010. The typical daily operating cost would be \$2,600. This project would connect two disconnected segments of the Silver Line and created one through route between Roxbury, Downtown, South Boston, and Logan Airport. The project would attract 20,500 passengers to the mode of which 4,500 would be new transit riders. This project would result in a moderate reduction in air pollution. The anticipated high construction costs result in moderate cost effectiveness per new transit rider despite drawing a large number of new riders. Because the segment of new construction is short and would also result in a combination of two planned or existing services, the operating cost per new passenger would be very low.

The project would provide improved access and connections to the South Boston Waterfront area, which is expected to be an area of high employment growth and mixed use development with residential areas, and would provide improved access from residential areas in Roxbury which are a high priority for environmental justice. Direct transfers would be provided to the Green Line, Orange Line, and the Red Line.

MAP 5-46 SILVER LINE PHASE III: SOUTH STATION-BOYLSTON CONNECTOR

