

Regional

Massachusetts Avenue Rapid Bus

Exclusive bus lane with priority signals and quick bus boarding along Mass Ave

Project Score

- Access 1
- Safety 1
- Reliability
- Sustainability/Resiliency 1
- Sustainability/Resiliency 2
- Governance
- Access 2
- Safety 2
- Affordability

#4 in public voting

Project Description

A designated lane along Mass Ave would facilitate rapid travel for buses and other high occupancy vehicles including university shuttles and on-demand bus services such as Bridj. In addition to the exclusive lanes, which allow buses to avoid the congestion caused by cars, the stations would include all-door boarding, off-board fare collection, and improved waiting areas, which would support and promote transit ridership in this corridor and reward people who take the bus.

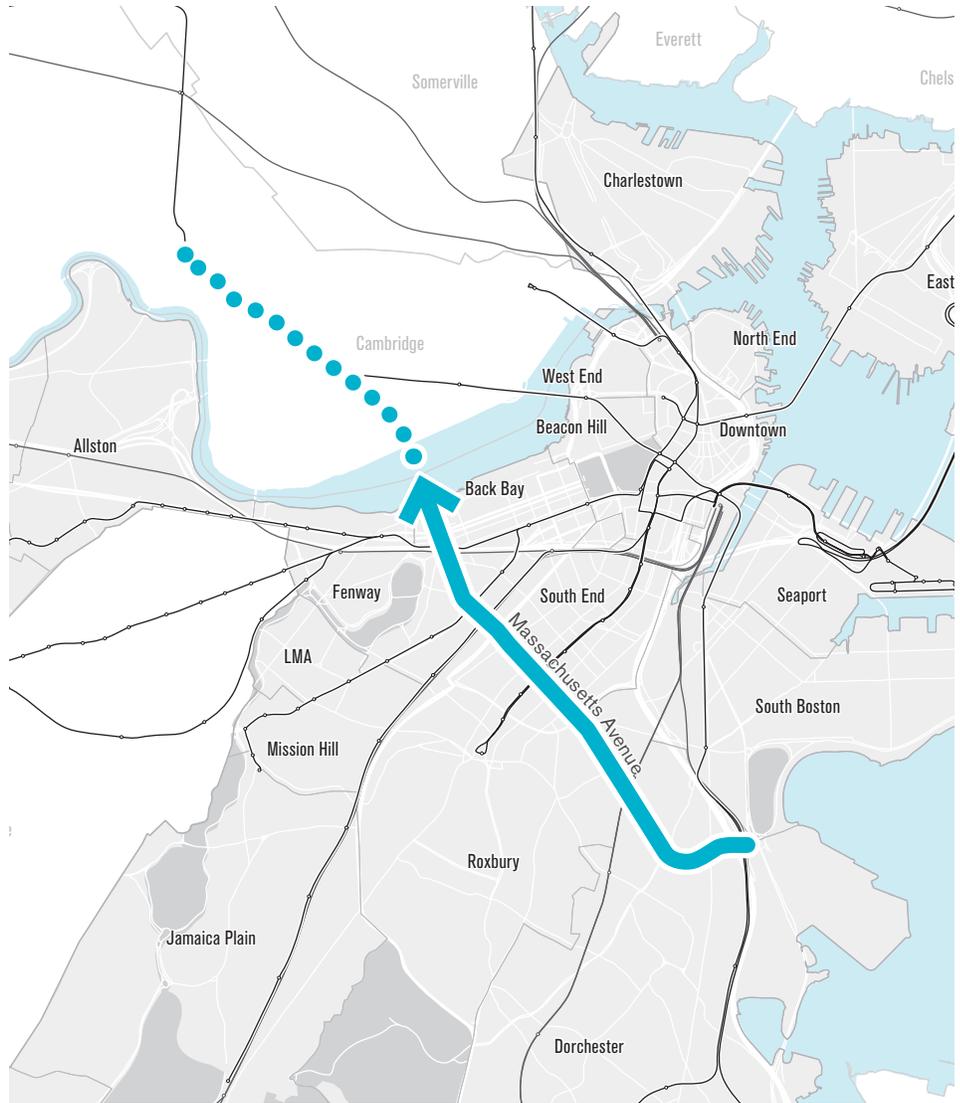
Benefits and Issues Addressed

The Route 1 bus that runs down Massachusetts Avenue from Harvard Square in Cambridge to Dudley Square in Roxbury is among the routes with the highest ridership in Boston. These buses are less than 5% of the vehicles on this corridor, yet they carry up to 23% of the people traveling in motorized vehicles between Beacon and Albany Streets. However, Route 1 buses are regularly stuck in general traffic leading to bus bunching, inconsistent service, and slow overall speeds. Exclusive bus lanes and smart signals that adapt in real-time would help eliminate bunching, improve reliability, and reduce travel times—especially in the Back Bay and South End, improving cross-town connections and transit speed. Delays also occur at stops where long lines of people wait to board and passengers without loaded Charlie Cards slow the process. Off-board payment and all-door boarding can accommodate even the busiest boardings in under 15 seconds, reducing delay significantly. The system could also serve the multiple university and hospital buses operating on Massachusetts Avenue, as well as corporate shuttles, Bridj vans, and other pooling services.

Best Practices

Chicago, IL's, Looplink project reclaimed vehicle travel lanes to offer raised boarding, dedicated bus lanes, and bus tracking monitors coupled with protected bicycle lanes. Multiple routes use these amenities, which now include pre-board fare systems in some places.

www.transitchicago.com/looplink/



Implementation

Approximate Cost: \$43 million for design and construction with vehicle costs to be determined
Potential Funding Sources: City of Boston and Cambridge for design, Boston MPO TIP for construction
Who's responsible: BTD and Public Works with MassDOT and the City of Cambridge
Time Frame: Within 5 to 15 years in conjunction with local community process

Public Input

"Transit Signal Priority for MBTA buses along key corridors:... The Mass Ave corridor, at least, could greatly benefit from this—I often see #1 and #77 bus bunching, and I feel bad for the passengers when this is the case. I often decide to walk along Mass Ave because I usually don't have faith in the bus arrival estimates, but would be more inclined to climb on board if I knew the bus would be able to sail through the traffic signals."
 —02130