ARLINGTON

Repurposing Parking to create a Morning Bus Lane

Morning Peak Time Dedicated Bus Lane

Pilot: October to November 2018 (30 days)

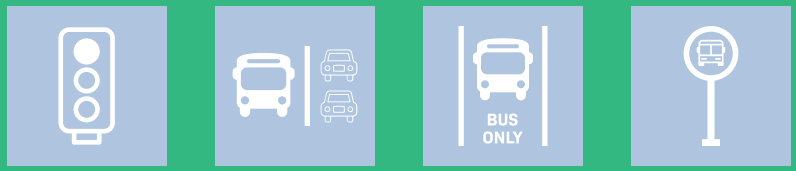
Permanent: October 2019

Arlington Bus Stop // Ad Hoc Industries

As bus priority projects began popping up around the Boston region, Arlington staff were observing significant traffic congestion at multiple intersections, especially on Massachusetts Avenue, the main corridor through the Town.

When Arlington first began considering bus interventions, Town staff used the MBTA's boarding data, including how long it took the bus to get through each traffic signal, to understand where bus delays were happening. This was helpful for the team to understand the source of the problem and develop a compelling solution. Arlington saw that Massachusetts Avenue (also known as US Route 3/State route 2A) was a severe bottleneck for bus traffic. Massachusetts Avenue is a major northsouth connecter and key route into Cambridge and Boston, which meant that bus improvements would have a substantial impact on reducing commute times for many people.

Town staff decided to pilot bus improvements along this corridor on the inbound direction. Arlington announced that the project was going to have multiple Bus Rapid Transit (BRT) elements. Working with a $100,000 grant through the Barr Foundation and a team of consultants, and in coordination with the MBTA, City of Cambridge, and the MA Department of Conservation and Recreation, four BRT elements were incorporated into the pilot – transit signal priority (TSP), queue jumps, a dedicated lane, and consolidated bus stops. The BRT proposals were vetted at several community-wide and East Arlington neighborhood meetings.



Arlington Public Art // Arlington BRT

ARLINGTON BRT

Like other bus priority projects in the region, Arlington's lane had to work with existing infrastructure. A complete reconstruction of Massachusetts Avenue in East Arlington recently occurred so the Town had to adapt the completed reconstruction to incorporate these BRT elements that were not contemplated when the reconstruction was originally conceived.

Arlington initiated their month-long pilot on Massachusetts Avenue in the fall of 2018 from the beginning of October to the beginning of November. The bus lane was piloted in the morning peak commuting time from 6:00 a.m. to 9:00 a.m. in the parking lane on the eastbound section of the road between Varnum Street and Alewife Brook Parkway, benefiting MBTA bus routes 77, 79, and 350. The BostonBRT team, led by ITDP, initiated a partnership with the Arlington Commission for Arts and Culture to implement a series of art installations at bus stops along the corridor which brought beauty and a sense of place and comfort to the bus experience during the pilot, which they called ARTBRT.

Throughout the pilot, Arlington led extensive, regular meetings with the business community, neighborhood associations, and elected and volunteer committees. As the project progressed, one local business along the corridor voiced opposition due to the loss of onstreet parking. MAPC conducted a parking study that was crucial to dispel assumptions that the reduction of parking spaces would hinder their business.

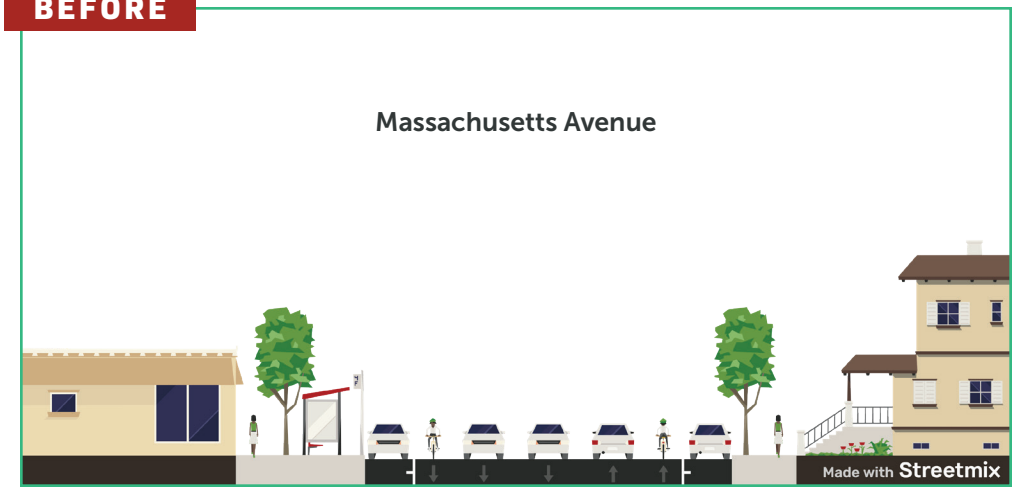
In addition, the Town and ITDP collected survey data from both bus and bike riders using the new infrastructure. The data showed that bus riders were in strong support. After extensive surveying of users, Arlington was able to report that of the 382 responses they received, 73% wanted the bus lane to become permanent.

Due to this strong showing of public support and data showing the success of the project in improving bus travel times and reliability, Arlington's Select Board approved making the pilot permanent in February 2019. However, the project was not implemented until October 2019, a year after the initial pilot project, due to challenges with technical capacity and available funding to design and install the bus lane. The Town worked with the MBTA over the spring and summer of 2019 to address issues related to funding, design, and product sourcing.

Arlington originally considered improvements and a bus lane that would stretch over a mile along Massachusetts Avenue, but the final lane ended up being only about one quarter of a mile. Although this seems short, in the context of the corridor and the severe congestion experienced at the Mass Ave and Alewife Brook Parkway intersection, the bus lane helped address a critical bottleneck for buses they faced on this corridor every morning.

The Town had planned to lay down red glass bead aggregate on only portions of the lane, due to the high cost of the material. After working with the MBTA on the design and discussing the funding issues faced by the Town, the MBTA provided supplemental funding to install red glass bead aggregate along the entire bus lane. The permanent installation of the bus lane, primarily the cost of the red glass bead aggregate, initial police details, and signs, was funded by the MBTA and the Town's Transportation Network Company (TNC) funds (payments from the state that disburse fees collected for every TNC ride) for about $95,000.

BEFORE



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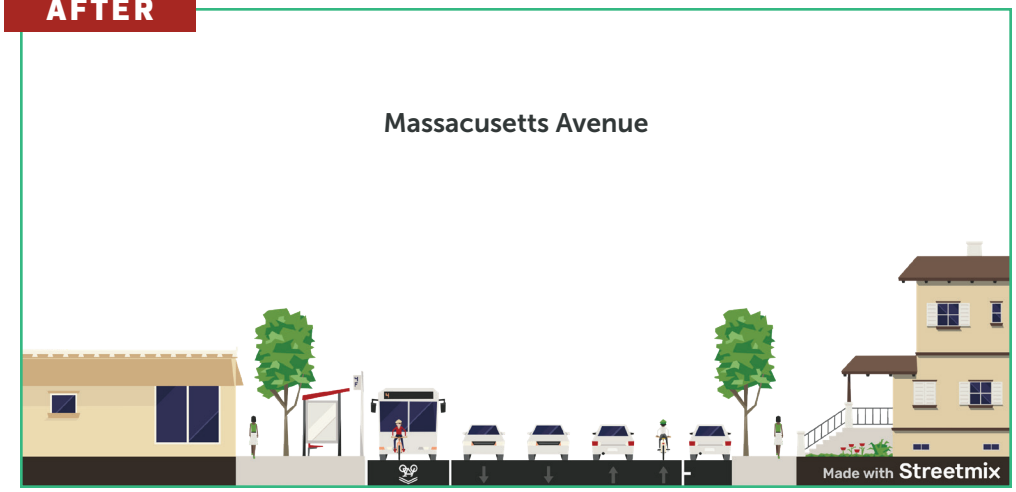

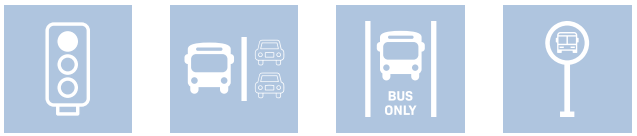

DATA

Type of Improvement:
AM Peak bus lane (6am-9am)

Length of Improvement:
0.2 miles

Bus Routes Along Corridor:
97, 104, 109, 110, 112

Exact Location:
In the parking lane on the eastbound section of the road between Varnum Street and Alewife Brook Parkway on Mass Ave.

Starting Intersection/Point:
Massachusetts Avenue at Varnum Street

Ending Intersection/Point:
Massachusetts Avenue at Boulevard Road

Weekday Ridership: 10,000 people

Vehicles Allowed to Use Bus Lane:
MBTA buses, emergency vehicles, school buses, bikes

Multimodal Improvements:
Bus and bike improvements

Land Uses Along Corridor: Commercial and residential

Pilot or Direct to Permanent: Pilot first, then permanent

Dates of Pilot: October to November 2018 – 30 days

Dates of Permanent Implementation: October 2019

Parking Study: Yes (by MAPC)

Planning Study: None

Average bus rider time saved: 10 minutes

Post-implementation Survey Satisfaction:
Bus Riders – 81% positive
Bike Riders – 94% positive