When will the pilot start and how long will it last?

The pilot is being implemented during two weeks -- October 15 to October 26, 2018. It is a "quick-build" project, implemented with paint, signs, and changes to traffic signals, and has no specific end date. The design will stay in place while we evaluate and adjust the design, if needed, to inform our long-term planning for this corridor.

Where will the changes occur?

Bus and bike only lanes will be painted primarily in the eastbound direction on Mount Auburn Street between Ralph Piteri Terrace in Watertown and Coolidge Avenue in Cambridge. In addition, there will be bus and bike only lanes on inbound Belmont Street between Brimmer Street and Mt. Auburn Street. A short section of Mount Auburn St. in Watertown will have bus lanes in both directions.

Location of the bus-bike only lanes

Approximate locations of bus lanes
What are the key design features of the pilot?

- **All-day bus and bicycle only lanes** painted in red.

- **Transit Signal Priority** at up to two intersections to sense when a bus is approaching an intersection and give that direction of travel more priority or green time in the signal cycle.

- A **transit queue-jump signal** to give buses a few seconds head start on traffic at the Coolidge Avenue intersection.

- New **signal timing and coordination** to improve throughput and flow overall on Mt. Auburn Street.

- **New lane markings** clarifying turn lanes.

- A **westbound bicycle lane and green marked conflict areas** on Mt. Auburn Street and Belmont Street west of Brattle Street.

- **Lane reduction at the pedestrian crossings** on the east sides of Aberdeen Avenue and Brattle Street with hatched out areas in the center.

- A “**bent**” approach on Brattle Street to Mount Auburn Street to give traffic priority to Mount Auburn St and reduce traffic conflicts and crashes. This results in a safer, shorter bicycle crossing and better visibility for people turning from Brattle Street to Mount Auburn Street. It also reinforces that Mount Auburn Street traffic has priority over Brattle Street traffic.

- “**Shark’s teeth” yield markings** at the crosswalks on Mt. Auburn and Brattle near their intersection.

Why are we making bus only lanes?

During the morning rush hour, on Mount Auburn Street from Brattle Street to Coolidge Ave, just 3% of vehicles are MBTA buses but buses carry 56% of people on the street. Designating bus only lanes creates faster and more reliable bus service for more than 12,000 daily MBTA bus riders and shuttle passengers and improves traffic flow for everyone on the road. It also provides a space for emergency vehicles to use.

Why is the bus lane all day? Why not have a peak hour-only bus lane?

The bus lane will be in effect all day and all week because traffic counts indicate that outside of the peak hours, with bus lanes, Mount Auburn Street can accommodate traffic demand. There also may be a perception that few people ride buses during the afternoon rush hour in the eastbound/inbound direction. However, in the weekday afternoon rush hour, ridership is equivalent to half of the very busy morning rush hour. Again, for this stretch of Mount Auburn Street, this means just under half of all people traveling eastbound in the PM rush hour are on the bus.

There will only be one eastbound general traffic lane from Brattle Street to Coolidge Ave., won’t this make it take longer for me to drive through the area?

When fully implemented, it will take drivers roughly the same amount of time to travel through the area as before the pilot. While it may seem like these changes would result in a longer queue, we are timing signals to move more people through the intersections in this area. With these changes, we intend to improve overall traffic flow while giving the buses a significant benefit, resulting in an incentive for people to take the bus. Fewer drivers also means better conditions for those who still drive.
How will parking be affected?

No parking is proposed to be removed for the bus lane. Where there is parking at the curb, it will remain for this pilot.

Where do I take a right turn or park from – the red bus lane or the general travel lane?

From the bus lane. The boundary line and red paint becomes dashed to show drivers where to enter to make a right turn. Drivers may enter the red lane near a parking spot briefly to parallel park where parking is allowed at the curb. In addition, drivers may also enter the bus lane to turn into a driveway. Drivers must yield to buses and bikes when entering the red lane.

Will I still be able to turn onto and off of side streets, driveways, and on Brattle Street?

Yes, the intent was to accommodate the same kinds of movements and turns onto and off of side streets. We hope these movements will be slightly easier with more predictable and clearer lane striping and travel patterns. We also carried out queue and delay observations in the prior conditions and found that the time in which people experience delay is limited to a very short period in the day.

As a driver, how do I park when there is a red bus lane?

Drivers may pull into the bus lane in order to parallel park on the curb. Please signal and look carefully and yield to all people cycling and buses in the lane.

How do I take a right turn when there is a red bus lane?

A driver may enter the bus lane 150’ in advance of the turn in order to make a right turn. The bus lane is dashed near the turn to give drivers a visual cue that they may enter the lane only to take right turns.

Why is there a bike lane only on the north side and what are cyclists expected to do on the south side?

We had a limited amount of space to work with and focused on providing a wide bicycle lane in the westbound direction, where cyclists used to share the lane with all traffic, trucks, and buses. In the new design, cyclists have their own space in the westbound direction, and in the eastbound direction they share the dedicated lane with buses and shuttles. Even though these vehicles carry a large portion of the people on Mt. Auburn Street (sometimes, more than half), they are a very small number of total vehicles. Cyclists often will be able to use the bus lane by themselves. Cyclists are encouraged to take the lane and move at a comfortable speed. Bus drivers are being instructed not to crowd or pass cyclists unless the adjacent lane is clear.
As a cyclist, how should I use the bus lane?

The eastbound red lanes are shared bus-bike lanes. Cyclists should ride down the center of the bus lane, as indicated by the bicycle symbol ("sharrow"). It is NOT intended that cyclists or buses should be able to pass each other in this 11’ lane. Instead, buses and cyclists should share the lane and wait comfortably behind each other. Cyclists should NOT try to ride close to the curb to allow a bus to pass.

More information about shared bus-bike lanes can be found here: https://nacto.org/publication/transit-street-design-guide/transit-lanes-transitways/transit-lanes/shared-bus-bike-lane/

On the north side of Mt. Auburn Street (heading west toward Watertown or Belmont Street), there is a regular bicycle lane next to a mixed traffic lane.

What has been done to improve pedestrian safety along Mt. Auburn Street?

This project did not include any construction, so improvements are limited to what could be done with “paint”. Crosswalks were refreshed where possible and yield triangles installed in advance of crosswalks to support visibility and encourage yielding. In addition, at the Brattle intersection at Mt. Auburn Street, pedestrians now only have to cross three lanes of traffic, instead of four.

What happened to the Brattle Street merge?

The Brattle Street westbound merge onto Mt. Auburn Street has been changed through restriping and flex posts to better enforce the priority of Mt. Auburn Street through traffic compared to traffic entering from Brattle Street. The merge area was a high crash rate as there are many conflicts between drivers, buses (including a bus stop that was removed at Aberdeen), and cyclists. By bending the Brattle street approach to Mt. Auburn Street, drivers on Brattle St. must now come to a full stop and look for conflicts before pulling out into Mt. Auburn Street traffic. This also gives more priority to the higher traffic and bus volumes on Mt. Auburn Street.

In addition, the driveways that once forced drivers to pull out of homes or businesses and contend with merging traffic from both Brattle and Mt. Auburn Street are now brought directly to Mt. Auburn Street. All movements from the driveways, left or right turns, are still allowed.
What is the strange signal with the white/grey bars?

These are signals designed to communicate to bus drivers and are for buses. They are different from the typical green, yellow, and red signals so that people don't get confused by indications that are intended only for bus drivers. People should follow the signal heads that are green, yellow, and red and ignore the white/grey signals.

What is being done for enforcement?

Police will be monitoring and enforcing the correct use of the bus lane. When we first install the bus lane in October, the police will focus more on helping drivers understand what they are supposed to do. After a short time period, the police will enforce by giving tickets when warranted.

Is the City planning to evaluate the impacts of the pilot project?

Yes. We collected traffic and safety data before the pilot was implemented and plan on a two-phase evaluation. Immediately after the pilot is implemented, in November and December, we will observe how the project is working, share a post-implementation survey, and look at transit data. We can modify the design if needed. In the spring, we’ll do another round of data collection and traffic analysis to assess the impact of the project.

What are the next steps for Belmont Street, Mt. Auburn Street, and Fresh Pond Parkway?

After the pilot project is implemented, the City of Cambridge will engage in a design process for Belmont Street. The City expects to begin reconstruction of the short portion of Belmont Street in Cambridge in late 2019. Watertown also plans to start its reconstruction of Mt. Auburn Street in 2022. The nearer-term Fresh Pond Parkway/Mt. Auburn changes are a Department of Conservation and Recreation project, also expected to begin construction in 2019.

Who is involved in this project and who can I contact if I have other questions about the Mount Auburn Street Bus Priority Pilot Project?

This project is a collaboration of the City of Cambridge, Town of Watertown, the Massachusetts Bay Transportation Authority (MBTA) and Massachusetts Department of Conservation and Recreation (DCR) with funding from the Barr Foundation.

The point of contact for this project is Tegin Teich at the City of Cambridge Community Development Department.

Tegin Teich
tteich@cambridgema.gov
617-349-4615