

# Mount Auburn Street Bus Priority Pilot

[cambridgema.gov/MtAuburnBusPriority](http://cambridgema.gov/MtAuburnBusPriority)

Public Meeting

May 01, 2018

# Meeting Overview

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- Introductions and opening remarks (10 minutes)
- Presentation (30 minutes)
- Questions and answers (10 minutes)
- Stations for small group input (40 minutes)



**Massachusetts Bay  
Transportation Authority**



**ITDP**  
Institute for Transportation  
& Development Policy



# Presentation Contents

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- Overview of planning projects
- Mt Auburn Street Bus Priority Pilot
  - Purpose and context
  - Concept
  - Expected outcomes
  - Process and evaluation
- Stations for small group input



# Overview of planning projects





# Projects

2016 - 2017

DCR Mt. Auburn Street  
Corridor Study

2018

DCR Short Term  
Design Implementation

2018

BostonBRT Mt. Auburn St.  
Bus Priority Pilot

2018 - 2021

Cambridge Belmont St.  
Design and Construction

2022

Watertown Mt. Auburn St.  
Complete Street Project





# Cambridge Belmont Street Design/Construction

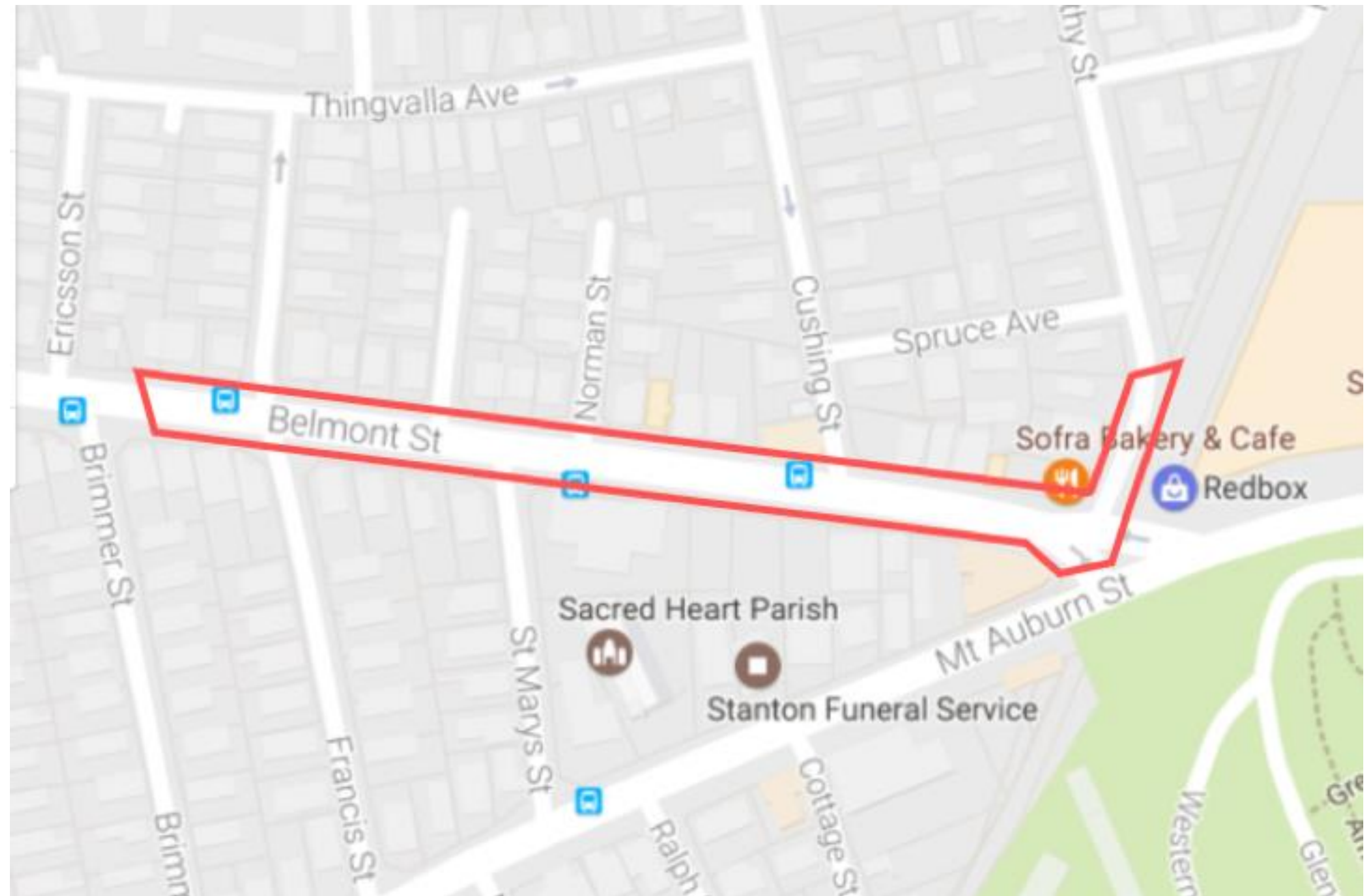
- New sidewalks and paving, improve accessibility, improvements for all users
- Belmont St and Holworthy St (up to #37-39)

## Schedule:

- Design: 2018 – early 2019
- Bid: July 2019
- Construction: summer 2019 – 2021

## Contact

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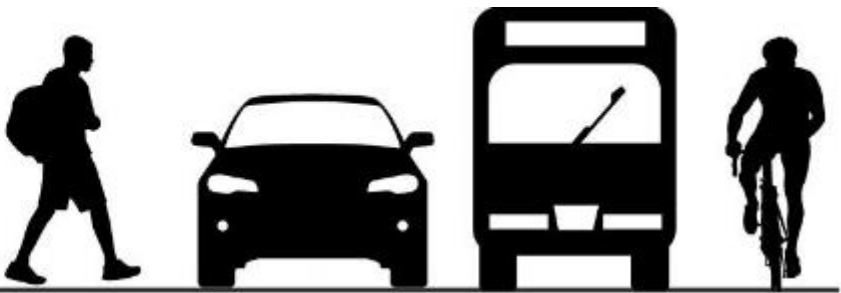


# Watertown Mt. Auburn Street Complete Streets Project and Watertown Square Improvements Project

- Create a safer road through traffic calming and street design, while also maintaining road capacity
- Promote alternative modes of transportation such as walking, biking and public transit to decrease congestion
- Schedule: Design underway, construction anticipated 2022

<https://mountauburnstreet.com/>

**Mount Auburn Street**



A Complete Streets **Project**

<https://watertownsquareimprovements.com/>

**Watertown Square**

Improvements **Project**





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# Mount Auburn Street Bus Priority Pilot



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# Purpose and context





# Policies

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## **1992 Cambridge Vehicle Trip Reduction Ordinance:**

Established programs to encourage alternatives to single occupancy vehicle trips

## **1993, 2007 Cambridge Growth Policy:**

Emphasizes sustainable modes of transportation (walking, biking, and using transit) and low-emission vehicles



## **Cambridge (2016) and Watertown (2017) Complete Streets policies:**

Complete Streets are designed and operated to enable safe access for all users – regardless of age, ability, or mode of transportation.



## **2016 Cambridge Vision Zero policy:**

Calls for the elimination of fatalities and serious injuries resulting from traffic crashes, and emphasizes that they can and should be prevented.



# Plans

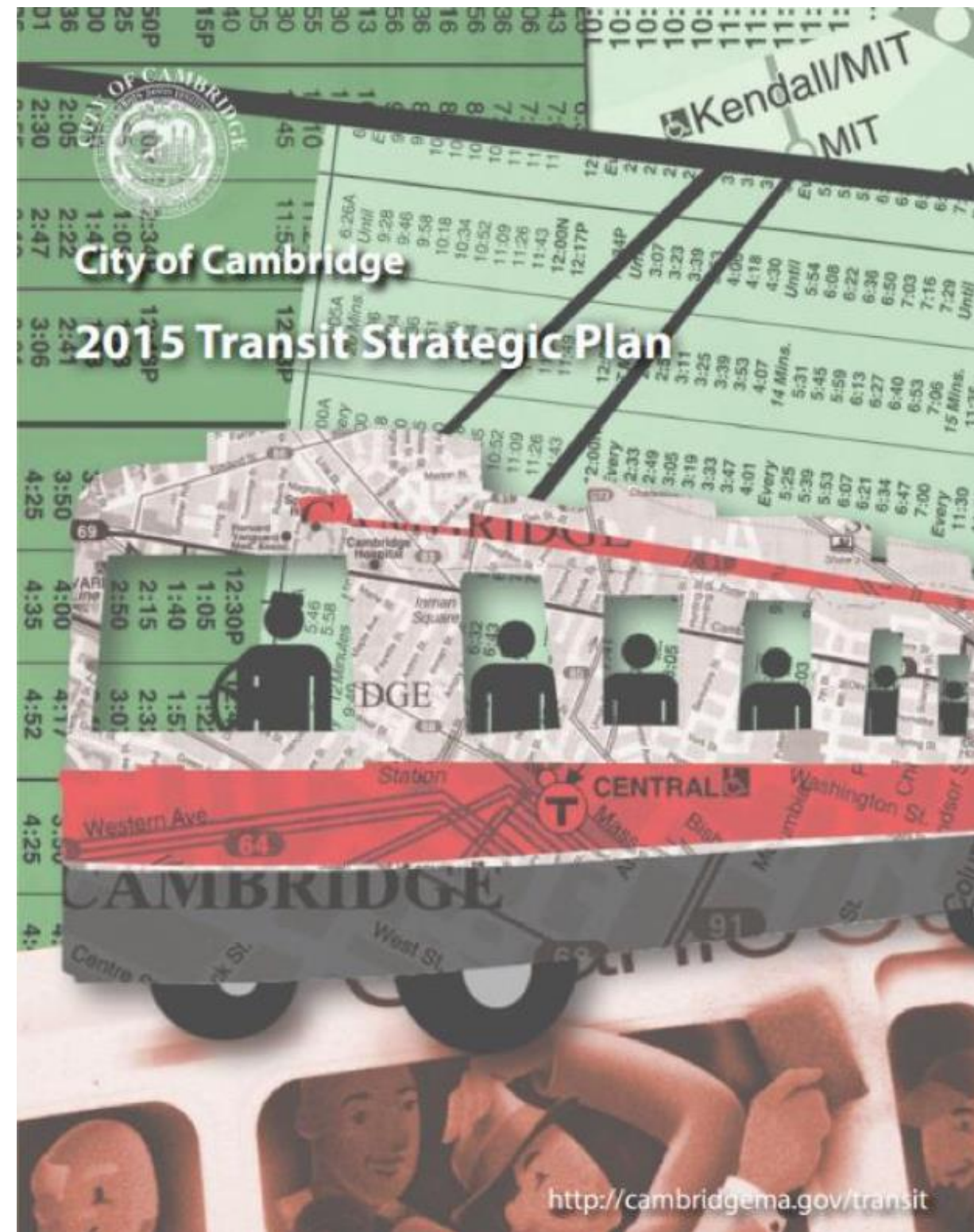
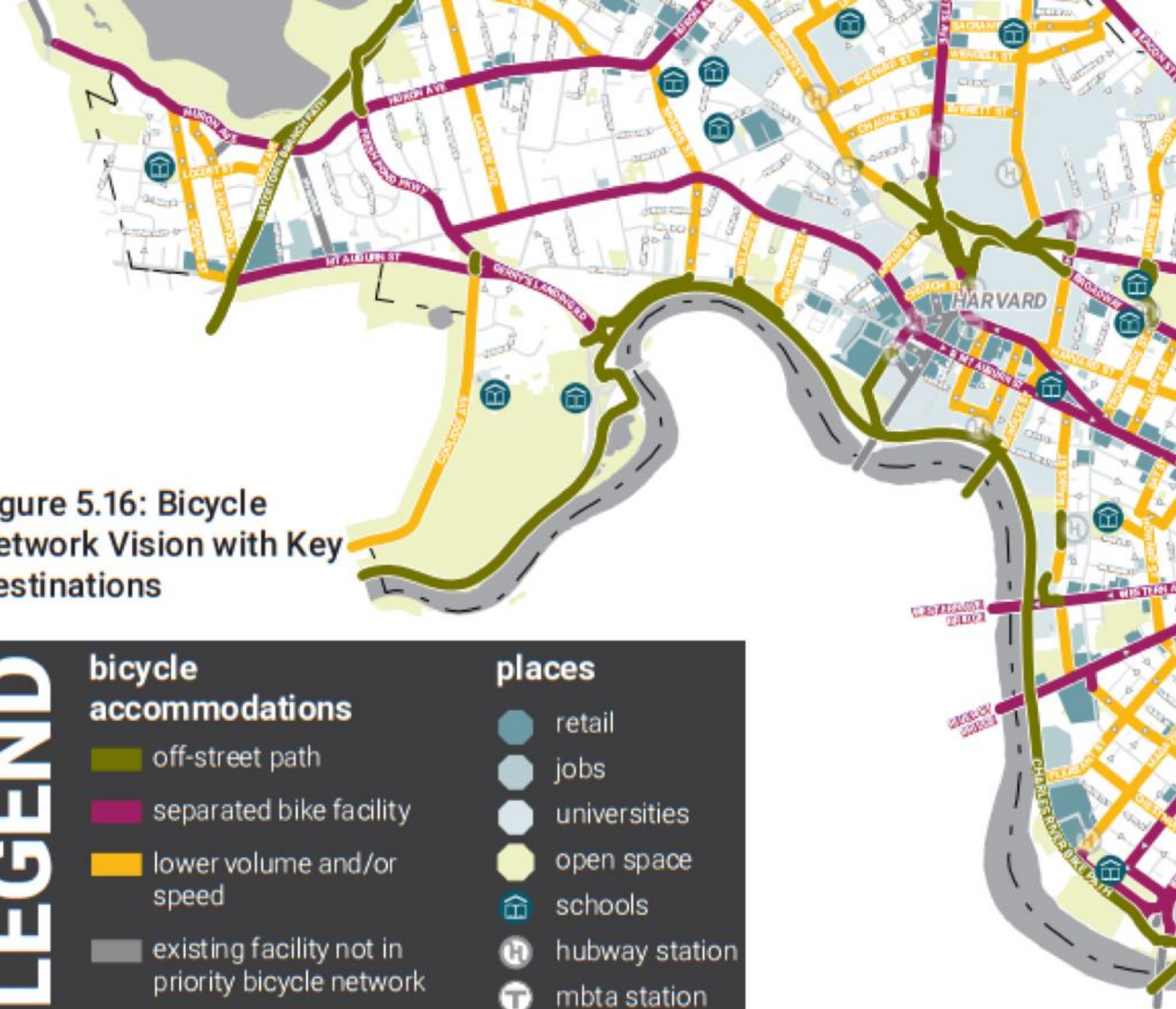
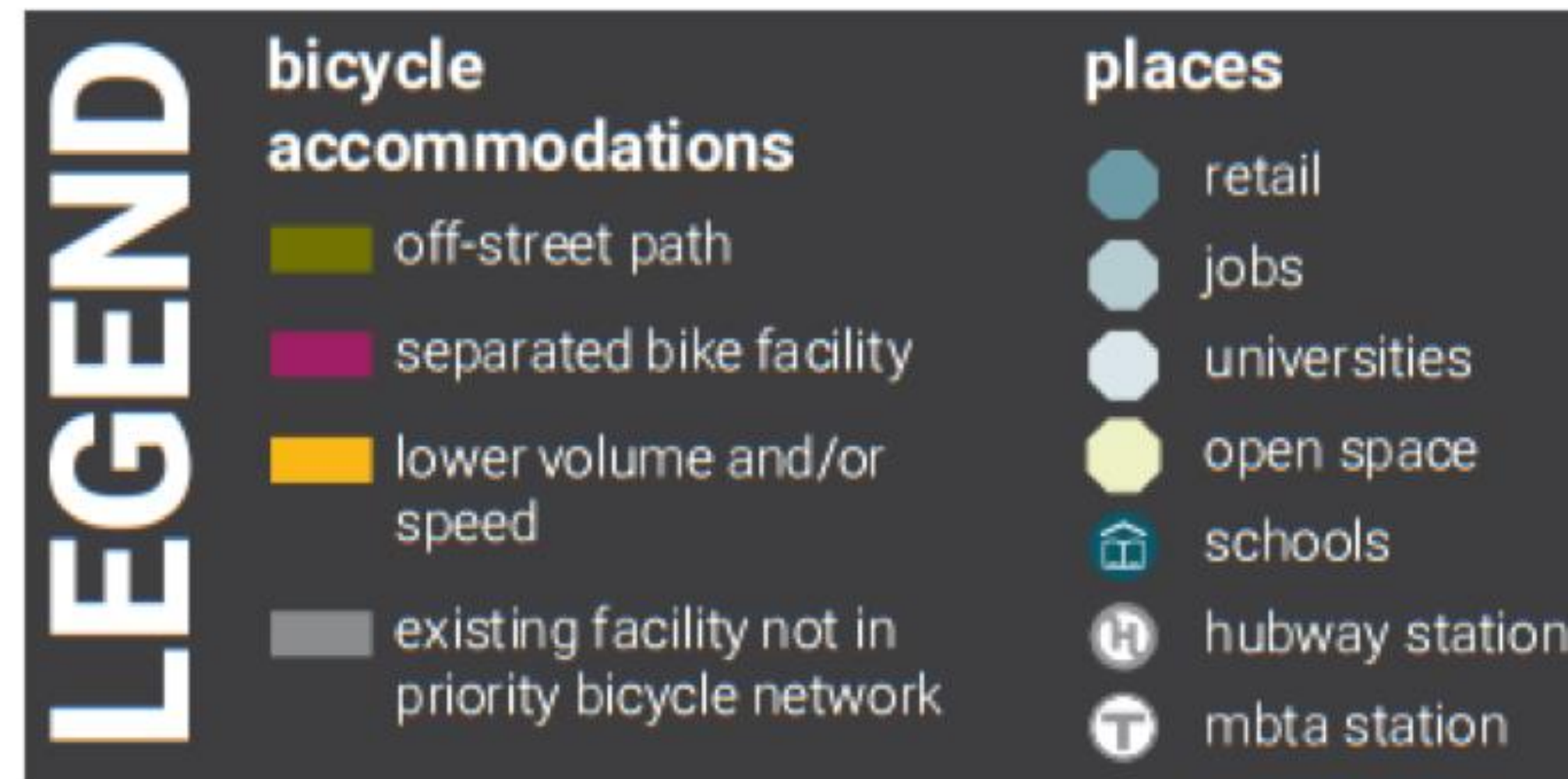


Figure 5.16: Bicycle Network Vision with Key Destinations





# Public Transit / Buses

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- The region is growing economically and regional traffic is increasing
- Public transit is the most efficient way to capture and serve that growth in a sustainable way, reduce congestion, relieve demand for parking
- A 30% increase in transit trips in the region is predicted by 2035 (LRTP)
- Bus service is the “easiest” to expand and is the most local service, **but suffers from significant delay and reliability challenges**





# **BostonBRT Grant Background: Gold Standard Bus Rapid Transit (BRT) - The Ultimate Bus Experience**



**New, clean, high-capacity buses**

**Dedicated bus lanes**

**Enclosed and secure stations**

**Rapid, level boarding**

**Pre-board payment**

**High quality pedestrian and bike access**



# Example BRT in the U.S.

## HealthLine in Cleveland, OH

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Online sources: Active Transportation Alliance and Sasaki



# Bus Priority Pilots on the rise in Boston

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**Roslindale Pilot  
(Washington St)**



**Everett Bus Only Lane  
(Broadway)**



**Somerville Pilot  
(Prospect St)**





# Cambridge – Watertown Boston BRT Grant Mt. Auburn St. Bus Priority Pilot Goals

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- Implement some recommendations from the DCR Study
- Test and refine a design that makes bus travel more reliable, predictable, faster
- Enhance safety for people walking and cycling on the corridor
- Keep driving travel time similar overall and improve safety
- Inform the Cambridge Belmont St., Watertown Mt. Auburn Street, and Watertown Square projects





# Pilot Context

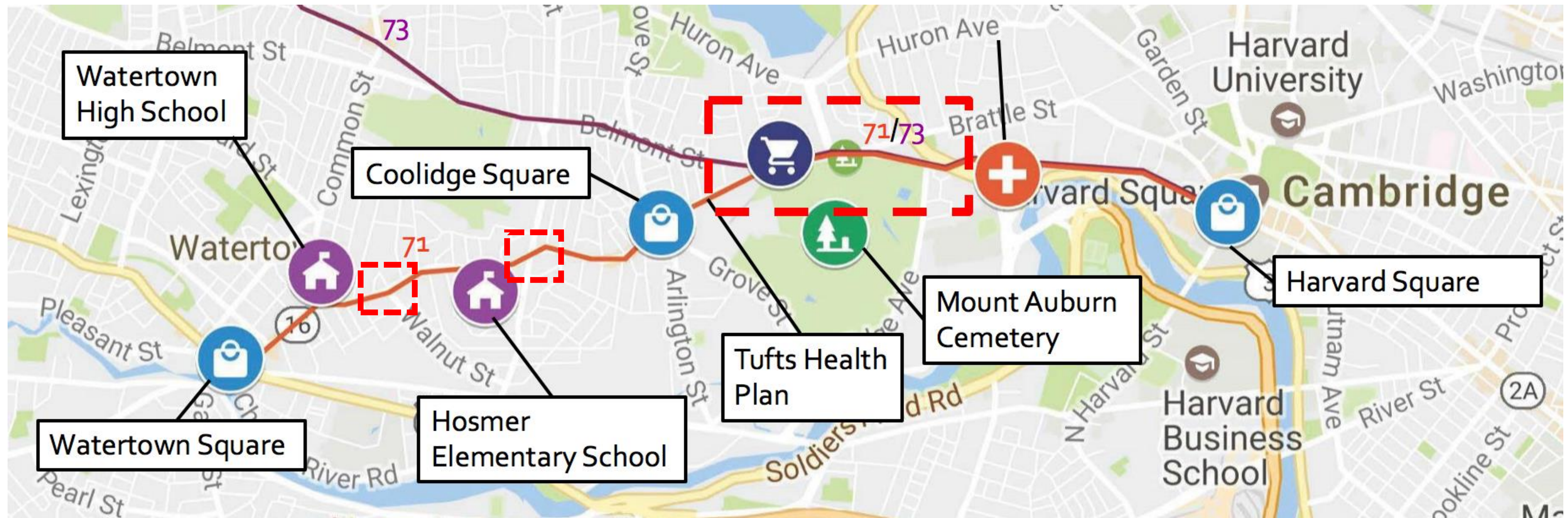
MBTA Route 73 (Harvard to Waverly Square)

MBTA Route 71 (Harvard to Watertown Square)

Mount Auburn Street is typically two travel lanes in each direction and carries up to 19,000 vehicles per day

MBTA Route 71 and 73: 12,000 weekday daily passenger trips combined

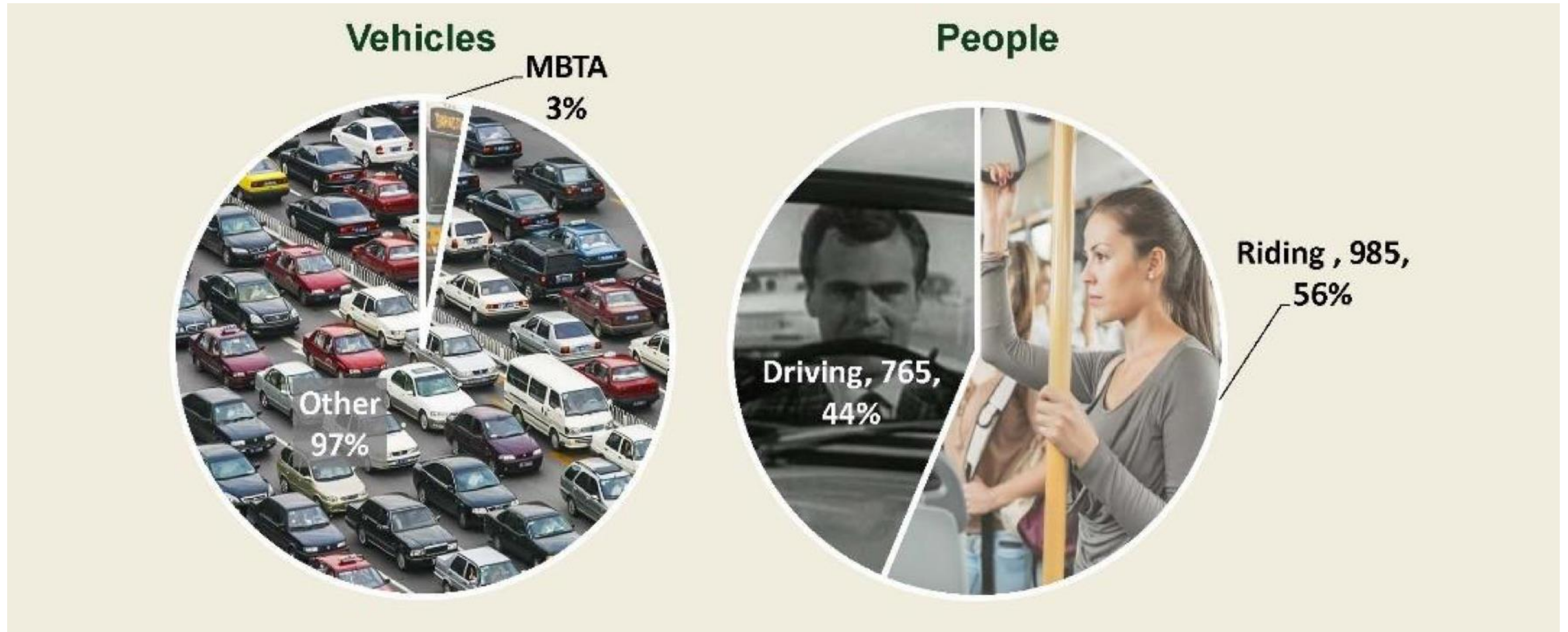
Shuttles: Mt. Auburn Hospital, athenahealth, Bentley, etc.





# Brattle St. to Coolidge Ave. (AM Peak)

Vehicle Volumes vs. People Volumes on Mt. Auburn St. between Brattle Street and Coolidge Avenue



(Source: DCR Public Presentation, January 10, 2016, Slide 70)

<http://www.mass.gov/eea/agencies/dcr/conservation/planning-and-resource-protection/projects/mount-auburn-street-corridor-study.html>



**Concept**





# BostonBRT Bus Priority Pilot Project



Cambridge and Watertown Barr Foundation grant to **pilot bus priority** on Mt. Auburn Street west of Fresh Pond Parkway

## Pilot

- Minimal or no construction, paint, signal changes, signs, education and enforcement
- No specific timeframe, intended to test and evaluate

## Proposed features - bus and bike priority

- All day bus/bike-only lanes eastbound (toward Harvard) and signal priority
- Bus queue jump lanes at Walnut and School Streets in Watertown
- Bike lanes in Cambridge westbound (toward Watertown/Belmont)

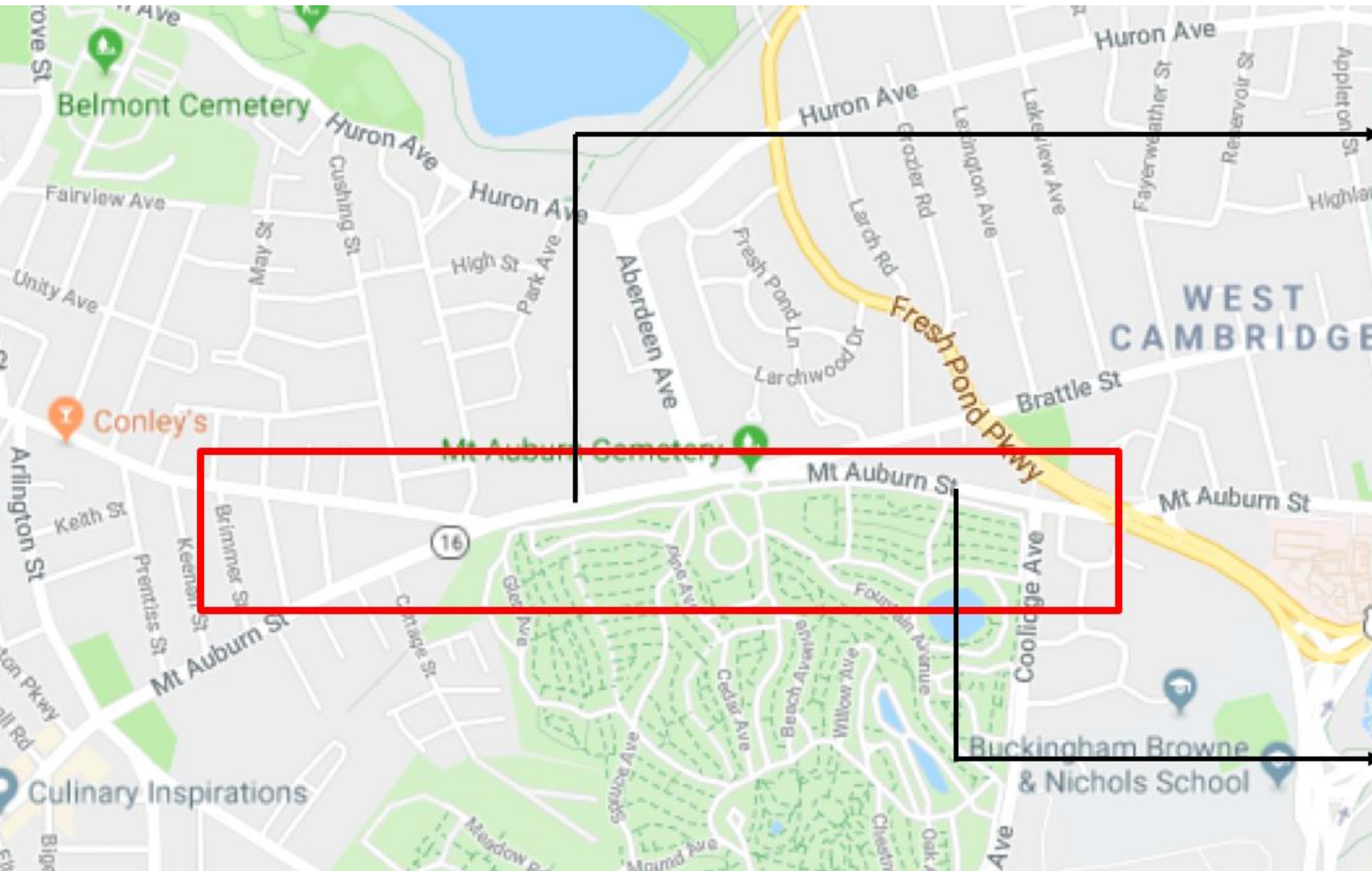
*MUST* be implemented in conjunction with DCR's short-term design

- Minor construction and signal improvements at Coolidge Ave and Fresh Pond Pkwy
- Improve traffic flow and improve pedestrian and bicycle safety



# Existing Conditions

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# DCR Short-term Design

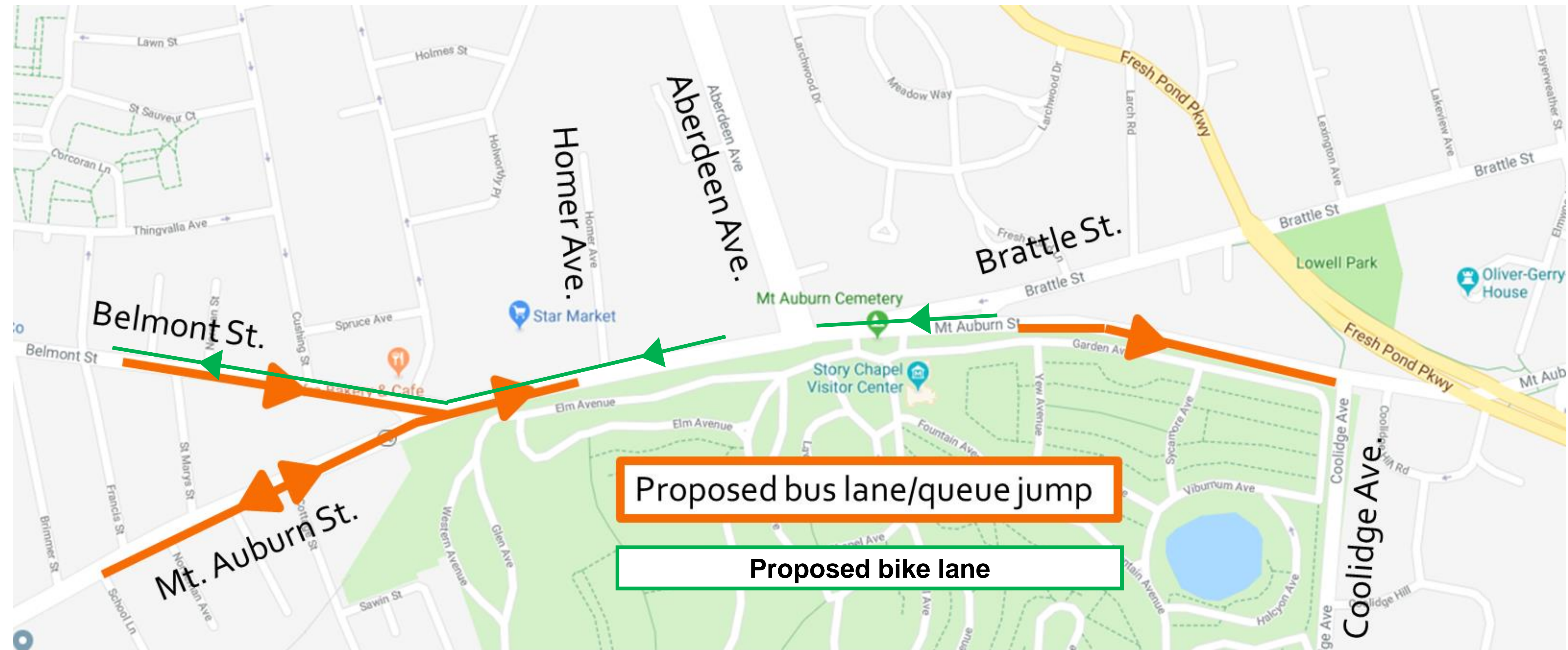
Design in progress. Existing conditions shown.





# Conceptual Layout

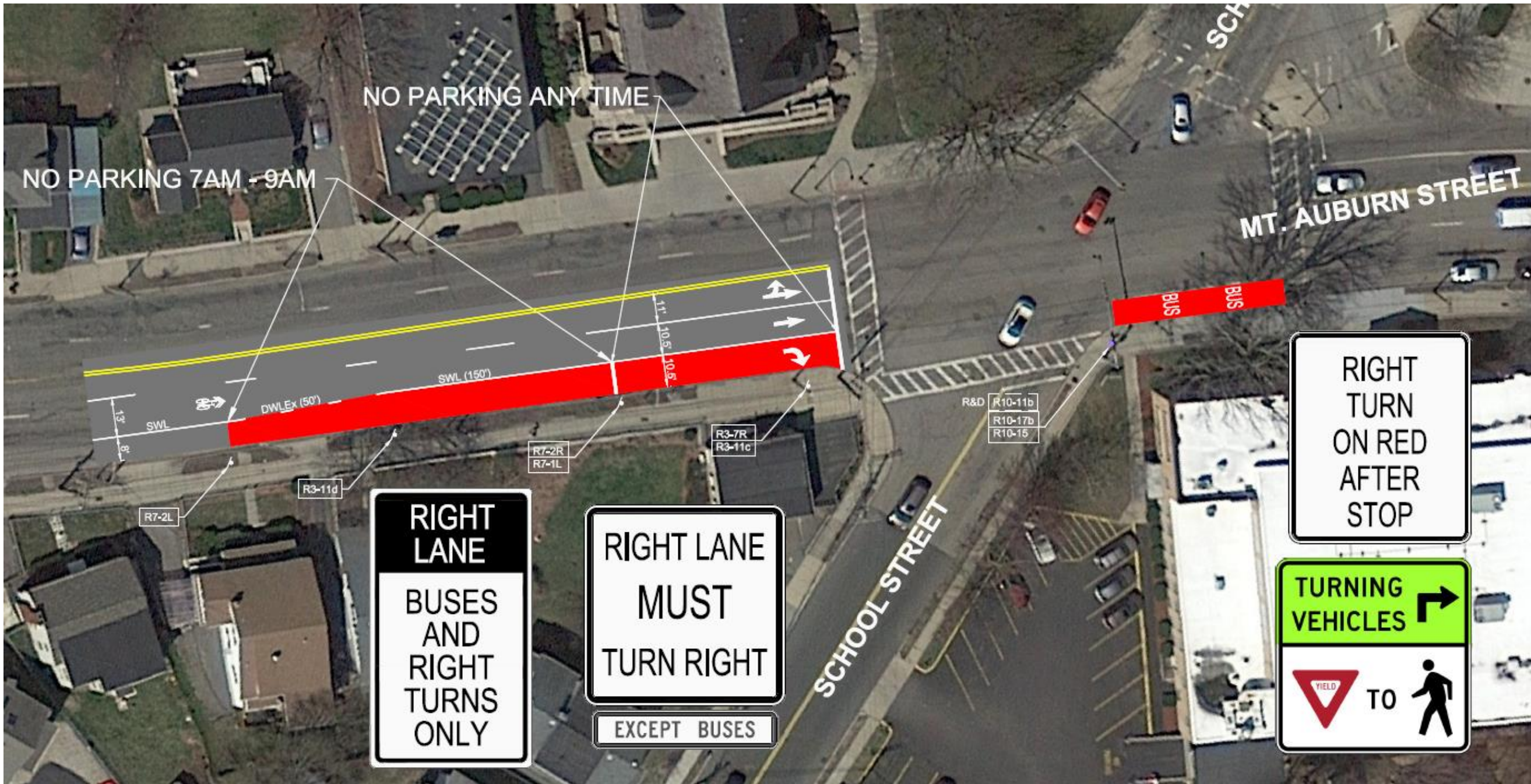
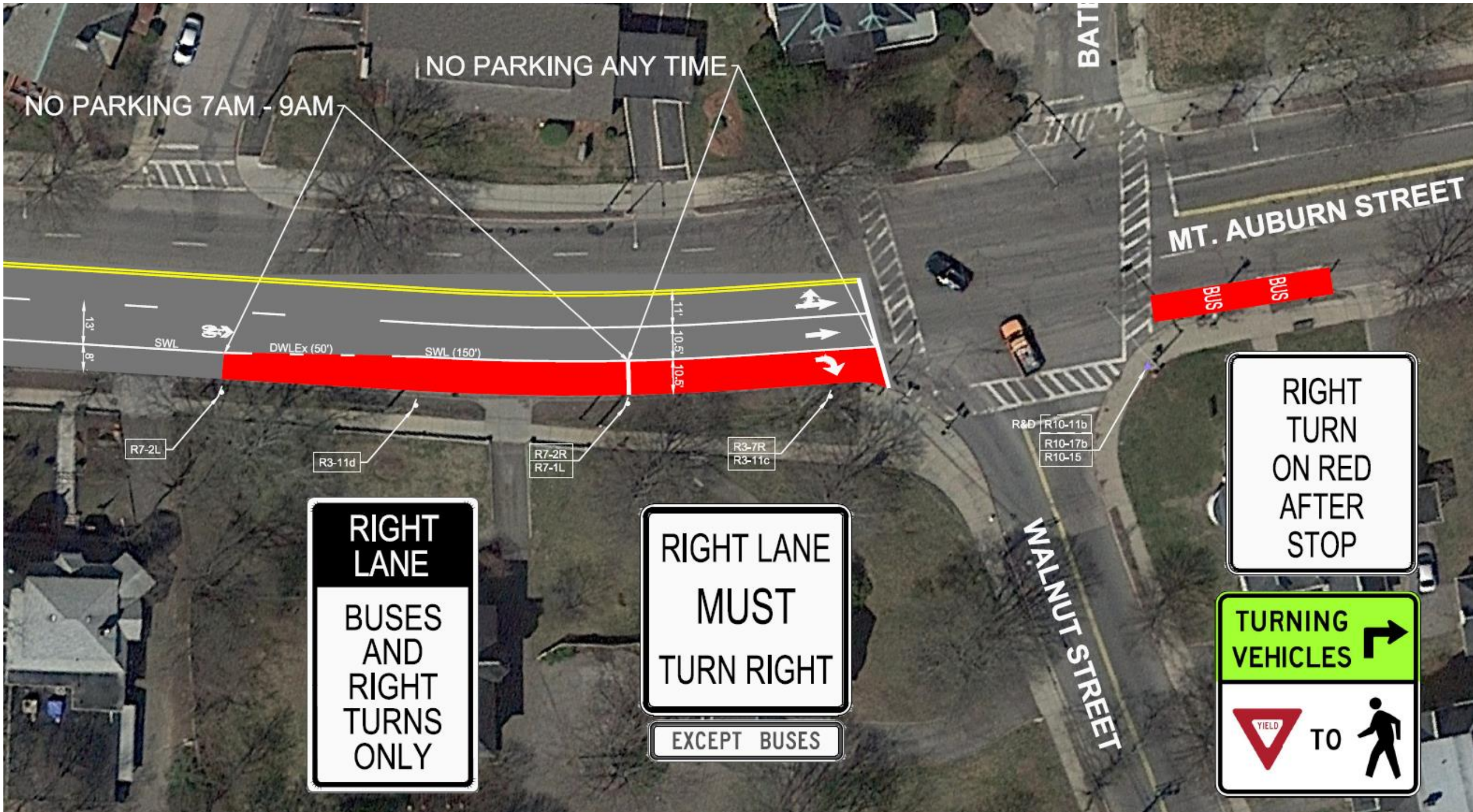
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# Walnut Street & School St

- Inbound Right turn/ Queue jump lanes
- Longer in morning – 7 am to 9 am parking restriction
- Right turns on red allowed





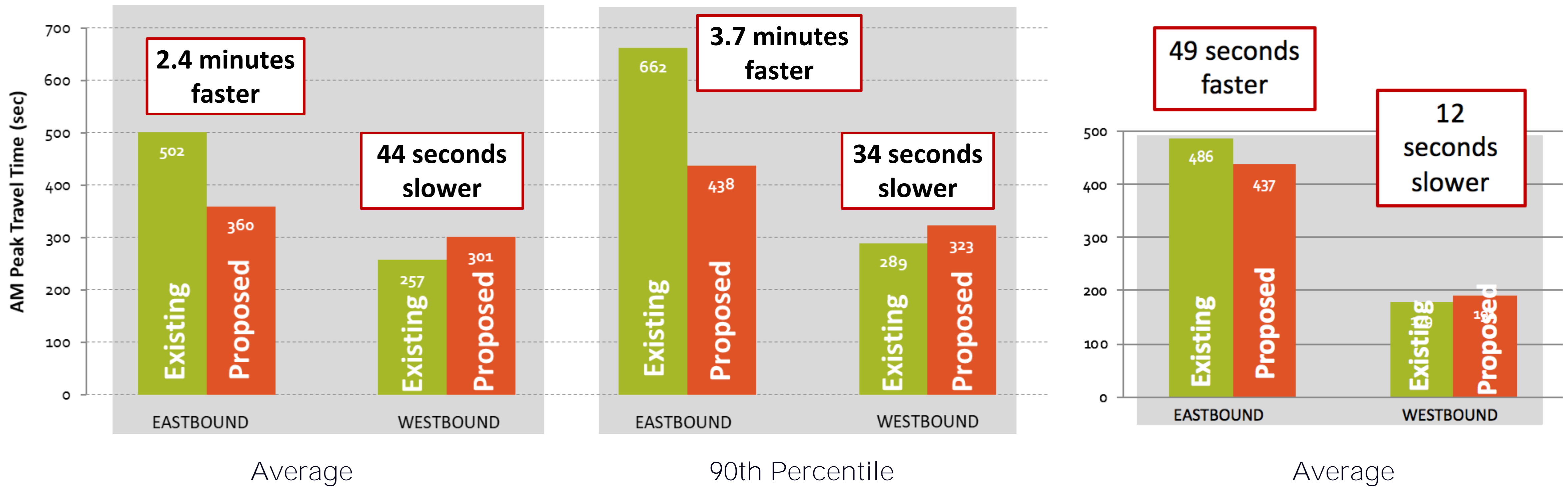
**Expected outcomes**





# Estimated Outcomes, Morning Rush Hour

Source: DCR Mt Auburn Corridor Project, presented at May 8, 2017 Strawberry Hill public meeting



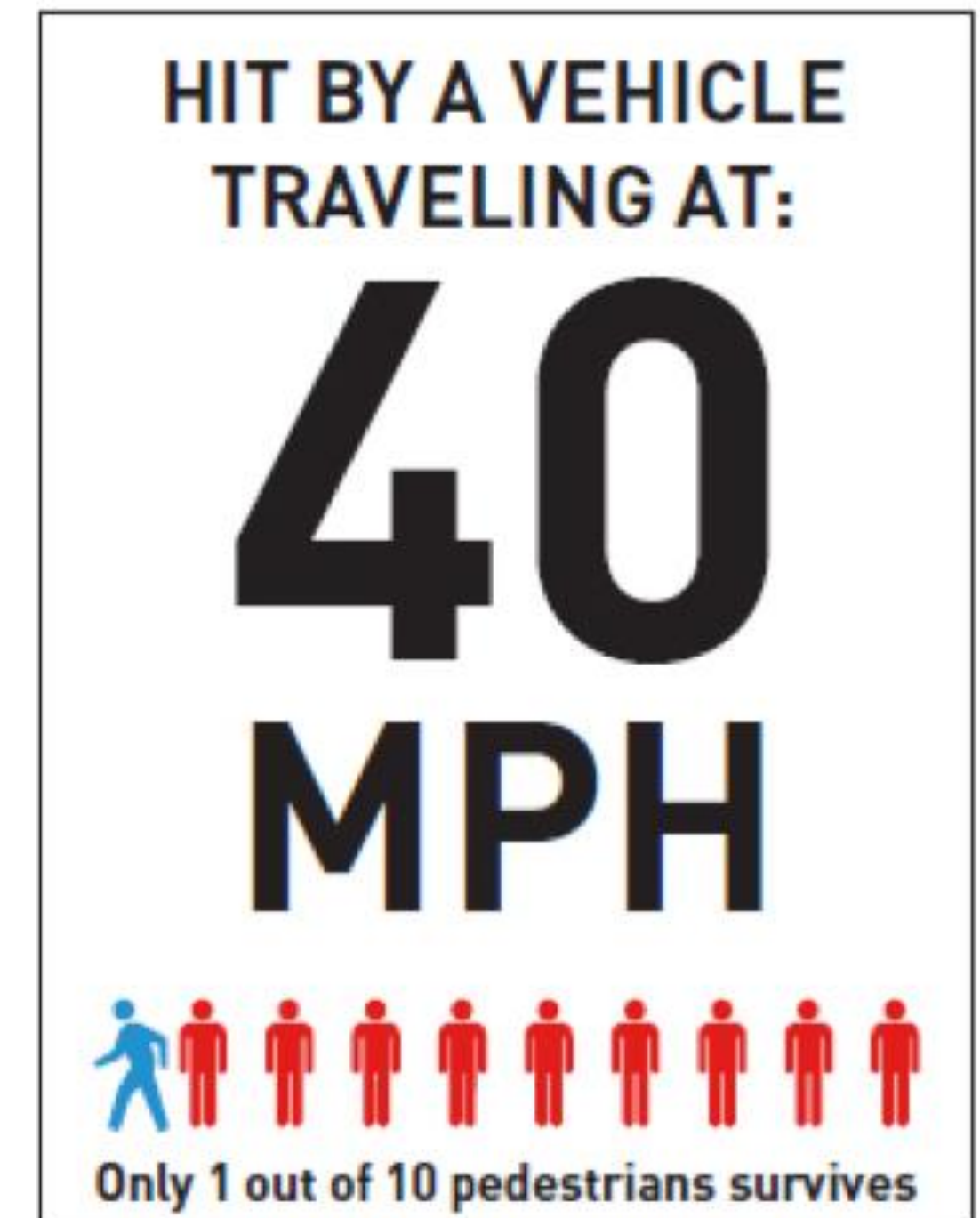
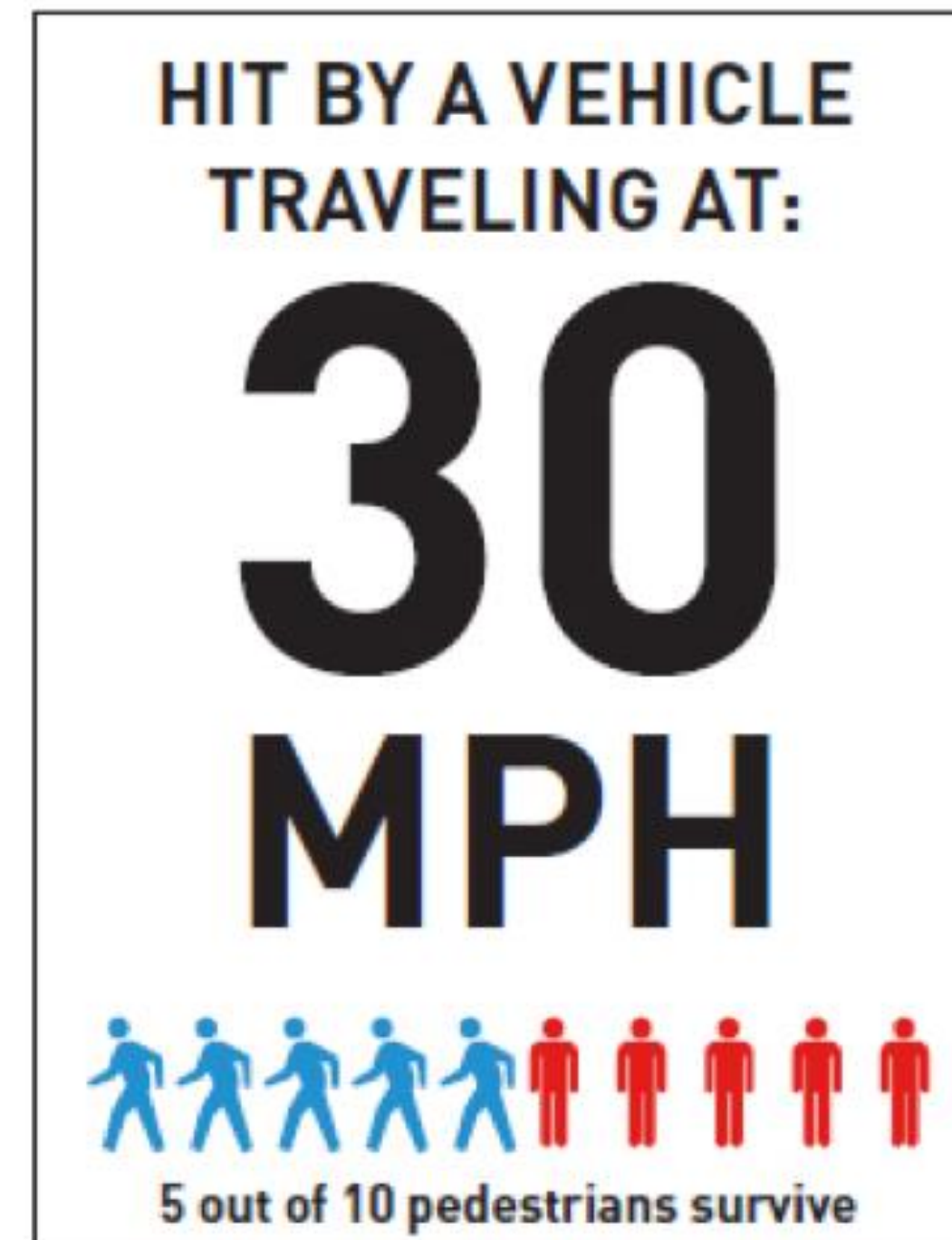
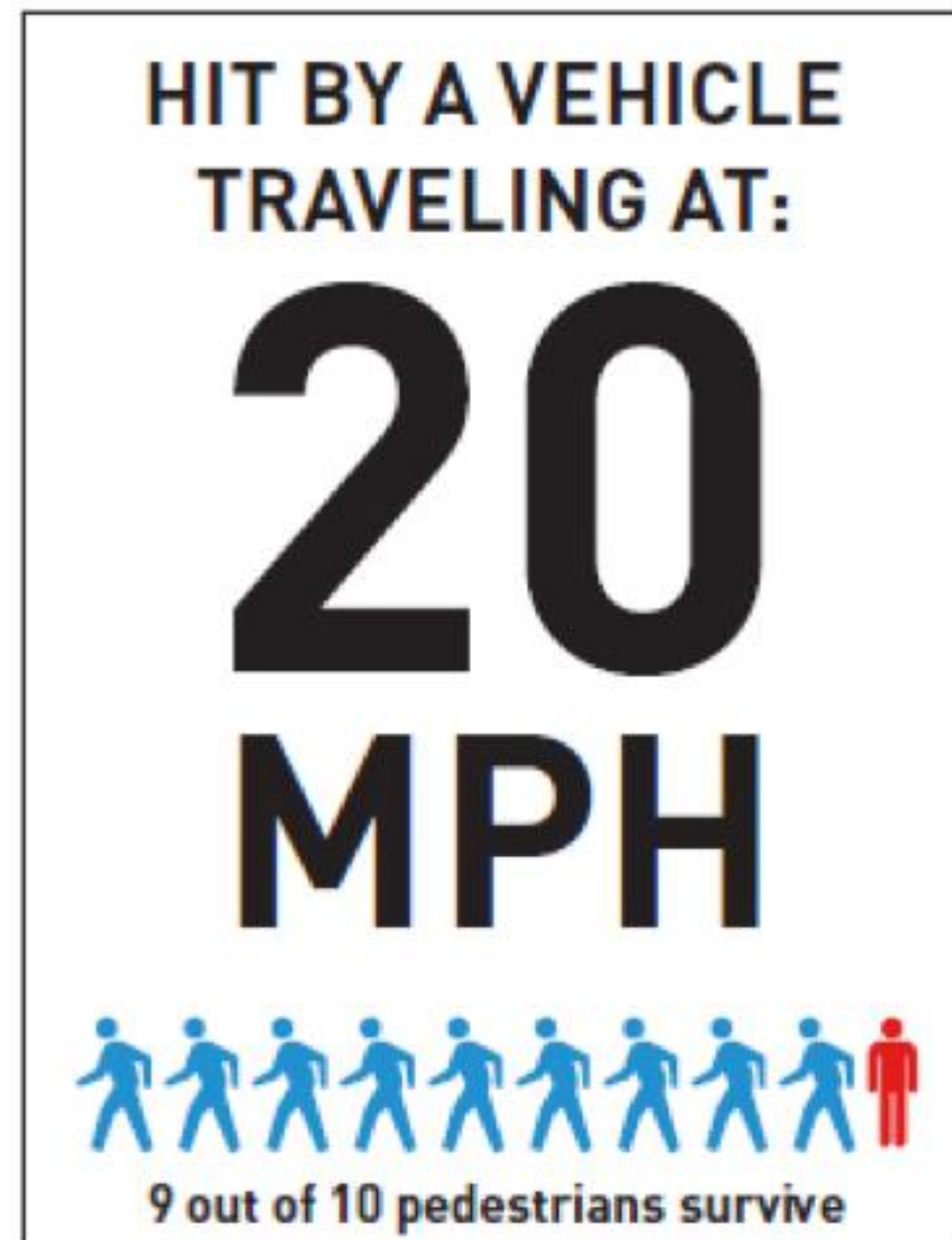
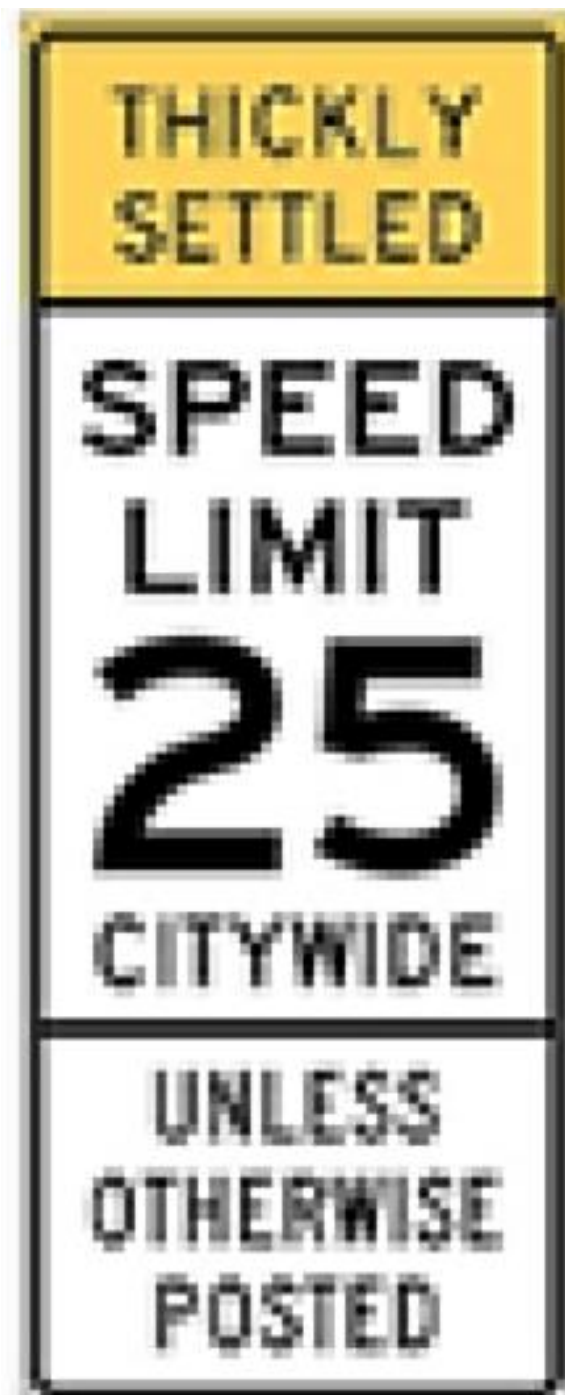
Bus (AM Peak)  
Passenger Travel Time Impacts

Auto (AM Peak)  
Travel Time Impacts



## Estimated Impacts, Safety

- Slightly narrower lanes and single through lanes will improve safety for everyone
- Multiple wide lanes encourage faster speeds

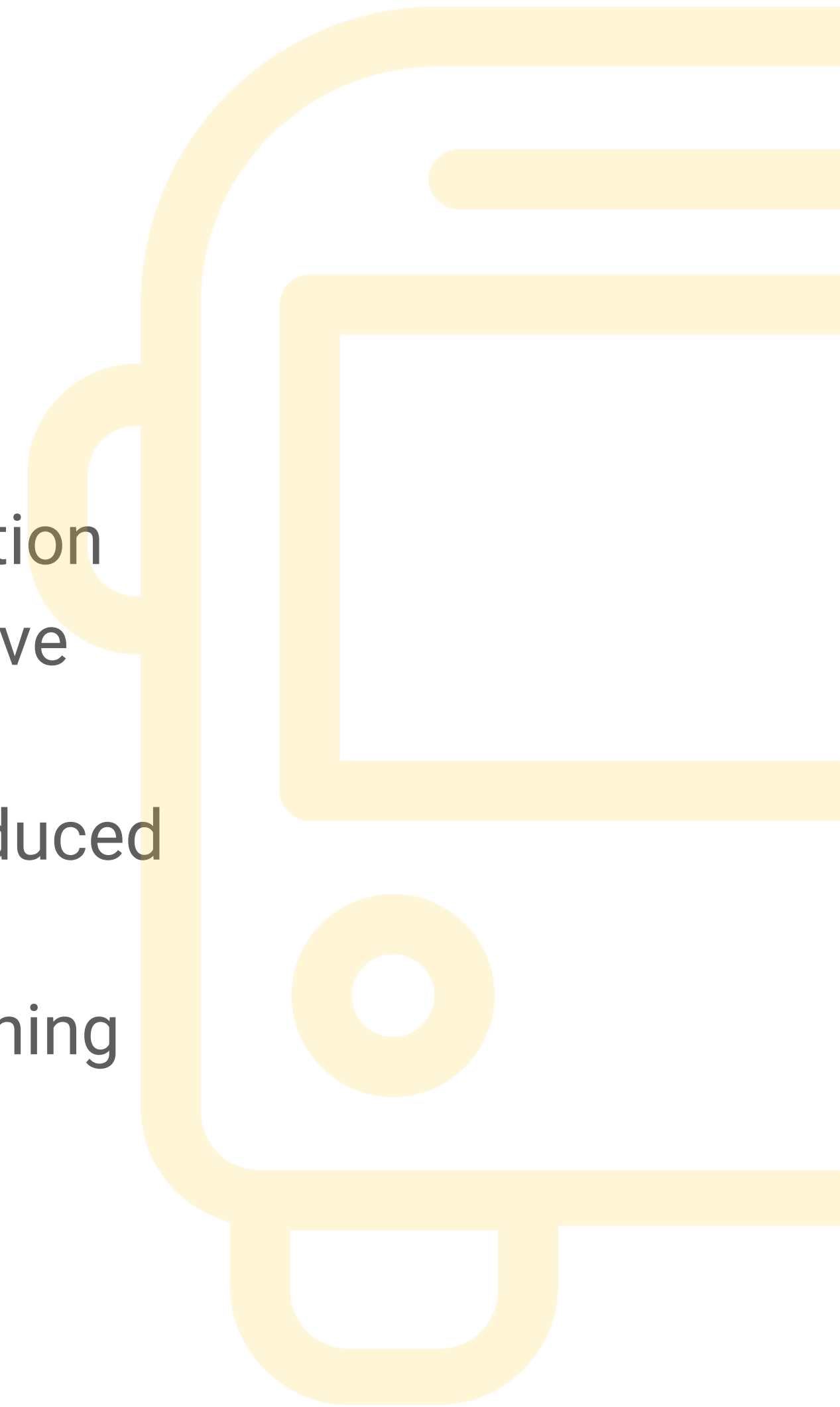




# What about people who don't take the bus?

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- Accommodating growth through public transit can help reduce congestion and create less demand for parking for those who still want/need to drive
- Travel time by car should not be significantly affected, and conflicts reduced
- No significant impacts expected for access out of side streets like Cushing
- Design is intended to accommodate left turns onto Holworthy, Homer, Aberdeen, and Brattle to avoid negative impact on through traffic





# Process and Evaluation

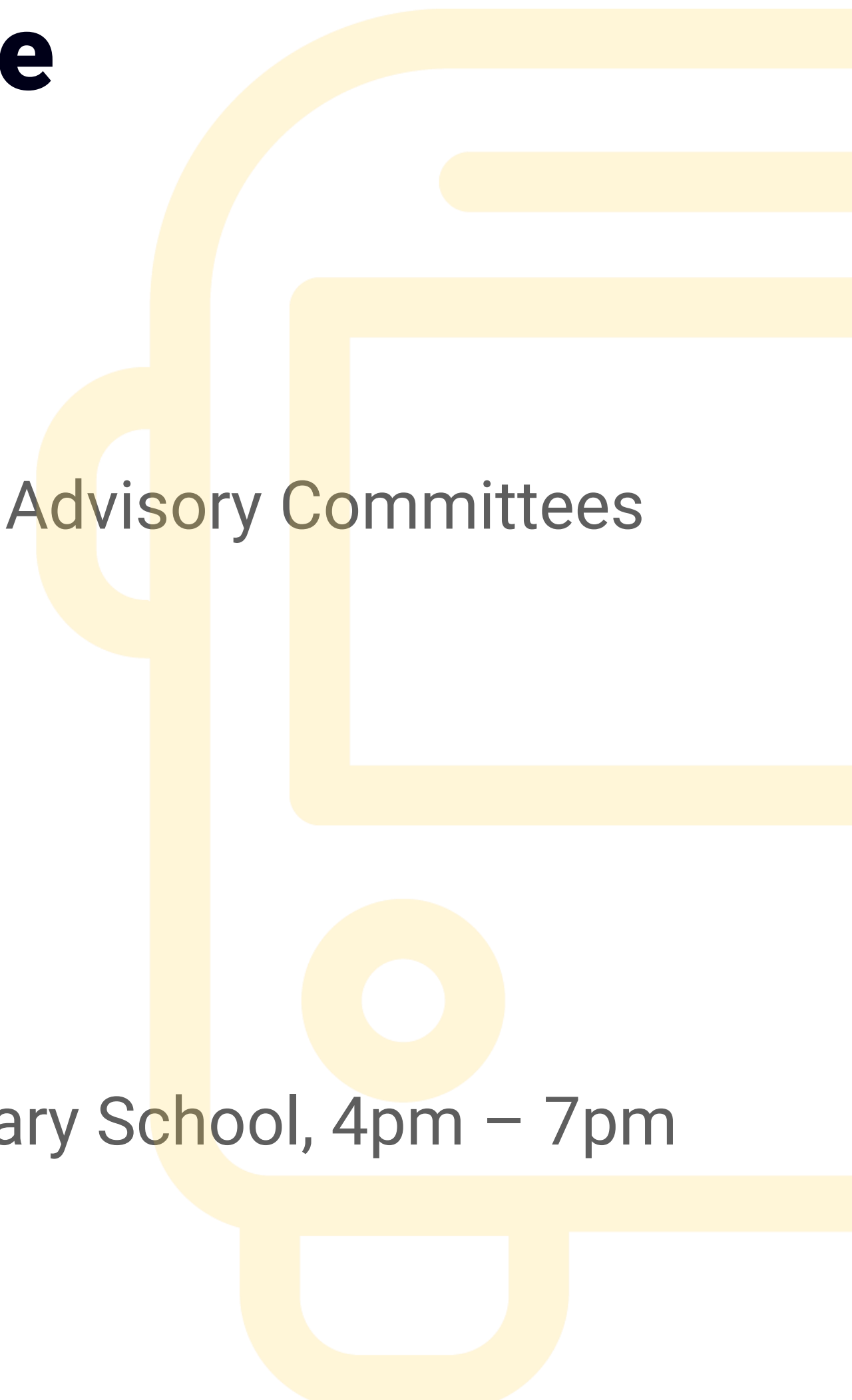




# Outreach / Implementation / Evaluation Timeline

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- Jan-March:** Internal stakeholder and City Transit, Bicycle, and Pedestrian Advisory Committees
- February 15:** Watertown Mt. Auburn corridor transit meeting
- March 27:** Strawberry Hill Neighborhood Meeting
- March/April:** Outreach to external stakeholders (businesses, institutions)
- April/May:** Gather data for use in evaluation
- May 1:** **Joint Watertown/Cambridge public meeting**
- May 14:** Watertown Mt. Auburn Project Open House Hosmer Elementary School, 4pm – 7pm
- Summer:** Finalize design and prepare for implementation, street teams
- Late Summer:** Implement, evaluate and refine
- Fall:** Evaluate and refine, begin Belmont St. design process





# **Stations for small group input**





# Station 1 Let's Talk: Bus Service

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- “BostonBRT”, high quality bus rapid transit service
- MBTA upcoming service planning process (Better Bus Project)
- Existing bus service, ridership, stop locations
- Transit Signal Priority





# Station 2 Let's Talk: Measuring Success

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- Bus service improvements (reliability, ridership)
- Speeds (main streets and side streets)
- Travel time (cars and buses)
- Turns onto / out of side streets
- Wait times / queues at side streets
- Number of people using each mode
- Surveys / perception (all users)

## **2 expected evaluation phases:**

1. Summer, immediately after implementation (when traffic is lighter)
2. Fall (when traffic will be heavier)





# Station 3 Let's Talk: Design

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DRAFT plans for the entirety of the project area

**TABLE 3:** Watertown, west of Belmont/Mt. Auburn

**TABLE 4:** Cambridge, Belmont to Star Market/Homer Ave.

**TABLE 5:** Cambridge, Aberdeen and Brattle

**TABLE 6:** Cambridge and DCR, east of Brattle







# Thank You

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[cambridgema.gov/MtAuburnBusPriority](https://www.cambridgema.gov/MtAuburnBusPriority)