



# Rehabilitation of Mount Auburn Street (Route 16)

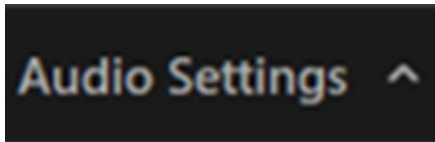
*Design Public Hearing*

Virtual (Zoom) | November 4, 2021 | 6:30 PM

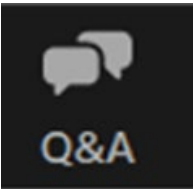
Project File No. 607777



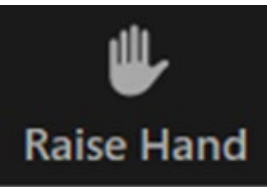
# Zoom controls



- Drop down menu to check microphone and speakers



- Q&A box is for questions



- Raise your hand



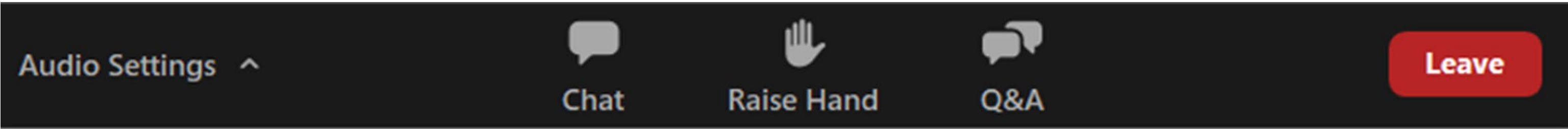
- If you are unable to access the internet or are having technical problems, please call into the meeting at 1-646-876-9923, Webinar ID: 820-3815-1414



If you have trouble with the meeting technology during the presentation, please call Zoom customer service:

1-888-799-9666

**Closed captioning automatically generated by Zoom**



# Public Meeting Notes and Procedures

## Notification of recording

- This virtual public hearing will be recorded. The Massachusetts Department of Transportation may choose to retain and distribute the video, still images, audio, and/or chat transcript.
- By continuing attendance with this virtual public hearing, you are consenting to participate in a recorded event.
- All recordings and chat transcript will be considered a public record.
- If you are not comfortable being recorded, please turn off your camera, keep your microphone muted, and refrain from chatting in the transcript box. Otherwise, you may choose to excuse yourself from the meeting.

## Important notes

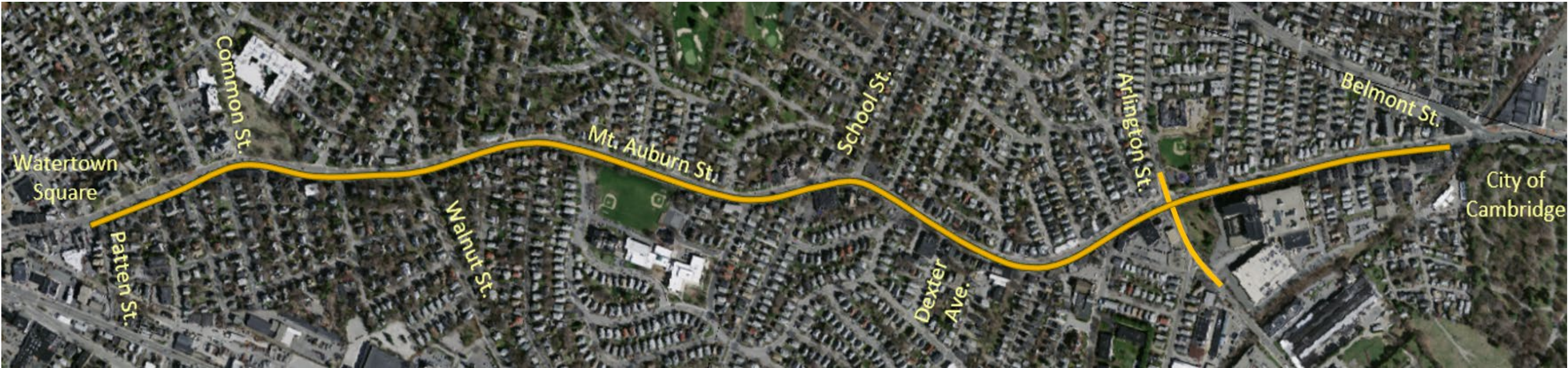
- Your microphone and webcam are automatically disabled upon entering the meeting.
- The meeting will be open to questions and answers at the end of the presentation.
- Please take time to respond to our survey at the end of the presentation. Your feedback is important.
- **We strongly recommend you submit your comments in writing.** Details on where to send comments will be explained at the end of this presentation.

**All questions and comments are welcome and appreciated, however we do request that you refrain from any disrespectful comments.**



# Project Area

Mt. Auburn Street (from Patten Street to Cambridge City Line)





# Agenda

- 01 Project Team
- 02 Timeline of Events
- 03 Goals & Objectives
- 04 Design Alternatives
- 05 Bike / Ped. / Transit Facilities
- 06 Changes to Date
- 07 Construction Phase
- 08 Ongoing Coordination
- 09 Next Steps / Q&A



*“Commitment to additional public informational meetings as the design progresses.”*



# Project Team

- **MassDOT**
  - David Shedd, Project Manager
  - Craig Sheehan, Right of Way Liaison
  - Alex Cantor, Digital Services
  - Kit McLewee, Digital Services
- **Town of Watertown (Municipality)**
  - Greg St. Louis, DPW Superintendent
  - Matt Shuman, Town Engineer
- **WorldTech Engineering (Design Consultant)**
  - Rich Benevento, President
  - Alan Cloutier, Director of Transportation
  - Kristopher Surette, Project Engineer
- **Regina Villa Associates (Community Outreach)**
  - Nancy Farrell, Chief Executive Officer
  - Sarah Paritsky, Sr. Public Participation Manager







COMMON



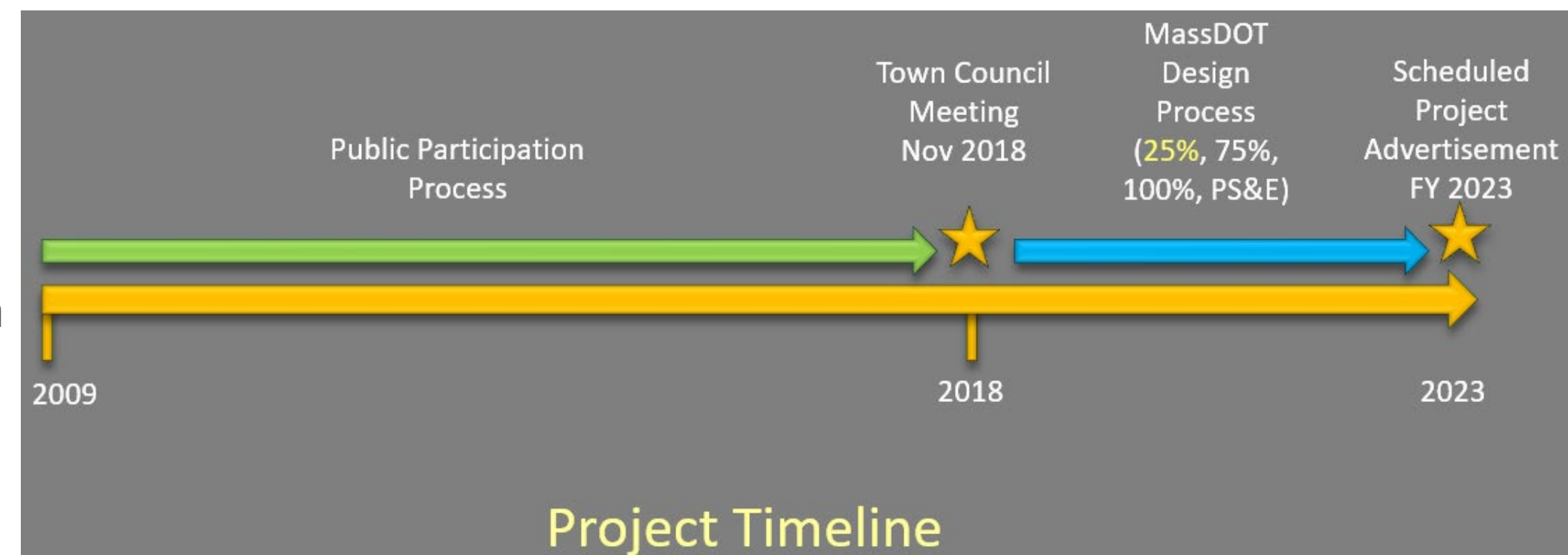
**Why was this  
project  
initiated?**

RUSSELL A



# Project History / Project Need

- Project History
  - Project initiated by Town of Watertown in 2009
  - Community workshops / corridor studies conducted from 2010 – 2016
  - Workshop held in 2016 yielded concerns relative to bicycle accommodations along corridor
- Project Reconsideration – Complete Streets
  - 14 public meetings held between 2016 – 2018
  - Developed “Complete Streets” alternatives
  - Created project website [www.mountauburnstreet.com/](http://www.mountauburnstreet.com/)
  - Endorsement of recommended concept by Town Council on November 13, 2018
- Project Need
  - Project is funded through MassDOT and the Federal Highway Administration (FHWA)
  - Funding in place for Fiscal Year 2023 (FY23)





# Existing Issues

- Traffic and Safety Concerns
  - Wide travel lanes that promote higher prevailing speeds
  - 18,600 vehicles per day (2018)
  - Outdated signal equipment
  - Pavement markings are non – standard / faded
  - Transit delay along the corridor
- Poor Pavement Condition
  - General pavement degradation and deterioration
  - Utility trenches, potholes, crack sealing
  - Limited opportunities for pavement preservation (catenary wires)
  - Mill and Overlay not a feasible alternative
- Substandard Pedestrian and Bicyclist Accommodations
  - Lack of bicycle facilities
  - Fair to poor sidewalk condition in many locations
  - Lack of ADA compliant pedestrian curb ramps and crossings
  - Outdated pedestrian equipment



**Traffic and Safety** Outdated Signal Equipment



**Traffic and Safety** Faded Pavement Markings





# Poor Pavement Condition

Rutting, Potholes, Cracking



# Poor Pavement Condition

Utility Patches and Trenches





**Pedestrian Accommodations** Non-compliant crossing



**Bicycle Accommodations** Lack of dedicated bicycle facilities







How has our  
design  
progressed?



# How did we get here?







What do we  
want to  
accomplish?



# Community Objectives

- **Developed design based on public input**
- Transform Mount Auburn Street into a Complete Street
  - Provide safe accommodations for all modes of transportation
- Modernize signalized intersections to improve traffic operations
- Provide accessibility for all users in compliance with the Americans with Disabilities Act (ADA)
- Improve transit service along the corridor
- Greenscape and placemaking
- Balance objectives while satisfying federal and state design requirements





# Design Recommendations

## from Public Engagement Process

- ✓ Maintain location of existing curb lines
- ✓ Incorporate road diet
- ✓ Retain existing tree canopy
- ✓ Maintain parking in business districts
- ✓ Improve operational efficiency
- ✓ Enhance bus service
- ✓ Improve pedestrian safety
- ✓ Provide benefits for all users (balance)
- ✓ Streetscape amenities



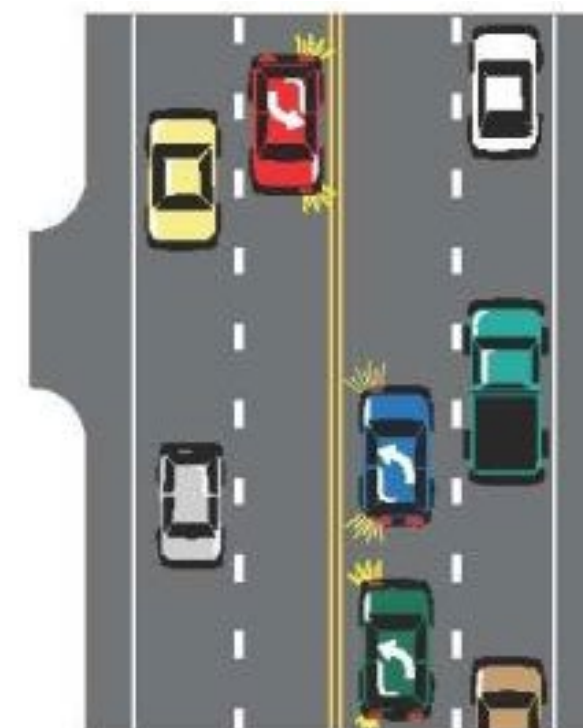
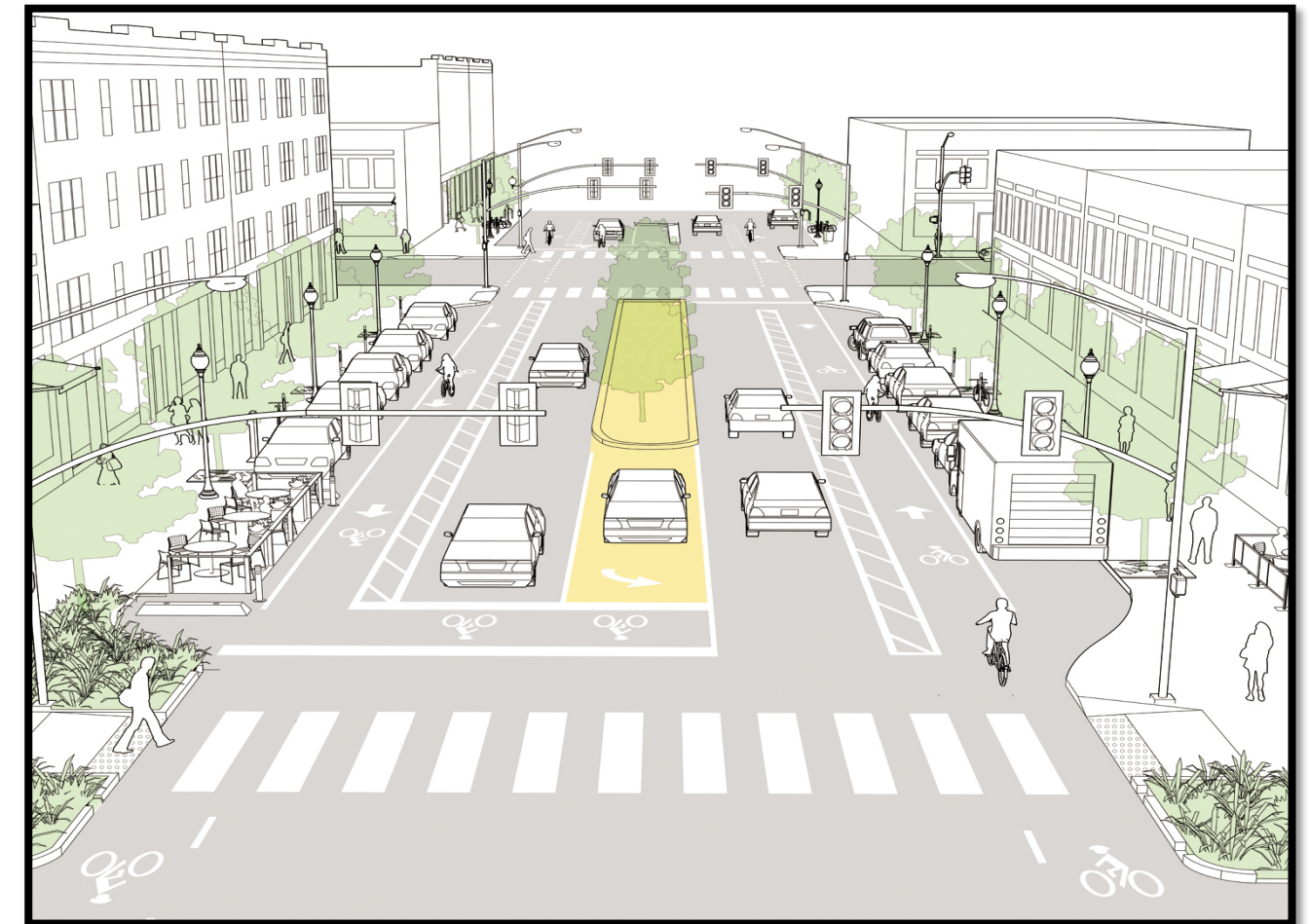


# What is a Complete Street?

- Safe and efficient travel for users of all transportation modes
- Efficient use of space
- Reduce number of travel lanes via Road Diet
  - One through lane in each direction
  - Dedicated turn pockets
  - Improved traffic operations at intersections
- Shorter crossing distances for pedestrians
- Creates opportunities for greenscape and placemaking
- **Creates a destination, rather than a through-way**

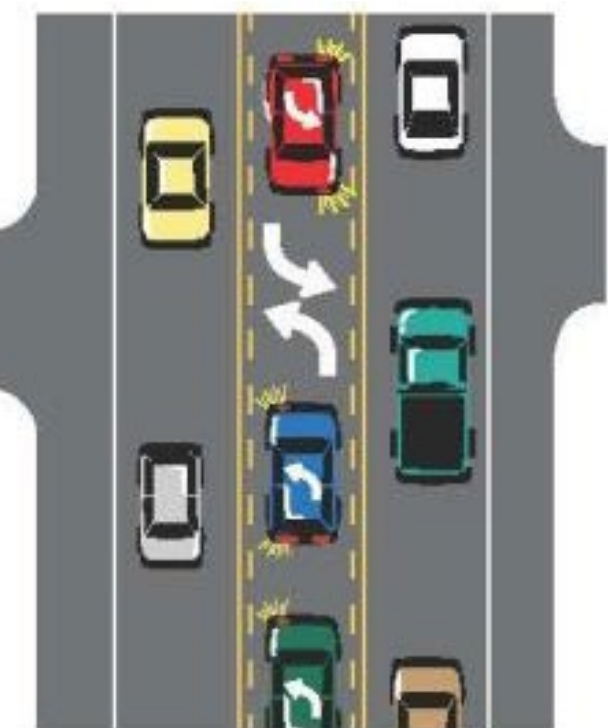
*“The challenge is to balance the competing interests of different users in a limited amount of right-of way and to provide access for all, a real choice of modes, and safety in equal measure for each mode of travel.”*

*- MassDOT Design Guide (2006)*



**Before**

A four-lane undivided road operating as a de facto three-lane cross section.



**After**

A Road Diet providing a two-way left-turn lane.





What  
alternatives  
were  
considered?



# Alternatives Considered

*Based on public input.....*

## Alternative 1 – Separated Bicycle Lanes

- Operational issues
- Emergency response concerns
- Widening required in some locations
  - Did not fit within community objectives

## Alternative 2 – Parking Protected Bicycle Lanes

- Parking stalls adjacent to travel lane
- Limited ability to pull over for emergency vehicles
- Bus / bike conflict
- Pedestrian / bicycle visibility
- Driveway spacing / side streets
- Maintenance concerns





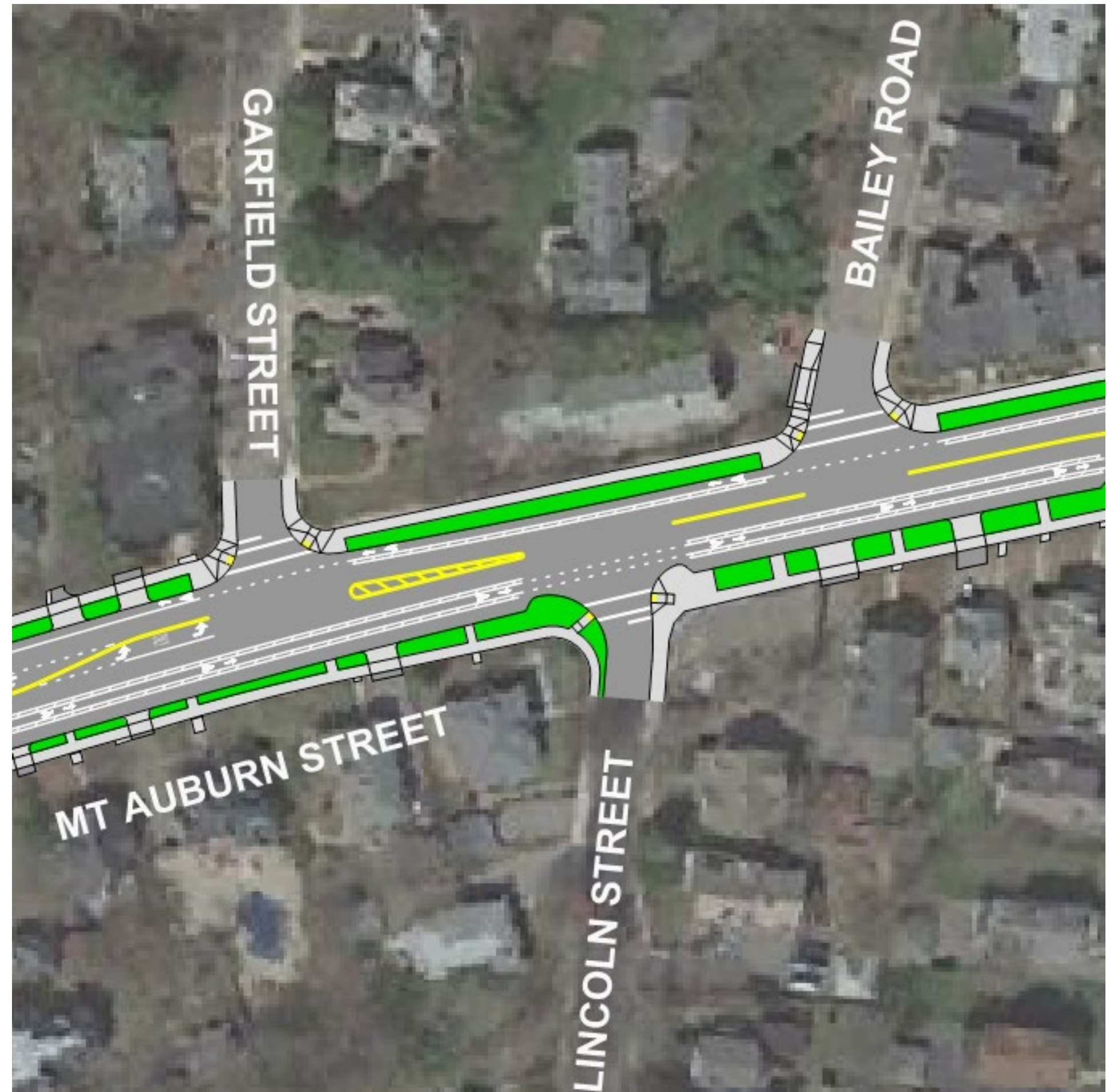


**What is the  
preferred  
alternative?**



# Preferred Alternative

- Incorporates 11-foot travel lanes and 10-foot turn lanes along corridor
- On-street buffered bicycle lanes as space permits
  - Non-buffered in constrained areas
  - Double buffered bike lanes adjacent to on-street parking
- Queue jump lanes at applicable signalized intersections
- Shared bus / bicycle lane in the eastbound direction at the Cambridge city line
- Preferred alternative is a result of input from the community and interest groups
  - Endorsed by Town Council





**Example** Buffered Bicycle Lanes

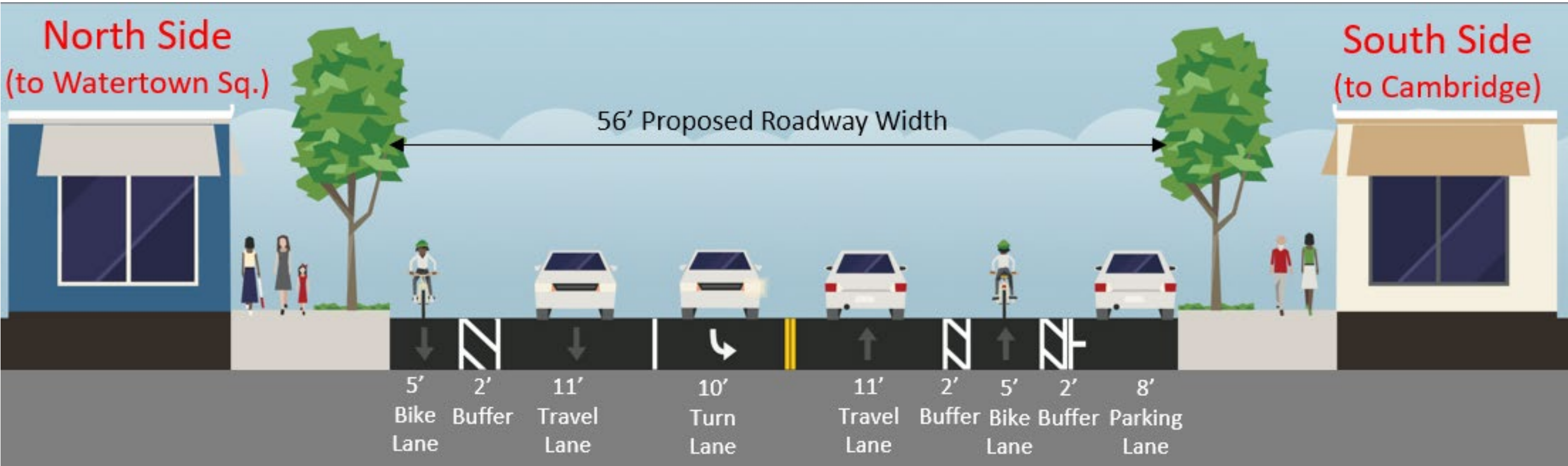


**Rendering** Lane Configuration of Road Diet

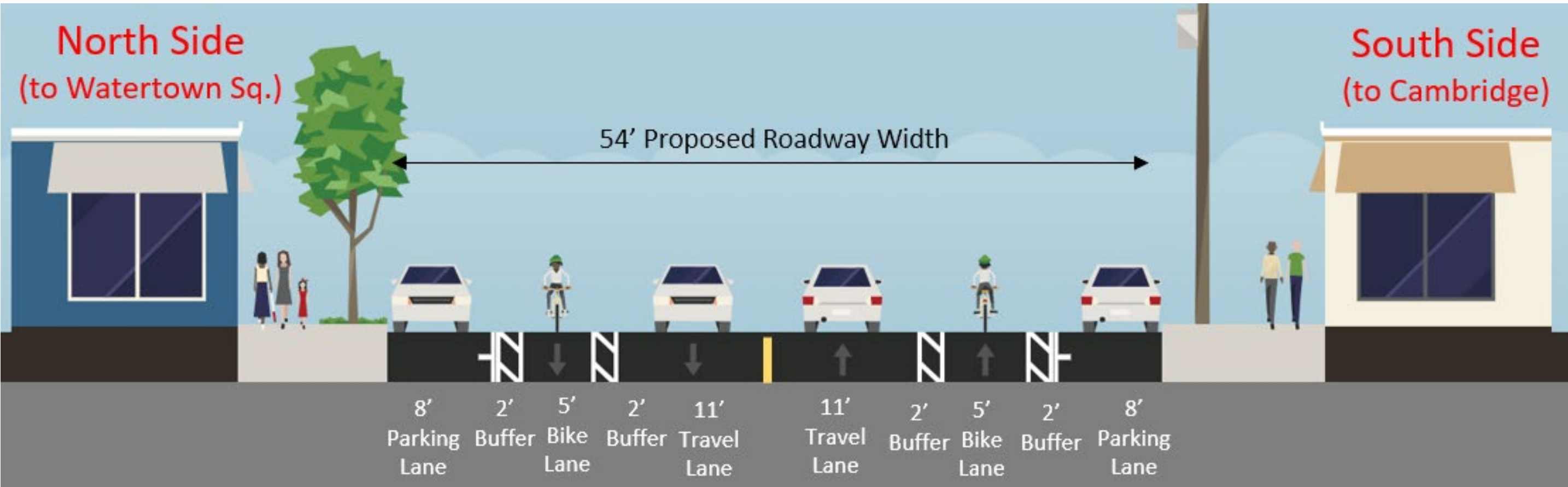




Typical Section    Mt. Auburn Street (east of Coolidge Square)



Typical Section    Mt. Auburn Street (west of Coolidge Square)







**How will  
bicyclists,  
pedestrians, &  
transit riders be  
impacted?**





# Pedestrians

- New ADA sidewalks and pedestrian curb ramps
- Traffic signals with audible pushbuttons and standardized crossing times
- Curb extensions at crosswalks adjacent to on-street parking
- Rectangular Rapid Flashing Beacons (RRFBs) at select crosswalk locations





# Bicycles

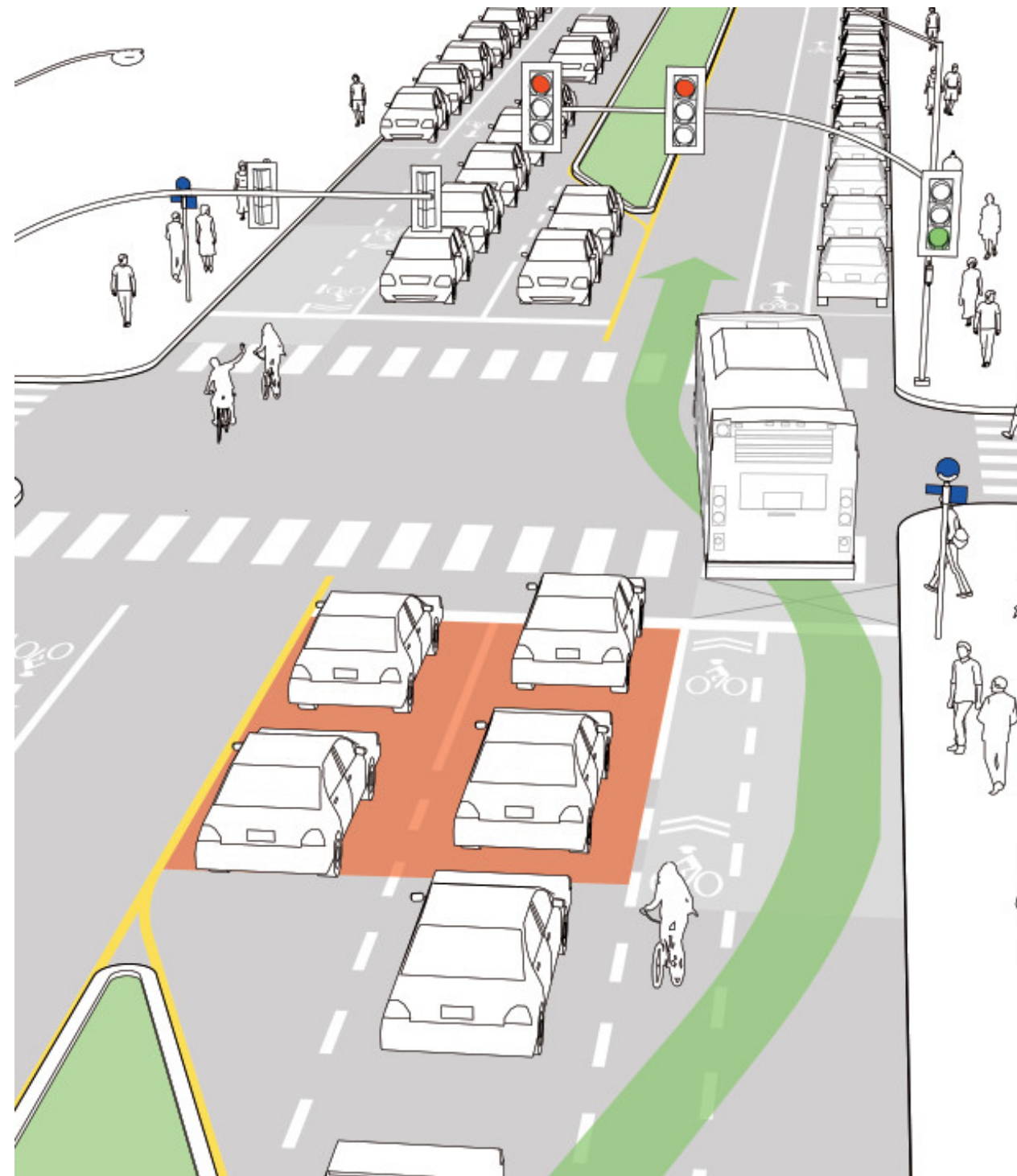
- Buffered / non-buffered bicycle lanes to the extent feasible
- Shared bus / bicycle lanes where space is constricted
- Bicycle racks at placemaking areas along the corridor





# Transit

- Location of bus stops will improve safety for all users
- ADA accessible bus stops
- Shelters at stops based on boarding data
- Marked bus stops (as space permits)
- Improve transit operations
  - Transit signal priority (TSP)
  - Queue jump lanes
- Shared bus / bike lanes







**What are the  
environmental,  
cultural  
resource, and  
community  
impacts?**



# Environmental, Cultural Resource, and Community Impacts

- No work in a wetland or wetland buffer area
- NEPA (National Environmental Policy Act)
  - Categorical Exclusion Checklist (required)
- Stormwater infiltration along corridor (where applicable)







**What has  
changed to  
date?**



# Design Development Process

- Subject to MassDOT, FHWA, and MBTA review
  - Progressed design from conceptual stage to MassDOT / federal review
  - Requirements for federal funding
  - Additional changes expected as design progresses
- Bus Stop Relocations
- Crosswalk Improvements
- School Street Intersection Improvements
- Boylston Street (W) Intersection Improvements





# Bus Stop Relocations

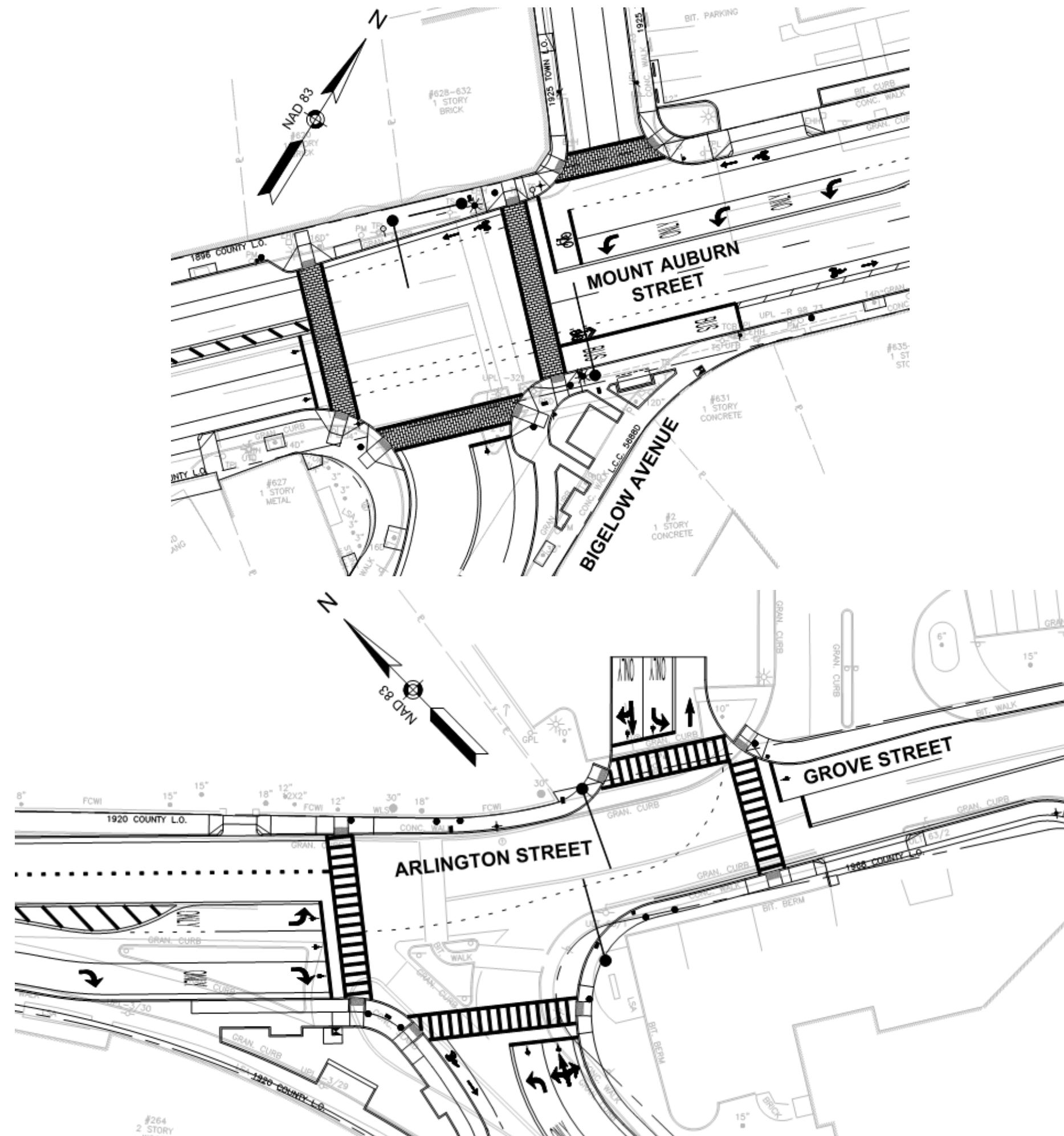
- Bus Stop Relocations
  - Feedback from MBTA
  - Based on 25% Design Review and Design Justification Process
- Relocations Include:
  - Amherst Road (WB)
  - Boylston Street (EB)
  - Adams Avenue (WB)
  - Adams Street (EB)





# Crosswalk Improvements

- Crosswalks at each intersection leg is consistent with Complete Streets policy objectives
- Crosswalk Relocations
  - Oakley Road to Boylston Street (W)
- Crosswalk Additions
  - Requirement of Design Justification Process
  - Bigelow Avenue at Mt. Auburn Street
  - Grove Street at Arlington Street

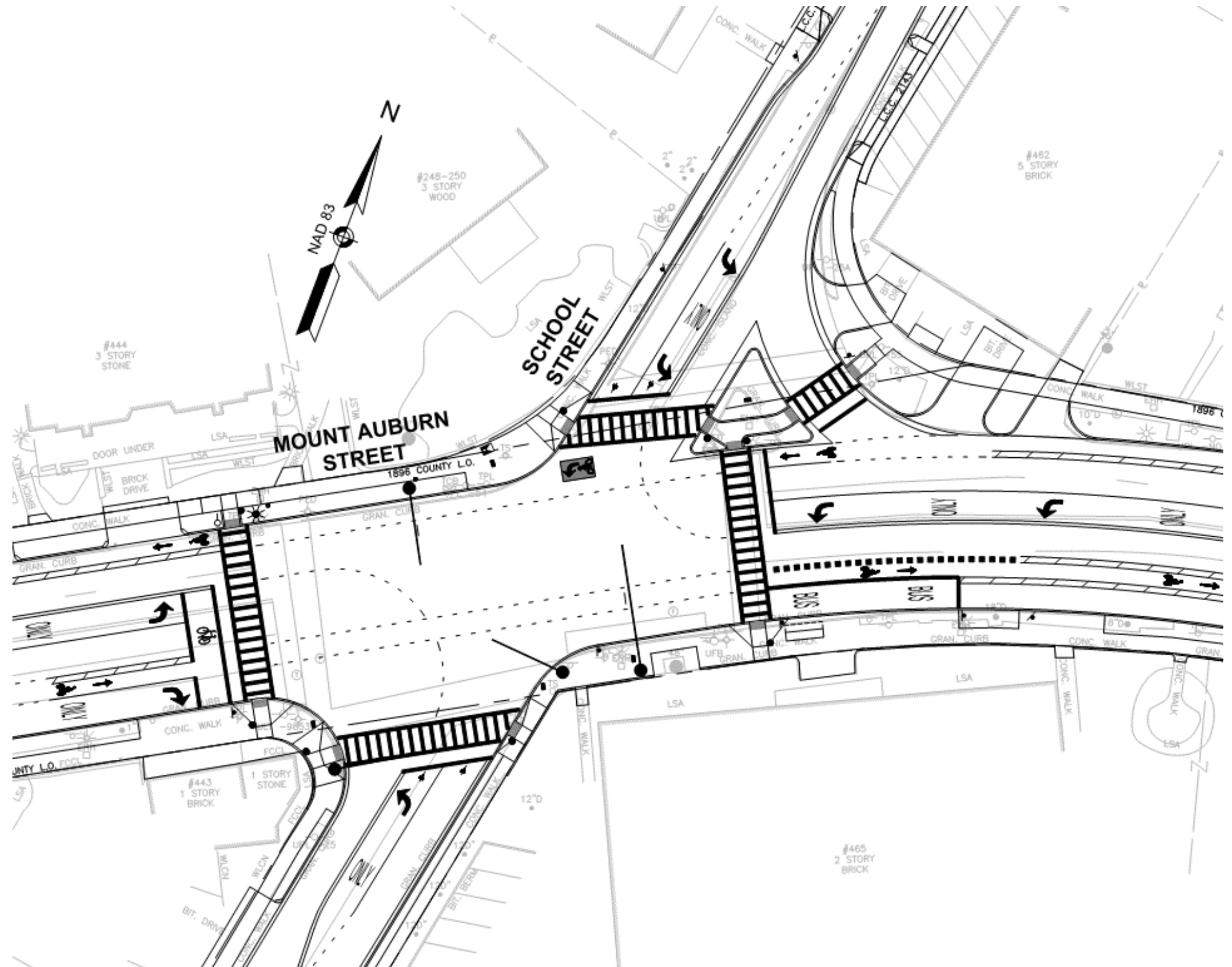




# School Street Intersection Improvements

*Based on public input.....*

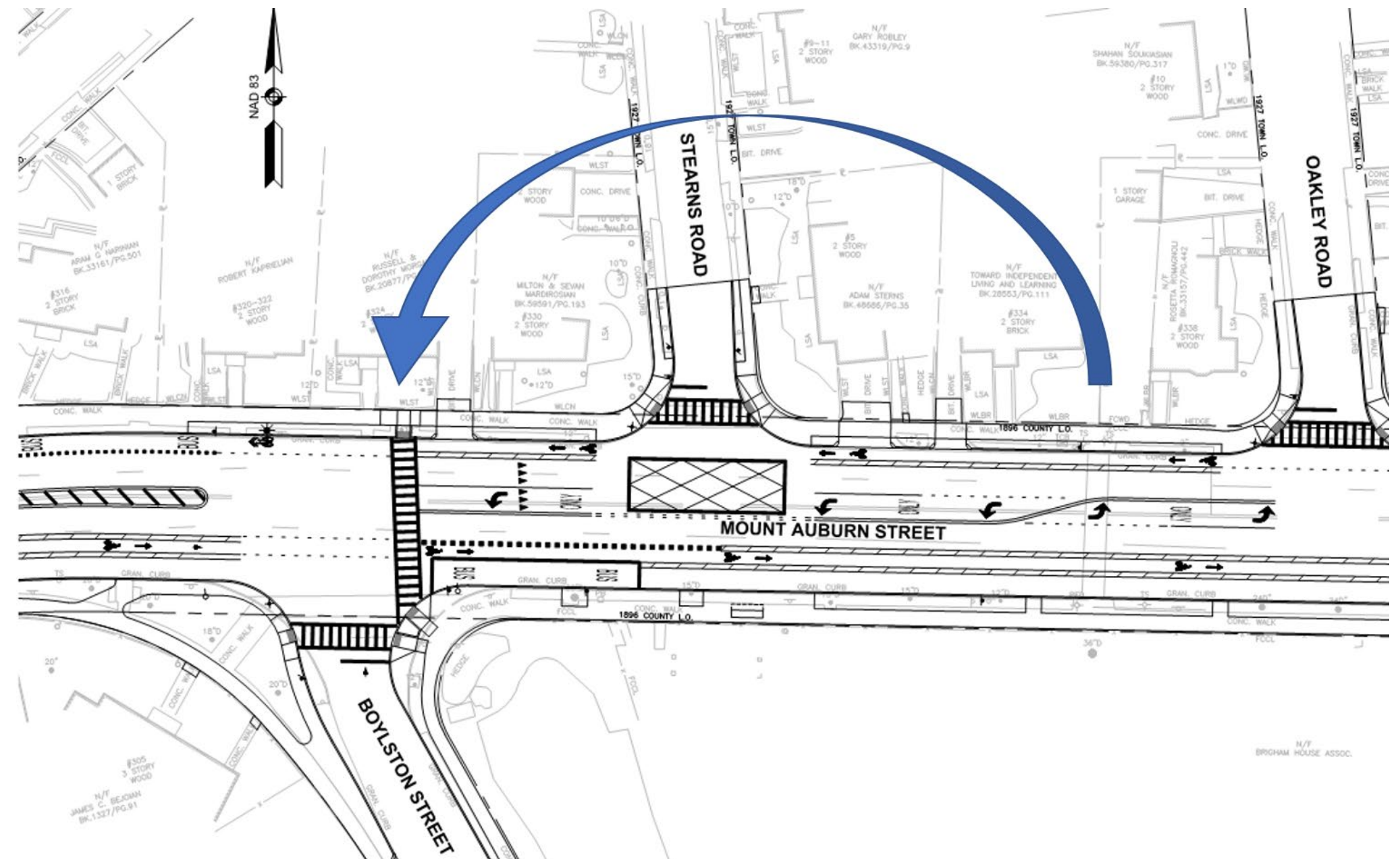
- Enhanced safety
- Improve traffic operations / LOS
- Consolidate intersection geometry
- Reduce pedestrian crossing distances





# Boylston Street (W) Intersection Improvements

- Boylston Street (W) Traffic Signal
  - Rectangular Rapid Flashing Beacon (RRFB)
  - Crosswalks will be supplemented with overhead beacon
  - Revised intersection geometry
  - Traffic signal not warranted







**What is the  
construction  
approach?**



# Construction Phase

- Construction 100% funded
  - Federal share 80% / State 20%
- MassDOT will administer the project
- Coordinated with MassDOT and Town Officials
- Sequence and phasing of construction
  - Segmented along the corridor
  - Maintain access to homes and businesses
  - Minimize disruptions to traffic
  - Coordinate utility provider upgrades







**How will the  
road user be  
affected?**



## Traffic Operations During Construction

- Shifting / alternating traffic
- Short-term temporary road closures
- Advanced notice of traffic disruptions
- Temporary pedestrian detours
- Work zone safety







## Coordination Efforts



# Ongoing Coordination

- National Grid - Gas
  - Replacement of gas main along Mt. Auburn Street
  - Segmented construction
  - Work would likely take place prior to roadway project
- MWRA
  - 20-inch pipeline from Irving Street to Russell Avenue
  - Coordination with National Grid design / schedule required
- MBTA
  - Catenary system
  - Operations during construction
  - Enhanced transit operations





# Our next steps



Design Public Hearing  
November 4, 2021



\*Complete 75% Design  
Winter 2022



\*Complete Final Design  
Spring 2023



Advertising Date  
Summer 2023



Construction Begins  
Fall 2023

\* Commitment to additional public informational meetings as the design progresses





**How will we  
keep you  
informed?**



# Staying Informed

- Project Website
  - [www.mountauburnstreet.com/](http://www.mountauburnstreet.com/)
  - Project announcements
  - Meeting materials
  - Overview of project history
- **Public Informational Meetings sponsored by MassDOT will be held after the 75% submission**
  - Include overview of design updates
  - Project schedule
- Commitment to public engagement

**Mount Auburn Street**

A Complete Streets **Project**







**Questions and  
discussion**



# Comments

- Formal comments should be submitted through MassDOT with the following contact information:
  - MAIL:  
Carrie Lavallee, PE  
Acting Chief Engineer, MassDOT  
10 Park Plaza, Suite 6340  
Boston, MA 02116  
Attn. Project Management, Project No. 607777
  - E-MAIL:  
[MassDOTProjectManagement@dot.state.ma.us](mailto:MassDOTProjectManagement@dot.state.ma.us)  
Use Subject : MassDOT Project No. 607777
  - **Submission deadline is November 19, 2021**
- Formal comments submitted to MassDOT will become part of the hearing / public record
- You are welcome to copy the town through the project email
  - [Team@MountAuburnStreet.com](mailto:Team@MountAuburnStreet.com)



# Questions and answers



- “Raise your hand” to be unmuted for verbal questions



- Submit your questions and comments using the Q&A button



- Please state your name before your question



- Please share only 1 question or comment at a time, limited to 2 minutes, to allow others to participate



- To ask a question via phone, dial \*9 and the moderator will call out the last 4-digits of your phone number and unmute your audio when it is your turn.



- Please take a few minutes to complete the survey after the meeting to let us know how your experience was with this virtual meeting.

**All questions and comments are subject to disclosure for public records.  
Please use these functions for project related business only.**





# ***Thank You***

## *Rehabilitation of Mount Auburn Street (Route 16)*

Virtual (Zoom) | November 4, 2021 | 6:30 PM

Project File No. 607777

Project Manager: David Shedd





# Detailed Scope of Work

- **Complete Street via Implementation of Road Diet**
- Provide Dedicated Bicycle Accommodations
- Improved Transit Services
- New Cement Concrete Sidewalks and Pedestrian Curb Ramps
- Enhance Pedestrian Crossings / ADA Compliance
- Operational Improvements / Traffic Signal Upgrades
- Pavement Reconstruction
- Utility Upgrades



# Contact Information MBTA Facilities

- For additional info on the battery electric bus (BEB) program and facility, please reach out to:
  - Scott Hamway  
[shamway@MBTA.com](mailto:shamway@MBTA.com)
- For coordination on outreach and public meetings, please reach out to:
  - Angel Donahue-Rodriguez  
[adrodriquez@MBTA.com](mailto:adrodriquez@MBTA.com)
- MBTA Website – Bus Electrification
  - <https://www.mbta.com/projects/bus-electrification>





# Alternative 1: Separated Bike Lanes

- Operational issues
- Emergency response concerns
- Widening required in some locations
  - Did not fit within community objectives
- Reduced driver anticipation / recognition of bicyclists
  - Side streets and driveways
- Bicycle lane would be level with sidewalk
- Maintain tree canopy
- Dismissed as part of conceptual public outreach process





## Alternative 2: Parking Protected Bike Lanes

- Parking stalls adjacent to travel lane
- Limited ability to pull over for emergency vehicles
- Bus / bike conflict
- Pedestrian / bicycle visibility
- Driveway spacing / side streets
- Maintenance concerns

