

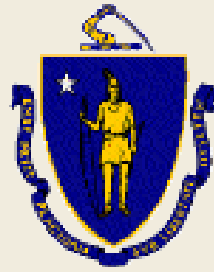


Mount Auburn Street Corridor Study



January 10, 2016
Russell Youth
Community Center





Commonwealth of Massachusetts

Governor
Charles D. Baker

Lieutenant Governor
Karyn E. Polito

Energy and Environmental Secretary
Matthew A. Beaton

Department of Conservation and Recreation Commissioner
Leo P. Roy



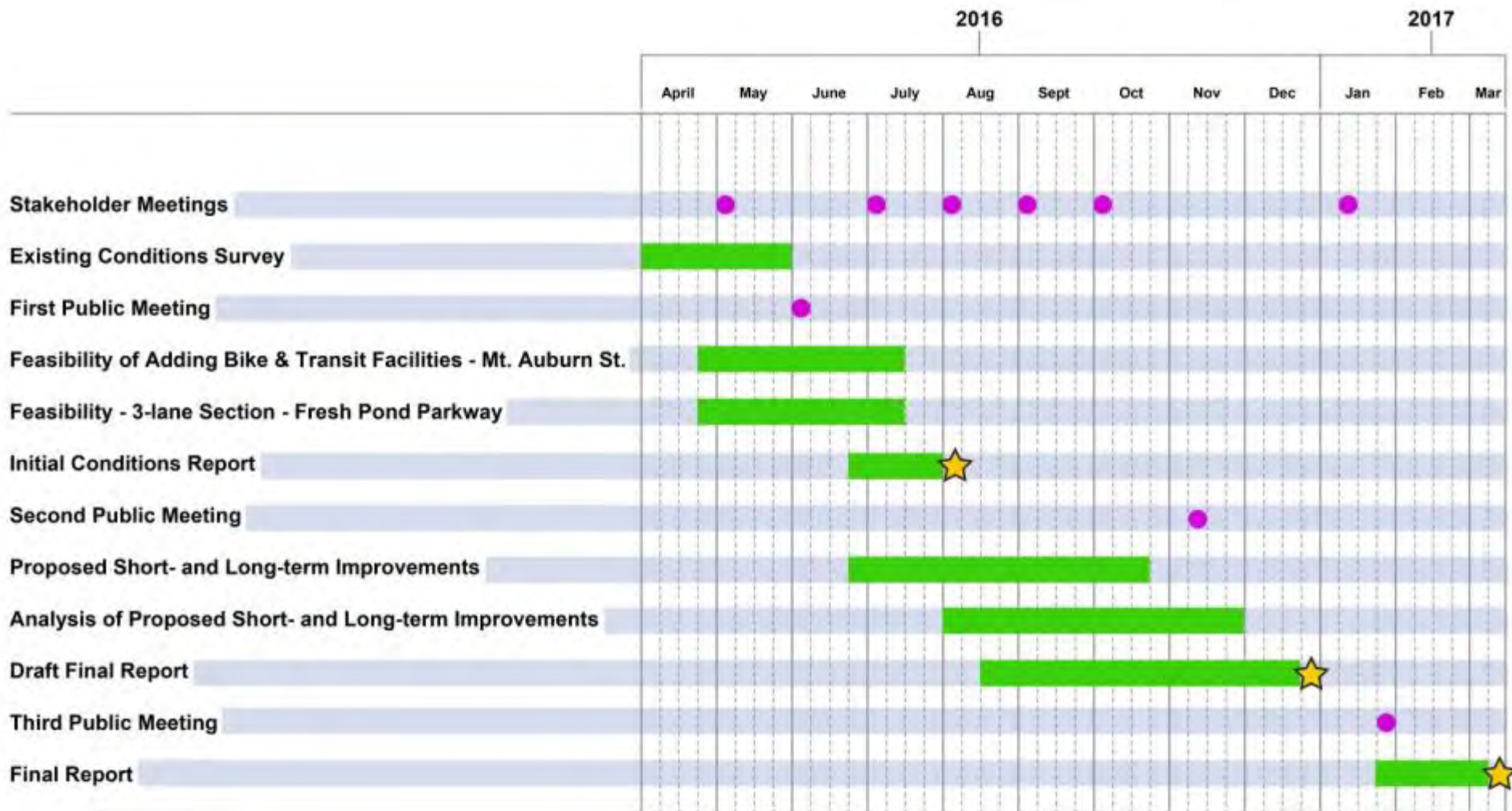
DCR Mission Statement

*To protect, promote and enhance our
common wealth of natural, cultural
and recreational resources
for the well-being of all.*

Project Area



Schedule



Agenda

- Welcome
- Feedback & Response
 - Option A indicated by Dot Poll
 - Call for better bicycle infrastructure
 - Road Diet Mt. Auburn VISSIM Analysis
 - Belmont-Brattle Improvements
 - Vision Zero/Cambridge Bike Plan Review
 - People Delay vs. Car Led Design
- Short-Term Considerations
- Benefits of the Plan

PLEASE NOTE:

The following concepts are drafts; works in progress shown only for the purpose of collecting public feedback for their improvement.



Community Feedback Review – Nov. 14 Public Meeting

Scheme 1 – Star Market Plaza



Scheme 2 – Star Market Plaza



11
6

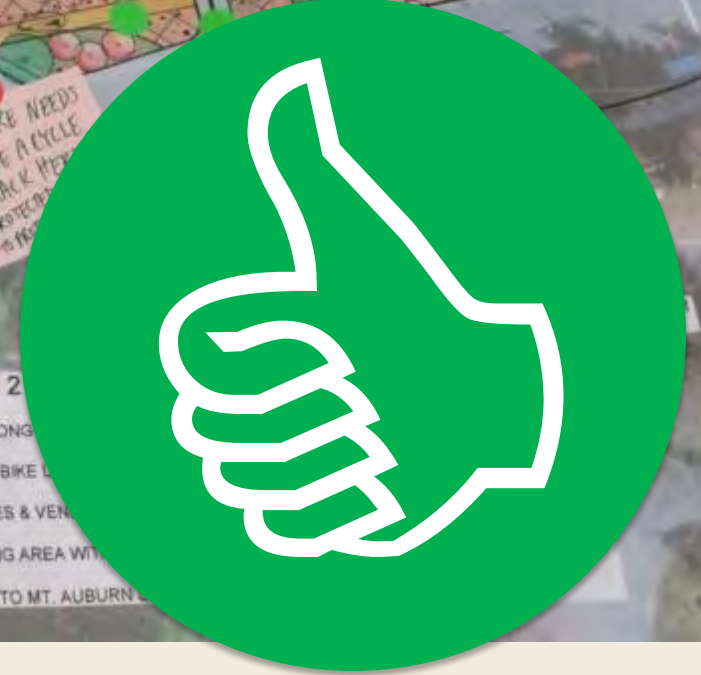
SCHEME 2

- PARKING ALONG MT. AUBURN STREET PLAZA CURB
- EASTBOUND BIKE LANE THROUGH PLAZA
- CAFE TABLES & VENDOR CARTS ALONG BUILDING FACE
- BUS WAITING AREA WITH PLANTED SCREEN ALONG SHOPPING CENTER PARKING LOT
- EXIT ONLY TO MT. AUBURN ST. FROM PARKING LOT

Scheme 2 – Star Market Plaza



11
6



Scheme 1 – Brattle Plaza



Scheme 2 – Brattle Plaza



2

0

Scheme 1 – Brattle Plaza



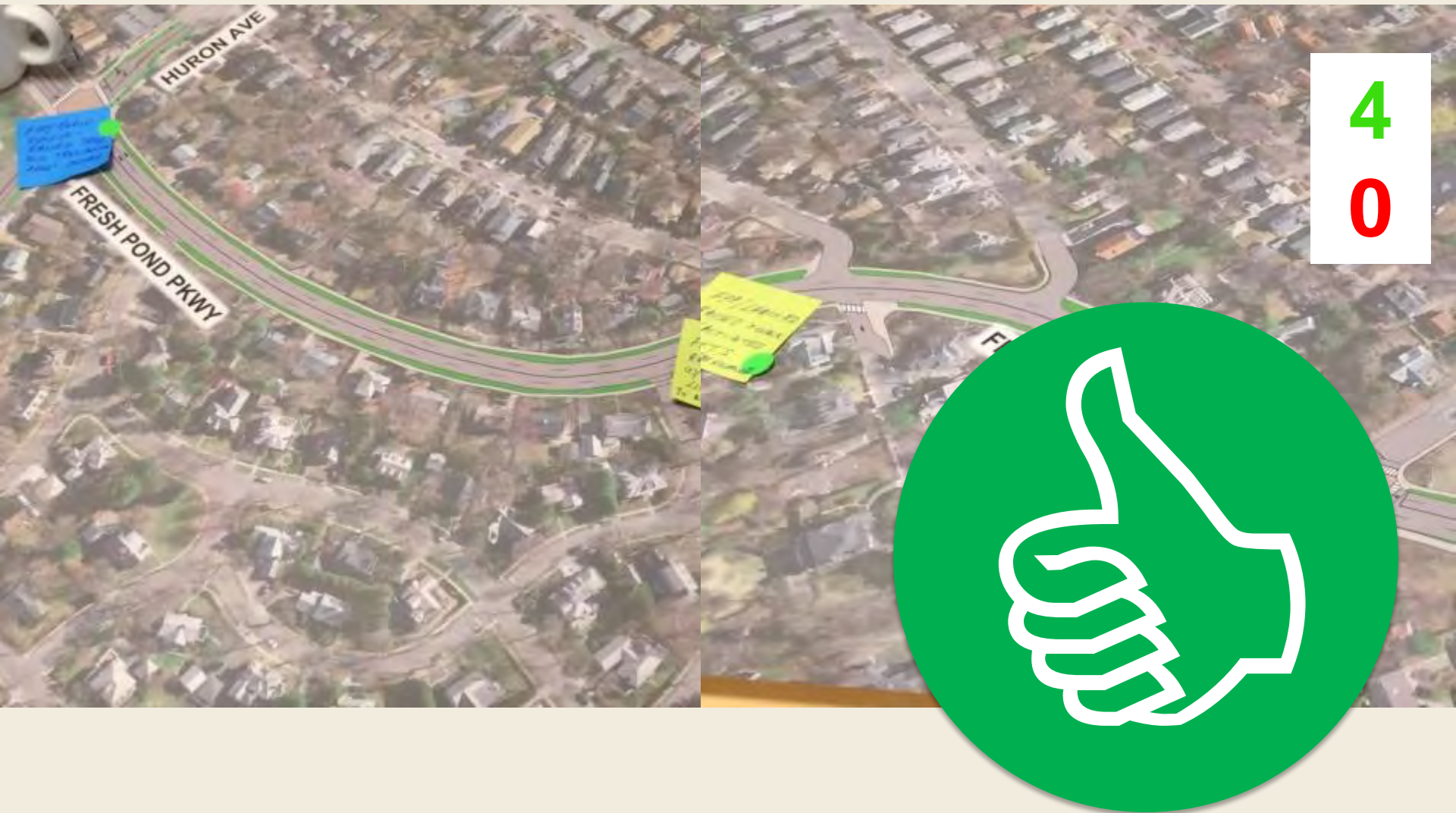
Option A (Stamped) – Fresh Pond Parkway



Option B (Raised) – Fresh Pond Parkway



Option B (Raised) – Fresh Pond Parkway



Option A – Gerry's Landing - Greenough Blvd Feedback



0

Option B – Gerry's Landing - Greenough Blvd



9

4

Option A – Gerry's Landing - Greenough Blvd



5

0

Option A – Mount Auburn Corridor (West Side)



Option A – Mount Auburn Corridor (East Side)



Option B – Mount Auburn Corridor (West Side)



22
13

Option B – Mount Auburn Corridor (East Side)

Option A



13



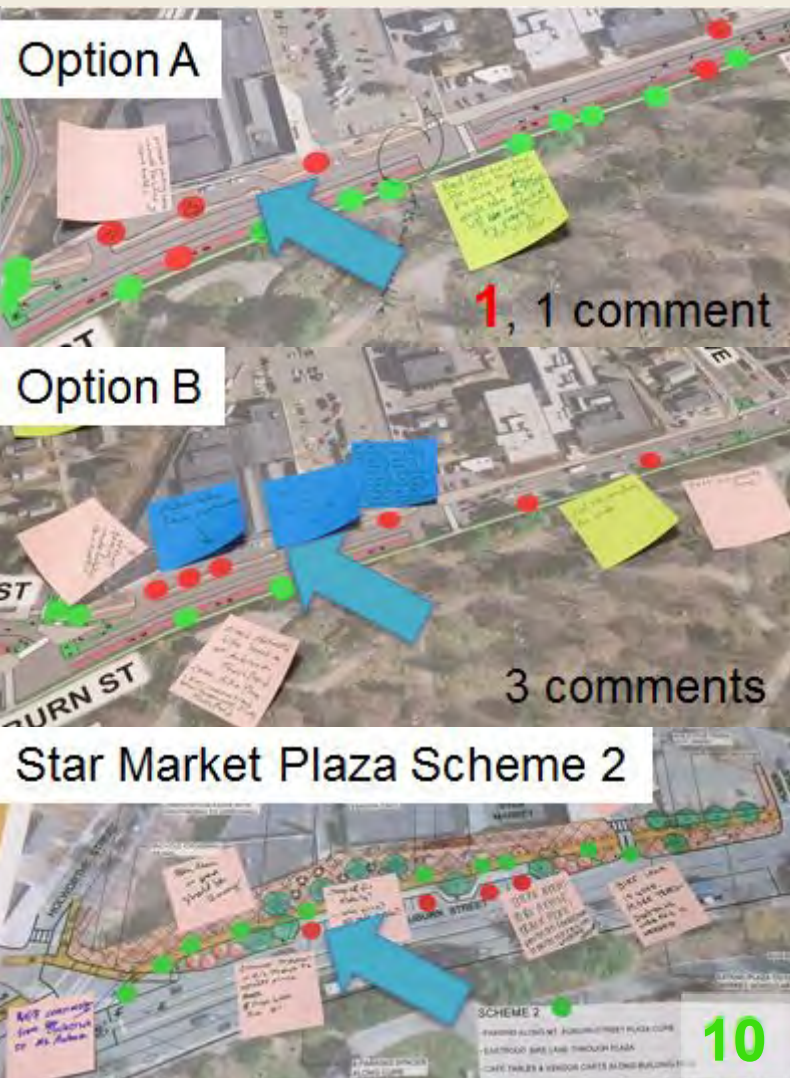
Option A – Mount Auburn Corridor



33
11



Community Feedback: Westbound Bike Lane Needed



“protected connections to protected facilities – Watertown Greenway”



Early Response to Comments (Better Bike Infrastructure, and more.)

Key Points We Heard

- Strong support for separated bike lanes on entire Mt. Auburn Corridor.
- Strong support for transit lanes on Mt. Auburn.
- Support for keeping motorist delay at a minimum.
- Strong support for removing the Brattle merge.
- Suggestion for a pedestrian actuated crossing signal at Larch Road.
- Support and Non-support of use of raised tables at signalized intersections.
- Concern about safe access to the U-Turn off Greenough Blvd.
- (More to come at Public Meeting!)

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Bike Improvements – Brattle to Aberdeen



Bike Improvements – Aberdeen to Homer



Bike Improvements – Homer to Belmont



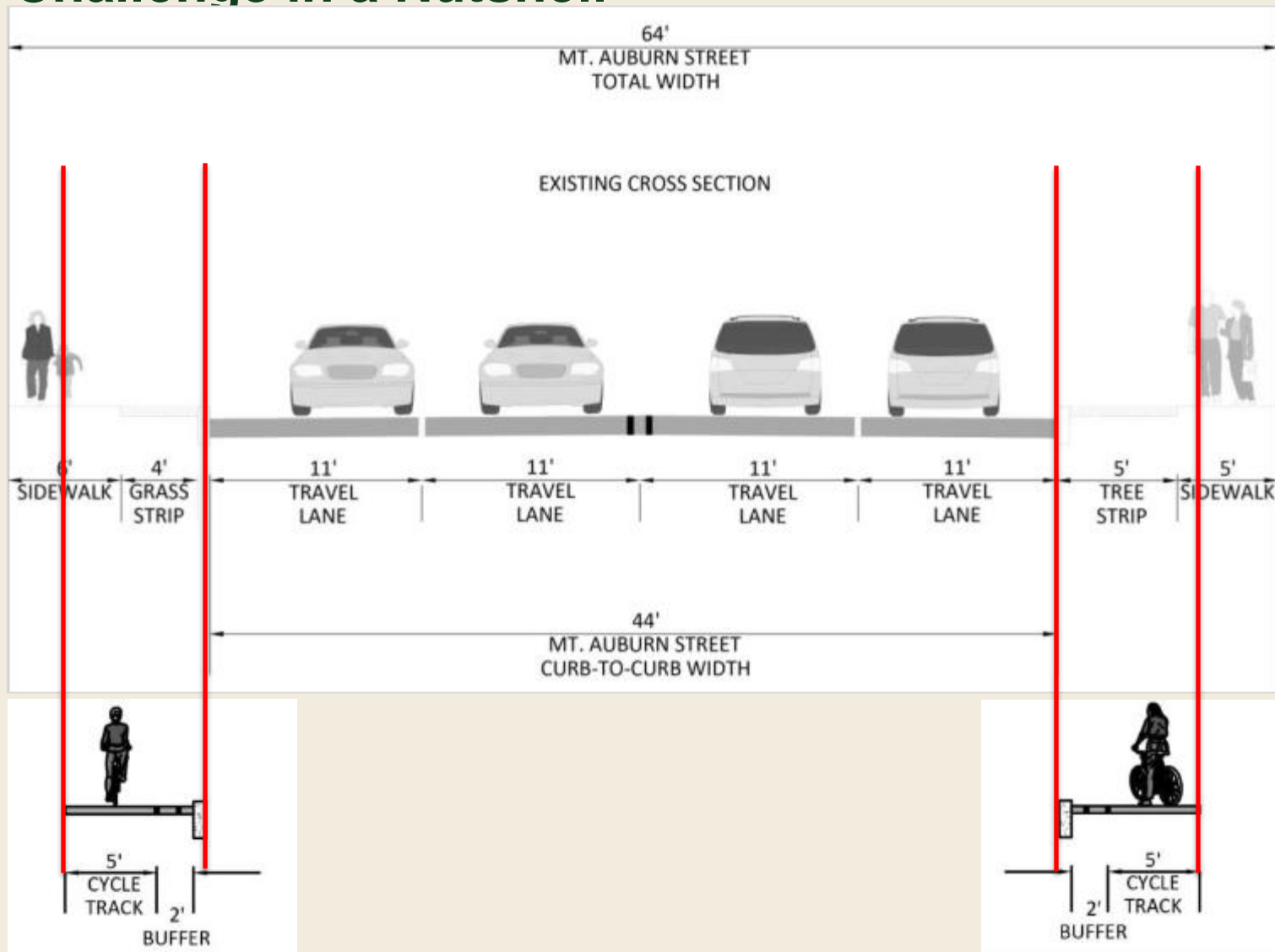
Cambridge - Watertown Greenway Connection



Bike Lanes Attempted – Coolidge Ave to Brattle St



The Challenge in a Nutshell



Westbound Bike Lane – AM Peak Queues



Westbound Bike Lane – PM Peak Queues



Double Road Diet: VISSIM Analysis

- *Mount Auburn Corridor with one lane in each direction*

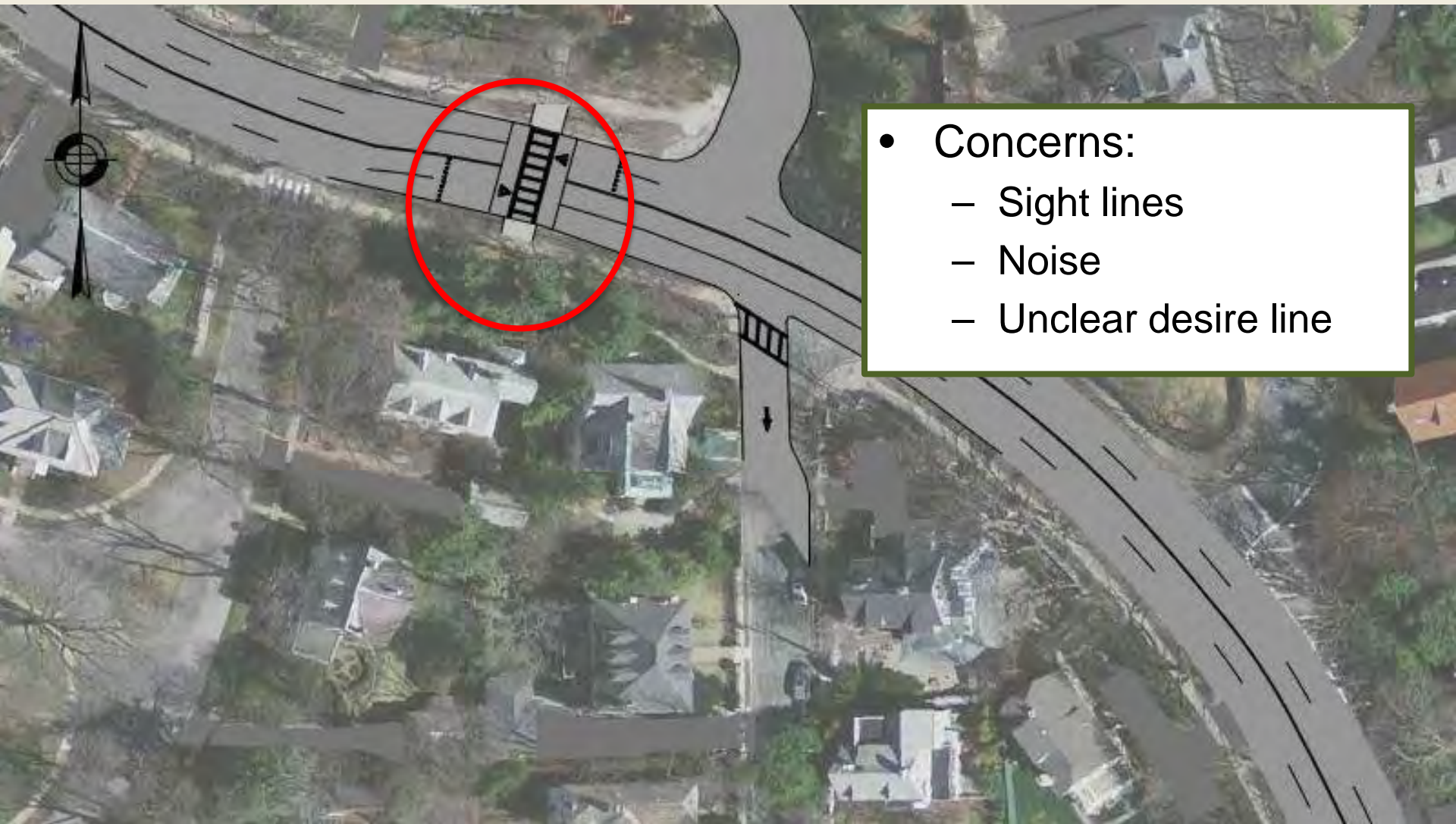
Two-Way Protected Intersection at Fresh Pond Parkway



Key Points We Heard

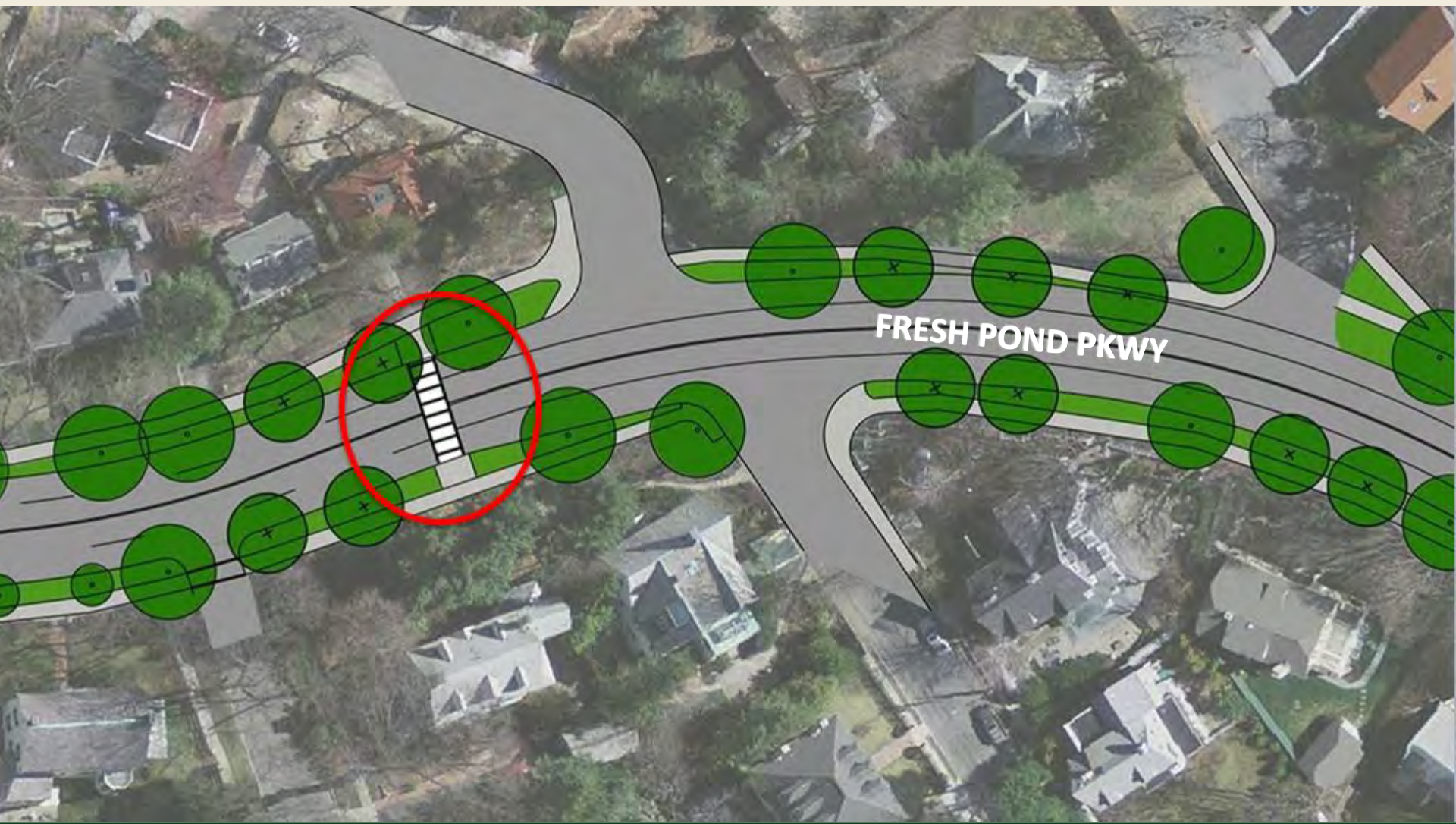
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Midblock Crossing at Larch Road – Old Version

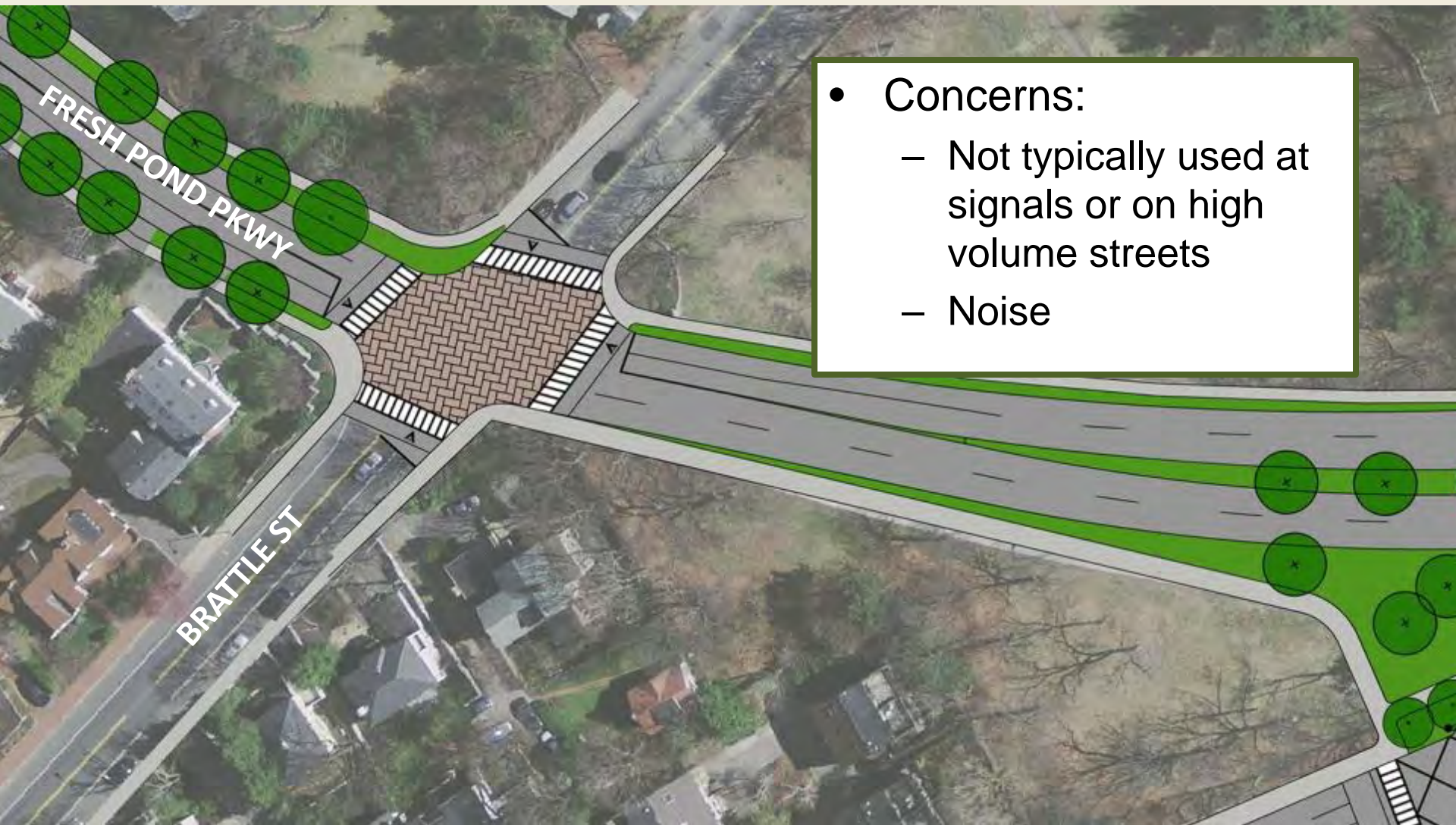


- Concerns:
 - Sight lines
 - Noise
 - Unclear desire line

New Solution: Signalized Crosswalk

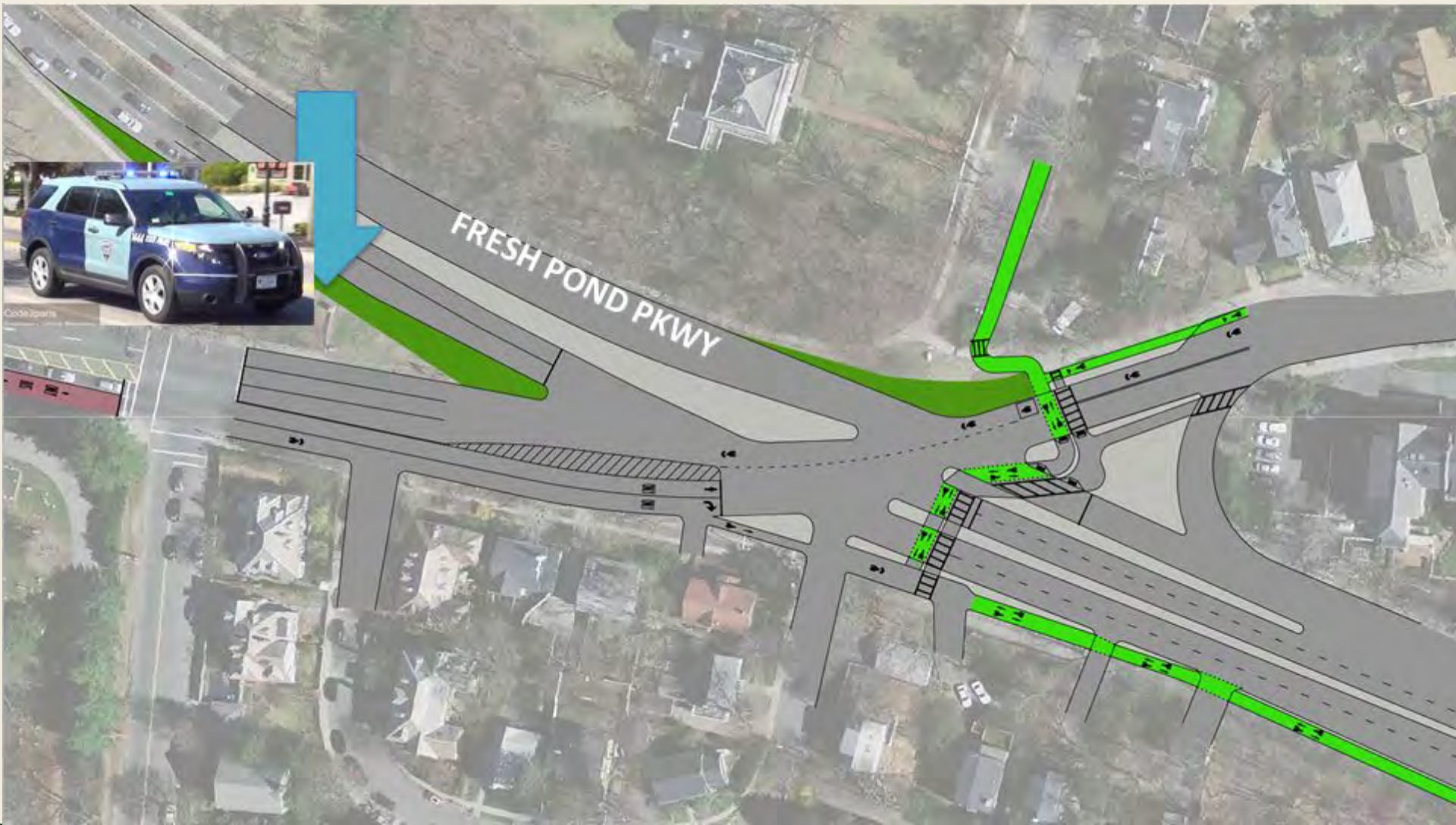


Raised Crossing Debate – To Be Continued



- Concerns:
 - Not typically used at signals or on high volume streets
 - Noise

Police Enforcement Opportunity – Short Term



Police Enforcement Opportunity – Long Term



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- (More to come at Public Meeting!)

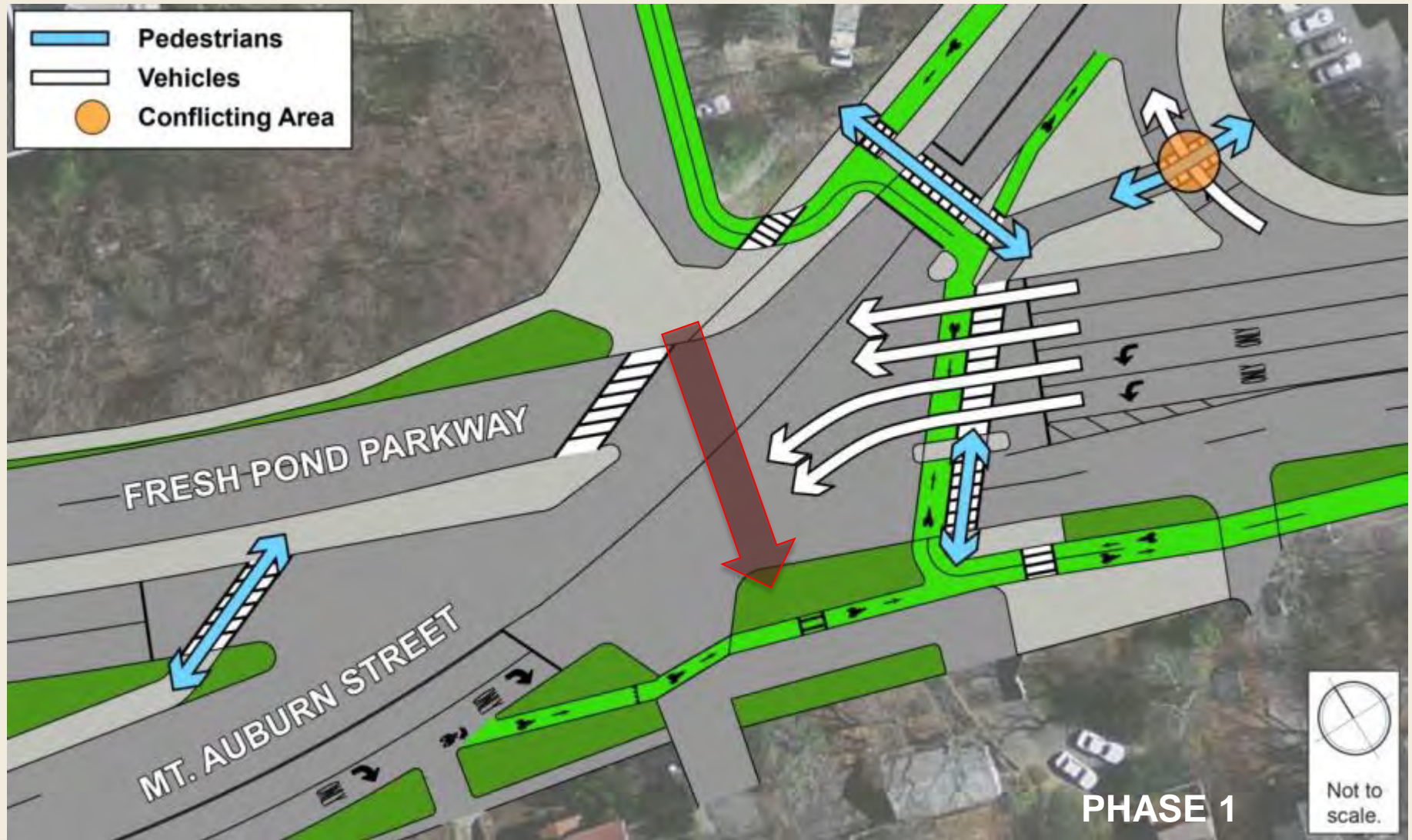
New Turnaround Solution



Key Points We Heard

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- Concern about safe access to the U-Turn off Greenough Blvd.
- **All Walk at Fresh Pond and Mt. Auburn**
- (More to come at Public Meeting!)

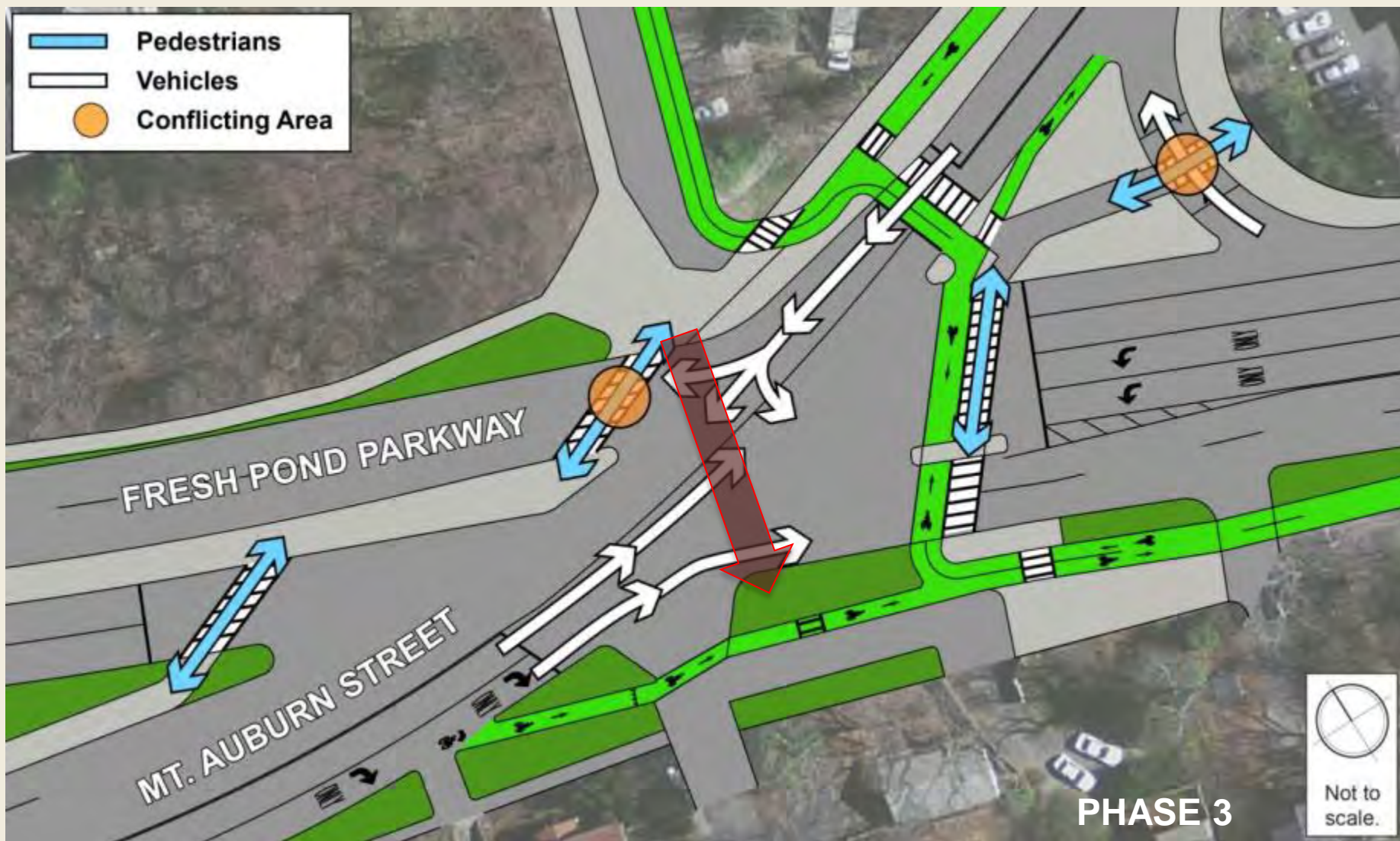
Community Feedback: Signal Phasing for Pedestrian Crossings



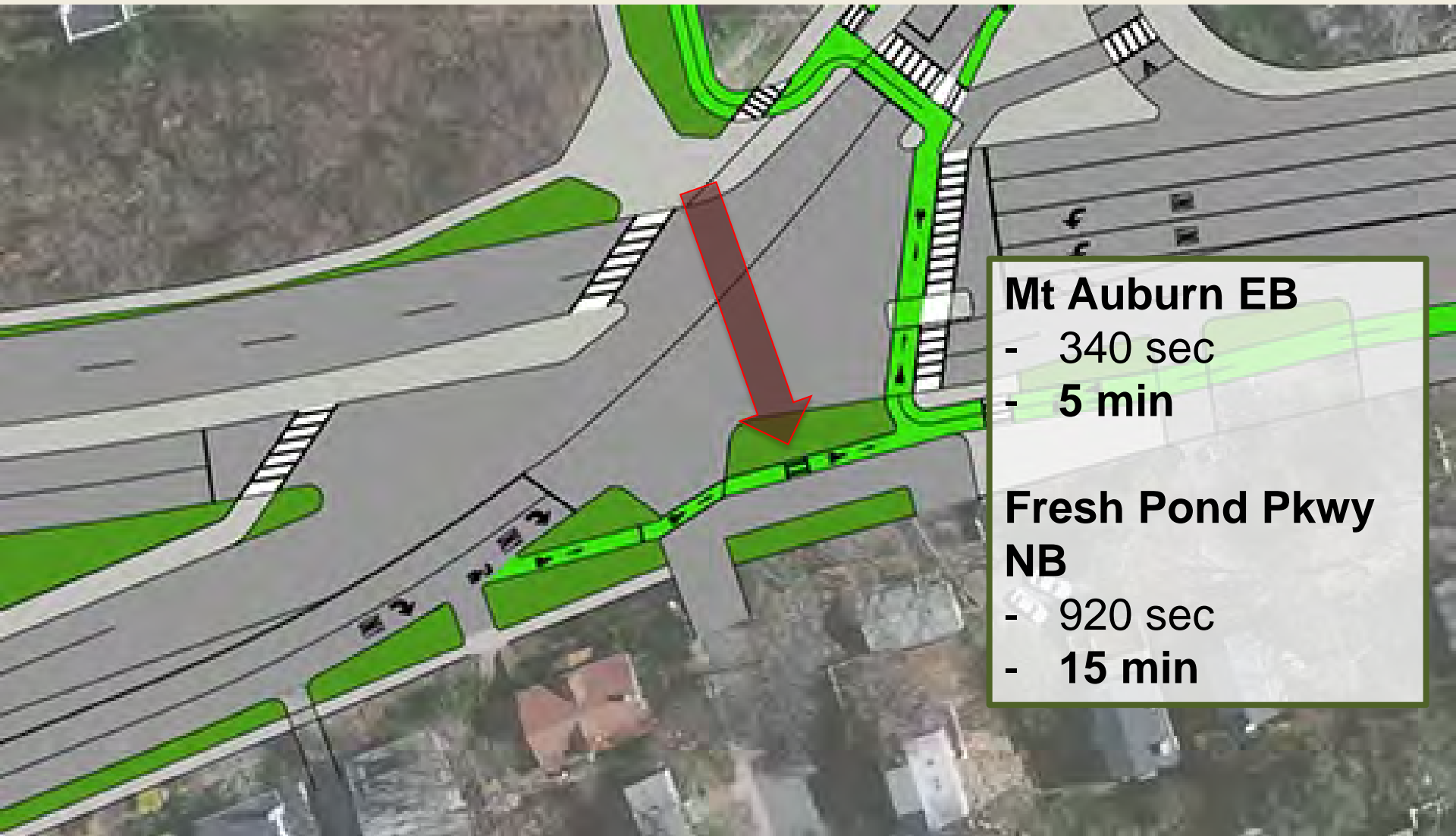
Signal Phasing for Pedestrian Crossings



Signal Phasing for Pedestrian Crossings



If Exclusive Pedestrian Phase, Then Major Delays



Mt Auburn EB

- 340 sec
- 5 min

Fresh Pond Pkwy NB

- 920 sec
- 15 min

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- All Walk at Fresh Pond and Mt. Auburn
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A few of the things still to address:

- Bike Lanes on Eliot Bridge



Review of Vision Zero Effort and Incorporating Cambridge Bike Plan

Cambridge Bicycle Plan (2015)

“Most transit trips begin and/or end with a walk or bike ride”



Goals of Vision Zero Cambridge¹




- Eliminate traffic fatalities and serious injuries from traffic crashes
- Improve bicycle and pedestrian facilities
 - Clarify signals for pedestrians
 - Improve turning safety for bicycles
- Lower vehicle speeds
- Data driven enforcement
- ***Redesign streets to encourage safe, healthy, equitable mobility options***



¹<https://www.cambridgema.gov/traffic/sustainabletransportation/visionzero>

Long Term Concept: Mount Auburn






-  Vision Zero: *improve bike facilities when not separated, provide equitable mobility options, enforcement opportunity*
-  Cambridge Bicycle Plan
-  Both: *connect to off-street bike path, separated bike facilities where possible including at intersections, safety improvements to reduce crashes, speeds*

Long Term Concept: Fresh Pond Parkway






- Additional speed limit signs
- Speed activated signs

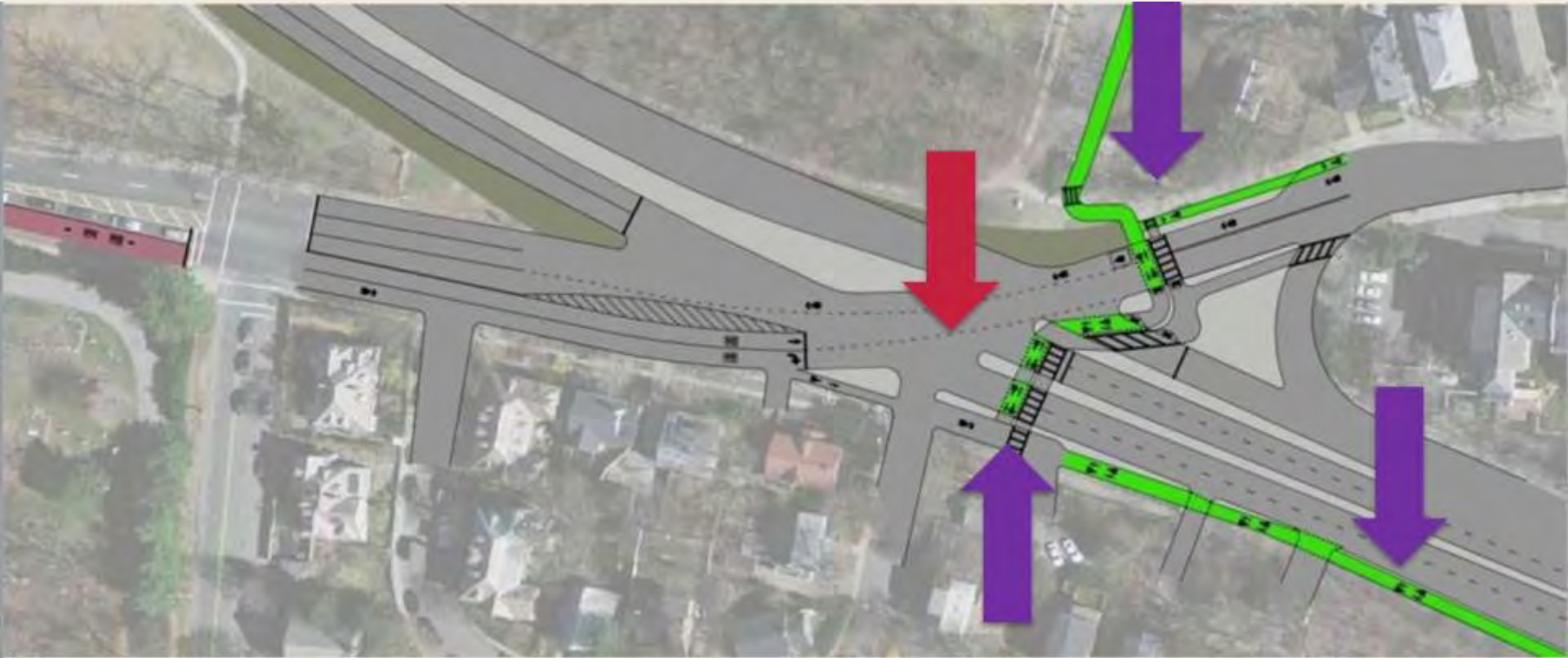
-  Vision Zero: *reduce vehicle speeds and crashes, improve pedestrian facilities*
-  Cambridge Bicycle Plan
-  Both: *reduce ped/bike conflicts, connect to off-street path, separated bike facilities where possible including at intersections, safety improvements,*




Long Term Concept: Gerry's Landing



-  Vision Zero: *improve pedestrian connectivity, reduce traffic crashes*
-  Cambridge Bicycle Plan
-  Both: *connect to off-street bike path, separated bike facilities where possible including at intersections, safety improvements to reduce crashes, speeds*

Mt. Auburn Street at Fresh Pond Parkway — Short-Term



-  Vision Zero: *reduce vehicle speeds and crashes, improve pedestrian facilities*
-  Cambridge Bicycle Plan
-  Both: *reduce ped/bike conflicts, connect to off-street path, separated bike facilities where possible including at intersections, safety improvements*



Analysis Changes & People Delay Concept

Changes “Down by the River”



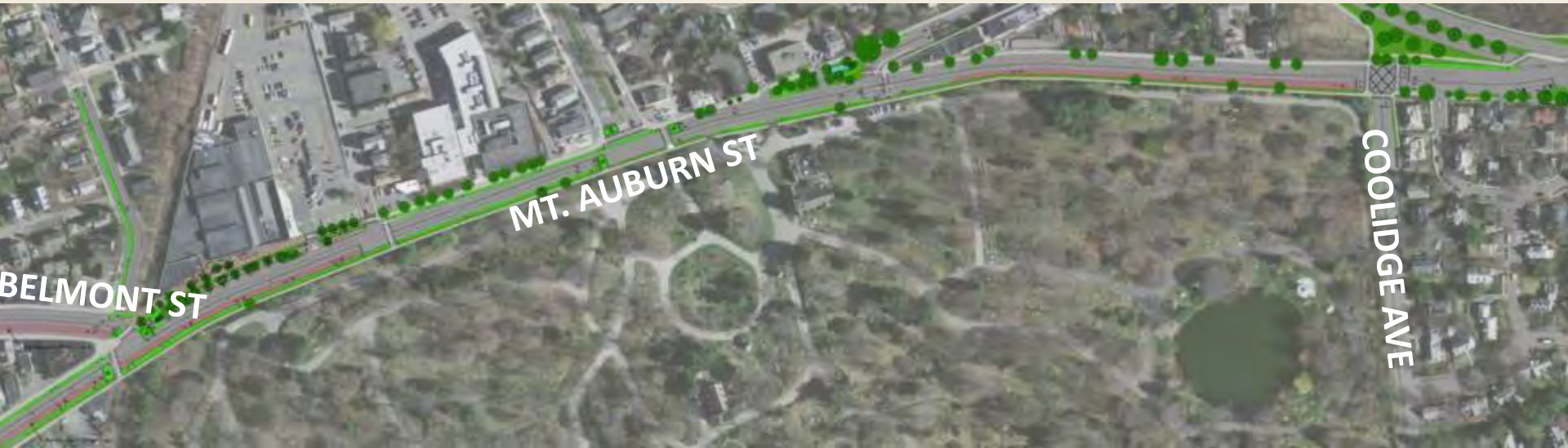
Changes “Down by the River”



VISSIM Animations

- *Long Term Concept: Gerry's Landing – Memorial Dr. – Eliot Bridge – Greenough Blvd*

Mount Auburn Street – The People Mover

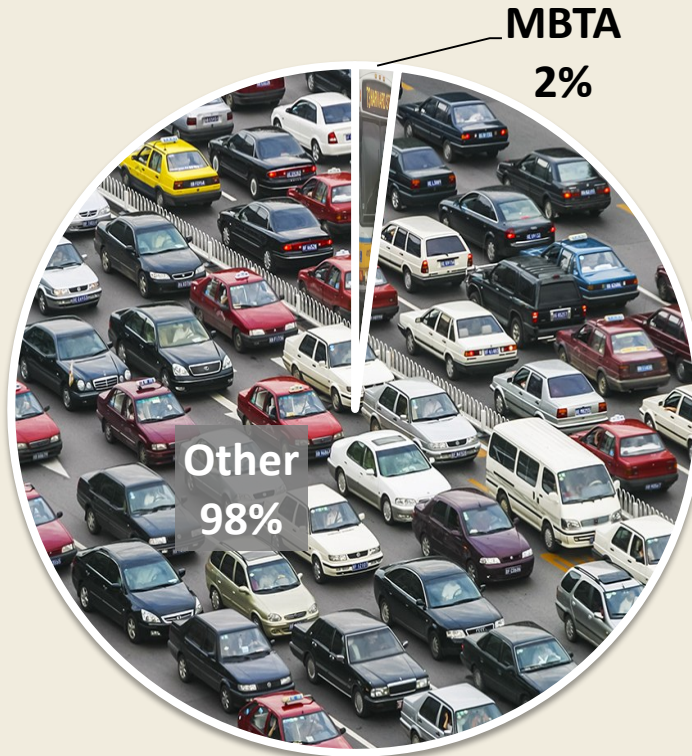


Belmont St. to Homer Ave. (AM Peak)



Belmont St. to Homer Ave. (AM Peak)

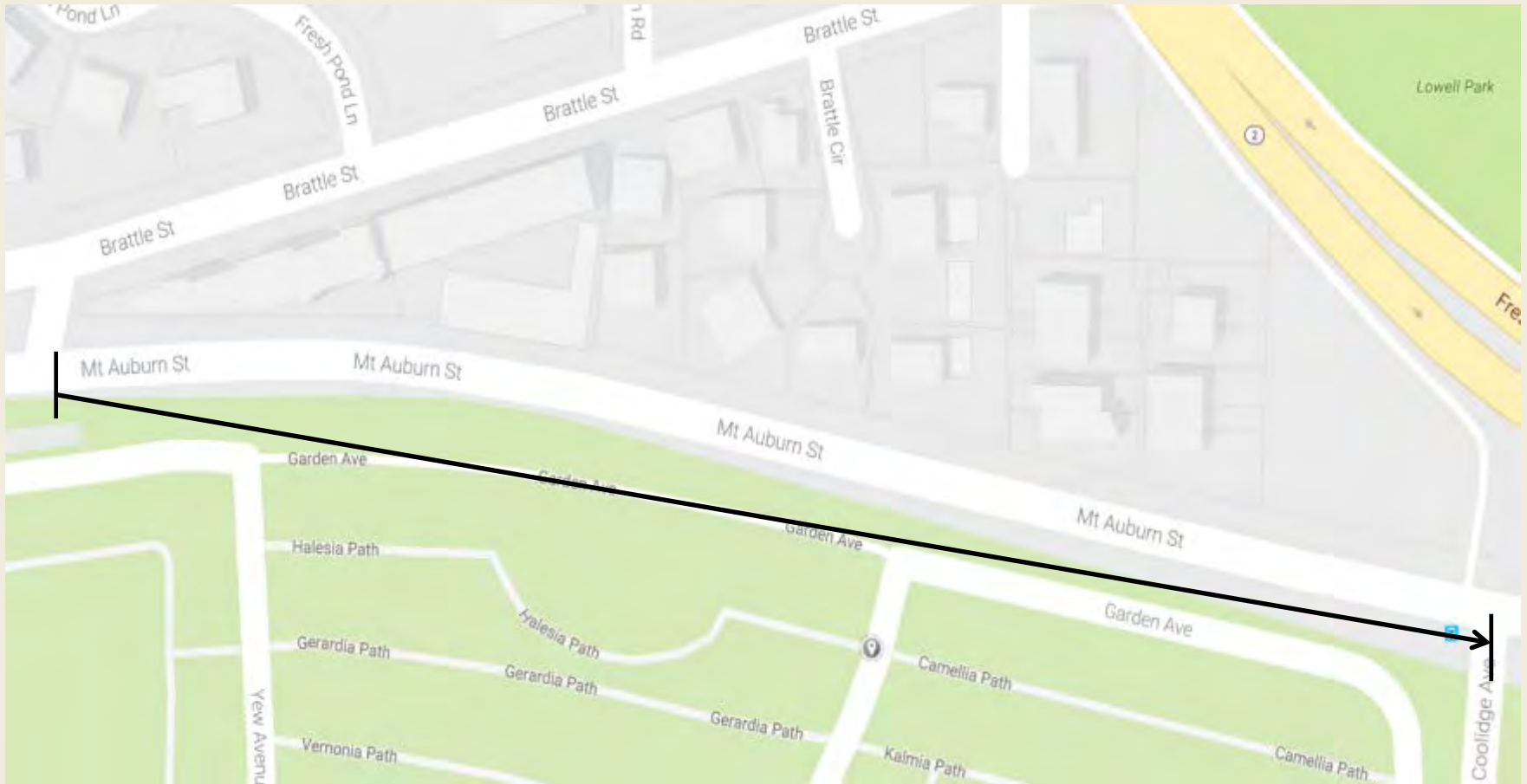
Vehicles



People

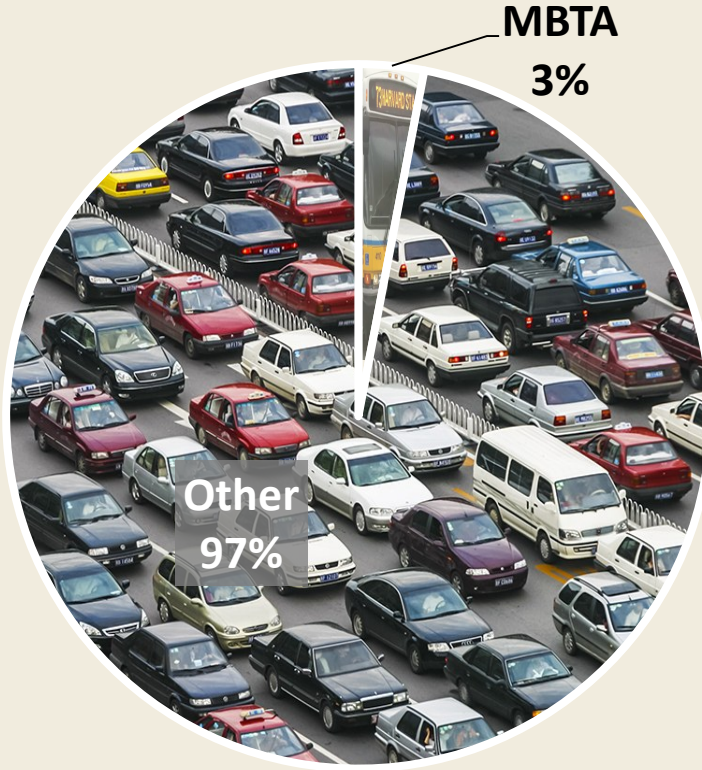


Brattle St. to Coolidge Ave. (AM Peak)



Brattle St. to Coolidge Ave. (AM Peak)

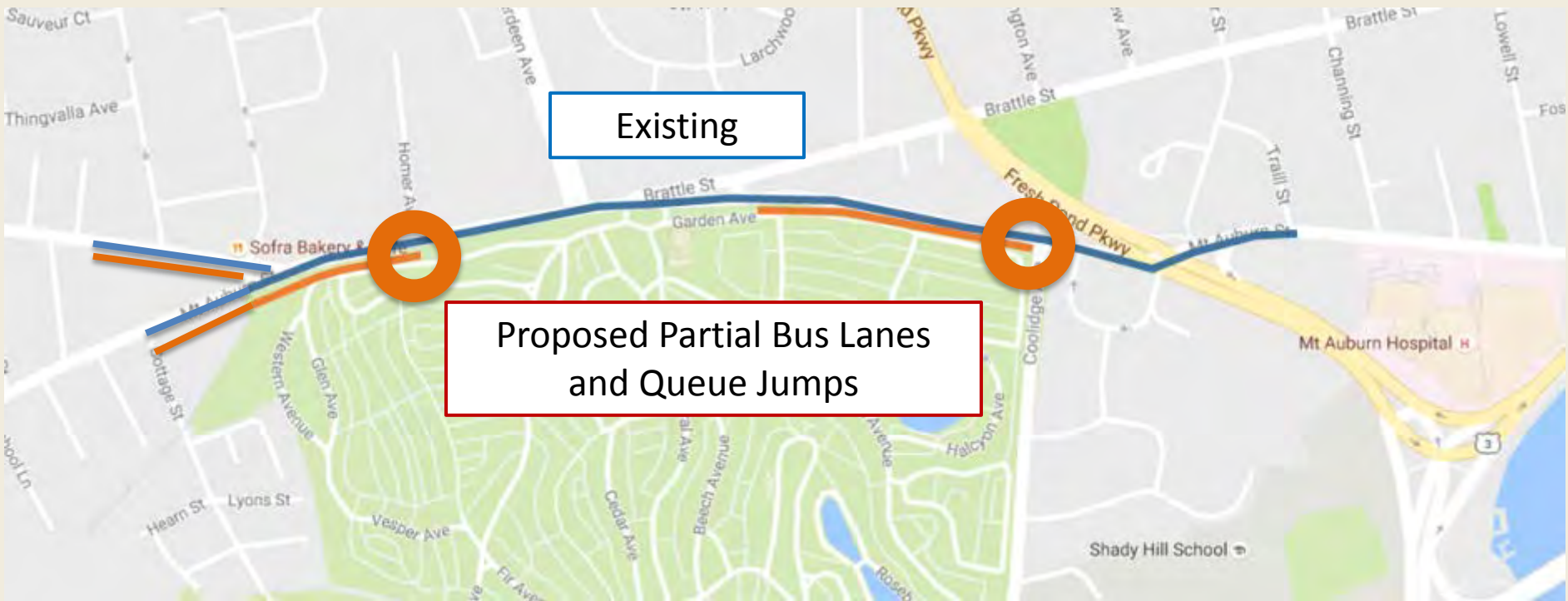
Vehicles



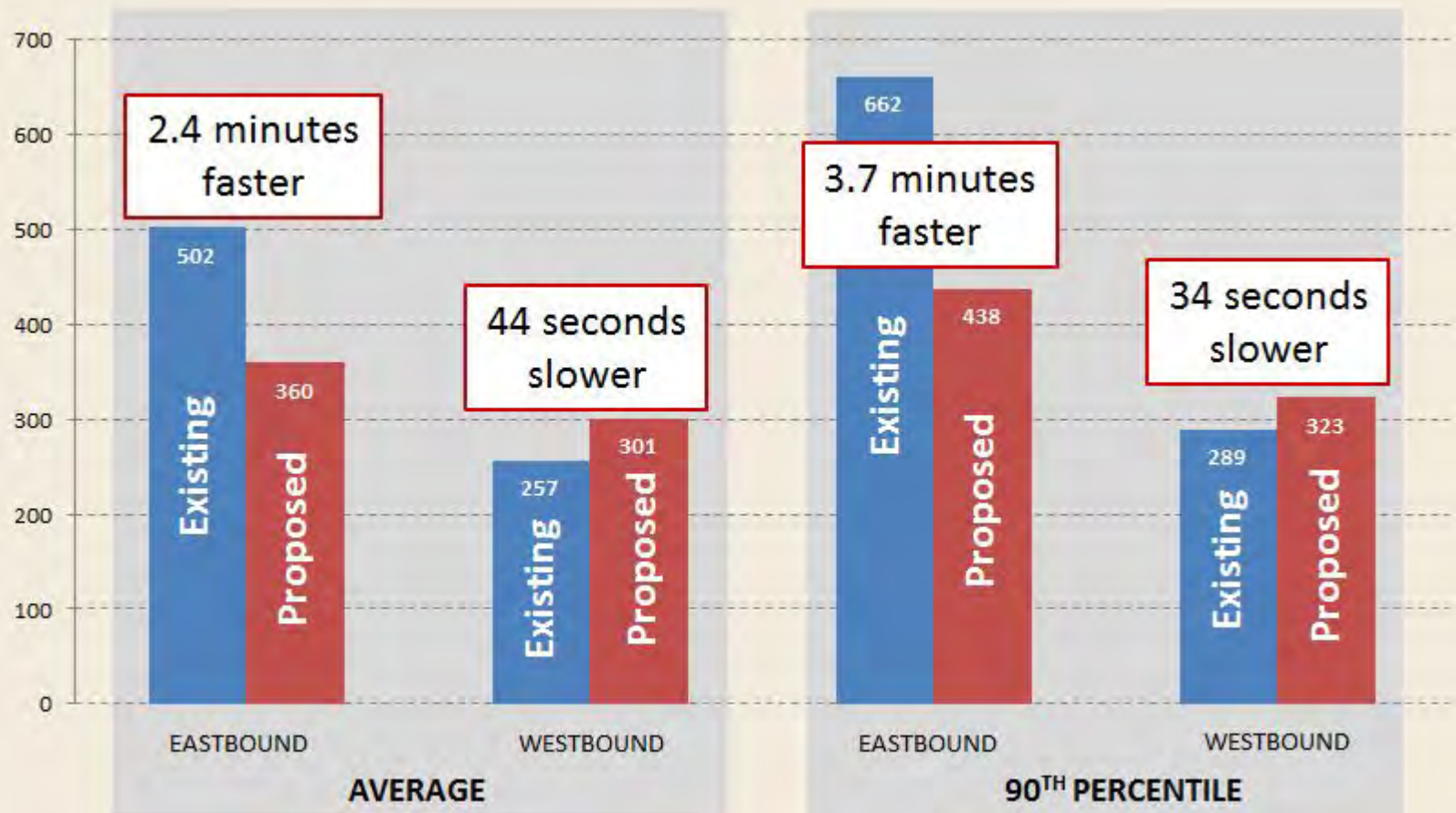
People



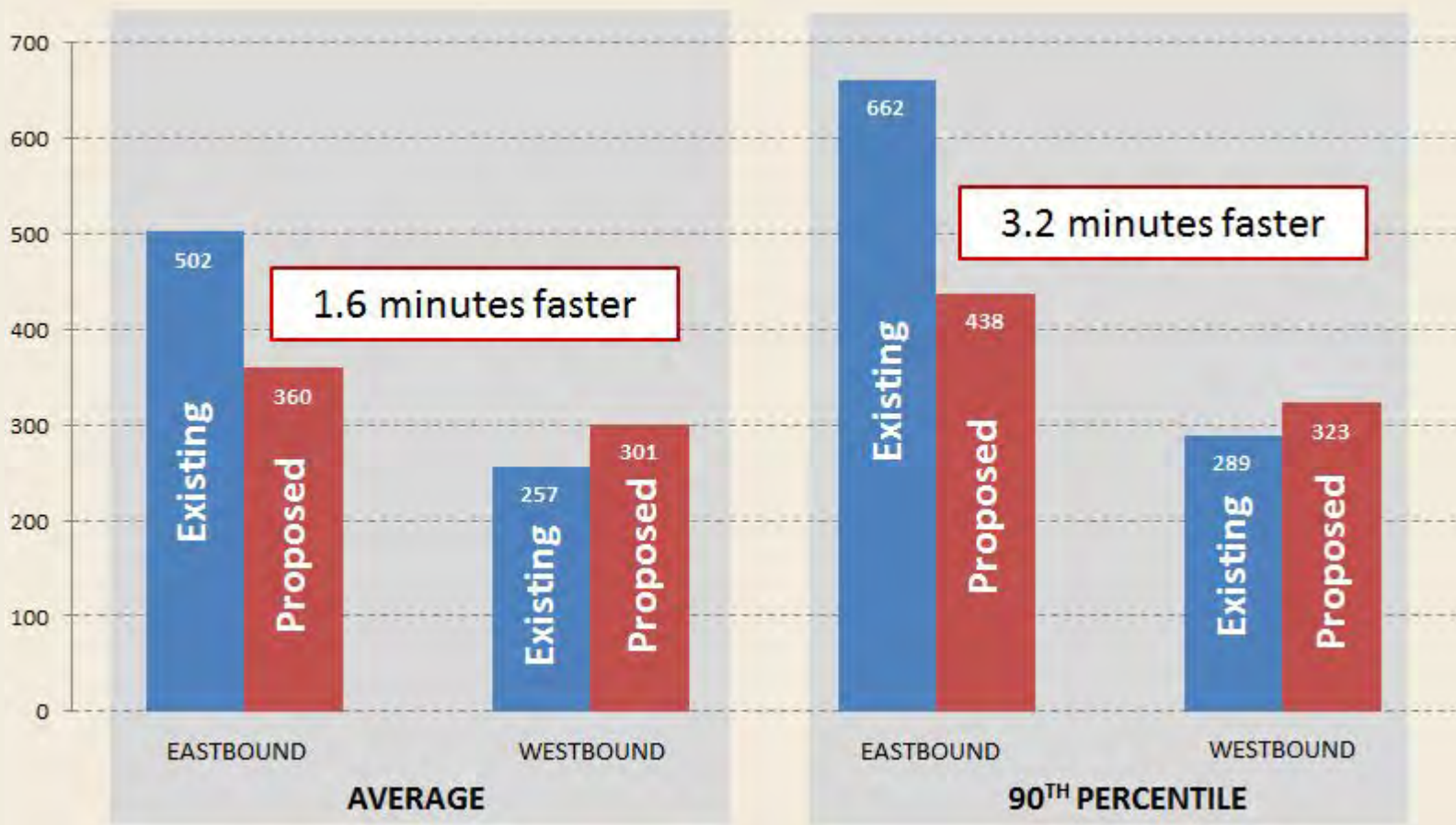
Proposed Bus Lanes



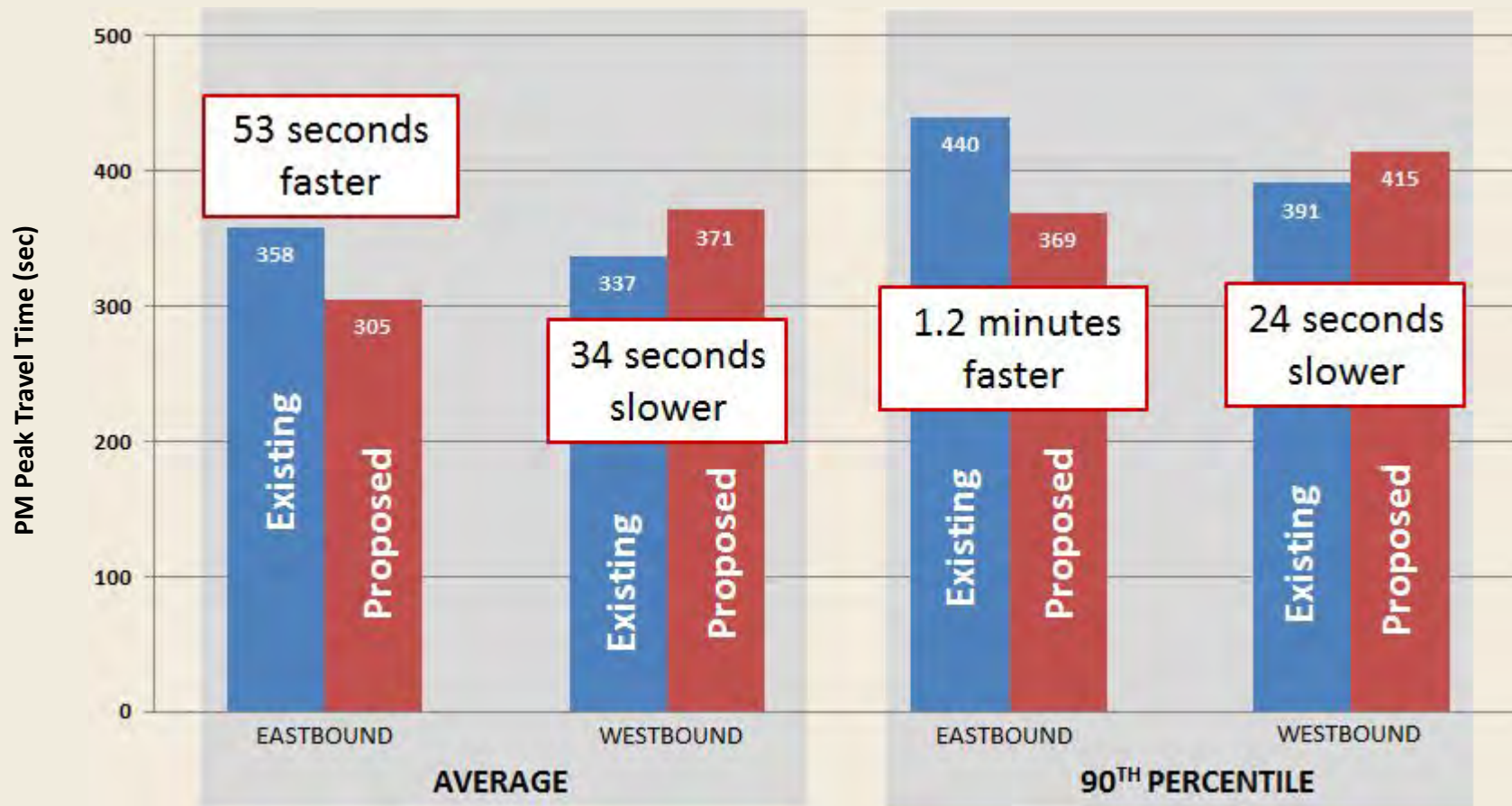
Bus (AM Peak) – Passenger Travel Time Savings



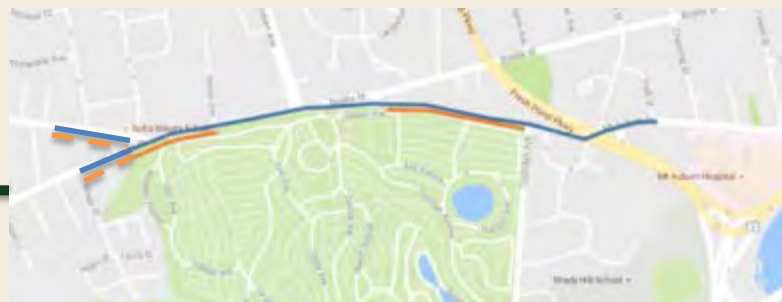
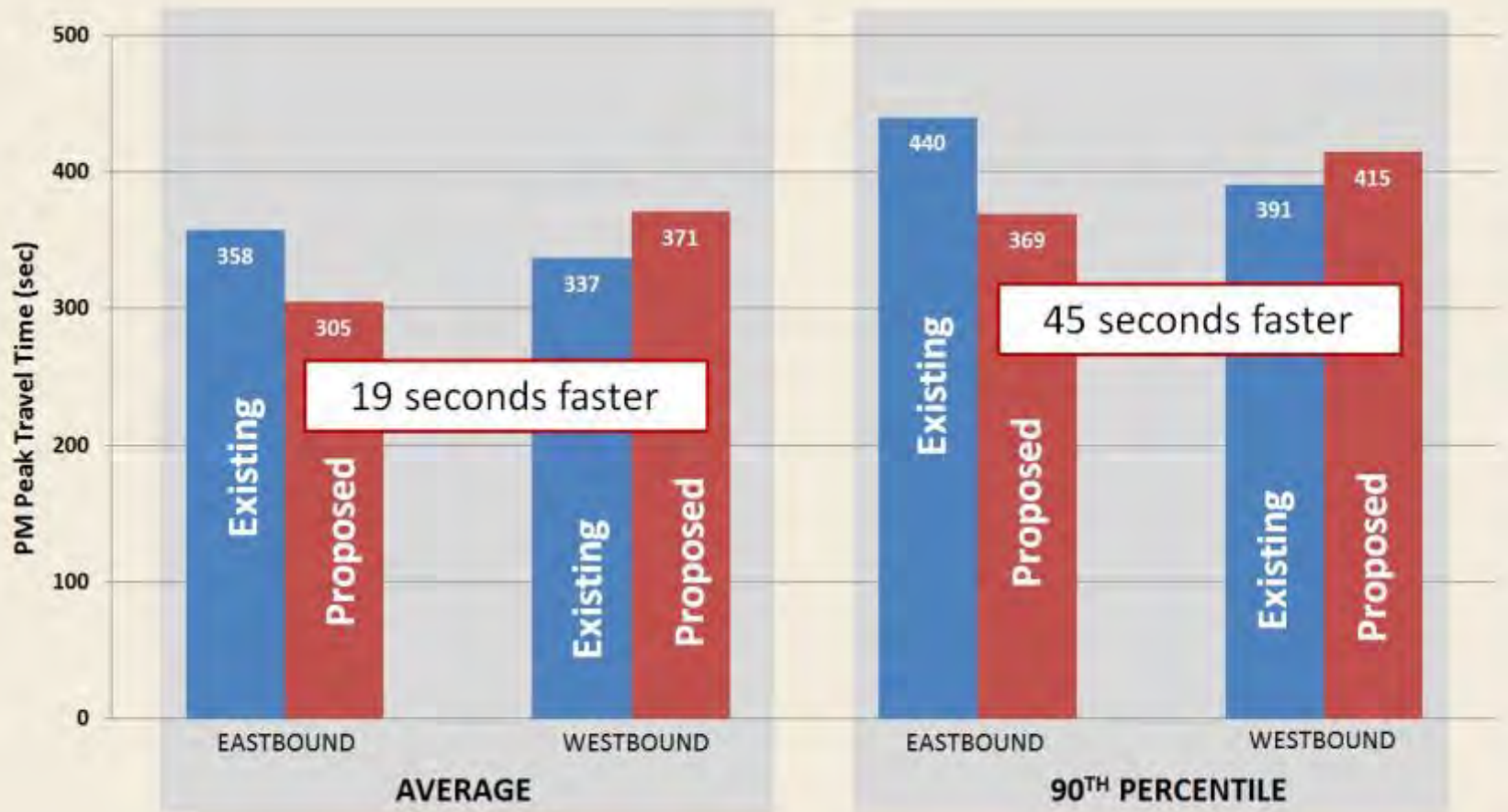
Bus (AM Peak) – Round Trip Travel Time Savings



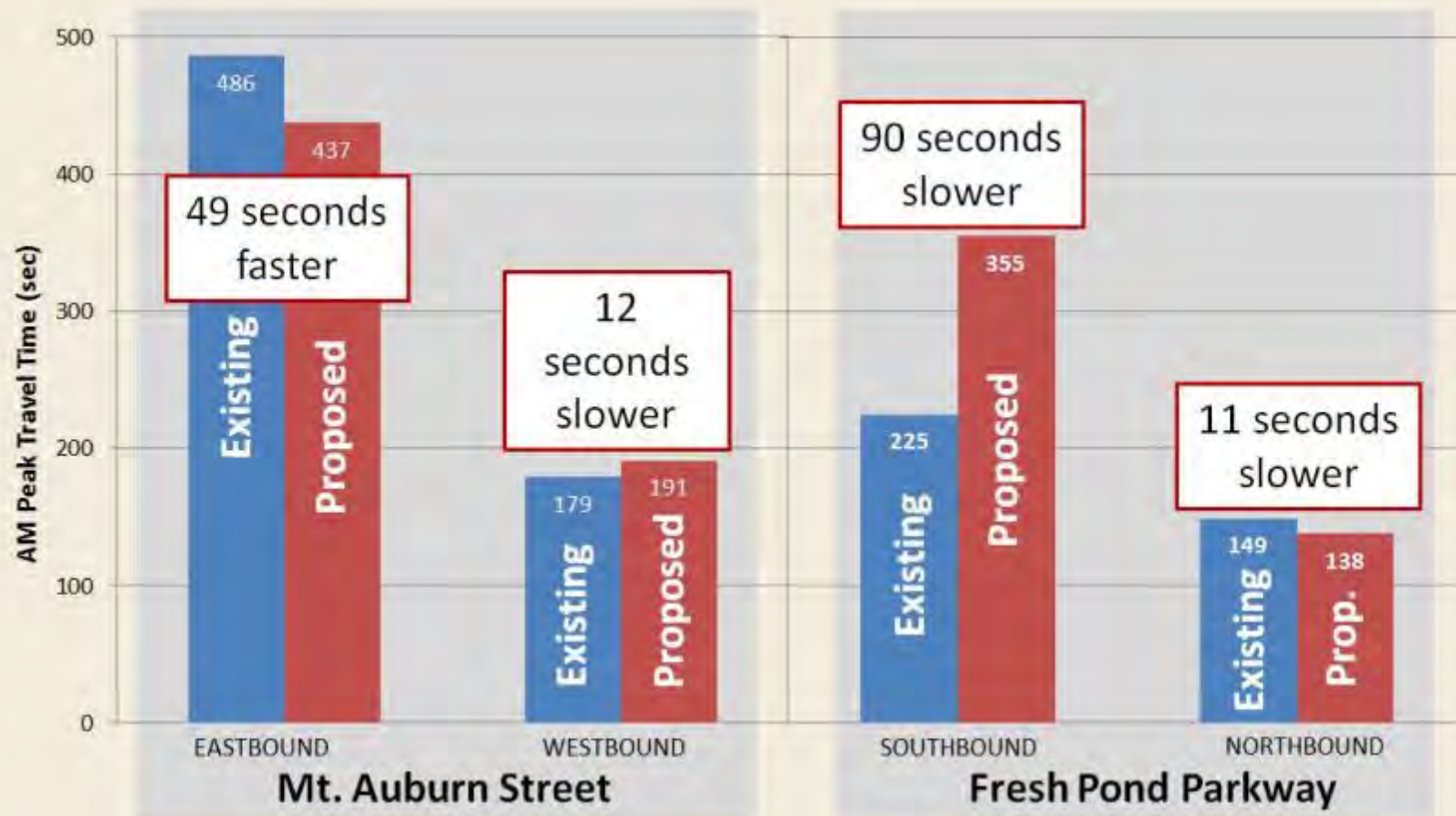
Bus (PM Peak) – Passenger Travel Time Savings



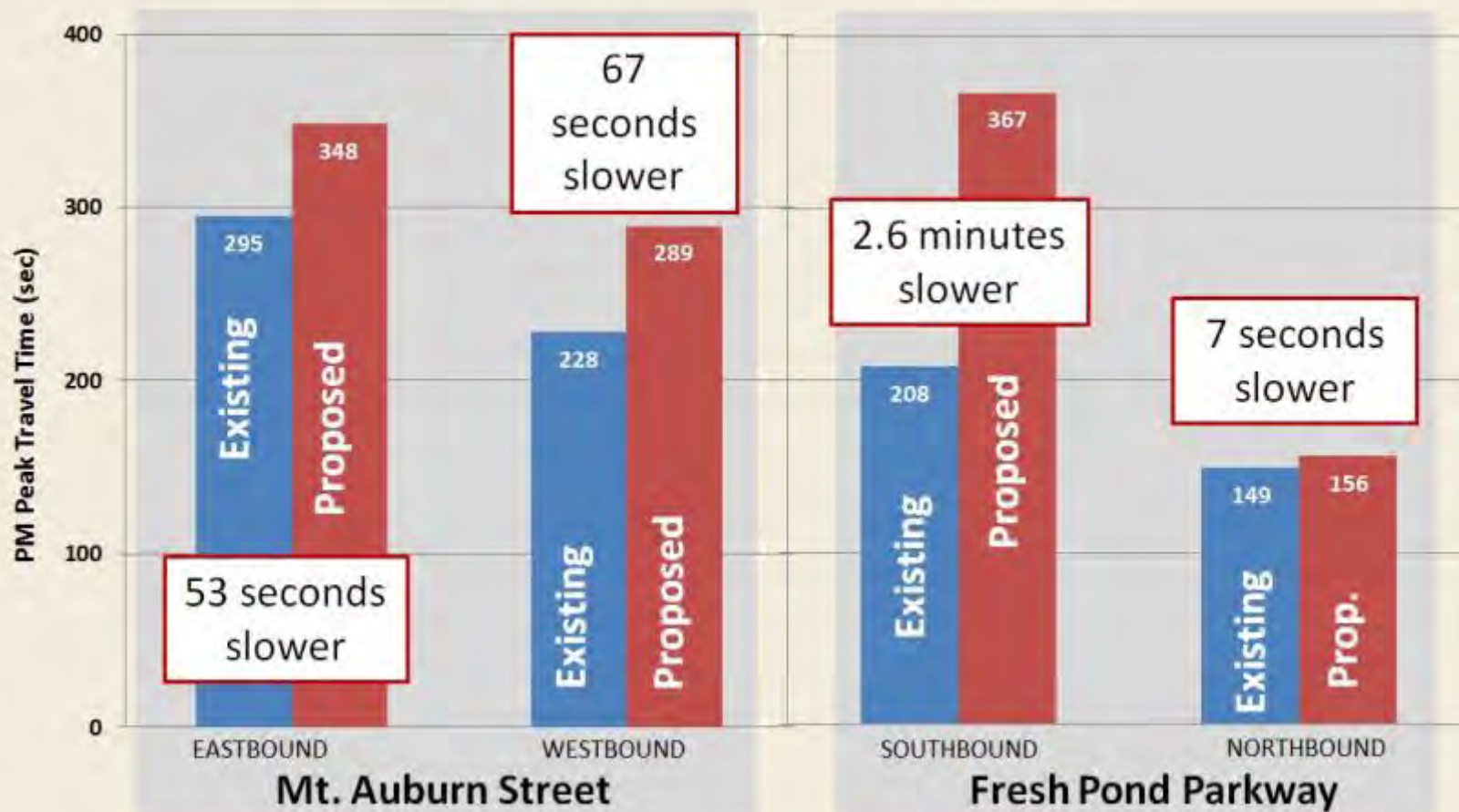
Bus (PM Peak) – Round Trip Travel Time Savings



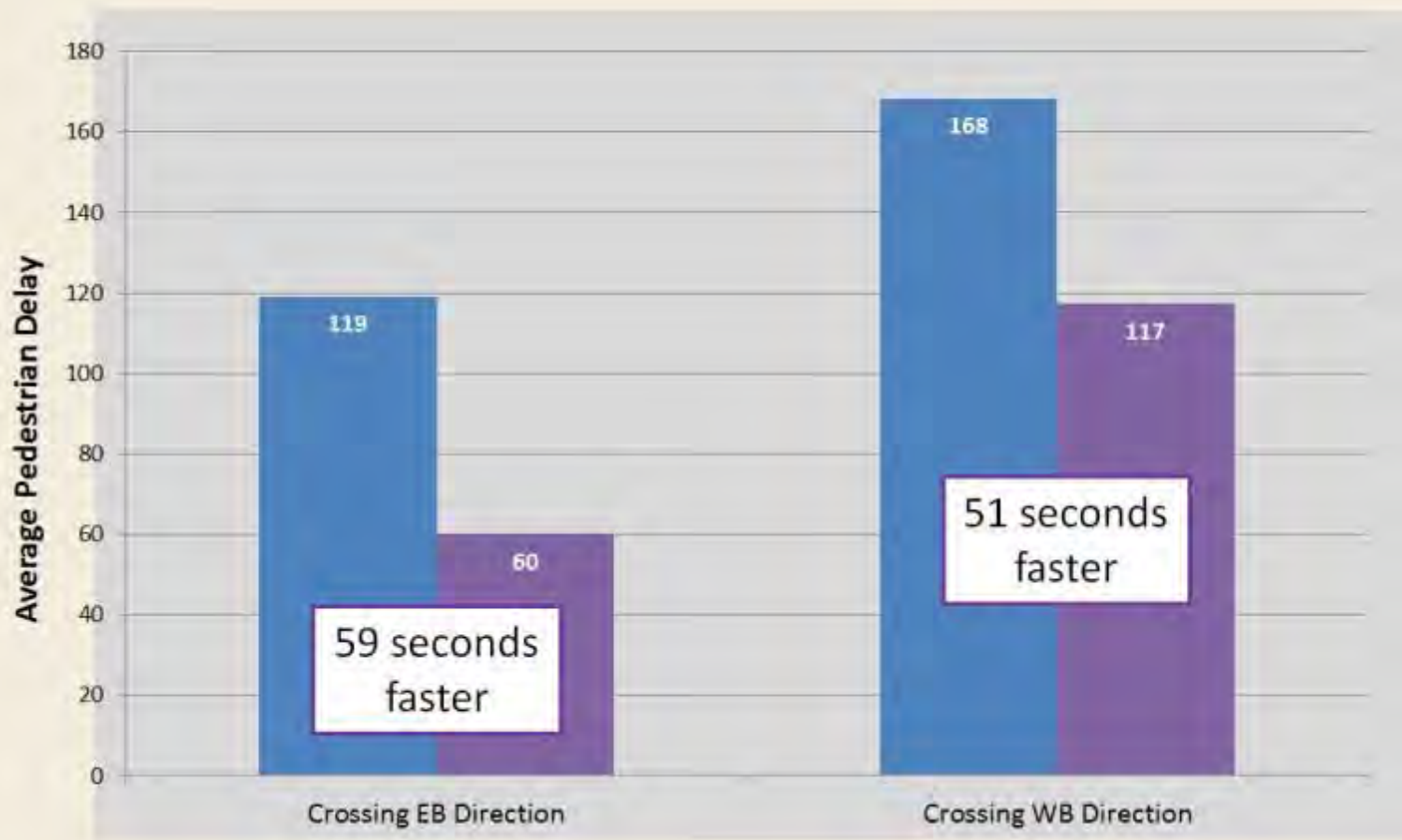
Auto Travel Time (AM Peak)



Auto Travel Time (PM Peak)



Mt Auburn Pedestrian Delay at Fresh Pond Parkway



VISSIM Animations

- *Long Term Concept: Mount Auburn Street*



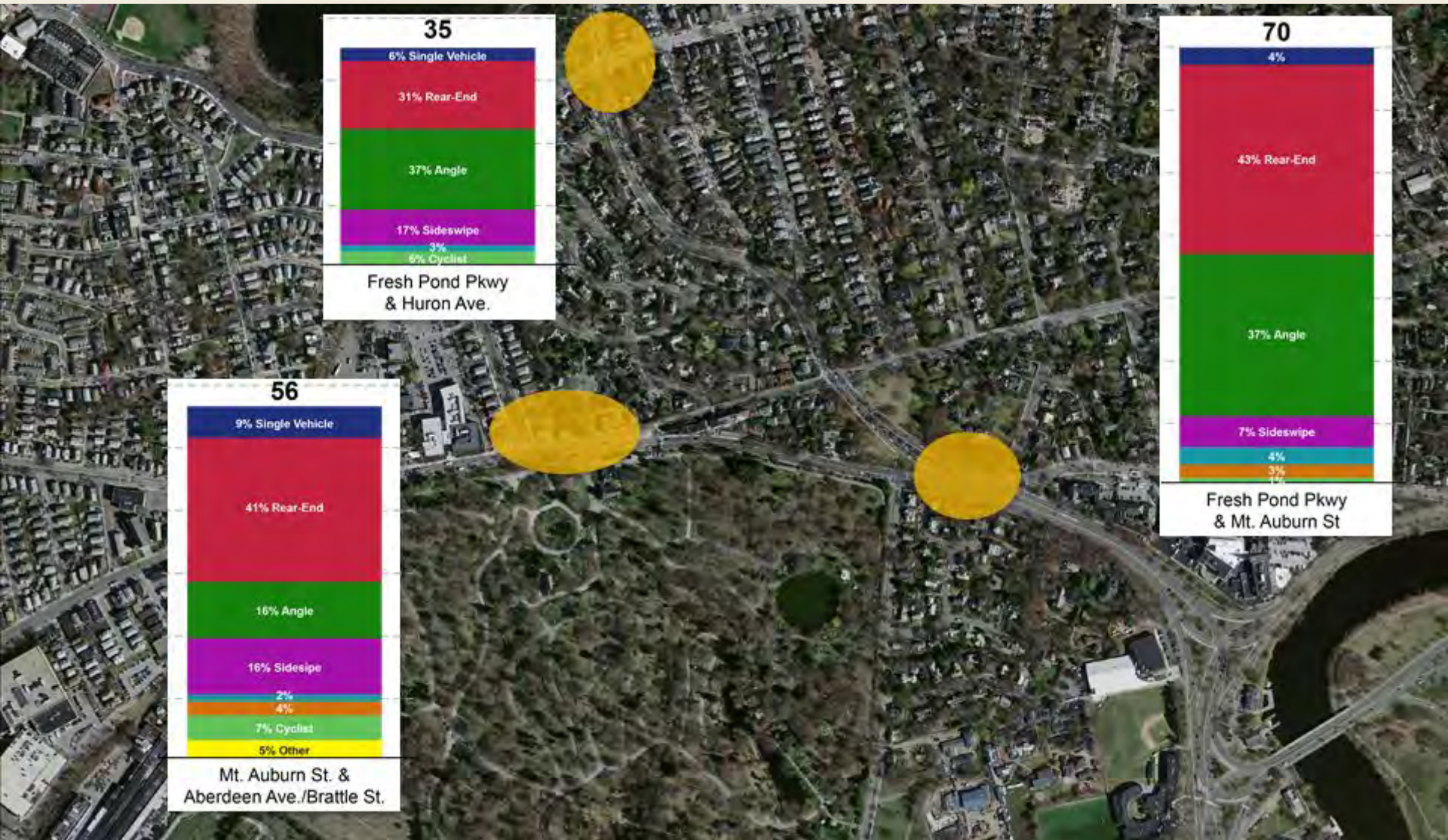
Long Term Concept Benefits

Benefits for Motor Vehicles, RSA Results Addressed

- Calmed traffic
- Reduced vehicle speeds
- Reduced conflicts between vehicles and across modes
- Eliminated Brattle merge
- Improved operations at major intersections
- Providing clarity regarding left turns off Fresh Pond Parkway



Road Safety Audit Results



Neighborhood Benefits

- **4.5 acres** of new parkland, **1.6** programmed acres
- Introducing traffic calming elements
- Improving connections to the river
- Calms traffic
- Bridges Fresh Pond Parkway, connecting neighborhoods, improving safety



Pedestrian Benefits

- Improve pedestrian facilities throughout the corridor
- Quicker, safer pedestrian crossings along major desire lines
 - Fresh Pond/Mt. Auburn crossing distance reduced **65 feet**
- Reduce pedestrian and bicycle conflicts
- Providing equitable mobility options, focus on vulnerable road users



Benefits for Bicycles

- Improves the bicycle network within the corridor, connects to off street paths
- Improves turning safety at all major intersections
- Reduces pedestrian/bicycle conflicts
- Provides equitable mobility options, focus on vulnerable road users



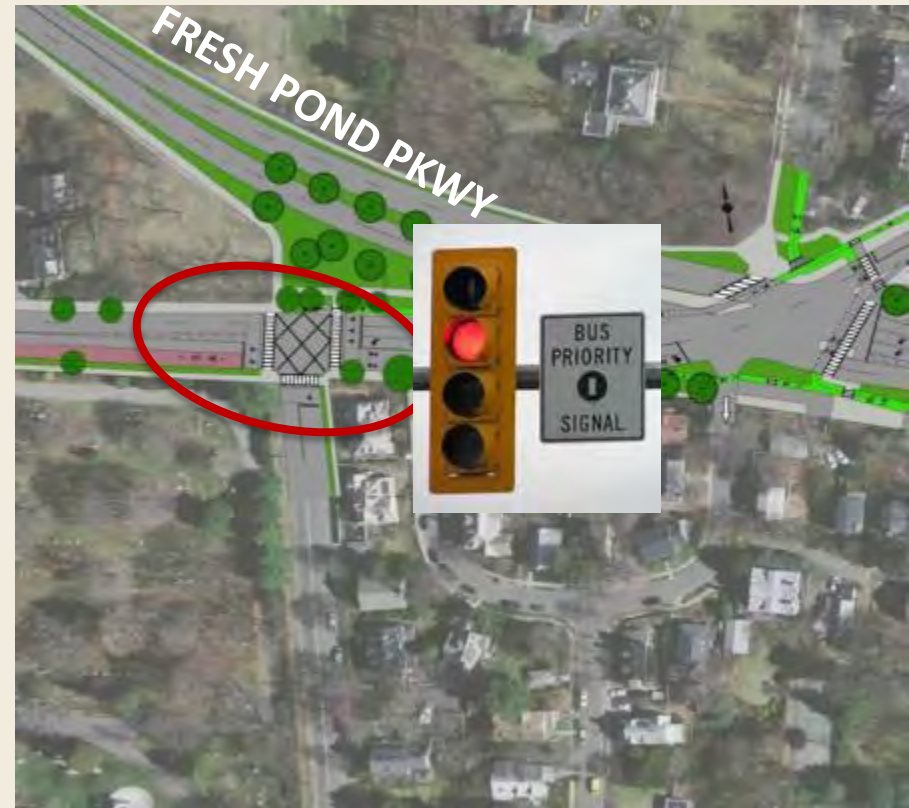
Cambridge Bicycle Plan 2015

“Most transit trips begin and/or end with a walk or bike ride”



Benefits for Transit

- **2.5 minutes** saved* for buses traveling eastbound in the AM Peak, **1 minute** saved* for in the PM Peak
- **30 seconds** saved* for buses traveling westbound saved in the PM Peak
- Providing equitable mobility options



** On average. Benefits at the 90th percentile are generally greater.*

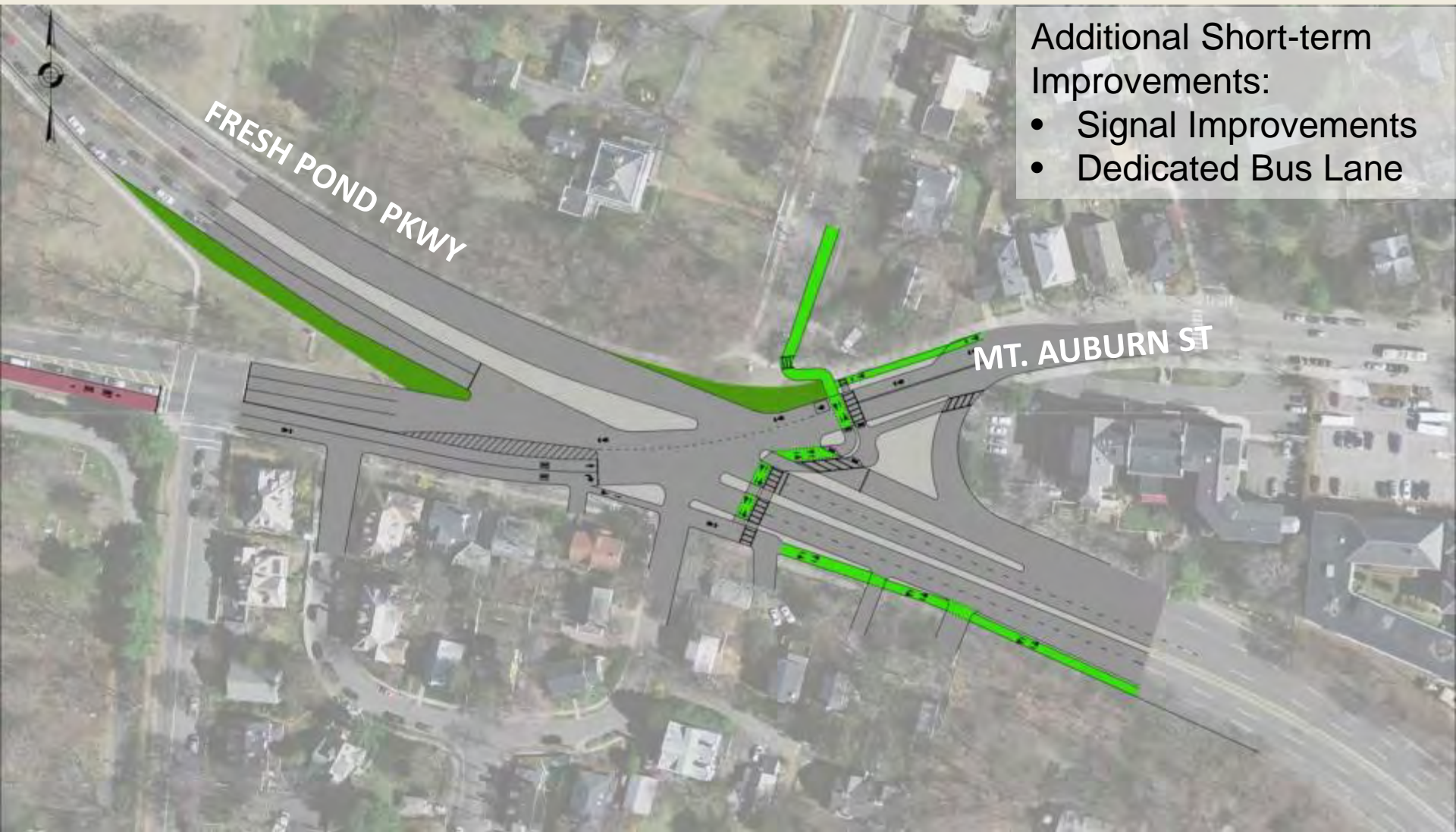
Vision Zero Goals align with Shared Goals

- 1. *Calm traffic, provide clarity, reduce crashes and severity of crashes***
2. Improve connectivity, air quality and expand mobility choices by:
 - a. Measuring people, not cars
 - b. *Reducing transit delays***
 - c. *Improving safety, access, parking and comfort for bicycles.***
 - d. Maintaining mobility for motor vehicles
 - e. *Improving safety, attractiveness, noise, and comfort for pedestrians and residents***
3. Address cut-through traffic in the Larchwood, Huron Village, and Coolidge Hill Neighborhoods
4. Offer short-term and long-term solutions
- 5. *Acknowledge enforcement*** and special uses by BB&N, Mt. Auburn Cemetery, Mt. Auburn, Shady Hill, and Tufts Health Plan



Short Term versus Long Term

Concept as of November – Leaves Existing Medians



- Additional Short-term Improvements:
- Signal Improvements
 - Dedicated Bus Lane

Long Term Plan



Next Steps

- Final Public Meeting: January 31, Shady Hill School
- SNOW DATE: February 2
- Long and Short-Term Concepts, benefits, traffic analysis, and feedback from the November meetings
 - Please bring your friends and neighbors!



For More Information:

- **Project Website:** www.mass.gov/dcr/mt-auburn-corridor-study
- **If you have comments or suggestions on this project:**
 - *Submit online at:* <http://www.mass.gov/eea/agencies/dcr/public-outreach/submit-public-comments/>
 - *Write:* Department of Conservation and Recreation, Office of Public Outreach, 251 Causeway Street, Suite 600, Boston, MA 02114
 - *Comment Period (pertaining to this meeting):*
January 10 – January 24, 2016
 - *Note: Public comments submitted to DCR may be posted on the DCR website in their entirety.*
- If you have questions, please email:
MaryCatherine.McLean@massmail.state.ma.us