

# Mount Auburn Street Corridor Study



August 18, 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.



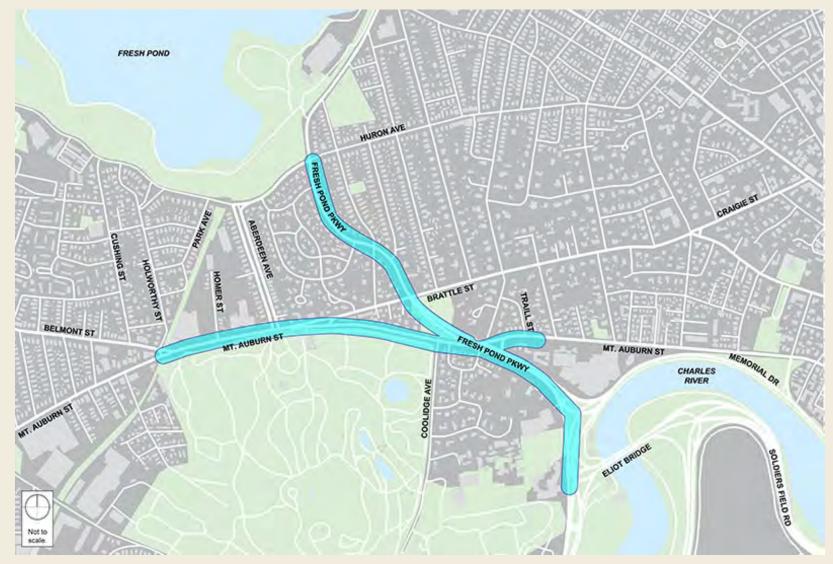


# Agenda

- Welcome
- Mt Auburn Concept Draft Updates
- Fresh Pond Parkway Concept Draft
- Plaza Design Charrette



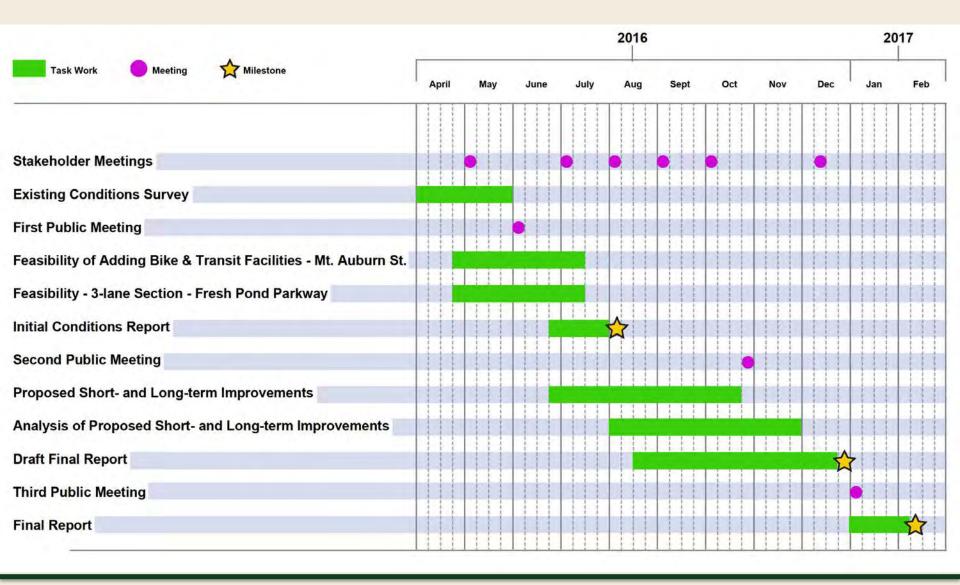
# Agenda







#### **Schedule**



# **PLEASE NOTE:**

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







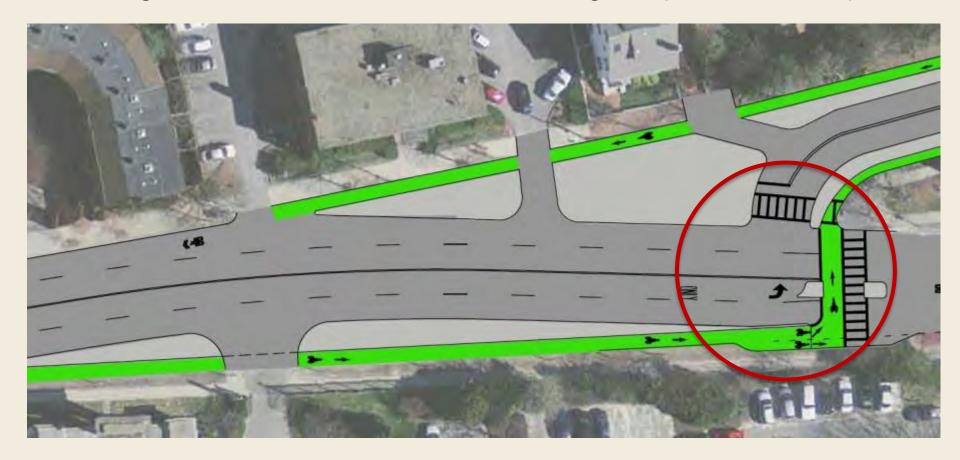
# Mt. Auburn Draft Concept Updates





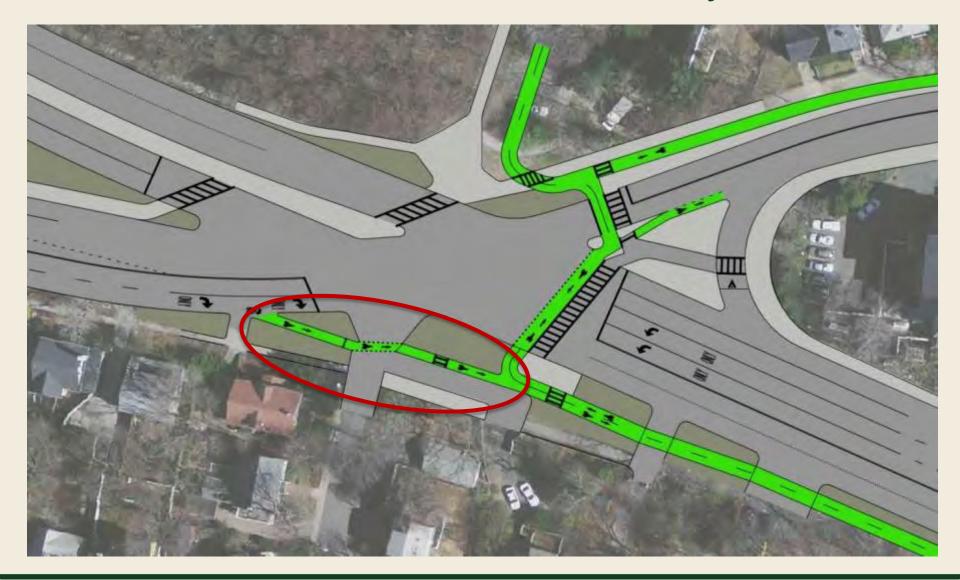
# Signal Likely Warranted at Mt Auburn at Brattle Street

 Peak-hour, four-hour volumes warrant a traffic signal, estimates for eight-hour volumes also warrant a signal. (MUTCD 2009)





# **New Bike Connection at Fresh Pond Parkway**







# Mt. Auburn Roundabout Feasibility





# Roundabout Feasibility — Historic View

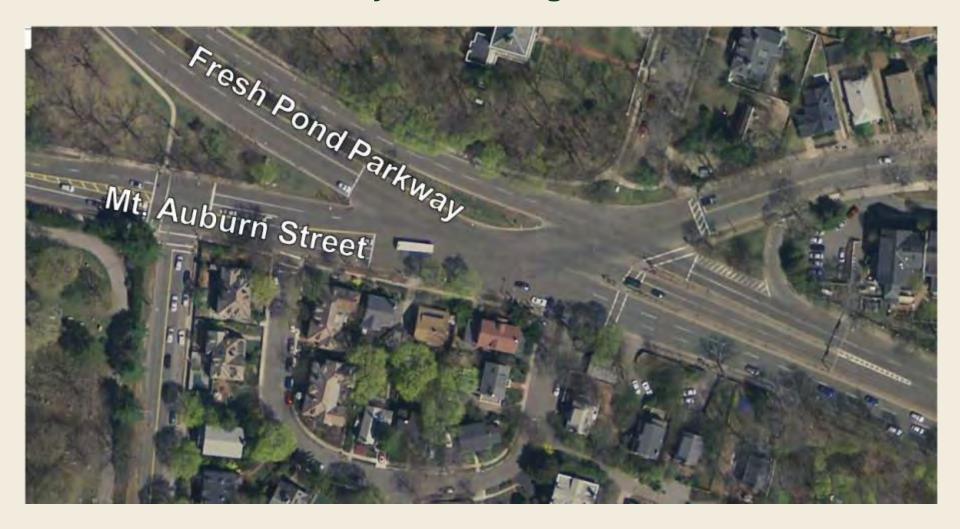


1952





### Roundabout Feasibility — Existing Conditions



Circa 2015



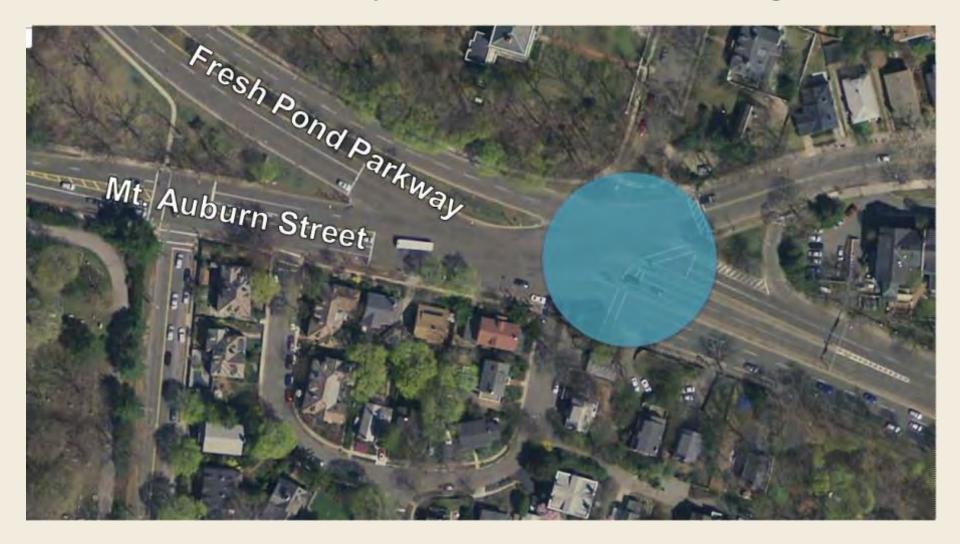


# Roundabout Feasibility — Placement vs. 1952





# Roundabout Feasibility — Placement vs. Existing I



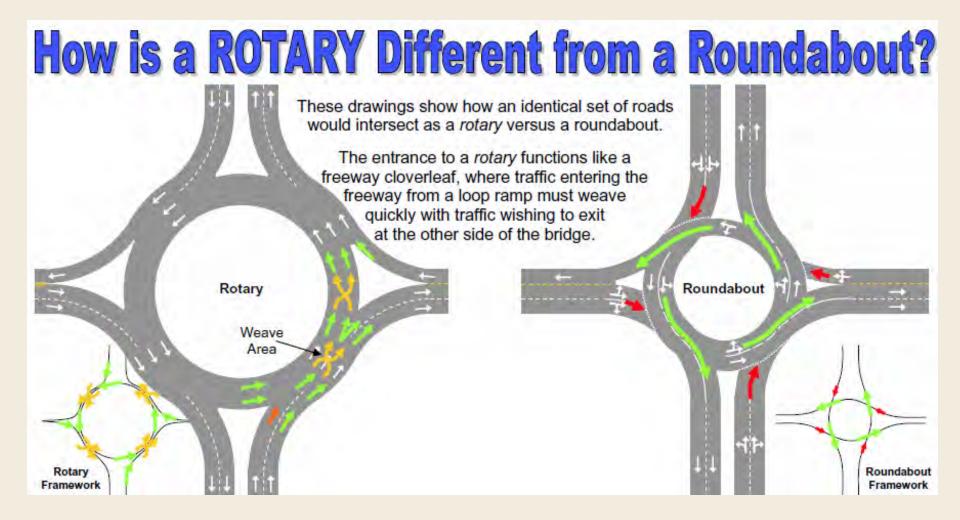


# Roundabout Feasibility — Placement vs. Existing II





## Roundabout Feasibility — Rotary vs. Roundabout





#### **Roundabout Feasibility — Outside Diameter**





#### **Roundabout Feasibility — Inside Diameter**





# Roundabout Feasibility — Lane Configuration



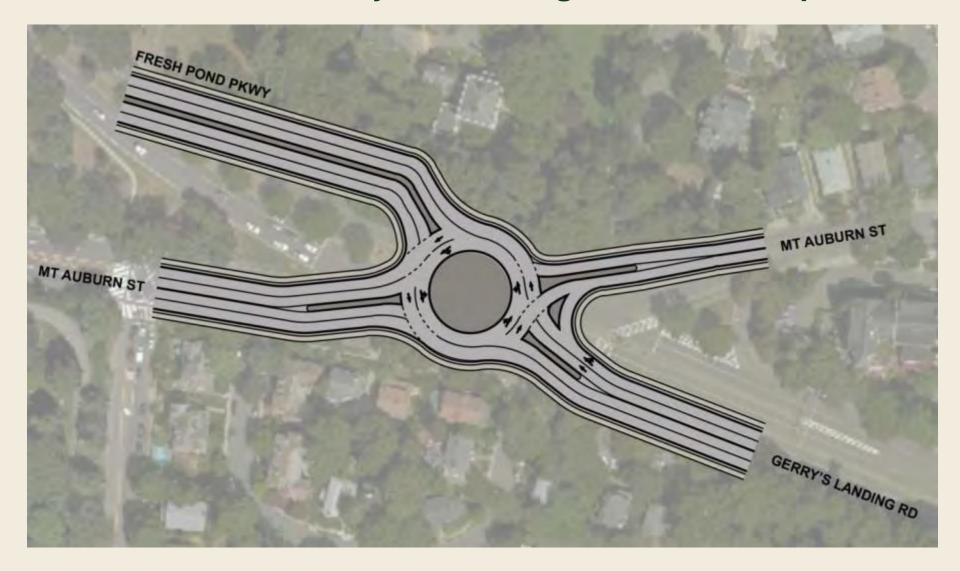


# Roundabout Feasibility — Residential Impacts



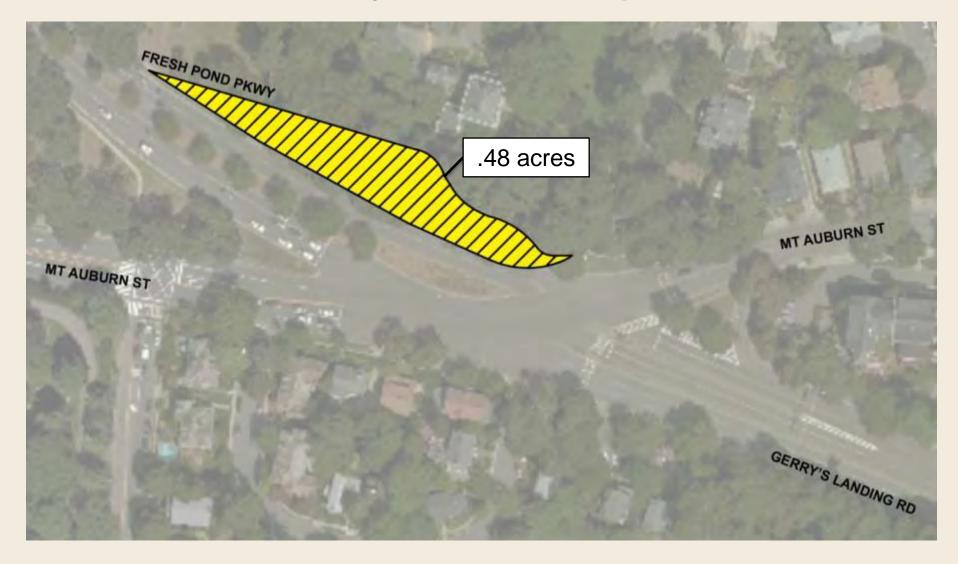


# Roundabout Feasibility — Avoiding Residential Impacts



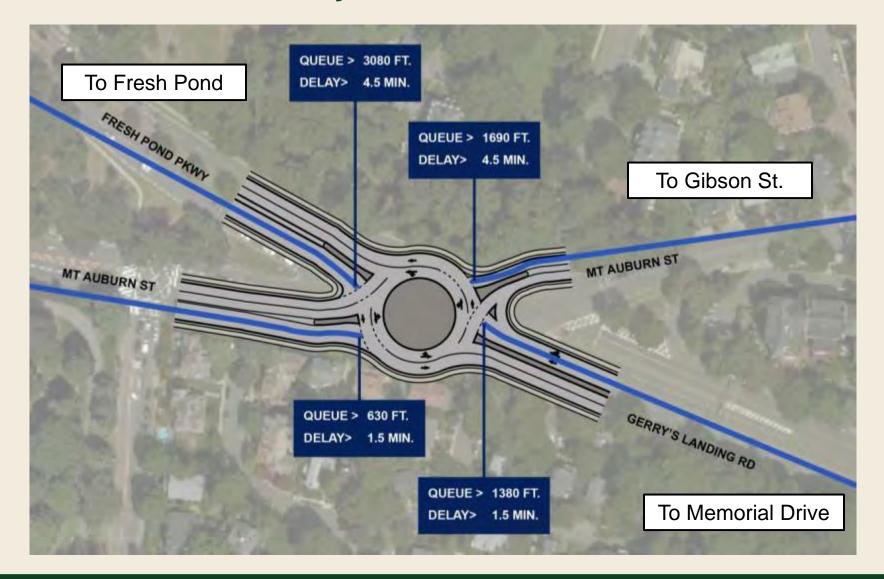


# **Roundabout Feasibility — Parkland Impacts**





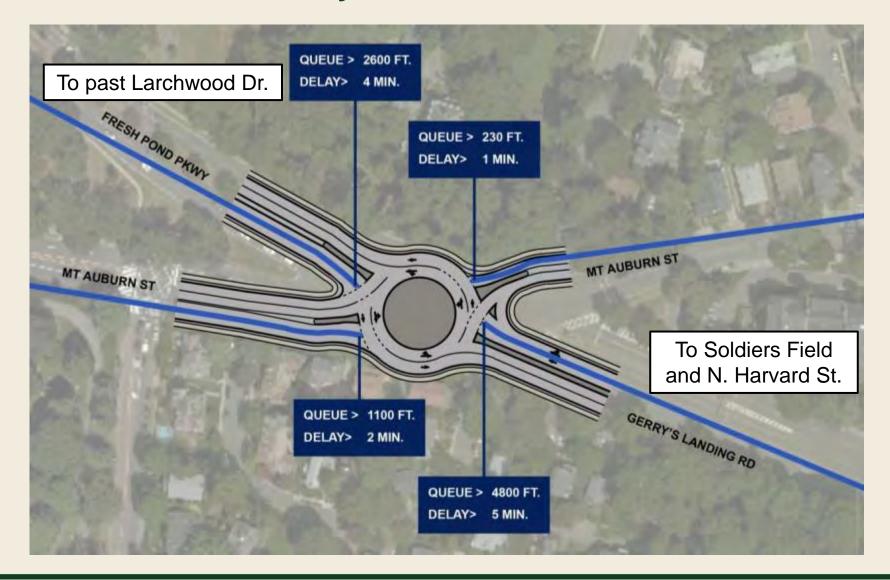
### Roundabout Feasibility — AM Traffic Queues







### Roundabout Feasibility — PM Traffic Queues





### Roundabout Feasibility — La Rotonda, Lacarno, Switzerland





# Roundabout Feasibility — La Rotonda, Lacarno, Switzerland





### Roundabout Feasibility — La Rotonda, Lacarno, Switzerland





## Roundabout Feasibility — La Rotonda Size Comparison





#### Roundabout Feasibility – Key Takeaways

- Rotary vs. Roundabout.
- Roundabout fails to handle existing traffic.
- Cut-through traffic would increase significantly on all possible local streets.
- Significantly alters historic parkway, park land, or other property.





# Mt. Auburn Underpass Feasibility

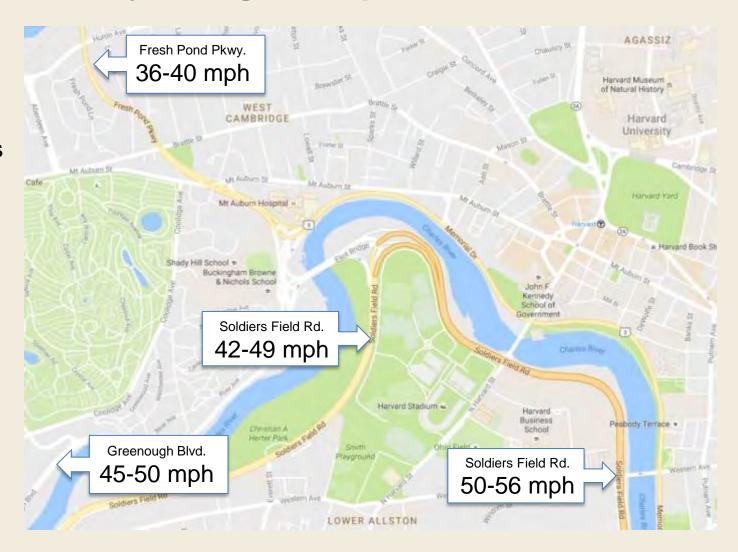




# **Underpass Feasibility — Regional Speeds**

## MIT Speed Study 2001

50<sup>th</sup> – 85<sup>th</sup> percentile speeds







#### Underpass Feasibility — Soldiers Field Rd. under Western Ave.



- Eastbound 34,699 ADT
- Westbound 34,555 ADT
- 50<sup>th</sup>/85<sup>th</sup> Percentile Speed 50-56 mph





# **Underpass Feasibility — Width**







# **Underpass Feasibility — Length & Width (no southbound turns)**





### **Underpass Feasibility – Key Takeaways**

- Would significantly widen roadway
- Requires conversion of parkland to roadway (4f process)
- Likely to increase speeds
- Amplifies noise







## Fresh Pond Parkway Corridor Draft Concepts















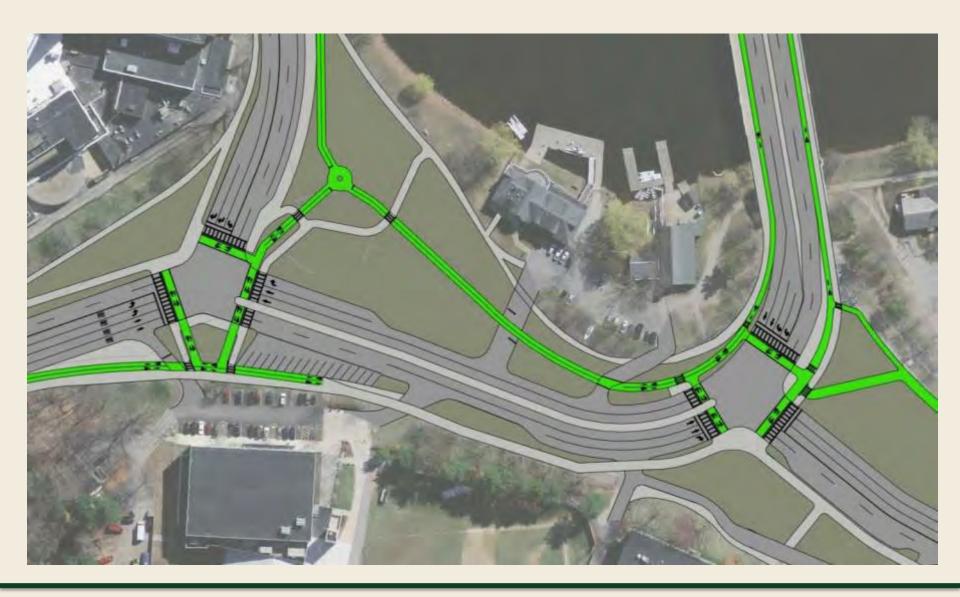






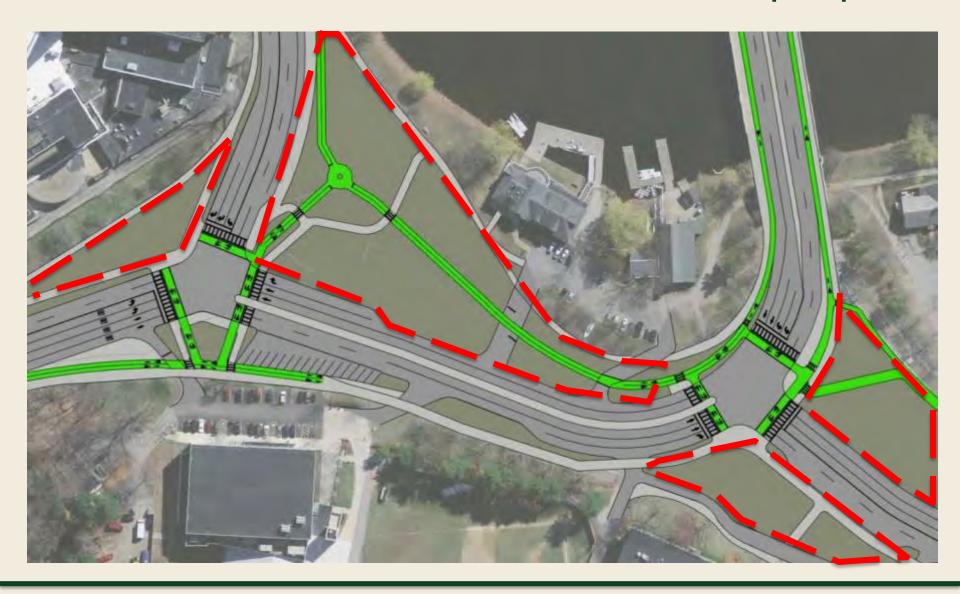


#### **Two-T Alternative**



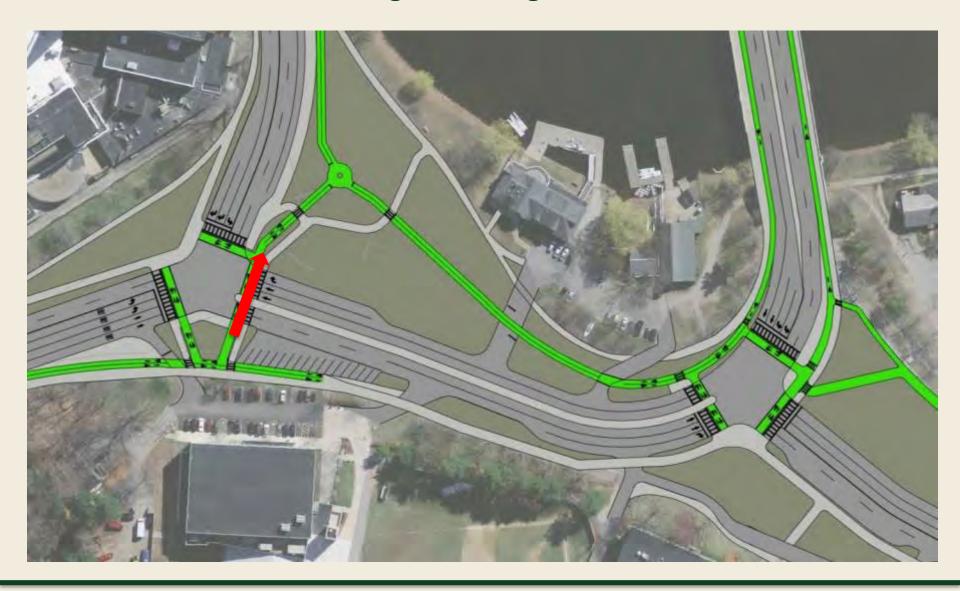


#### Two-T Alternative – More than 4 acres of new accessible open space



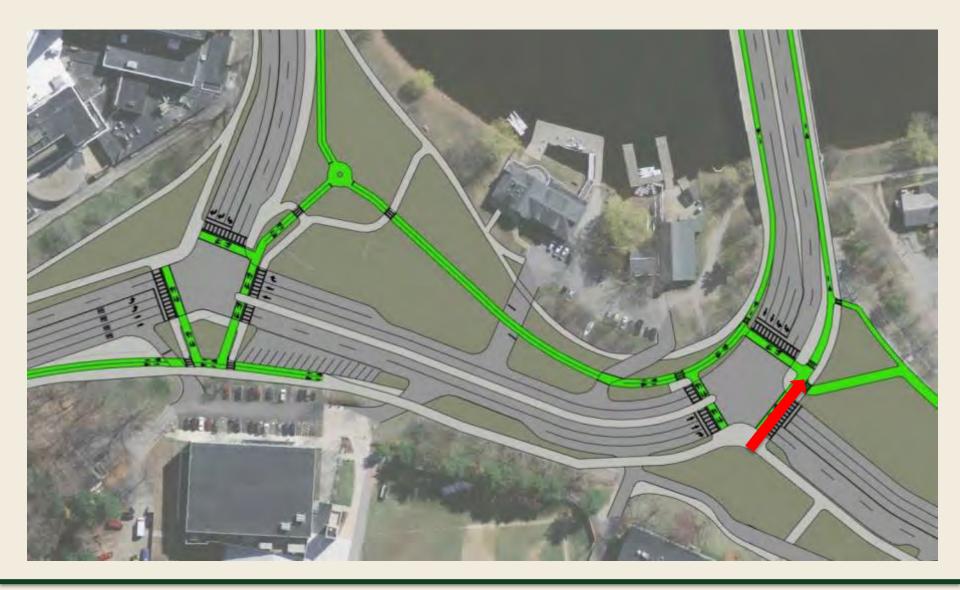


#### Two-T Alternative – One Stage Crossing I





#### Two-T Alternative – One Stage Crossing II





## Two-T Alternative, Greenough Side – Existing





### Two-T Alternative, Greenough Side – Proposed





#### **Two-T Alternative, Greenough Side – New Parkland**





# Gerrys Landing, Eliot Bridge, and Greenough Blvd. Key Takeaways

- Approximately 4.5 acres of new parkland.
- Single-stage crossings to the Charles River.
- Low-stress bike connection from Mt. Auburn St. to Paul Dudley White Bike Path.
- School pick-up and drop off zone/safe parking area.
- School U-turn included.
- More work on BB&N pick up and drop off needed.
- Road diet and narrowed travel lanes.

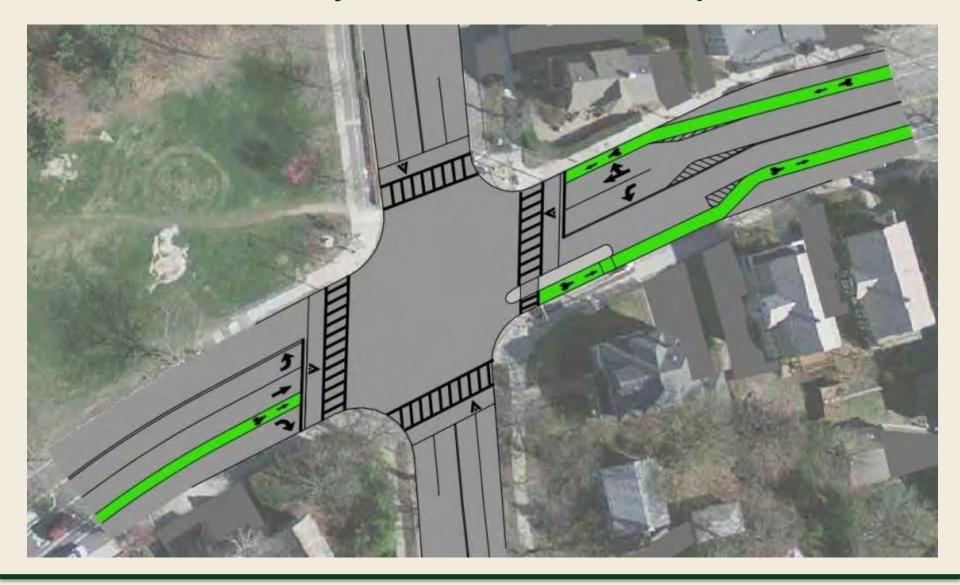


## Fresh Pond Parkway at Huron Avenue - Existing





## Fresh Pond Parkway at Huron Avenue - Proposed





## Raised vs. Stamped Intersections

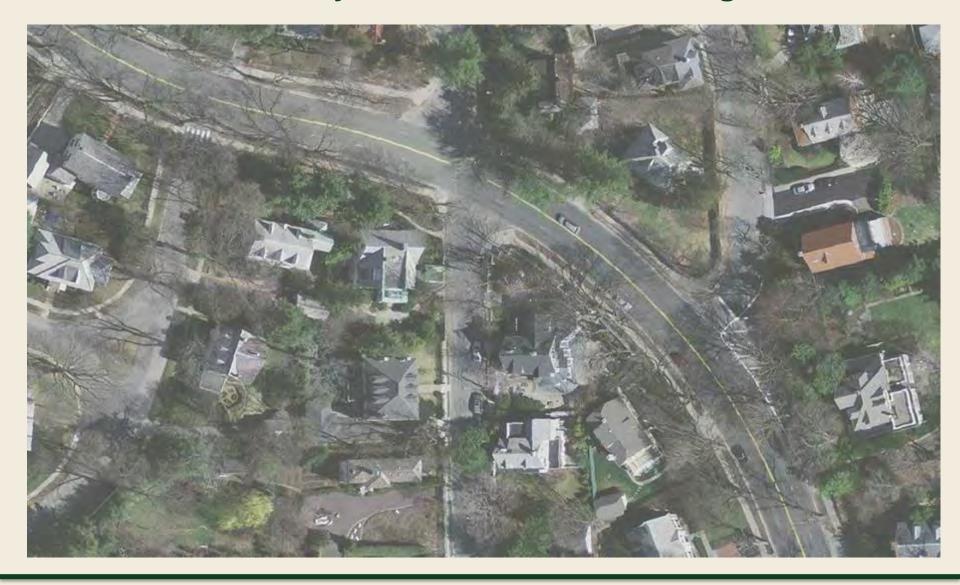






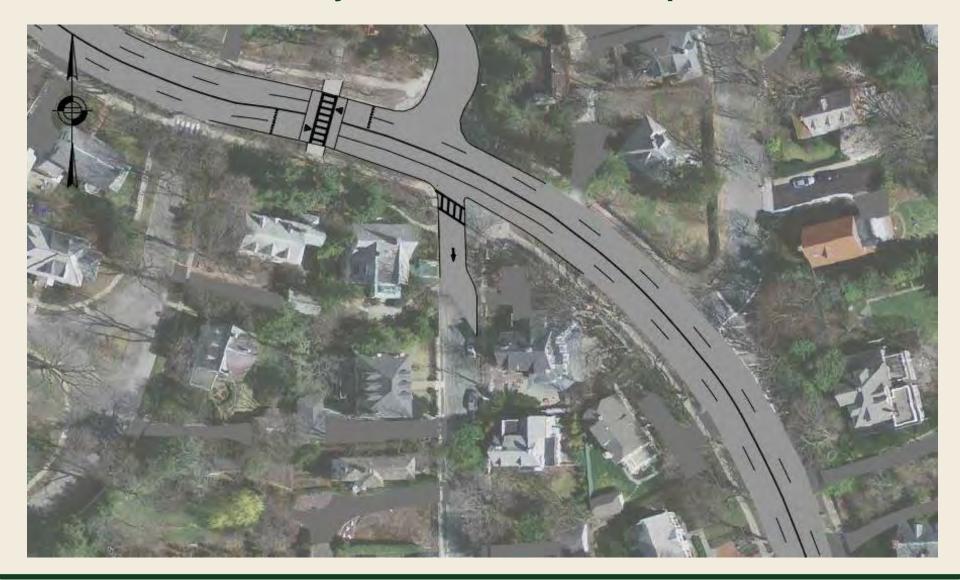


## Fresh Pond Parkway at Larch Street - Existing



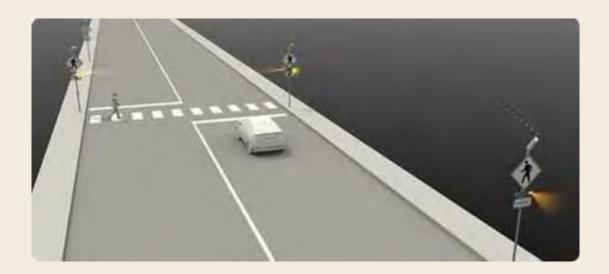


## Fresh Pond Parkway at Larch Street - Proposed





## Rectangular Rapid Flashing Beacon

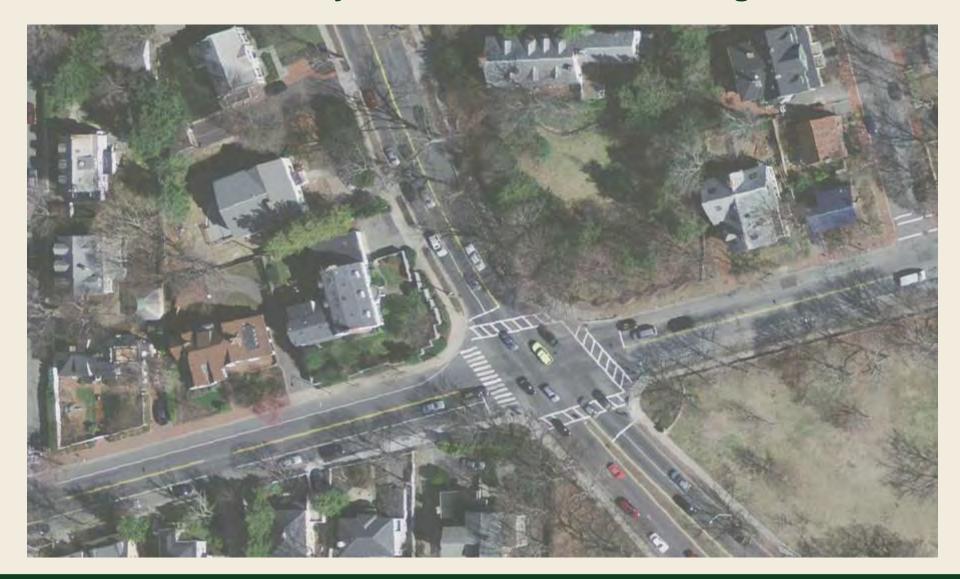








## Fresh Pond Parkway at Brattle Street - Existing





## Fresh Pond Parkway at Brattle Street - Proposed





#### Fresh Pond Parkway Draft Concept Takeaways

- Pedestrian-centric intersections and tighter turning radii at Brattle
   St. and at Huron Ave.
- New crossing with Rectangular Rapid Flashing Beacon at Larch Rd.
- Left turns at Larch impeded.
- Private property owners can contribute to traffic calming.
- Edge improvements possible.





#### **Pedestrian Context with Fence**





#### **Pedestrian Context without Fence**



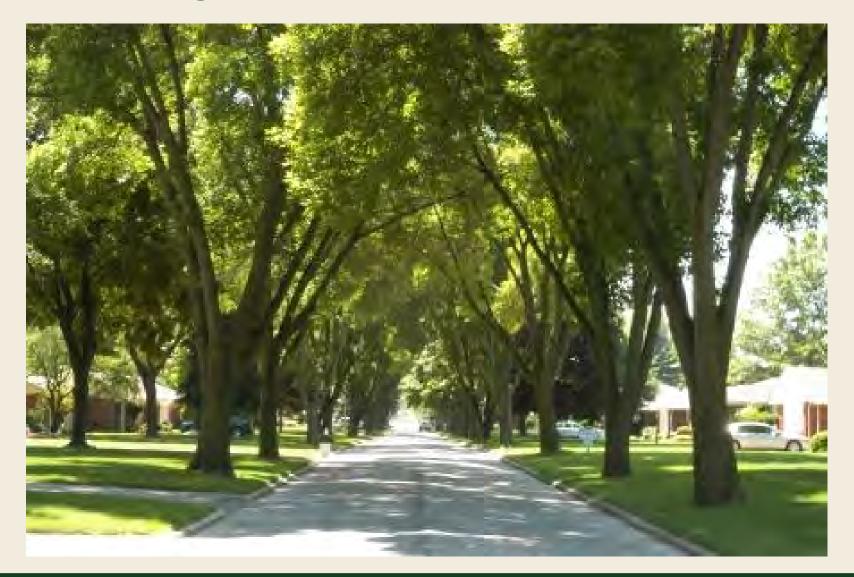


#### **Motor Vehicle Context with Fence**





## **Traffic Calming – Street Trees**





## **Traffic Calming – Street Tree Opportunities**











## **Traffic Calming – Planting Strips**











## **Traffic Calming – Adding Pedestrian Context**









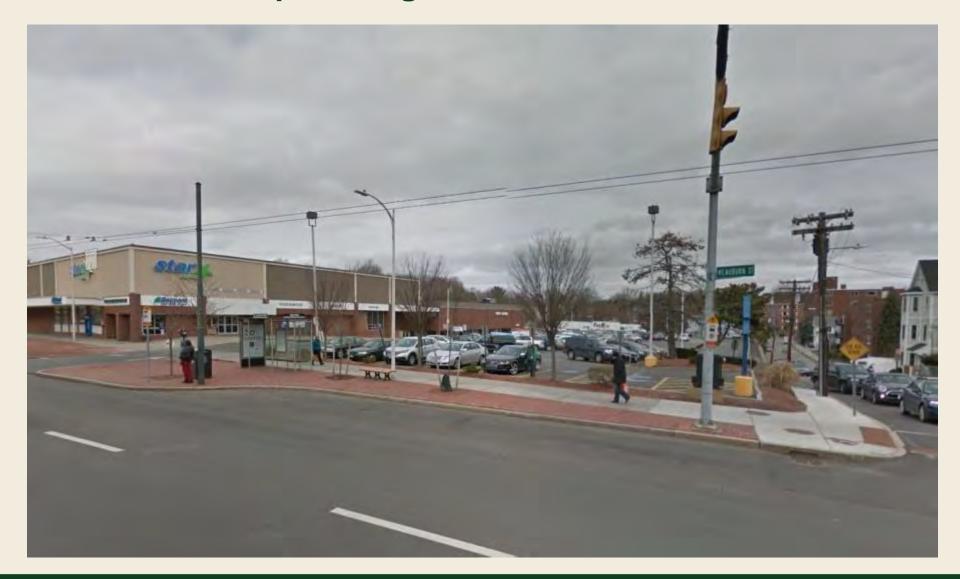




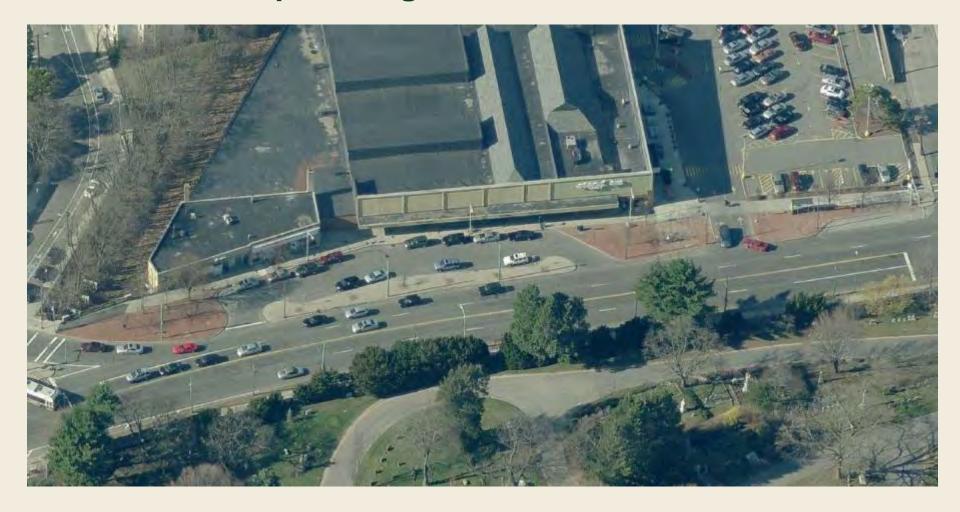
# Plaza Design Charrette



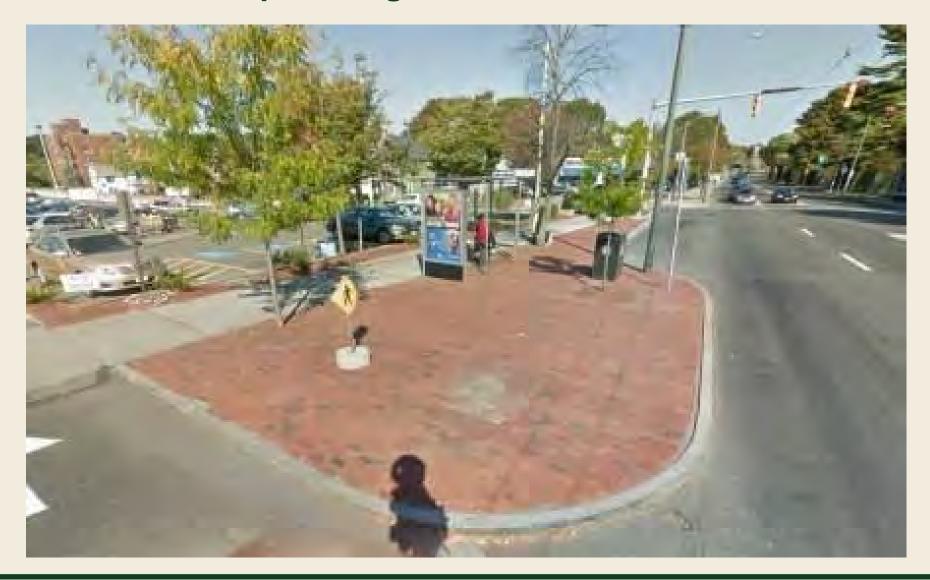




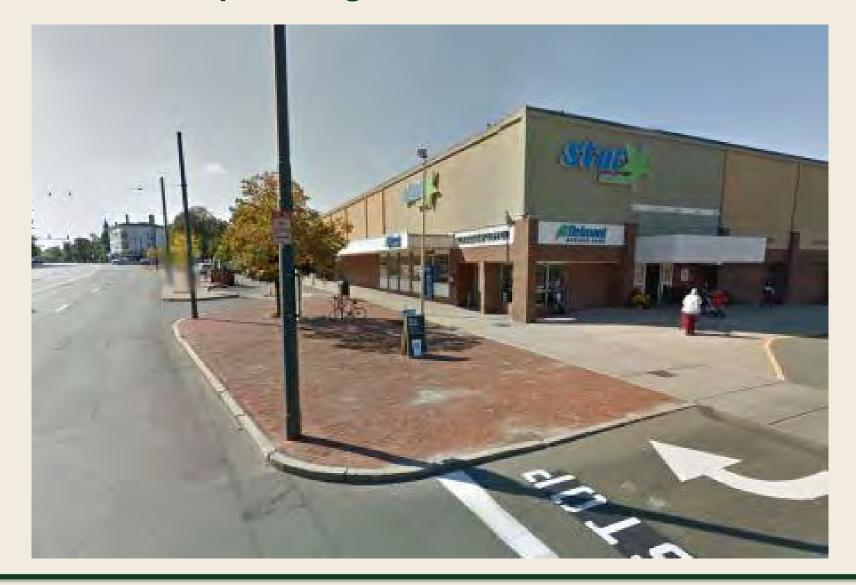






















- Possible Goals:
  - Gateway to Strawberry Hill
     Neighborhood
  - Social Activity
  - Bring more customers to local businesses
  - Create a new open space





#### **Next Steps**

- Next Stakeholder Meeting: September 15
- Next Public Meeting early November
  - Discussion of proposed long and short term improvements





#### For More Information:

- Project Website: <a href="https://www.mass.gov/dcr/mt-auburn-corridor-study">www.mass.gov/dcr/mt-auburn-corridor-study</a>
- If you have comments or suggestions on this project:
  - Submit online at: http://www.mass.gov/eea/agencies/dcr/publicoutreach/submit-public-comments/
  - Write: Department of Conservation and Recreation, Office of Public Outreach, 251 Causeway Street, Suite 600, Boston, MA 02114
  - Deadline (pertaining to this meeting): Thursday, 9/1/16
    - 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

