

Memorial Drive Greenway Improvements – Phase III Charles River Reservation, Cambridge

Public Meeting 2

Dr. Martin Luther King, Jr School Cafeteria

102 Putnam Avenue, Cambridge

6:30 PM – 8:30 PM

June 25, 2019

Commonwealth of Massachusetts

**Governor
Charles D. Baker**

**Lieutenant Governor
Karyn E. Polito**

**Energy and Environmental Secretary
Kathleen Theoharides**

**Department of Conservation and Recreation Commissioner
Leo P. Roy**



DCR Mission Statement



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

Tonight's Meeting: Existing Conditions, Concepts

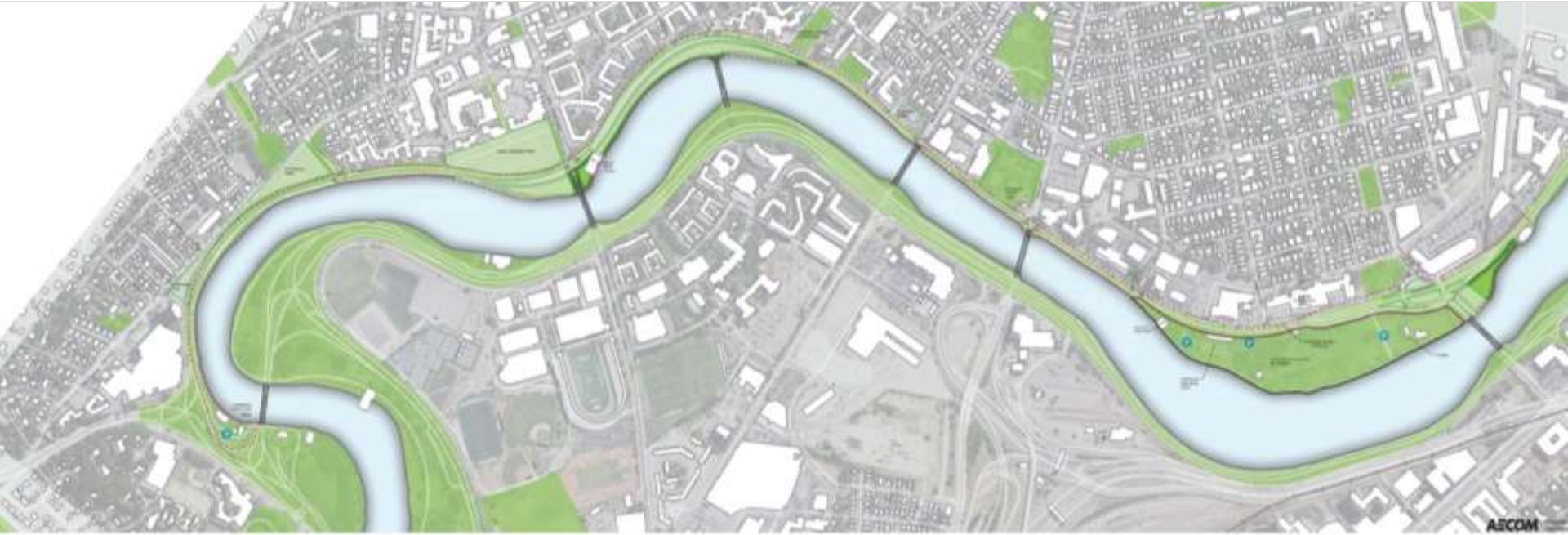
Welcome and Opening Remarks Presentation

- **What We Heard Last Time**
- **Shared Goals**
- **Existing Conditions**
- **Traffic Study**
- **Preliminary Concepts Overview**

Breakout Groups

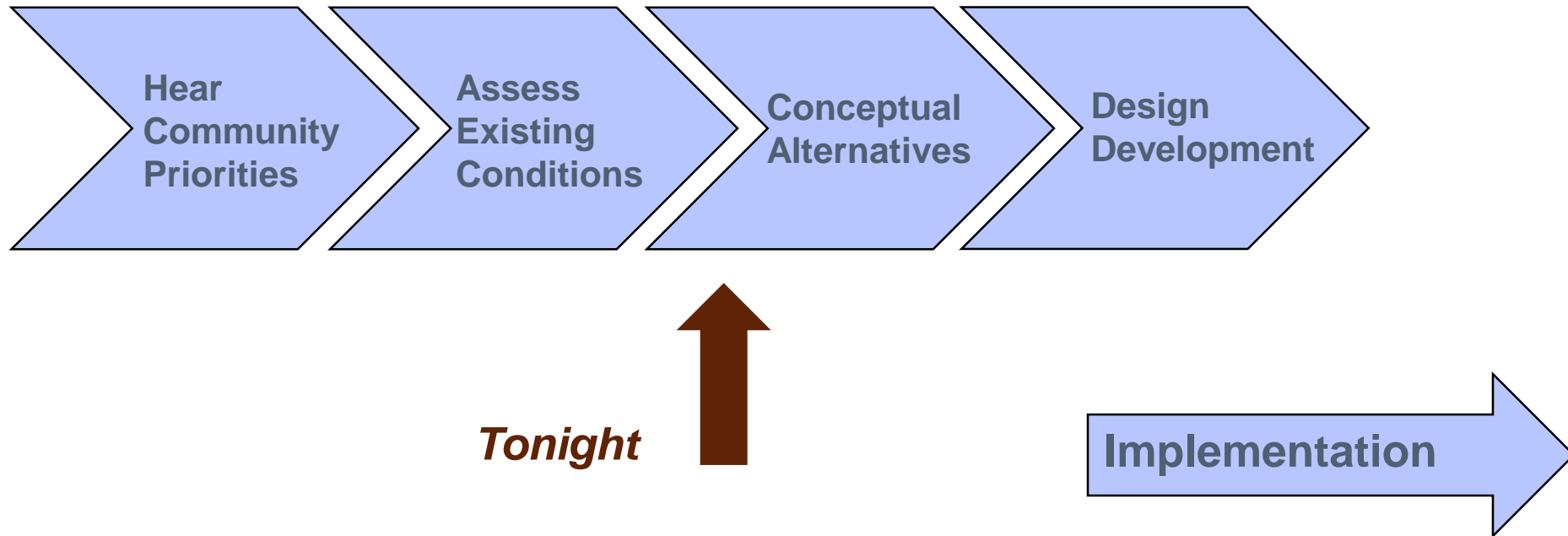
- **Reid Overpass/ B.U. Rotary**
- **Western Avenue and River Street Intersections**
- **Traffic Study**
- **Preliminary Concepts**

Phase III



- Reid Overpass and Rotary at Boston University Bridge
- Major Intersections at Western Avenue, River Street, JFK Street
- Dr. Paul Dudley White Bike Path
- John W. Weeks Footbridge (over the Charles River)
- Magazine Beach Pedestrian Bridge

Public Process



What We Heard

- Over 800 comments received



Wicked Local/ Diane McLaughlin



BU Bridge rotary sidewalk changes

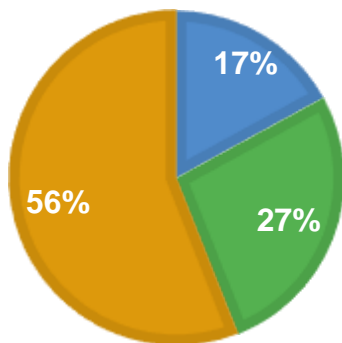


What We Heard: Listening Session



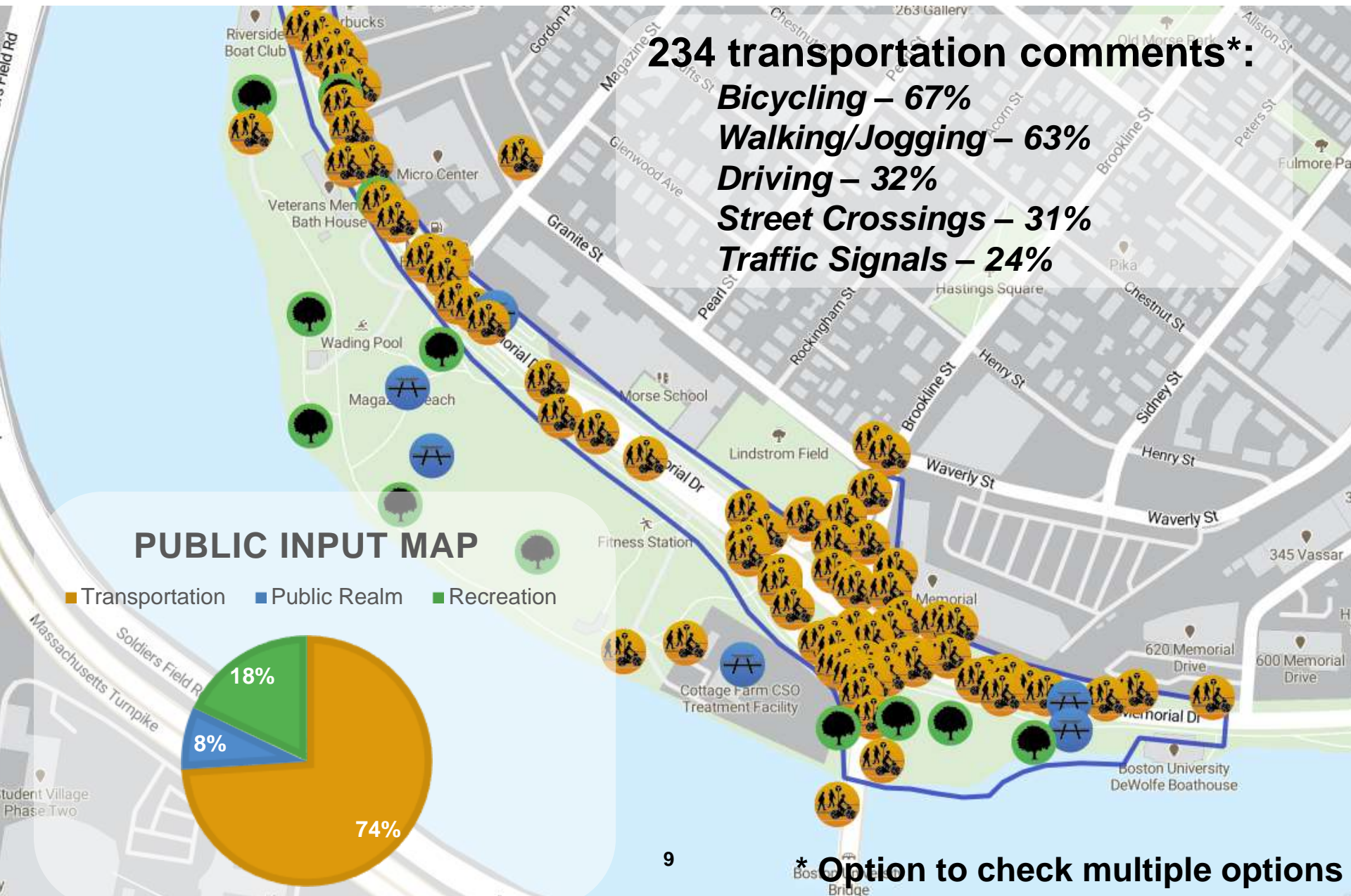
LISTENING SESSION COMMENTS

■ Public realm ■ Recreation ■ Transportation



**Desire for wider path for
pedestrians and cyclists and a
healthy tree canopy**

What We Heard: Public Input Map



Public Input Map – Pin Clusters: Transportation



Memorial Drive at BU Rotary

“Need continuous protected bike lane in entirety of rotary. At minimum, where a bike lane starts should not be in the middle of the rotary where there is no ramp to get onto it safely. The current ramp on this side nearest the BU bridge is often crowded by pedestrians and not cut wide enough to make an smooth turn onto the bridge from the ped/bike path without feeling like you will end up in the vehicular lane.”

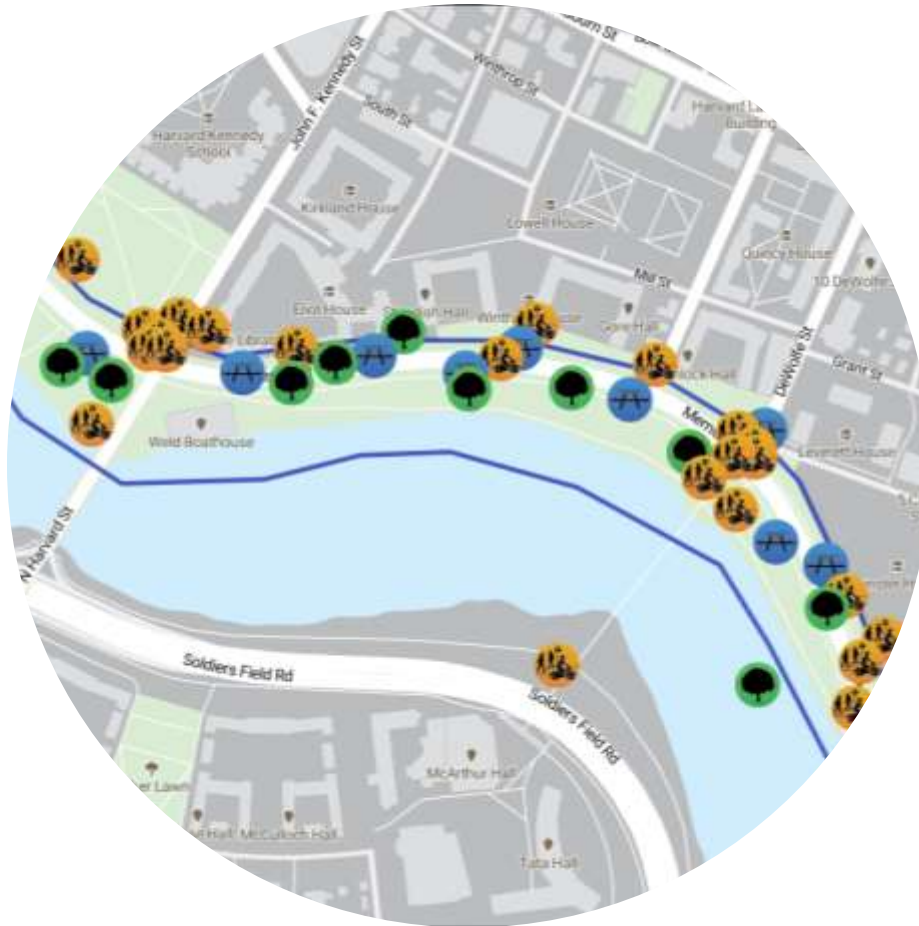
Public Input Map – Pin Clusters: Transportation



Memorial Drive at Western Ave

“I live just down the street from this intersection and have witnessed multiple collisions. Fortunately all involved have been safe each time because only cars were involved, but it terrifies me to bike through this intersection (as I must do each day to get to work). The intersection should be redone in order to encourage cars to slow down significantly to make it safer for all involved, with specific care taken for infrastructure for bikers and pedestrians. Cross walks are needed in all directions at this intersection.”

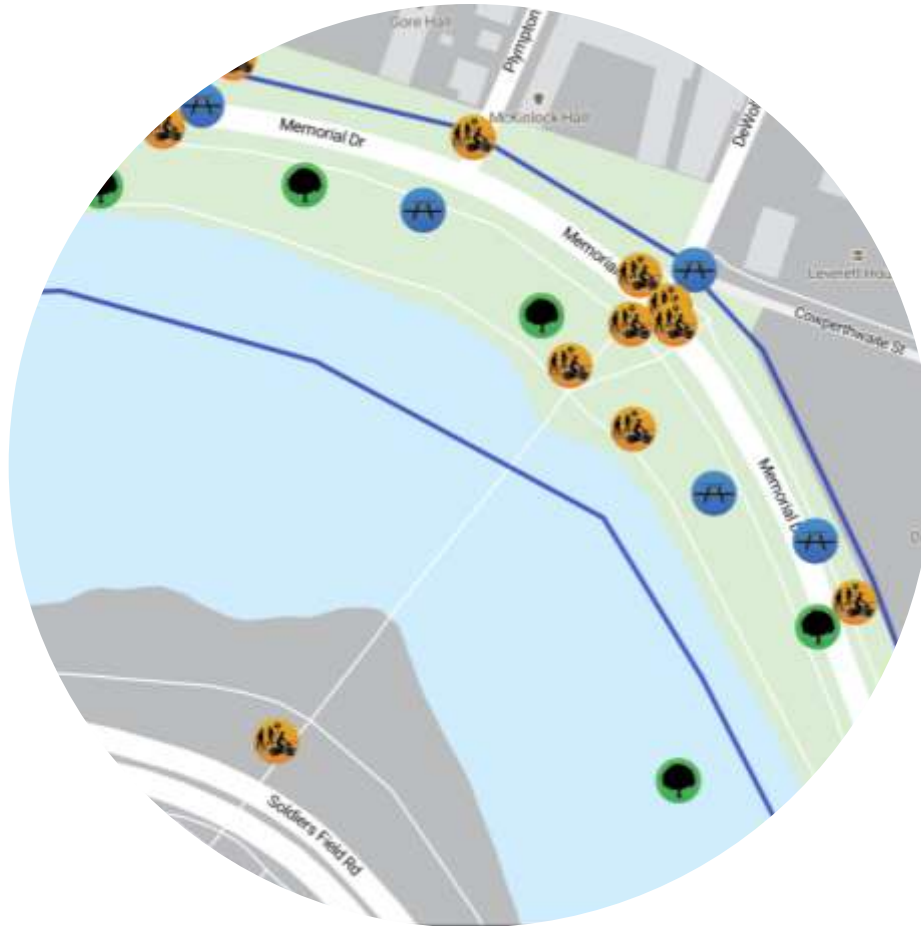
Public Input Map – Pin Clusters: Public Realm



Memorial Drive at North Harvard Street

“I think most places along the path could benefit from more plantings of native species, especially here where beds of daffodils add visual appeal but do little for birds, bees, or the river ecosystem. The example of the wetlands areas further west provide a good model to follow.”

Public Input Map – Pin Clusters: Recreation



Memorial Drive at Weeks Footbridge

“More water fountains should be added. The water fountains are few and far between on this side of the Charles.”

What We Heard: Written Feedback

Residents of:

- Cambridge
- Boston
- Allston
- Brighton
- Charlestown
- Dorchester
- Jamaica Plain
- Roslindale
- Somerville
- Arlington
- Belmont
- Brookline
- Malden
- Medford
- Melrose
- Needham
- Newton
- Wakefield
- Wellesley
- Winchester

- Magazine Beach Partners
- WalkBoston
- Cambridge Bicycle Safety
- The Charles River Conservancy
- Buckingham, Browne & Nichols School
- City of Cambridge

Shared Goals: Public Realm

- **Improve drainage through the use of green stormwater management**
- **Design for habitat enhancement using native plant species**
- **Seize opportunities for place-making where space allows such as the river's edge west of JFK Street**
- **Enhance the tree canopy through the application of species most likely to thrive in the riverside environment**

Shared Goals: Recreation

- **Improve the pedestrian and cyclist's user experience:**
 - **Provide separate treadways, wherever possible**
 - **Improve pathway surface conditions**
 - **Improve pathway/roadway crossings**
- **Improve drainage to minimize roadway impacts on water quality**
- **Improve accessibility to parklands for people of all abilities**

Shared Goals: Recreation

- Investigate expansion of car-free Memorial Drive to include both Saturdays and Sundays during the summer
- Investigate options to shorten the distance between access points from the adjoining neighborhoods to the parks.
- Provide lighting to increase level of comfort in the parkland

Shared Goals: Transportation

- **Improve timing and phasing at intersections to reduce modal conflicts**
- **Target project area for a road diet wherever applicable**
- **Improve operation for all modes at the BU Rotary/Reid overpass. Consider designs to eliminate barriers for pedestrians and cyclists while improving transit.**

Existing Conditions

Tree Health

Stormwater Management

Typical Road Conditions

Traffic Study

Evaluating Tree Conditions

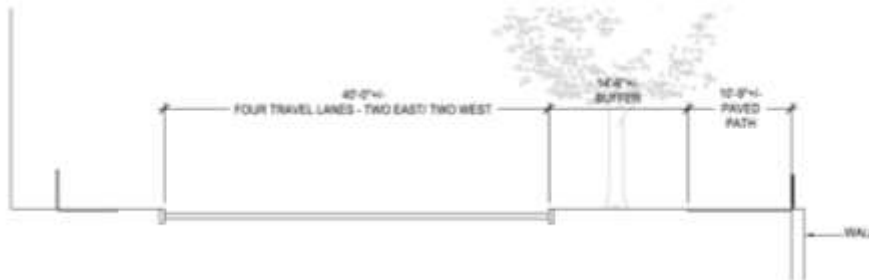
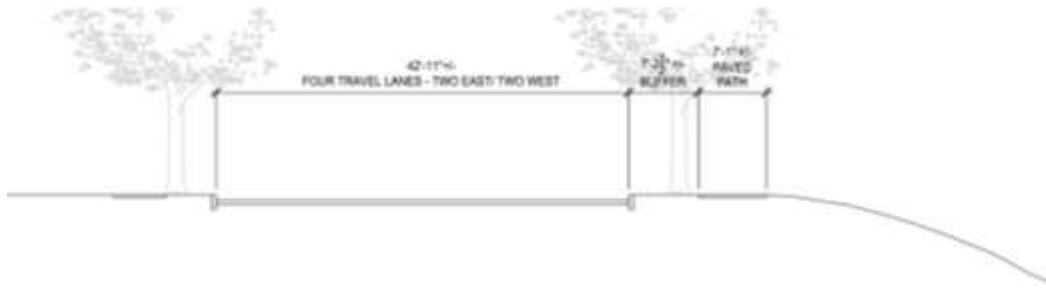


Stormwater Management

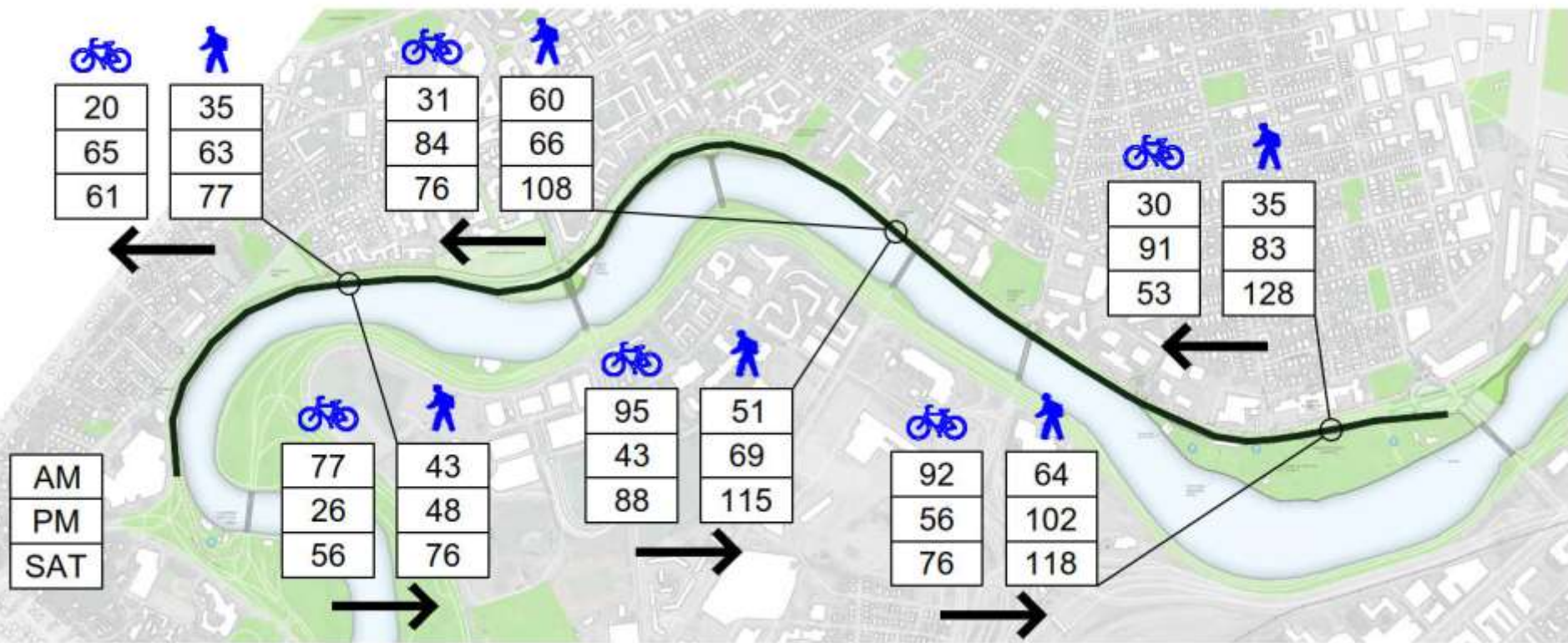
Concerns and Areas for Improvement



Typical Road Conditions: Memorial Drive



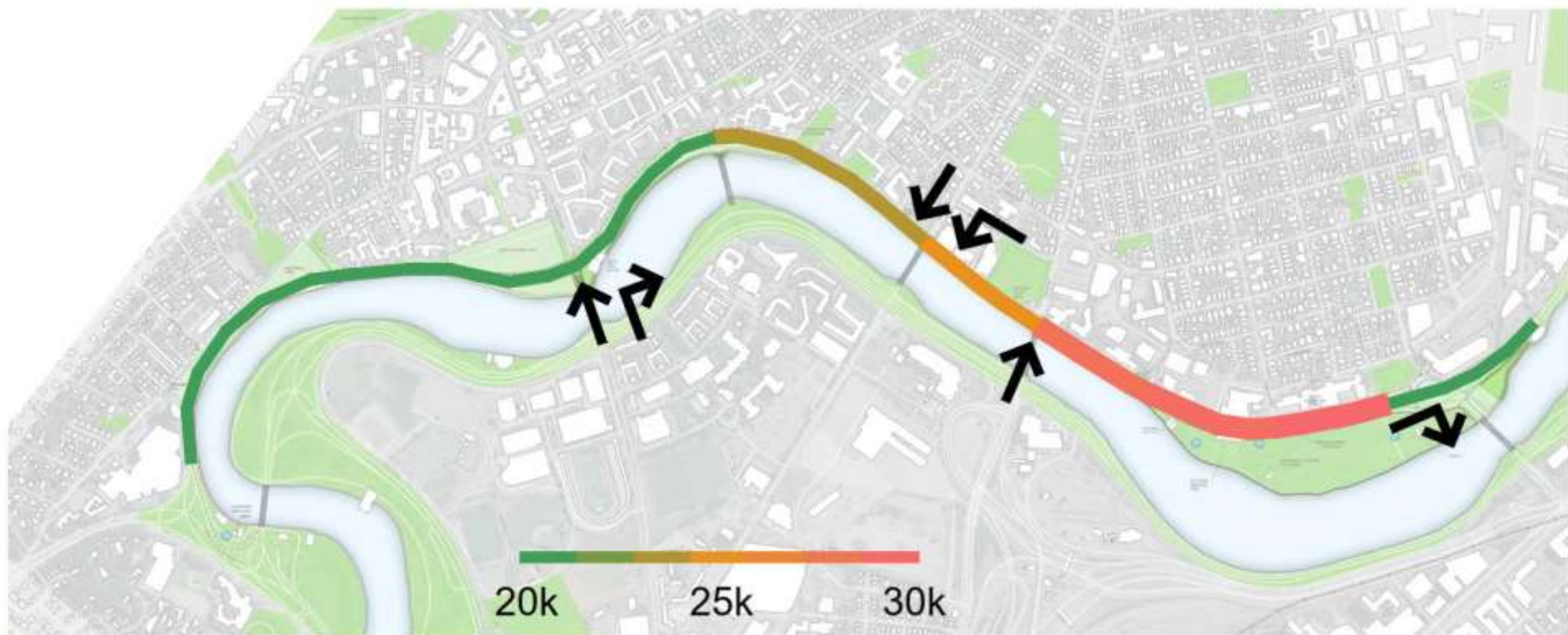
Bicyclist and Pedestrian Volumes



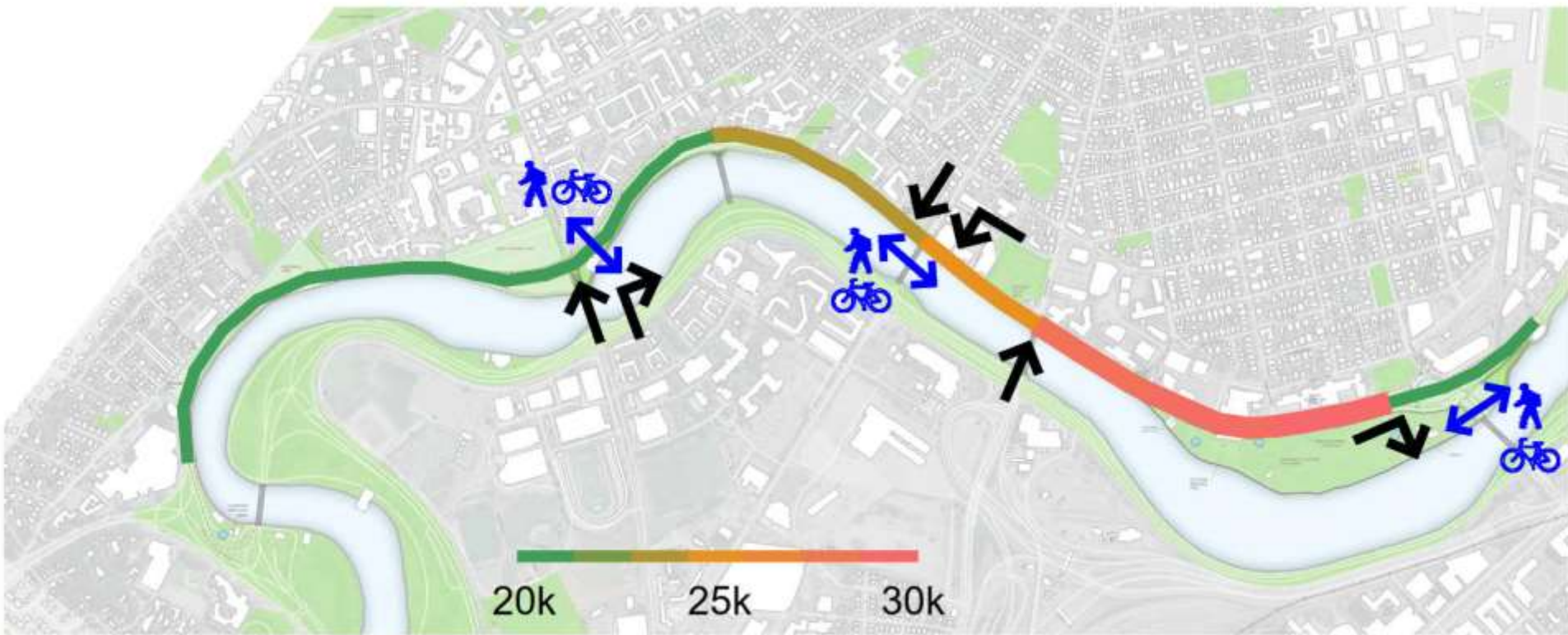
Traffic Volumes



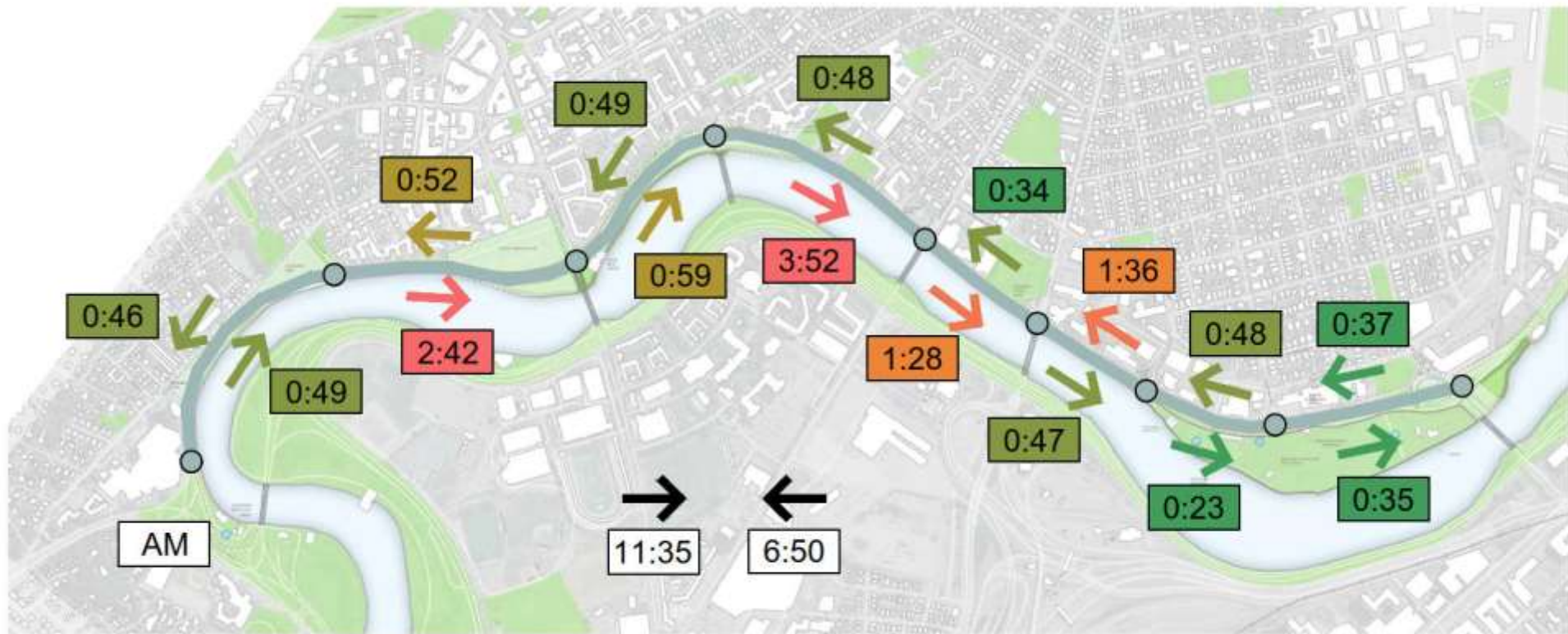
Critical Approaches and Turning Movements



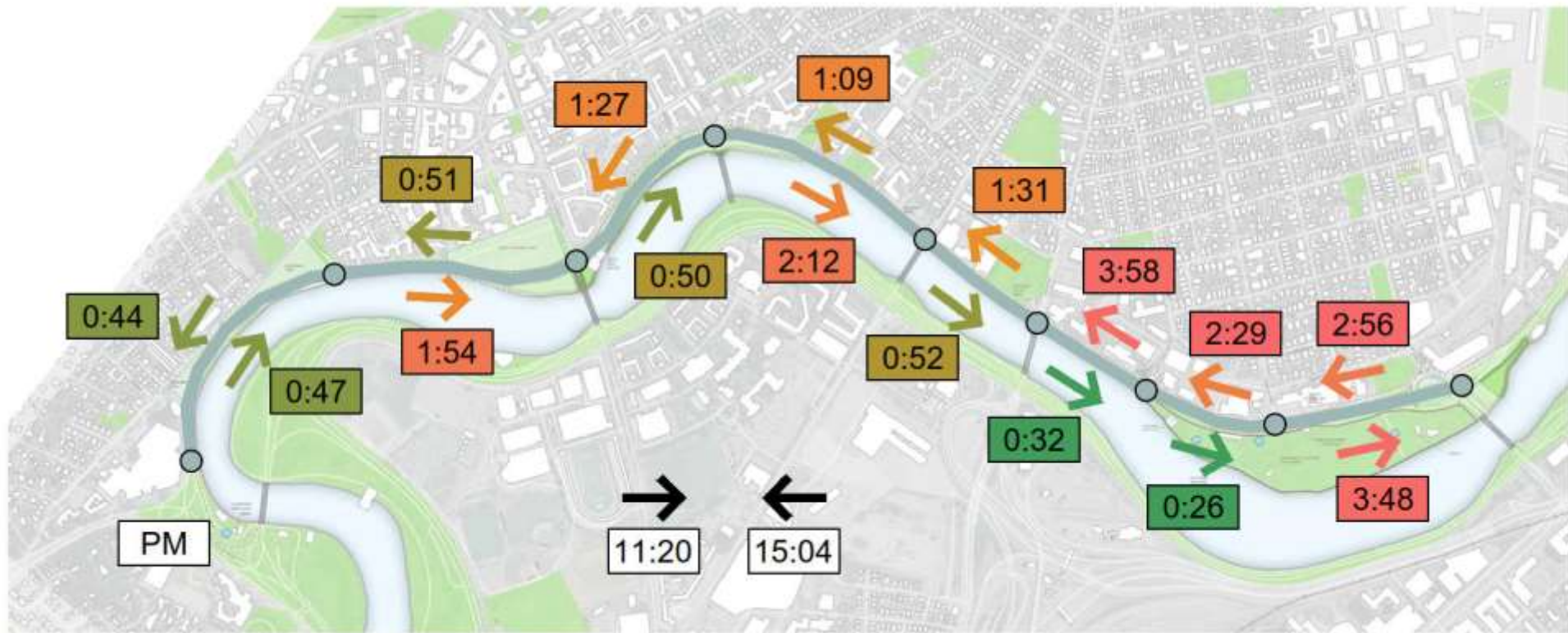
Key Pedestrian/Cyclist Connections



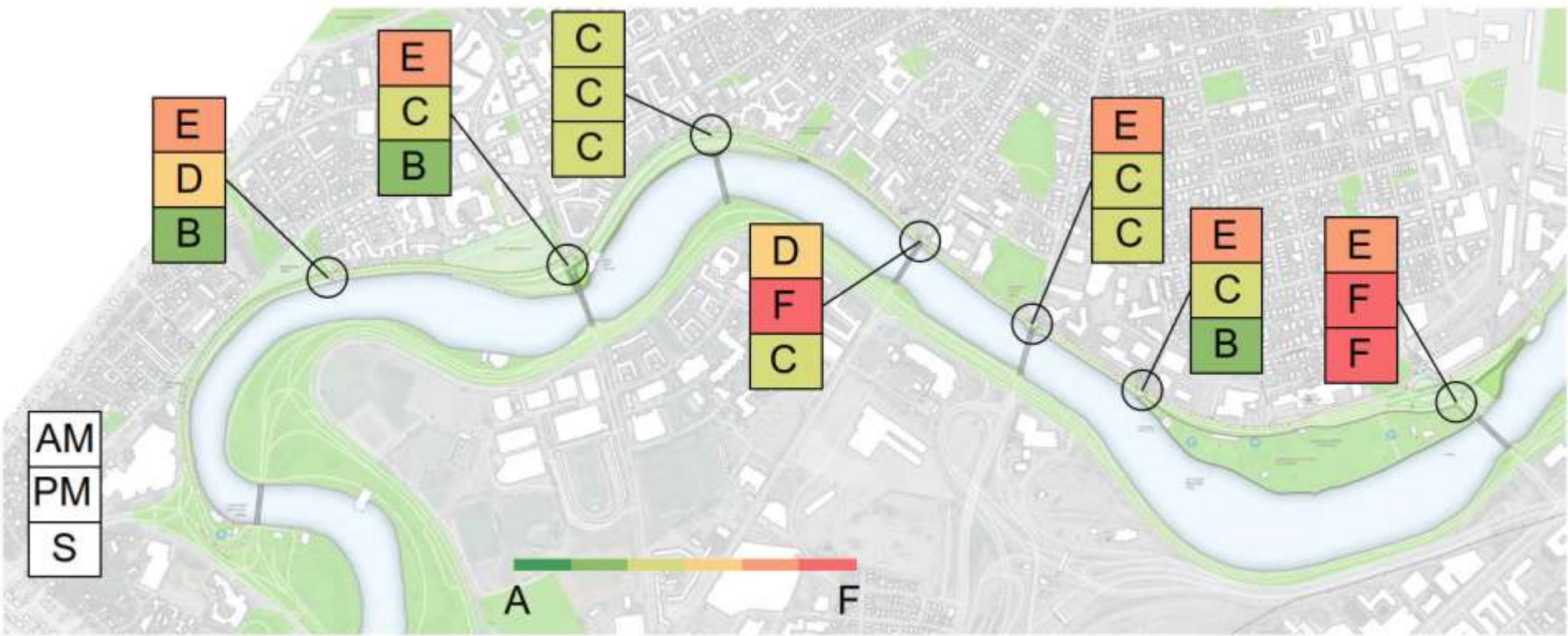
Travel Times (a.m. peak)



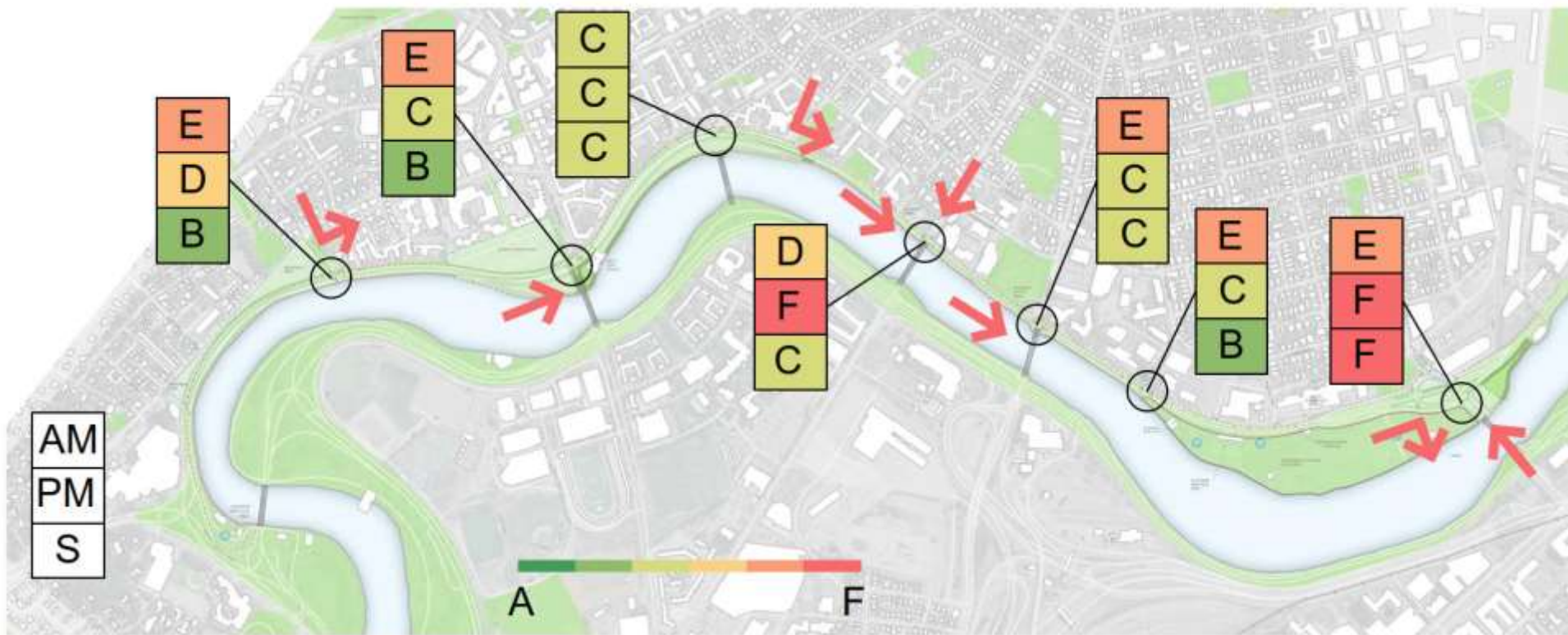
Travel Times (p.m. peak)



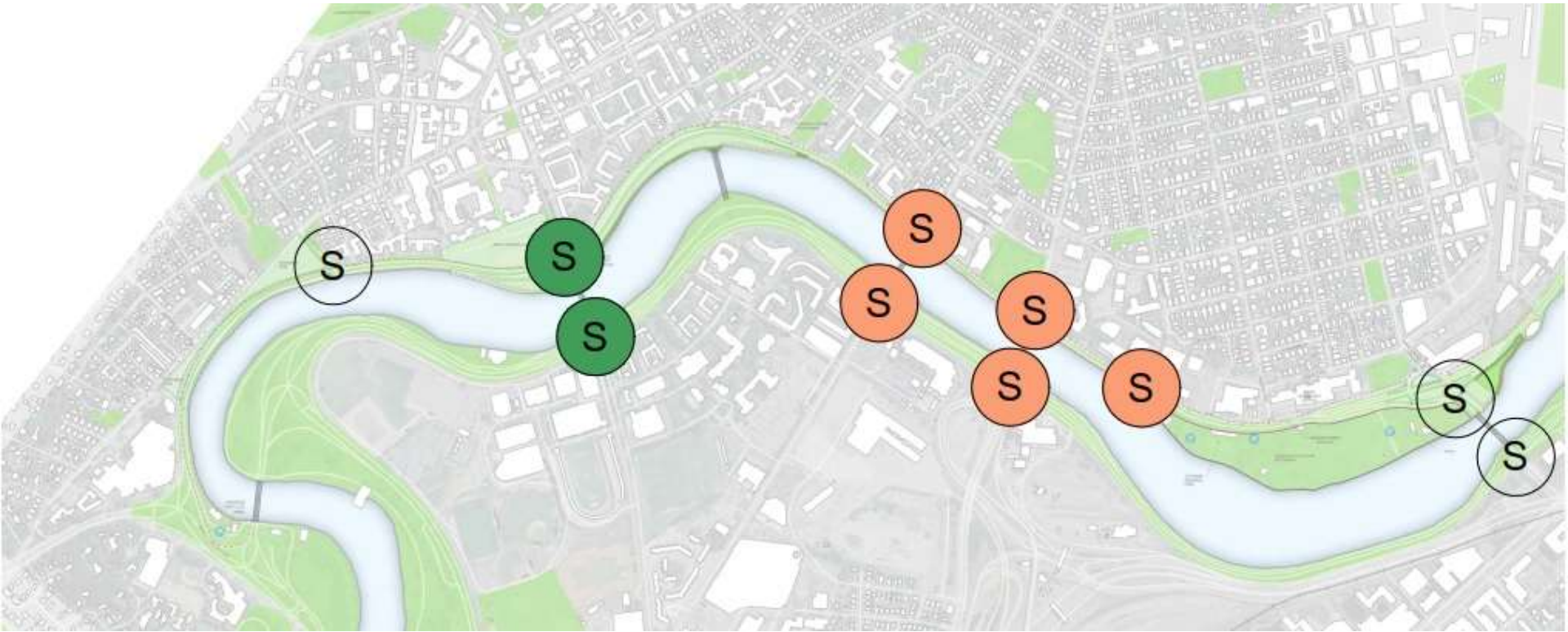
Intersection Operations



Intersection Operations – Turning Movements



Regional Coordination



Crash Data Summary

- **2 Intersections in state-wide top 200 crash locations:**
 - **Memorial Drive/River Street (#86)**
 - **Memorial Drive/Western Avenue (#135)**
- **Bicycle Crash Clusters identified at 2 locations:**
 - **Memorial Drive/JFK Street**
 - **Memorial Drive/Boston University Rotary**
- **Crash Data Summary**
 - **225 crashes on Memorial Drive (2014 – 2016)**
 - **8.5% of total crashes involved peds and cyclists**
 - **Memorial Drive/JFK Street: highest number of crashes involving pedestrians and cyclists**
 - **Most prevalent collision type: angle collision**

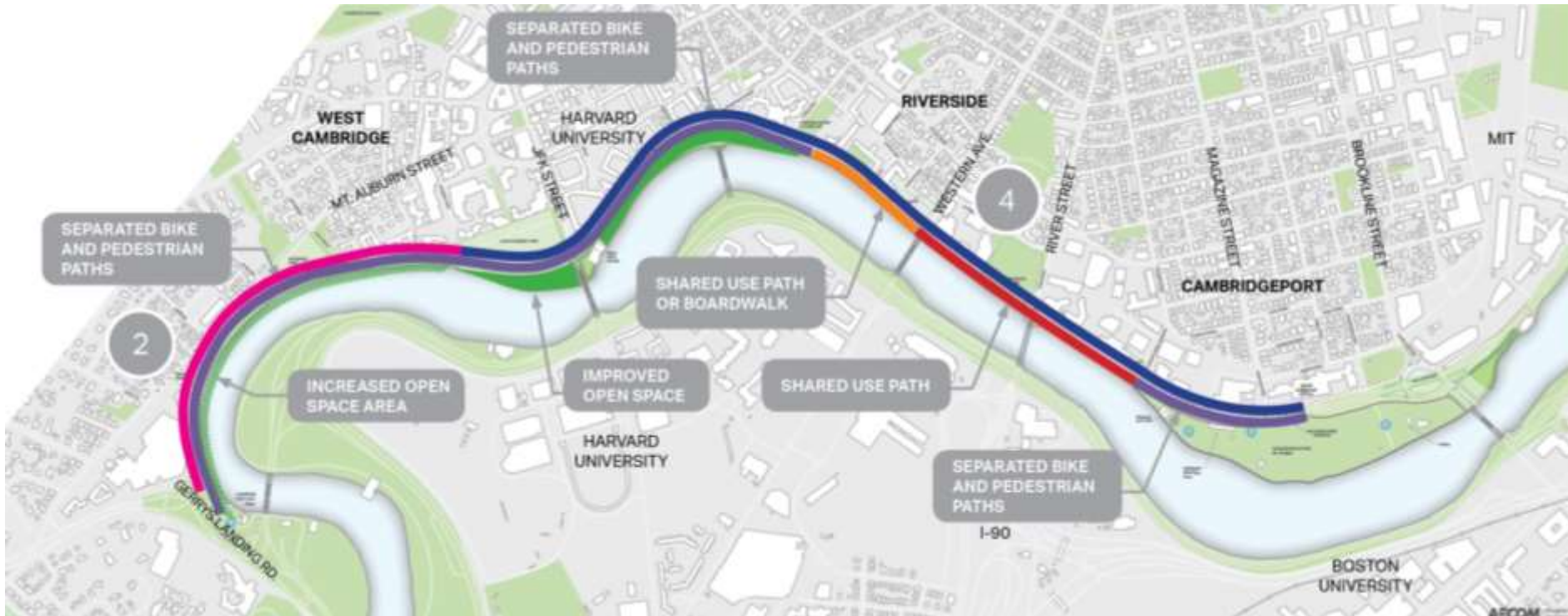
Traffic Study

Evaluation Criteria

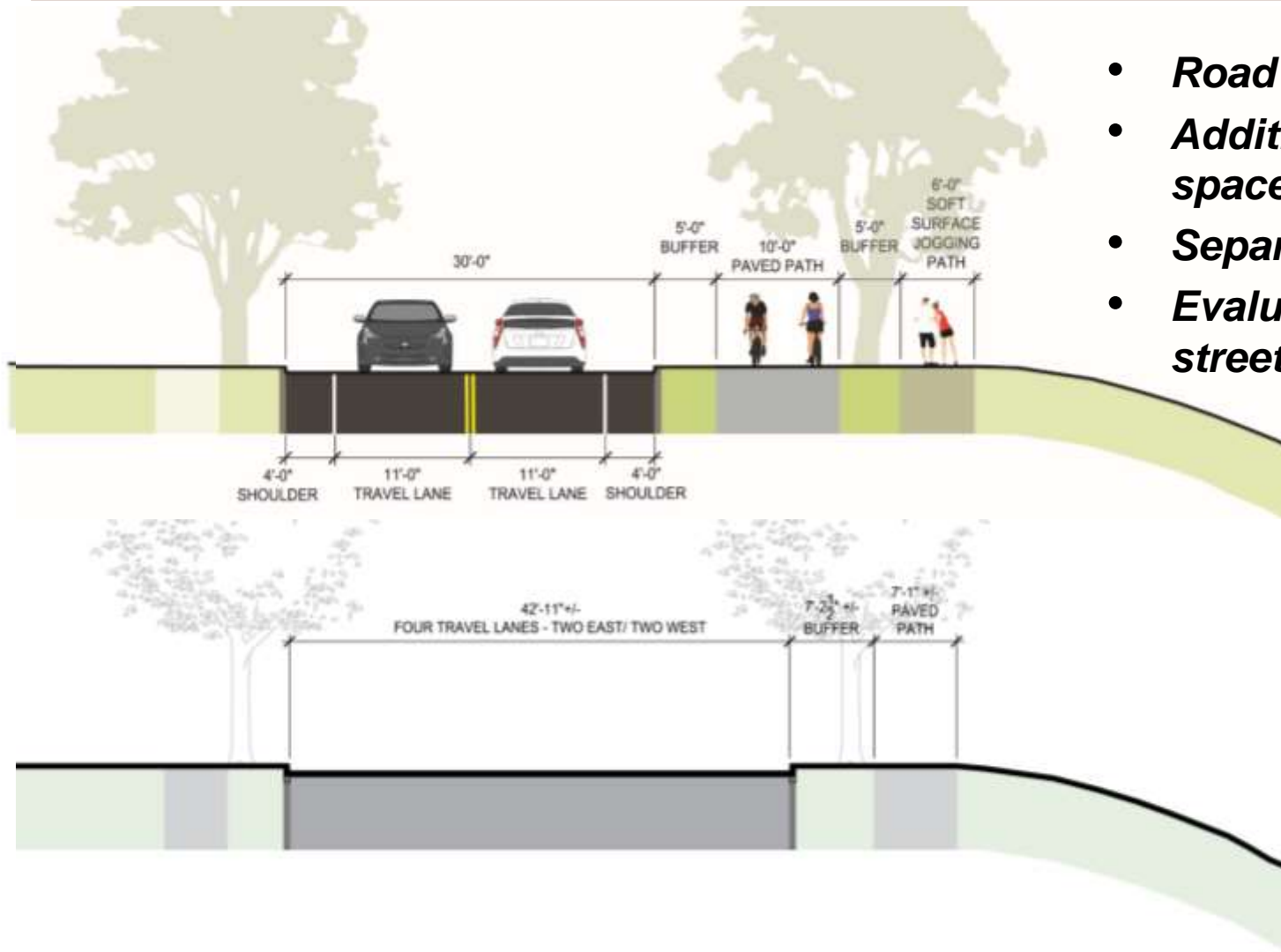
- **Existing peak hour demand**
- **Travel times**
 - **Individual segments and overall corridor**
- **Intersection operations**
 - **Current and reduced capacity**
 - **Current and modified phasing & timings**
- **Critical turning movements along corridor**

Preliminary Concepts Overview

Reclaiming Space on the Corridor



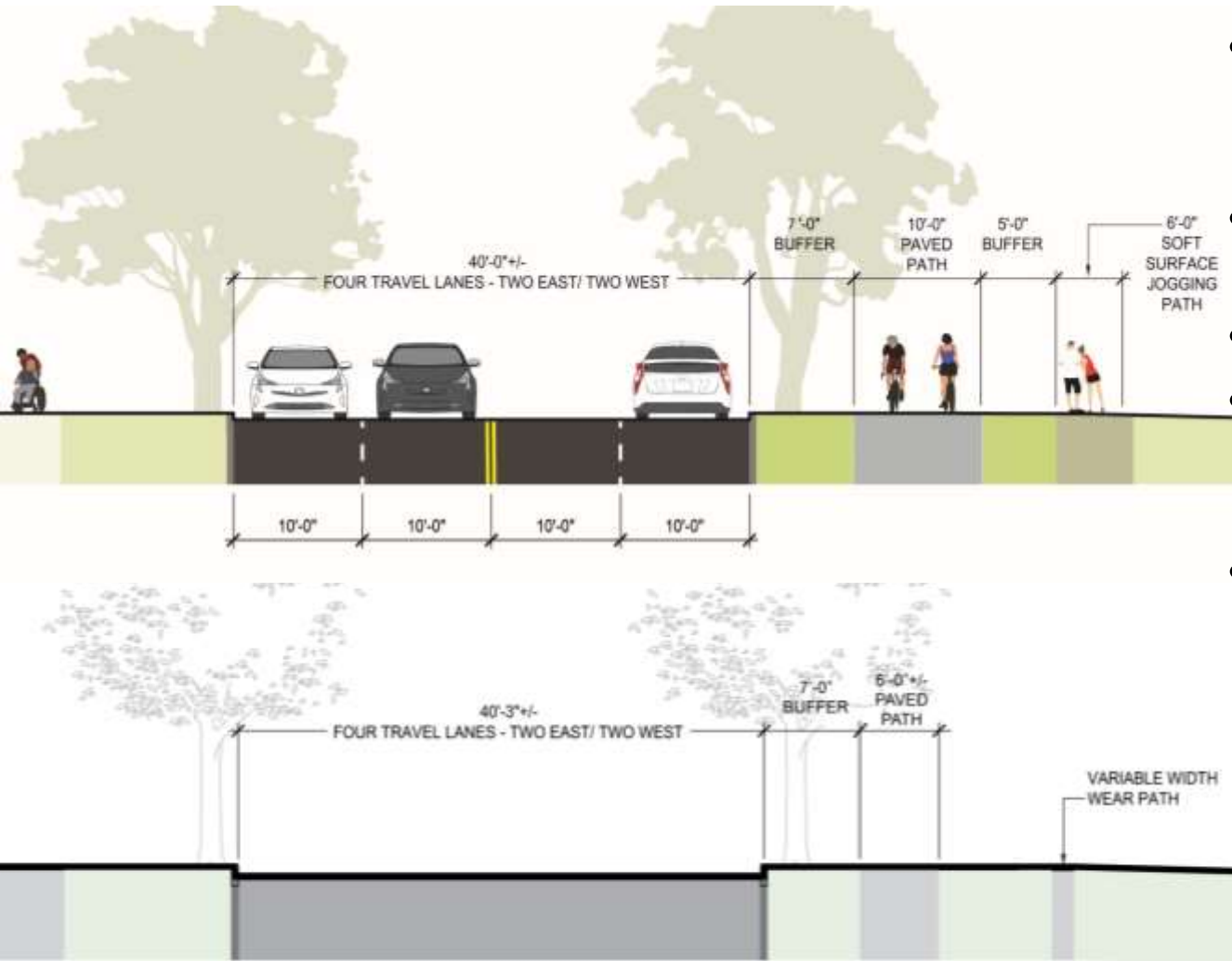
Eliot Bridge to JFK Park Concept



- *Road diet*
- *Additional park space*
- *Separated paths*
- *Evaluation of existing street trees*

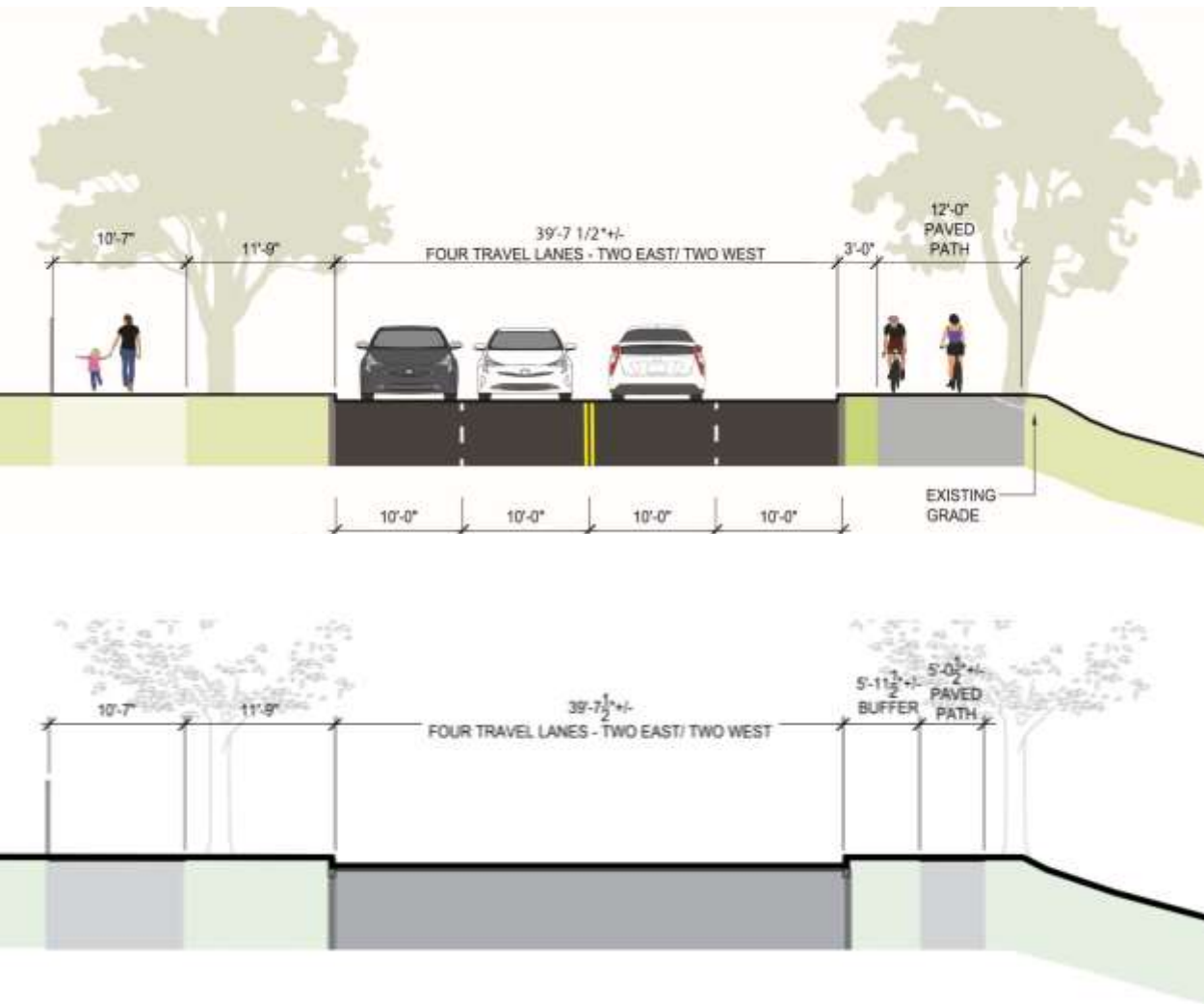
JFK Park to Flagg Street Concept

- *Existing parkland allows path widening and separation*
- *Improvements to open space*
- *Widening crossings*
- *Turning movements require lane allocation*
- *Preservation of existing street trees*

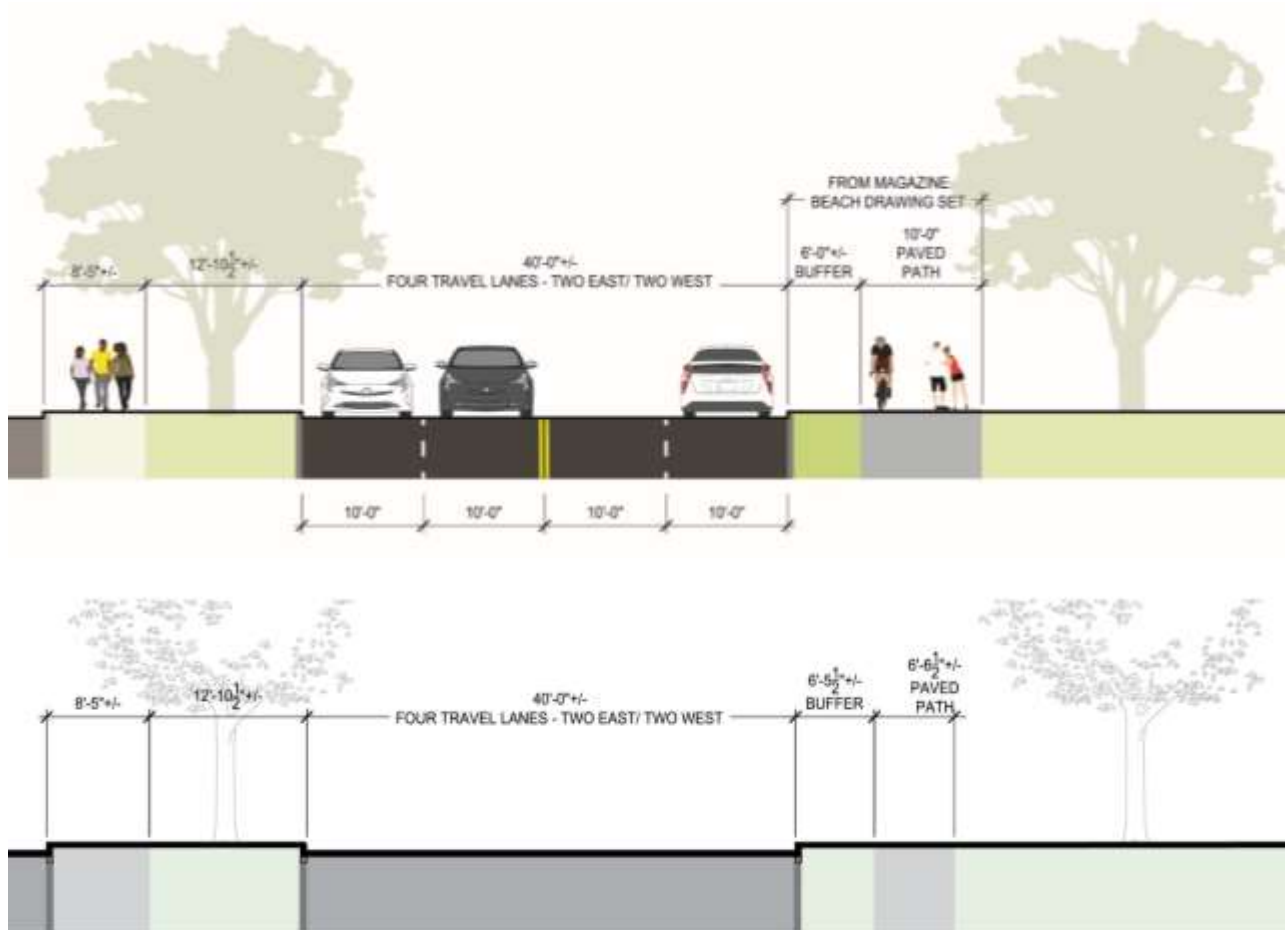


Flagg Street to Pleasant Street Concept

- ***Opportunity for signal timing improvements***
- ***Boardwalk being considered in specific locations***
- ***Turning Movements Require Lane Allocation***
- ***Narrow right-of-way***
- ***Environmental Impact Considerations***



Pleasant Street to B.U. Rotary Area Concept



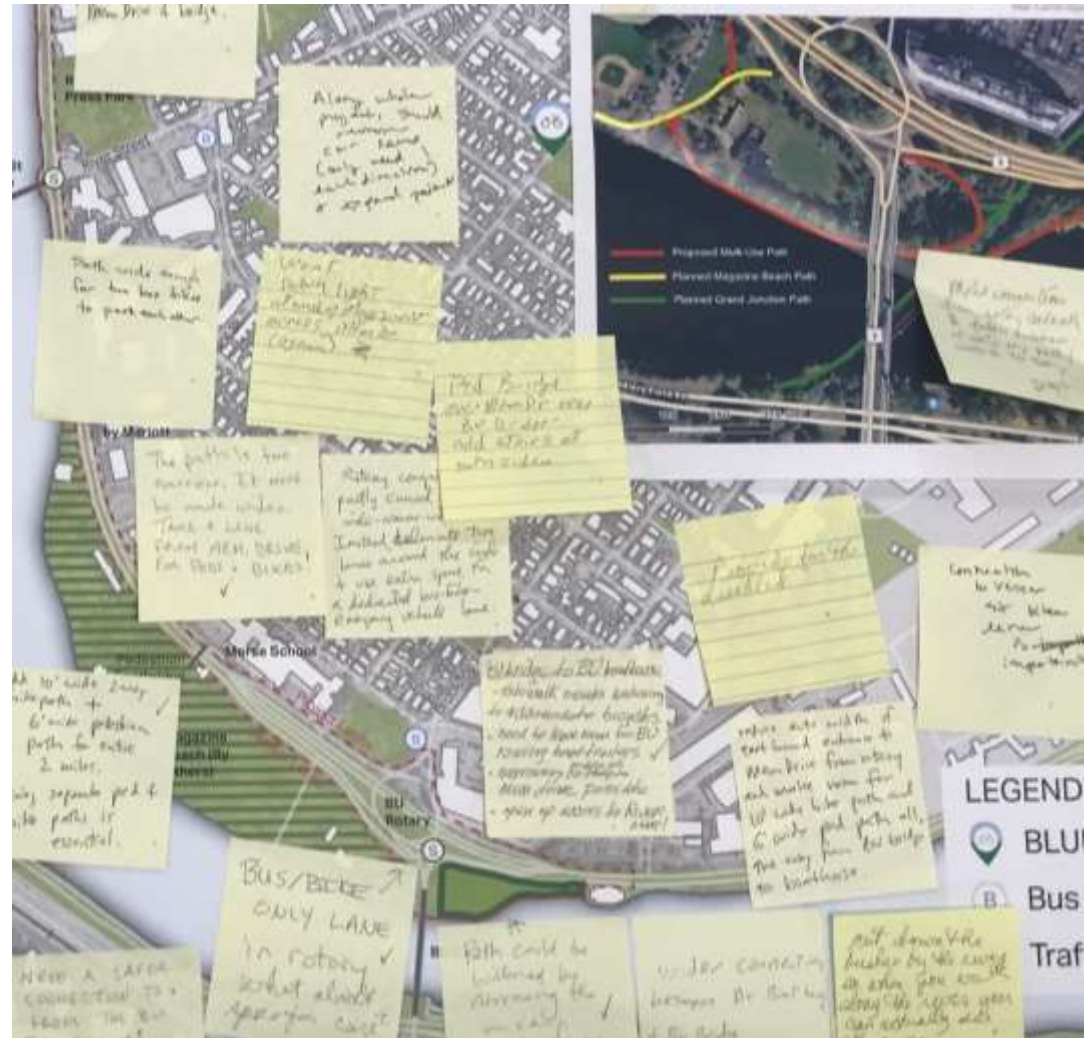
- **Increased path width and separation**
- **Drainage improvements**
- **High traffic volumes**
- **Narrow right-of-way in places**

Boston University Rotary/ Reid Overpass

- Goals
- Considerations
- Concepts

B.U. Rotary/ Reid Overpass: Goals

- **Remove Ped/ Bike Connectivity barriers**
- **Calm Traffic**
- **Remove Conflict Points, improve Safety**
- **Do Not Preclude Grand Junction Rail/Trail Connection**



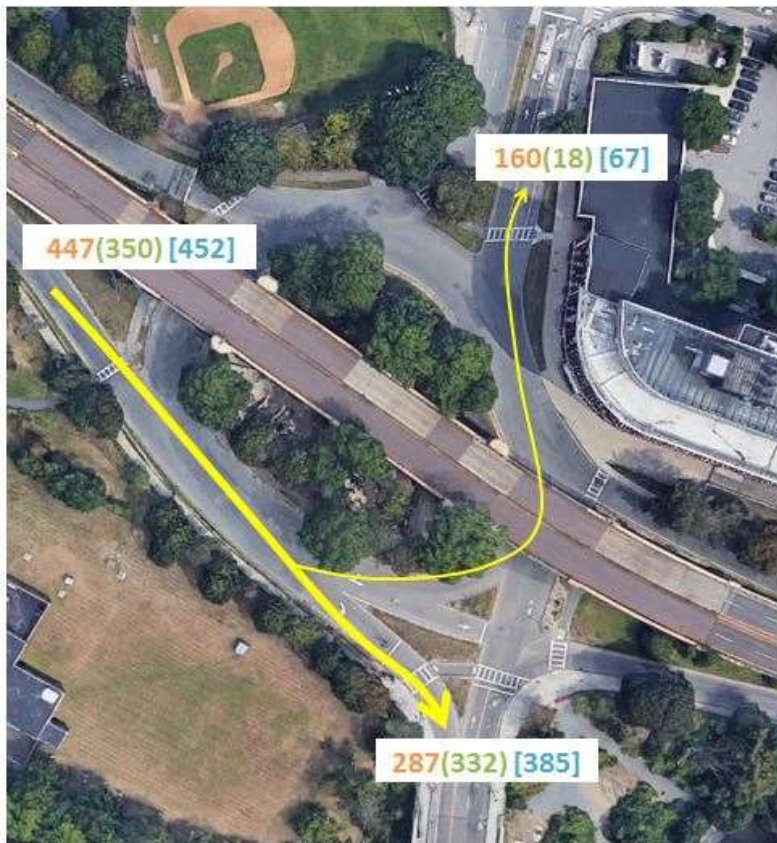
B.U. Rotary/ Reid Overpass: Considerations

- **Park Space and Connectivity**
- **Topography**
- **Capacity Limits on the B.U. Bridge**
- **Structure Ownership**
- **Historic Designation**

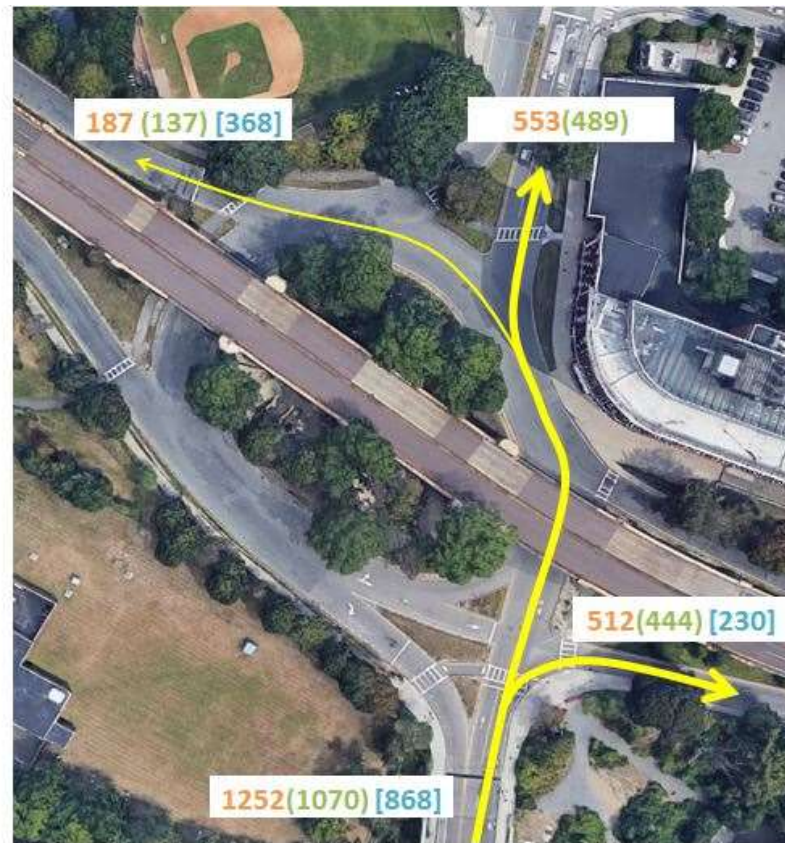


Where is Traffic Heading Today

From Eastbound Memorial Drive

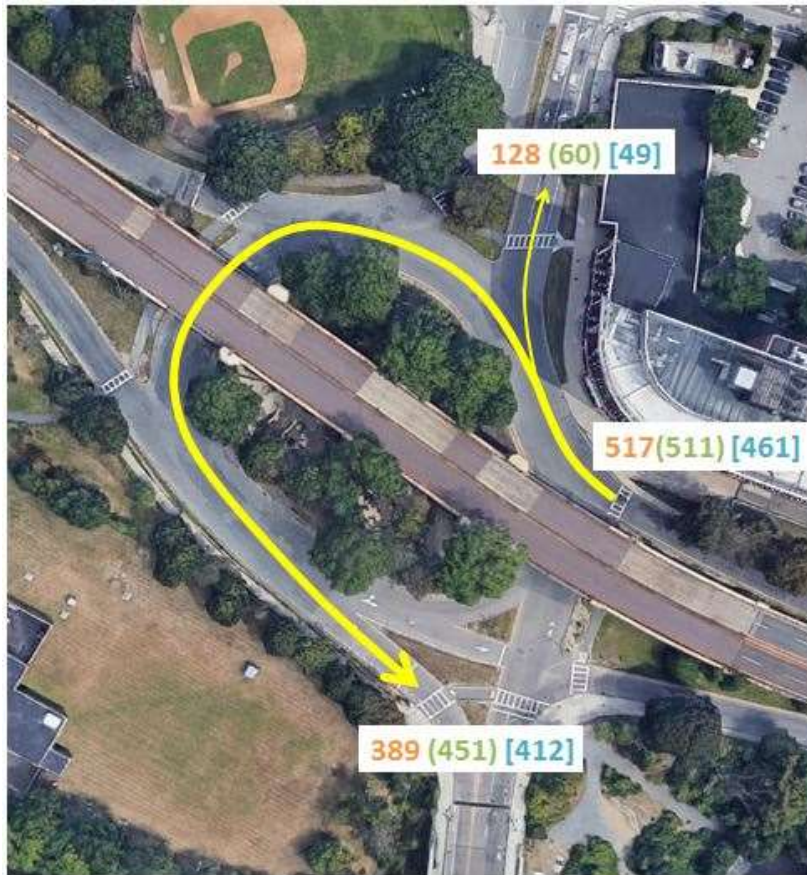


From Northbound BU Bridge



Where is Traffic Heading Today

From Westbound Memorial Drive



From Southbound Brookline Street



B.U. Rotary/ Reid Overpass Concept

Alternative 1: Formalize Existing Configuration



- *Some improvements to lane delineation (geometry, curb lines, and striping)*
- *Signal opportunities*
- *Improvements to ped/bike crossing (east-west)*
- *Gains to parkland greenspace limited*
- *Improvements to conflict points limited to south side*
- *Limited improvements for ped/bike crossing (north-south)*

B.U. Rotary/ Reid Overpass Concept

Alternative 2: Keep Overpass, Reconfigure At-grade Geometry



- ***Eliminates rotary aspect and controls all vehicle thru and turning movements with signals***
- ***Flexibility for left-turn options***
- ***Improvements to ped-bike crossings (north-south)***
- ***Gains to parkland greenspace in all four quadrants***
- ***Conflict points managed by signalized crossings***
- ***Improvements to ped-bike crossing (east-west)***

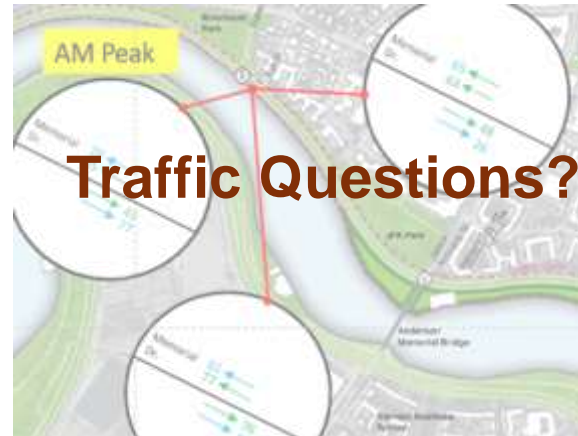
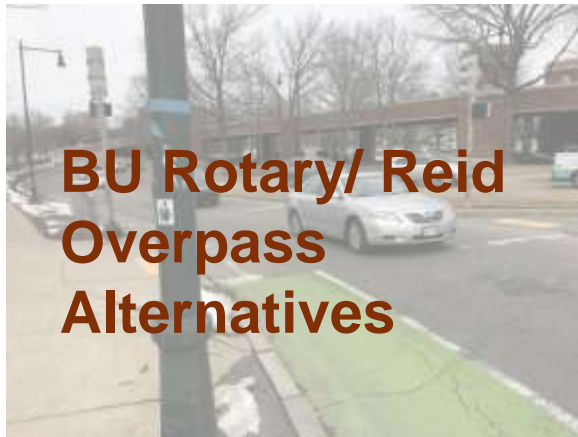
B.U. Rotary/ Reid Overpass Concept

Alternative 3: Remove Overpass and Accommodate Volumes At-grade



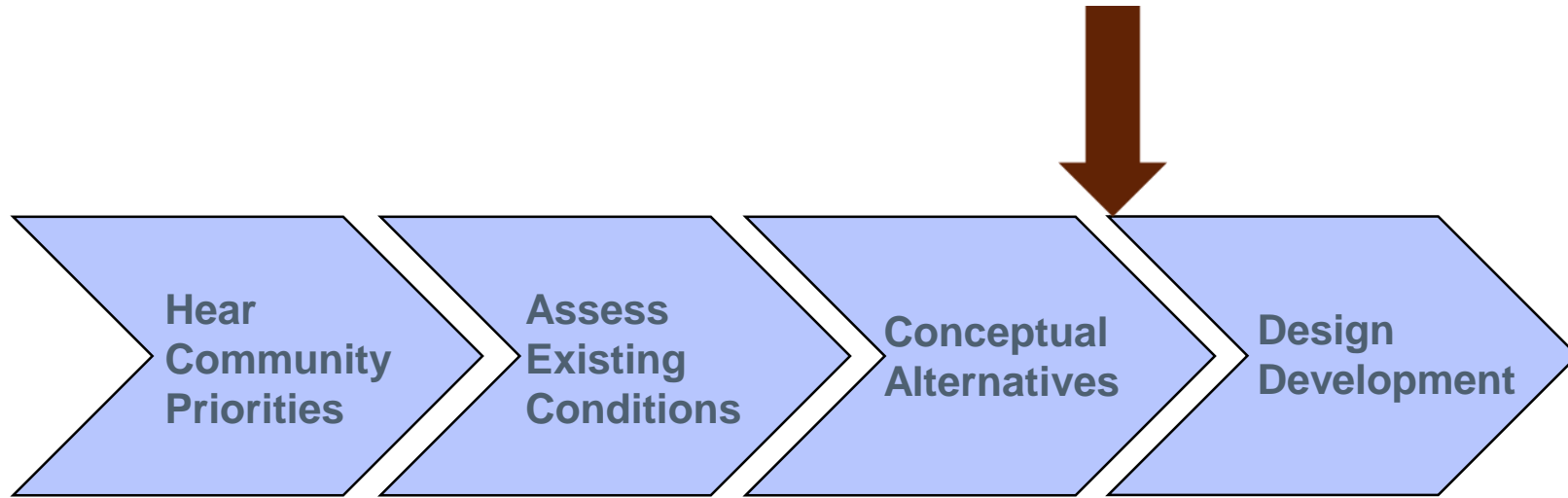
- *Results in long vehicle queue lengths at signalized crossing*
- *Reduces number of conflict points*
- *Improvements to ped-bike crossing (east-west)*
- *Improvements to ped-bike crossings (north-south)*
- *Substantial gains to parkland greenspace in all four quadrants*
- *Vehicle travel times increased*

Breakout Groups 7:40 – 8:15 p.m.



Report back: 8:15 p.m.

Next Steps



- **Next Anticipated Meeting: Fall 2019**
 - **Design Development**
 - **Path at Intersections**
 - **BU Rotary/Reid Overpass**
 - **Landscape/Programming**

Connect: Stay Involved

Comment Deadline Associated with this Meeting: July 25, 2019

For more information:

www.mass.gov/dcr/past-public-meetings

- <https://www.mass.gov/service-details/memorial-drive-greenway-improvements-phase-iii>

• If you have comments or suggestions on this project:

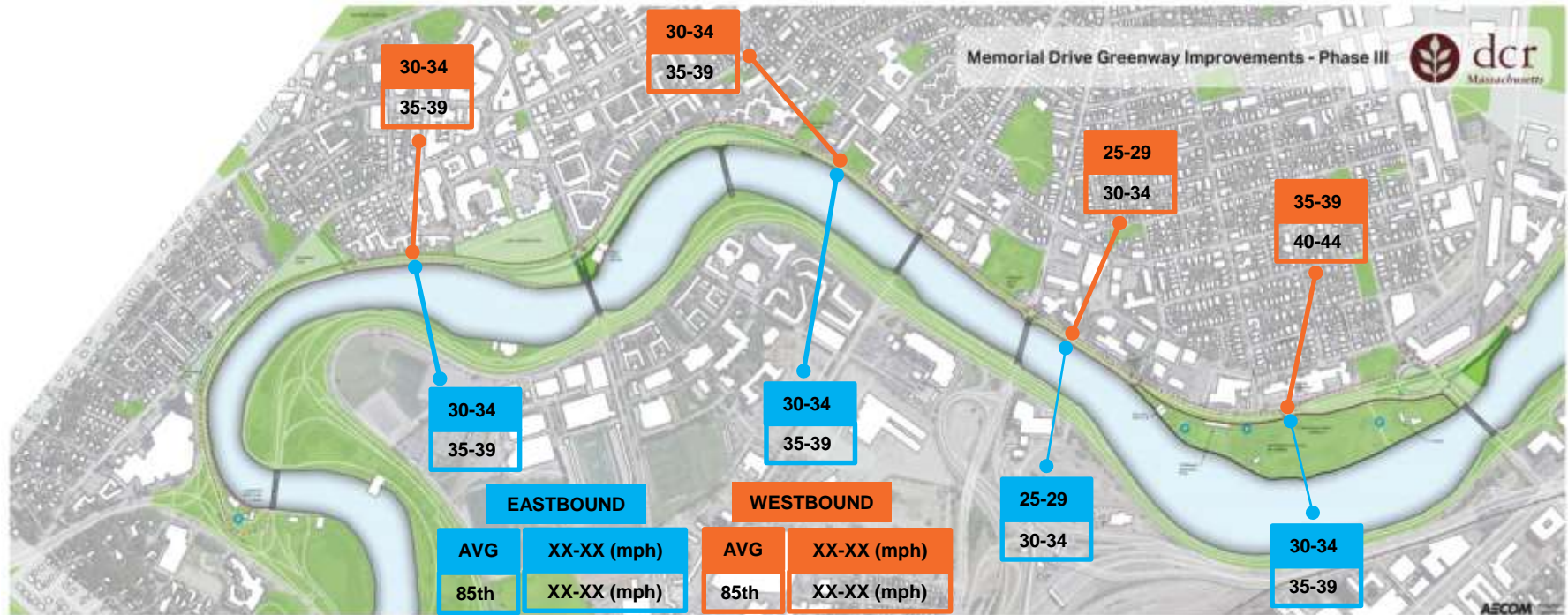
Submit online: www.mass.gov/dcr/public-comment

Write: Department of Conservation and Recreation
Office of Public Outreach
251 Causeway Street, Suite 600
Boston, MA 02114

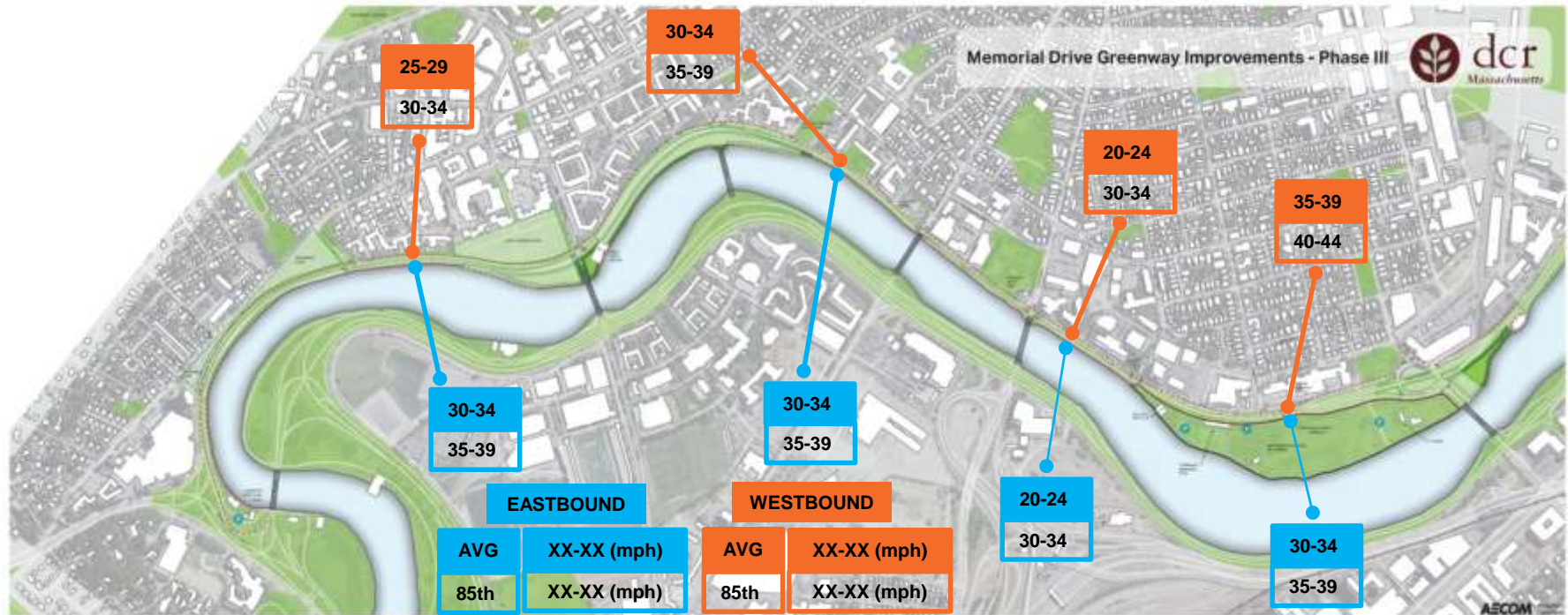
Note: Public comments submitted to DCR may be posted on the DCR website in their entirety, and no information, including contact information, will be redacted.

If you wish to subscribe to a DCR general information or project-related listserv: contact DCR's Office of Community Relations at 617-626-4973 or Mass.Parks@state.ma.us.

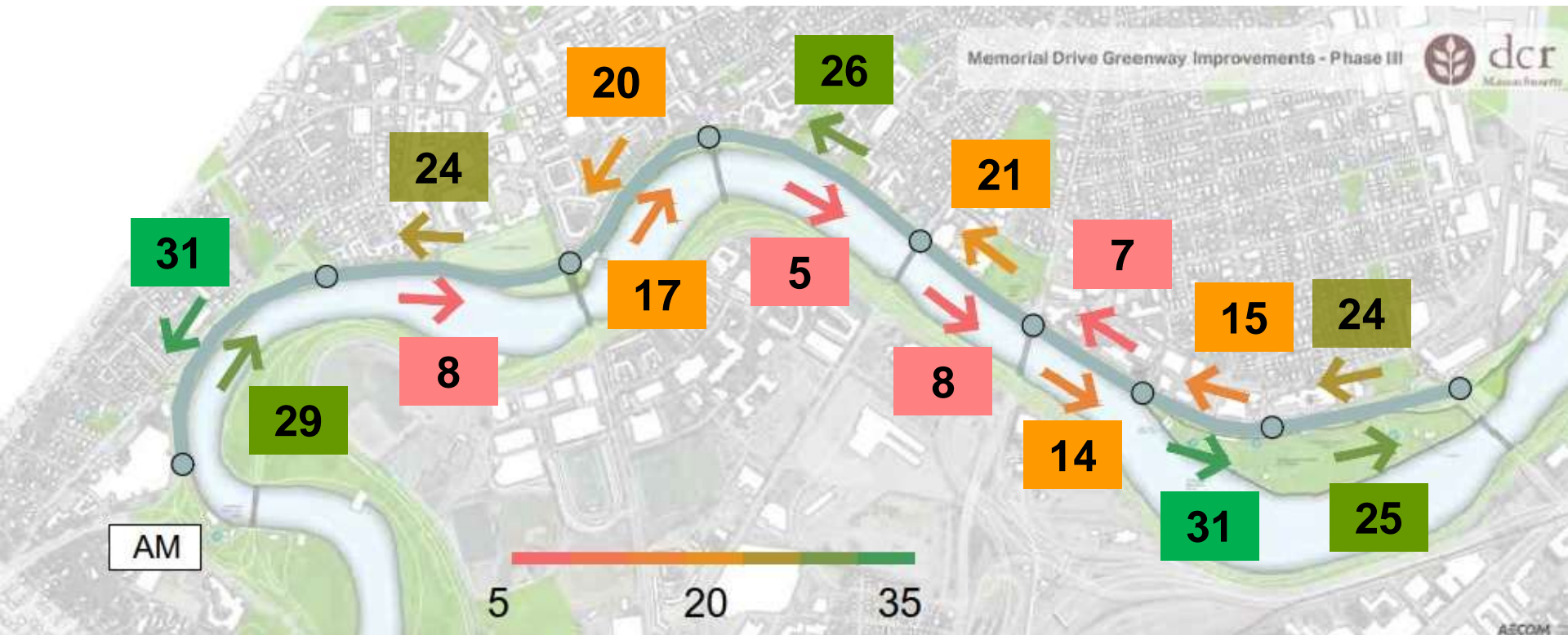
Weekday Travel Speeds – 24 hours



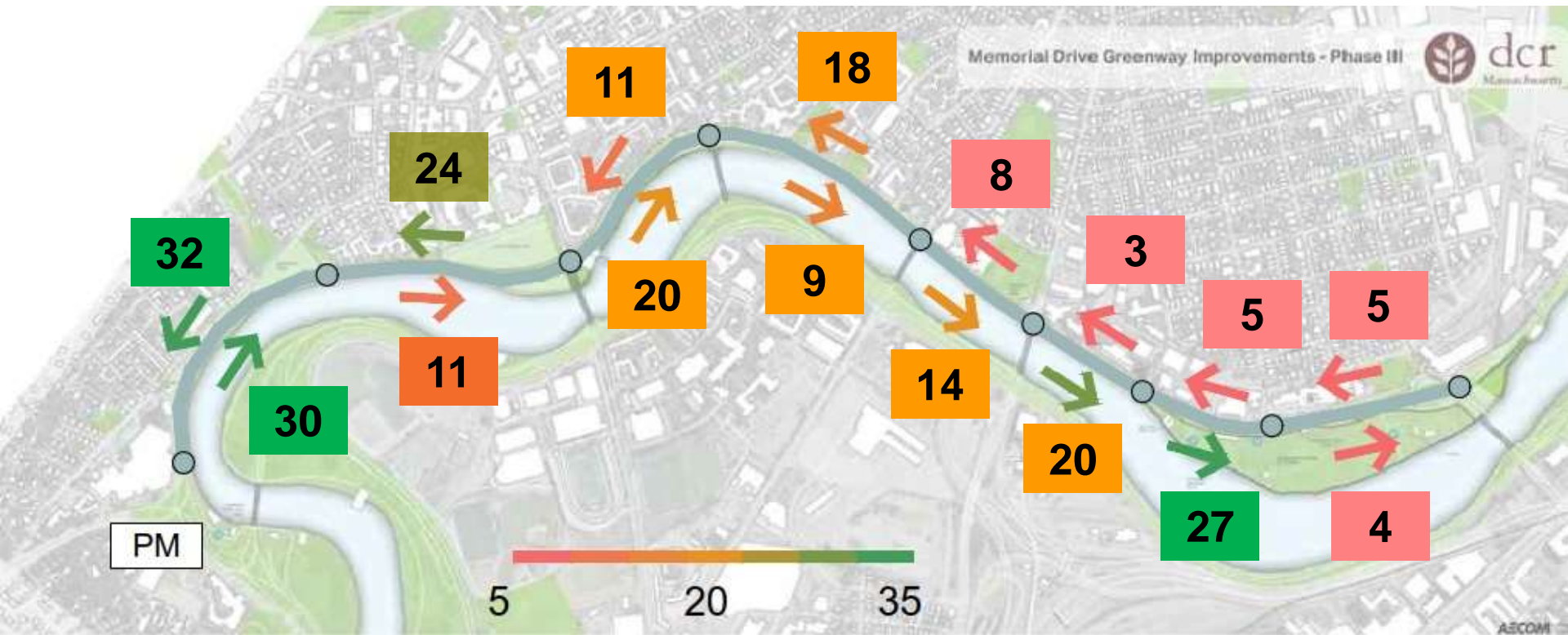
Weekday Travel Speeds – Off Peak



AM Peak Hour Travel Speeds (mph)



PM Peak Hour Travel Speeds (mph)



-
- **Takes 5 min 14 sec to traverse corridor at 25 mph.**