



# December 2021 PTAC Meeting: City Update

# Agenda

- Mobility Division Intro/Background
- Pedestrian Signal Timing Discussion
- Mystic/Shore and 28/38 Project Universe
- End of year project Updates
- Ongoing input opportunities

# Mobility Division Introduction

- Staff introductions
- What is the City update?
  - Monthly report from the City on ongoing plans, projects, studies, and programs
  - A broad view of everything that's going on relevant to Pedestrian and Transit issues
  - A chance for project input and deeper dives on important topics
  - Committee may request specific updates in advance of our meeting

# Transportation Related Departments, Committees, & Commissions

## Departments & Divisions:

- **Office of Strategic Planning & Community Development**
  - Divisions: **Mobility**, Admin, Historic Preservation, Economic Development, **Planning & Zoning**, **Public Space & Urban Forestry**, Housing, Housing Stability
- **Infrastructure & Asset Management Department**
  - Divisions: **Engineering**, Capital Projects
- **Parking Department**
  - Divisions: **Administration**, **Enforcement**, **Maintenance**
- **Department of Public Works**
  - Divisions: Administration, Buildings, Grounds, School Custodians, Solid Waste, **Highway**, **Lights & Lines**, **Fleet Management** , **Snow Removal**

## Interdepartmental Working Groups:

- **Vision Zero Working Group:** Meets a few times per year with Mobility, DPW, Engineering, Parking, Police, Fire, Schools, Communications, Health & Human Services, Personnel, three resident members

## City Council:

- **Committee on Traffic & Parking:** Meets monthly, new schedule and assignments TBD by new council next year

## Committees/Commissions:

- **Pedestrian & Transit Advisory Committee:** meets on the third Thursday of each month
- **Bicycle Advisory Committee:** meets on the first Thursday of each month
- **Commission for Persons with Disabilities:** meets on the second Tuesday of each month
- **Traffic Commission:** Typically meets on the second Thursday of each month
- **Traffic Board:** Meets as needed to hear appeals of Traffic Commission decisions.

# How changes get made to our streets

- Major full depth **reconstruction projects**
  - Usually all options on the table (but utility conflicts can still occur)
  - Often originate from underground infrastructure needs
  - Often tied to major development or transit projects
- Annual Pavement & Sidewalk **resurfacing program projects**
  - Primarily maintenance projects to meet ADA compliance
  - A limited amount of more comprehensive changes can be included
  - Data driven – annual survey of streets
  - Sometimes bundled with small standalone interventions like speed humps or intersection improvements
- **Quick-build projects**
  - Changes must take place between existing curbs
  - Primarily paint, signs, and posts, sometimes traffic signals upgrades
- Other projects (can be any of the above project types)
  - State, grant, MBTA, or other partner funded construction projects
  - Development mitigation projects
  - Street changed incorporated into city building or park reconstruction

# Pedestrian Signal Timing

- Signaling Basics
  - Exclusive pedestrian phasing
  - Concurrent pedestrian phasing
    - Leading pedestrian/transit/bike intervals – LPIs, LTIs, & LBIs
- Discussion of tradeoffs
  - Pedestrian delay vs crossing comfort
  - Perception of safety vs proven safety
  - Compliance concerns
  - Impacts on transit service
- What do other local cities do?
- Washington/Webster/Somerville Ave intersection
  - Challenges with existing signal timing
  - Possible modifications
  - What we want to know from the committee

# What do other local cities do?

## City of Cambridge:

- Pedestrians long noted to cross concurrently no matter what the pedestrian signal indicated, (when traffic signals were set to run exclusive, most pedestrians crossed with the vehicle green light rather than wait)
- As of 1997, concurrent with LPIs is official policy, except for at 'T' intersections and at intersections with many turning vehicles.

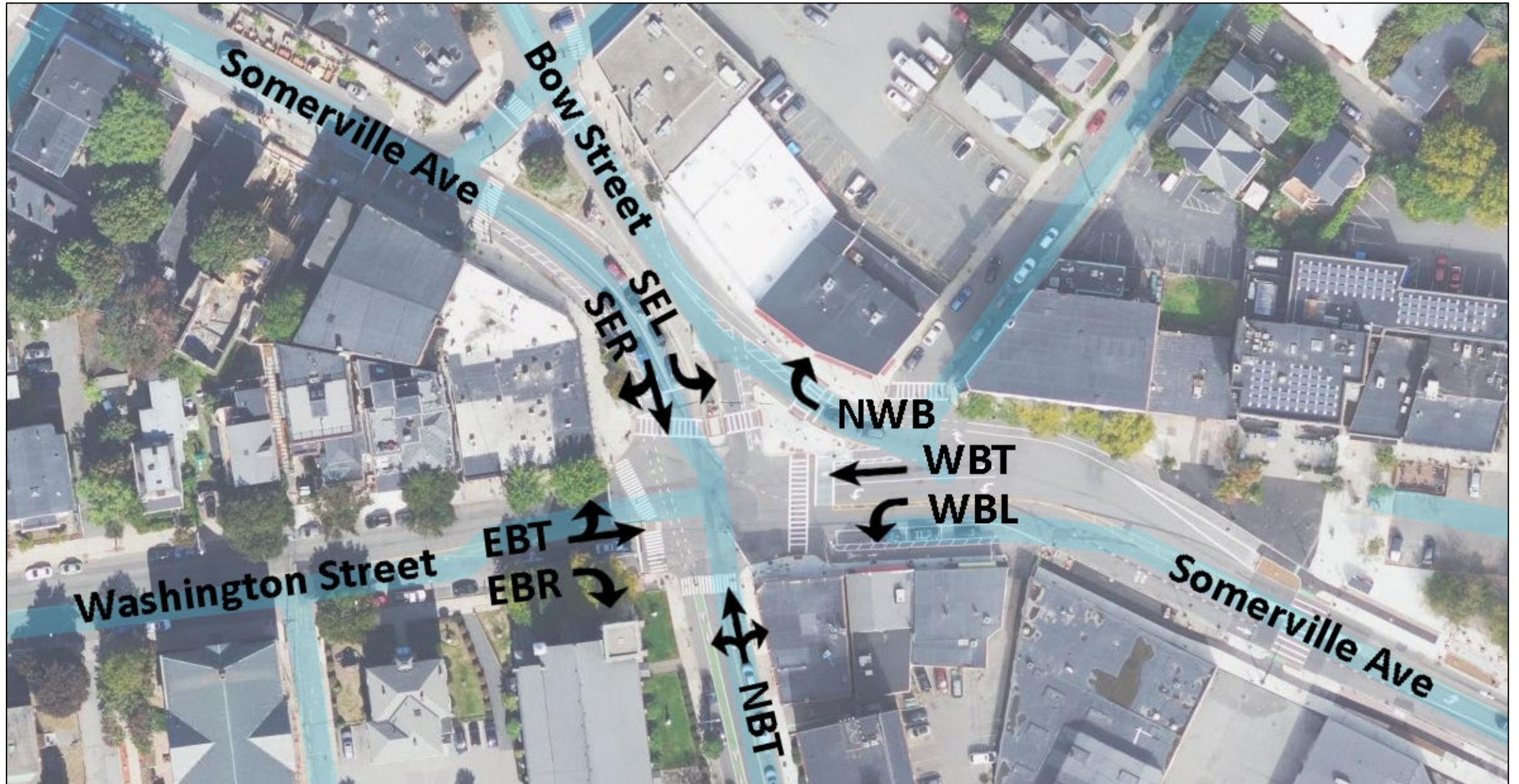
## Boston

- Complete Streets Guidelines encourages concurrent phasing, except when conflicting turning vehicle volumes are equal to or greater than 250 vehicles per hour.

## MAPC (Regional Planning Agency)

- Also recommends considering the overall pedestrian volume and crossing distance.

# Washington/Webster/Somerville Intersection





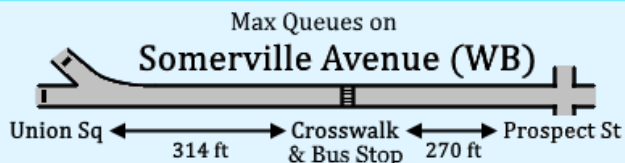
# Alternatives Analysis

## UNION SQUARE - SOMERVILLE Alternatives Analysis



**D** Vehicular Level of Service (A-F)

**55** Average Pedestrian Wait Time (in Seconds)



	AM	PM	AM	PM
Scenario #1 (Existing) Concurrent Pedestrian Phasing	<b>D</b> 55	<b>F</b> 55	AM 220ft	PM 700ft
Scenario #2 Exclusive Pedestrian Phasing	<b>E</b> 55	<b>F</b> 70	AM 278ft	PM 811ft
Scenario #3 Exclusive Pedestrian Phasing Prohibition of Eastbound Left Turn	<b>D</b> 55*	<b>D</b> 55*	AM 155ft	PM 382ft
Scenario #5 Concurrent Pedestrian Phasing Westbound Right Turn operates at all times under yield conditions, except when pedestrian phase is called.	<b>D</b> 55*	<b>D</b> 70*	AM 56ft	PM 115ft

A Leading Bus Interval can be added on Washington Street Eastbound for minimal impact. Short queues on Somerville Avenue Westbound limit bus-delaying blockages.

Average Pedestrian Wait Times are directly proportional to signal cycle length. This assumes equal pedestrian distribution in terms of time and direction.

**D** Intersection Analysis done using the Synchro 11 software. Level of Service is based off of average vehicle delay.

### Delisted Scenarios

Scenario #4 Scenario 4 was the addition of an exclusive pedestrian phase to the existing phasing, with no other changes. Delisted due to poor performance.

Scenario #6 Scenario 6 was the counterpart to Scenario 5, with exclusive pedestrian phasing. Delisted to remove duplicate.

\* Wait time to cross one leg of intersection (both only if crossing diagonally)



# Mystic/Shore and 28/38 Project Universe: Large Projects

## McGrath Resurfacing

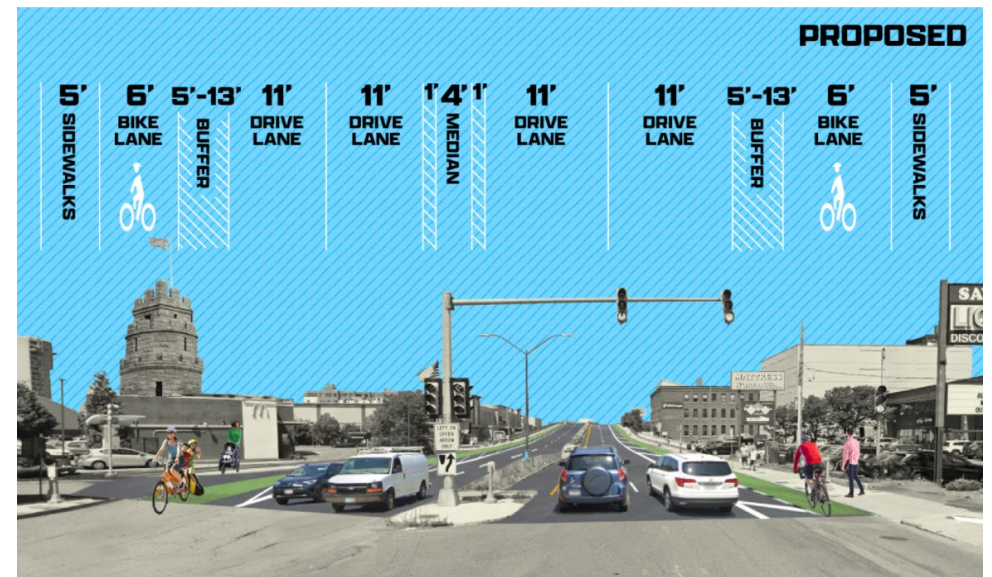
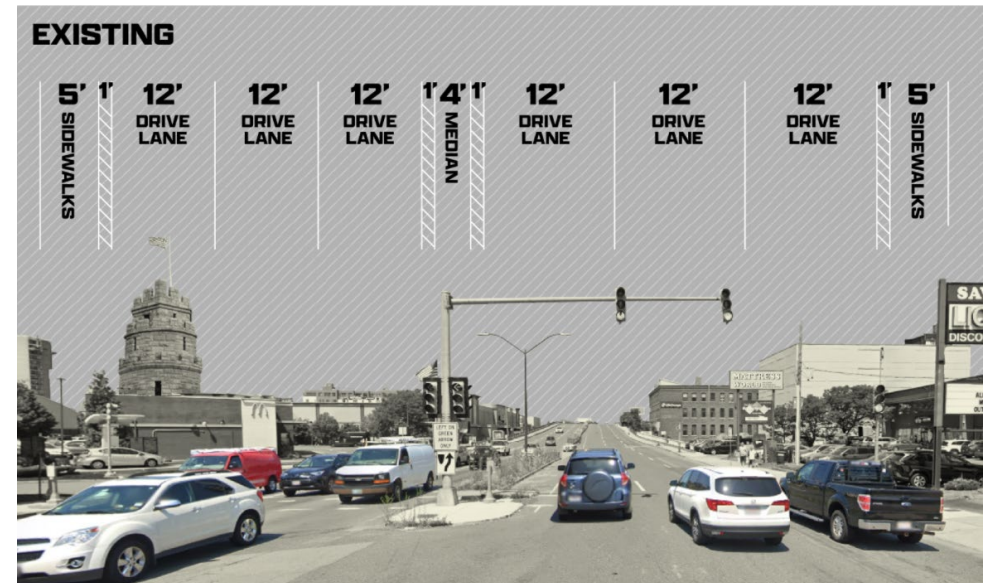
- Extends from 3rd St. in Cambridge to Broadway
- Includes road diet, improved bus stops, reconstructed pedestrian ramps
- Construction in 2022
- More information: [McGrath Highway Resurfacing \(arcgis.com\)](https://arcgis.com)

## Route 28/38 Intersection Improvements

- City submitted comments in April 2021
- Revised 25% being finalized now
- Expect more community process and outreach in the new year
- More information: [Somerville - Design Public Hearing webinar and comment period | Mass.gov](#)

## McGrath Boulevard

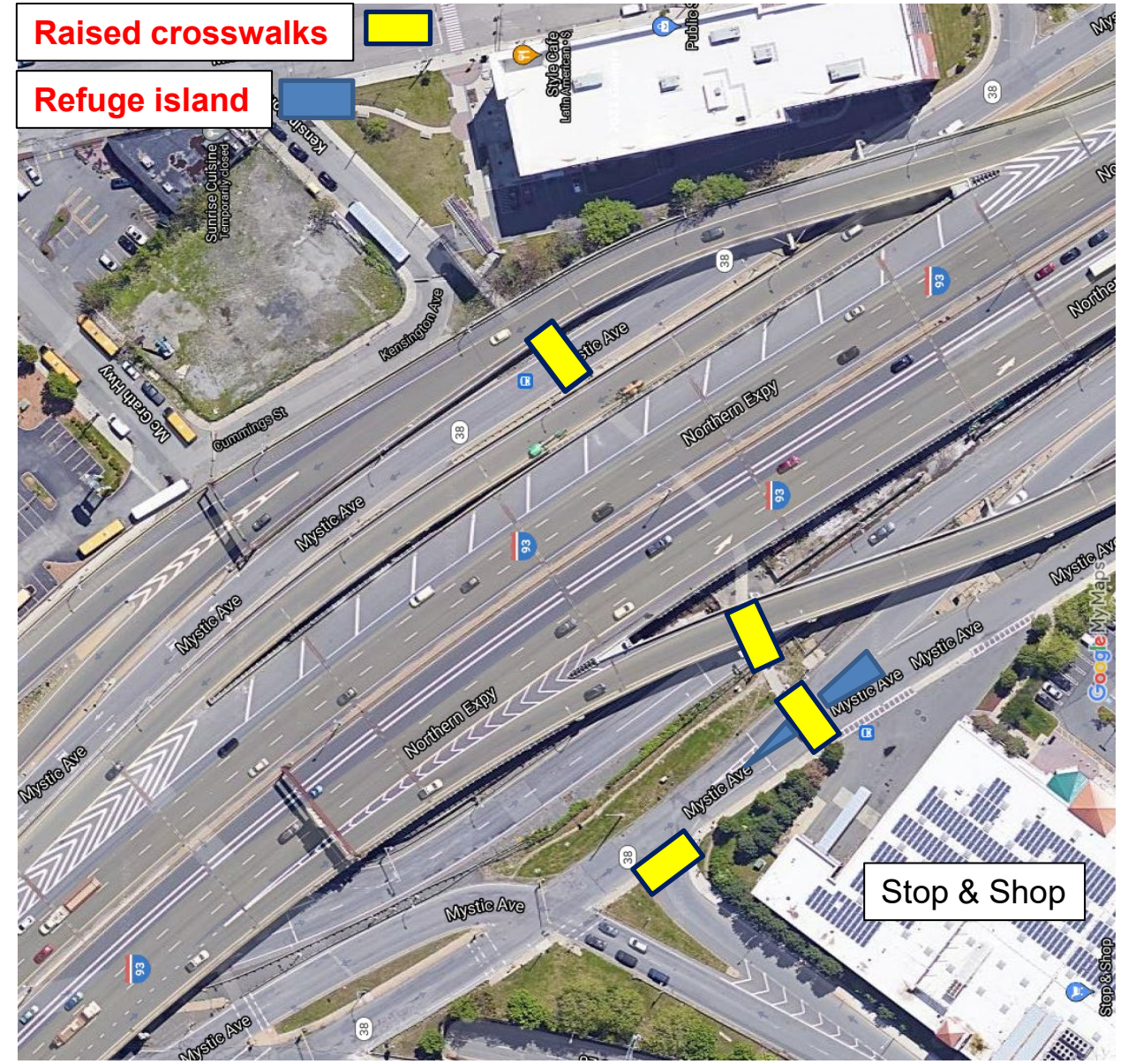
- MassDOT advancing 25% design
- Early 2023 for 25% design completion
- MassDOT and the City advocate for programming in the TIP in late 2023
- More information: [Destination-2040-LRTP-20191030.pdf \(bostonmpo.org\)](#)



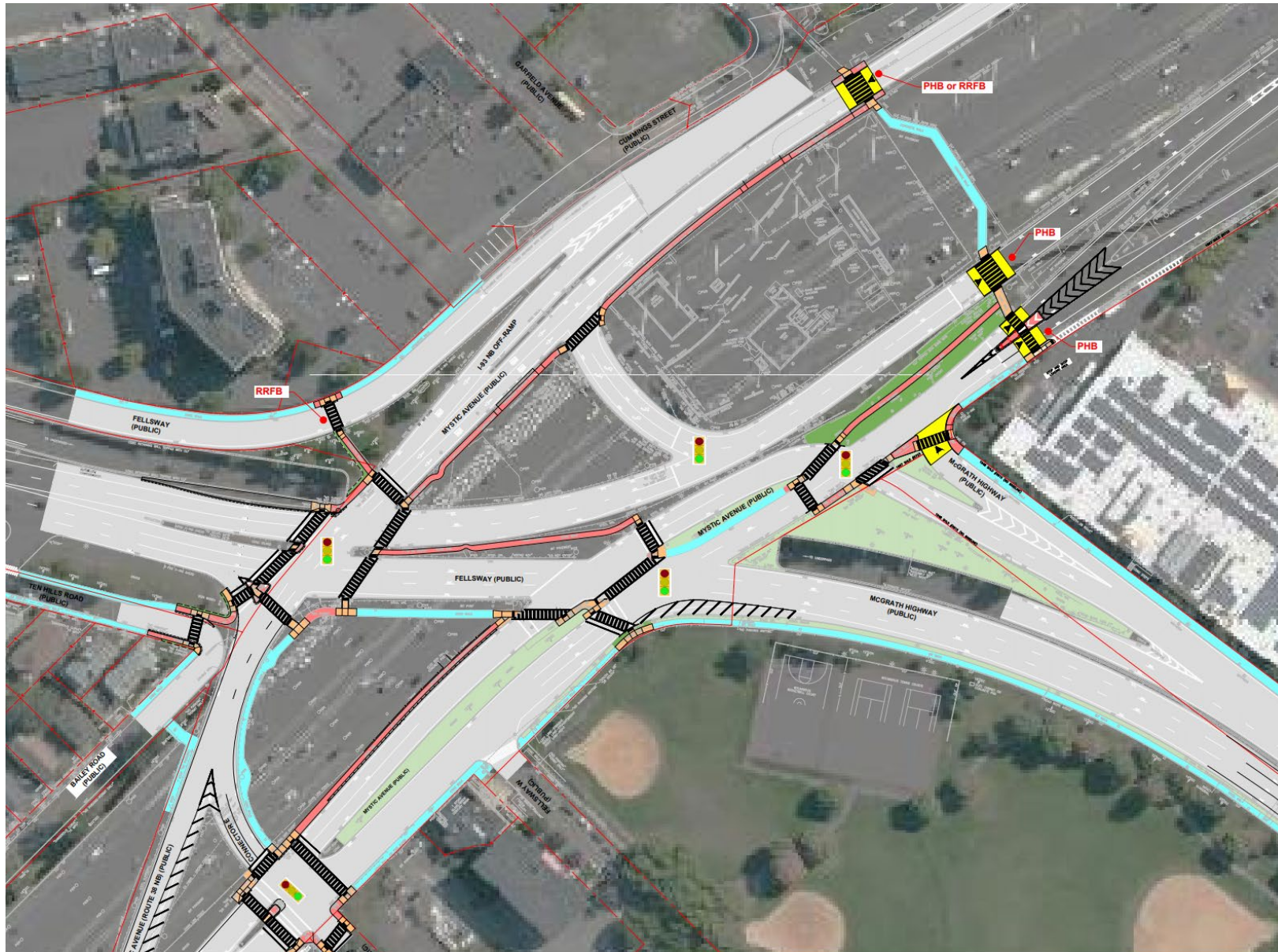
# Mystic/Shore and 28/38 Project Universe: Large Projects

## Near-term Improvements

- Blakeley Ave. crosswalk implemented in July
- Kensington Connector raised crossings designed and planned for implementation in 2022 construction season
- Pedestrian ramp upgrades design advancing and planned for construction start in 2022



# Mystic/Shore and 28/38 Project Universe: Large Projects





# Mystic/Shore and 28/38 Project Universe: Medium Projects

## Kensington Connector

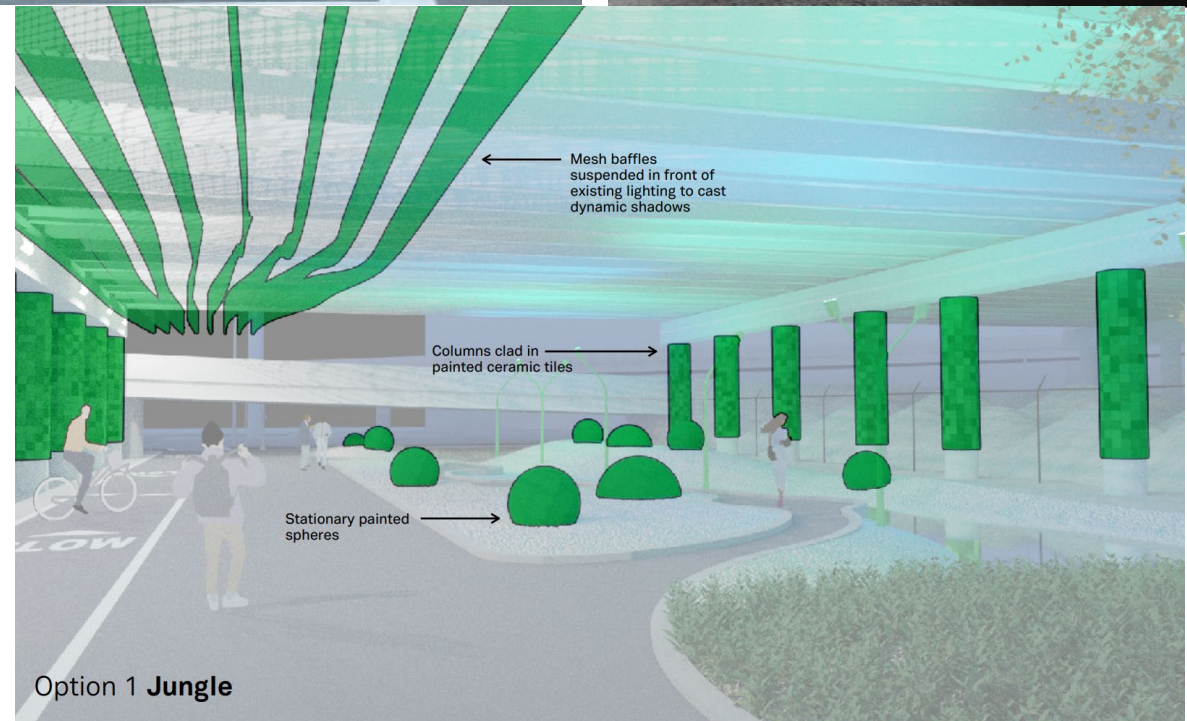
### Key Project Improvements:

- Quick-build project included murals and prints wrapping the fence
- Longer-term redesign is planned to include permanent improvements to lighting, plantings, art, and separate walking and biking areas.

### Estimated Timeline:

- Summer 2021: Short-term improvements implemented
- End of 2021: Finalize cost estimate for long-term project
- 2022: Work with MassDOT on next steps

**More Information:** [Kensington Connector Revitalization](#) | [Somerville \(somervillema.gov\)](#)



Option 1 Jungle

# Mystic/Shore and 28/38 Project Universe: Small Projects

## Wellington Bridge Protected Bike Lanes

- Signs installed last week
- Flex posts removed for winter snow removal operations; will be reinstalled in spring
- Construction of ramps and paths on north side of bridge in spring 2022

## Mystic Ave. Bus Lane

- Implemented in June 2021
- Extends from Main St. in Medford to Wheatland St. in Somerville
- Pre- and post-project data collection
- Anticipate discussions with MassDOT on next steps winter/spring 2022





# Project/Planning Updates

- Neighborhood Traffic Calming
  - Signs installed for 15 speed humps on Lowell, Morrison, & Kidder
  - Pavement markings complete on Lowell St, remainder planned to be implemented as weather permits.
- College Ave Resurfacing
  - Sidewalks substantially complete
  - Temporary pavement markings in place
  - Final repaving and restriping will take place in 2022
  - Traffic Board reaffirmed Traffic Commission decision
- Eastern Washington Street
  - Thermoplastic pavement markings complete
  - Scheduling signal changes ASAP
  - Red carpet to be applied next year
- Powder House Circle Safety Improvements
  - Substantially complete
  - Scheduling bagging of signals, bus shelter removal ASAP



New pedestrian refuge islands and temporary pavement markings on College Avenue

# Ongoing Input Opportunities

- Highland Ave
  - Public input map is open for comment
  - Community survey will open in January
  - [www.somervillema.gov/highlandave](http://www.somervillema.gov/highlandave)
- Gilman Square
  - Street design feedback survey open and available in multiple languages
  - Accepting applicants for Civic Advisory Committee for redevelopment
  - [www.somervillema.gov/gilmansquare](http://www.somervillema.gov/gilmansquare)
- Citywide Parking & Curb Use Study
  - Community survey open and available in multiple languages
  - [www.somervillema.gov/parkingstudy](http://www.somervillema.gov/parkingstudy)
- Coming soon in 2022
  - Mobility 2021 year in review and 2022 work planning
  - Pearl Street Community Meeting
  - West Washington Street community process