

PLAN: South Boston Dorchester Avenue Transportation Plan

Virtual Public Meeting

December 9, 2020

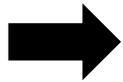


ZOOM TIPS

Your controls are at the bottom of the screen:



Use the chat to type a comment or ask a question at any time – Joe Blankenship, Charlotte Ong, and Sam Devine from the project team will moderate the chat



To raise your hand, click on “Participants” at the bottom of your screen, and then choose the “Raise Hand” option in the participant box



Mute/unmute – Participants will be muted during the presentation – the host will unmute you during discussion if you raise your hand and it is your turn to talk



Turns your video on/off

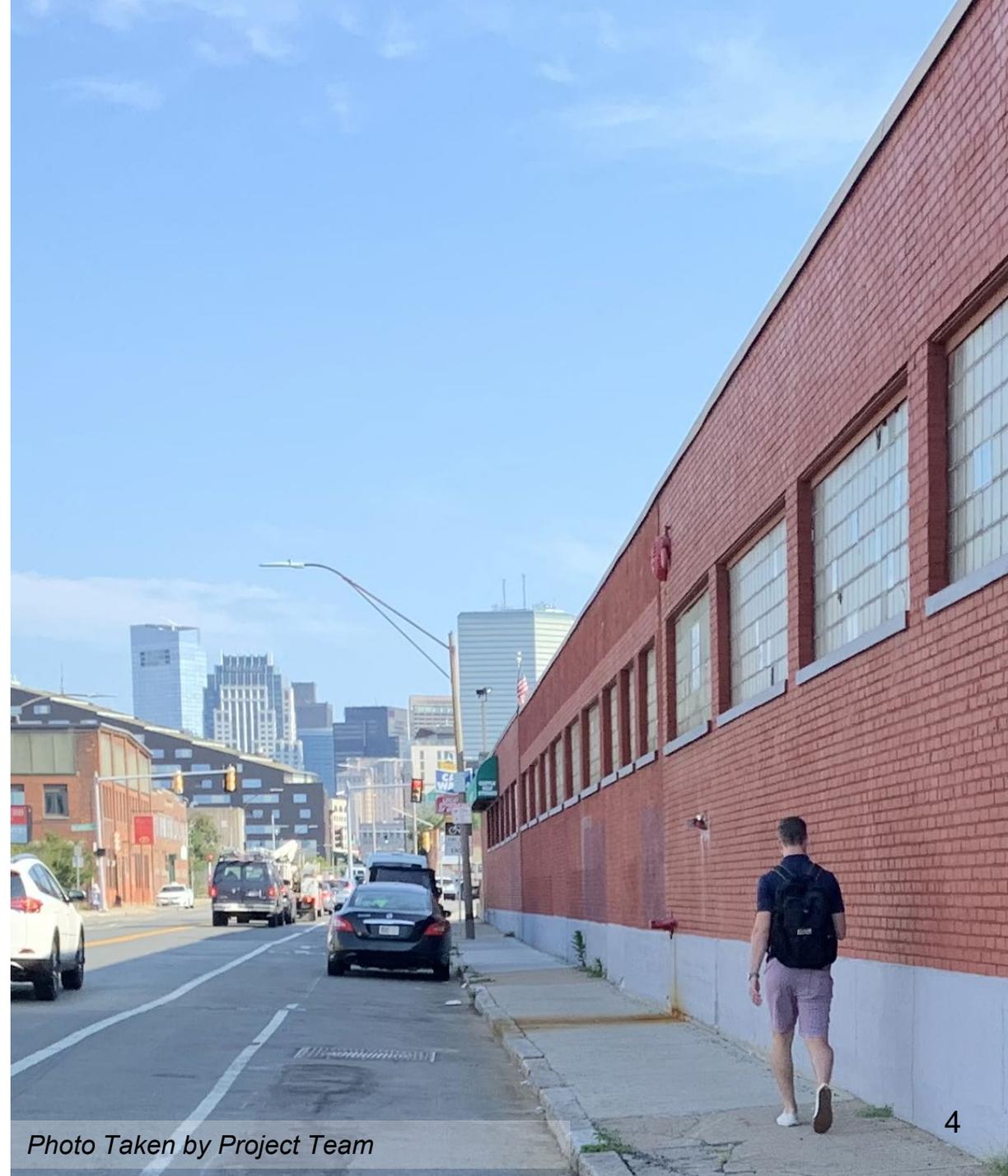
MEETING RECORDING

The BPDA will be recording this meeting and posting it on the PLAN: South Boston Dorchester Avenue project webpage at web: bit.ly/plandotave for those who are unable to attend the Zoom meeting live. The recording will include the presentation, Q&A, and public comments afterwards. Also, it is possible that participants may be recording the meeting with their phone cameras or other devices. **If you do not wish to be recorded during the meeting, please turn off your video camera and leave your microphone muted.**

WELCOME!

The purpose of this Virtual Open House is to:

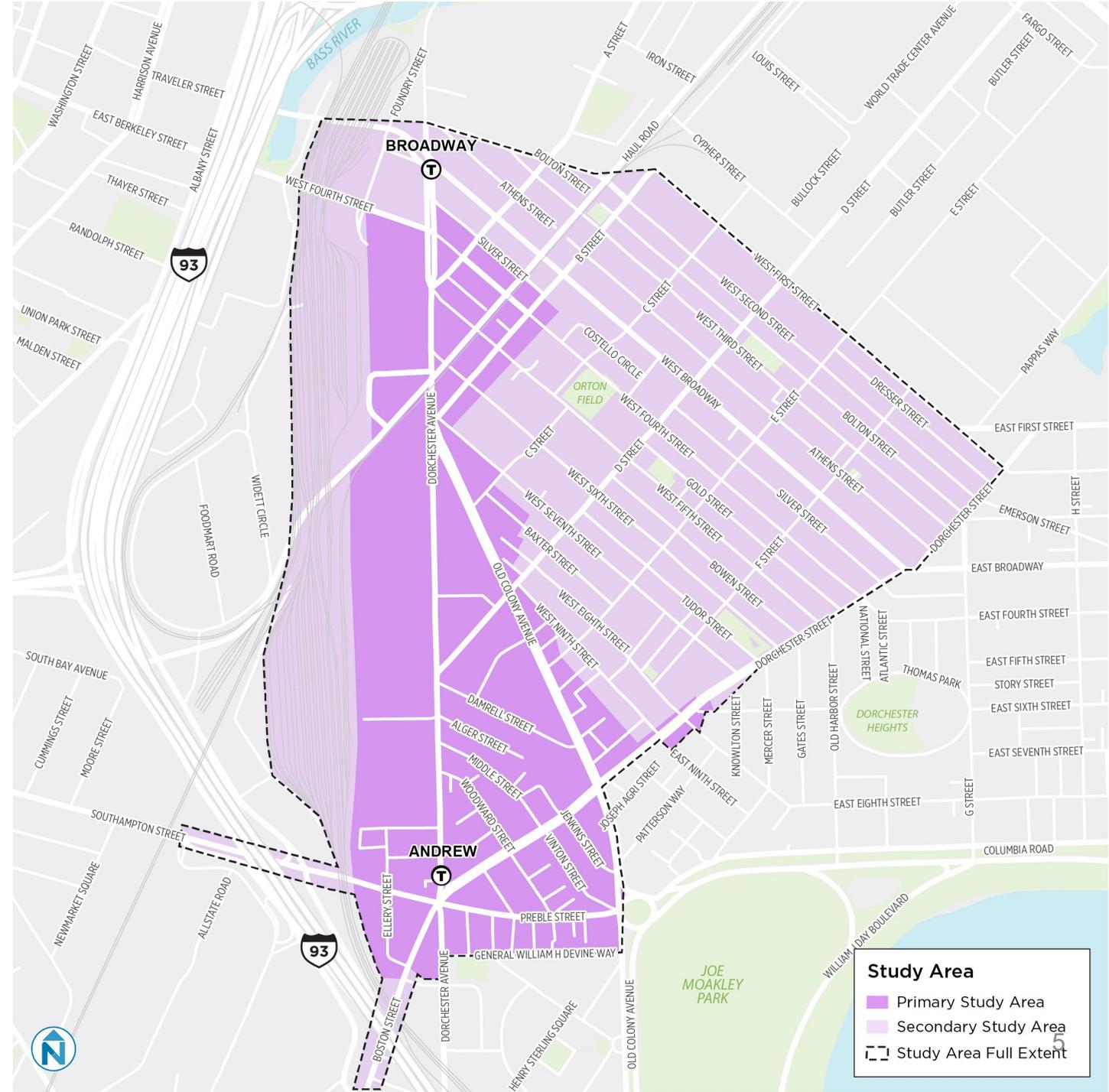
- Describe progress made since our last Virtual Open House
- Share the results of our analysis on future demands on the road and transit network
- Present our draft recommendations for feedback



PROJECT STUDY AREA

Purple shaded area shows the project study area

- **Primary study area** is consistent with PLAN: South Boston Dorchester Avenue
- **Secondary study area** is slightly larger and includes influence areas on the transportation network



PROJECT TIMELINE

2019

Fall/Winter

- Mobilize the team
- Collect data
- Review results of previous plans and other efforts underway
- Conduct site visits

2020

Spring

- Analyze existing conditions
- Identify goals and objectives
- Create evaluation framework
- Prepare future forecasting methods

Summer

- Host public meeting #1
- Analyze future conditions
- Evaluate previous PLAN ideas
- Develop short-term recommendations
- Develop a long list of long-term recommendations

2021

Fall/Winter

- Refine immediate-term recommendations
- Develop long-term recommendations
- Host public meeting #2
- Document findings and recommendations into the Plan
- **Host public meeting #3**

We are here

PROJECT TEAM

City of Boston Project Team

Boston Planning and Development Agency (BPDA)

- Jim Fitzgerald – Transportation & Infrastructure Planning
- Joe Blankenship - Transportation & Infrastructure Planning
- Mary Knasas – Neighborhood Planning
- Charlotte Ong - Neighborhood Planning
- Mark McGonagle - Neighborhood Planning
- Prataap Patrose - Neighborhood Planning
- Matt Martin – Urban Design
- Chris Busch – Climate Change & Environmental Planning
- Stephen Harvey – Development Review
- Raul Duverge – Development Review

Boston Transportation Department (BTD)

- Pat Hoey – Transportation Planning
- Matt Moran – Transit Team
- Stefanie Seskin – Active Transportation
- Amy Cording - Engineering

Boston Public Works Department (PWD)

- Zach Wassmouth – Engineering Division

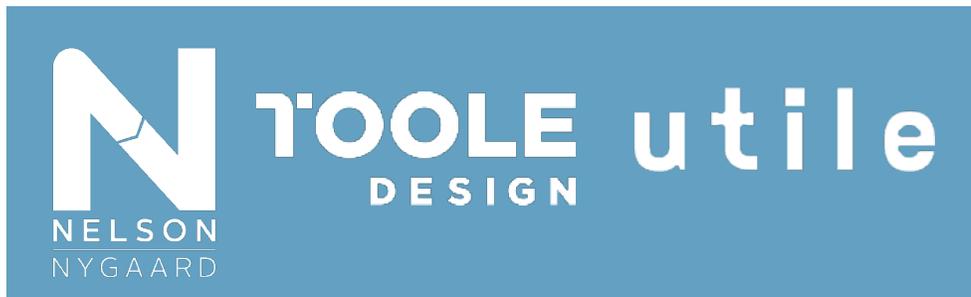
Boston Water & Sewer Commission (BWSC)

- Irene McSweeney
- Charlie Jewel

Mayor's Office of Neighborhood Service (ONS)

- Haley Dillon – South Boston Liaison

Consultant Team



Agency Partners





PROJECT OVERVIEW

Topics Covered at our First Public Meeting



ALIGNED WITH PREVIOUS EFFORTS

PLAN South Boston Dorchester Avenue Project Vision

A walkable neighborhood with improved public transportation

- Walkable sidewalks and bikeable streets
- Less traffic congestion
- Cycling opportunities for people of all ages

A neighborhood with amenities

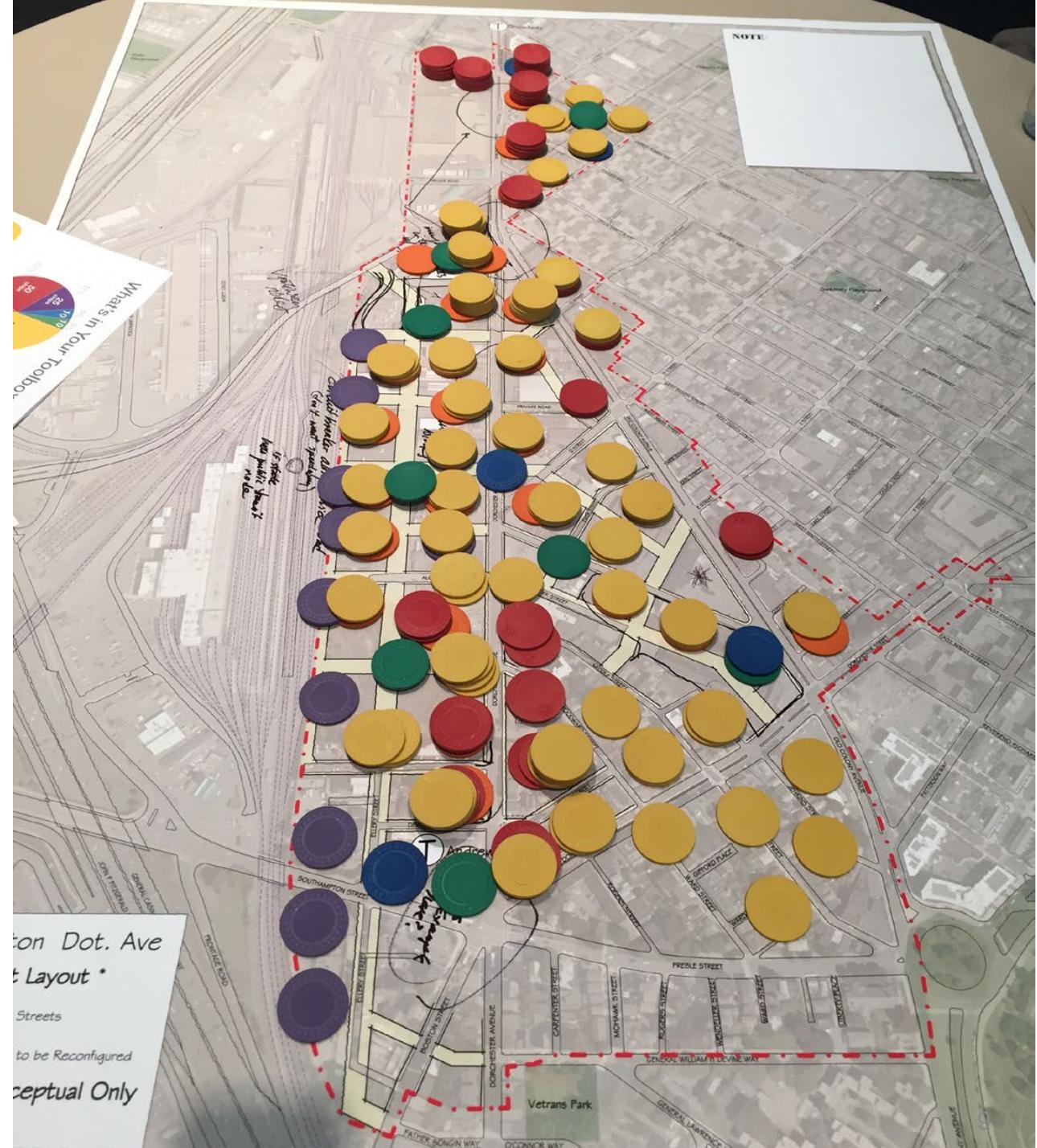
- Retail and other services
- Civic/Cultural/Art spaces
- New and varied open spaces

A diversity of housing types

- Live/work opportunities
- Tall apartment buildings
- Smaller housing units preserving existing character



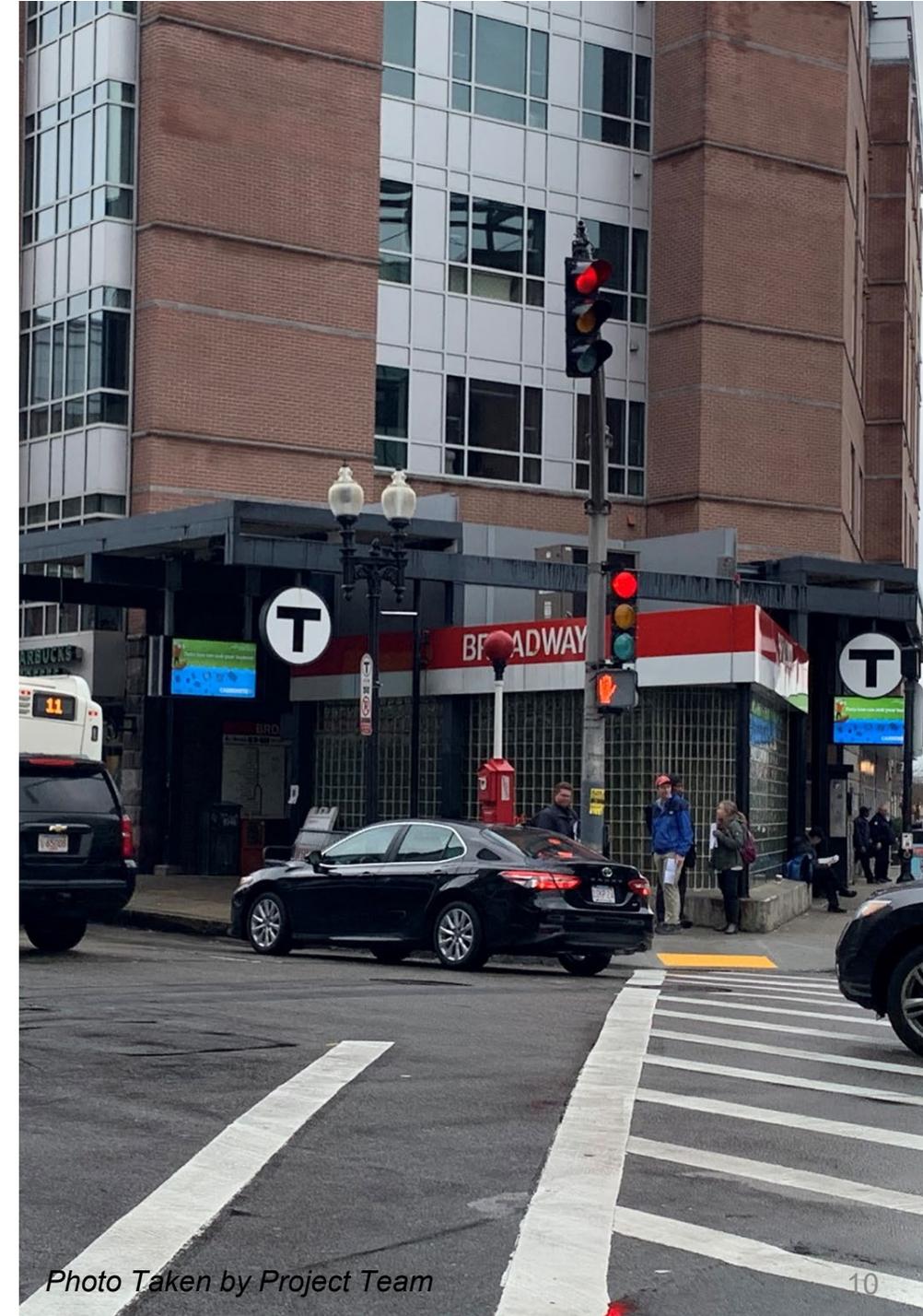
**boston planning &
development agency**



HOW PLAN: SOUTH BOSTON DORCHESTER AVENUE IS ALIGNED WITH THE CURRENT EFFORT

The current effort picks up where PLAN South Boston Dorchester Avenue left off, and addresses the following questions:

- What has changed between 2016 and today?
- Will the recommended transportation network from the PLAN accommodate future growth?
- How do we best maintain safety, access, and neighborhood vitality in this environment of change?



SUMMARY OF EXISTING CONDITIONS

- At our July 2020 public meeting we presented the results of our existing conditions analysis
- We will go through these findings at a very high level in the next few slides
- The full Existing Conditions Report is available on the BPDA's website at bit.ly/plandotave

PLAN South Boston Dorchester Ave

TRANSPORTATION PLAN EXISTING CONDITIONS REPORT



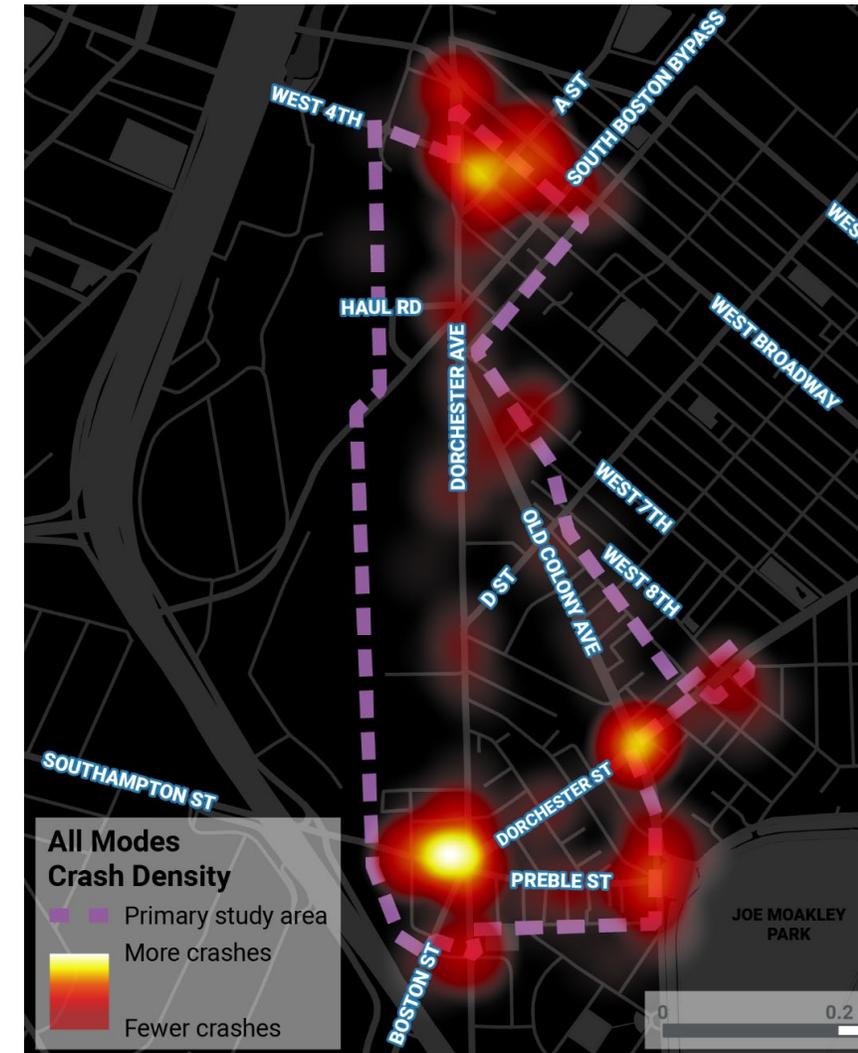
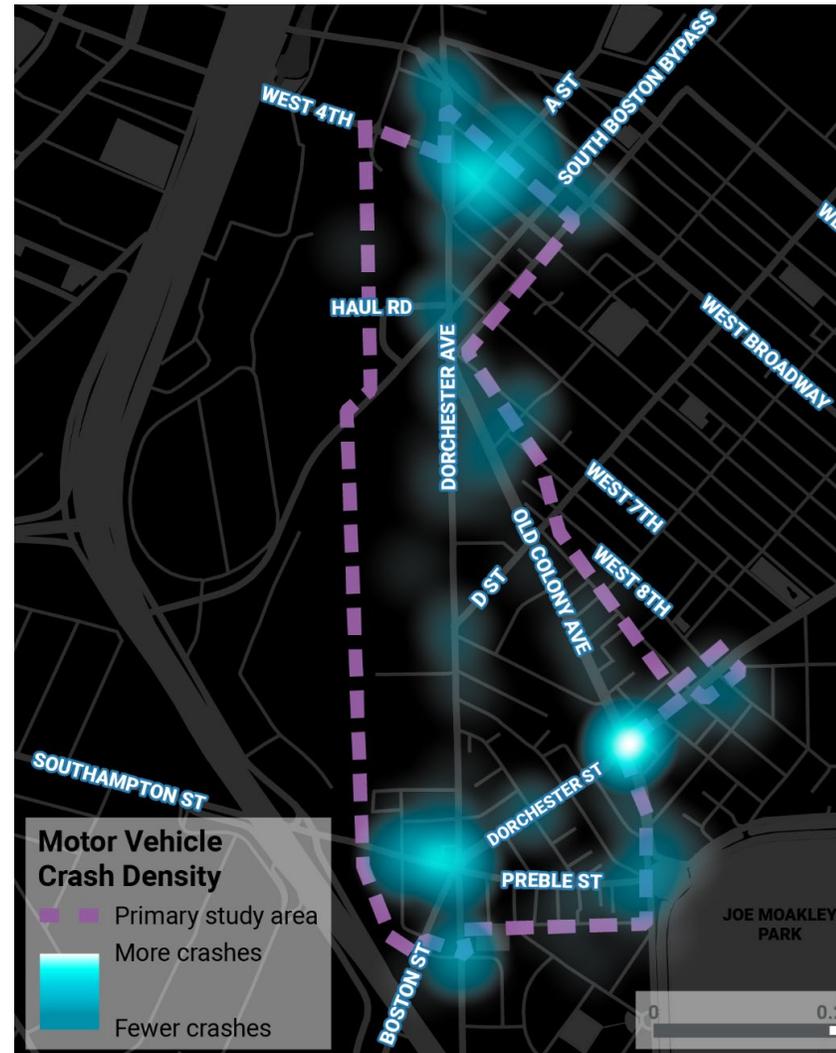
CITY OF BOSTON
Martin J. Walsh, Mayor

July, 2020

EXISTING CONDITIONS

Safety (Crash History: 2015-2019)

- Vehicle crashes are highest at the intersection of Dorchester St and Old Colony (20 crashes)
- Overall, crashes are concentrated at the gateways to the study area
- We acknowledge the recent and tragic crashes in the vicinity of Andrew Square



EXISTING CONDITIONS

Transit



During the morning rush hour, the **most crowded part of the red line** is the section between Andrew, Broadway, and South Station

Photo Credit: Dorchester Reporter

Buses have reliability concerns because they travel in mixed traffic, and get caught up in regular traffic congestion

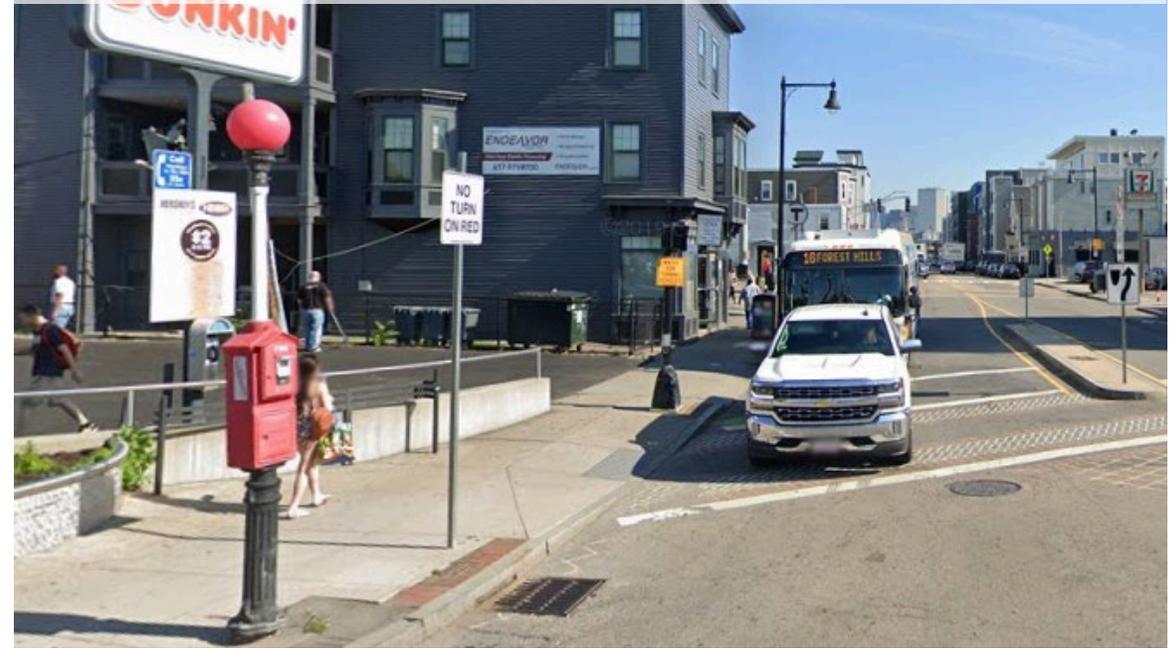


Photo Credit: Google Maps

EXISTING CONDITIONS

Walking and Bicycling

- There are crucial gaps in the existing network of bicycle infrastructure
- At Andrew Square in particular, there are a lot of crossings outside the marked crosswalk locations
- However, sidewalk conditions are poor throughout the study area, discouraging walking and compromising ADA accessibility



Photo Taken by Project Team



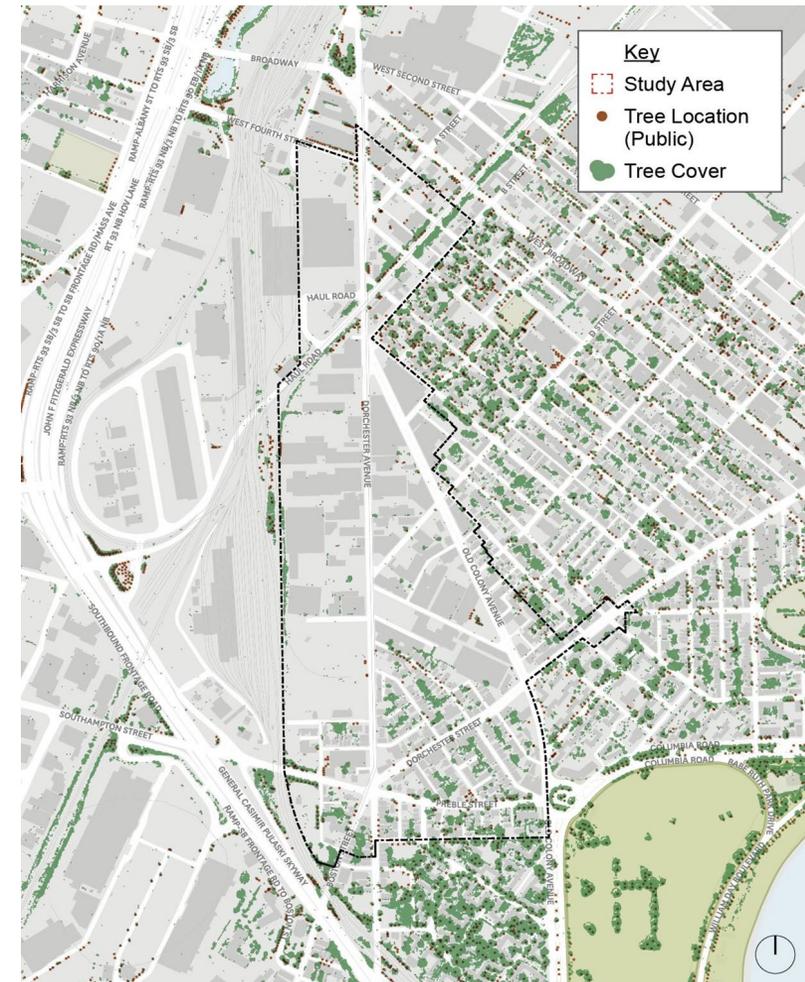
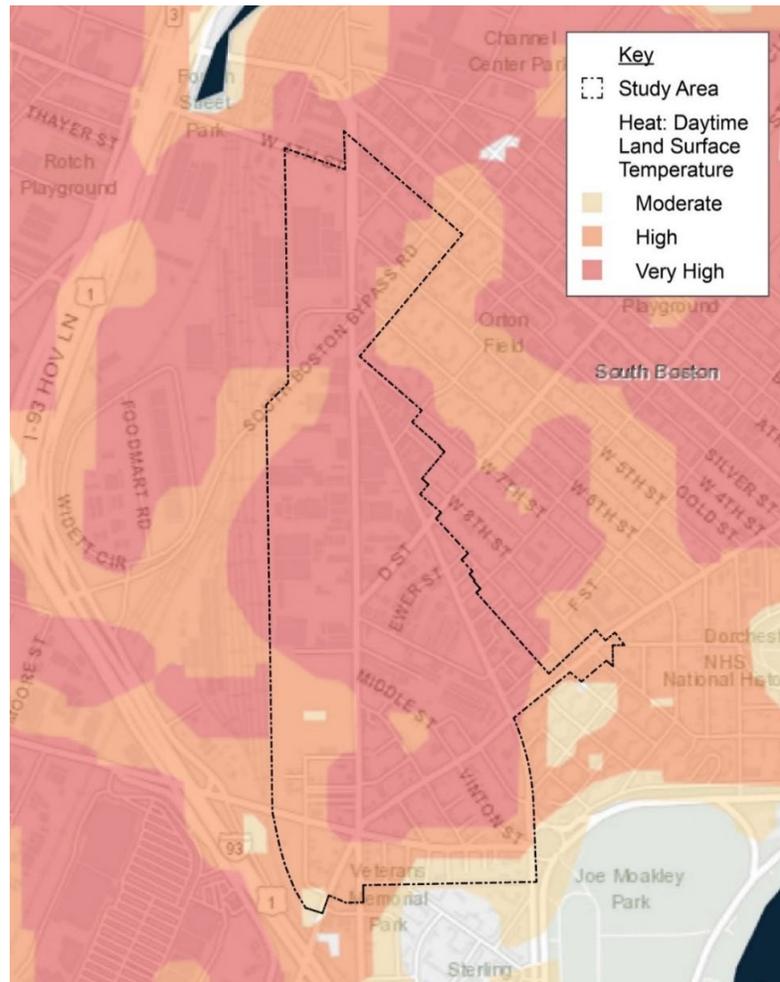
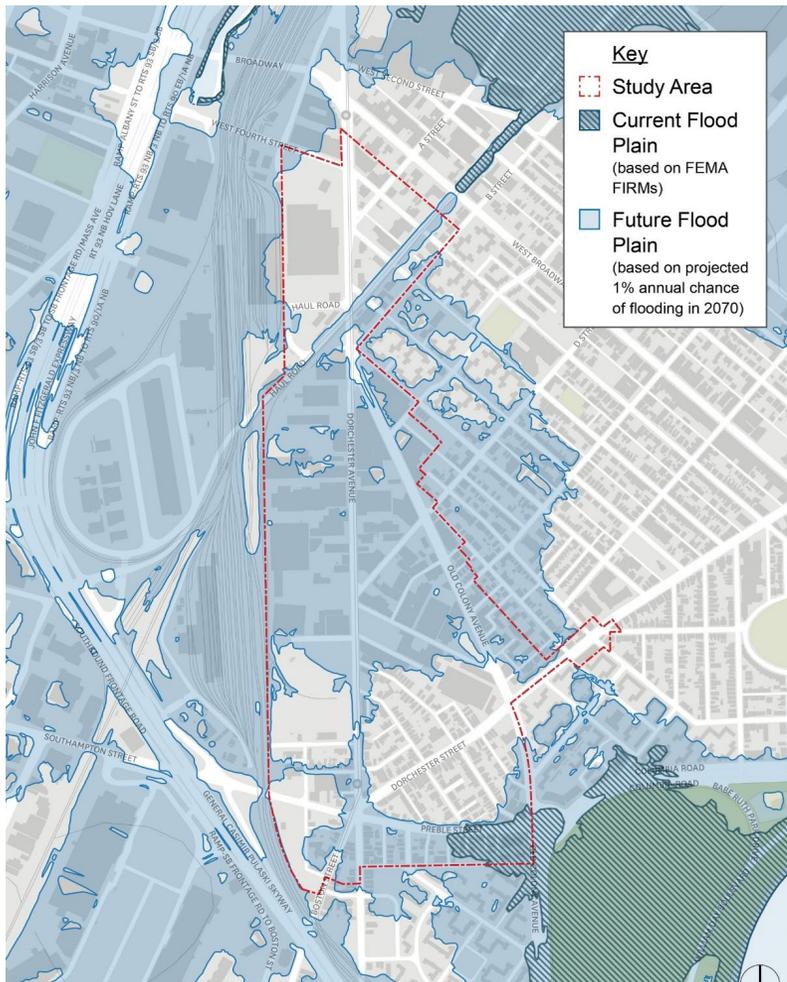
Photo Taken by Project Team



EXISTING CONDITIONS

Climate Change

The study area will be affected by both coastal and stormwater flooding
The study area will also be affected by extreme heat, exacerbated by a lack of tree cover





FINDINGS FROM FUTURE CONDITIONS ANALYSIS



FUTURE CONDITIONS

Overview

- The future conditions analysis tells us what kind of transportation changes are needed to serve anticipated land uses
- We define “future” as what the study area looks like in the year 2040 and assumes full build out of the PLAN
- Land uses are consistent with PLAN: South Boston Dorchester Avenue



PLAN Full Build Out w/ Building Footprints



PLAN Complete Future Network

FUTURE CONDITIONS

Analysis Methods: Four Steps

Step 1: How Many Trips are Generated from Future Land Use?

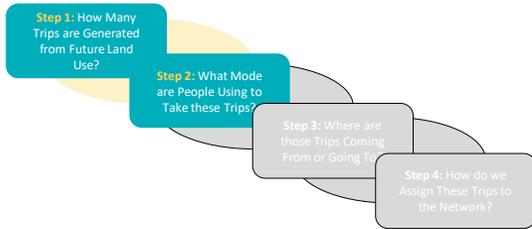
Step 2: What Mode are People Using to Take these Trips?

Step 3: Where are those Trips Coming From or Going To?

Step 4: How do we Assign These Trips to the Network?

FUTURE CONDITIONS

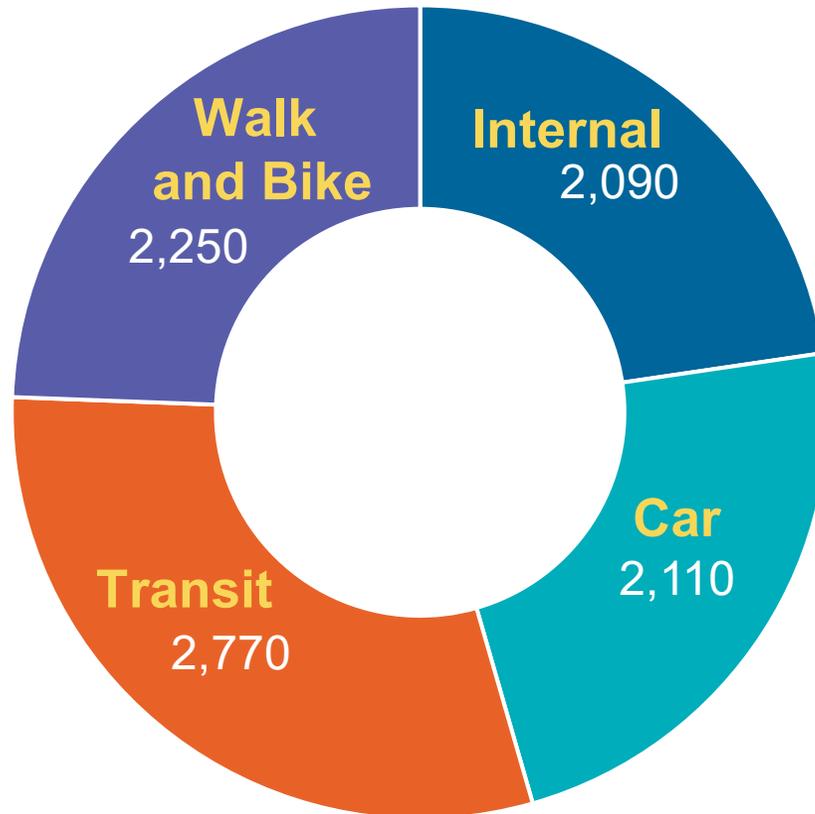
Identifying Future Trips from Land Use



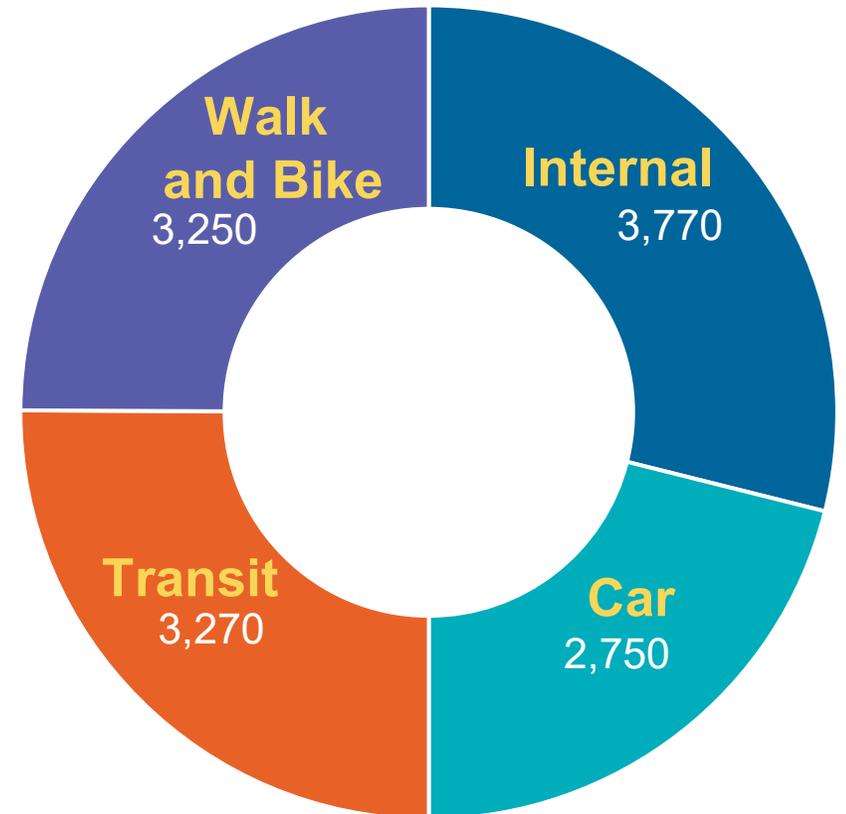
These charts show the number of trips generated from expected development by 2040

We know that mode split in the study area will be different from today

Morning Rush Hour

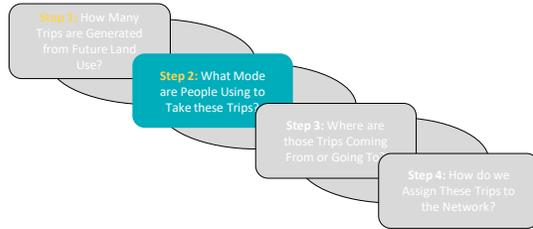


Afternoon Rush Hour



FUTURE CONDITIONS

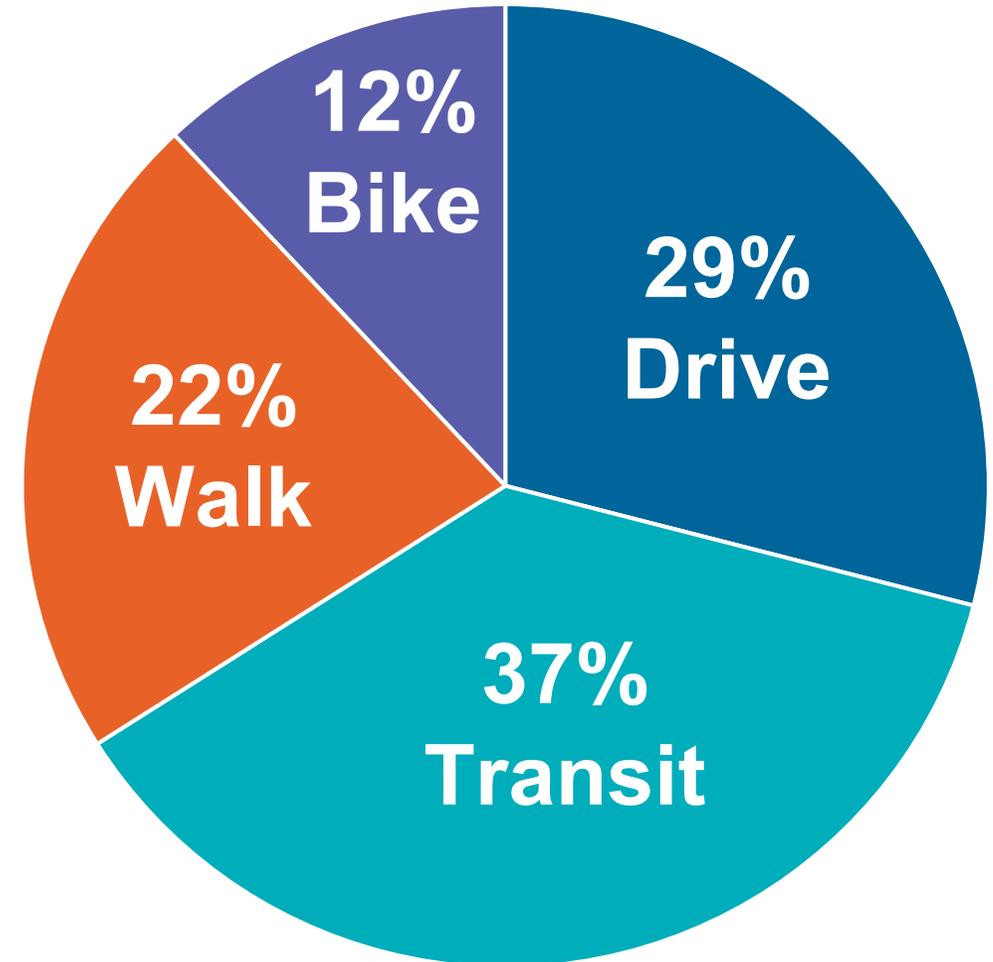
Mode Split



Mode split means the mix of methods of travel that people are expected to use for their trips

We look at City efforts like GoBoston 2030 for guidance on mode split

Future Mode Split



FUTURE BICYCLE AND PEDESTRIAN CONSIDERATIONS

FUTURE CONDITIONS

Traffic Analysis – Bicycling and Walking Considerations

- There are many more walkers and bicyclists anticipated in the future
- Safety for these users is most critical, especially at Andrew Square
- Low stress bicycle network for comfortable riding
- Reduced delay for people walking



FUTURE TRANSIT CONSIDERATIONS

FUTURE CONDITIONS

Transit Analysis: Overview

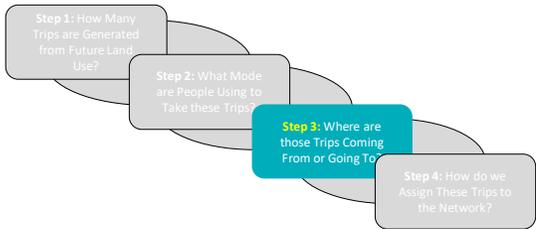
- Explores the demands on the transit system from future land uses
- The analysis makes several assumptions related to future transit network investments
 - Subway
 - Commuter rail
 - Silver Line
 - Bus
- The only future transit investments assumed are those under construction, or where construction funds have been secured



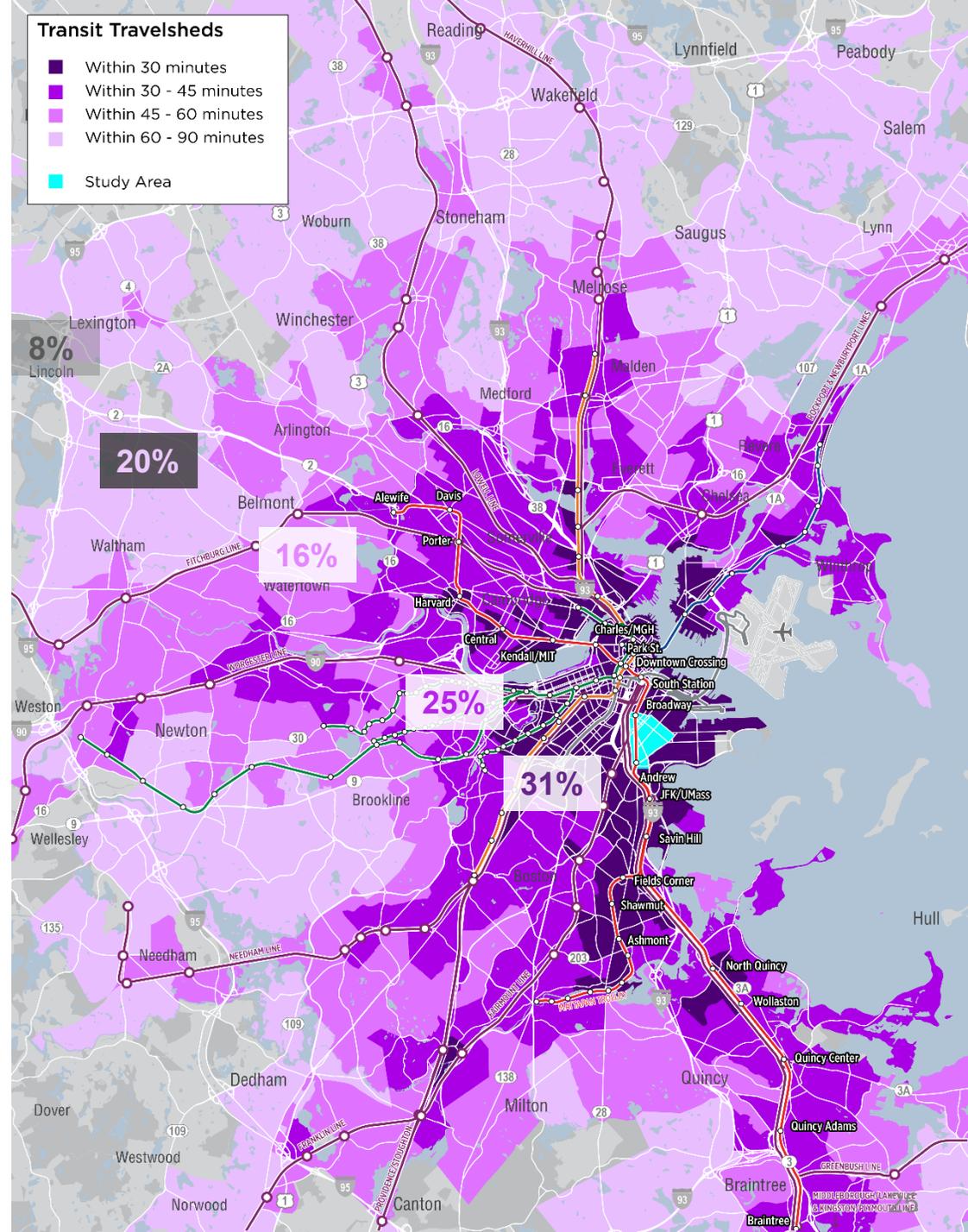
Photo Credit: MassLive.com

FUTURE CONDITIONS

Transit Analysis: Distributing Trips

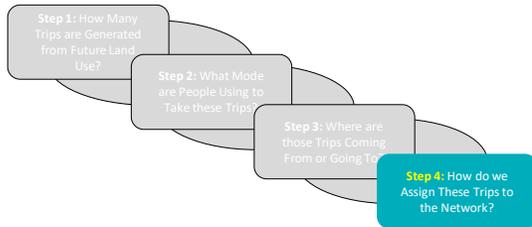


The map shows where trips in the study area are assumed to be coming from, and going to



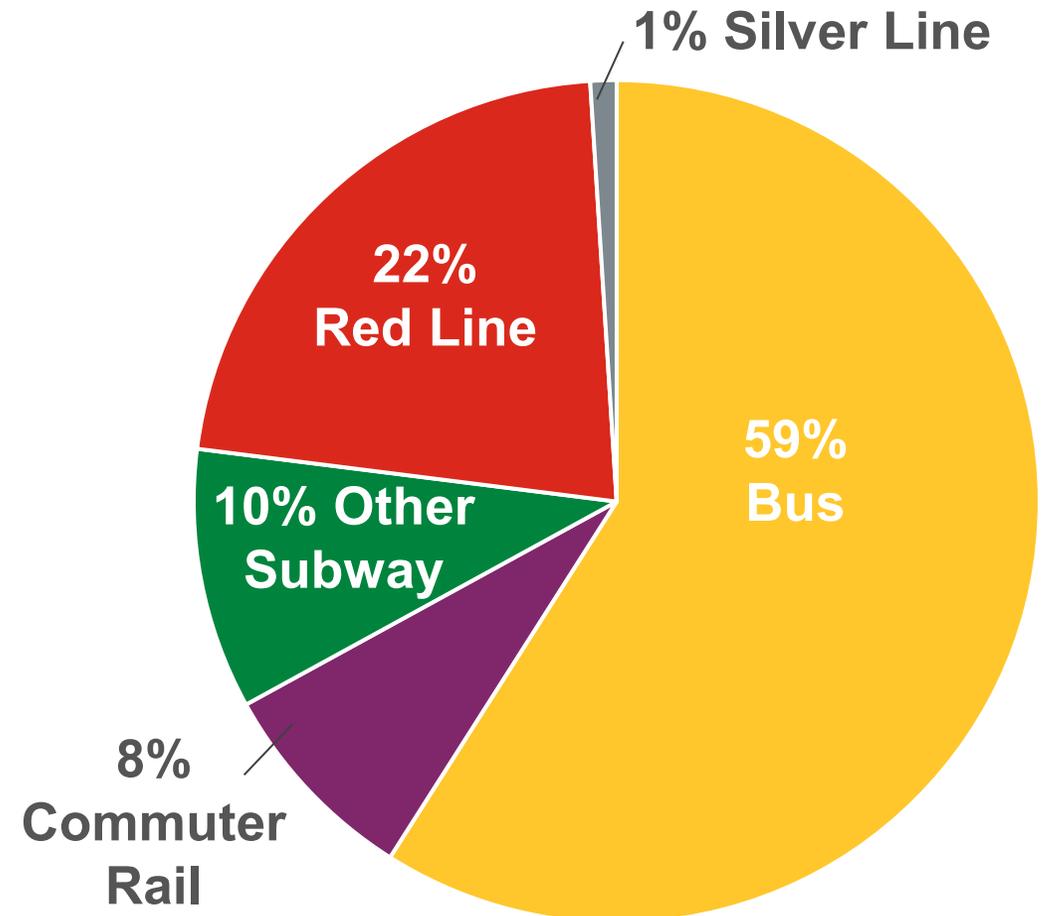
FUTURE CONDITIONS

Transit Analysis: Assigning Trips



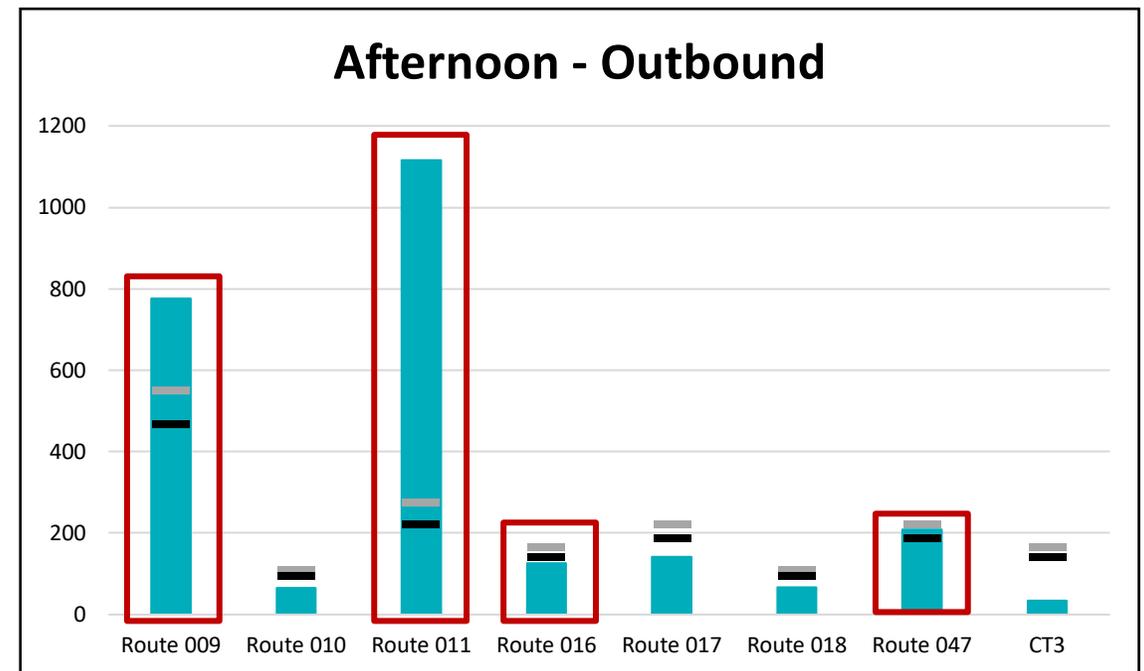
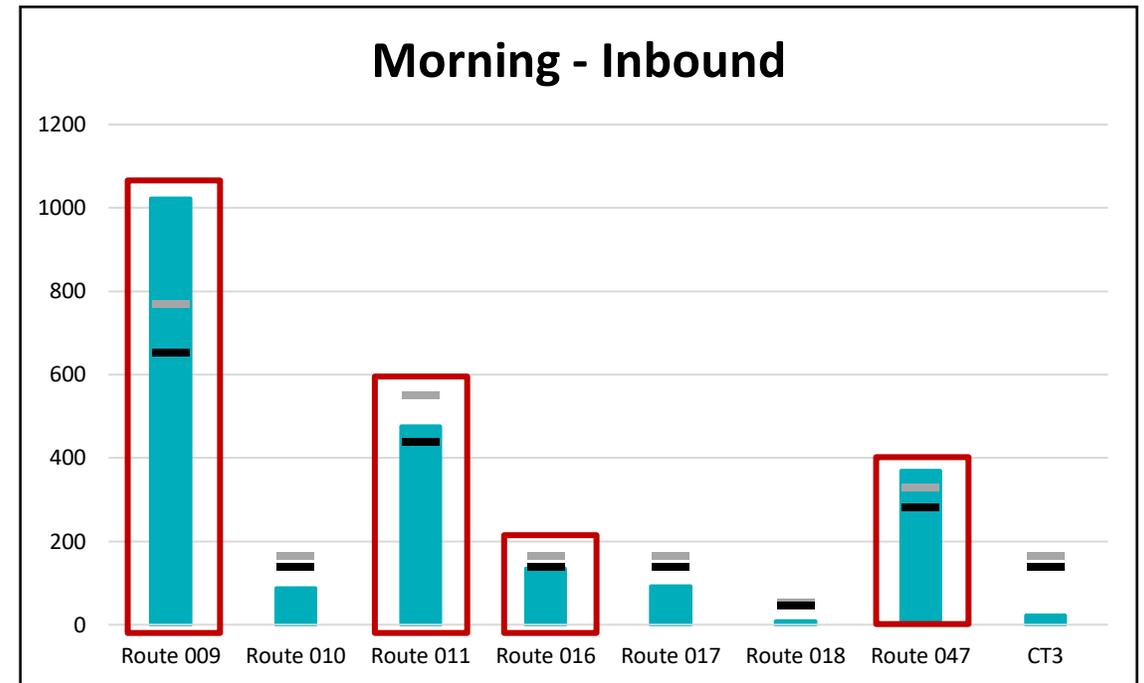
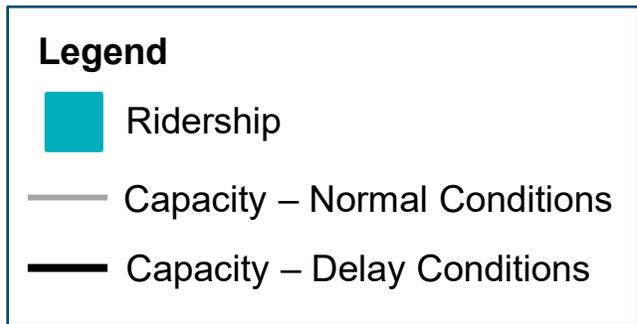
We assign trips to specific transit routes depending on direction and time of day
This pie chart shows one example (outbound, afternoon)

Transit Trip Assignment (PM Outbound Example)



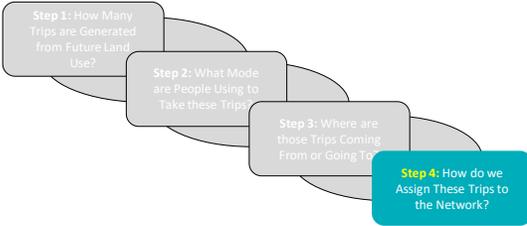
FUTURE (2040) CONDITIONS Transit Analysis – Findings

- Similar to existing conditions, demand is greater than capacity in the *peak direction*, meaning inbound in the morning and outbound in the afternoon
- We see crowding concerns on the Routes 9, 11, 16, and 47



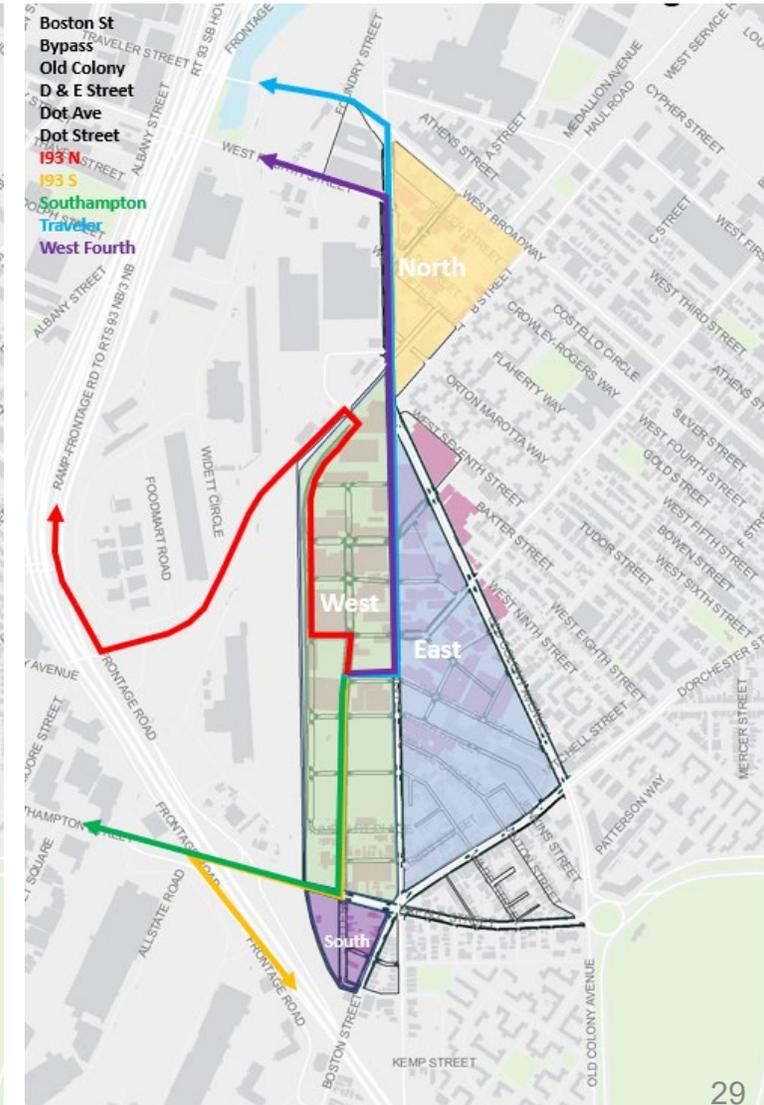
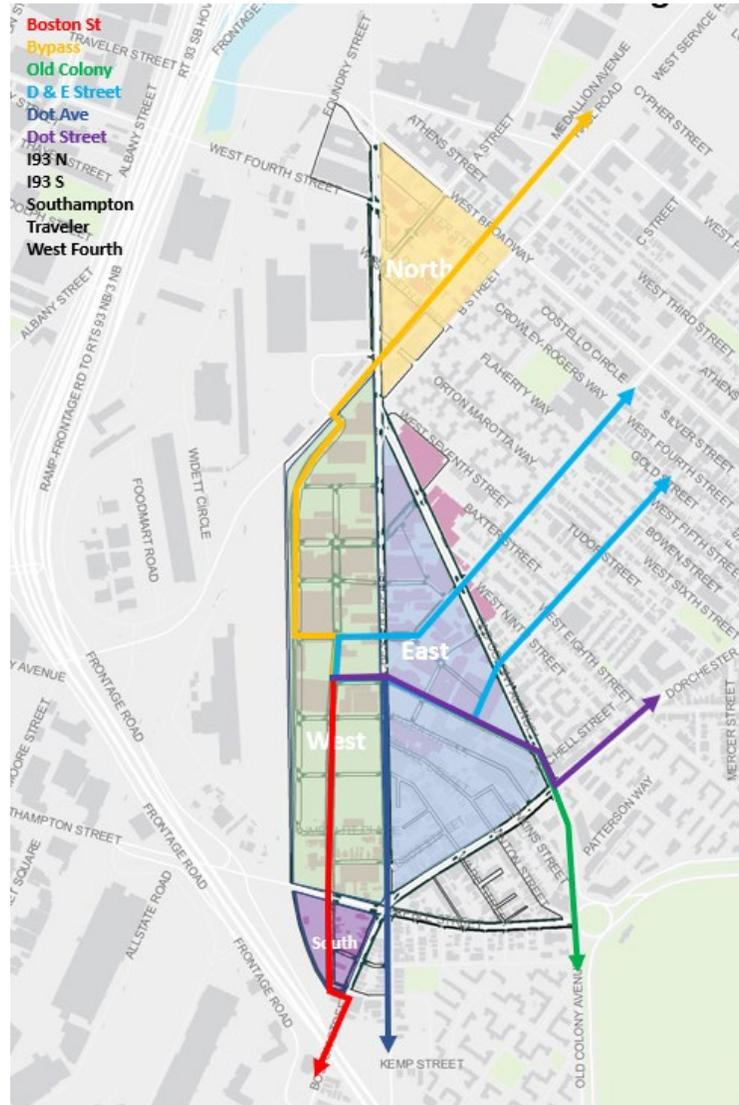
FUTURE TRAFFIC CONSIDERATIONS

FUTURE CONDITIONS Network Analysis



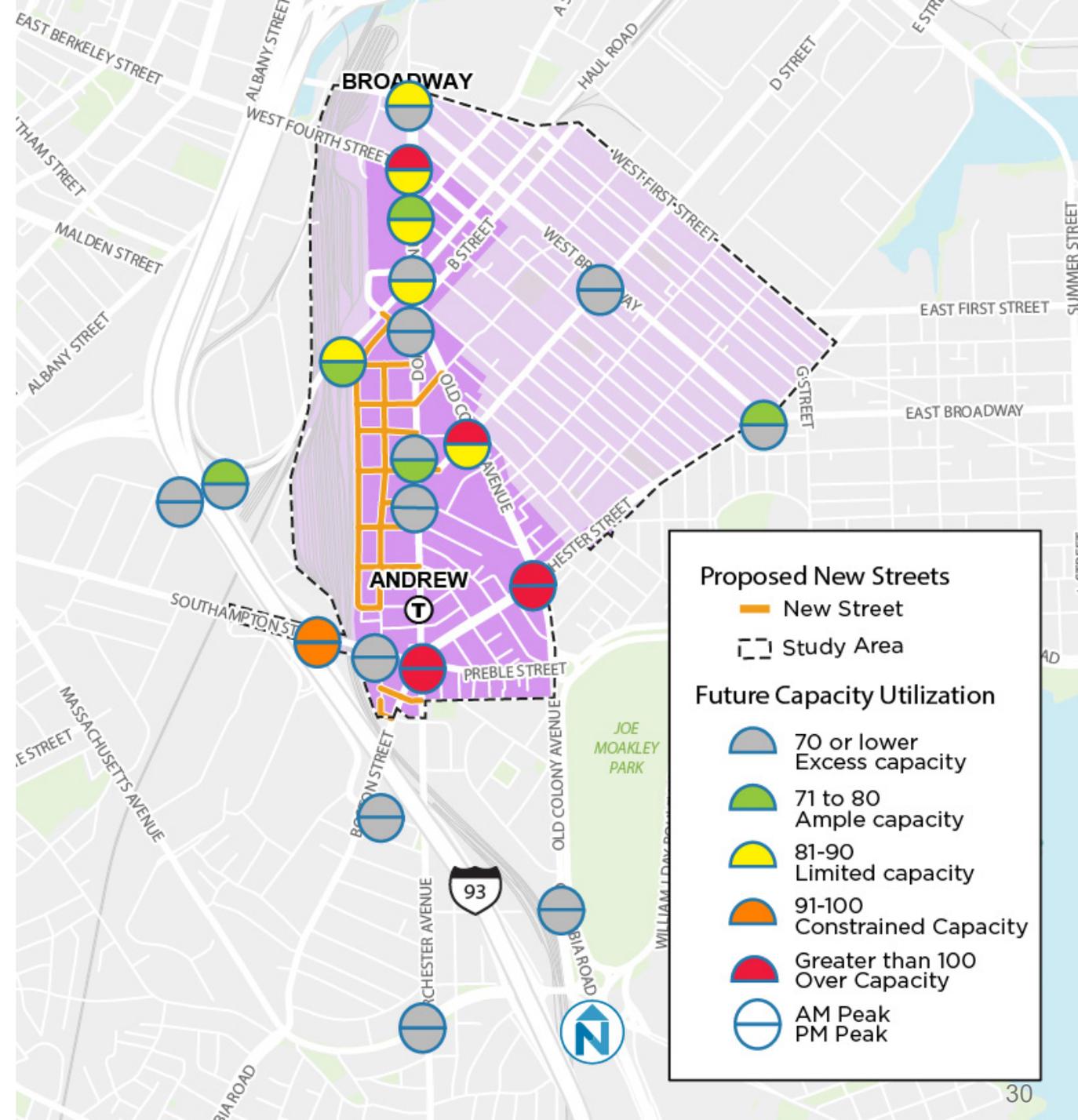
The network provides many access routes in and out of the study area

This is important in understanding the expected future volume of traffic on the roads



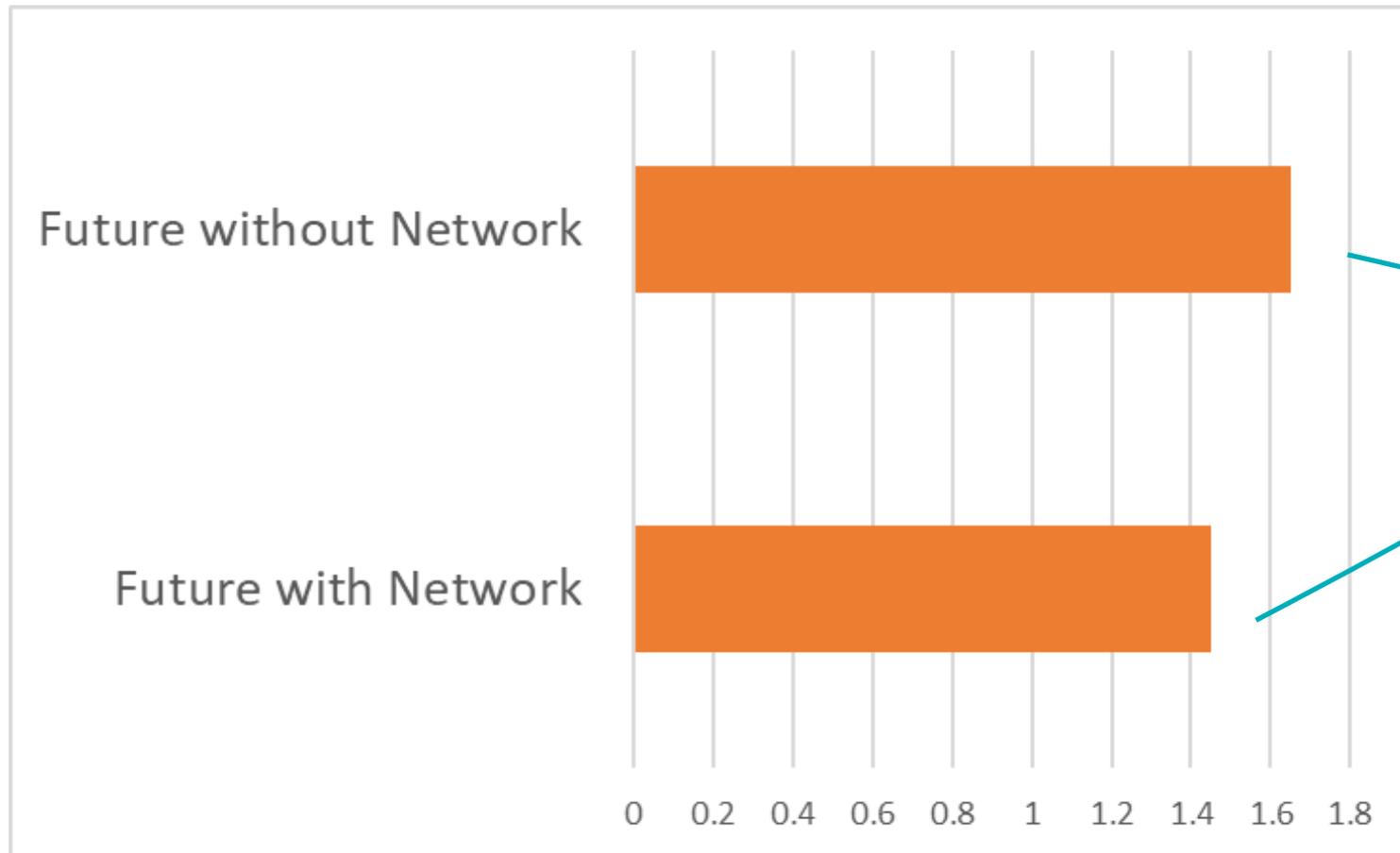
FUTURE CONDITIONS Traffic Analysis – Congestion

- The PLAN Dot Ave planned street network allows many trips to avoid the most congested intersections
- The most critical congestion issues remain at Andrew Square and Old Colony/Dorchester Street



THE NETWORK IS CRITICALLY IMPORTANT

Andrew Square Example – With Long-Term Investments



Congestion in Andrew Square decreases substantially just with the addition of the PLAN's grid network



DRAFT RECOMMENDATIONS



DRAFT RECOMMENDATIONS

Recommendations are intended to:

- Address safety and capacity-related concerns
- Accommodate travel-related demand today and in the future
- Provide travel options
- Align with the goals and the vision of PLAN: South Boston
Dorchester Avenue

A mixture of immediate-term and long-term



SHORT-TERM RECOMMENDATIONS

Short-term recommendations are

- Generally implementable within the next 5 years
- Within City control to build
- Relatively low cost
- Provide safety benefit
- Fit within current right-of-way
- Compatible with and complementary to longer-term efforts
- Could be implemented or advanced by development teams

Example Short-Term Recommendation Projects

Low-stress bike lanes



Bus lane pilots



Pedestrian crossings



LONG-TERM RECOMMENDATIONS

Long-term recommendations are those address needs identified over the next 20 years

- Safety
- Mobility
- Connectivity

Cost is not the deciding factor

They could be implemented by the City of Boston, or by others

Example Long-Term Recommendation Projects

Roadway reconstruction



A new trail



Roundabout



TRANSIT RECOMMENDATIONS

Ideas We Will Forward to MassDOT and the MBTA

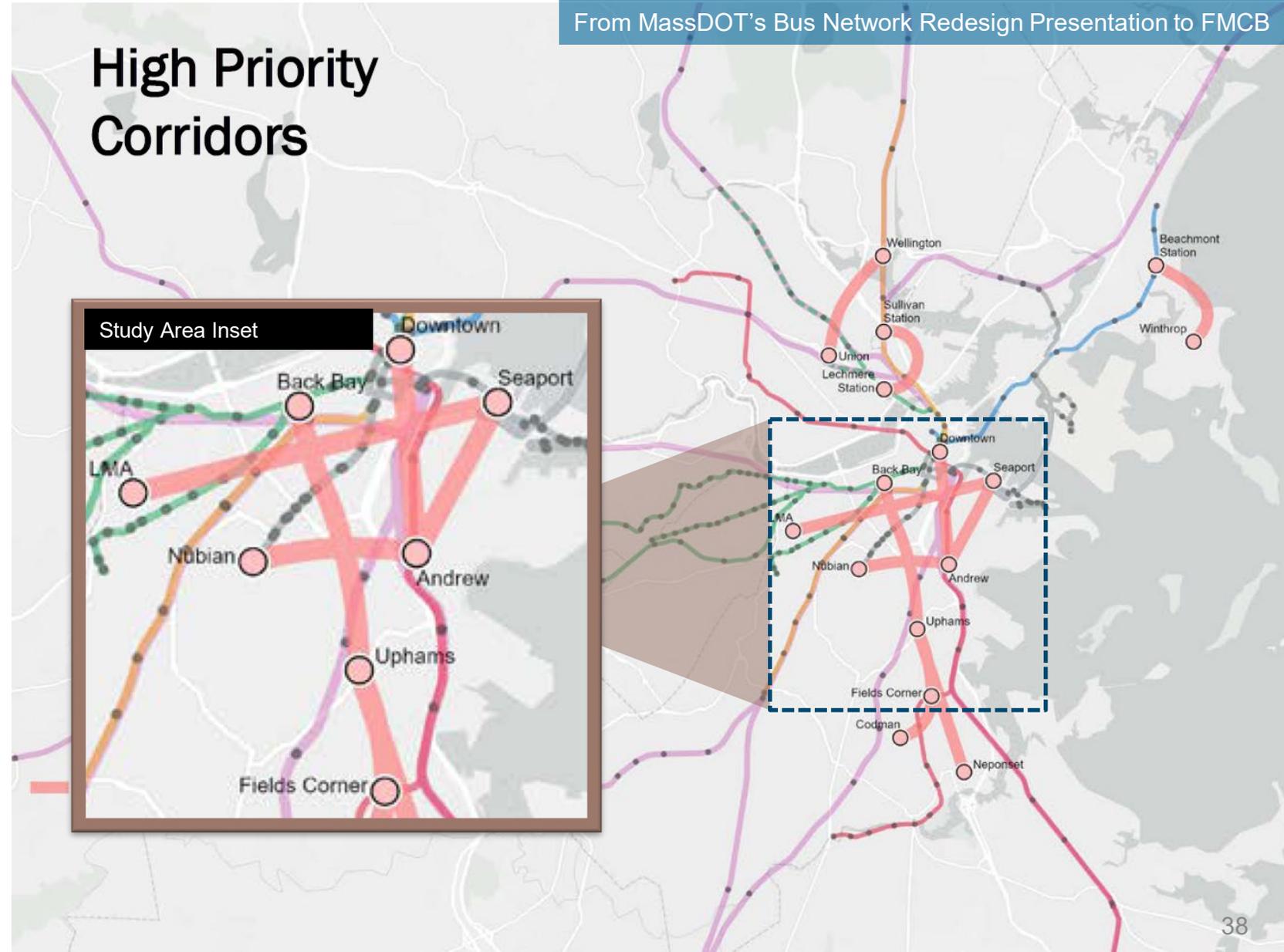
TRANSIT RECOMMENDATIONS

- Red Line Transformation is assumed in future transit analysis
- This investment absorbs most of the future transit demand
- Remaining and unmet demand is on the bus network
 - New connections
 - Additional bus service on existing routes

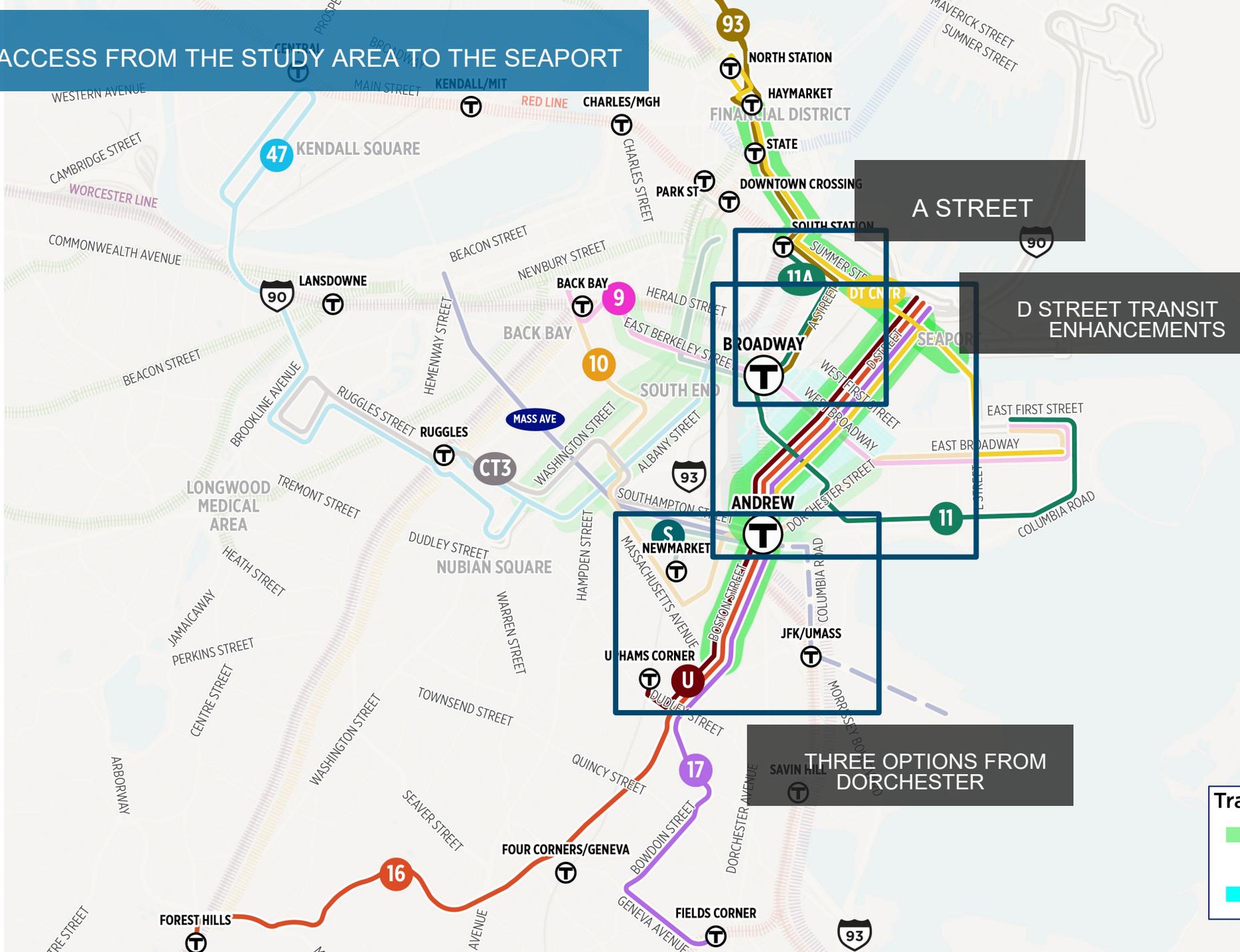
**Agency
Coordination**
All the transit ideas we show here will be shared with MassDOT and the MBTA for their consideration

BUS NETWORK REDESIGN IS BEING LED BY MASSDOT

- Bus Network Redesign is currently underway by MassDOT and MBTA
- They have identified several high priority transit corridors in our study area
- This section organizes our transit ideas by need and opportunity
- We will forward these ideas to MassDOT to consider as part of Bus Network Redesign



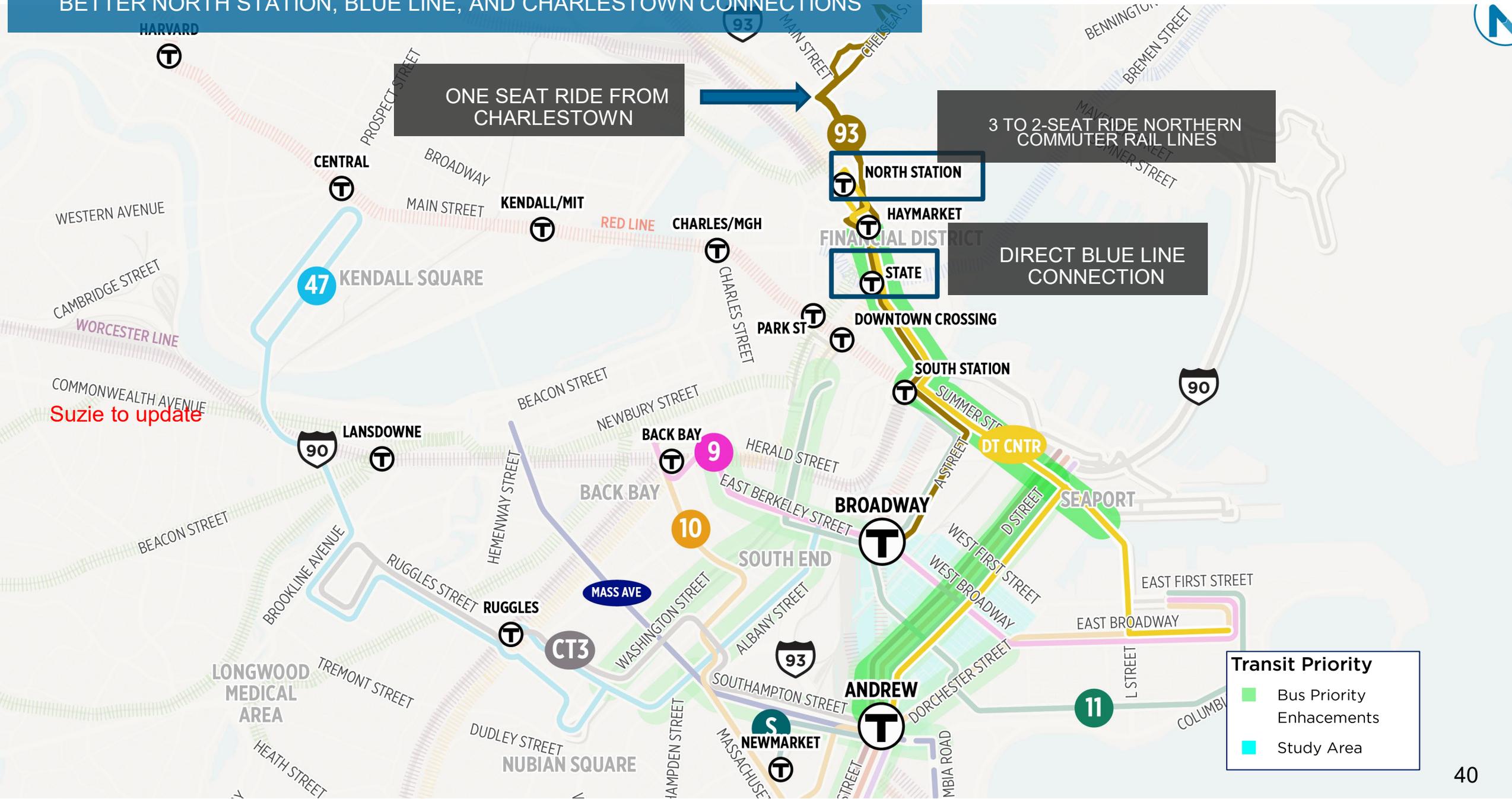
DIRECT ACCESS FROM THE STUDY AREA TO THE SEAPORT



Transit Priority

- Bus Priority Enhancements
- Study Area

BETTER NORTH STATION, BLUE LINE, AND CHARLESTOWN CONNECTIONS



ONE SEAT RIDE FROM CHARLESTOWN



3 TO 2-SEAT RIDE NORTHERN COMMUTER RAIL LINES

NORTH STATION

HAYMARKET

DIRECT BLUE LINE CONNECTION

STATE

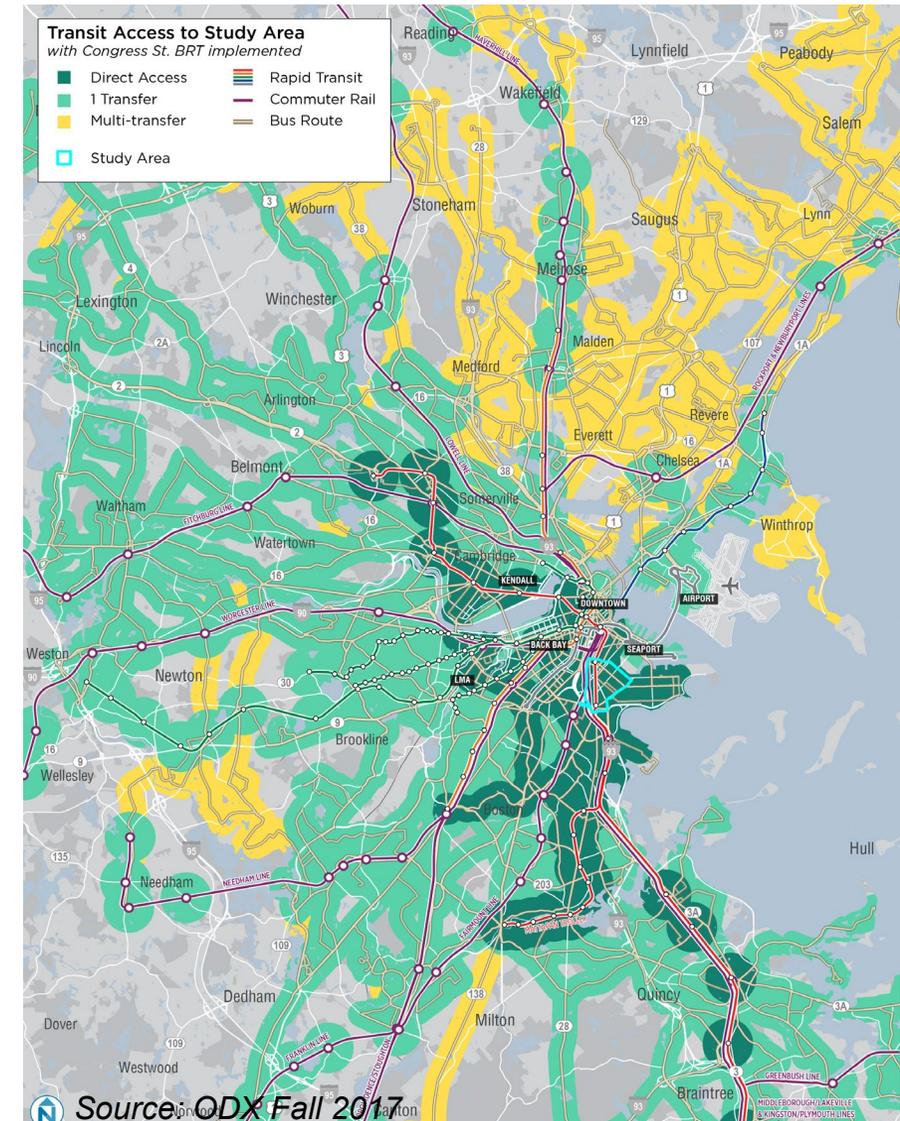
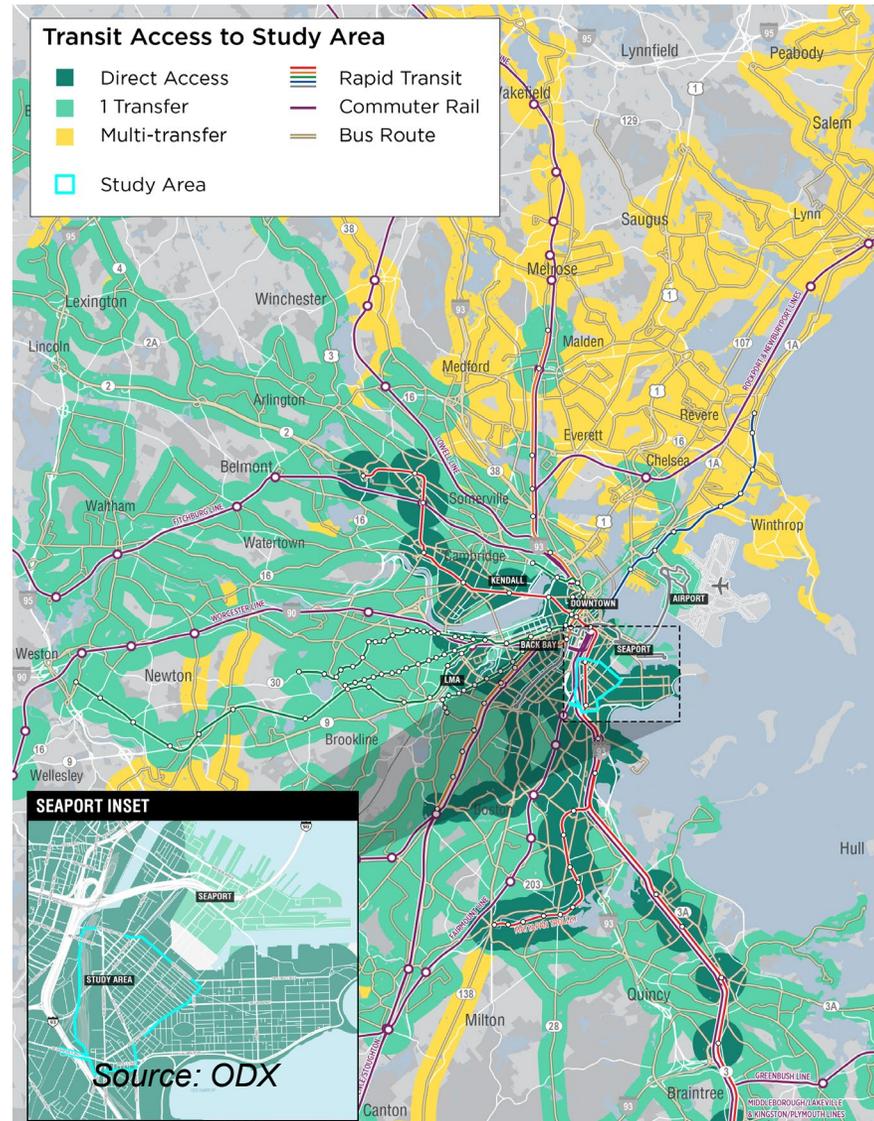
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Transit Priority

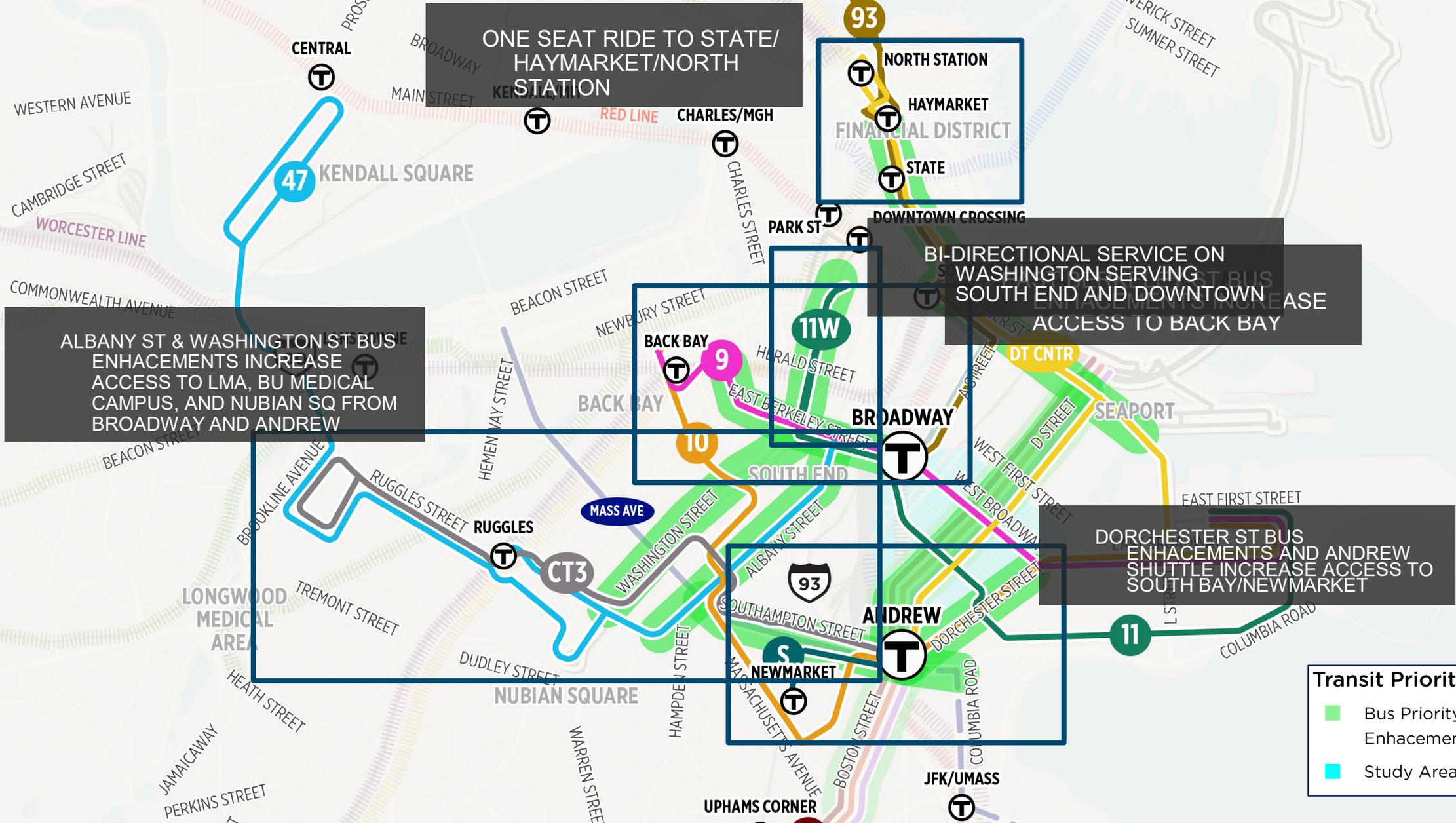
- Bus Priority Enhancements
- Study Area

IMPROVED ACCESS FROM A BUS RAPID TRANSIT CONNECTION BETWEEN NORTH AND SOUTH STATION ALONE

These maps show the improvement in access to the study area from the northern part of the region from one specific transit investment – implementing BRT from North Station along Congress Street



BETTER ACCESS TO OTHER MAJOR JOB CENTERS AND ACTIVITY CENTERS



Transit Priority

- Bus Priority
- Enhancements
- Study Area

BETTER ACCESS TO THE STUDY AREA & SEAPORT FROM DORCHESTER AND ROXBURY

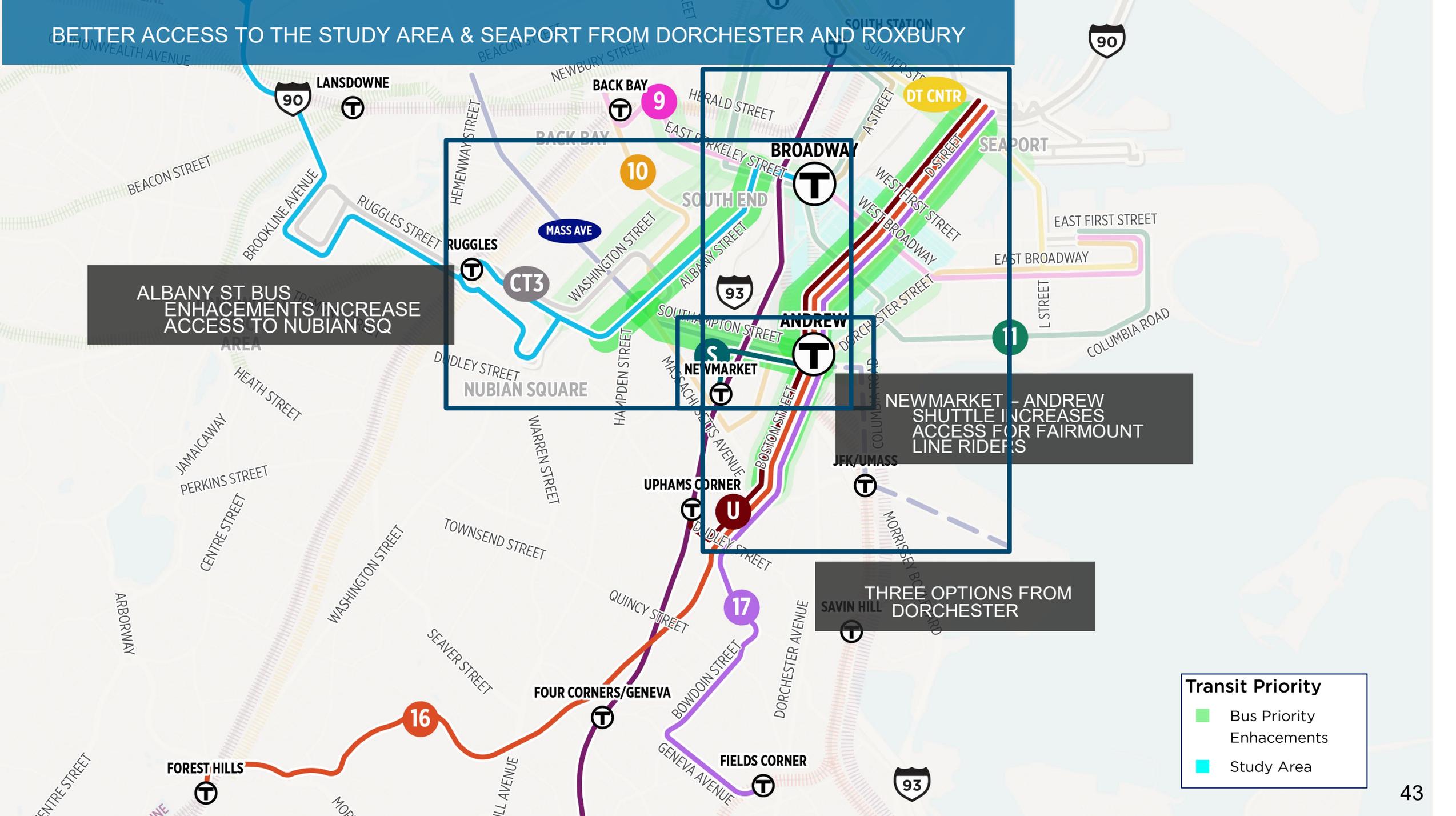
ALBANY ST BUS ENHANCEMENTS INCREASE ACCESS TO NUBIAN SQ

NEWMARKET - ANDREW SHUTTLE INCREASES ACCESS FOR FAIRMOUNT LINE RIDERS

THREE OPTIONS FROM DORCHESTER

Transit Priority

- Bus Priority Enhancements
- Study Area

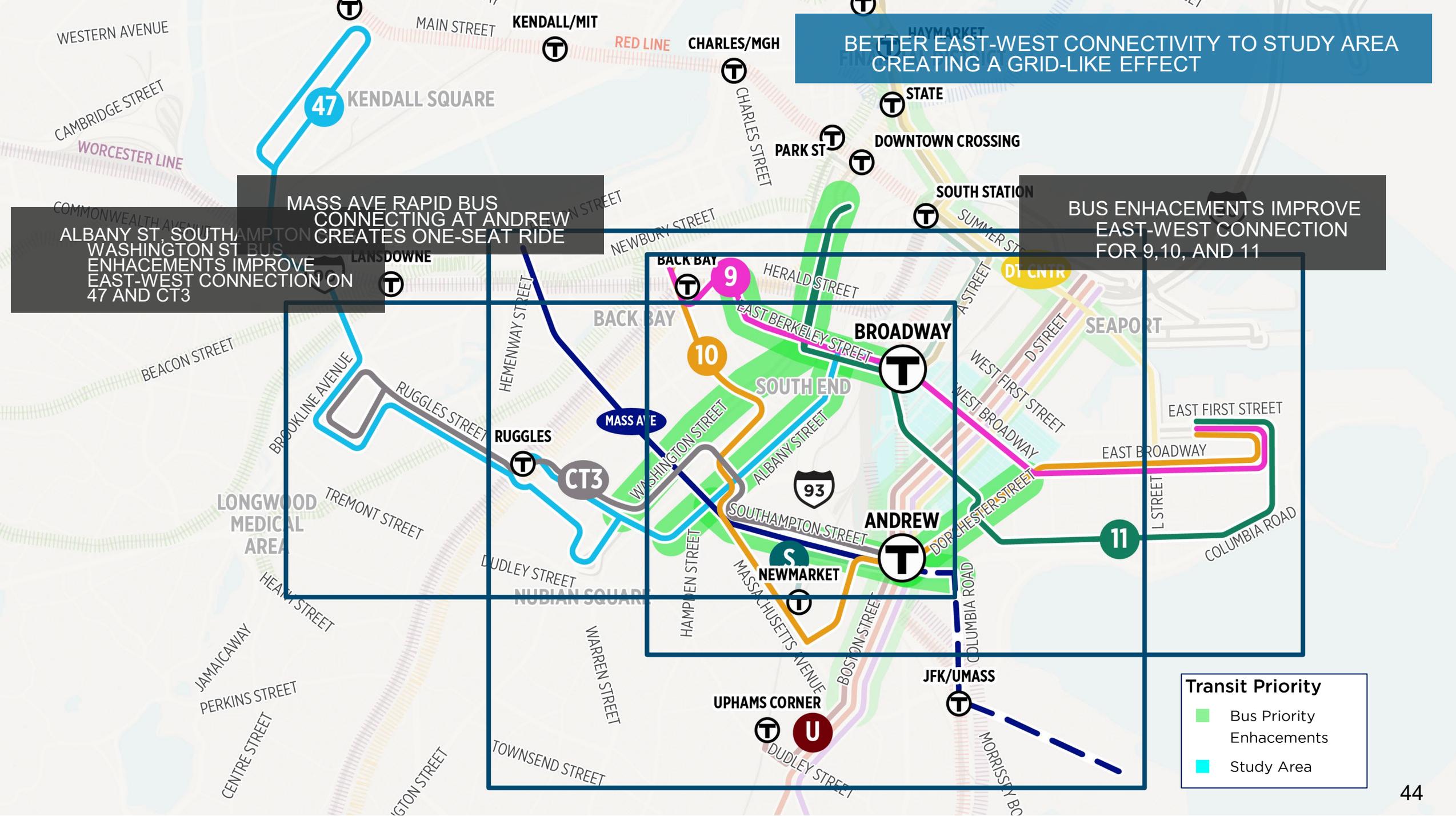


**BETTER EAST-WEST CONNECTIVITY TO STUDY AREA
CREATING A GRID-LIKE EFFECT**

ALBANY ST, SOUTH WASHINGTON ST BUS ENHANCEMENTS IMPROVE EAST-WEST CONNECTION ON 47 AND CT3

MASS AVE RAPID BUS CONNECTING AT ANDREW CREATES ONE-SEAT RIDE

BUS ENHANCEMENTS IMPROVE EAST-WEST CONNECTION FOR 9, 10, AND 11



Transit Priority

- Bus Priority
- Enhancements
- Study Area

BROADWAY STATION NEW HEADHOUSE

Short
Term

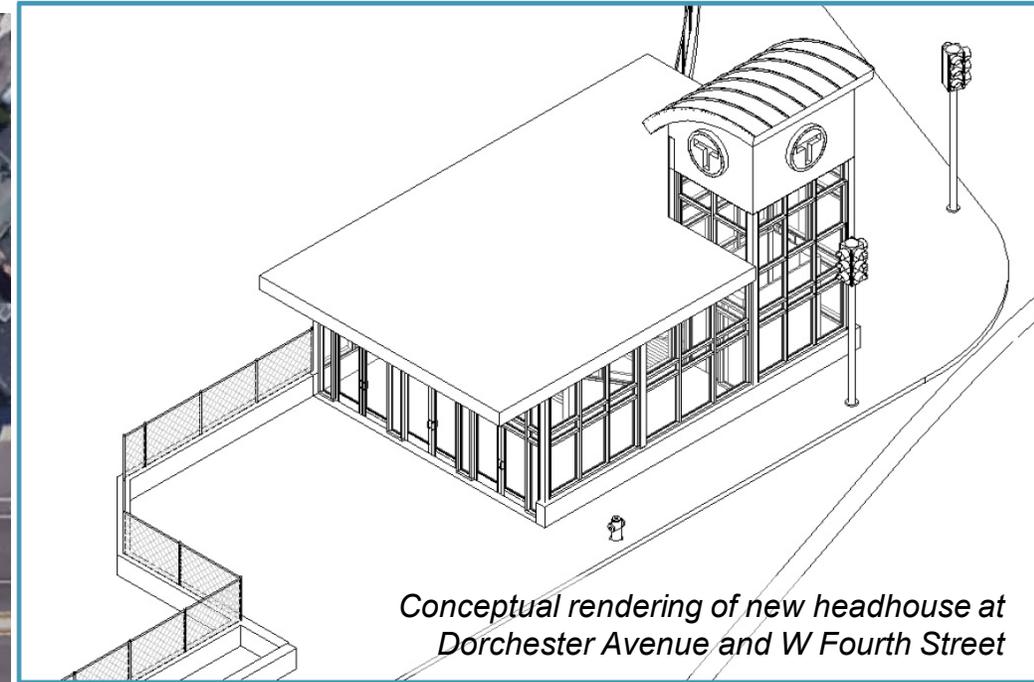
- Provides new and better accessibility to the station to a wider geography
- Additional headhouses will improve pedestrian safety by not needing to cross busy intersections

Dorchester Avenue

Wt Fourth St

W. Fourth St

Google



Conceptual rendering of new headhouse at Dorchester Avenue and W Fourth Street

A *headhouse* is the part of a train station that is above ground – typically how riders will enter a station

Andrew Station New Headhouses

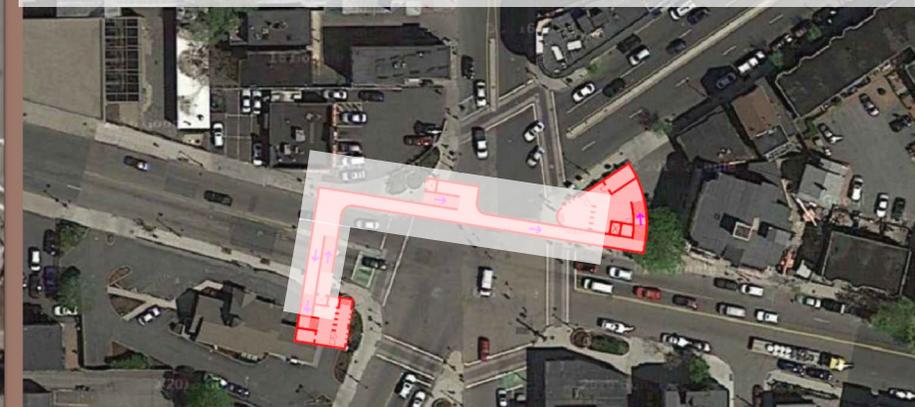
Short
Term

Existing
Headhouse

New
Headhouse

New
Headhouse

Illustration of new headhouse locations and underground connections between headhouses and station platform



- Provides new and better accessibility to the station to a wider geography
- Additional headhouses will improve pedestrian safety by not needing to cross busy intersections

TRACK 61

Track 61 provides an important connection into the Seaport from the study area

Potential to connect Track 61 to the Fairmount Line, would greatly improve job access (Seaport, Dedham Corporate Center)

Recommendation is to not preclude future rail service along Track 61 with a potential station in the study area



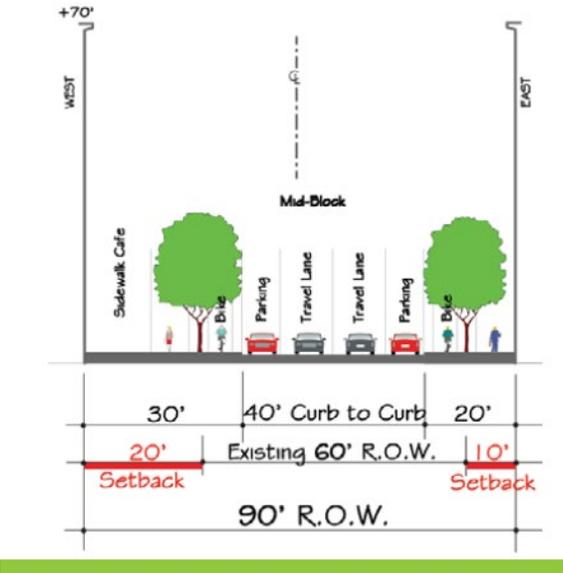
ROADWAY RECOMMENDATIONS

Safety and Mobility Improvements

PLAN SOUTH BOSTON DOT AVENUE STREET GRID
A Network of Complete Streets to Serve All Users

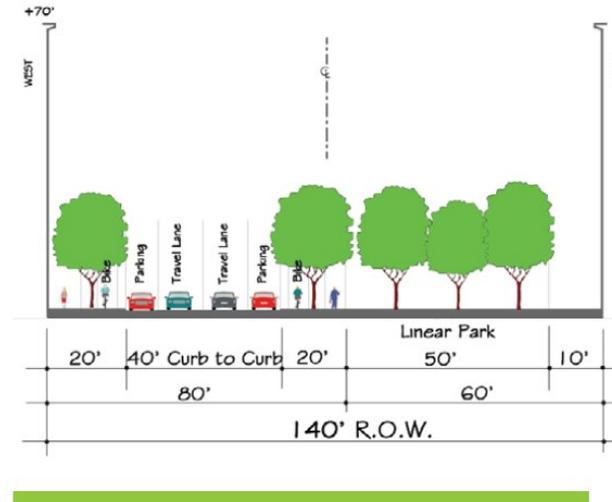
DORCHESTER AVENUE

Recommendation: Wider setbacks from new development, consistent and continuous bike lanes and sidewalks between Andrew and Broadway stations



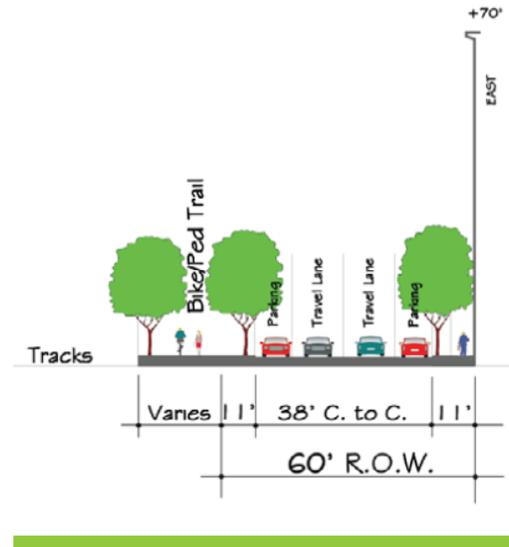
ELLERY STREET

Recommendation: Build out Ellery Street as a 40' curb to curb parallel street to Dorchester Avenue, for local access and to lessen overall future traffic on Dorchester Avenue and Andrew Square



SERVICE CORRIDOR/EDGE ROAD

Recommendation: This new road at the western edge of the study area provides access to loading docks and parking, and creates a high-quality bike/ped trail that improves safety and comfort for walkers and cyclists

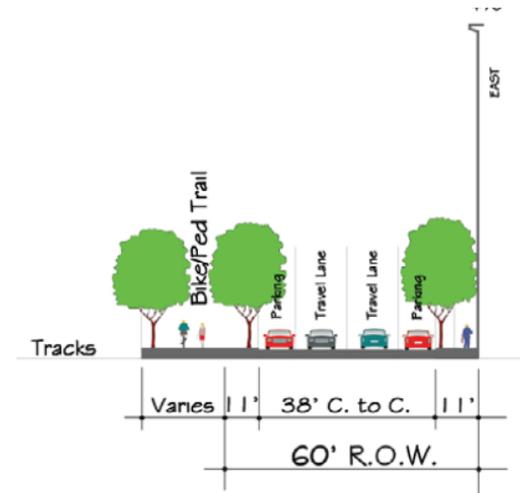


SERVICE CORRIDOR/ EDGE ROAD



D

Conceptual Drawing Along Tracks:
"Service Corridor"



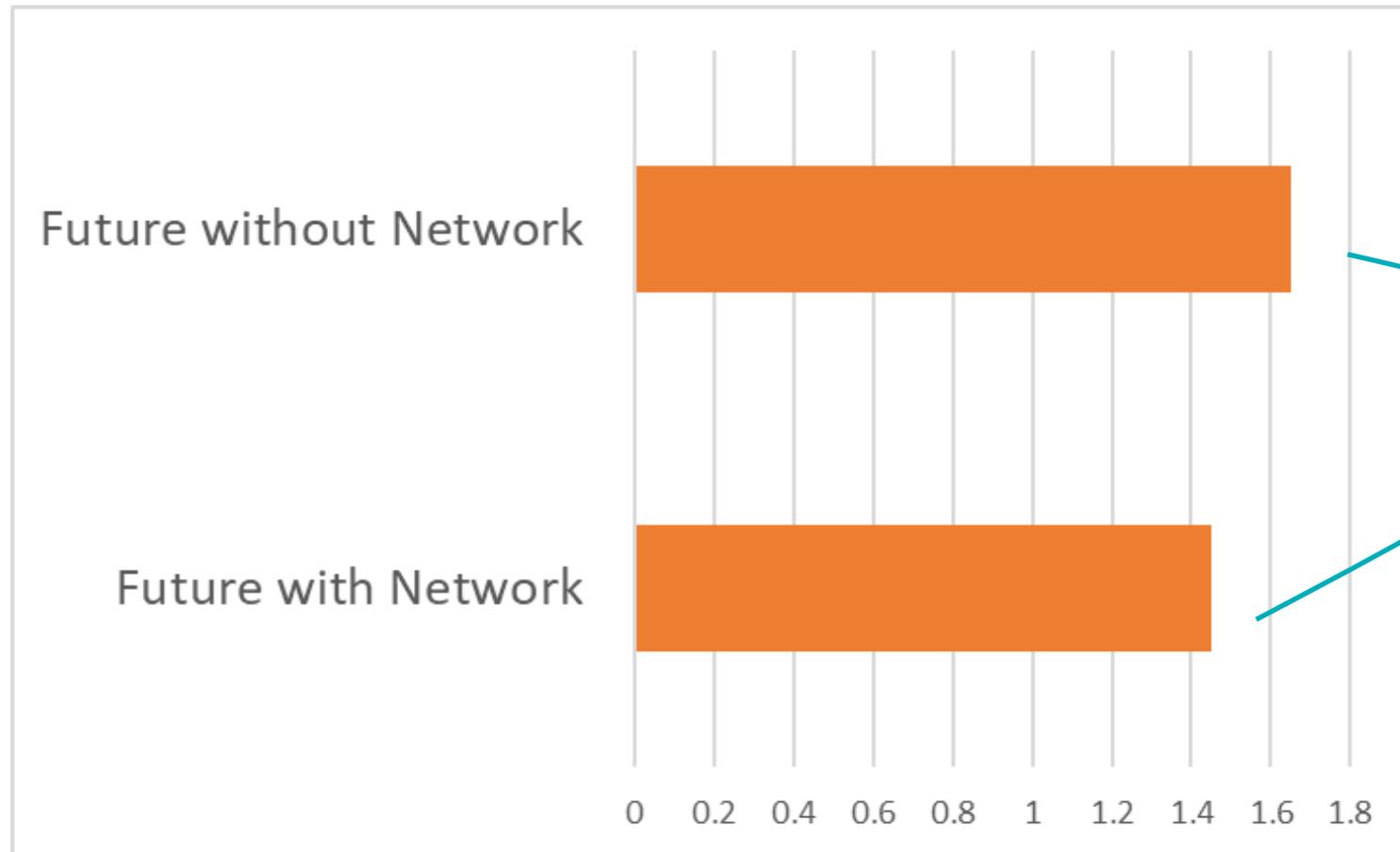
D Edge Road Along the Tracks

Agency Coordination

This idea touches a state facility and we will coordinate with MassDOT to move the concept forward

THE NETWORK IS CRITICALLY IMPORTANT

Andrew Square Example – With Long-Term Investments



Congestion in Andrew Square decreases substantially just with the addition of the PLAN's grid network

ANDREW SQUARE VICINITY

Improved connectivity eases the burden on Andrew Square

CIRCULATION IMPROVEMENTS

Circulation changes provide alternatives to travel through Andrew Square. There are tremendous benefits to safety and congestion when:

- Ellery Street becomes 2-way south of Andrew Square
- Boston Street becomes 1-way southbound just south of Andrew Square
- Ellery Street is extended south of Andrew Square to Dorchester Avenue
- Boston Street Extension becomes 2-way



**boston planning &
development agency**



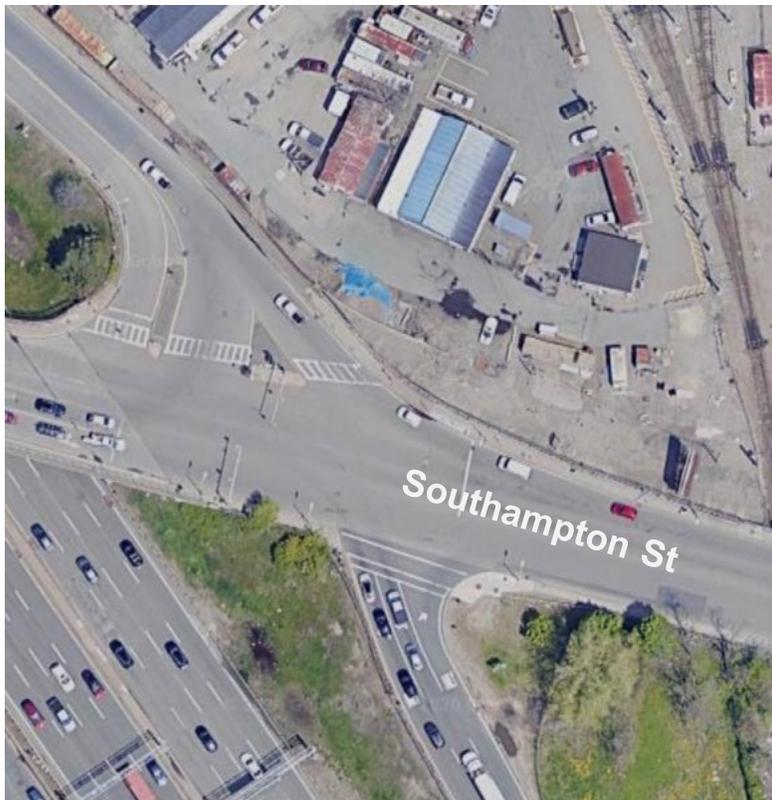
SOUTHAMPTON @ I-93 RAMPS PEDESTRIAN IMPROVEMENTS

Short
Term

- Install pedestrian signals
- Refresh crosswalks
- Improve sidewalk surface conditions
- Make ADA accessibility improvements to meet current standards

MassDOT Coordination

This idea touches a state facility and we will coordinate with MassDOT to move the concept forward



Short-Term Recommendations

Short
Term

Boston Vision Zero

Daylight intersection
to improve visibility

Daylight intersection
to improve visibility

Daylighting an intersection means removing visual barriers that are located within 10 feet (or more) of an intersection crosswalk. This improves visibility to both drivers and pedestrians looking to cross the street



Example of a daylighted intersection. Photo credit: Patrick Hoey

ANDREW SQUARE

Addressing issues of safety for all users, as well as congestion

Andrew Square

An aerial photograph of Andrew Square, a complex intersection in an urban area. The square is formed by several streets meeting at a central point. The surrounding area is densely packed with multi-story buildings, many with dark roofs. There are numerous cars and trucks visible on the roads, indicating a busy traffic environment. The image is used as a background for a presentation slide.

The main issues to address in Andrew Square are:

- Pedestrian safety
- Bicycle safety
- Complex signal phasing
- Congestion, queuing

SHORT-TERM RECOMMENDATIONS

Rapid Response Project

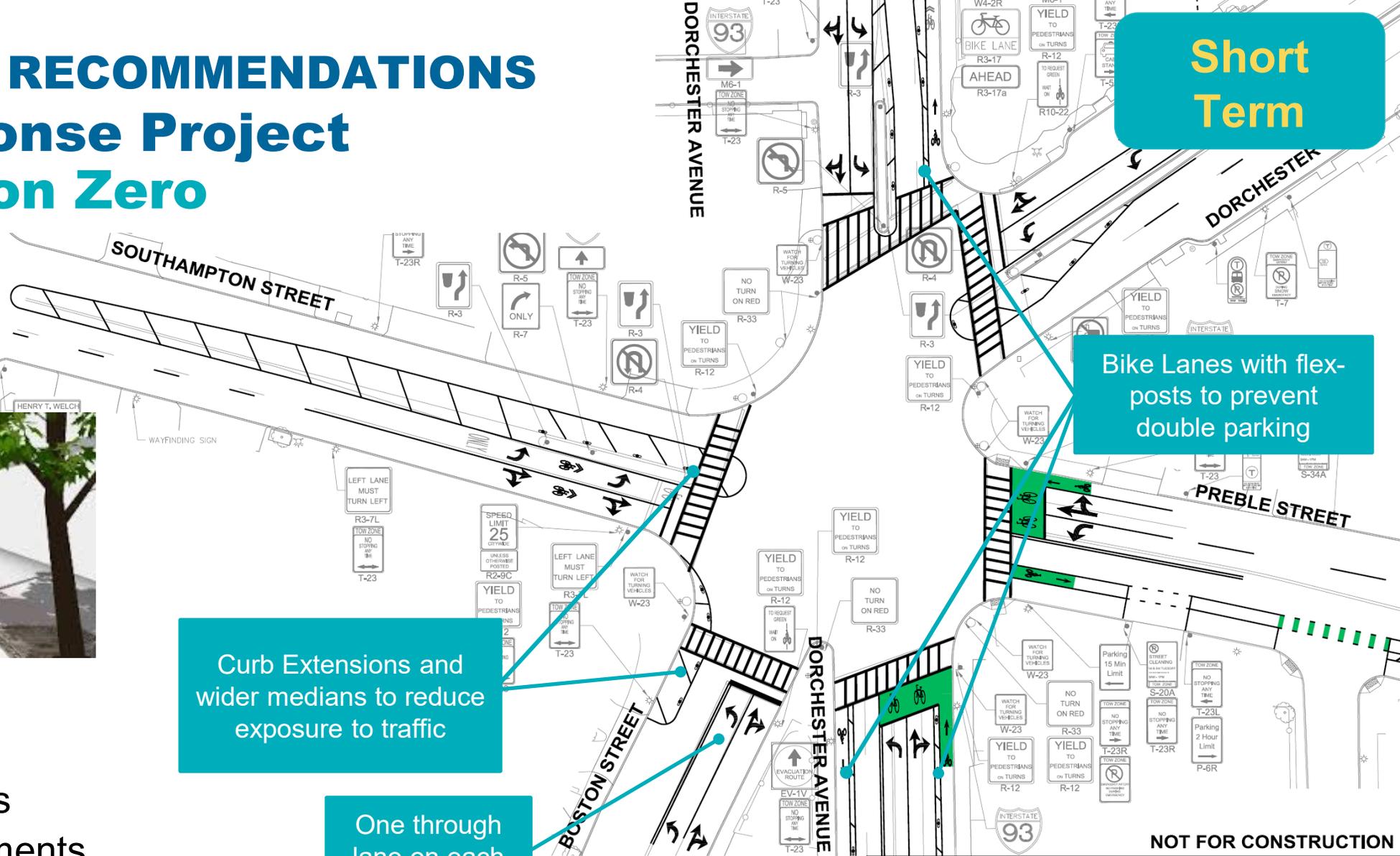
Boston Vision Zero

Short Term



Design Goals

- Lower traffic speeds
- Clarify lane assignments
- Better visibility of pedestrians

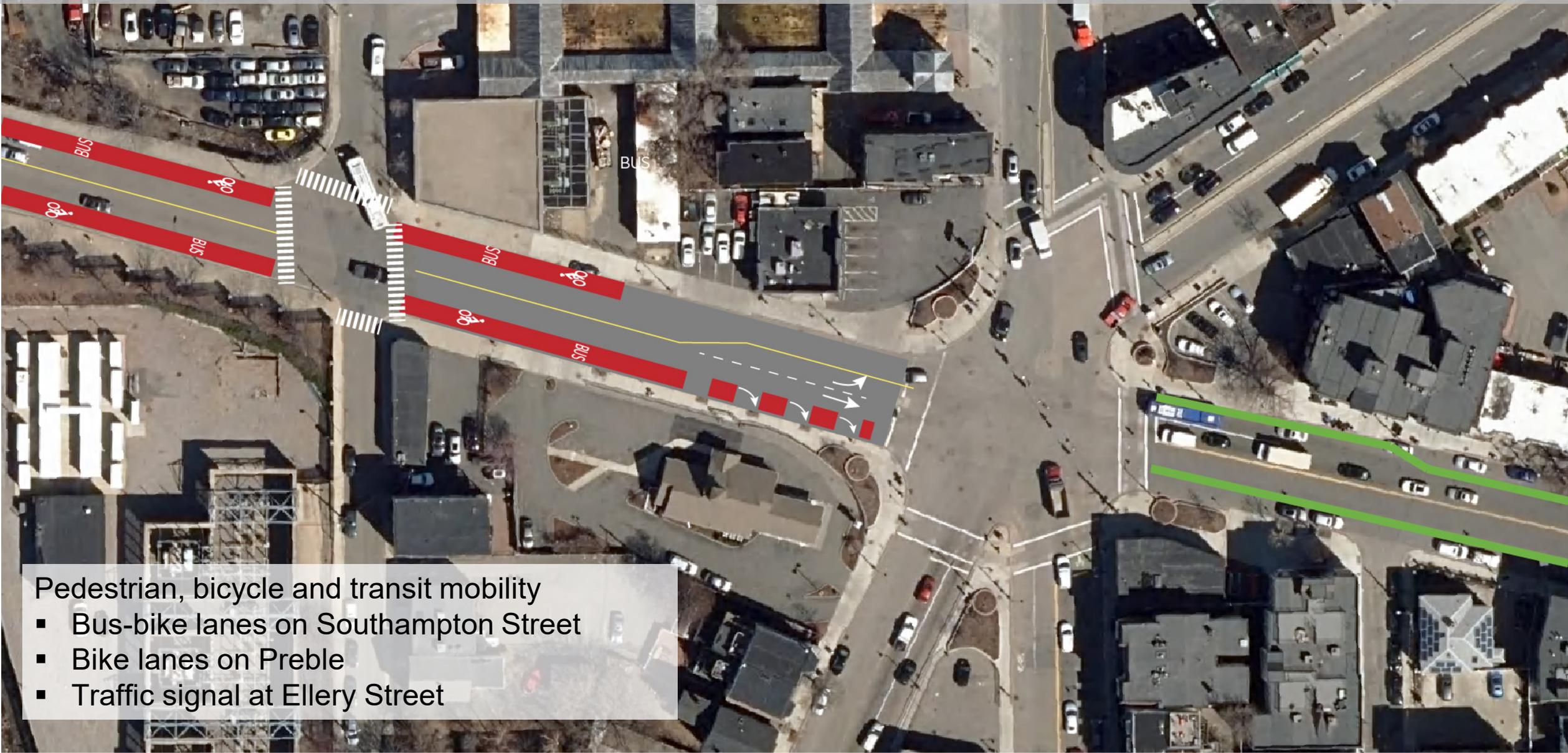


Curb Extensions and wider medians to reduce exposure to traffic

One through lane on each approach

Bike Lanes with flex-posts to prevent double parking

Medium-Term Recommendations



Pedestrian, bicycle and transit mobility

- Bus-bike lanes on Southamptton Street
- Bike lanes on Preble
- Traffic signal at Ellery Street

LONG-TERM IDEAS

Long
Term

Some ideas that could provide long-term benefit for Andrew Square include:

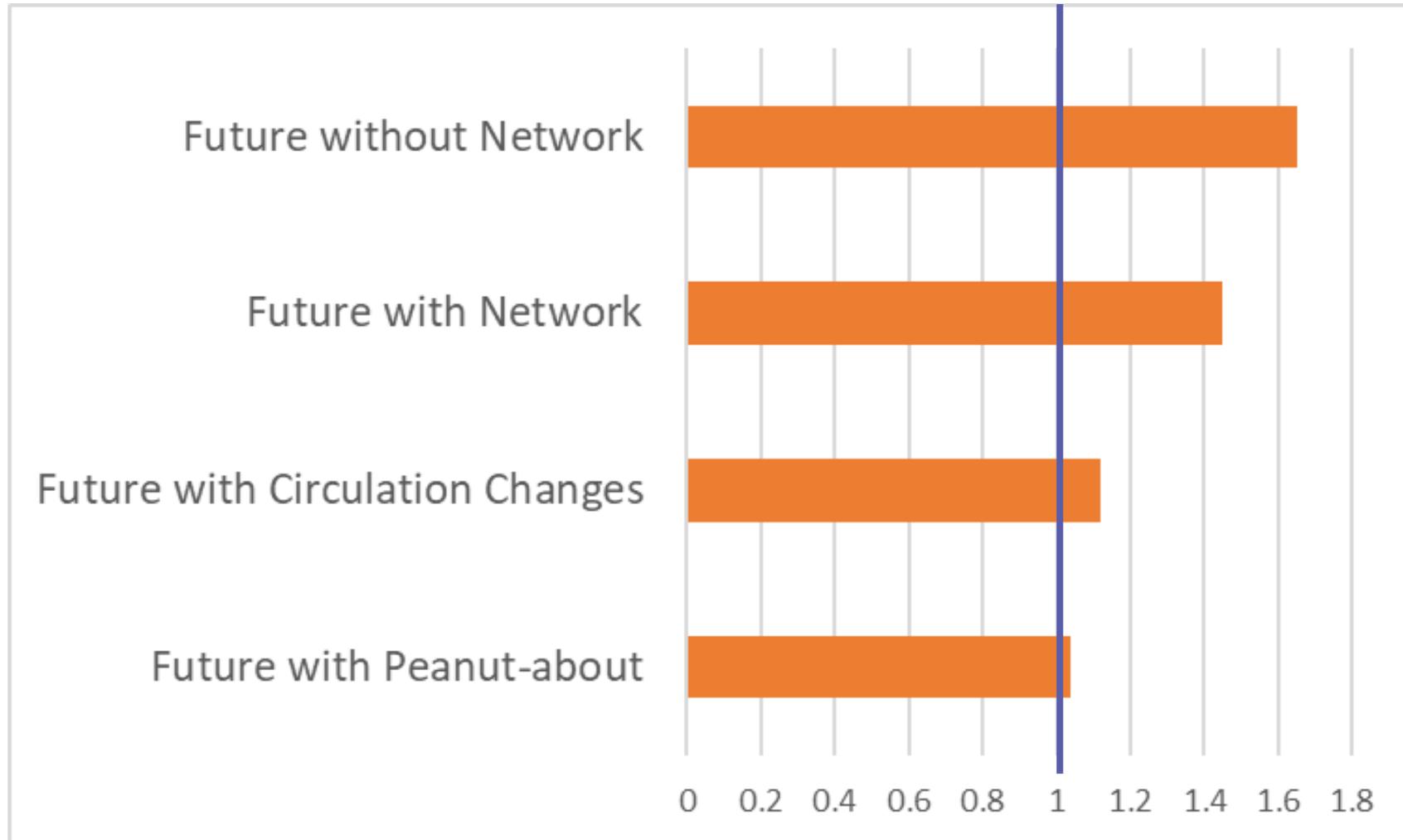
- Reduce number of signal phases – a Convert Preble Street or Dorchester Street to one-way
- “Peanut” roundabout (see image) designed to accommodate trucks

Each of these ideas merit further consideration in the future



THE NETWORK IS CRITICALLY IMPORTANT

Andrew Square Example – With Long-Term Investments



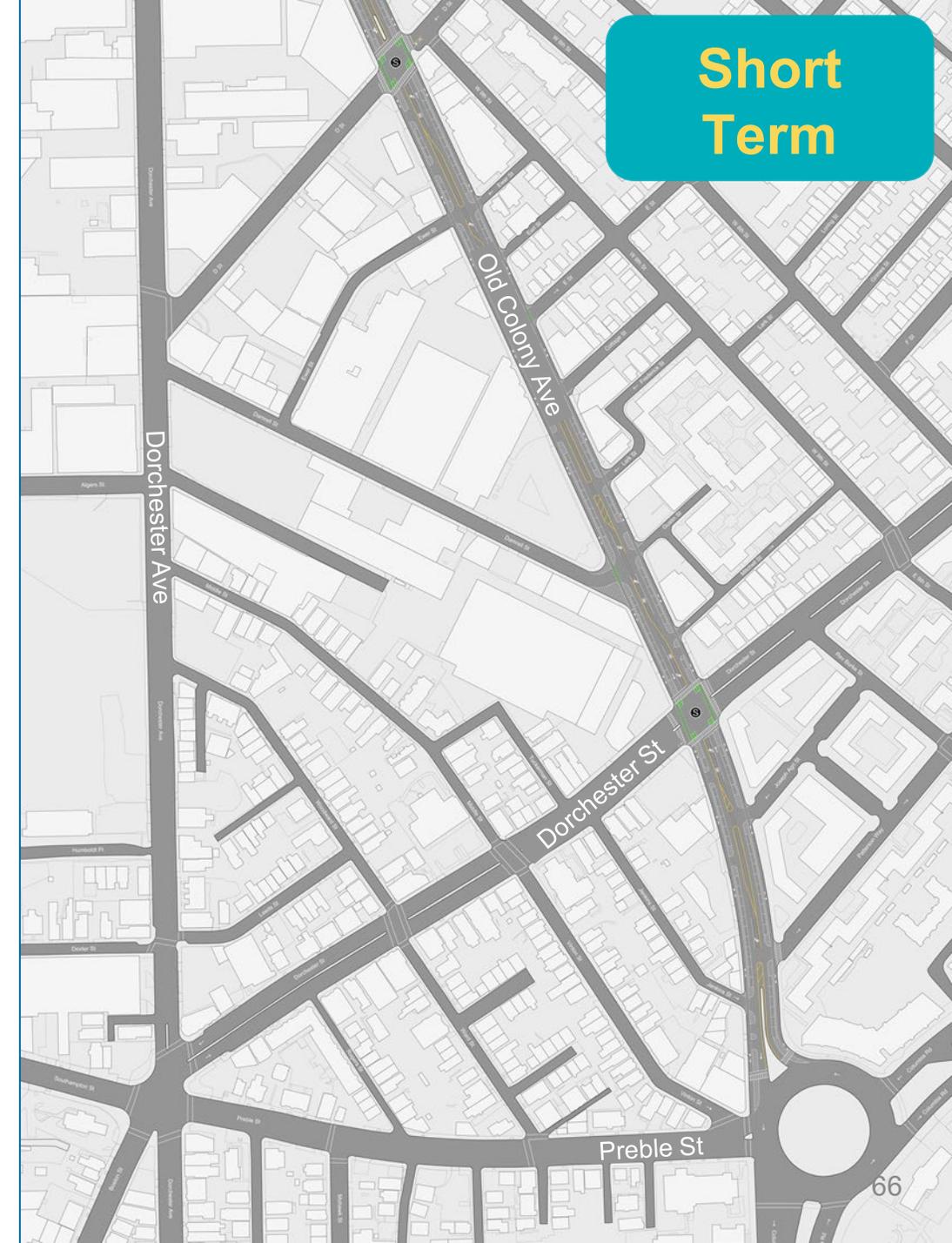
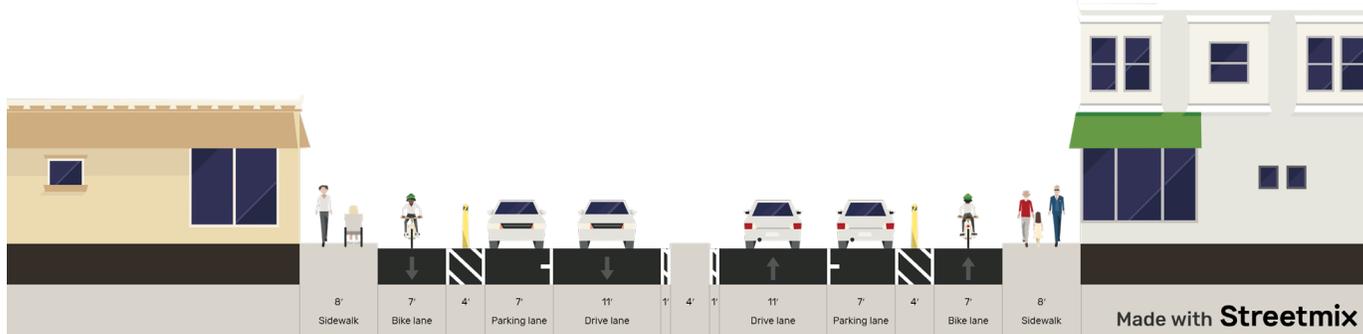
Congestion in Andrew Square decreases with each improvement we make over the medium- and long-term

Old Colony Avenue

Shifting the emphasis towards pedestrian and bicycle safety

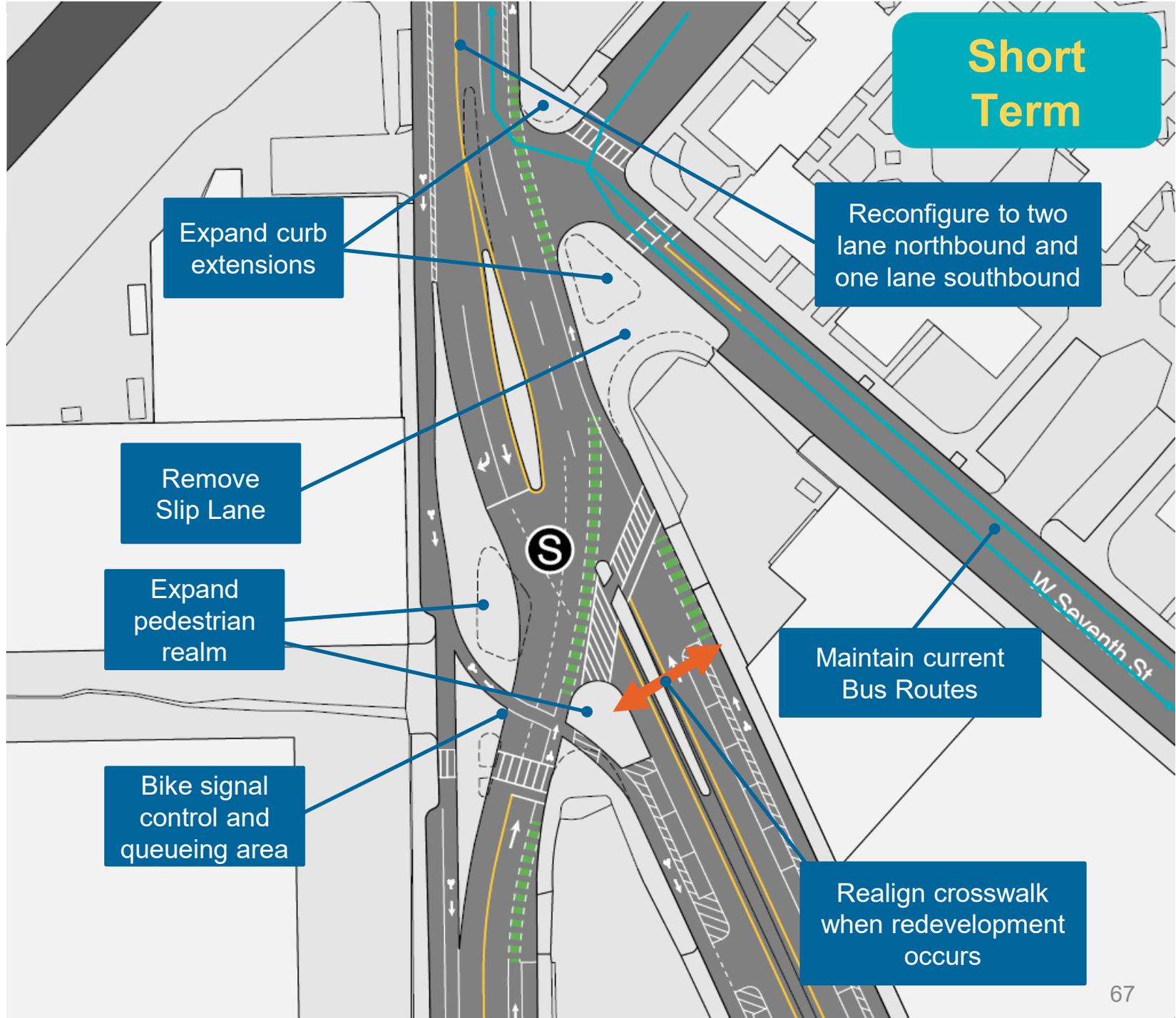
OLD COLONY AVENUE

- Reconfigure Old Colony Avenue to
 - One travel lane in each direction
 - Parking lanes
 - Separated bicycle lanes between Dorchester Avenue and Preble Circle
- Provide left turn lanes at intersections where warranted



DORCHESTER AVENUE/OLD COLONY AVENUE

- Reduce driver confusion
- Improve pedestrian safety
- Improve bicyclist safety
- Maintain transit access



Old Colony Ave & Dorchester St Intersection

Safety and Congestion Challenges:

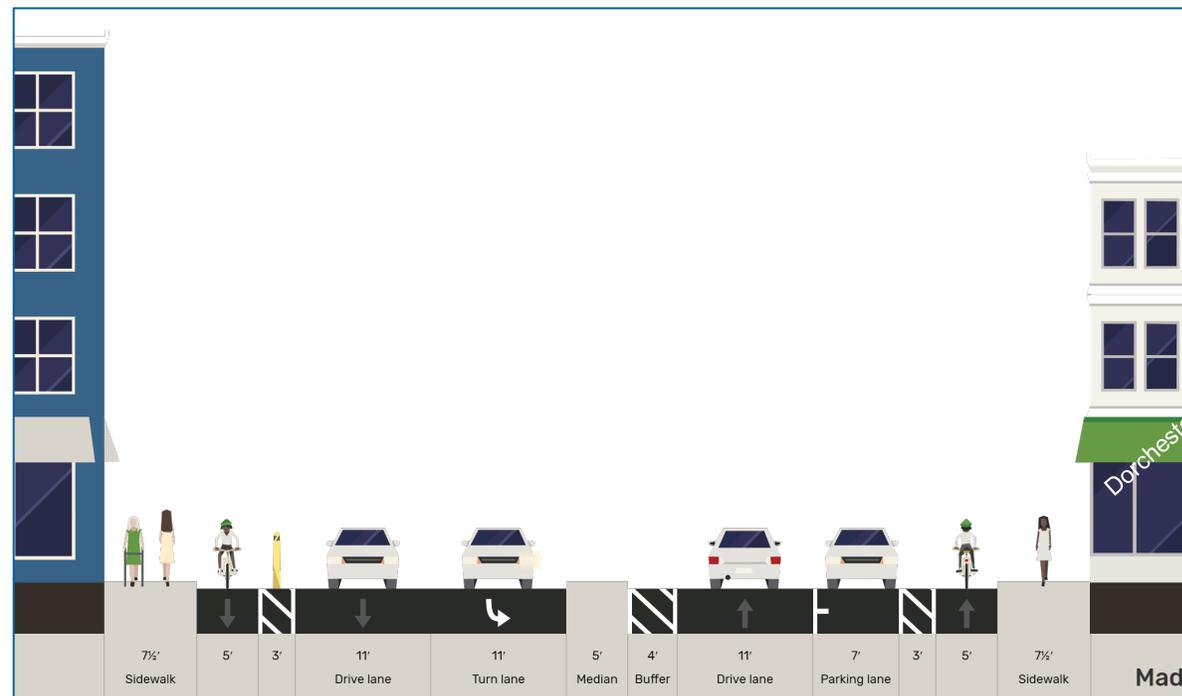
- Heavy traffic volumes during morning and afternoon rush hour
- Regular speeding concerns
- Left turns on all approaches create confusion
- Wide intersection (70') creates safety concerns for pedestrians
- Median islands are not wide enough to serve as pedestrian refuge
- Pedestrians are not waiting for “exclusive” phase to cross

OLD COLONY AVE & DORCHESTER ST

Short
Term

Short-Term

- Left turn lanes with exclusive signal phases
- Concurrent pedestrian phases
- Shorter crosswalks
- Less driver confusion and left turning conflicts
- Reduces off-peak speeding



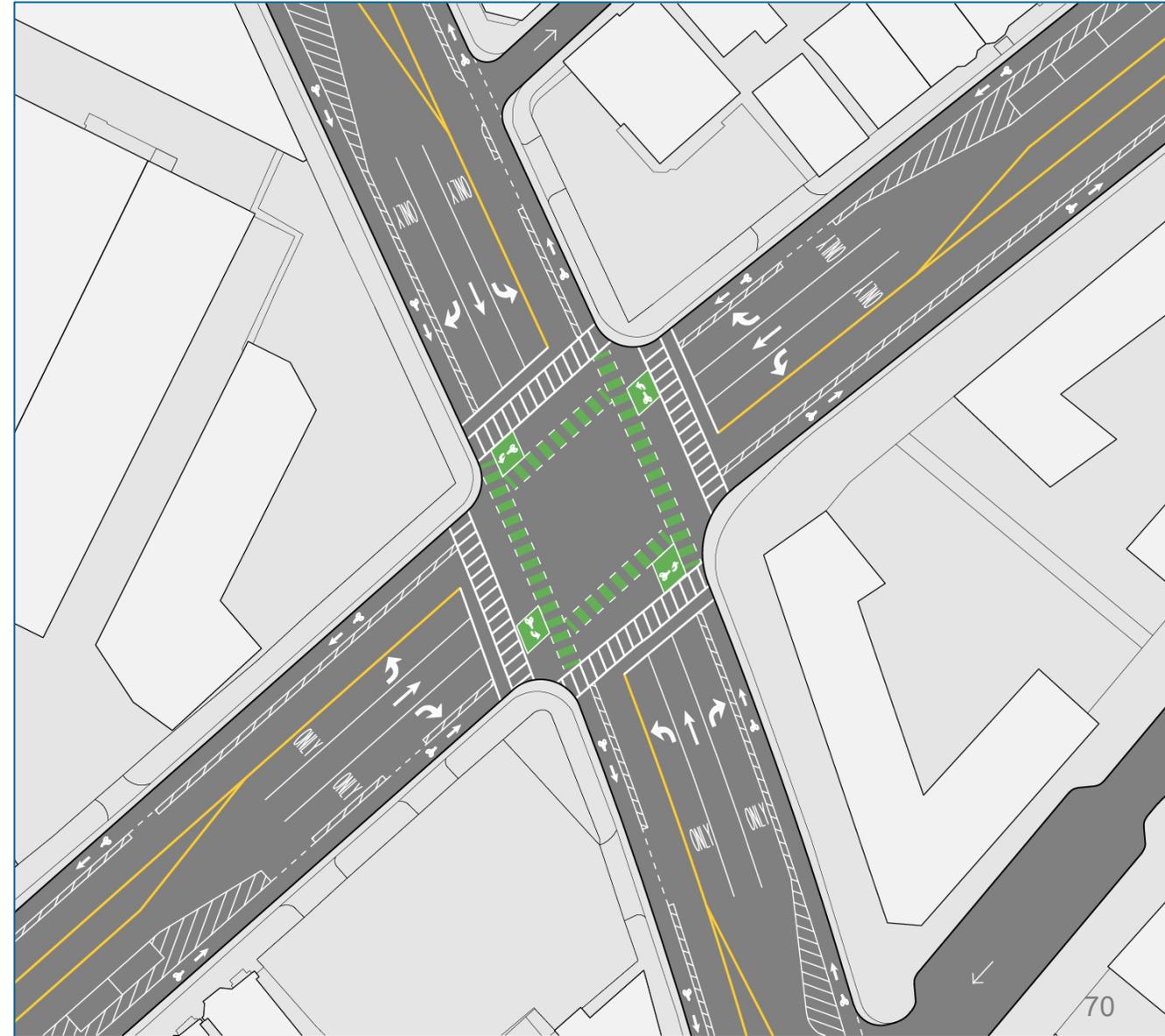
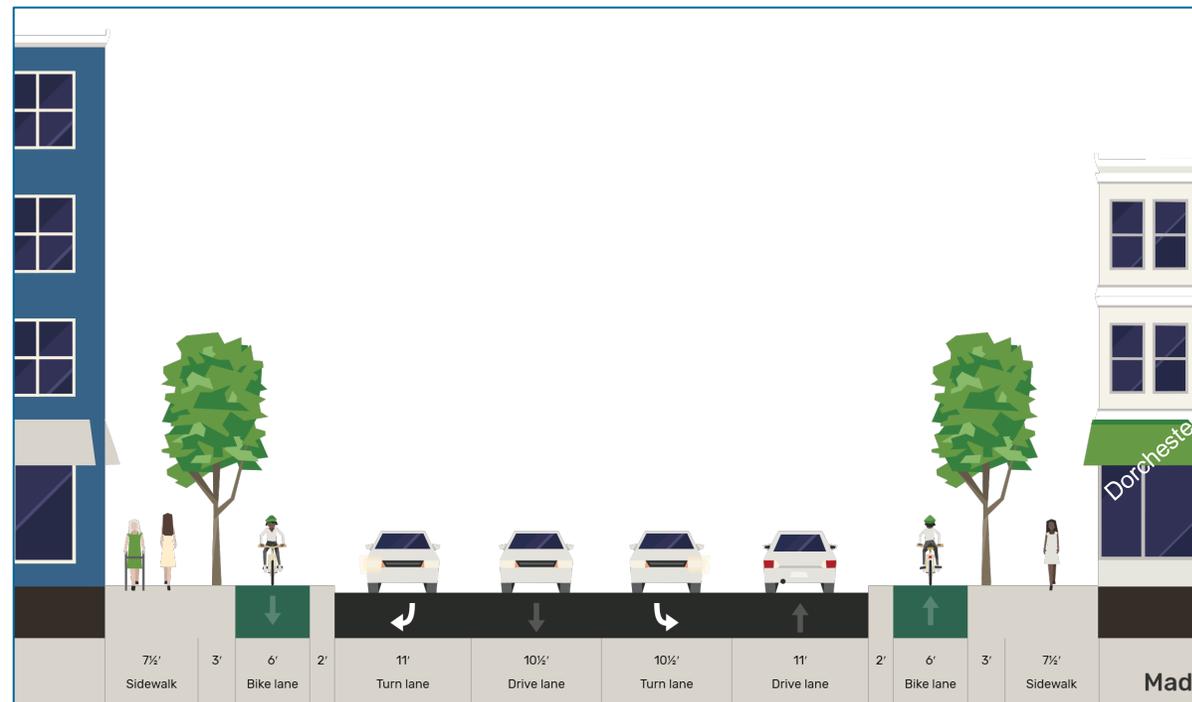
OLD COLONY AVE & DORCHESTER ST

Long
Term

Long-Term

- Additional approach lanes where volumes warrant
- Exclusive turning phases to reduce conflicts between vehicles and people biking and walking

OPTION 1



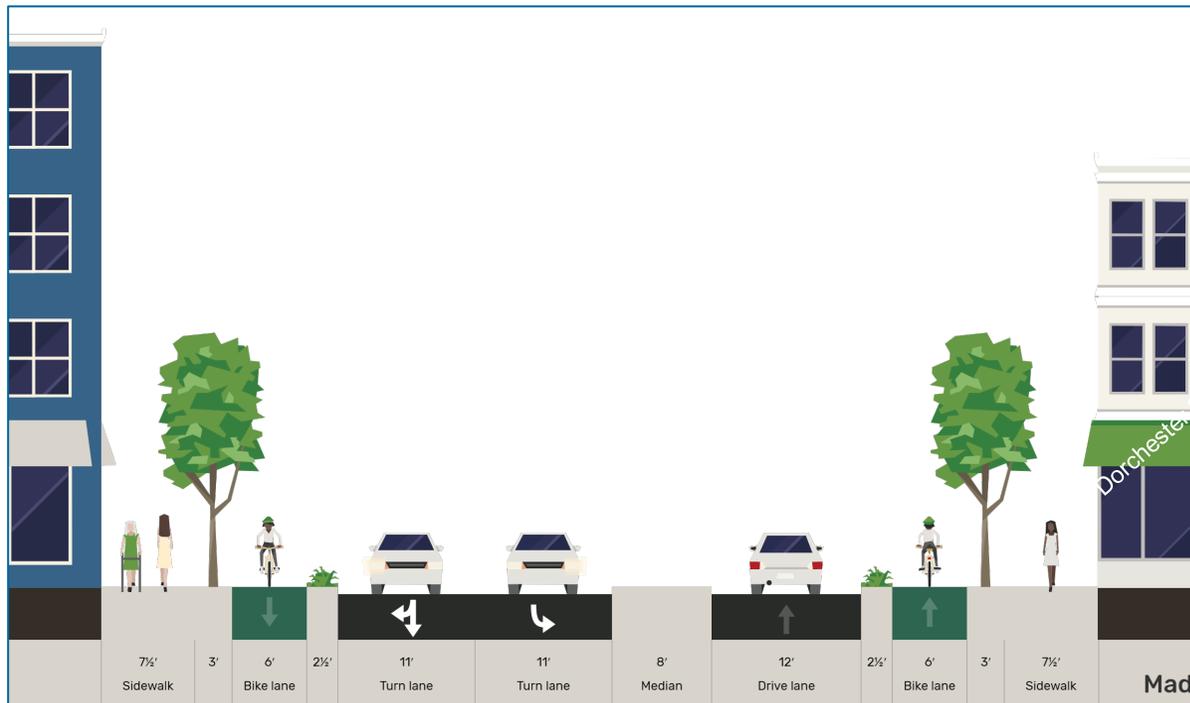
OLD COLONY AVE & DORCHESTER ST

Long
Term

Long-Term

- Protected Intersection provides low stress crossing for bicyclists
- Exclusive left turn phase reduces conflict with pedestrians crossing

OPTION 2

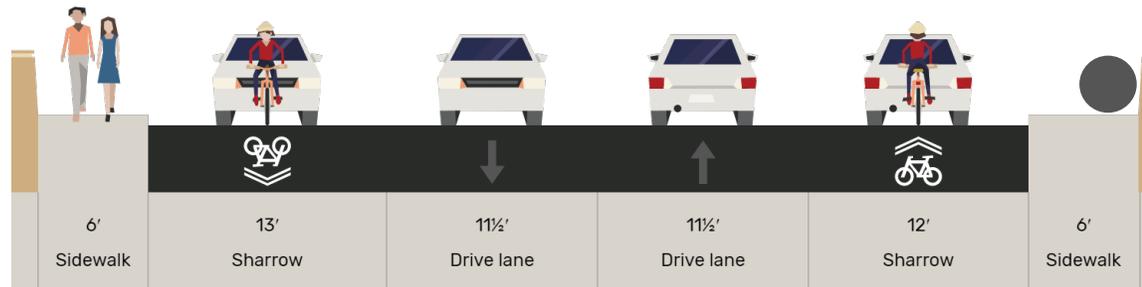


DORCHESTER AVENUE FROM OLD COLONY TO W FOURTH STREET

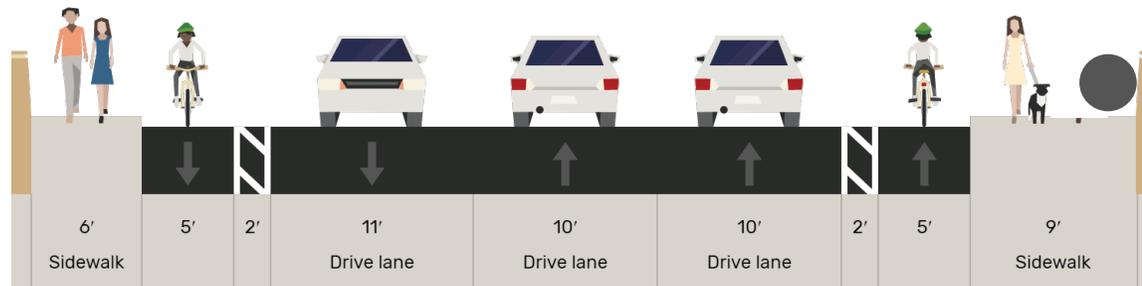
Short
Term

- Convert 1 southbound lane on Dorchester Avenue to an exclusive bicycle facility
- Widen the sidewalk on the bridge over the Bypass

Existing Cross Section – Dorchester Ave north of Old Colony Ave



Proposed Cross Section – Dorchester Ave north of Old Colony Ave



Widen sidewalk for pedestrian safety

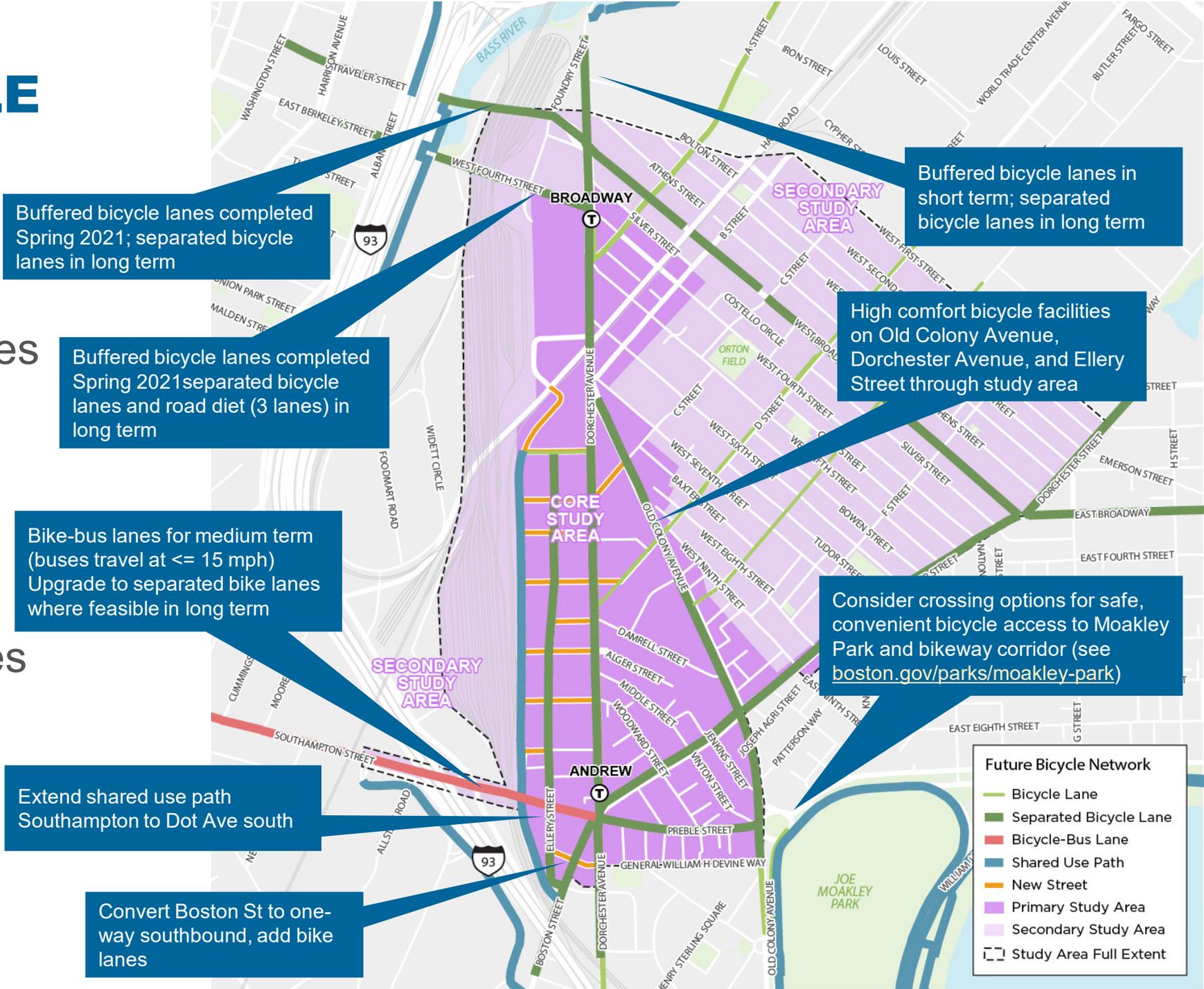
THE BIG PICTURE

Creating an Urban Fabric that Emphasizes Safety and Comfort

FUTURE BICYCLE NETWORK

Ideas to consider

- Buffered bicycle lanes in short term
- Shared use path extensions
- Separated bicycle lanes in long term
- High comfort facilities for Old Colony, Dorchester Avenue, and Ellery



Future Bicycle Network	
	Bicycle Lane
	Separated Bicycle Lane
	Bicycle-Bus Lane
	Shared Use Path
	New Street
	Primary Study Area
	Secondary Study Area
	Study Area Full Extent

DISCUSSION

- Do these future conditions findings make sense to you?
- Was anything surprising?
- Do you agree with the draft recommendations?
- What is missing from the recommendations, in your opinion
- What questions come to mind?





NEXT STEPS IN THE TRANSPORTATION PLAN



NEXT STEPS

2019

Fall/Winter

- Mobilize the team
- Collect data
- Review results of previous plans and other efforts underway
- Conduct site visits

2020

Spring

- Analyze existing conditions
- Identify goals and objectives
- Create evaluation framework
- Prepare future forecasting methods

Summer

- Host public meeting #1
- Analyze future conditions
- Evaluate previous PLAN ideas
- Develop short-term recommendations
- Develop a long list of long-term recommendations

2021

Fall/Winter

- Refine immediate-term recommendations
- Develop long-term recommendations
- Host public meeting #2
- Document findings and recommendations into the Plan
- **Host public meeting #3**

We are here

NEXT STEPS

We are planning office hours to answer your questions on tonight's content, one additional public meeting for early next year

Office Hours

Tues, December 15

Noon-1:30pm

- We shared a lot of content with you tonight
- This time will be spent answering your questions – no presentation
- Pop in – no need to stay for the whole time

Our Next

Public Meeting

- Refined immediate-term recommendations
- Refined long-term recommendations
- Draft Plan

COVID-19 Updates

Stay up-to-date with COVID-19 related announcements, City of Boston reopening plans, and resources for you and your community at:

boston.gov/coronavirus

THANK YOU

For More Information:

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plandotave@boston.gov



**boston planning &
development agency**