





#### **Project Team**

- City of Boston
  - James Gillooly, Deputy Commissioner
  - William Conroy, Project Manager
- Tetra Tech
  - Erik Maki, PE, PTOE, Project Manager
  - lan McKinnon, EIT, Transportation Engineer
- The Cecil Group Urban Design
- Brown Richardson & Rowe Landscape Architects
- Jacobs Engineering Group Structural Engineering





#### Agenda

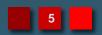
- Review Project Goals
- Mobility & Traffic Data
  - MBTA System/Trends
  - I-93 Corridor
  - Volumes 2008 vs. 2015
  - Adjacent Projects
- Concept Plans and Discussion
  - Austin Street to City Square



#### Rutherford Avenue Corridor



Total project length from Alford Street/Mystic River to City Square is about 7,000 feet.



"Right-size" the Road – Replace regional highway feel with neighborhood-oriented character







- Improve pedestrian connections/ safety to MBTA Transit Stations and community
- Decrease traffic congestion
- Protect Main Street from cut-through traffic
- Create public/open space
- Provide opportunities for appropriate development
- Provide bicycle connections
- Increase on-street parking



- Urban Street Grid
- TOD Development
- Proposed Options
  - Surface Option
  - Underpass Option





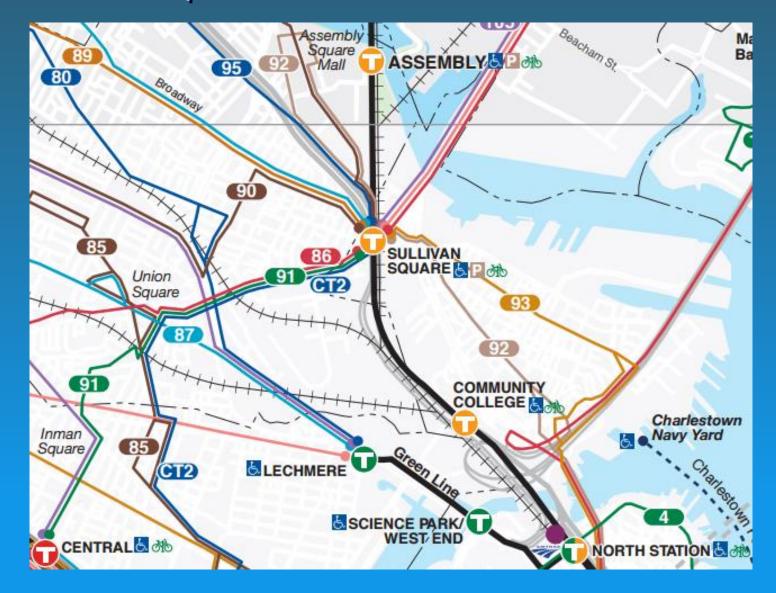


- Create continuous bicycle and pedestrian connections <u>along</u> the entire corridor
- Create bicycle and pedestrian connections across the corridor





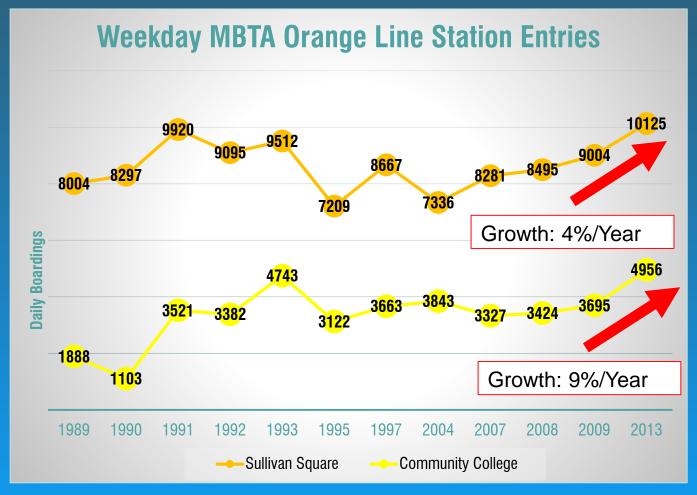
#### Mobility – Sullivan Square transit HUB







#### Mobility - Orange Line daily boarding







#### Mobility - Orange Line Improvements

#### Wynn Subsidized Service

- 9 extra trains per weekday
- AM Headways (8 Min → 5 Min)
- PM Headways (10 Min → 7.5 Min)
- \$7.5 Million over 15 years

#### MBTA Purchased Cars

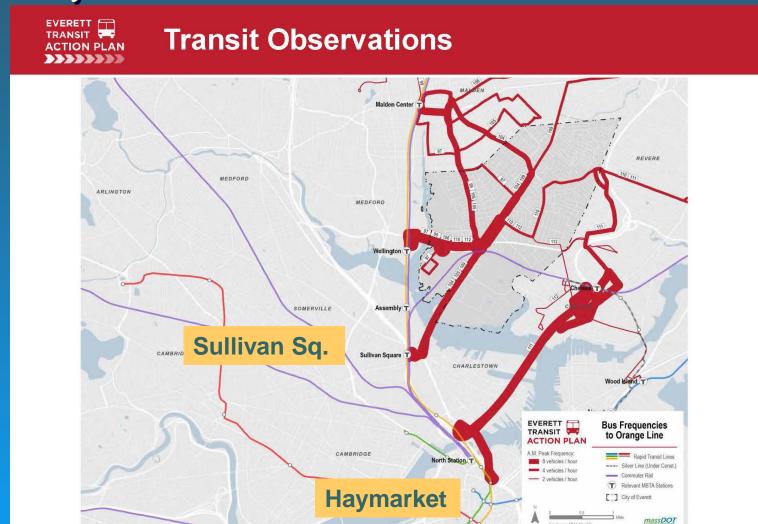
- 152 new vehicles purchased
- Delivery 2018, Service 2019
- More cars during peak periods will Reduce headways to 4-5 min







#### Mobility – City of Everett – Transit Action Plan

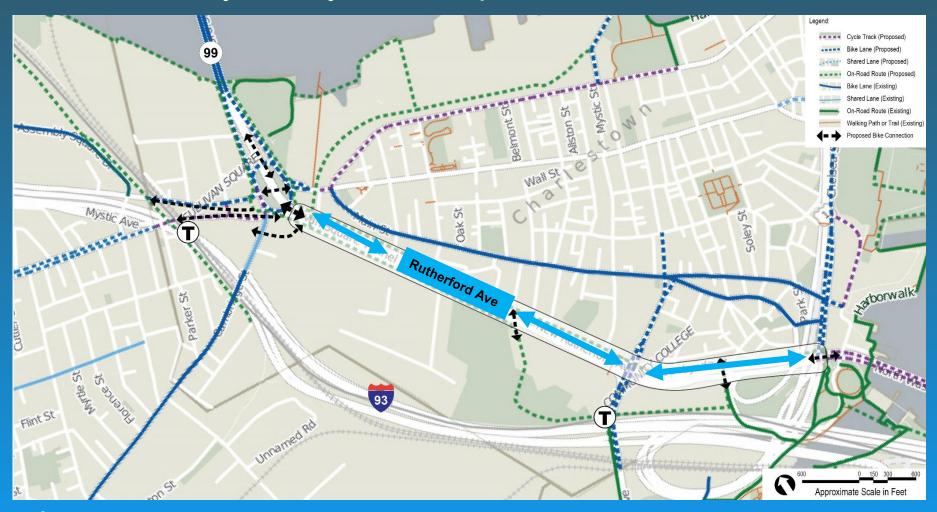




November 16, 2015

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#### Mobility – 30 year bike plan

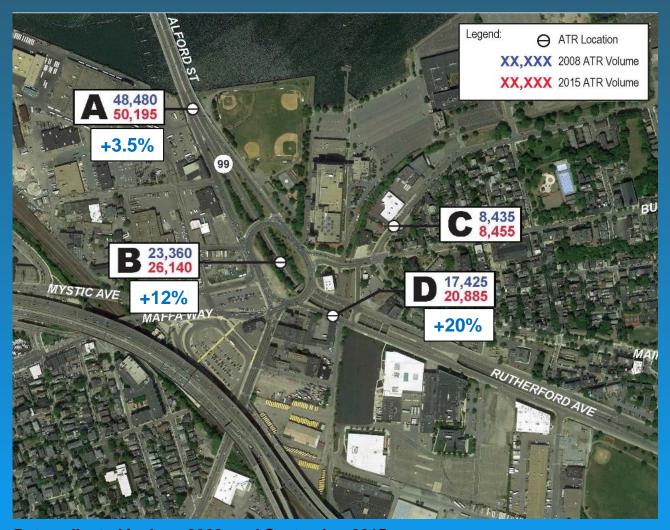




 Opportunity to create new connections to existing and proposed bikeways; also get a Hubway station at Sullivan Sq



#### Daily Traffic Volumes 2008 vs. 2015

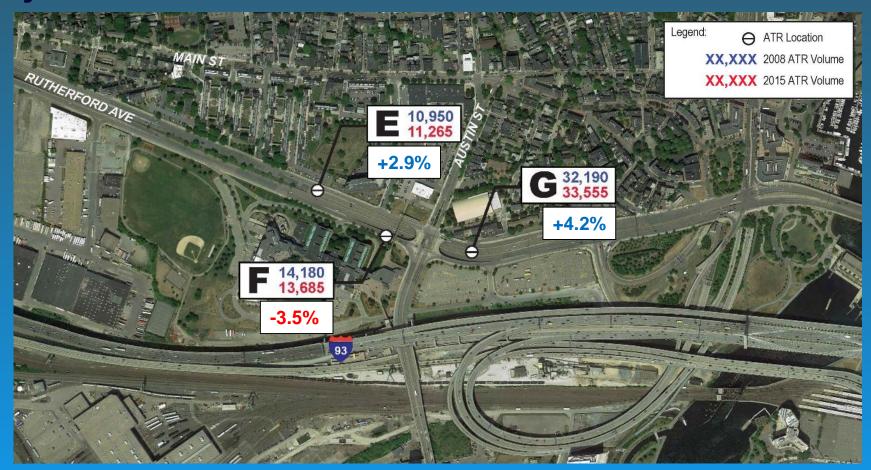




Data collected in June 2008, and September 2015



#### Daily Traffic Volumes 2008 vs. 2015





Data collected in June 2008, and May & October 2015

## Rutherford Avenue Daily Traffic Volumes Northbound vs. Southbound Comparison

Location	2008	2015	
Rte-99 South of Alford St Bridge	NB: 19,557 SB: 28,919	NB: 20,732 (+6.0%) SB: 29,456 (+1.9%)	
Sullivan Square Underpass	NB: 5,799 SB:17,599	NB: 6,799 (+17.2%) SB: 19,336 (+9.9%)	
Rte-99 Austin St Underpass	NB: 8,330 SB: 23,855	NB: 7,660 (-8.0%) SB: 25,895 (+8.6%)	

Note that southbound travel is much higher than northbound, by about 3X

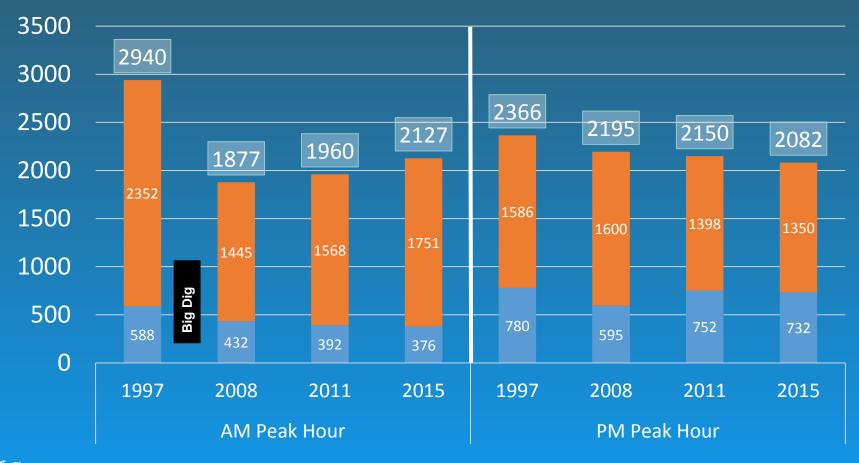


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# **Traffic volume comparison - Austin Street Underpass (Both NB/SB)**



# Traffic volume comparison Austin Street Underpass



NB

SB





#### Regional Mobility

Future Tobin effect?

## Everybody on the Tobin Bridge will soon have to pay tolls

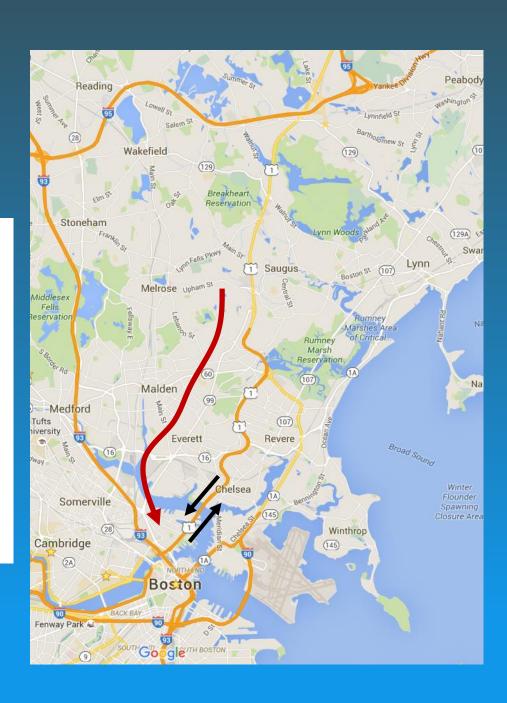


DAVID L. RYAN/GLOBE STAFF/FILE 201

Drivers in the northbound lanes of the Tobin Bridge will soon have to pay tolls like those in the southbound lanes do.

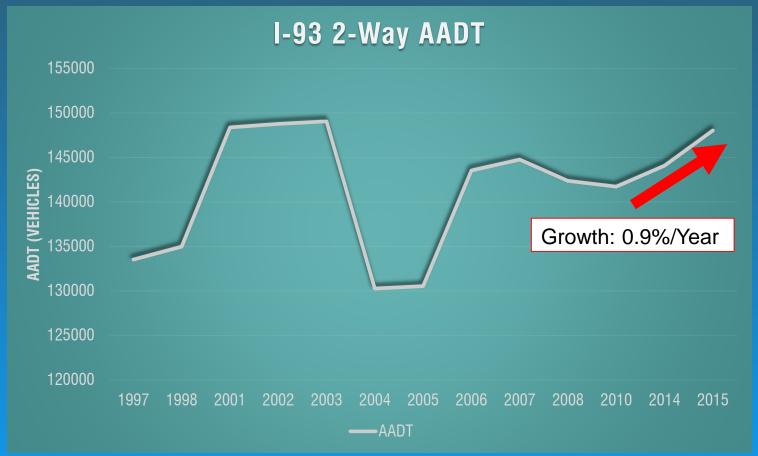
By John R. Ellement GLOBE STAFF JUNE 07, 2016







#### I-93 Annual Average Daily Traffic





Note: Volumes dropped in early 2000's due to the recession and again in 2007-2009



#### AM Peak Hour – Volume Comparison

	Location	Exist 2008 (TT)	Exist 2015 (TT)	Future No-Build 2030 Old (TT) <sup>1</sup>	Wynn Build 2023 (HSH) <sup>2</sup>
А	Sullivan Square East of Maffa/Cambridge St	2841	2785	2984	3283
В	Sullivan Square North of Bunker Hill St	1463	1448	1537	1987
С	Sullivan Square South of West St	1910	1935	2005	2143
D	Sullivan Sq NB (Underpass)	123	152	129	185
E	Sullivan Sq SB (Underpass)	1279	1199	1343	1219

- Current 2015 counts are similar to the older 2008 counts during peak hours (i.e., saturated conditions).
- Wynn projections generally higher than previous projections.
- Lower Mystic Regional Working Group future growth scenarios





#### PM Peak Hour – Volume Comparison

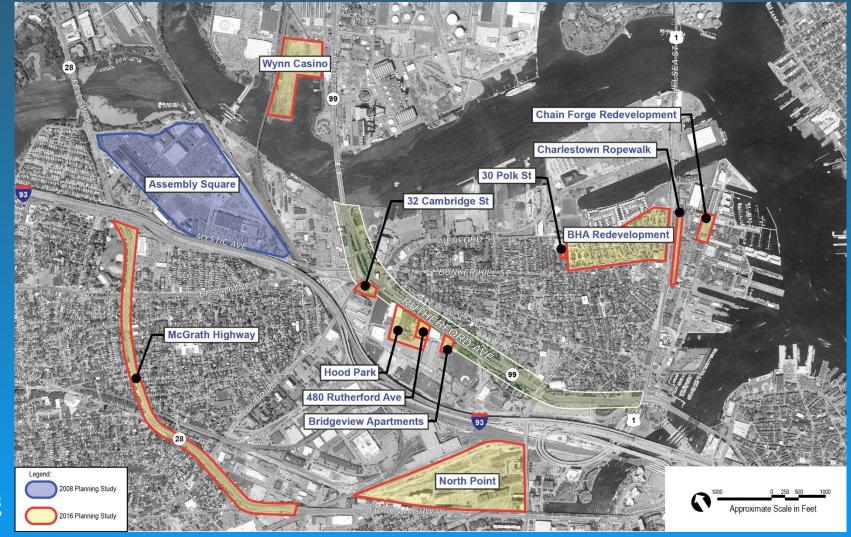
	Location	Exist 2008 (TT)	Exist 2015 (TT)	Future No-Build 2030 Old (TT) <sup>1</sup>	Wynn Build 2023 (HSH) <sup>2</sup>
А	Sullivan Square East of Maffa/Cambridge St	2579	2294	2708	3249
В	Sullivan Square North of Bunker Hill St	2822	2835	2963	3415
С	Sullivan Square South of West St	2615	2453	2746	2967
D	Sullivan Sq NB (Underpass)	480	677	504	603
Е	Sullivan Sq SB (Underpass)	969	710	1017	1066

- Current 2015 counts are similar to the older 2008 counts during peak hours (i.e., saturated conditions).
- Wynn projections generally higher than previous projections.
- Lower Mystic Regional Working Group—future growth scenarios





## Adjacent Projects within the Study Area







#### Adjacent Project Development

- Partners Healthcare Assembly Square
  - 4,000 employees & 2,400 parking spaces
- Boston Housing Authority Charlestown Redevelopment
  - +1,900 new residential units
- Wynn Casino
  - 629 hotel rooms
  - 4,000 employees
- Hood PDA
- Bunker Hill Apartments
- Chain Forge Redevelopment
- Rope Walk Redevelopment
- 30 Polk Street

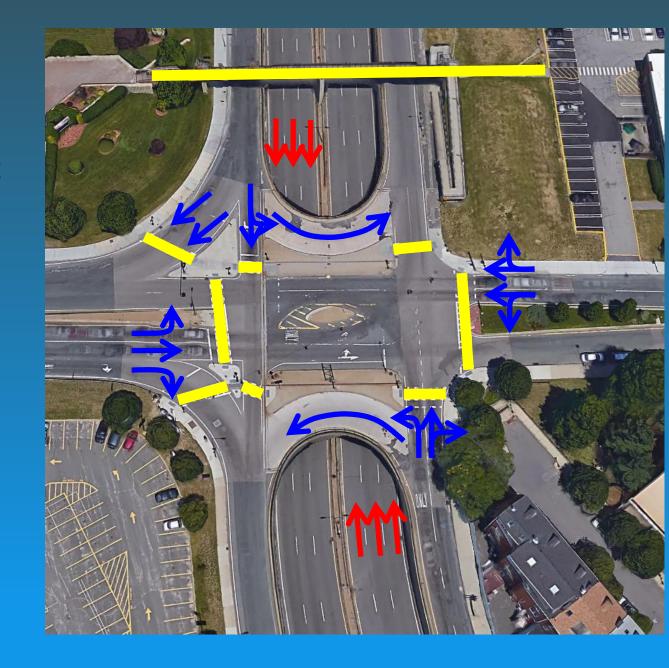
#### **Long Term Projects:**

- Sullivan Square TOD
- BRA land at BHCC
- Brickbottom / Inner Belt
- North Point
- McGrath Highway
- Industrial Zoned land near I-93 & Medford Street
- Other Everett, Somerville & Cambridge Projects





# Austin Street – Existing Geometry & Concept Development



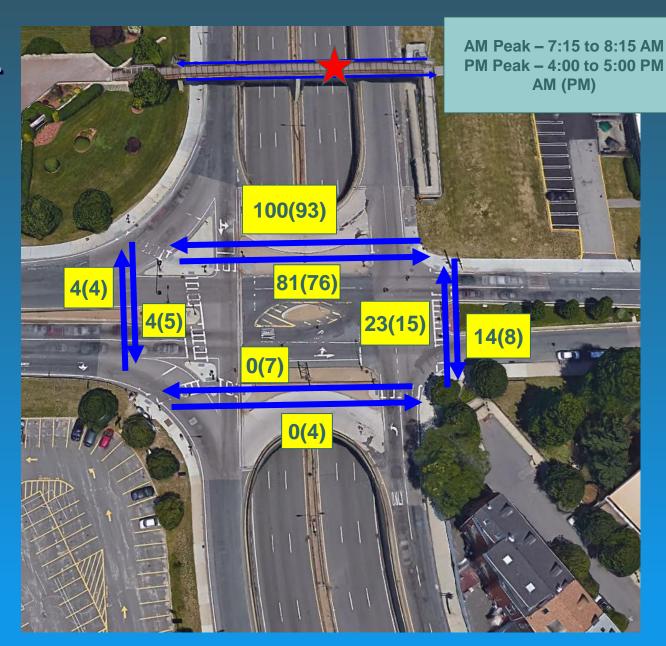




# Austin Street – Pedestrian Volumes

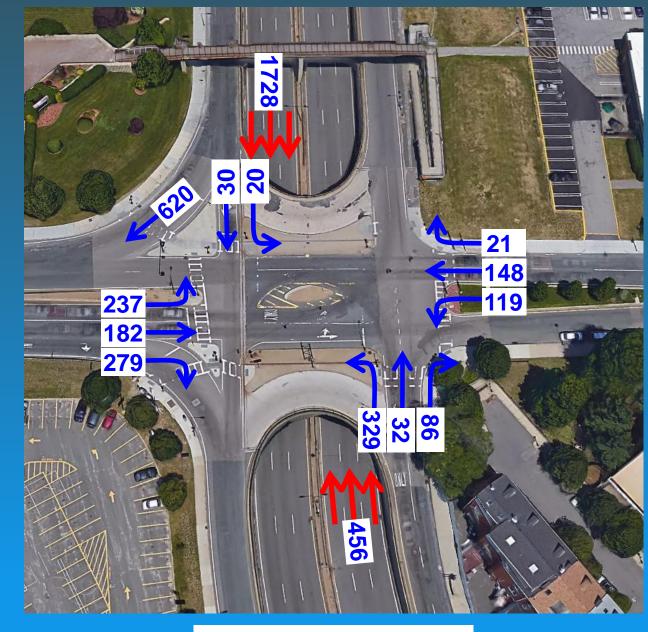
★ Pedestrian bridge to be counted and evaluated in the Fall







#### Austin Street – AM Peak Hour Volumes

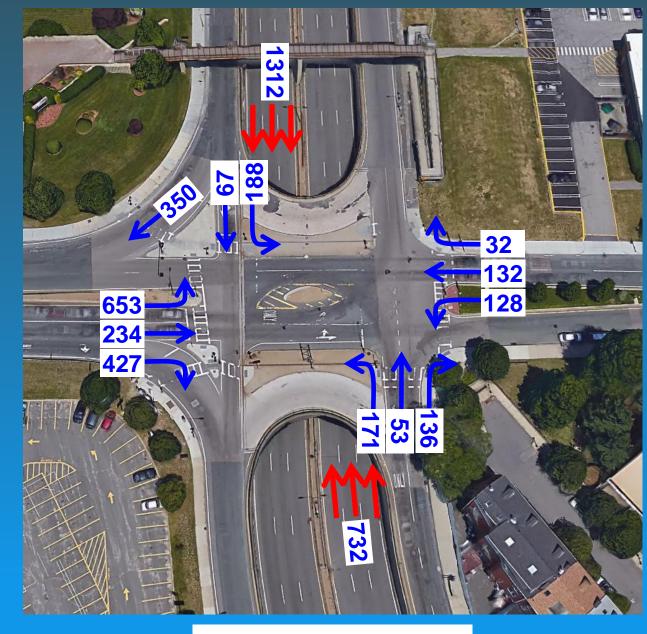




**2015 Existing Volumes** 



#### Austin Street – PM Peak Hour Volumes





**2015 Existing Volumes** 



#### **Rutherford Avenue- Previous Concept**

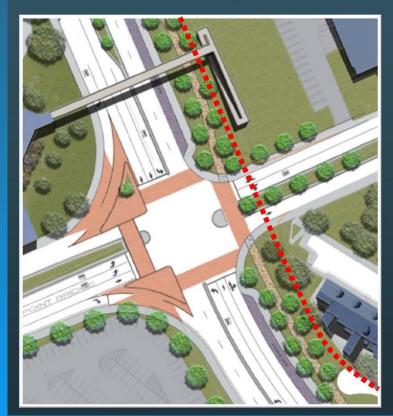


(See full-size roll plan after slide show)



#### **Austin Street - Previous Concepts**

#### Surface Option



#### **Underpass Option**





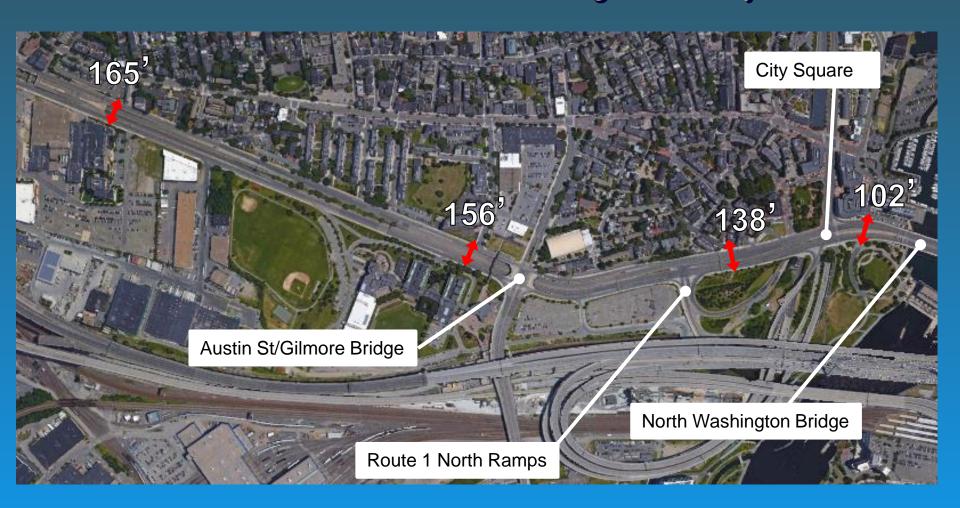
**CITY OF BOSTON** 

#### Austin Street Improvement Options

- A. Surface Option
- B. Underpass Option (SB Only)
- C. Underpass Option (NB+SB)



#### Rutherford Avenue Corridor Right-of-Way

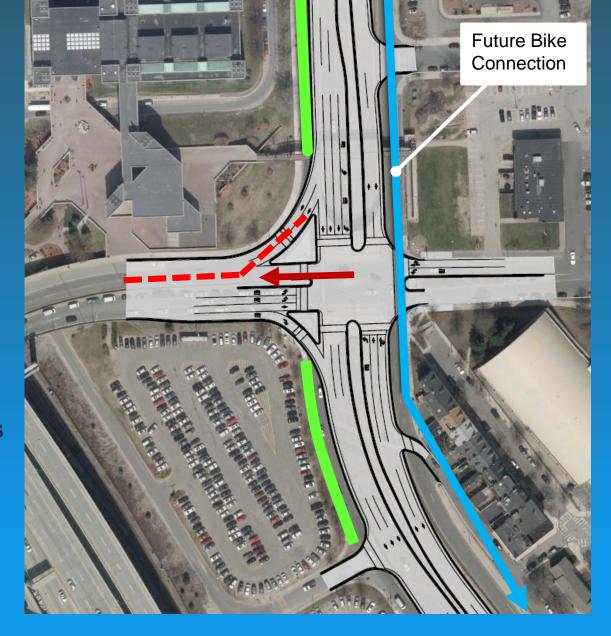






#### A. Surface Option

- Remove Underpass
- Open space gained +++ both sides
- Continuous Pedestrian crossing but may take longer
- Traffic Operations concern
  - Gilmore queues affect SB flow along corridor
- Enhanced access to BRA parcels



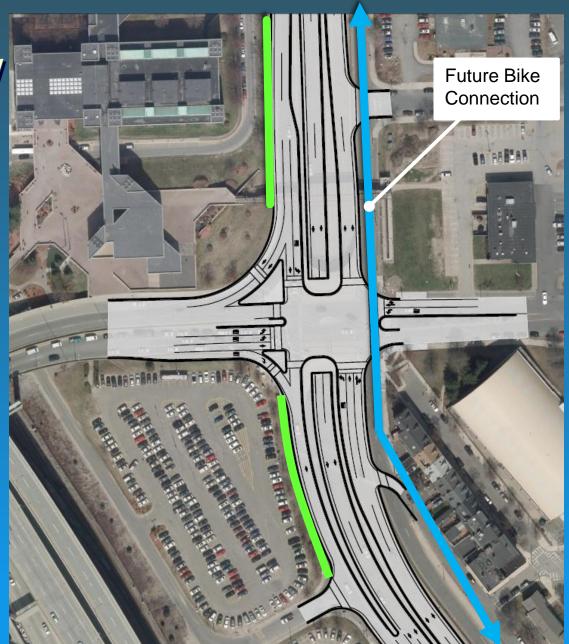




#### B. Underpass - SB Only

- Remove NB Underpass
- Open space gained ++
- Heavy SB traffic stays underneath
  - Higher Speeds SB along Rutherford
- Shorter Pedestrian crossings
- Future BRT lanes?
- More signal time allocated to Austin St and Pedestrians

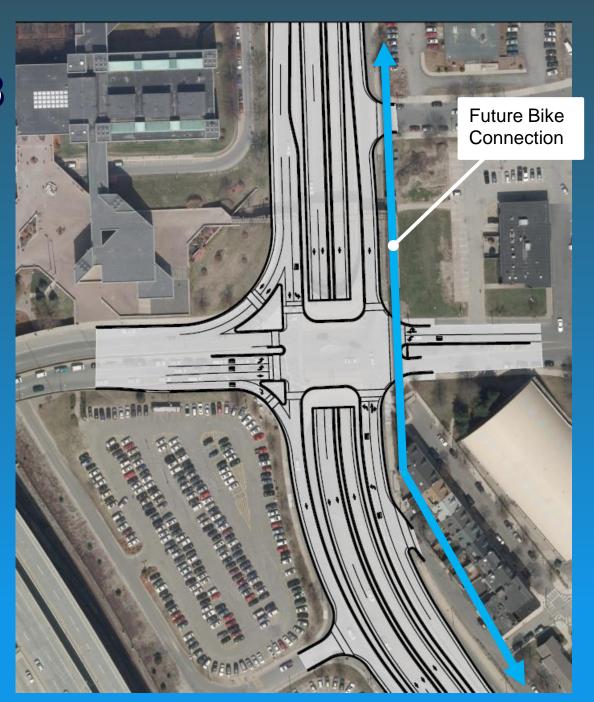




#### C. Underpass NB+SB

- Reduced Underpass
- Less Open space
- Shorter Pedestrian crossings
- Future BRT lanes?
- Potential for Reversible Lanes in Underpass for peak flow
- Higher Speeds along Rutherford
- More signal time allocated to Austin St and Pedestrians

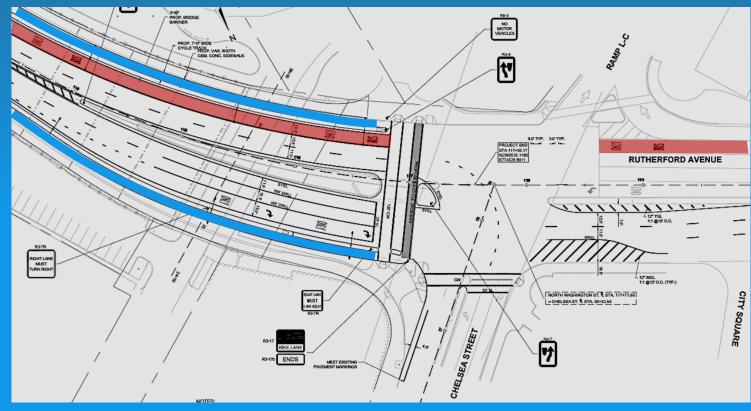




### City Square

- North Washington St Bridge
  - BRT Lane
  - Separated bike lanes
  - Protected Intersection





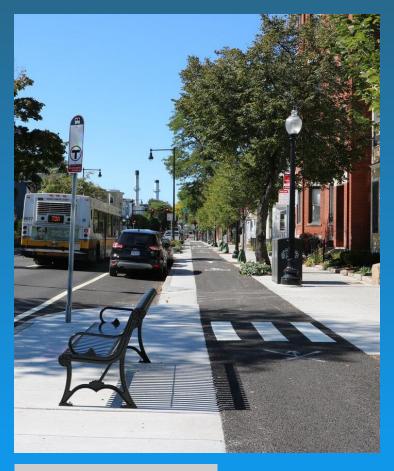


#### Separated bike lanes- examples



Source: Indyculturaltrail.org





Western Ave, Cambridge



### Separated bike lanesexamples



Seattle, WA Photo credit: Adam Coppola Photography

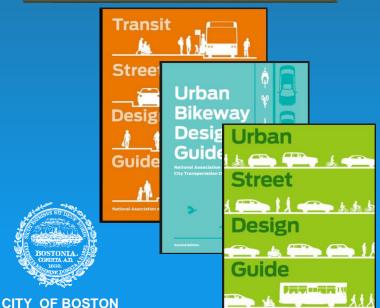


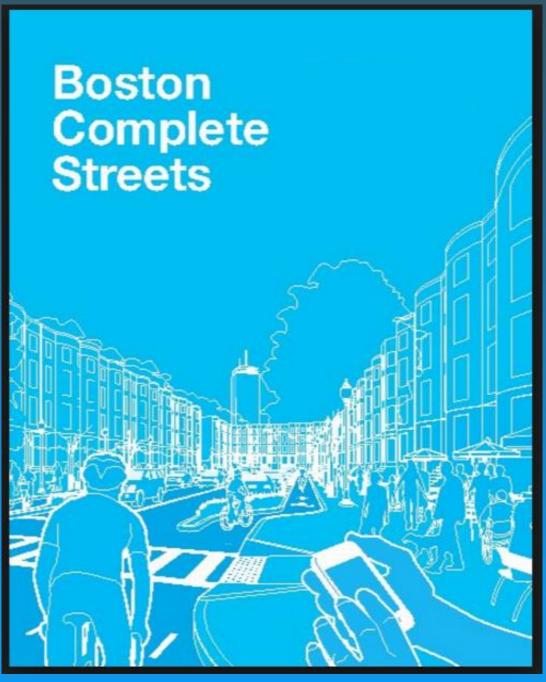




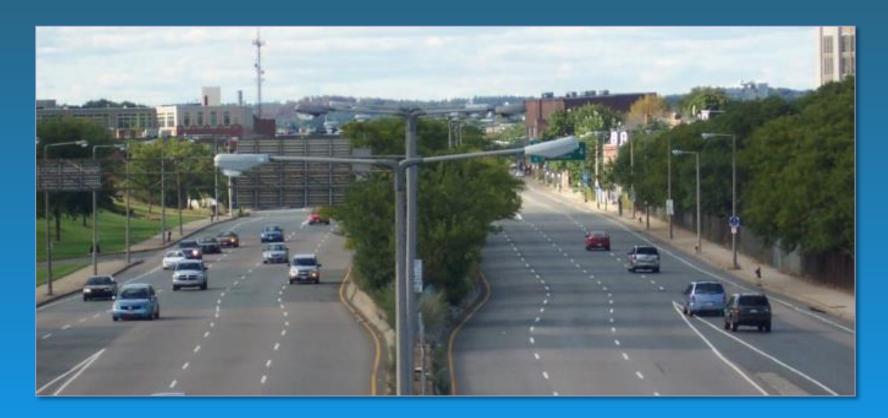
#### New Design Guides







#### Your continued involvement is appreciated!





For more Information, visit:

www.cityofboston.gov/transportation/rutherford/