



B

Summer Street Pilot Program

Public Meeting - April 19th, 2023

Mayor Michelle Wu

AGENDA

- Summer Street Pilot **context**
- What's the **background** of this program?
- What **challenges** are we trying to solve?
- What's are the **details** of this project's design?
- What will **evaluation** look like for this pilot program?
- Next Steps & Timeline



Summer Street Pilot Context

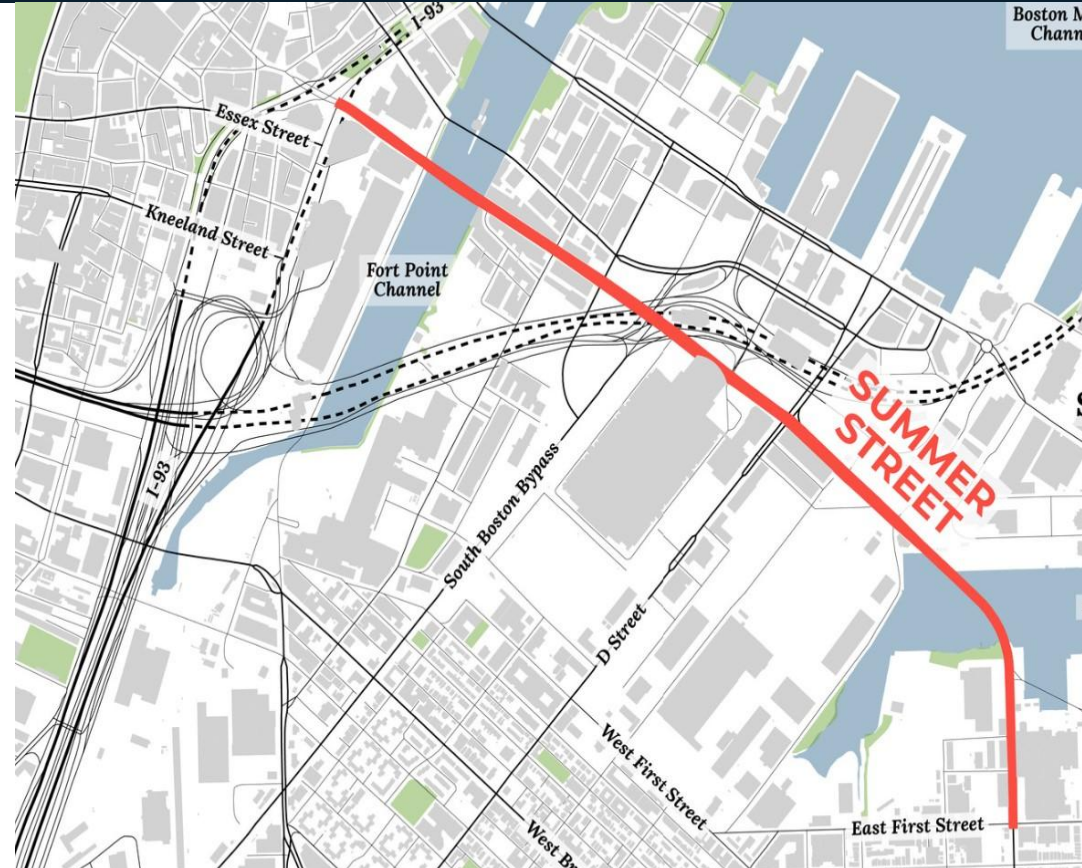
Summer Street Pilot Context

Pilot Goals

- **Improve Safety for Bikes and Pedestrians** with a focus on improved infrastructure
- **Enable Sustainable Mobility** with a focus on better conditions for buses and bikes
- **Accommodate Economic Activity** with improved Port access and mobility options for people who live and work here.

Summer Street Pilot Context

- New Bus/Truck Lanes from East 1st Street to South Station
- Enhancing Existing Bike Lanes
- Connecting Disconnected Bike Lane Segments
- Improving Street Safety



Summer Street Pilot Context

- Led by the **City of Boston Transportation Department**
 - In close collaboration with with other City agencies - BPDA, Public Works, Disabilities Commission
- **MassDOT**
 - Grant Awarded by Shared Streets Program and Coordination with Adaptive Signal Program
- **MBTA**
 - Design Review and Coordination on Bus Service
- **Agency Coordination**
 - MassPort
 - BCEC
 - Seaport TMA

MBTA Bus Network Redesign



- The City of Boston is working in close coordination with the MBTA's Bus Network Redesign process
- The MBTA is proposing a **high frequency** bus route along Summer Street



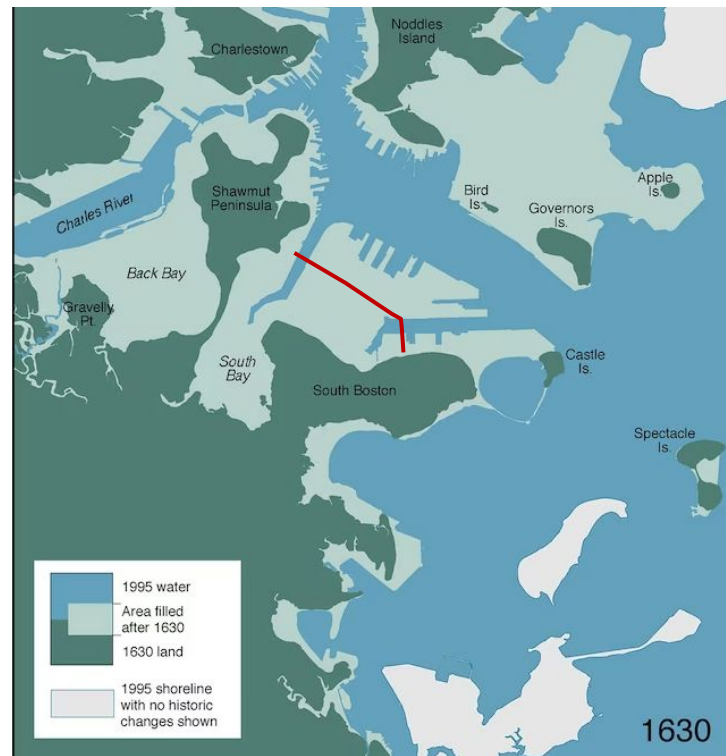
Background

Background

1630 to 1804

Today's South Boston was once a rural farming and fishing village on Boston Harbor

The area was very much a peninsula, connected to the mainland by a neck roughly where Andrew Square is today



Norman Leventhal Map Center

Background

1804 - South Boston becomes South Boston

South Boston annexed to the City of Boston

Mather Withington lays out South Boston's grid system - creating plan for streets from Foundry St to Q Street (now Farragut Road)



October 1804 Manuscript Plan for South Boston from the Massachusetts Historical Society

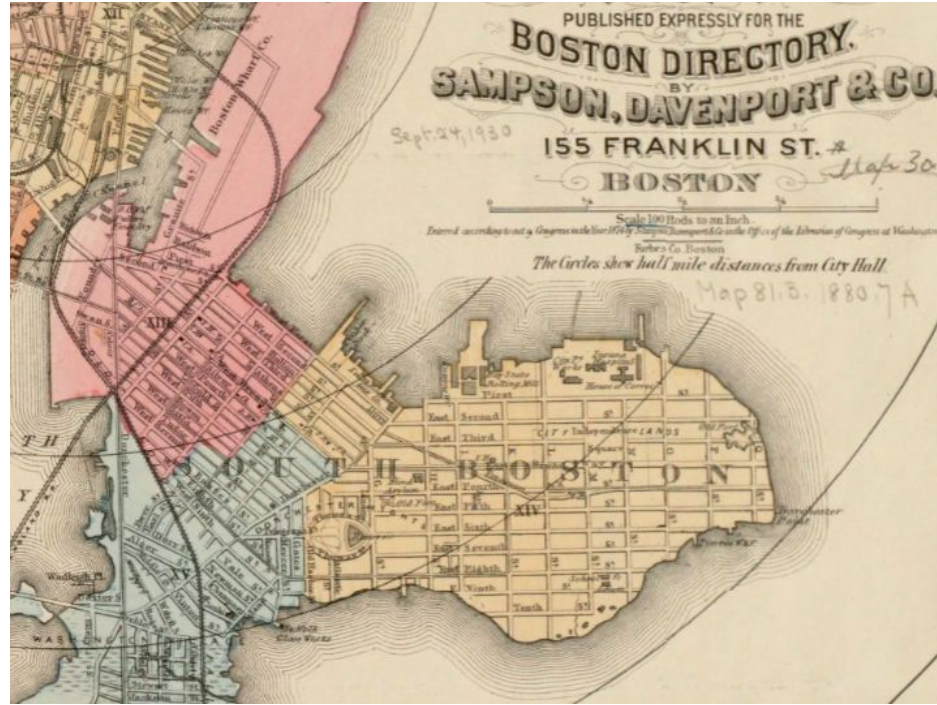
Background

1839

The Boston Wharf Company begins filling in the Fort Point Channel area.

Mid and Late 19th Century

South Boston develops into a dense urban neighborhood with trolley connections via Broadway



Boston Directory Map - Digital Commonwealth

Background

1866

State Commission maps out “Eastern Avenue” connecting Downtown to L Street

Eastern Ave would later become Congress and Summer Streets



Plan for a Reserved Channel - Digital Commonwealth

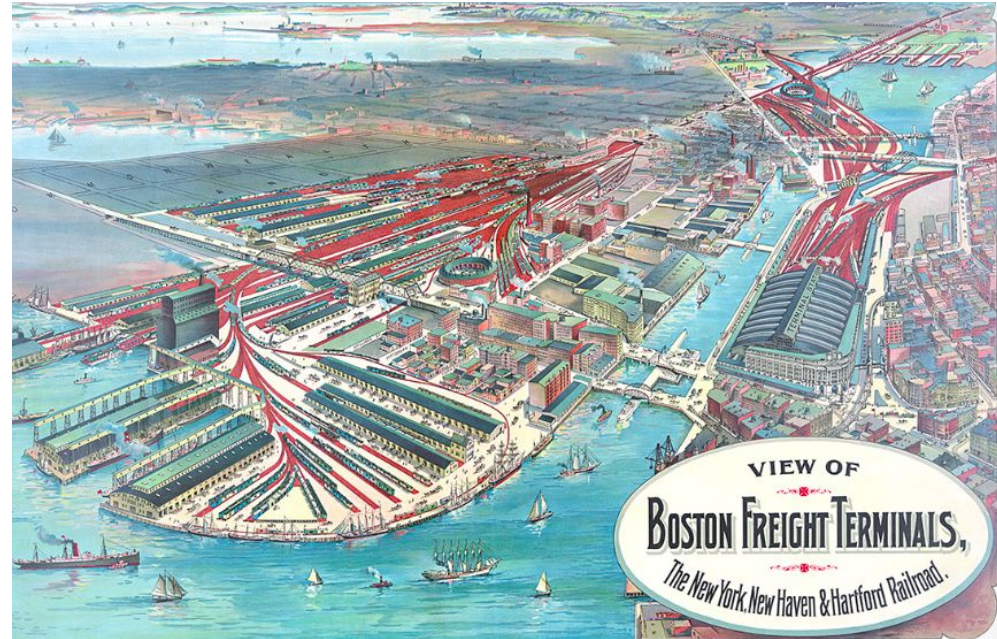
Background

1899

Summer Street Bridge over the Fort Point Channel completed.

Boston Elevated Railway begins streetcar service to Fort Point and Commonwealth Flats Port Area

Commonwealth Flats is filled and large port area constructed.



*1903 Boston Freight Terminals
Map*

Background

1915 to 1950

South Boston Waterfront is a regional employment center with robust transit service

Summer St becomes a spine for transit service from the Port and South Boston to Downtown Boston with 3 trolley routes



Boston Elevated Railway Map

Background

1915 to 1953

High capacity transit with equivalent technology to the modern MBTA Green Line

Provided direct service from South Boston/Waterfront to South Station and North Station

5

6

7



City Point Streetcar

Project Background

1950s - 1970s

After World War 2, urban expressway construction began in earnest and was accelerated by the 1956 Interstate Highway and Defense Act

Expressways had a devastating impact on urban neighborhoods and drove businesses and residents to the suburbs

Transit systems during this time were disinvested in and, in many cases, abandoned



Project Background

1950 - Boston reaches its population peak of over 800,000 residents

1953 - Trolley service replaced by buses on City Point routes - tracks ripped up or paved over

1974 - US Military closes South Boston base, leaving the land to the City

1980 - Boston's population bottoms out at 562,000 in the 1980 U.S. Census



Project Background

1980s

Planning for Big Dig and South Boston Waterfront redevelopment begins

Raymond L. Flynn Marine Park redeveloped and opened.



Project Background

1990s - Large Transportation Investment

Construction on major transportation projects in South Boston Waterfront:

- Ted Williams Tunnel / I-90 Extension
- South Boston Bypass Road
- Summer Street Viaduct
- Silver Line Tunnel
- Evelyn Moakley Bridge / Seaport Blvd

Most of these opened in the late 90s or early 2000s



Project Background

1990s to Present - Substantial Growth in South Boston Waterfront

Construction of Major Public Buildings:

- Moakley Courthouse
- Boston Convention & Exhibition Center
- Institute of Contemporary Art

Construction of Residential, Office, Retail, Lab, and Industrial at a faster pace than anticipated



Challenges



Challenges

- Challenges Today
- Challenges in the Future



Challenges

How did we identify challenges?

- Review of Past Plans, Policies, and Programs
- Review of Available Data
- Community Engagement
- Stakeholder Discussions



Challenges

What's wrong with Summer Street today?

- Street is not comfortable for cyclists and pedestrians in many locations
- Traffic speeds can reach nearly 50 MPH in some segments and 1 in 10 cars are exceeding 40 MPH
- Congestion in key locations delays transit and Port of Boston traffic



Challenges

What's wrong with Summer Street today?

- Trips between South Boston and Downtown are time consuming for short distances
- Buses get stuck in traffic and backups along Summer Street
- The Silver Line and Route 7 operate at unacceptable levels of crowding during peak periods which delays service and causes reliability issues.



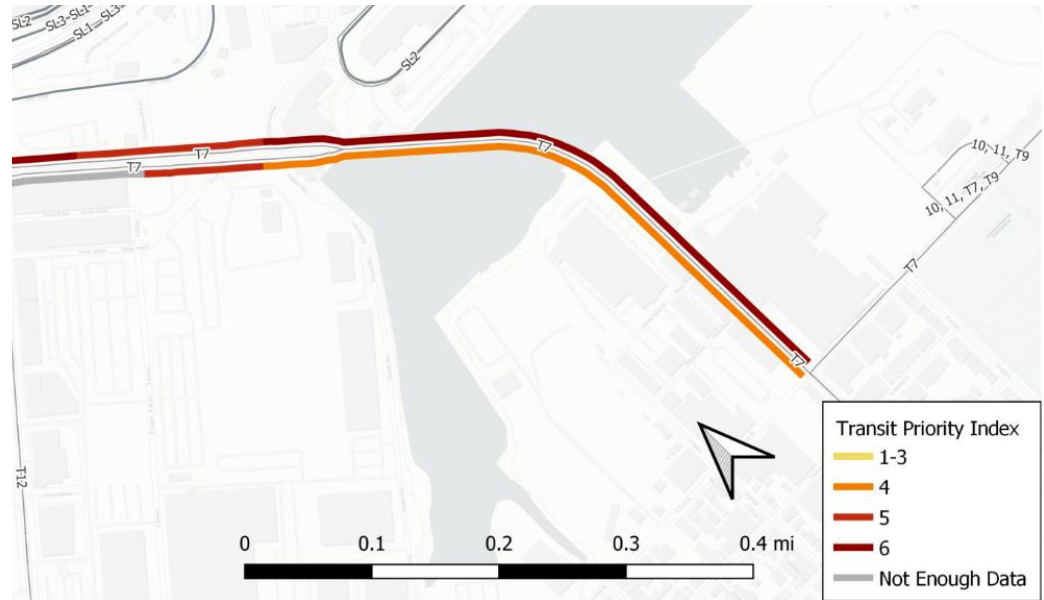
Challenges

Summer Street from East 1st to D Streets

One of the worst congested bus segments in the Boston region according to MBTA data:

- Level 5: Poor level of service operating substantially in congested traffic
- Level 6: Poor passenger experience that travelers may consider walking to be preferable

Daily, there are 103 passenger hours wasted in congestion on this stretch of Summer Street.

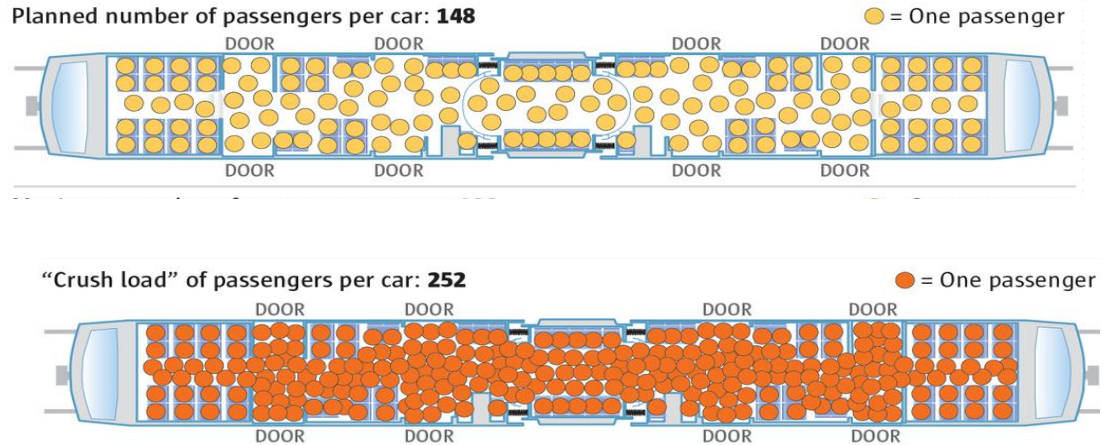


Challenges

What's wrong with Summer Street today?

Route 7 Bus Crowding

- 116% of AM Peak Trips will be at planned capacity
- 83% of AM Trips will be at crush capacity



**Data from MBTA and Howard Stein Hudson analysis*

Challenges

Bus Rider Testimonials

“There is **consistently a line of 50-plus people** waiting for the bus and **not everyone can get on the bus each time.**”

- South Boston resident commuting to Downtown

“[The 7 bus] is constantly overwhelmed and **puts the bus drivers and patrons in dangerous positions** and we are crammed into the bus.

- South Boston resident commuting to Downtown

“Sometimes the bus is too full... this makes me Uber frequently **which is bad for me personally financially and environmentally seems bad too.**”

- South Boston resident commuting to Financial District

“**THE BUS IS THE ONLY TRANSPORT IN THE EAST SIDE OF SOUTHIE.** We really need this to run better because **we are about a 40 minute walk at least to any T stop.**”

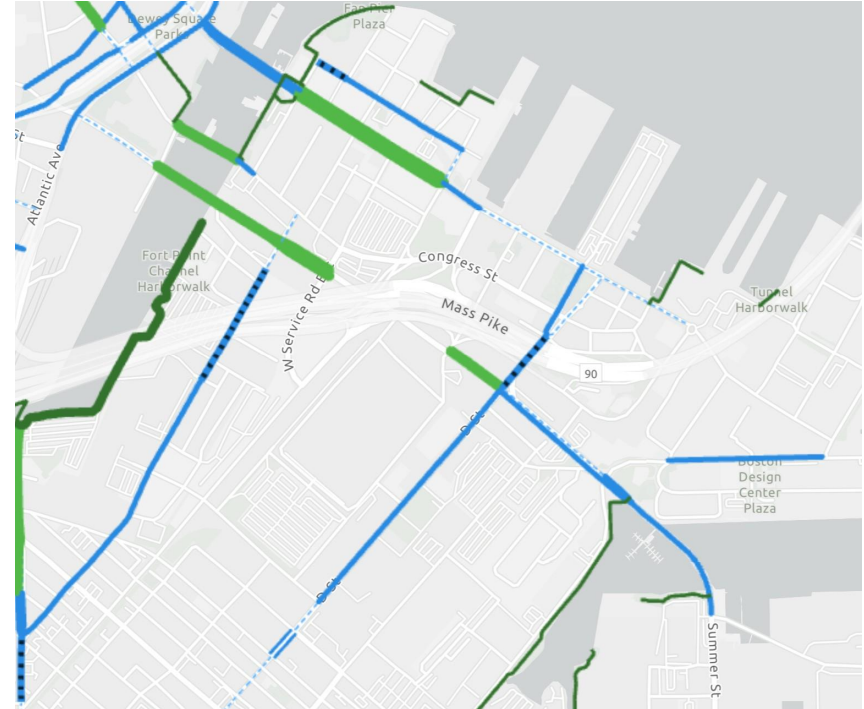
- South Boston resident commuting to South Boston Waterfront

Challenges

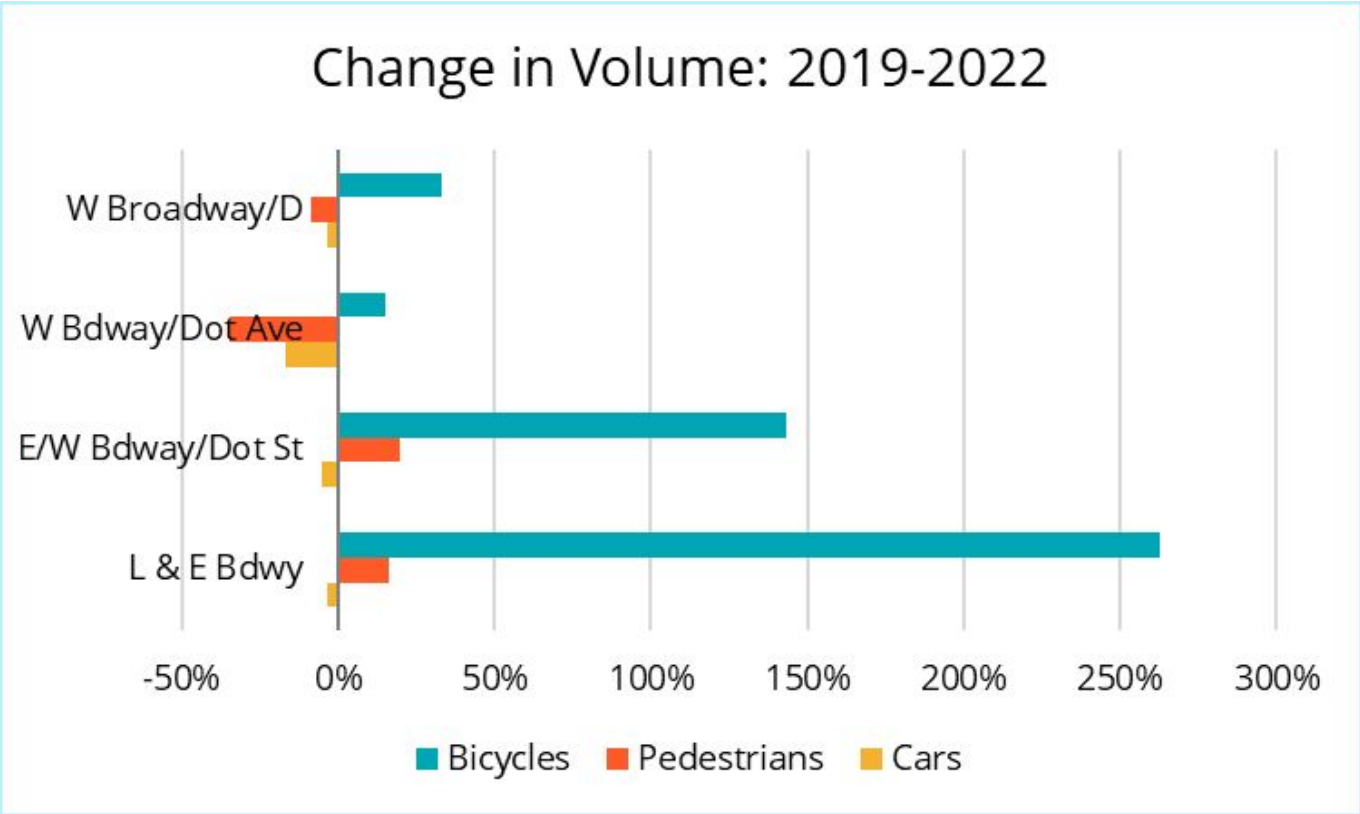
What's wrong with Summer Street today?

Bike routes are not comfortable for most riders - it's difficult for many riders to reach key Downtown and South Boston Destinations

Riders are often left stranded in dangerous situations on the road



Challenges

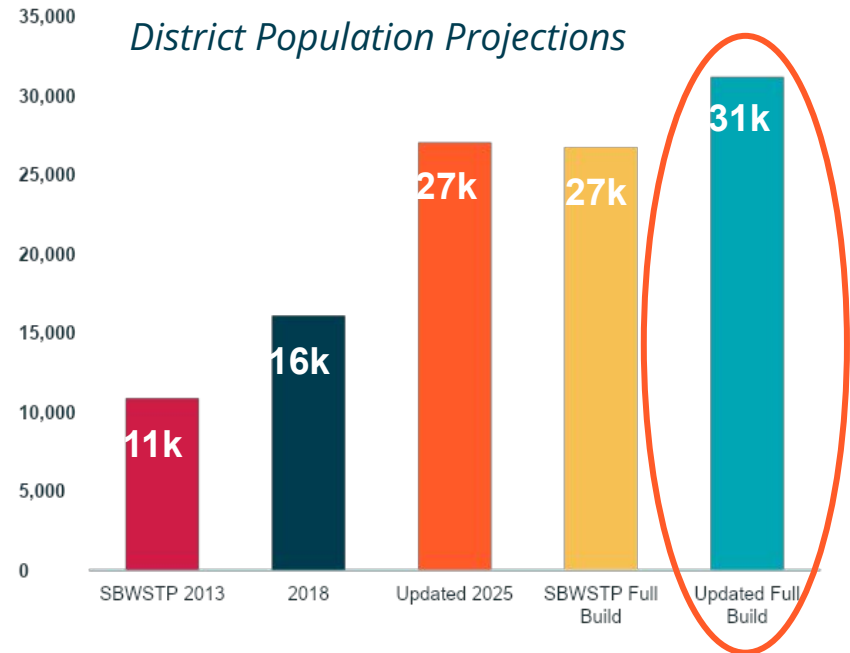


Challenges

The Future

By 2030, the South Boston Waterfront will have roughly 31,000 residents. This is significantly ahead of projections from past planning work.

This population size is equivalent to Hyde Park and larger than Allston, Roslindale, Back Bay, or Mattapan.

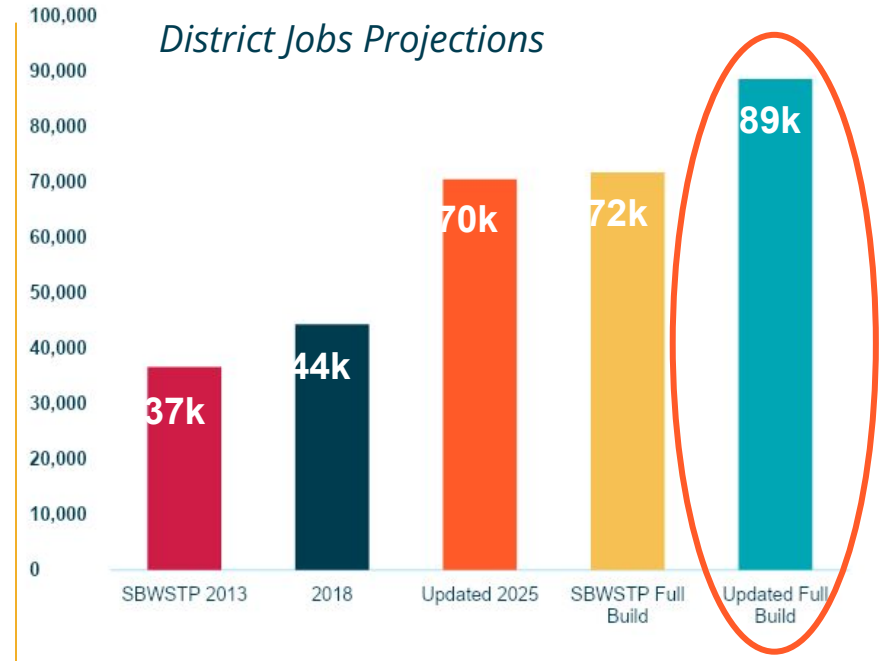


Challenges

The Future

By 2030, the South Boston Waterfront will have roughly 89,000 jobs, becoming Boston's second largest employment hub after Downtown Boston and ahead of the Back Bay.

For comparison, Downtown has 178K jobs and Back Bay has 52K jobs.



Challenges

The Future



Guided by Go Boston, the goal is to increase commuting to work by transit by a third and reduce drive-alone rates by half.

...and today...

Morning Commute Mode Share to the Seaport / South Boston Waterfront (2018)

Drive - 54% Transit - 41%



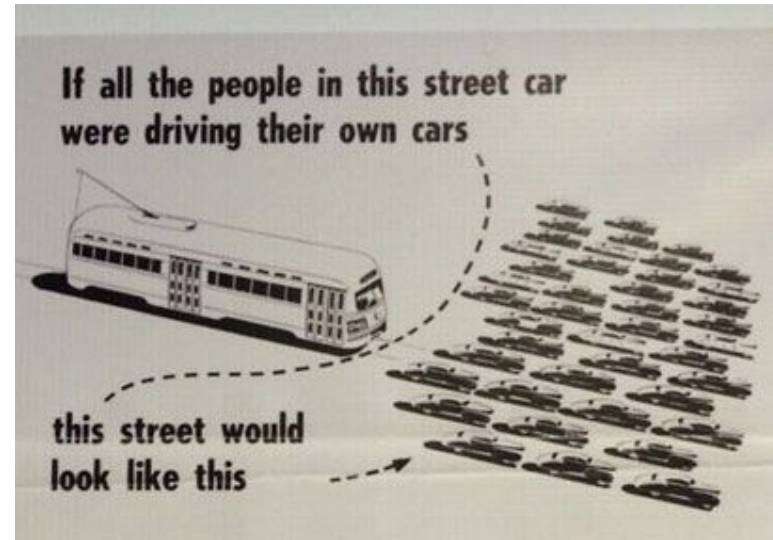
18,200 Total Trips

Increase Transit to 55%

Challenges

Existing transportation infrastructure will not handle future demand caused by population and job growth if we do nothing.

Approaching transportation with a “business as usual” approach will negatively impact residents, employment competitiveness, and the functionality of the Port of Boston as traffic increases over the coming years. This traffic will also spill over into surrounding neighborhoods as commuters seek alternative routes.

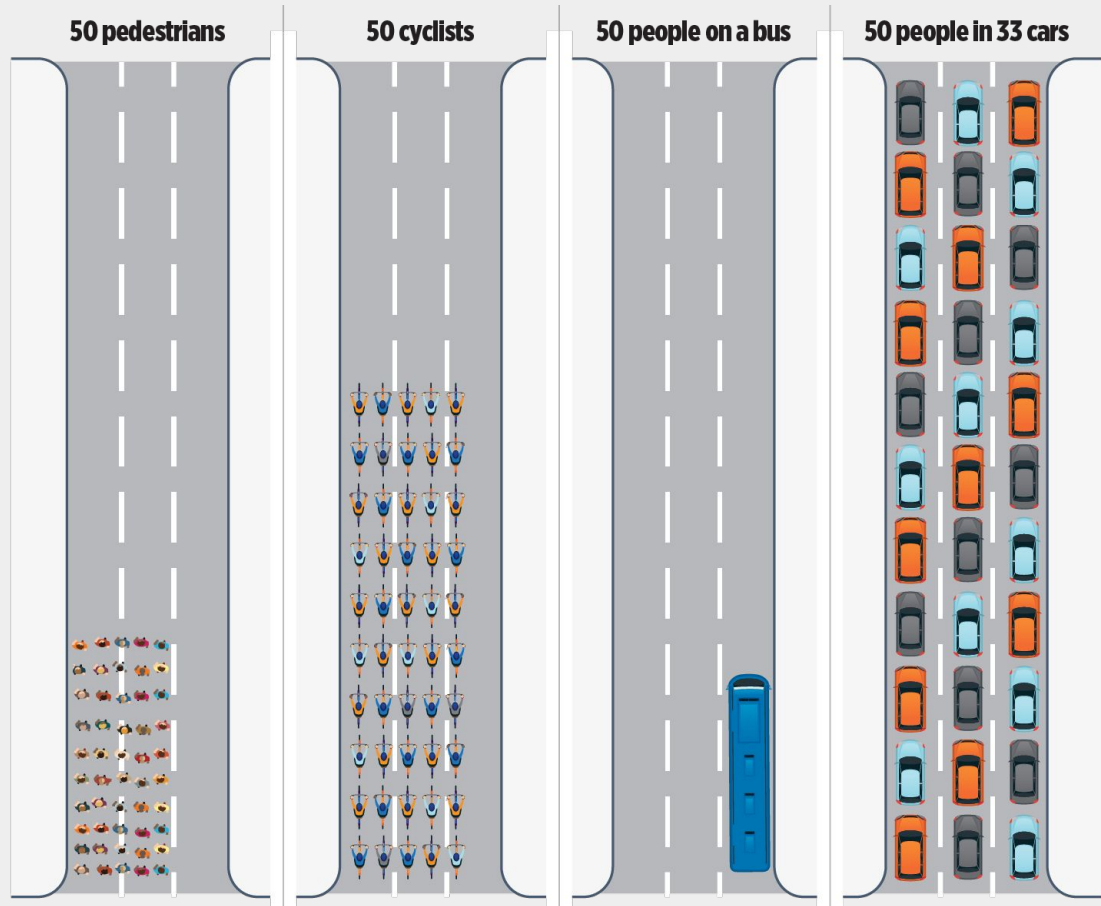


1940s-era transit poster

Why a Focus on Transit?

We only have so much available space on our roads - and transit, biking, and walking use this space more efficiently than cars.

This graphic compares how much roadway space 50 people take up as pedestrians, cyclists, on a bus, and in cars.



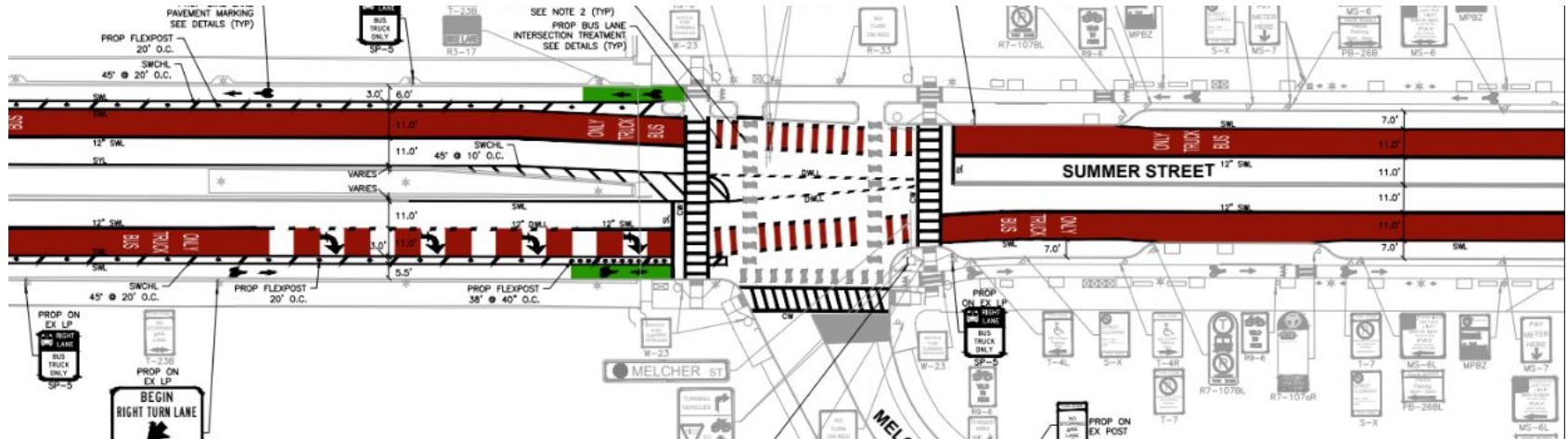


Pilot Program

Pilot Program

How did we get here?

What are the details of the pilot?



Pilot Program

How did we get here?

South Boston Waterfront Sustainable Transportation Plan

- In 2016, this plan recommended an evaluation of South Boston Waterfront Arterials for better multimodal transportation - notably Summer Street

Go Boston 2030

- In 2017, this plan recommended protected bike lanes on Summer Street

South Boston Seaport Strategic Transit Plan

- Preliminary recommendations call for Summer Street transit improvements; the first of these recommendations were issued in 2019

South Boston Transportation Action Plan

- Close coordination with SBTAP team

Pilot Program

How did we get here?

Neighborhood Advocacy

- Southie Bikes for bike lanes on Summer St
- Fort Point Neighborhood Association for safer streets in the community

Elected Officials

- Officials suggested to City leadership a bus lane pilot to understand the potential impacts before moving forward with permanent implementation

Agency Coordination

- Discussions with partner agencies on pilot specifics - length, technology, and equipment

Pilot Program

How did we get here?

Community Office Hours

- 8 in-person and 8 Zoom office hours in January, February, March, and April

Stakeholder Meetings

- Coordination with MassPort, BCEC, MassDOT, MBTA, Seaport TMA
- Abutter Discussions about Design Issues

Civic Association Meetings

- Presented at Fort Point Neighborhood Association and Southie Bikes
- Scheduled to Present at City Point Neighborhood Association

Community Meetings

Three Community Meetings

Bus Rider Surveys

- Engaged with Bus Riders in South Boston and Downtown

Pilot Program

Why trucks too?

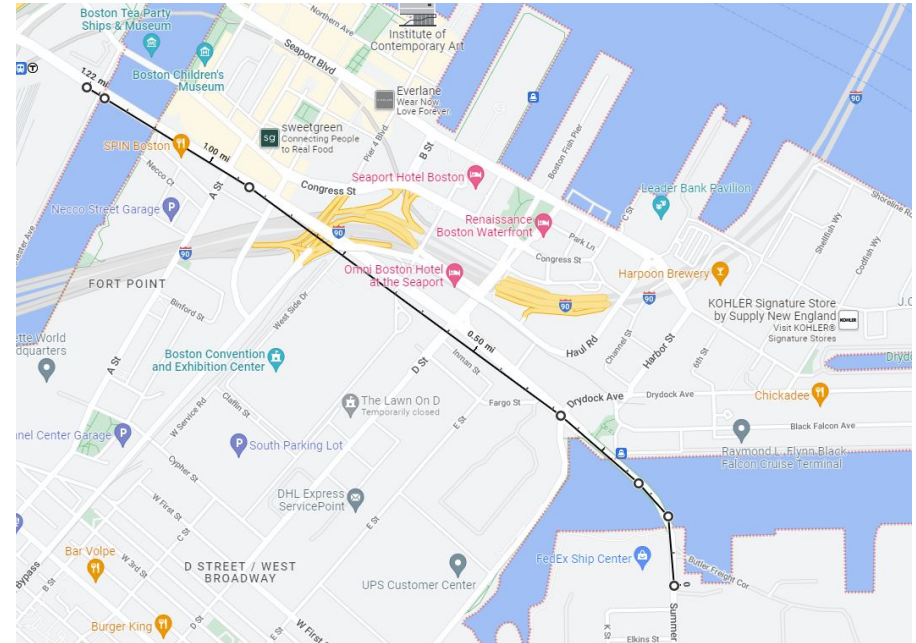
- Transit and trucks share a unique economic space and need for on-time travel
- The Port of Boston is a vital economic engine for the entire state. There are 675 truck movements on Summer Street daily, connecting the port to the region
- Bus Truck Lanes used effectively in New York City

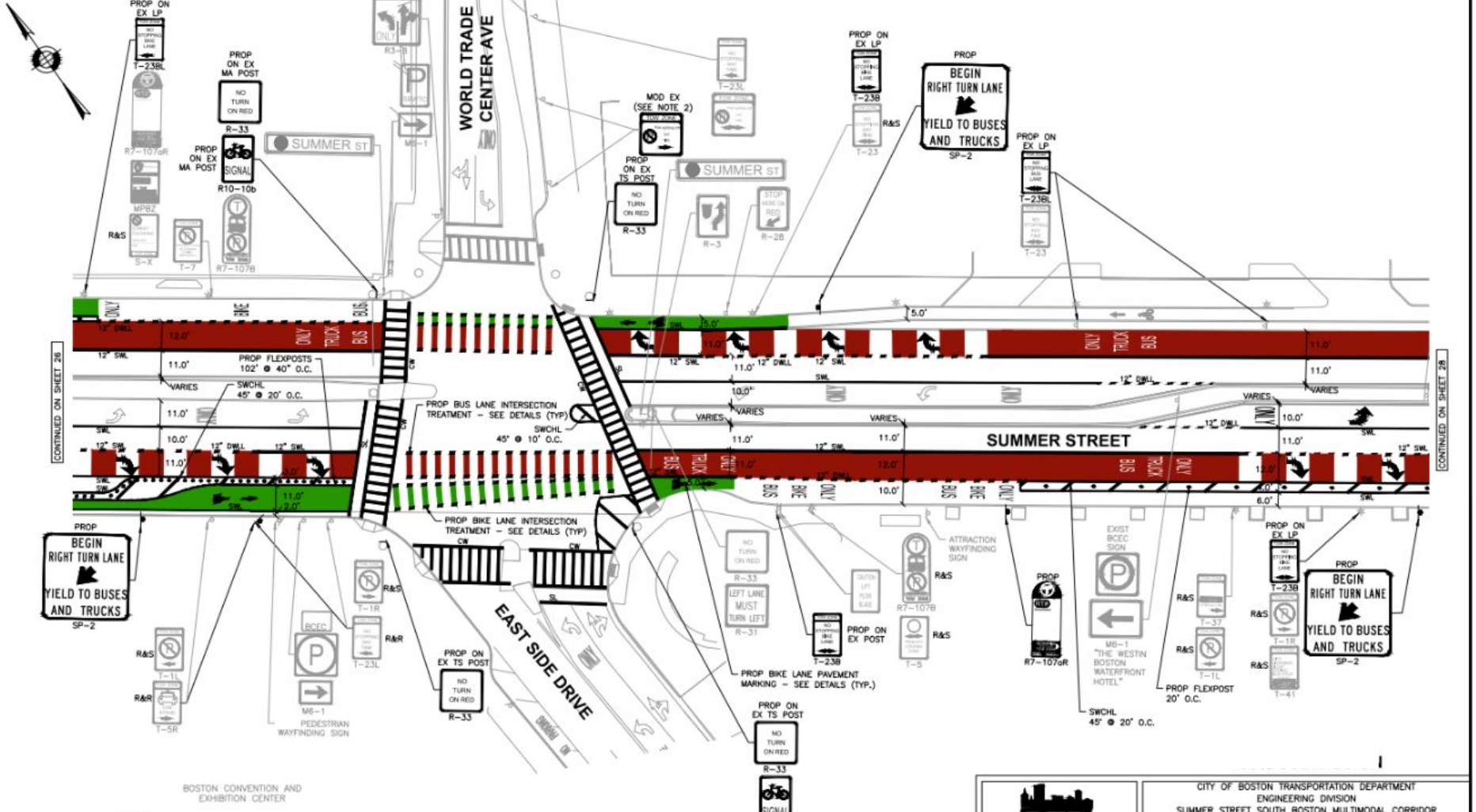


Pilot Program

What is the pilot?

- **Our Focus will be a 6 Month Painted Bus / Truck Lane Pilot**
- **We will also look to Improve Safety on Summer Street with**
 - Improve Existing Bike Lanes
 - Fill Gaps Between Existing Bike Lanes Segments
 - Improve Pedestrian Crossings





CONTINUED ON SHEET 2B

CONTINUED ON SHEET 2B

BOSTON CONVENTION AND EXHIBITION CENTER

NOTE:

1) ALL EXISTING SIGNS SHALL BE RETAINED UNLESS OTHERWISE NOTED.



CITY OF BOSTON TRANSPORTATION DEPARTMENT
 ENGINEERING DIVISION
 SUMMER STREET SOUTH BOSTON MULTIMODAL CORRIDOR
PAVEMENT MARKING & SIGNAGE PLAN
 SUMMER STREET

Summer Street Pilot - Materials

Durable but Easily Changeable Materials for Pilot

- Painted Lanes & Pavement Markings
- Signage
- Flex Posts
- Minor Changes to Traffic Lights



Summer Street Pilot - Design Comparison

Massachusetts Ave (North) in Cambridge

- *Painted Lanes & Pavement Markings*
- *Signage*
- *Flex Posts*
- *Minor Changes to Traffic Lights*
- *Utilizes Existing Bus Stop Locations*

BTD is Coordinating with City of Cambridge on design and evaluation approach.



Summer Street Pilot - Design Comparison





Evaluation



Evaluation Approach

Evaluation Approach

- **Community Feedback**
 - Comments, Questions, and Data
- **Bus**
 - Service Quality
 - Ridership
 - Bus Speed
 - Bus Reliability
- **Freight**
 - Traffic
 - MassPort & Freight Operator Feedback

Example - Roslindale Bus Lane Pilot



Evaluation Approach

Evaluation Approach

- **Bicycle**
 - Average Weekday Bike Counts
 - BlueBike Usage in South Boston (including Waterfront)
- **General Purpose Traffic**
 - Average weekday auto counts, speeds, and trip times
- **Safety**
 - Lane Violation Counts
 - Reported Issues
 - Block the Box Violations
- **Business / Stakeholder Feedback**
 - BCEC and other nearby businesses

Evaluation Approach

Evaluation Approach

- Similar stylistically and in approach to NYC DOT's evaluation for 14th Street Bus/Truck Lanes
- Utilizing Nelson / Nygaard & McMahon Consultants to support on the project evaluation

HIGHLIGHTS/RESULTS

14TH STREET TRANSIT & TRUCK PRIORITY PILOT PROJECT
QUARTERLY REPORT | WINTER 2020



BUS OPERATIONS¹

WEEKDAY AVERAGE TRAVEL TIME



24% improvement in travel times

2.9 minutes faster

Combined for both directions:
3rd Avenue to 8th Avenue from
January 2018 to January 2020

WEEKDAY RIDERSHIP



14% Increase in bus ridership from January 2018 to January 2020, up to 29,568.

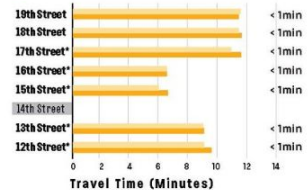
3,526 riders



VEHICLE TRAVEL TIMES²

WEEKDAY PM (5-6PM)

PRE-IMPLEMENTATION (October 2018/May 2019)
POST-IMPLEMENTATION (January 2020)



*OCTOBER 2018 DATA NOT AVAILABLE. MAY 2019 USED FOR PRE-IMPLEMENTATION DATA.



VEHICLE VOLUMES⁴

WEEKDAY PM (5-6PM)

PRE-IMPLEMENTATION (May/June 2018 and June 2019)
POST-IMPLEMENTATION (January/February 2020)



* BETWEEN 7TH AVE & 8TH AVE
* BETWEEN 5TH AVE & UNIVERSITY PL



CITI BIKE VOLUMES³

MONTHLY BIKE RIDERSHIP



94% Increase in Citi Bike ridership in the project area from January 2018 to January 2020, up to 185,265.

89,686 riders



SAFETY⁵

CRASHES



42%

decrease in crashes with injuries between October 2017-January 2018 and October 2019-January 2020

PEDESTRIAN INJURIES **3**

Oct '17-Jan '18	24	🚶🚶🚶🚶🚶🚶🚶🚶
Oct '18-Jan '19	27	🚶🚶🚶🚶🚶🚶🚶🚶
Oct '19-Jan '20	14	🚶🚶🚶🚶

DATA SOURCES/NOTES



Timeline



Timeline

Engagement

- April/May - Public Meetings, Office Hours

Implementation

- June - Implementation
- Summer/Fall - Evaluation during Pilot

Evaluate Pilot for the Future

- Fall/Winter - Determine Next Steps



Thank You!



looking forward your questions and
feedback

matthew.moran@boston.gov



Project
Website



Appendix



Huntington Ave Bus Lane

BTD recently completed a bus-bike lane project on Huntington Ave from Gainsborough St in Fenway/Kenmore to Tremont St in Mission Hill.



The Huntington Avenue bus/bike lanes **save bus riders 125 hours** every work week



Route 39 and CT2 riders are **saving up to 2 minutes per trip** during peak period traffic



Automobile trips on this stretch of Huntington Ave are **increasing by less than 45 seconds per trip**



Emergency vehicles are always allowed in bus lanes, taking them out of general traffic and into a clear, dedicated space



The installation of the bus/bike lanes has coincided with slightly **lower vehicle speeds**, providing **safer conditions for all road users**

Pilot Program

Bus Rider Surveying

In March and April, BTD staff surveyed Route 7 riders at the following stops, collecting **100 responses**:

- Franklin St @ Devonshire St
- Otis St @ Summer St
- Summer St @ Atlantic Ave
- Summer St @ E 1st St
- L St @ Broadway
- E Broadway @ N St



Pilot Program

Bus Rider Testimonials

“There is **consistently a line of 50-plus people** waiting for the bus and **not everyone can get on the bus each time.**”

- South Boston resident commuting to Downtown

“[The 7 bus] is constantly overwhelmed and **puts the bus drivers and patrons in dangerous positions** and we are crammed into the bus.

- South Boston resident commuting to Downtown

“Sometimes the bus is too full... this makes me Uber frequently **which is bad for me personally financially and environmentally seems bad too.**”

- South Boston resident commuting to Financial District

“**THE BUS IS THE ONLY TRANSPORT IN THE EAST SIDE OF SOUTHIE.** We really need this to run better because **we are about a 40 minute walk at least to any T stop.**”

- South Boston resident commuting to South Boston Waterfront

Other Transportation Planning Efforts

North Station to Seaport Multimodal Corridor

- Concept Planning

South Boston Transportation Action Plan

- Kick-Off Spring 2022
- Focus on core residential neighborhood

PLAN South Boston
Dorchester Avenue (2016)

- August 2021 Completed Transportation Plan

