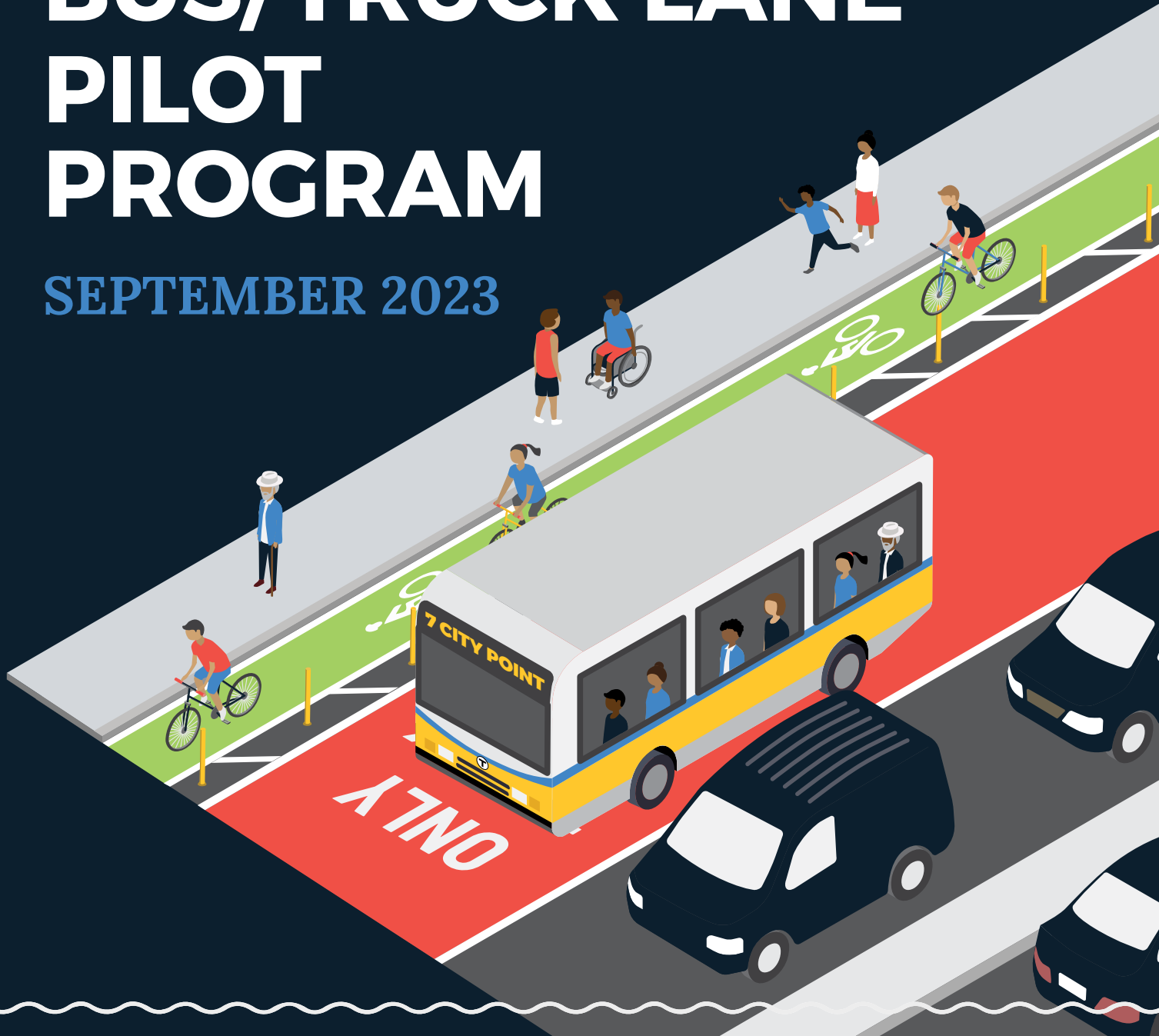


SUMMER STREET BUS/TRUCK LANE PILOT PROGRAM

SEPTEMBER 2023



City of Boston
Transportation

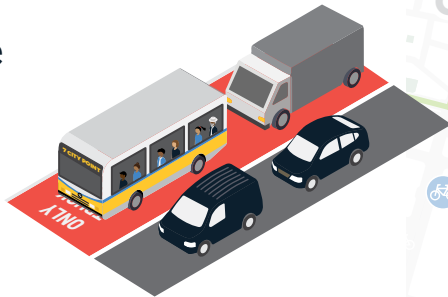
WHAT IS THIS PROJECT?

Boston Transportation Department (BTD) and Massachusetts Bay Transportation Authority (MBTA) are launching a six-month pilot bus/truck lane program to improve traveling experience for all on Summer Street between South Station to East First Street in South Boston.

SUMMER STREET IMPROVEMENTS INCLUDE:

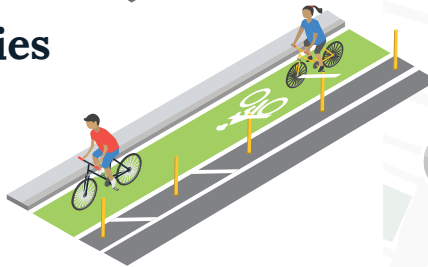
1 Pilot bus/truck lane

to improve the reliability of bus service. Trucks will also be permitted to use the bus lane to accommodate heavy truck traffic from Massport.



2 Protected bike facilities

for low-stress and safe connections between South Boston and Downtown Boston. New connections will be made between existing infrastructure.






3 Improved pedestrian experience




through better traffic management and enhanced neighborhood walkability.





These lanes will be permanently implemented if they are found to be successful during the pilot period in 2023 and 2024.

Summer Street Bus/Truck Pilot Program

-  MBTA Bus - Route 7
-  MBTA Bus - Route 4
-  Bicycle Infrastructure

-  MBTA Subway
-  MBTA Silver Line
-  Bluebike Station

-  MBTA Station
-  MBTA Bus Stop



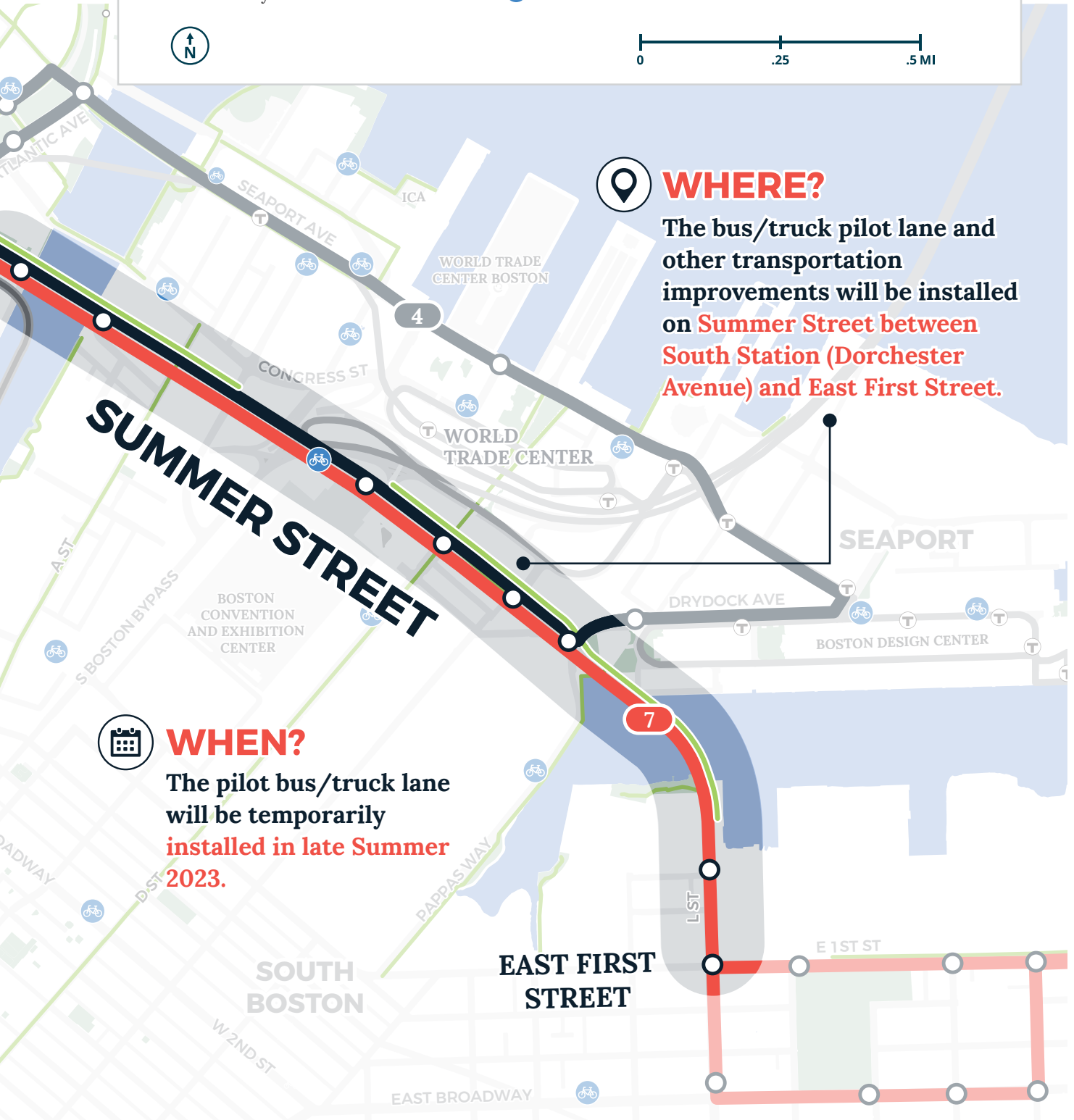
WHERE?

The bus/truck pilot lane and other transportation improvements will be installed on **Summer Street between South Station (Dorchester Avenue) and East First Street.**



WHEN?

The pilot bus/truck lane will be temporarily installed in **late Summer 2023.**



WHAT DOES THIS MEAN FOR YOU?

More than 2,100 people ride the MBTA 7 on an average weekday including over 700 during the peak hour in the morning to head to work. The bus/truck pilot and other bike and pedestrian improvements will make this corridor more safe, reliable, and efficient for all.

REDUCE TRANSIT DELAY AND IMPROVE RELIABILITY

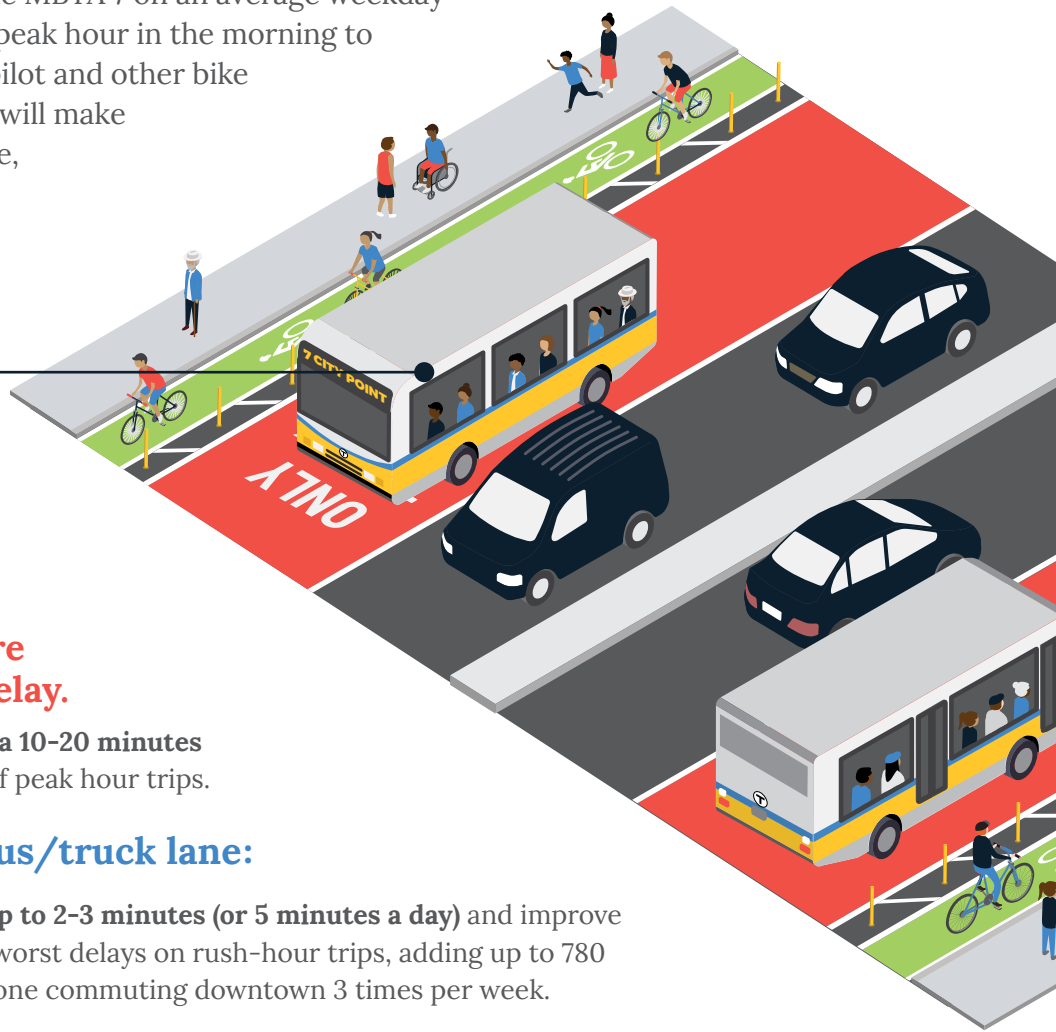
TODAY, Route 7 buses are crowded and prone to delay.

A rush-hour trip can take an **extra 10-20 minutes** and buses stay on schedule 71% of peak hour trips.

What we expect with bus/truck lane:



The pilot lane could **save up to 2-3 minutes (or 5 minutes a day)** and improve reliability by reducing the worst delays on rush-hour trips, adding up to 780 minutes per year for someone commuting downtown 3 times per week.



HOW HAS THIS WORKED IN OTHER AREAS OF THE CITY?

Bus/bike lane on BRIGHTON AVE resulted in:

↑ 15% increase in bus ridership

↑ 5% increase of bus passengers during morning peak times

↓ 13% decrease in traffic volumes

↑ 8% increase of bus passengers during evening peak times



MOVE PEOPLE & GOODS EFFICIENTLY

TODAY, many travelers are bogged down by local congestion.

Buses face an average of **over 2 minutes of delay** on the 1.5-mile corridor, increasing travel times by over 50%. During the worst periods of congestion, riders face **3-4 minutes of delay** on Summer Street.

What we expect with bus/truck lane:



Summer Street could move about **14,200 people per hour on the roadway**, better serving nearly 15% of roadway users at peak hours. Emergency vehicles will also be able to use the pilot lane, enabling quicker access for fire, EMS, and police with reduced response times.



CREATE SAFER STREETS

TODAY, bicyclists do not have consistent bike connection along Summer Street and pedestrians do not feel safe.

In the last five years, there were **37 reported crashes involving bicyclists or pedestrians** along Summer Street, accounting for 41% of the 90 total reported crashes.

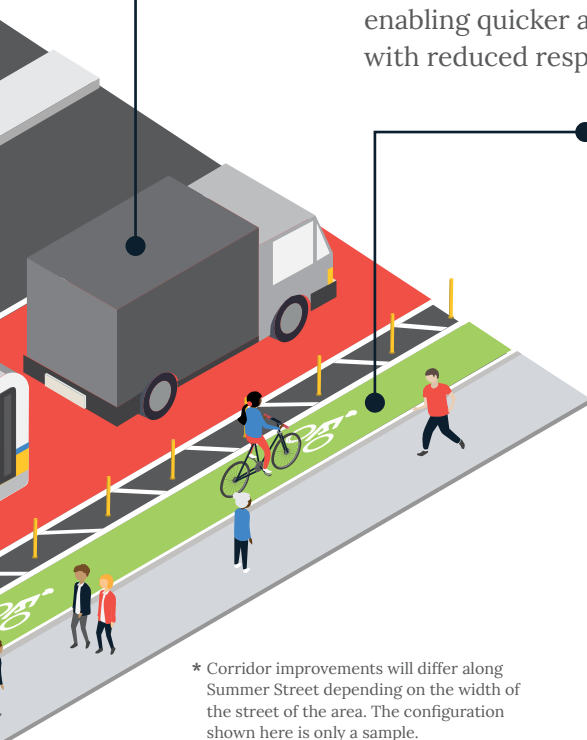
What we expect with street improvements:



The protected bike facilities will allow for a more direct and lower stress bike route between South Boston and Downtown through the Seaport.



For pedestrians, improved traffic management will mean a safer experience walking along Summer Street.



* Corridor improvements will differ along Summer Street depending on the width of the street of the area. The configuration shown here is only a sample.

Bus/bike lane on N. WASHINGTON ST resulted in:

20-25% reduction in travel time during peak congestion (7:30 AM to 8:30 AM), **saving bus riders at least an hour each week** on the AM bus

89% of bicyclists reported feeling safer in the shared bus/bike lane **94%** supported a permanent bus/bike lane



HOW WILL THIS PILOT BE EVALUATED?

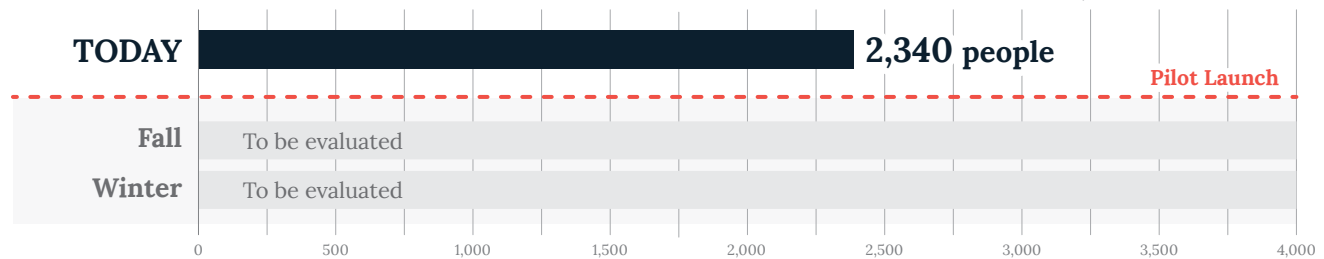
BTD and MBTA will monitor the performance of the Summer Street Bus/Truck Lane Pilot for six months from its launch. We will evaluate before and after changes in bus, truck, auto, and bicycle activity. In addition, community and business feedback will be collected through a variety of methods such as public surveys.

Data will be collected mid-way through the project lifespan in the Fall and again in mid-Winter. We will compare the results of the Fall and Winter to today's conditions (shown on these pages) to determine the pilot's effectiveness. A final Pilot Evaluation Report will be released at the end of the pilot.

MBTA BUS PERFORMANCE

RIDERSHIP

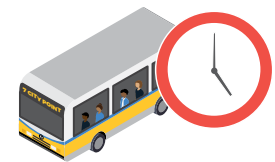
Weekday Average of MBTA Route 7 and 4 During Peak Hours



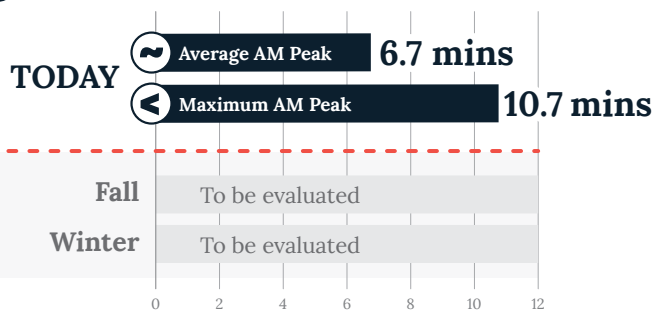
Bus ridership decreased by 53% between Summer 2019 and Summer 2022, due to the COVID-19 pandemic. The highest ridership bus stop in the project area is Summer Street at South Station.

BUS TRAVEL TIME

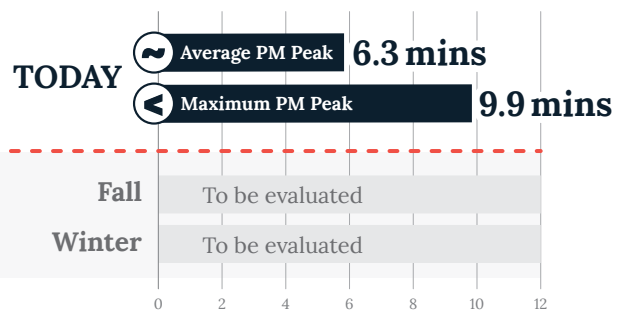
Weekday Average of MBTA Route 7 During Peak Hours



AM INBOUND



PM OUTBOUND

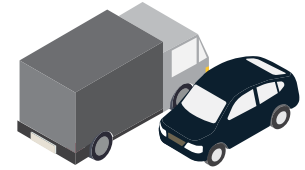


During peak hours, bus riders typically wait an extra 2-3 minutes and up to 3.9 minutes during the worst times of delay. More than one in four trips on Route 7 are late during peak periods.

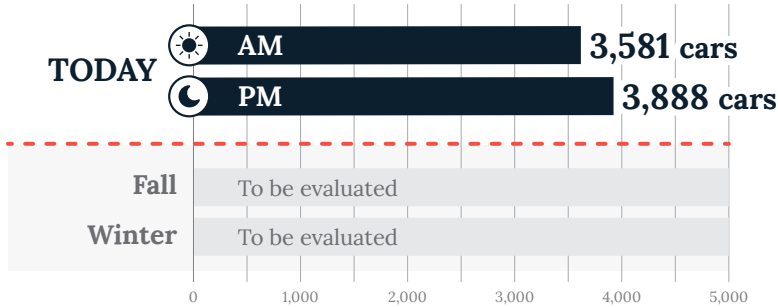
VEHICLE ACTIVITY

VOLUME

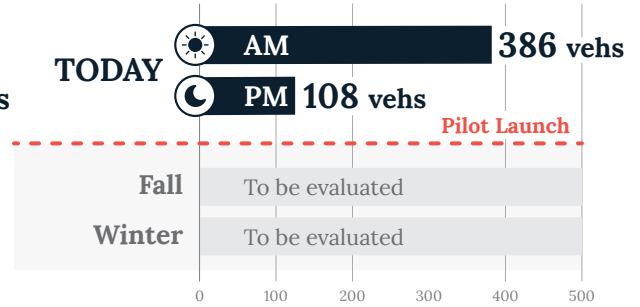
Weekday Average During Peak Hours



CARS



TRUCKS AND BUSES

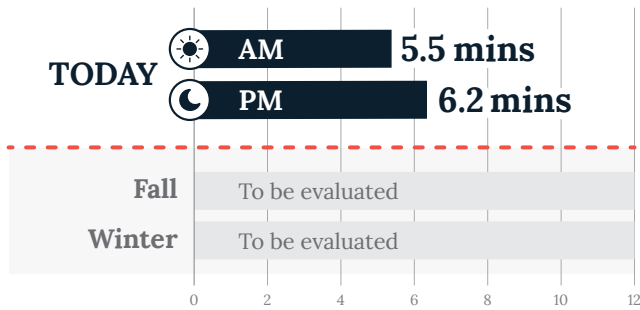


VEHICLE TRAVEL TIME

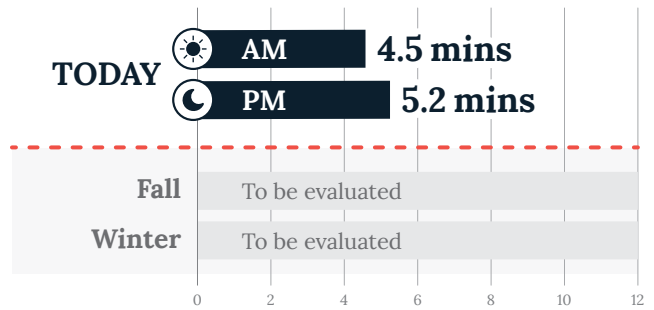
Weekday Average During Peak Hours, between Dorchester Avenue and East 1st Street



INBOUND

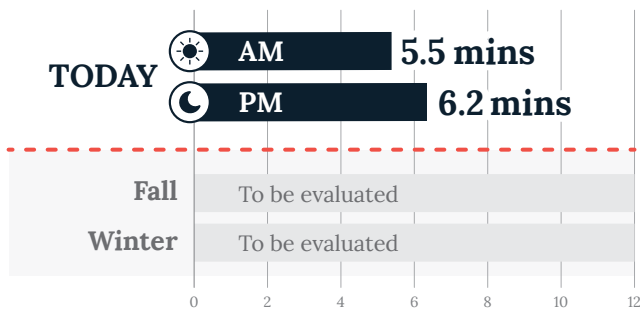


OUTBOUND

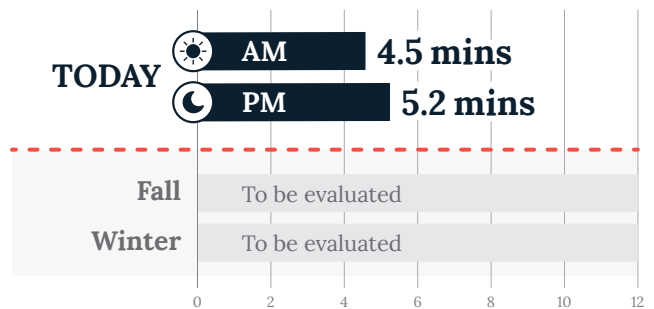


Weekday Average During Off-Peak Hours

INBOUND



OUTBOUND

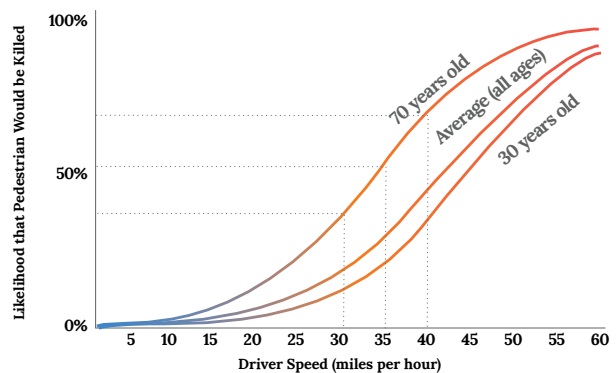
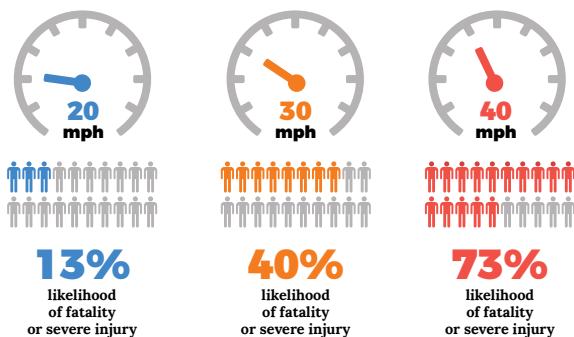


HOW WILL THIS PILOT IMPROVE SAFETY?

Vision Zero Boston prioritizes safety and takes a people-first approach to transportation and community building. Most trips in the City of Boston are made by people on foot, bike, or transit. Everyone, including drivers, benefits from a transportation system that's made safer for the most vulnerable road users.

Thoughtful reallocation of road space by adding dedicated bike lanes, adding dedicated bus lanes, creating safer crossings, and other strategies can calm speeding traffic. **The chance of being killed or severely injured when struck by a driver greatly increases with vehicle speeds.**

VEHICLE SPEED AND PEDESTRIAN INJURY



Tefft, B.C. (2013) "Impact Speed and a Pedestrian's Risk of Severe Injury or Death," Accident Analysis and Prevention, Volume 50, January 2013, pp. 871-878

propublica.org/article/unsafe-at-many-speeds based on data from Tefft (2013)

VEHICLE SPEEDS ON SUMMER STREET

Weekday Average During Peak Hours, Measured between Drydock Avenue and Freight Corridor



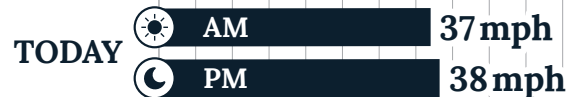
INBOUND



Fall To be evaluated

Winter To be evaluated

OUTBOUND



Fall To be evaluated

Winter To be evaluated

CITY SPEED LIMIT - 25 MPH



Drivers have been observed to reach speeds of **more than 45 mph** between Pappas Way and the Butler Freight Corridor (**20 mph more than the City Speed Limit of 25 mph**). One in five cars on the street are traveling over 40 mph.

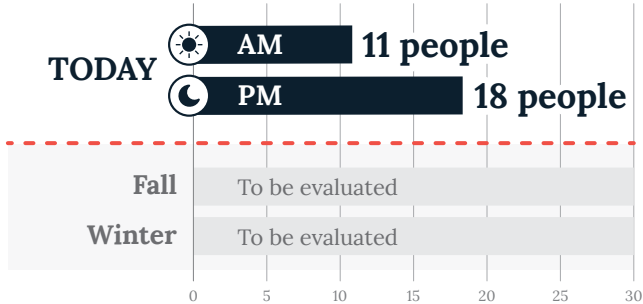
BIKE ACTIVITY

VOLUME

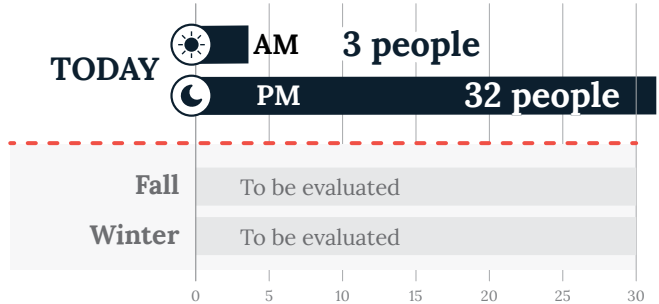
Weekday Average on Summer Street, During Peak Hours (January 2022 counts)



INBOUND



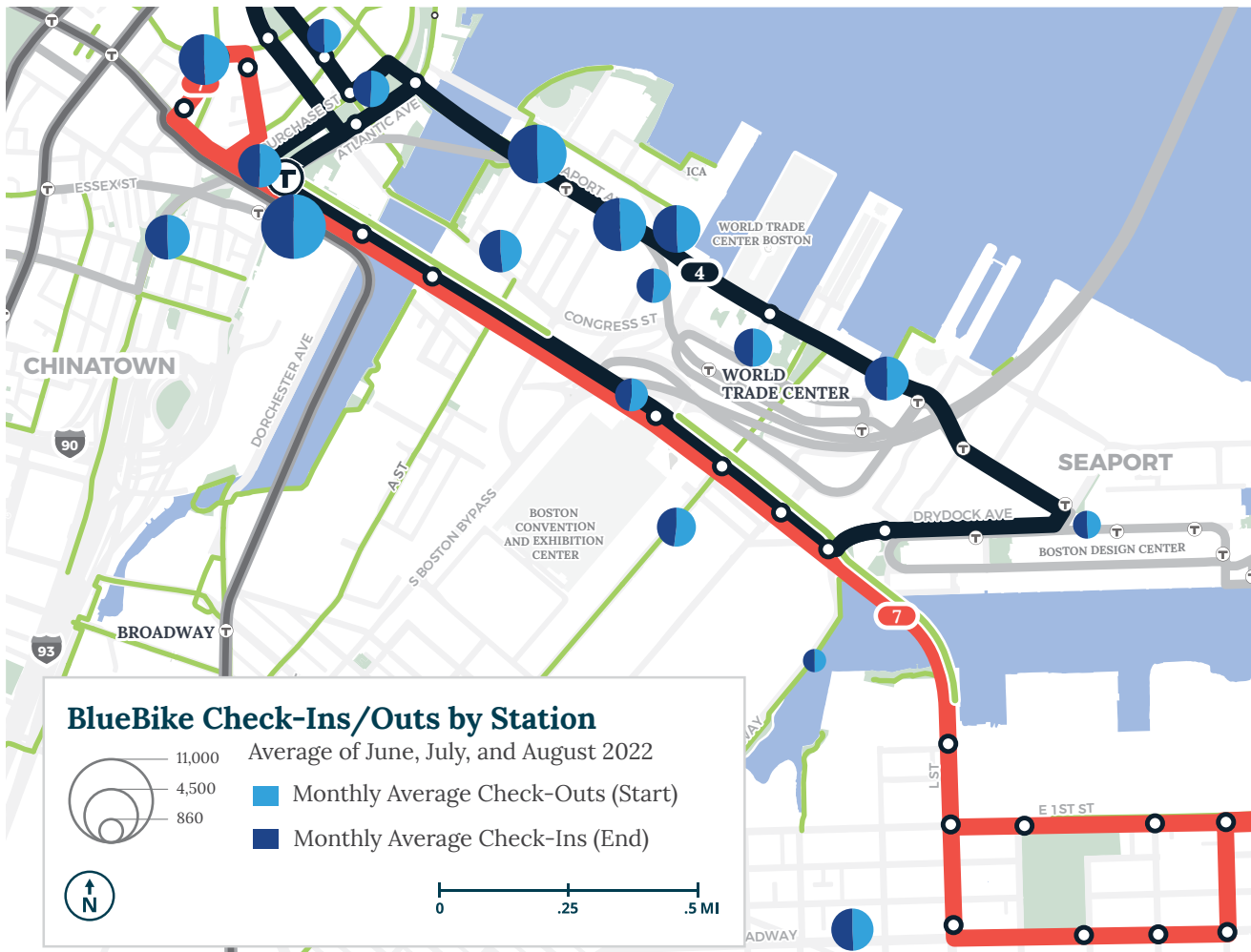
OUTBOUND



BLUEBIKE ACTIVITY

STATION ACTIVITY

Bikes Checked Out and Returned at BlueBike Stations Within 1/3-Mile of the Pilot Study Area



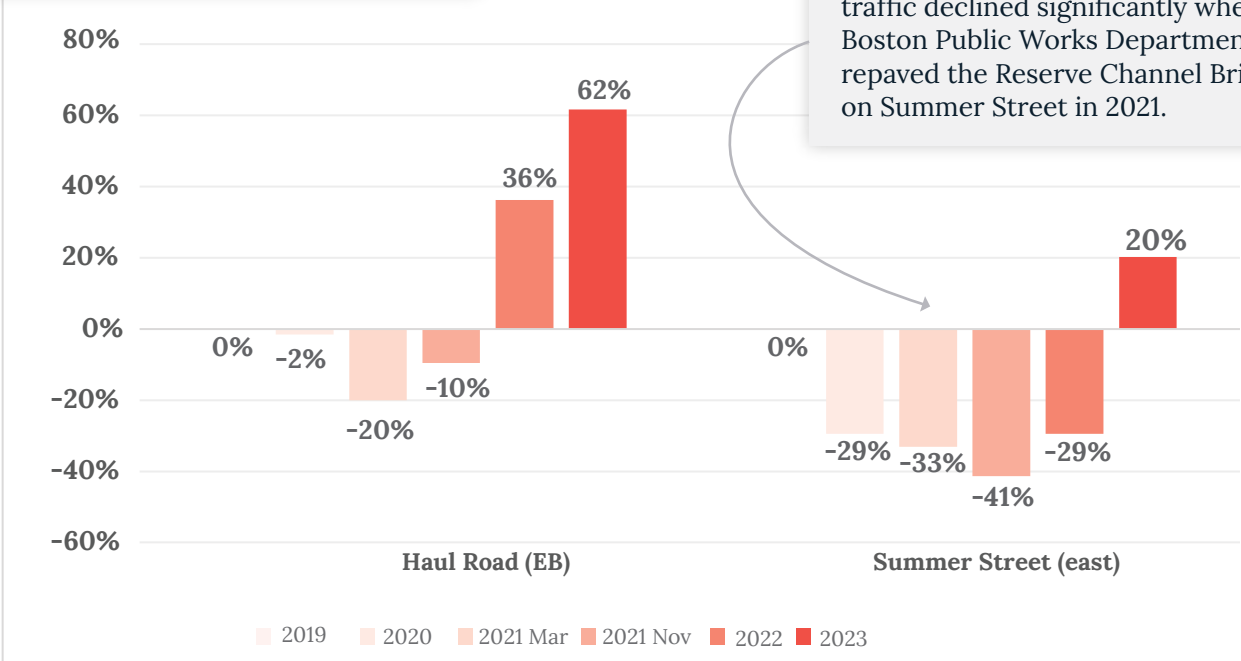
UNDERSTANDING REGIONAL TRAFFIC

A key component of traffic volumes in South Boston are people making trips from points around Greater Boston to destinations in Downtown Boston, South Boston Waterfront/Seaport, and Logan Airport. Known as "regional traffic", most of this traffic uses major highways to reach these destinations, such as I-90, I-93, South Boston Bypass Road, and roads connecting directly to Interstate Highways, such as Seaport Boulevard.

- However, some regional traffic filters through neighborhood streets and has neither an destination or origin in the South Boston community. Known as "cut-through traffic" this traffic can degrade the quality of life of residents and snarl local roads.
- Because regional cut-through traffic tends to have more options than local traffic, slight changes to area roadways have substantial impacts on cut-through traffic. For example, A Street saw a significant drop in traffic volumes when the South Boston Bypass Road was open to general purpose traffic.
- Increasing capacity for transit on major corridors like Summer Street can help to give South Boston residents easier trips by bus and also has the potential to reduce cut-through traffic on neighborhood streets.

Overall traffic heading into the South Boston Waterfront is beginning to recover to pre-COVID volumes.

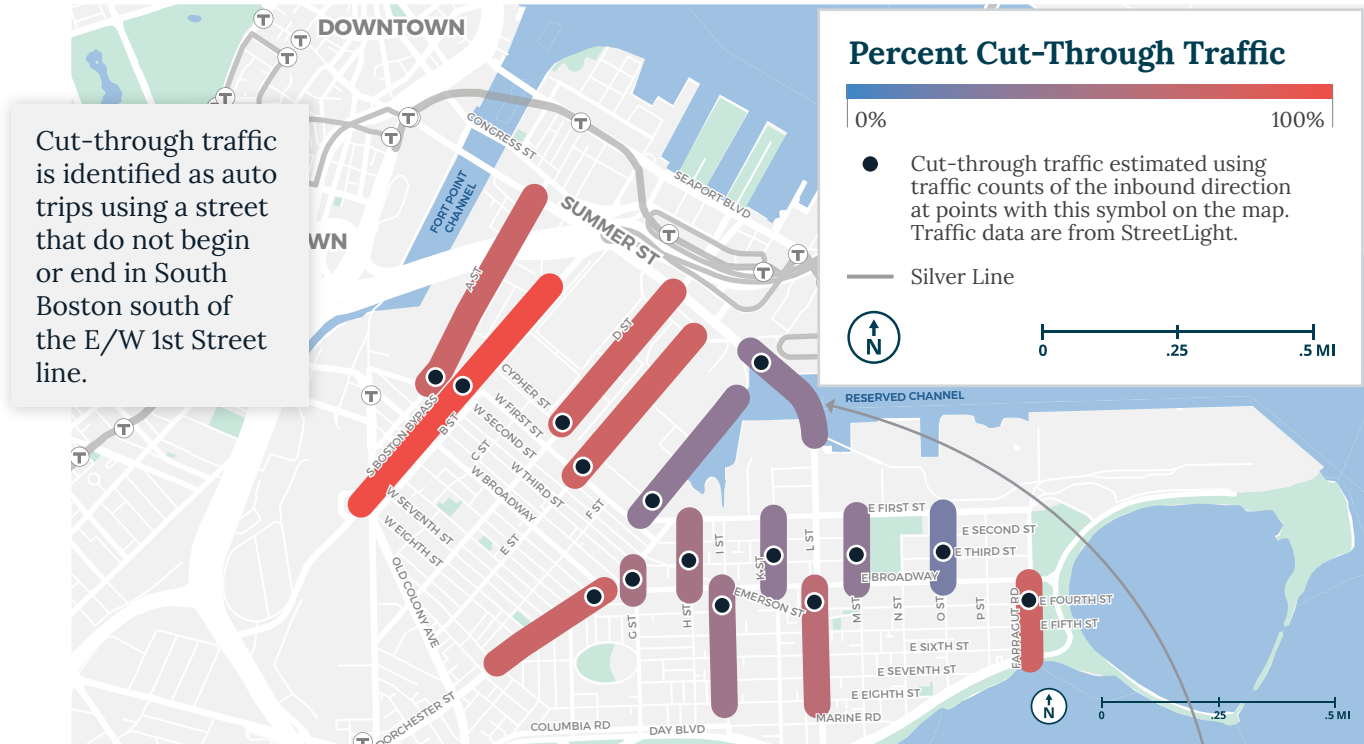
The percentage of cut-through traffic declined significantly when Boston Public Works Department repaved the Reserve Channel Bridge on Summer Street in 2021.



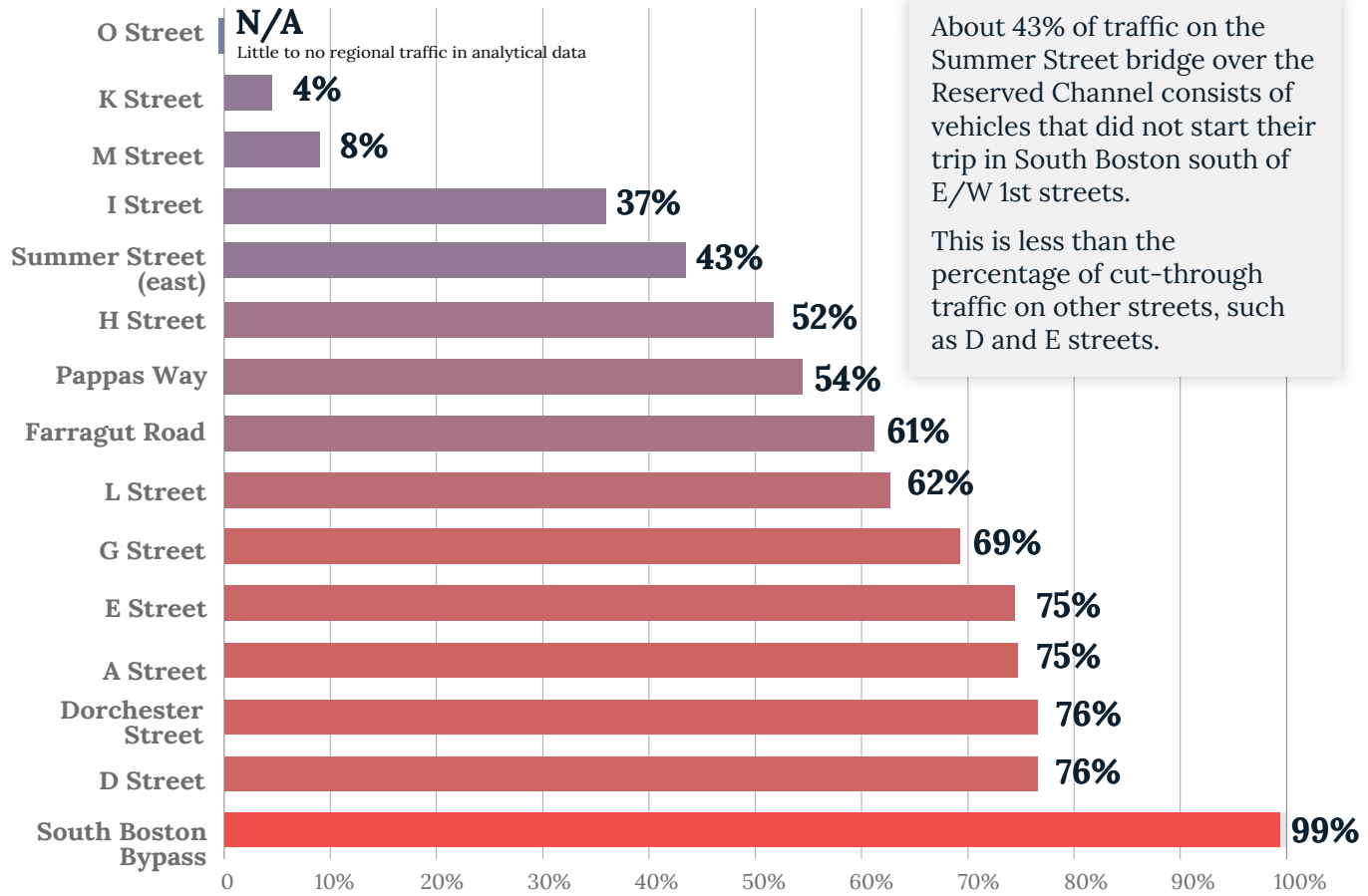
Change since pre-pandemic 2019 Average Annual Daily Traffic (AADT), Inbound to Seaport/Downtown/Airport, AM Peak

CUT-THROUGH TRAFFIC

Percent of Auto Traffic Traveling Inbound to Seaport that is Cut-Through Traffic, 2023 AM Peak.



Cut-through traffic is identified as auto trips using a street that do not begin or end in South Boston south of the E/W 1st Street line.



About 43% of traffic on the Summer Street bridge over the Reserved Channel consists of vehicles that did not start their trip in South Boston south of E/W 1st streets.

This is less than the percentage of cut-through traffic on other streets, such as D and E streets.

Percent of Auto Traffic Traveling Inbound to Seaport that is Cut-Through Traffic, 2023 AM Peak

QUESTIONS?

Contact the BTD Transit Team at
transit@boston.gov



City of Boston
Transportation

SCAN TO GIVE
YOUR FEEDBACK:



SCAN TO JOIN
OUR EMAIL LIST:

