

BOYLSTON STREET DIRECTION CHANGE

Connect Downtown

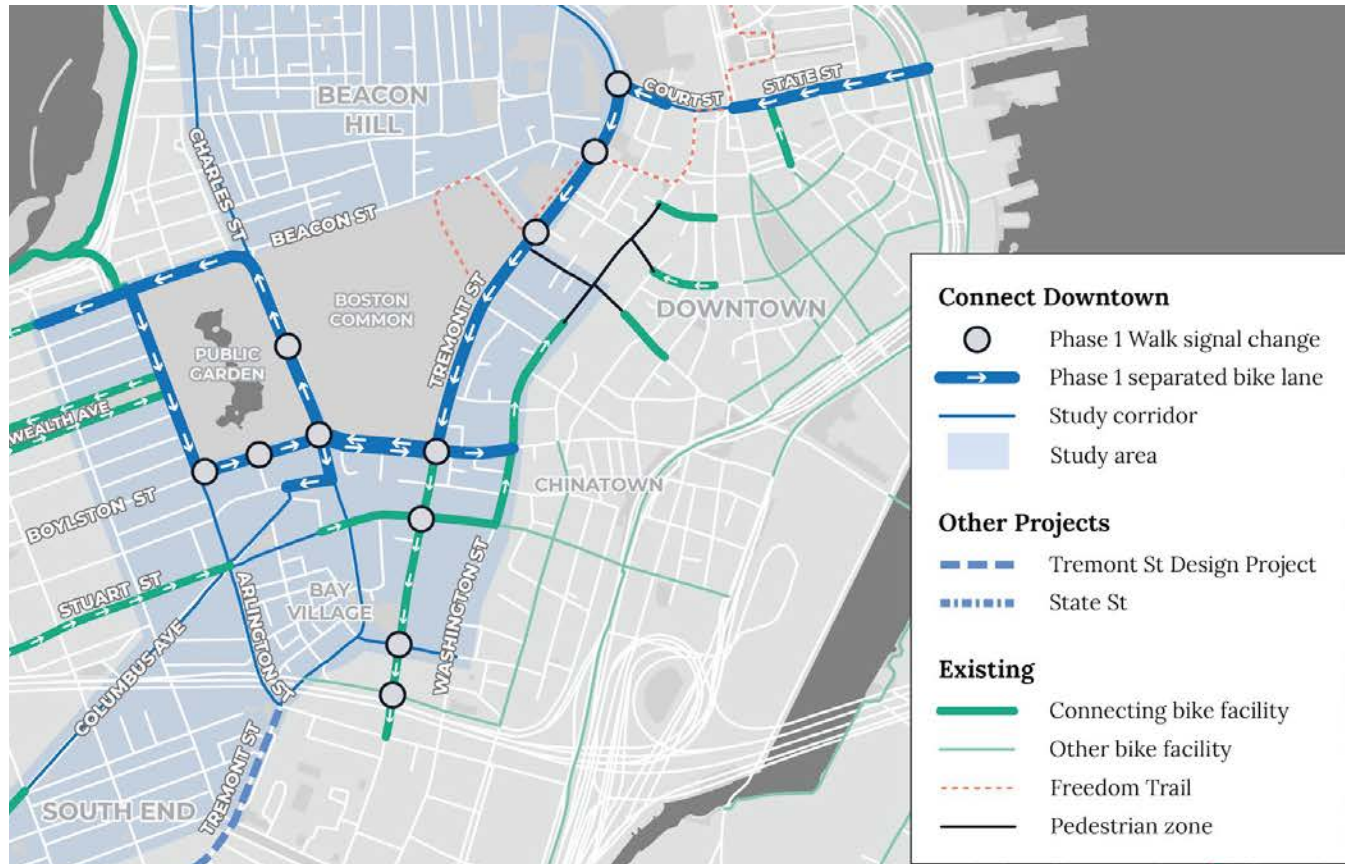
PROJECT SUMMARY



Connect Downtown centers people— residents, commuters, and tourists— in a redesign of iconic streets in our downtown neighborhoods.

DESIGN CHANGES IN FALL 2020

We made changes to walk signals and to created permanent separated bike lanes on streets downtown.



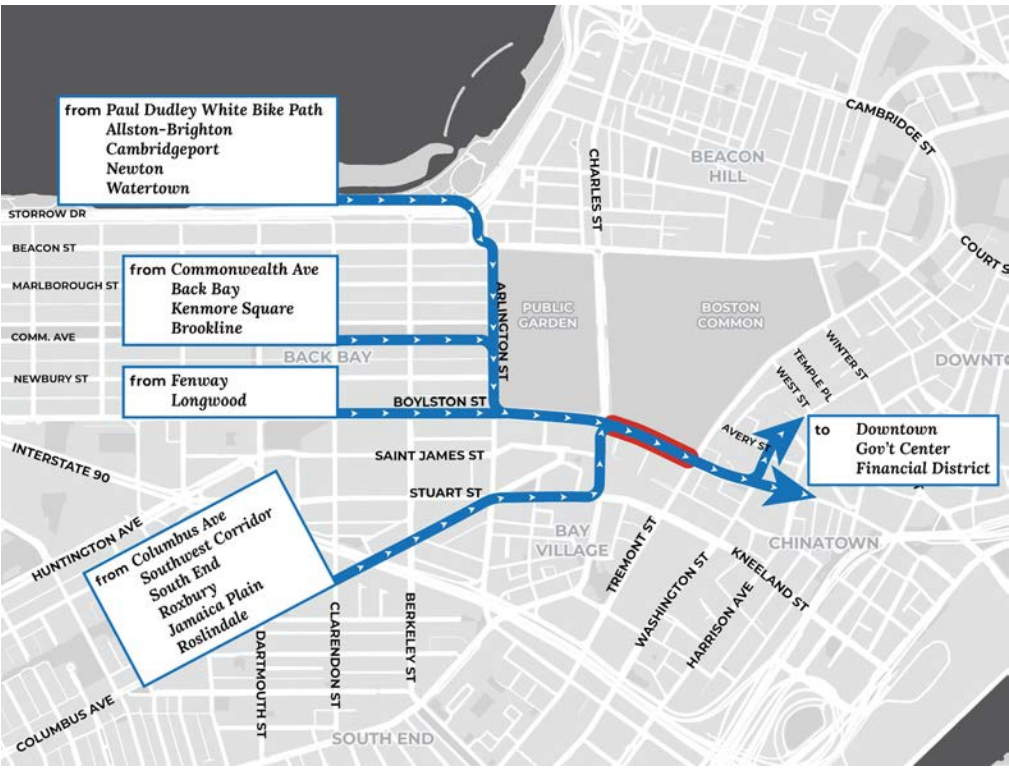
DESIGN CHANGES IN FALL 2020



As part of these changes, we built a two-way separated bike lane on the north side of Boylston Street between Tremont Street and Charles Street.

MAJOR BICYCLE ROUTES - INBOUND

Boylston Street between Charles Street and Tremont Street is an important part of a larger network bike routes to help you get into and around downtown.



MAJOR BICYCLE ROUTES - OUTBOUND

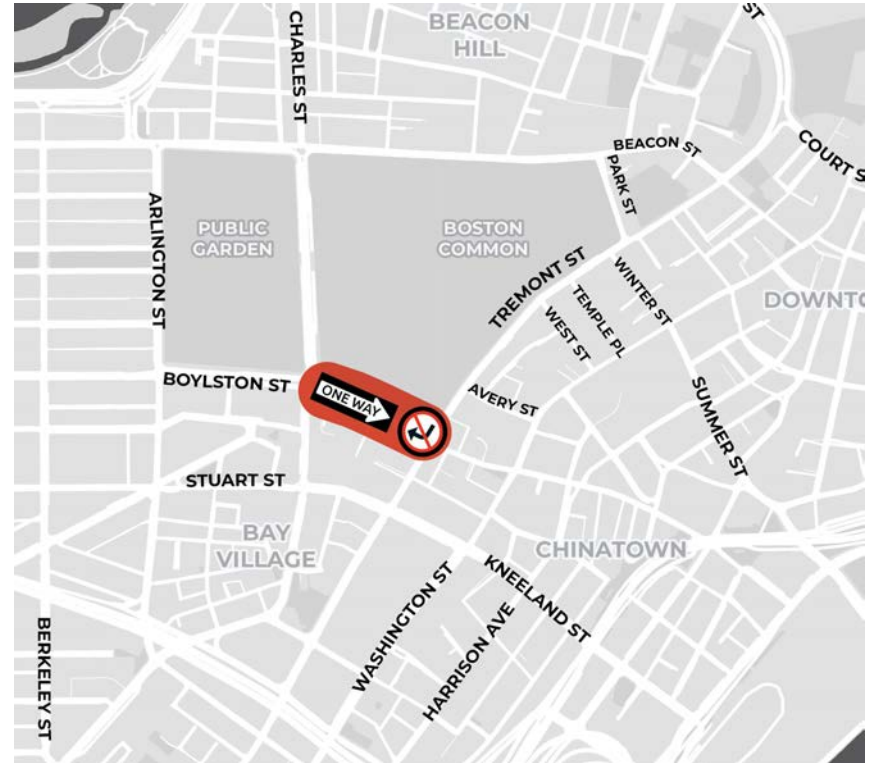
Boylston St is the best route for people biking.

- ▶ You can make direct connections to major bicycle routes.
- ▶ Alternative routes:
 - Have obstacles like busy, complicated intersections
 - Would significantly impact vehicle delay and parking
- ▶ Boylston St provides an alternative to riding through Boston Common, where cycling is not allowed.



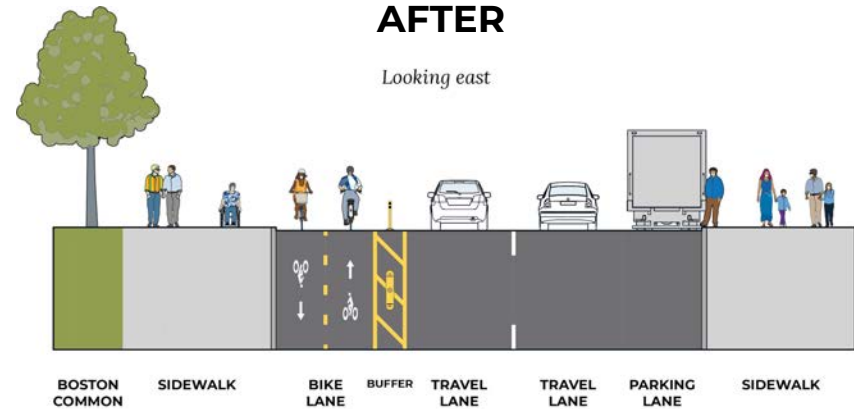
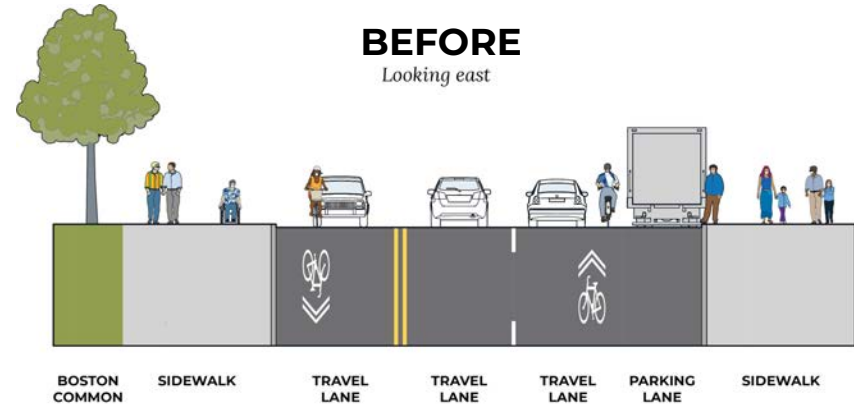
CHANGES TO BOYLSTON STREET

To make this change possible, Boylston Street is now one-way eastbound for drivers between Charles Street and Tremont Street.

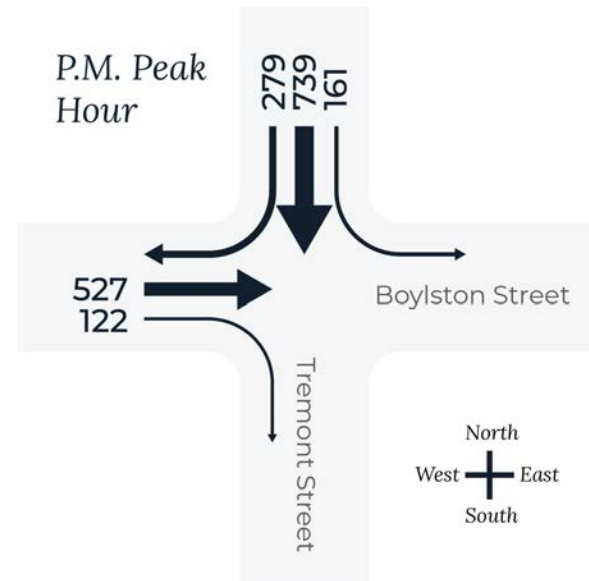
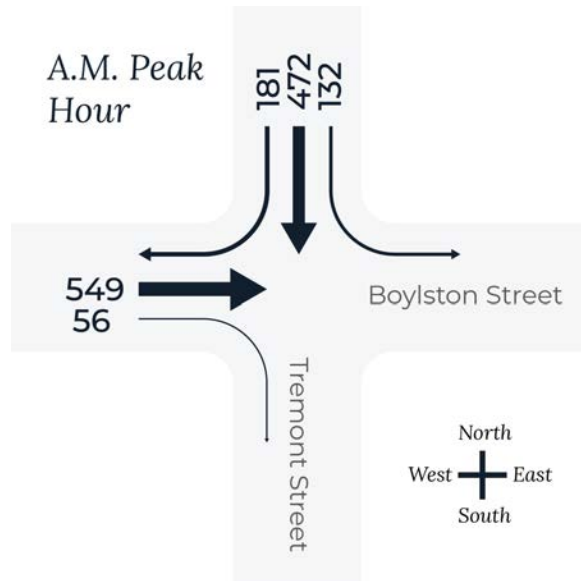


CHANGES TO BOYLSTON STREET

We kept two lanes going eastbound (to Downtown) because more vehicles go in that direction.



CHANGES TO BOYLSTON STREET



- ▶ During the A.M. peak, vehicles turning from Tremont Street southbound to Boylston Street westbound were 13% of all traffic at the intersection. During the P.M. peak, that number was 15%.

HOW DID WE MAKE THIS CHOICE?

We gave careful consideration to this change. Based on our data analysis, we found that:

- ▶ The overall number of vehicles using Boylston Street westbound during peak travel times is relatively low.
- ▶ Nearby intersections can absorb the traffic that would otherwise use Boylston Street westbound.
- ▶ Reasonable, nearby alternative routes are available for drivers to access destinations to the west.

WHAT DATA DID WE USE?

We used a combination of:

- ▶ Turning movement count (TMC) data
- ▶ Anonymized smartphone data

Using these two data sources, we can understand the relative number of drivers bound for different destinations and make informed decisions about changes to the downtown street network.

WHAT DATA DID WE USE?

Turning movement count (TMC)

- ▶ Collected at all intersections in the project area during normal weekdays in October 2019 (*pre-pandemic*)
- ▶ Counts the number of vehicles that pass through an intersection and groups them by direction, including whether they are turning or going straight through
- ▶ TMC data is a very common type of traffic data. We use it across the City of Boston to calibrate traffic signals as a standard practice.



A traffic counter installed on Centre Street in Jamaica Plain.

WHAT DATA DID WE USE?

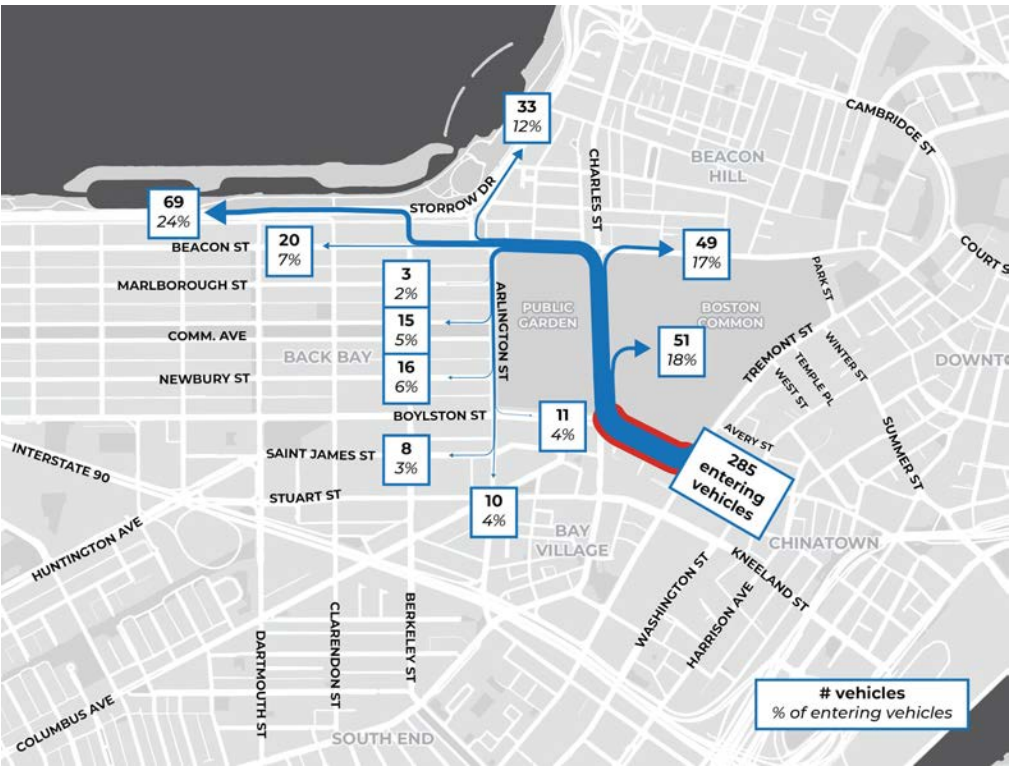
Anonymized smartphone data from StreetLight

- ▶ We can look at a specific block, like Boylston Street between Tremont Street and Charles Street, and analyze trends about where drivers are coming from and where they are going.
- ▶ The data of individual users are protected in several ways.
 - We can only see a % breakdown of where trips start and end, not raw numbers.
 - Trip start and end points are grouped by Census Block Groups, not by individual start and end points.
- ▶ StreetLight Data is a newer type of data source. It can help us understand travel patterns at a broader, regional scale.

BOYLSTON STREET MOTOR VEHICLE DESTINATIONS - PM PEAK

The greatest share of vehicles (24%) were bound for Storrow Drive westbound.

A combined 27% were bound for streets in the Back Bay.

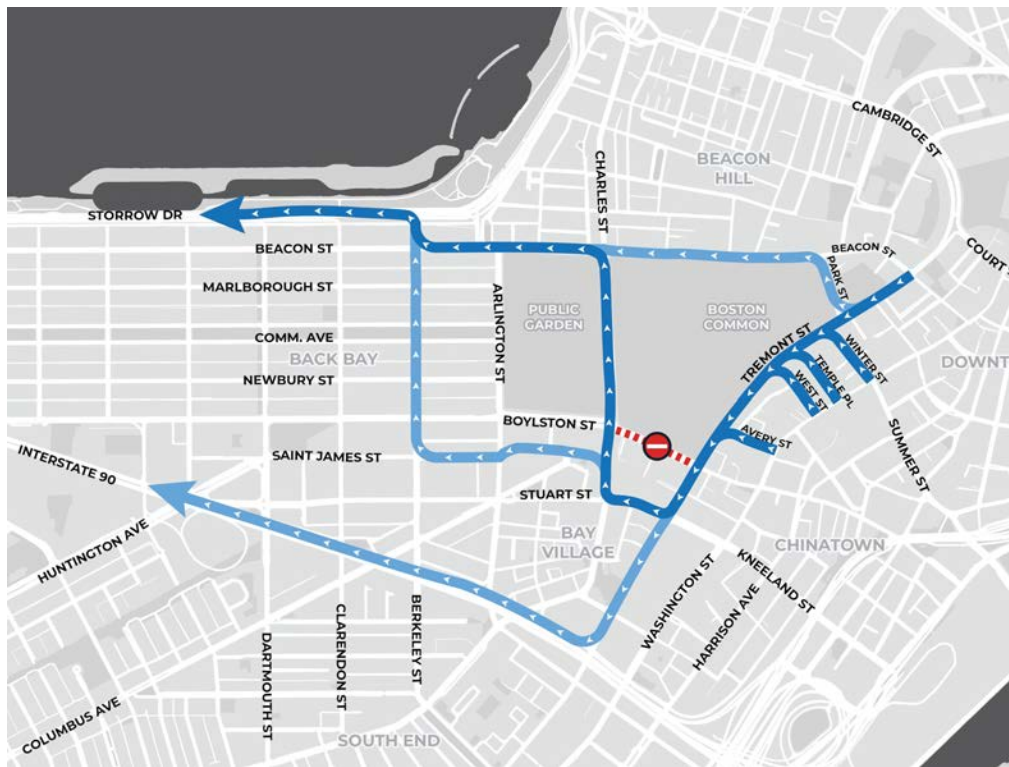


The evening peak hour was 5-6 p.m.

VEHICLE ROUTING OPTIONS TO STORROW DRIVE WESTBOUND

As a driver, you still have options to get to Storrow Drive westbound.

- ▶ Drivers entering Tremont St south of Park St can use Stuart St, Saint James St, and Berkeley St.
- ▶ Drivers on Tremont St north of Park St can reroute via Park St and Beacon St.
- ▶ Depending on your destination, Interstate 90 west may also be an

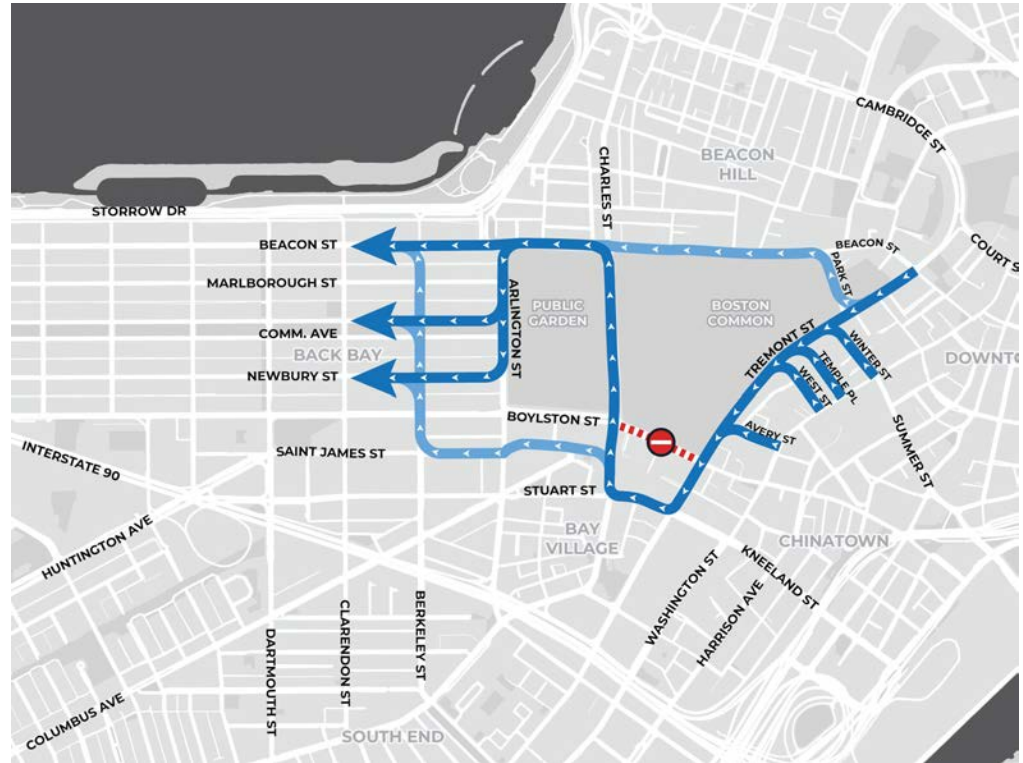


VEHICLE ROUTING OPTIONS TO THE BACK BAY

As a driver, you still have options to get to the Back Bay.

Drivers entering Tremont St south of Park St can use Stuart St instead of Boylston St.

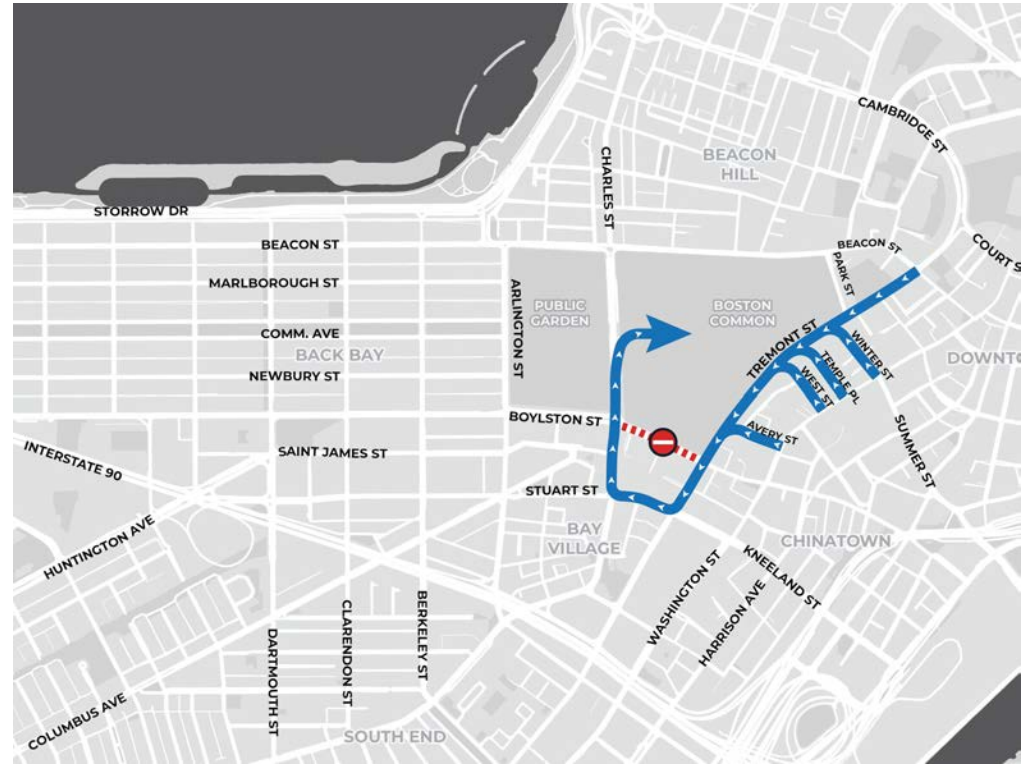
Drivers on Tremont St north of Park St can reroute via Park St and Beacon St.



VEHICLE ROUTING OPTIONS TO THE BOSTON COMMON GARAGE

Some destinations don't have rerouting options, such as the Boston Common Garage.

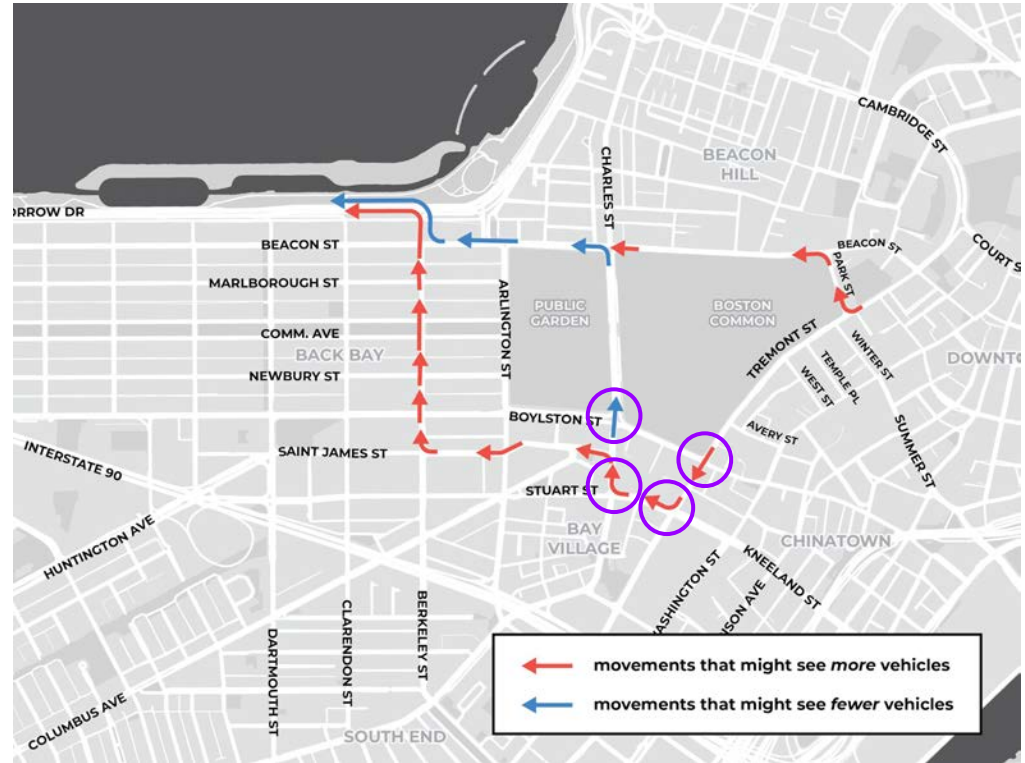
These trips comprised 18% of all vehicles previously using Boylston St westbound.



VEHICLE ROUTING OPTIONS TO THE BOSTON COMMON GARAGE

As a result of some drivers taking other routes, we could predict which intersections may have more vehicles.

We made changes to signal timing to account for this projected change.

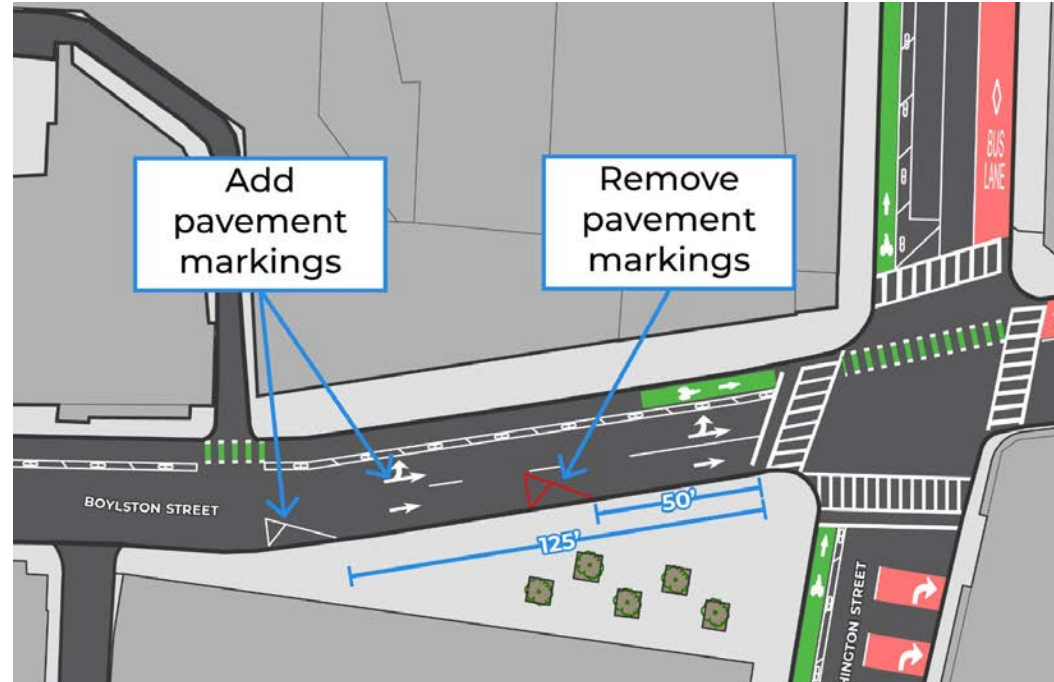


We made changes to the signal timing at the four circled intersections. We assumed higher volumes of vehicles.

BOYLSTON STREET AND WASHINGTON STREET

We heard your feedback about congestion on Boylston Street between Tremont Street and Washington Street.

- ▶ The right thru lane on Boylston Street is now 125' long, instead of 50'.
- ▶ More vehicles can use this lane at all hours of the day.
- ▶ Several parking spaces were removed.





THANK YOU

boston.gov/connect-downtown