

# WARREN STREET CORRIDOR CONTEXTUALIZING THE PROJECT



City of Boston  
Transportation

**GO BOSTON 2030**

**Crosstown**

## Bus Service Reliability Improvements

Ensure that each of the 30 bus routes with the highest ridership operate more effectively

**Policy Description**

In 2013 and 2014, the 15 bus routes in the MBTA system with the highest ridership were the focus of a project to consolidate stops and develop a schedule with more frequent service, "with buses arriving every 10 minutes or better during weekday peak periods, every 15 minutes or better during weekday midday, and every 20 minutes or better during off-peak periods." Now, these bus routes, along with the next 15 busiest, will be the focus of further improvements including exclusive bus lanes where there is a segment of particularly high ridership and a high frequency of buses, off-board payment or another system that allows for all-door boarding, signal priority when buses run behind schedule, and better bus stops.

**Benefits and Issues Addressed**

While buses have to stop regularly on a route to serve passengers effectively, they should remain an efficient and reliable way to travel through the city. Improving the boarding process and helping buses advance past other vehicular congestion will mitigate the two most common types of existing delays that plague essential MBTA routes now serving neighborhoods with little or no subway service. Though all buses should provide excellent customer service, be safe and comfortable, and meet the needs of people with disabilities, improvements to 30 routes with the highest ridership will make a significant impact on transit reliability and use.

**Best Practices**

Select Bus Service is a system of key bus routes in NYC that have been (or will be) improved using more frequent service, fewer stops, off-board fare payments, real time arrival signs, signal priority, and bus lanes.

**Implementation**

Approximate Cost: TBD  
Potential Funding Sources: MassDOT/MBTA for construction with City capital plan for street design  
Who's responsible: MassDOT/MBTA and RTD  
Time Frame: Ongoing  
Construction and improvements for Key Bus Routes was completed in 2014, with the exception of minor adjustments, using a \$10 million grant from the American Recovery and Reinvestment Act. (MBTA, April 2015)

**Public Input**

"Keep up bus service during the day so that it's a reliable way to run errands or get to meetings between peak times."

**Map**

These 15 routes are part of the existing Key Bus Route program.

Map source: [mbta.com/about\\_the\\_mbta/projects/default.asp?id=19047](http://mbta.com/about_the_mbta/projects/default.asp?id=19047)

Boston Transportation Department March 2017

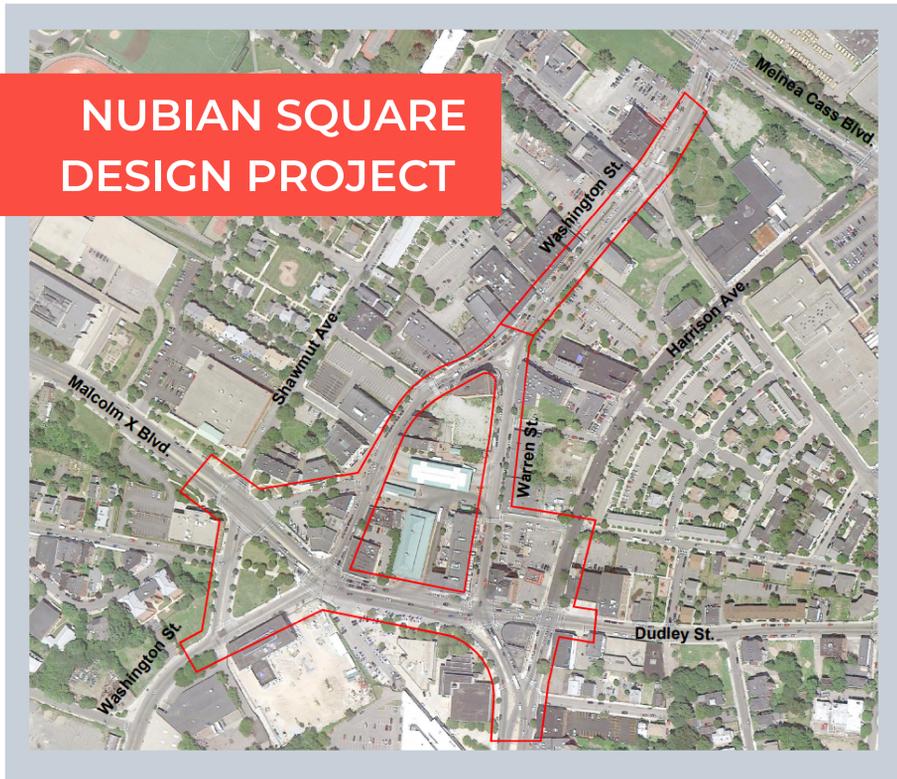
## GO BOSTON 2030

- Go Boston 2030 is the City's mobility action plan. The plan features 58 projects crafted by community members, and committed to by the Transportation Department. **One of those projects calls for changes to how Warren St. functions for buses.** (See left)
- The City's ambitious transit and bicycle use goals will not be reached without **significant improvements to bus service and bike facilities.** This project features a proposal for both. (See below)

**Mode for Bostonian Commutes**

Data Source: 2013-2017 ACS 5-year estimates

Mode	Today*	2030 Aspirational Goal
Public Transit	34%	↑ Up by a third
Walk	14%	↑ Up by almost a half
Bike	2%	↑ Increases fourfold
Carpool	6%	↓ Declines marginally
Drive Alone	39%	↓ Down by half
Other/Work from Home	5%	↑ Slight increase in Work from Home



- This project builds on the Nubian Square Design Project, which entered the planning phase in 2012 and is currently under construction. That project will **improve pedestrian safety, increase greenery, and add a two-way cycle track** along Warren from Dudley St. to the Boys & Girls Club.



# WARREN STREET CORRIDOR

## THE STRONG CASE FOR BUS PRIORITY



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### HIGH RIDERSHIP



#### #1 In Ridership

Route 28 which serves Warren, hosts the highest ridership in the MBTA bus network

#### 64% Of Street Users

Over 60% of both morning and evening rush hour travelers along Warren are on buses

#### 20,272 Daily T Riders

Between Blue Hill Ave. and Dudley St., over 20,000 bus riders travel along Warren every weekday

### SEVERE DELAYS



#### 20 Minute Delays

The average bus rider experiences 20 minutes longer than necessary travelling on Warren each day

#### 30 Minute Delays

When traffic is at its worst, bus riders can spend 30 minutes longer than necessary along Warren

#### 2.5 Hours per Week

Due to severe delays, bus riders are spending as much as 2.5 hours longer than necessary on Warren per week

### HEAVY DISPARITIES



#### 90% Minority Riders

90% of Warren St bus riders identify as minorities; as a result, Warren's delays are primarily impacting commuters of color

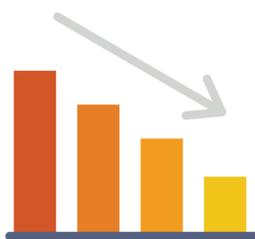
#### 62% Low-Income

62% of Warren bus riders are low-income earners; these riders face a disproportionately negative travel experience

#### 65 Hours a Year

On average, black riders each spend 65 hours longer a year on buses than white riders; Warren's delays contribute heavily to that

### POOR RELIABILITY



#### 2nd Worst Reliability

As of 2018, Route 19, which serves Warren Street, had an on-time performance of 43%; 2nd worst in the entire system

#### 4th Worst Reliability

Route 14, also serving Warren Street communities, had an on-time performance of 49%; 4th worst in the system

# WARREN STREET CORRIDOR PARKING STUDY METHODOLOGY



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TO CREATE A ROADWAY DESIGN THAT WORKS, WE NEED TO UNDERSTAND DEMAND.

## HOW WE MEASURED PARKING USE IN THE CORRIDOR

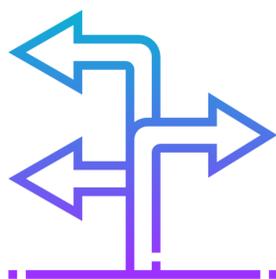
### PRIMARY OBJECTIVE



#### WHAT WE HOPED TO ACCOMPLISH

- To identify **parking regulations and capacity** on Warren.
- To **measure existing demand** for on-street parking.

### SECONDARY OBJECTIVE



#### TAKING A LOOK AT SIDE-STREET UTILIZATION

- Assessment of **side-street parking regulations**.
- Measurement of **side-street capacity** to serve existing demand.

### MEASUREMENT STRATEGY



#### HOW WE COLLECTED DATA

- Two teams of two travelled the corridor **noting whether every spot on their side of Warren was populated by a vehicle**.
- One team collected southbound side data, and the other collected northbound side data.
- Another two teams of two collected the **same data, but on side-streets** the length of one block off of Warren.
- Data was collected in **30 minute intervals**.

### MEASUREMENT TIMING



#### CREATING A WELL-ROUNDED PICTURE

- Tuesday and Thursday the week of May 20th, 2019.  
From **7am to 8pm** in 30 minute intervals.
- Sunday May 25th and Sunday June 1st, 2019.  
From **8am to 2pm** in 30 minute intervals.
- Tuesday, Thursday, and Saturday the week of Feb. 3rd, 2020  
From **8pm to 11:30pm** in 30 minute intervals.

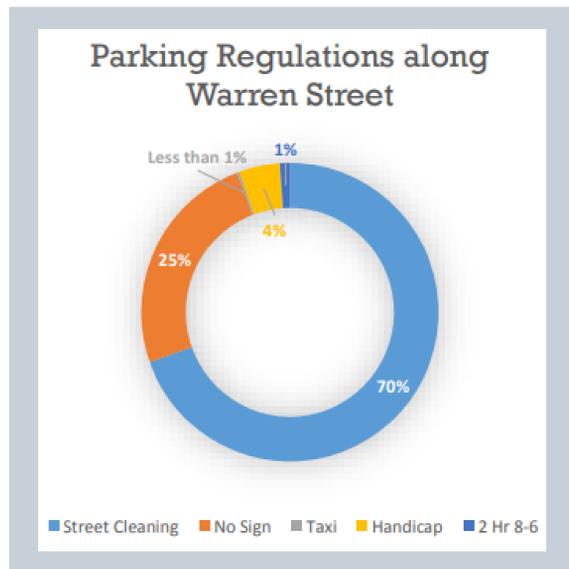
# WARREN STREET CORRIDOR PARKING STUDY RESULTS



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THERE ARE 378 PARKING SPOTS ON WARREN. 94% OF THESE ARE UNREGULATED.

## STUDY RESULTS: WEEKDAYS



Existing parking regulation along Warren

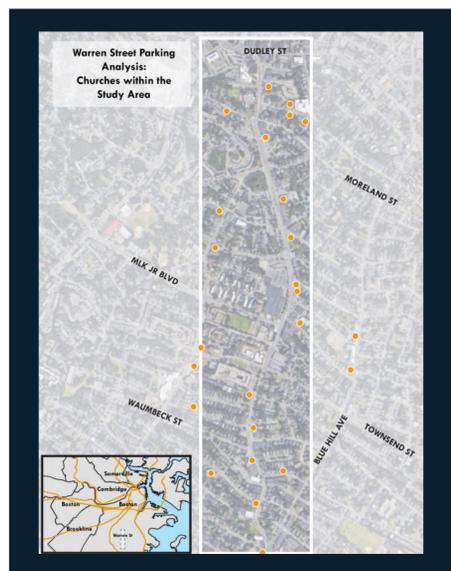
Daily average parking occupancy on Warren **49%**

Both AM and PM peak commute period occupancy **45%**

At 10am, when parking on Warren reached its highest utilization, 56% of available spaces were used. **56%**

Side street parking was most occupied around 6:30pm, and never exceeded 51% utilization. **51%**

## STUDY RESULTS: SUNDAYS



Churches near and along Warren

Sunday daily average parking occupancy on Warren **51%**

Average inbound occupancy was 60%, while outbound occupancy was 43%. This is likely due to church locations. **60% & 43%**

At noon, when parking on Warren reached its highest utilization, 63% of available spaces were used. **63%**

Side street parking was most occupied around 8:00am, and never exceeded 61% utilization. **61%**

## STUDY RESULTS: LATE NIGHT



Late night average parking occupancy on Warren **35%**

At 8:00pm, when parking on Warren reached its highest late night utilization, 47% of available spaces were used. **47%**

Side street parking was most occupied around 11:30pm, and never exceeded 68% utilization. **68%**

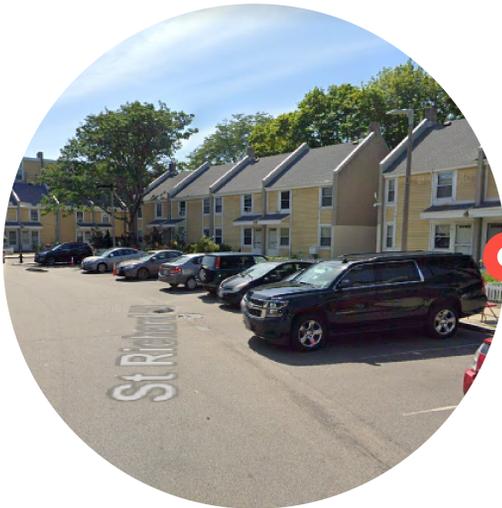
# WARREN STREET CORRIDOR

## OFF-STREET PARKING NEAR WARREN



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WARREN  
GARDENS



WASHINGTON  
PARK MALL



BOSTON LATIN  
ACADEMY



**2,084**  
OFF-STREET  
PARKING SPOTS

With over 2,000 off-street parking spots **within 1 block away** from Warren, the commercial, worship, educational, and community service establishments that characterize the street are not solely dependent on on-street parking to support them.

# WARREN STREET CORRIDOR

## MEASURING THE TRANSIT BENEFITS



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### WHAT WE HAVE SEEN FROM OUR OTHER BUS LANES

#### ROSLINDALE BUS LANE - 2018



BUS TRAVEL TIMES BETWEEN  
ROLINDALE SQUARE AND  
FOREST HILLS DECREASED BY

20-25%

PEAK PERIOD BUS  
RIDERSHIP ALONG THE LANE  
INCREASED BY

160  
people

#### BRIGHTON BUS LANE - 2019



LESS THAN 1 MILE OF BUS  
LANE IMPROVED ROUTE 57  
RELIABILITY BY 3.5% IN  
JUST 6 MONTHS

3.5%

BUS RIDERSHIP ON  
ROUTE 57 INCREASED BY

about  
10%

### WHAT TO EXPECT IF THIS DESIGN COMES TO WARREN



POTENTIAL WARREN  
BUS LANE - SOUTHBOUND

ON WARREN:  
PEAK PERIOD BUS TRAVEL  
TIMES DECREASED BY

12-20  
minutes

BUS TRIPS FROM  
MATTAPAN STATION TO  
NUBIAN SQUARE, WHICH  
CURRENTLY TAKE 40-55  
MINUTES, WILL TAKE JUST

25  
minutes

# WARREN STREET CORRIDOR PROPOSED STOP TYPES + AMENITIES



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## BUMPED OUT BUS STOP

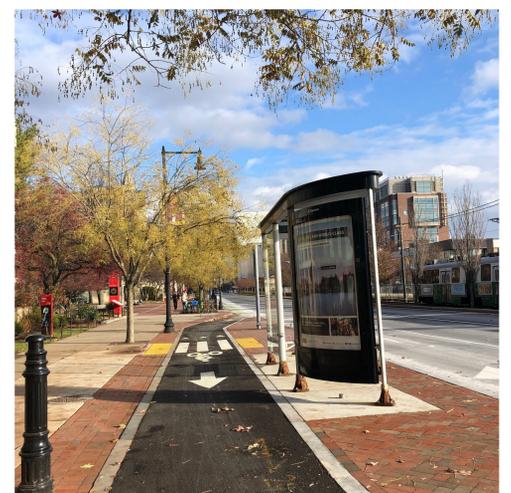
- Allows the bus to pick up and drop off without leaving its travel lane.
- Increases public space and pedestrian visibility, improving safety.
- Improves boarding experience and accessibility.
- Saves 5-20 seconds per stop.



Example: MBTA Silver Line  
Washington Street @ Lenox.

## FLOATING BUS STOP

- Allows the bus to pick up and drop off without leaving its travel lane.
- Allows for cyclists to travel, protected in their own lane, around the bus.
- Improves boarding experience and accessibility while minimizing the likelihood of a bus-bike collision.
- Saves 5-20 seconds per stop.



Example: MBTA ROUTE 57  
Commonwealth Ave.

## ALL STOPS ON WARREN WILL RECEIVE THE FOLLOWING:

### REAL-TIME ARRIVAL INFO

Every stop will have countdown clocks showing when the next bus is set to arrive. (See left)

### DOUBLE CANOPY SHELTER + ADDITIONAL BENCHES

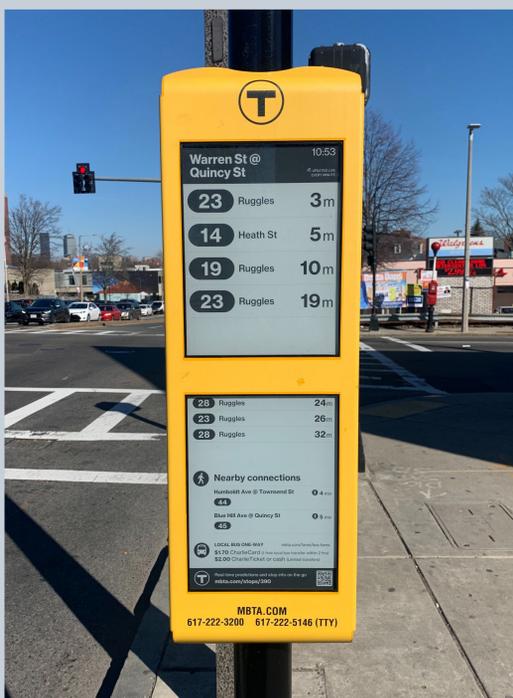
With some stops serving over 1,000 people a day, additional shelter and seating is needed to support and protect riders.

### TRASH CANS

We heard from you that existing trash cans are not placed closely enough to shelters to encourage people to use them properly. We are changing that.

### LIGHTING

Bus service on Warren begins before dawn many mornings and runs late into the night. We are making sure you won't be waiting in the dark.



# WARREN STREET CORRIDOR TIMELINE AND PARTNERS



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## PROJECT TIMELINE THUS FAR



## PROJECT ADVISORY TEAM

