

# M79 Crosstown Select Bus Service

Progress Report - Winter 2020




+selectbusservice



# Executive Summary

## Background:

- M79 Select Bus Service (SBS) launched on May 21<sup>st</sup>, 2017, replacing M79 Local service along 79<sup>th</sup> Street from FDR Drive to Riverside Drive
- At just over two miles, the M79 is a crucial connection to the  trains and 16 bus routes, including M15 SBS
- The redesign of this corridor has brought Select Bus Service improvements to 12,500 daily bus riders, including bus lanes, signal timing improvements, off-board fare payment, and real-time passenger information

## Results:

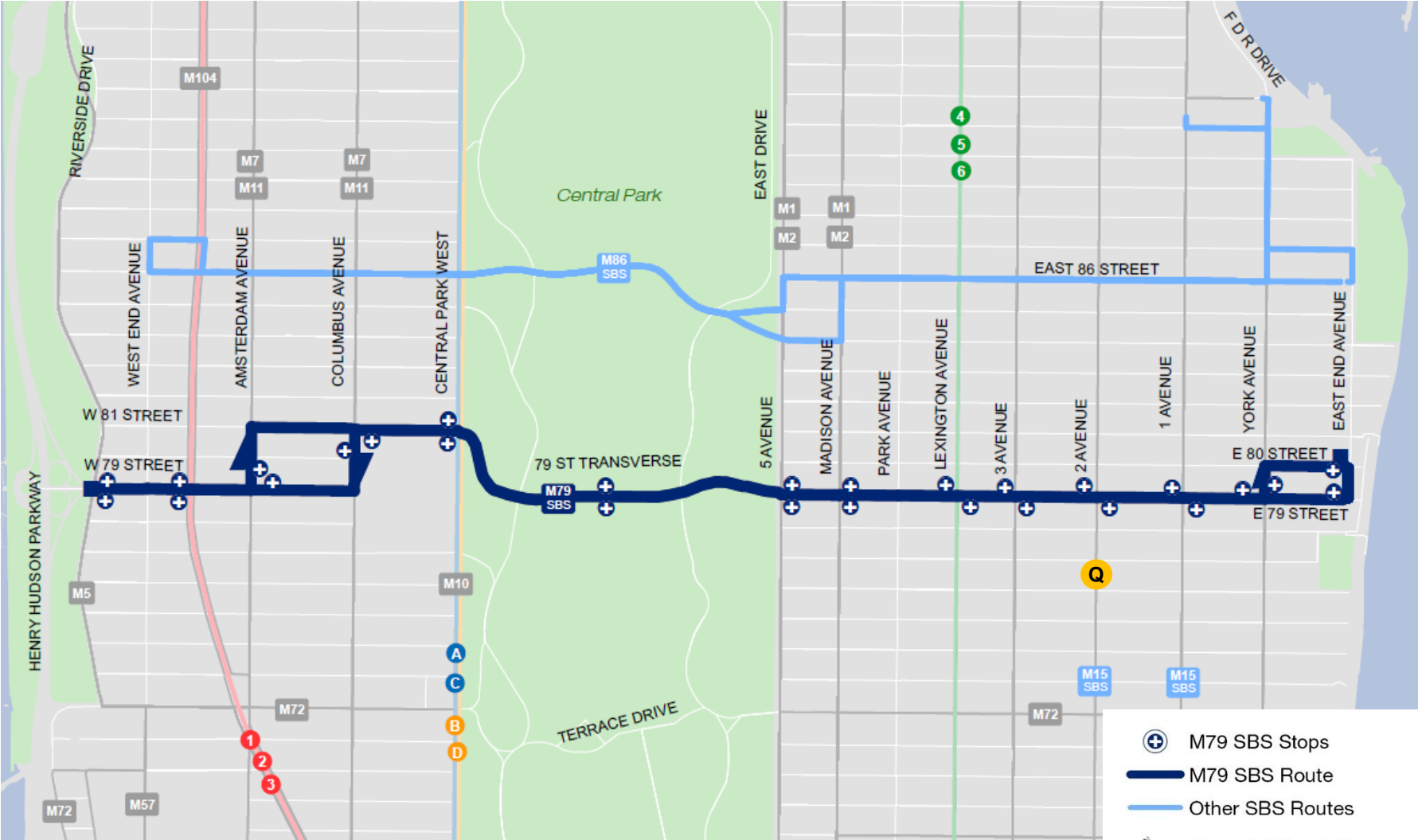
- The M79 SBS is on average 8% faster than previous M79 service
- On-time performance and instances of bus bunching on the M79 have improved since launch of M79 SBS
- M79 SBS ridership was up 9% one year after launch, compared to all Manhattan routes up 0.5% in the same time period
- Car travel times have decreased by 4-8% and crashes by 19% since project launch
- 96% of M79 SBS riders are satisfied with service as compared to 84% of riders with pre-SBS service




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# Project Background

# 1

# M79 SBS Stops and Route



-  M79 SBS Stops
-  M79 SBS Route
-  Other SBS Routes

0 0.125 0.25 Miles

# Community Engagement

## Community Board Presentations and Q&A Sessions

- Consultations with both community boards along the M79 route: CB 7 & 8
  - Fall 2016: CB 7 Transportation Committee, CB 8 Full Board
  - Spring 2017: CB 7 Transportation Committee, CB 7 full board, CB 8 Full Board

## Stakeholder Meetings

- 15+ meetings and site visits with elected officials, NYPD, and other stakeholders, including:
  - American Museum of Natural History
  - Metropolitan Museum of Art
  - Theodore Roosevelt Park Neighborhood Association



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# Project Implementation

# 2

# Implementation Timeline

Service Launched May 2017

2016

March 2017

April 2017

Community Engagement: *Public Events, Community Boards, Neighborhood Groups, Elected Officials*

Community meetings to introduce SBS, identify key issues

Meetings with Community Boards, elected officials, and stakeholder meetings to discuss detailed design plans

Street Design

New lane lines, bus lanes, crosswalks installed

Curb regulation signs installed

Concrete & Signal Work

Fare machine construction

Fare machines, wayfinding totems, benches installed

Signal timing improvements activated

# M79 SBS Service Launch – May 2017



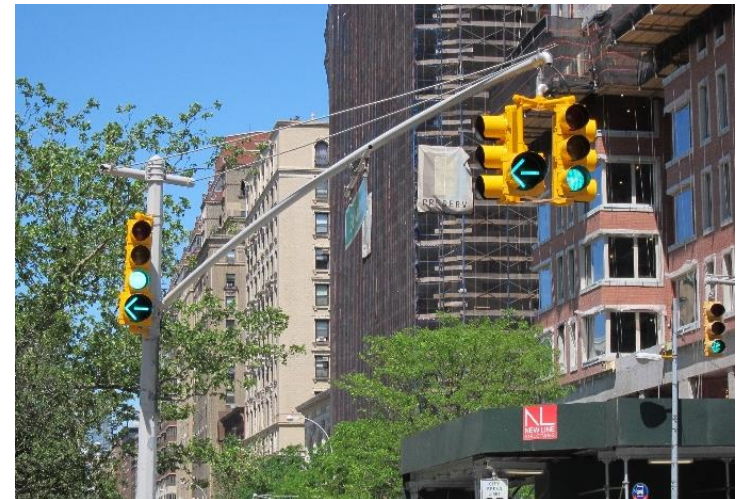
Improved fare collection at all stops



0.75 miles of bus lanes



12 new Bus Time/WalkNYC information displays



10 intersections with signal timing improvements

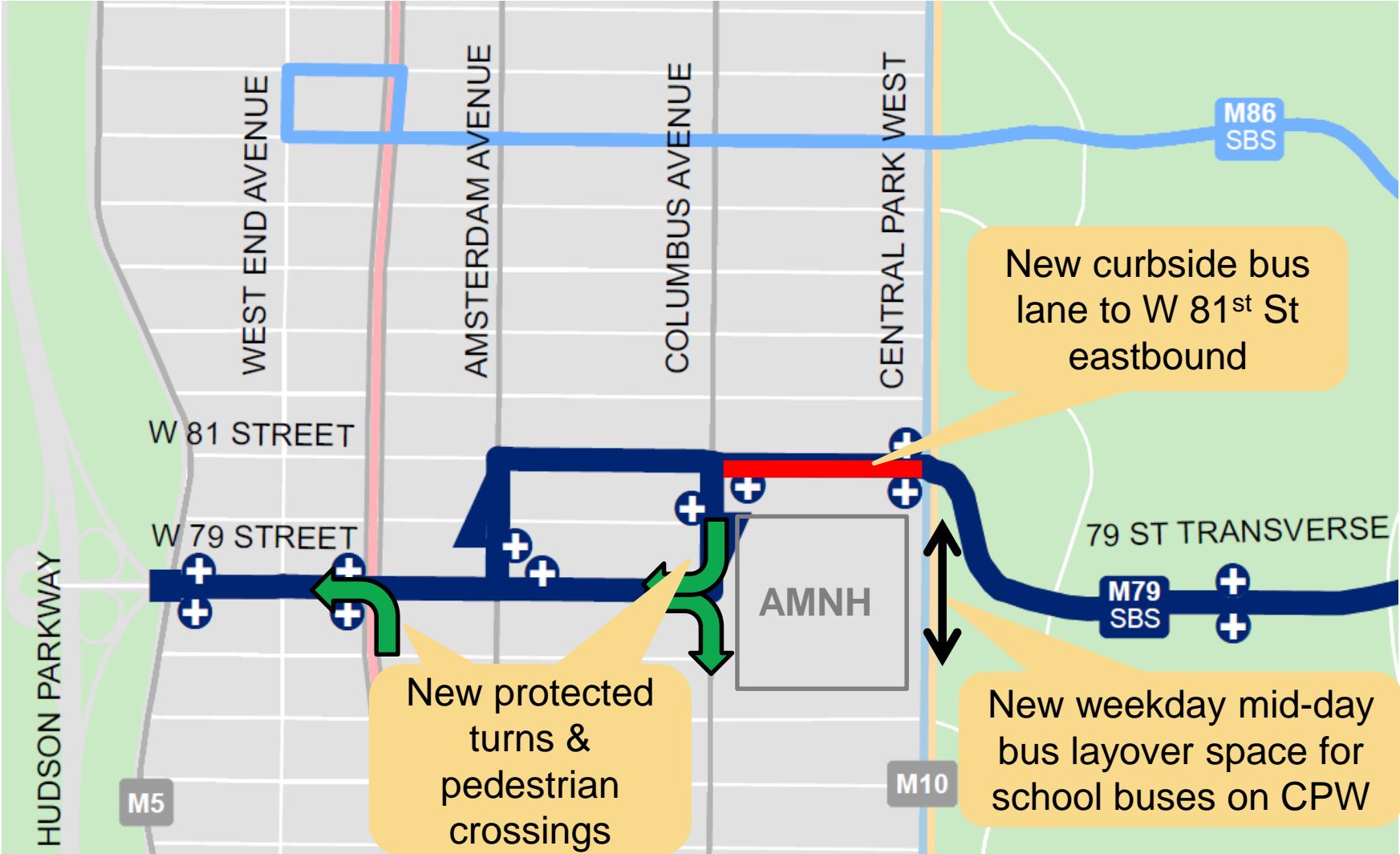


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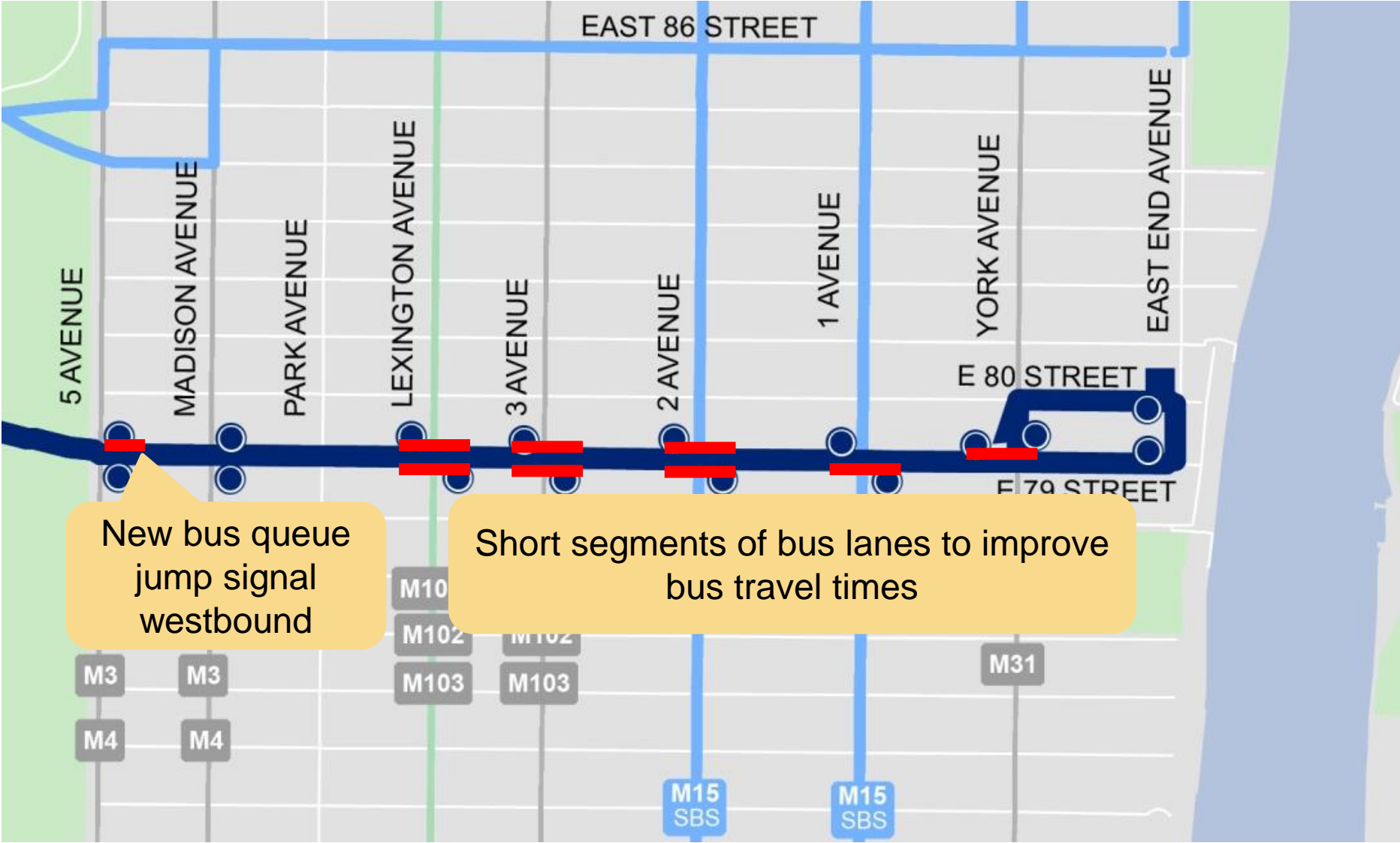
## Project Treatments

# 3

# M79 SBS West Side Treatments



# M79 SBS East Side Treatments



# Off-board Fare Payment and All-door Boarding

- Riders pay their fares before boarding, using a MetroCard or coins
- Riders board through any of the three doors, eliminating long boarding queues
- Buses can load and leave the stop significantly faster



Long rider queues on old M79 service



All door boarding speeds M79 SBS service

# 79<sup>th</sup> St at 5<sup>th</sup> Ave Westbound: New Bus Queue Jump Signal

- Old traffic signal with “Buses Only” signage installed in 2017 for M79 SBS, but green light for buses only may be misinterpreted by drivers, especially if they do not read the “Bus Only” signage
- 11/05/2018: NYCDOT installed an updated Bus Only Signal at 79<sup>th</sup> St and 5<sup>th</sup> Ave westbound and is evaluating its performance



Old signal & signage



New signal & signage

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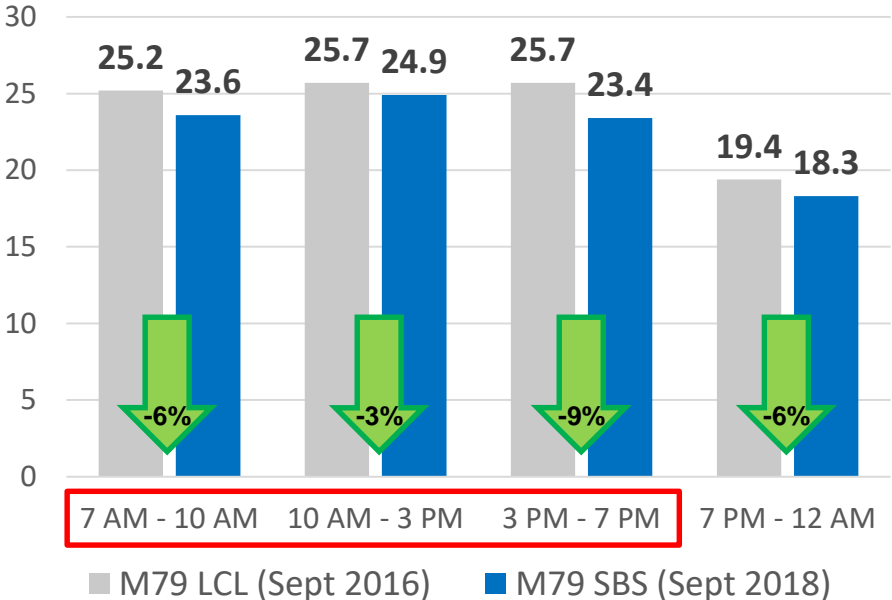
## Project Results & Analysis

# 4

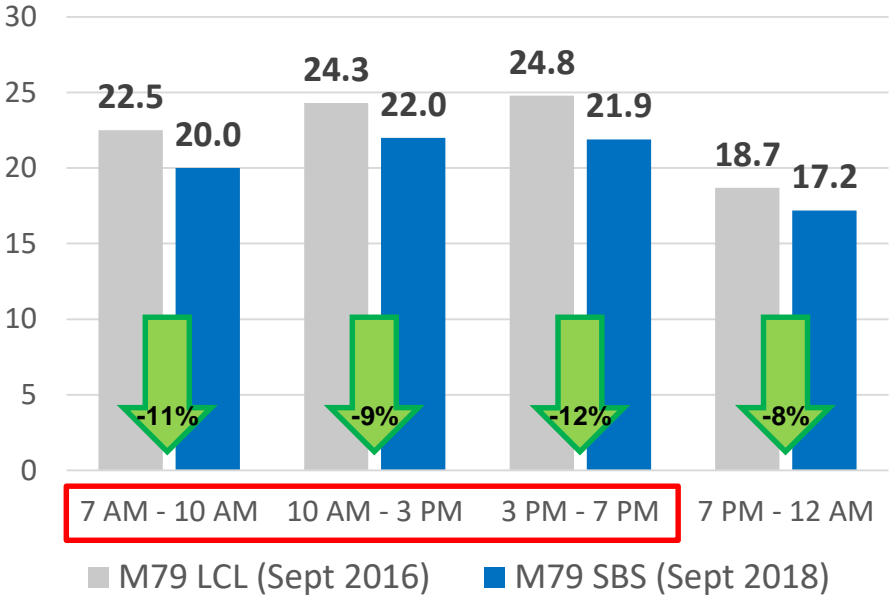
# Bus Travel Time

**Travel Time:** On average across all time periods, M79 SBS is 8% faster than the previous M79 service.

Eastbound Bus Travel Time (Minutes)



Westbound Bus Travel Time (Minutes)

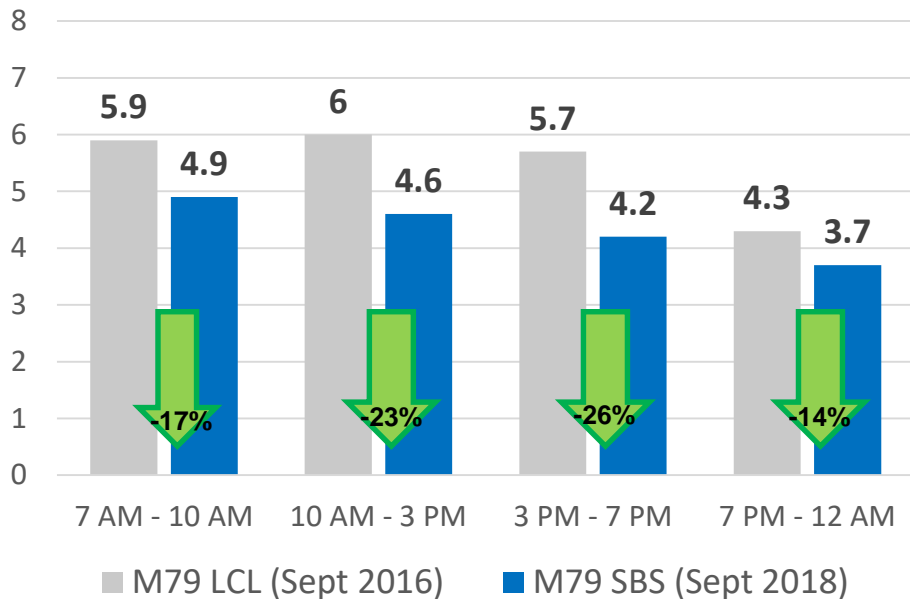


  Bus lane hours 7am-7pm

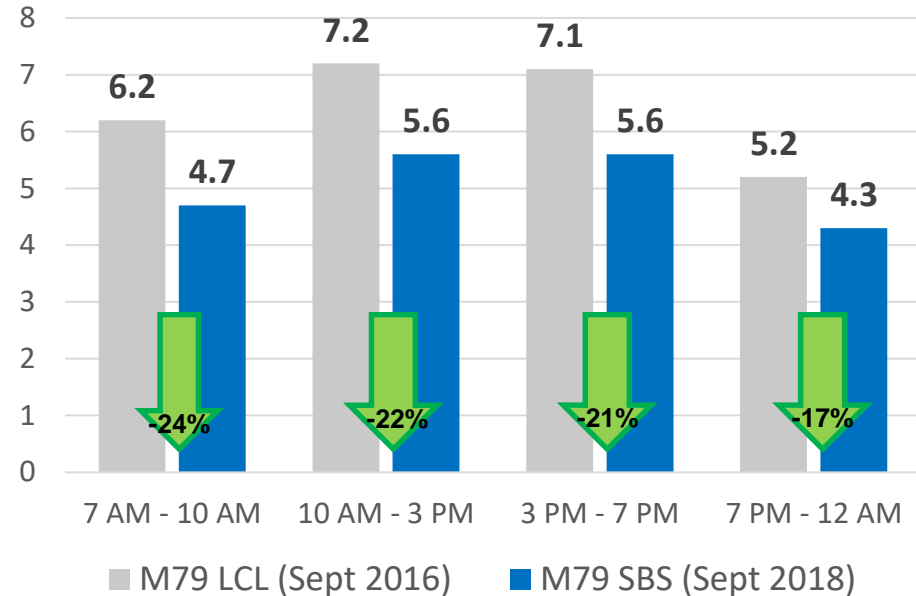
# Time Spent at Bus Stops

**Dwell Time:** On average across all time periods, M79 SBS spends 21% less time stopped at bus stops than the previous M79 service.

**Total Eastbound Dwell Time at Bus Stops (Minutes)**



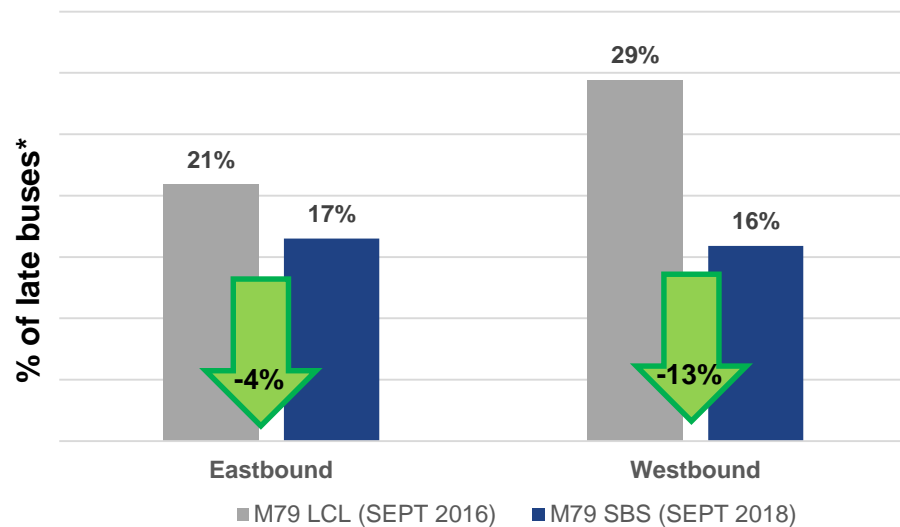
**Total Westbound Dwell Time at Bus Stops (Minutes)**





# Bus Reliability

## Late Buses



\* 'Late' defined as arriving 5 minutes or more after scheduled arrival time

## Bus Bunching

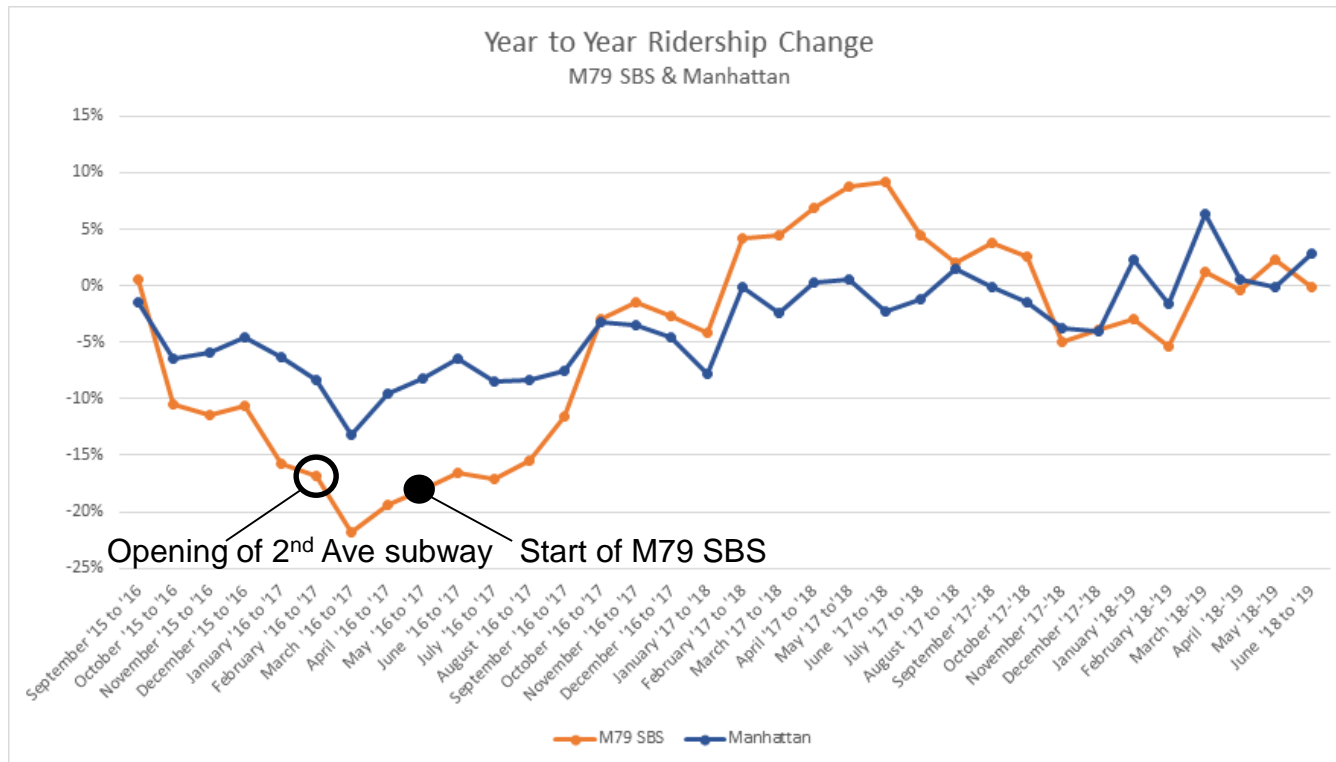
Route	Direction	Time	Before SBS (Sept 2016)	After SBS (Sept 2018)	% Change
M79	Eastbound	6-10AM	10.10%	6.40%	-3.7 ▼
		3-7PM	12.80%	10.70%	-2.1 ▼
M79	Westbound	6-10AM	10.70%	8.0%	-2.7 ▼
		3-7PM	18.70%	12.60%	-6.1 ▼

Bunching defined as two or more buses heading in the same direction departing a stop within 90 seconds of each other

- Poor on-time performance, especially going westbound in the PM, was common before SBS, and has improved in both directions.
- SBS implementation has also reduced bus bunching in both directions across all time periods.

# Ridership

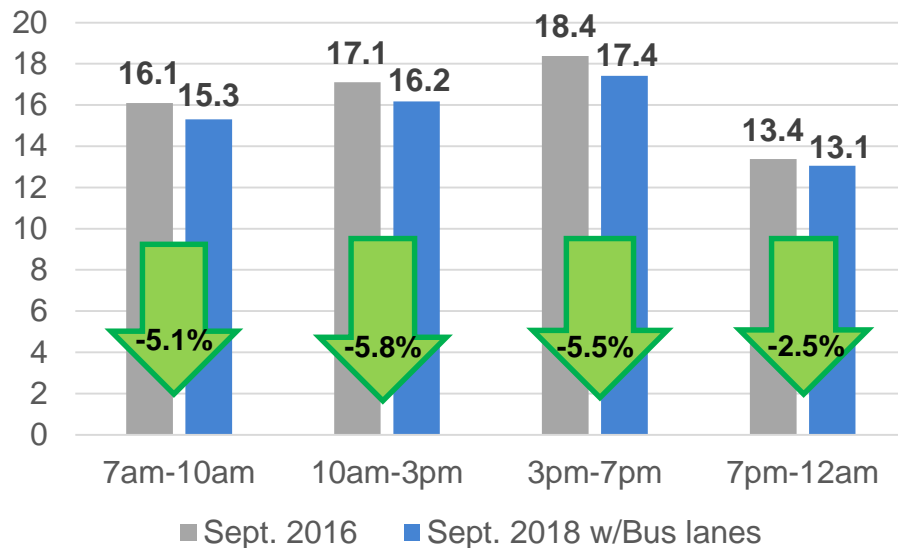
- M79 ridership had been decreasing in recent years, and continued to decline in the months before the conversion to SBS.
- After its May 2017 launch, M79 SBS reversed this decline. Ridership grew and outperformed the Manhattan trend for most of 2018, before stabilizing in recent months of 2019.
- Ridership grew by as much as 9% from June 2017 to June 2018, with ridership up 2.7% overall for 2018.



# Car Travel Time: Entire Route

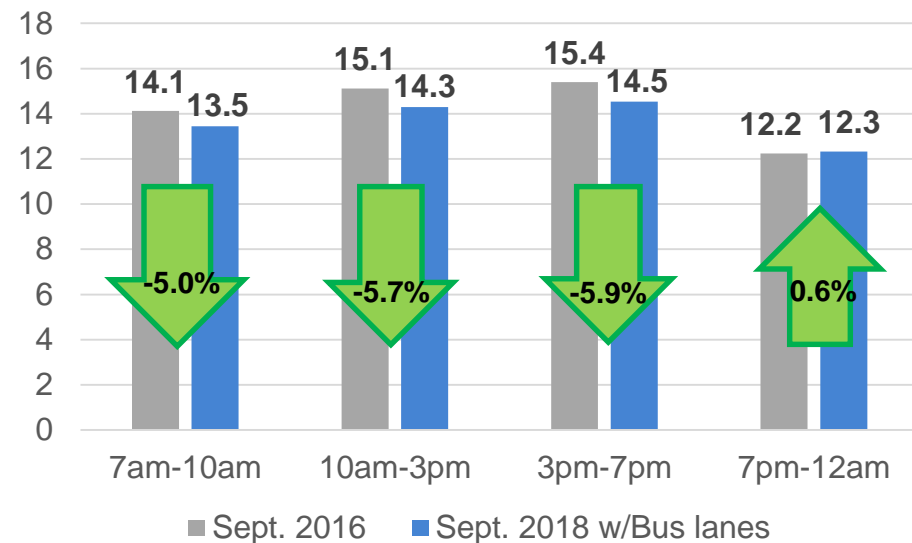
**Travel Time:** On average across all time periods, car travel time has decreased by 4% on the M79 SBS route.

Car Travel Time Eastside, minutes  
Eastbound



Source: INRIX RITIS. Travel time data uses closest available parameters (Riverside Dr.- FDR Dr.)

Car Travel Time Eastside, minutes  
Westbound

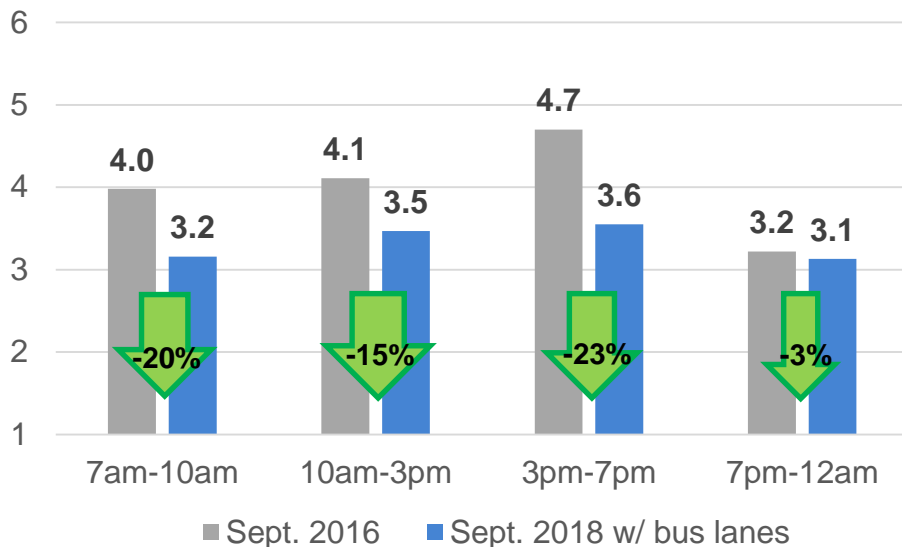


Source: INRIX RITIS. Travel time data uses closest available parameters (Riverside Dr- FDR Dr.)

# Car Travel Time: West Side

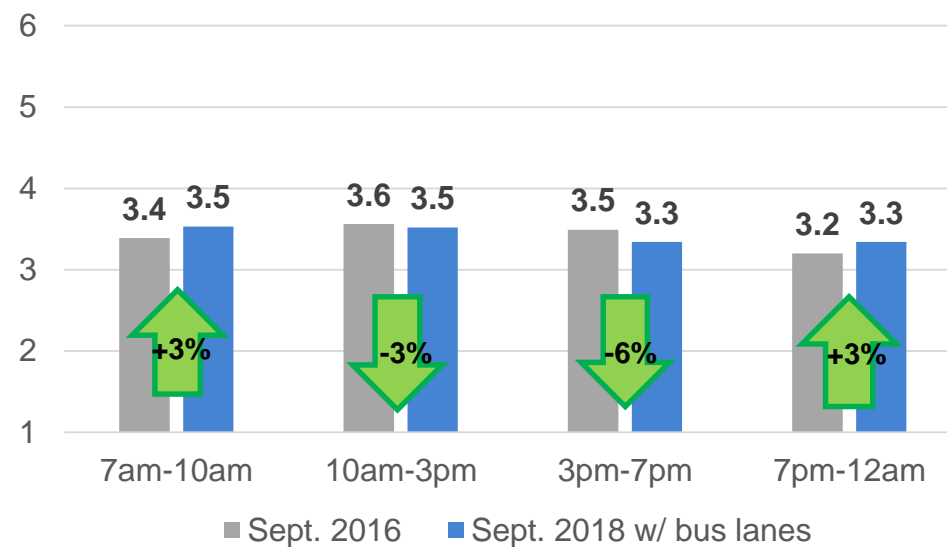
- Average travel time has decreased by 8% for cars along the M79 route between Riverside Drive and Central Park West.\*
- The new W 81<sup>st</sup> St bus lane in the eastbound direction added capacity for the large volume of buses and right turns outside the American Museum of Natural History, which contributed to greater car travel time improvements eastbound.

Car Travel Time West Side, minutes  
Eastbound



Source: INRIX RITIS. Travel time data uses closest available parameters (Riverside Drive and Central Park West)

Car Travel Time West Side, minutes  
Westbound



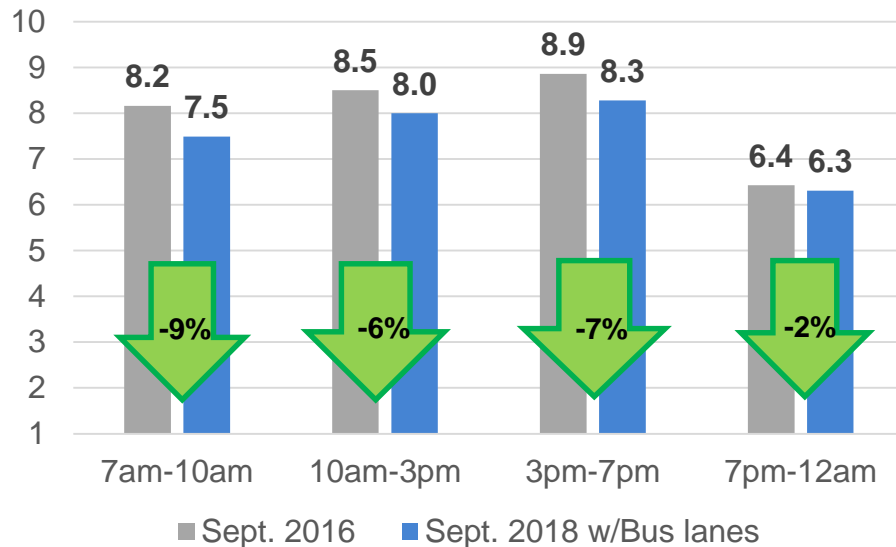
Source: INRIX RITIS. Travel time data uses closest available parameters (Riverside Drive and Central Park West)

\*Extents match those used for bus travel times: W 79<sup>th</sup> St from Riverside to Columbus Ave, Amsterdam from W 79<sup>th</sup> St to W 81<sup>st</sup> St, Columbus from W 79<sup>th</sup> St to W 81<sup>st</sup> St, and 81<sup>st</sup> from Amsterdam to CPW.

# Car Travel Time: East Side

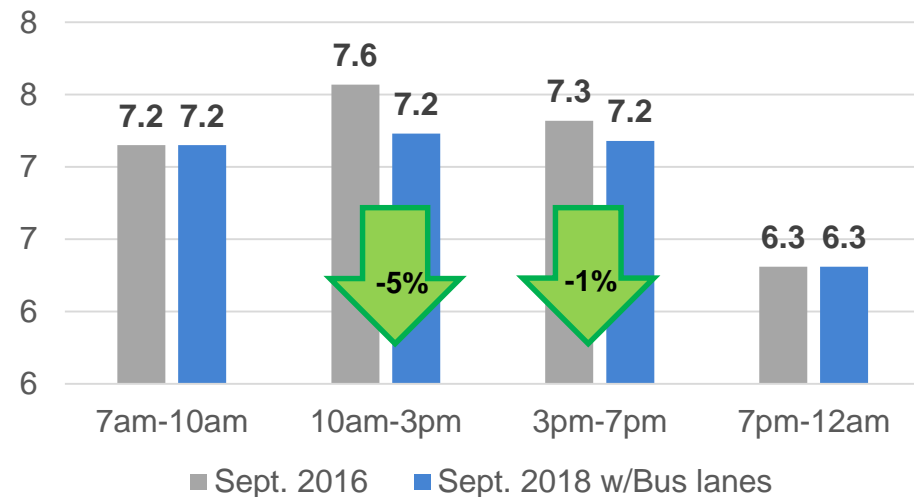
- Average travel time has decreased by 4% for cars along the M79 route between 5<sup>th</sup> Avenue and FDR Drive.\*
- Signal timing improvements and new turn bays were added along E 79<sup>th</sup> St to improve traffic flow, with signal sequencing benefitting eastbound traffic slightly more.

**Car Travel Time Eastside, minutes**  
Eastbound



Source: INRIX RITIS. Travel time data uses closest available parameters (5<sup>th</sup> Avenue- FDR Dr.)

**Car Travel Time Eastside, minutes**  
Westbound



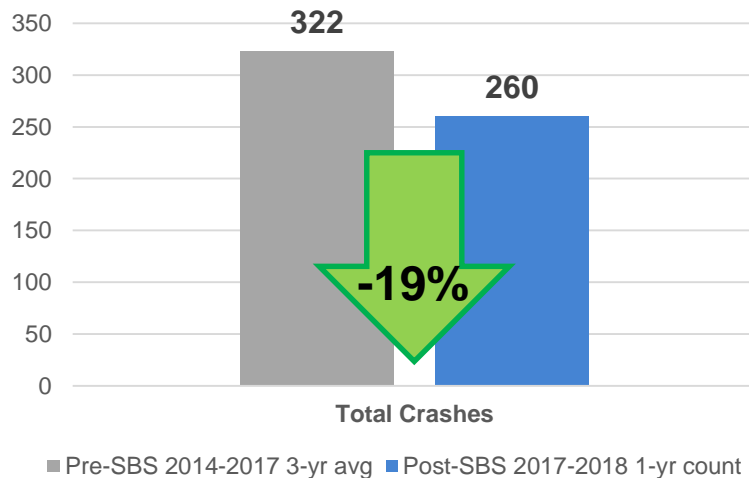
Source: INRIX RITIS. Travel time data uses closest available parameters (5<sup>th</sup> Avenue- FDR Dr.)

\*Extents match those used for bus travel times: E 79<sup>th</sup> St from 5<sup>th</sup> Avenue to FDR Drive.

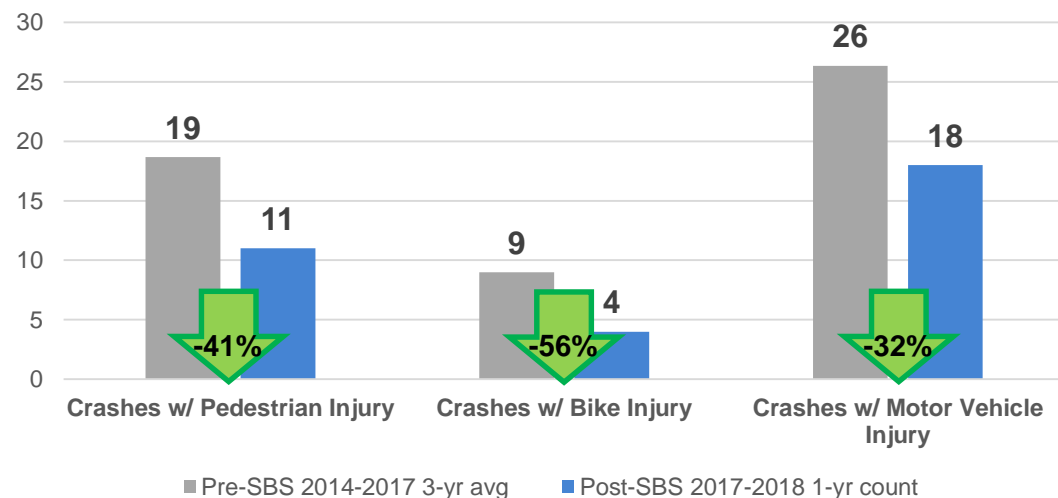
# Traffic Safety

- Since the implementation of M79 SBS, there has been a 19% reduction in total crashes along the corridor and a 41% reduction in crashes resulting in a pedestrian injury
- DOT is continuing to make safety improvements along the corridor

### Annual Crashes along M79 Route



### Annual Crash Injuries along M79 Route



Source: NYPD Crash Data, 2014-2018

# Project Results

- Since the launch of Select Bus Service in May 2017:
  - Ridership has increased about 9% on the M79 SBS
  - 96% of riders are satisfied or very satisfied with M79 SBS, compared to 84% of riders who were satisfied or very satisfied with M79 Local service pre-SBS
  - Bus travel times improved by about 8%
  - Car travel times improved by about 4%
- Off board fare payment, bus lanes, and signal timing improvements have all contributed to improved bus travel times.
- Street redesigns and signal timing improvements have contributed to overall improved car travel times.



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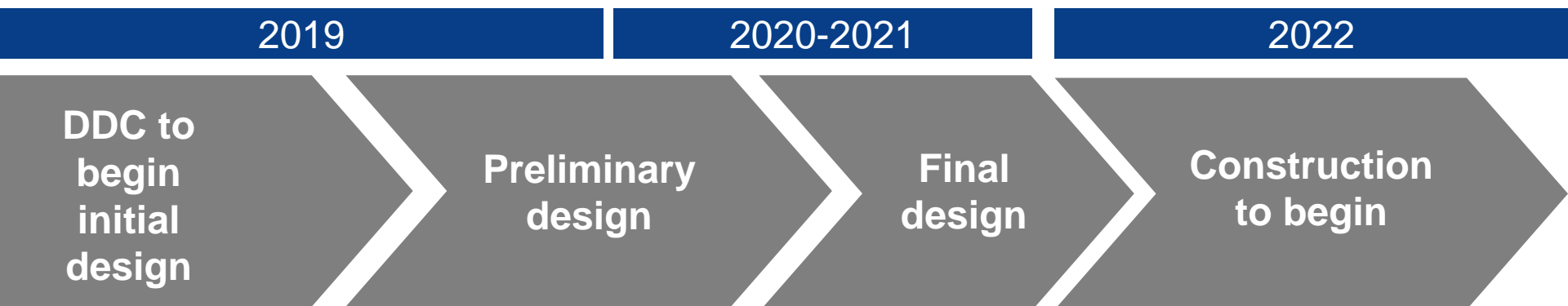
Next Steps

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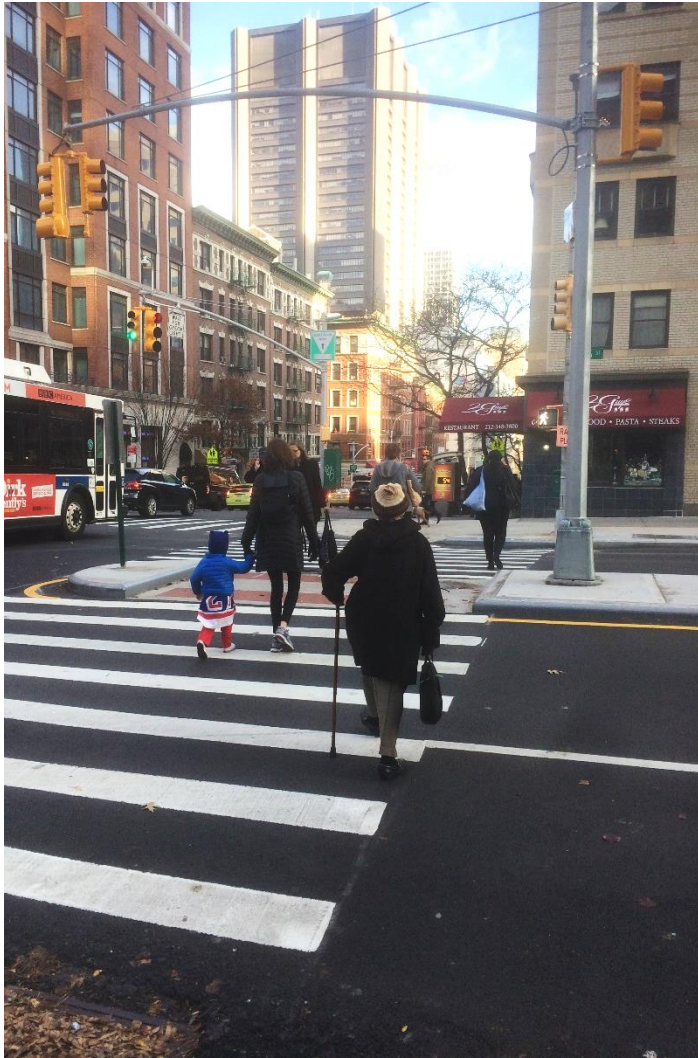


# M79 SBS Capital Project

- The 79<sup>th</sup> Street SBS capital project will build upon the improvements made for the 2017 M79 SBS launch, with the goals of further improving bus speeds, reliability, and pedestrian safety through the construction of new street elements along the M79 SBS route. Treatments will include:
  - **Bus bulbs** to eliminate buses weaving in and out of bus stops, shorten crossings for pedestrians, and expand bus stop and sidewalk space
  - **Curb extensions** to shorten crossings for pedestrians
  - **Pedestrian islands** to shorten crossings and provide a mid-crossing refuge for pedestrians
  - **Bus pads** to reinforce the roadway in concrete and reduce roadway wear and tear created by buses regularly stopping at bus stops



# M79 SBS Capital Project Treatments



Pedestrian Island



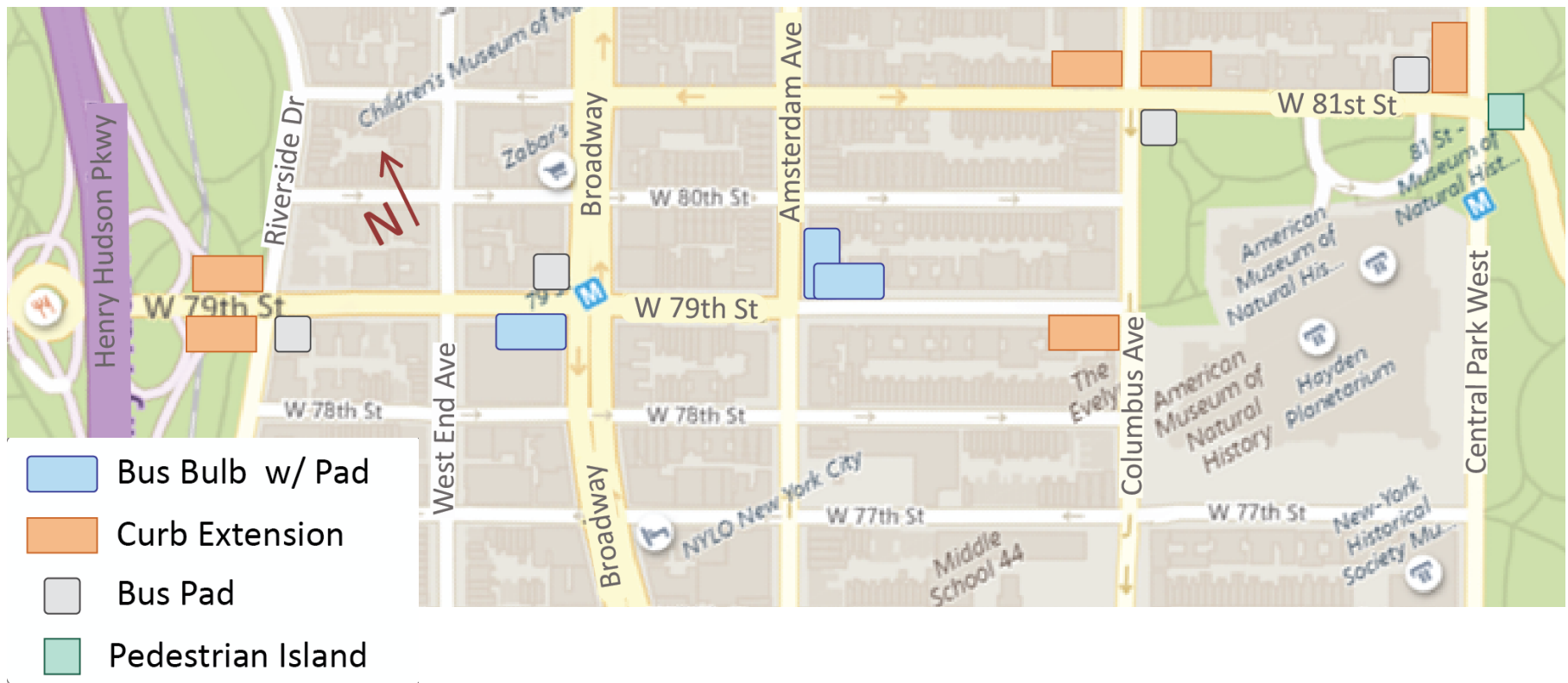
Curb Extension



Bus Bulb

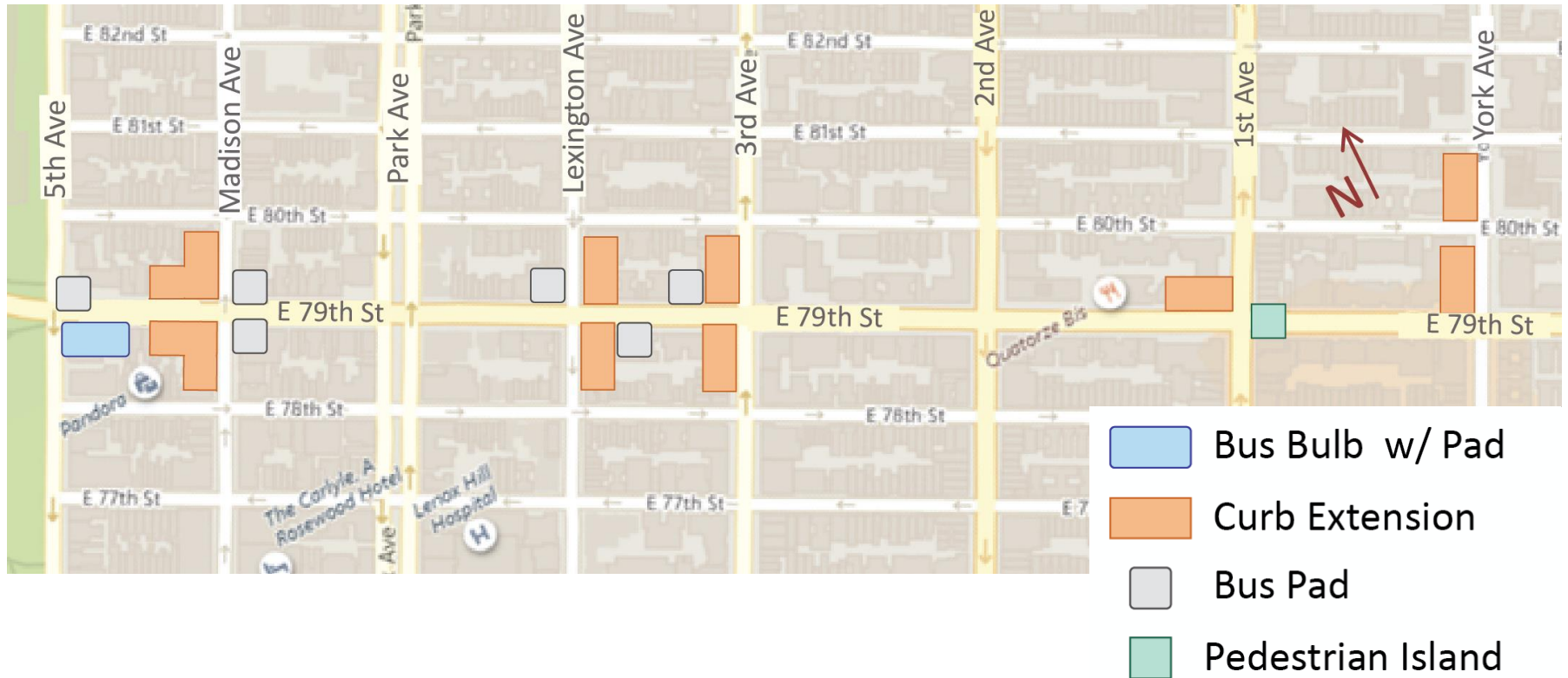
# M79 SBS Capital Project: West Side

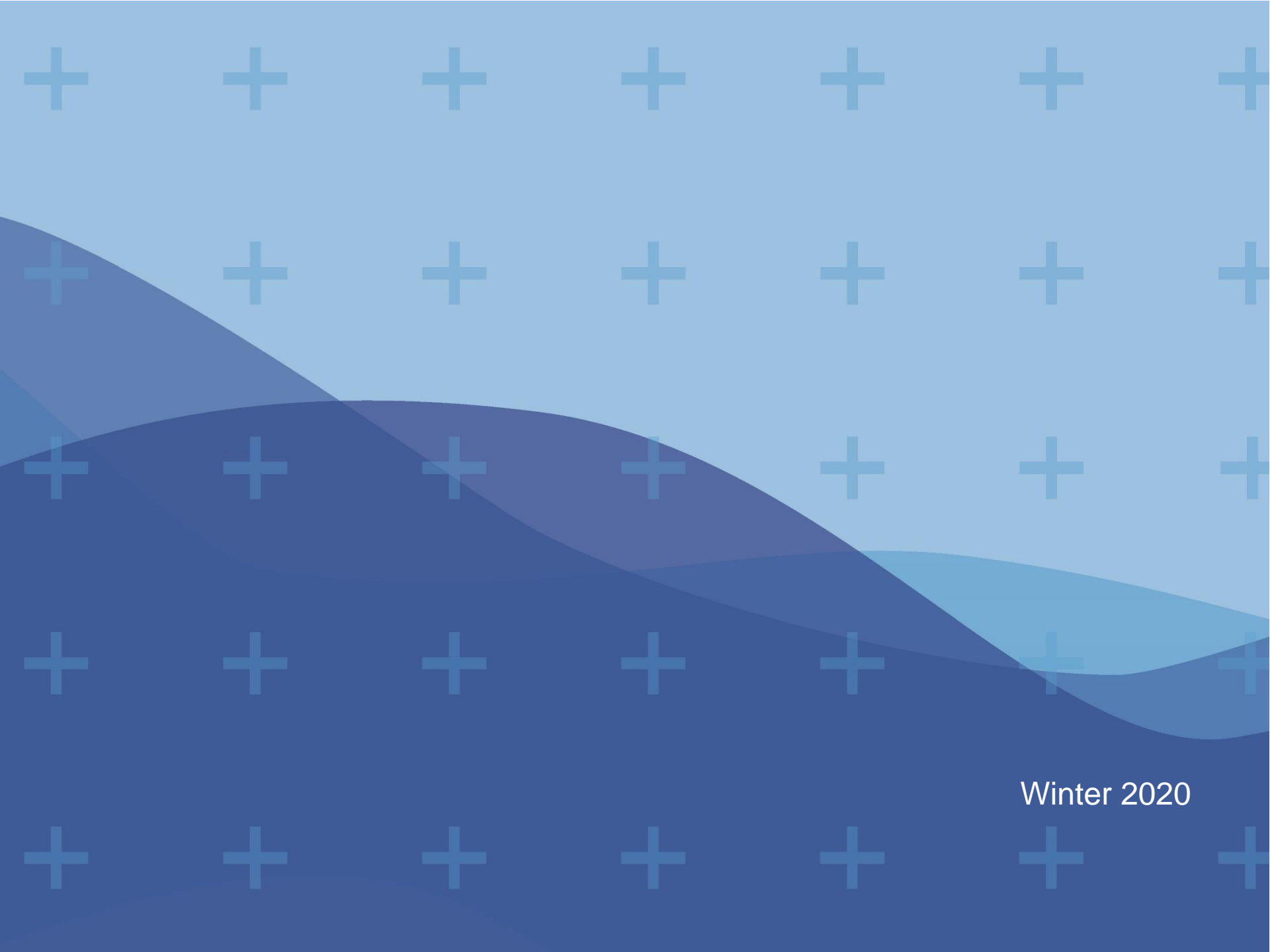
- 3 bus bulbs
- 6 curb extensions
- 4 bus pads
- 1 pedestrian island



# M79 SBS Capital Project: East Side

- 1 bus bulb
- 11 curb extensions
- 6 bus pads
- 1 pedestrian island





Winter 2020