Executive Summary

Background:
• M79 Select Bus Service (SBS) launched on May 21st, 2017, replacing M79 Local service along 79th Street from FDR Drive to Riverside Drive
• At just over two miles, the M79 is a crucial connection to the 1, 6, B, C, Q 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
Project Background
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
Project Implementation
Implementation Timeline

2016

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

March 2017

Street Design

- New lane lines, bus lanes, crosswalks installed
- Curb regulation signs installed

April 2017

Concrete & Signal Work

- Fare machine construction
- Fare machines, wayfinding totems, benches installed
- Signal timing improvements activated

Service Launched May 2017

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Service Launched May 2017
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
Project Treatments
M79 SBS West Side Treatments

- New curbside bus lane to W 81st St eastbound
- New protected turns & pedestrian crossings
- New weekday mid-day bus layover space for school buses on CPW
M79 SBS East Side Treatments

New bus queue jump signal westbound

Short segments of bus lanes to improve bus travel times
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
79th St at 5th 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 79th St and 5th Ave westbound and is evaluating its performance
**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](image)

![Westbound Bus Travel Time](image)

- **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)

<table>
<thead>
<tr>
<th>Time Period</th>
<th>M79 LCL (Sept 2016)</th>
<th>M79 SBS (Sept 2018)</th>
<th>Dwell Time Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 AM - 10 AM</td>
<td>5.9</td>
<td>4.9</td>
<td>-17%</td>
</tr>
<tr>
<td>10 AM - 3 PM</td>
<td>6.0</td>
<td>4.6</td>
<td>-23%</td>
</tr>
<tr>
<td>3 PM - 7 PM</td>
<td>5.7</td>
<td>4.2</td>
<td>-26%</td>
</tr>
<tr>
<td>7 PM - 12 AM</td>
<td>4.3</td>
<td>3.7</td>
<td>-14%</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Time Period</th>
<th>M79 LCL (Sept 2016)</th>
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</thead>
<tbody>
<tr>
<td>7 AM - 10 AM</td>
<td>6.2</td>
<td>4.7</td>
<td>-24%</td>
</tr>
<tr>
<td>10 AM - 3 PM</td>
<td>7.2</td>
<td>5.6</td>
<td>-22%</td>
</tr>
<tr>
<td>3 PM - 7 PM</td>
<td>7.1</td>
<td>5.6</td>
<td>-21%</td>
</tr>
<tr>
<td>7 PM - 12 AM</td>
<td>5.2</td>
<td>4.3</td>
<td>-17%</td>
</tr>
</tbody>
</table>
Bus Reliability

**Late Buses**

<table>
<thead>
<tr>
<th>Route</th>
<th>Direction</th>
<th>Time</th>
<th>Before SBS (Sept 2016)</th>
<th>After SBS (Sept 2018)</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>M79</td>
<td>Eastbound</td>
<td>6-10AM</td>
<td>10.10%</td>
<td>6.40%</td>
<td>-3.7</td>
</tr>
<tr>
<td>M79</td>
<td>Eastbound</td>
<td>3-7PM</td>
<td>12.80%</td>
<td>10.70%</td>
<td>-2.1</td>
</tr>
<tr>
<td>M79</td>
<td>Westbound</td>
<td>6-10AM</td>
<td>10.70%</td>
<td>8.0%</td>
<td>-2.7</td>
</tr>
<tr>
<td>M79</td>
<td>Westbound</td>
<td>3-7PM</td>
<td>18.70%</td>
<td>12.60%</td>
<td>-6.1</td>
</tr>
</tbody>
</table>

*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.

*‘Late’ defined as arriving 5 minutes or more after scheduled arrival time*
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.

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

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 81st 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

<table>
<thead>
<tr>
<th>Time</th>
<th>Sept. 2016</th>
<th>Sept. 2018 w/ bus lanes</th>
</tr>
</thead>
<tbody>
<tr>
<td>7am-10am</td>
<td>4.0</td>
<td>3.2</td>
</tr>
<tr>
<td>10am-3pm</td>
<td>4.1</td>
<td>3.5</td>
</tr>
<tr>
<td>3pm-7pm</td>
<td>4.7</td>
<td>3.6</td>
</tr>
<tr>
<td>7pm-12am</td>
<td>3.2</td>
<td>3.1</td>
</tr>
</tbody>
</table>

**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 79th St from Riverside to Columbus Ave, Amsterdam from W 79th St to W 81st St, Columbus from W 79th St to W 81st St, and 81st from Amsterdam to CPW.
Car Travel Time: East Side

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

**Car Travel Time Eastside, minutes**

<table>
<thead>
<tr>
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<th>Sept. 2018 w/Bus lanes</th>
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</tr>
<tr>
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<td>6.4</td>
<td>6.3</td>
</tr>
</tbody>
</table>

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

*Extents match those used for bus travel times: E 79th St from 5th 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.

**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.
M79 SBS Capital Project

- The 79th 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

<table>
<thead>
<tr>
<th>Year</th>
<th>Design Phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>DDC to begin initial design</td>
</tr>
<tr>
<td>2020-2021</td>
<td>Preliminary design</td>
</tr>
<tr>
<td>2021</td>
<td>Final design</td>
</tr>
<tr>
<td>2022</td>
<td>Construction to begin</td>
</tr>
</tbody>
</table>
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