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Background
Better Buses Restart

Recovery Plan

9 busway & bus lane projects announced, focused on:

• Vulnerable populations, essential workers

• Number of bus passengers served

• Ability to implement quickly

• Geographic equity
Why 181st Street?

- 42,000 daily passengers on 5 MTA bus routes
- Routes on 181st St serve neighborhoods with high concentrations of essential workers
- Bus passengers comprise 62%-70% of roadway users on 181st St
- Average bus speed is 3.7mph
- 69% of Washington Heights and Inwood households do not have access to a car
- Surveys indicate that 88% of people get to Washington Heights businesses via walking or public transit
Project Timeline

**July 7, 2020**
- CAB and project kick-off

**July / August 2020**
- Met with SBS and BID
- Added furniture at bus stops
- Developed draft busway plan
- Met with WHIN Charter School

**September 2020**
- Presented draft busway plan to CAB and gathered feedback
- Met with 2420 Amsterdam Av developer

**October 2020**
- Conducted traffic and parking analyses
- Launched online survey and feedback portal

**November - December 2020**
- Presented draft busway plan and analysis overview to Community Board 12
- Met with FDNY
- Completed analyses

**January 2021**
- Present analyses, survey responses, and updated plan to CAB

**February 2021**
- Present analyses, survey responses, and updated plan to Community Board 12

**Spring 2021**
- Implement busway (1 year pilot)

**Spring 2021 - Spring 2022**
- Project monitoring and evaluation
- Reporting to stakeholders
Outreach
Project Portal

- Issues identified
  - Crowded buses and bus stops
  - Slow buses
  - Double parking
  - Difficulty finding available parking
- Most comments supportive of busway

Bus Stuck in Traffic  09/04/2020 - 12:06
West 181 St - Audubon Ave - St Nicholas Ave

This busway is long overdue. The corridor is heavily used by bus riders during all hours of the day, and the hours of the lanes should ideally be 24/7, but should at least be from 5 a.m. to 10 p.m. to serve people with unconventional work hours.

https://nycdotprojects.info/181St-Busway
Online Survey

Distribution

- CAB
- DOT Social Media
- Bus Stops

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As part of planning for the 181st St Busway, we want to know more about how New Yorkers get to destinations on 181st St between Broadway and Amsterdam Ave in Manhattan.

If you spend time on 181st St, please fill out this survey: [https:// surveymonkey.com/r/181st](https://surveymonkey.com/r/181st)

Como parte de la planificación para la vía de autobuses en la 181st Street queremos saber más sobre cómo los neoyorquinos llegan a los locales en la 181st St entre Broadway y Amsterdam de Manhattan.

Si pasa tiempo en la 181st St, llene esta encuesta: [https://surveymonkey.com/r/181st](https://surveymonkey.com/r/181st)

See Translation

The NYC Department of Transportation is looking to hear from you.

**El Departamento de Transporte de NYC quiere oír sus opiniones.**

Please participate in a quick survey.

**Participe en una encuesta rápida.**
Online Survey

Response Summary

- 149 responses
- 83% live in Washington Heights or adjacent neighborhoods
- 81% support busway
- 84% primarily use buses, subway, or walking to access 181st St
- Concerns raised about slow and unreliable bus service, traffic congestion, and parking

Would you support a busway along 181st St that prioritizes buses and trucks by limiting thru traffic (local access and parking for private vehicles would still be allowed)?

- Strongly Agree, 64.0%
- Agree, 17.4%
- Neutral, 9.3%
- Disagree, 2.3%
- Strongly Disagree, 7.0%
Online Survey

Response Summary – Bus Riders

- Only 8% of riders reported being satisfied with bus service on 181st St
- More than half reported long waits, buses stuck in traffic, and crowded buses as major issues
Online Survey

Response Summary – Drivers and Pickups/Drop-offs

• 67% of respondents indicate that they park on side streets. 22% park on 181st St

• 44% of respondents indicated that finding a parking space typically takes more than 15 minutes

• 46% would take public transit if it were faster and more reliable

How long does it usually take you to find a spot to park on/near 181st St?

- More than 15 min: 44%
- 11 - 15 min: 22%
- 6 - 10 min: 11%
- 5 min or less: 22%

Number of Responses: 9
Online Survey

Response Summary - Shoppers

• 73% of respondents indicated that they shop, dine, or visit other businesses on 181st St

• 89% of those visiting businesses on 181st St arrive via walking, bus, subway, or bike

Number of Responses: 110
181st Street Busway Proposal
Busway Proposal

- Busway design remains the same as the previous proposal

- Only buses, trucks, and emergency vehicles may utilize 181st St as a thru street

- All vehicles may turn onto 181st St for local access, but cars and vans must make first available right turn off corridor

- Parking and loading activities will be allowed throughout the corridor to support local businesses and services

- Hours: 6am-10pm, all days

- Extents:
  - Eastbound: Broadway to Amsterdam Av
  - Westbound: Amsterdam Av to Wadsworth Av
Busway Proposal

Example Block – St. Nicholas Ave to Audubon Ave

Parking and loading

General traffic can turn onto corridor for local access

General traffic must make right turn off corridor
Travel Patterns - Vehicles

- 47% of traffic is “cut-thru” traffic with destination other than 181st St

- Cut-thru traffic could be redirected to larger roadways (e.g. Cross Bronx, 178 St, 179 St)

- Majority of vehicles with destination on 181st St already using cross streets

Source: Streetlight
Traffic Analysis

Traffic Modeling

- Builds off model created by Port Authority for GWB Bus Terminal project
- Model calibrated with latest traffic counts available (Fall 2019)
- Additional investigation of GPS data to determine origins and destinations of vehicles on 181st St
Traffic Analysis

Transit Improvements

• Proposed busway results in potential significant improvements for bus riders on 181st St

• End-to-end bus travel times reduced 14%-20% during PM Peak hours

<table>
<thead>
<tr>
<th>Direction</th>
<th>AM Peak Hours</th>
<th>PM Peak Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastbound</td>
<td>-11%</td>
<td>-14%</td>
</tr>
<tr>
<td>Westbound</td>
<td>-9%</td>
<td>-20%</td>
</tr>
</tbody>
</table>
Traffic Analysis

Traffic Effects

• Truck delays reduced 5% (AM Peak) - 15% (PM Peak)

• Vehicle passenger delay increases 4% (PM Peak) - 6% (AM Peak)

• North-south avenues on blocks approaching 181st St see greatest increase in vehicle volumes, however all average delay increases are less than a minute. In some cases delays are reduced
**Traffic Analysis**

**Potential Hot Spots**

- The vast majority of side streets do not see significant changes in vehicle delay, with the exception of a few potential locations.
- These locations will be closely monitored during busway pilot.

### Potential Hot Spots for Increased Traffic

<table>
<thead>
<tr>
<th>Street</th>
<th>Segment</th>
<th>AM Peak</th>
<th>PM Peak</th>
</tr>
</thead>
<tbody>
<tr>
<td>W 182 St</td>
<td>Broadway-Wadsworth Av</td>
<td>0.2</td>
<td>0.1</td>
</tr>
<tr>
<td>W 182 St</td>
<td>Audubon Av – St Nicholas Av</td>
<td>1.3</td>
<td>0.7</td>
</tr>
<tr>
<td>W 180 St</td>
<td>Broadway-Wadsworth Av</td>
<td>0.2</td>
<td>0.1</td>
</tr>
<tr>
<td>W 180 St</td>
<td>Audubon Av – Amsterdam Av</td>
<td>-</td>
<td>0.3</td>
</tr>
<tr>
<td>W 178 St</td>
<td>Broadway-Wadsworth Av</td>
<td>-</td>
<td>0.4</td>
</tr>
<tr>
<td>W 178 St</td>
<td>Audubon Av – Amsterdam Av</td>
<td>-</td>
<td>0.2</td>
</tr>
</tbody>
</table>
Traffic Analysis

14th St Busway Example

- 14th St resulted in fewer delays to surrounding streets than model predicted
- All side streets saw less than 1 minute increases in travel time
- Bus travel times were reduced by 24%

![Traffic and travel times comparison chart]

**BUS OPERATIONS**

**WEEKDAY AVERAGE TRAVEL TIME**

24% improvement in travel times

2.9 minutes faster

Combined for both directions: 3rd Avenue to 8th Avenue from January 2018 to January 2020
Traffic Monitoring

181st St Monitoring Plan

• DOT will monitor traffic volumes and patterns using multiple tools, including:
  – Automated Traffic Recorders (ATRs)
  – Manual and Video counts
  – Streetlight and INRIX (GPS)
  – MTA BusTime

• Adjustments can be made during pilot to improve traffic circulation as needed, including changes to:
  – Signal timing
  – Design / roadway markings
  – Signage
Parking Analysis
Parking Analysis

Time Lapse Study Results

- 37%-85% of vehicles on the corridor are double or illegally parked
- Average duration for legally parked vehicles is about an hour
- Double and illegally parked vehicles stay for less than 15 minutes
- Truck loading primarily occurs before 1pm
Parking Proposal

Overview

• Proposed parking regulations allow for greater flexibility at curb, improve access to businesses, and reduce double parking to keep traffic and buses moving

• Summary of proposed changes:
  – Add 12 metered parking spaces during 3-7pm
  – Add 11 flexible spaces for quick pickup and drop-off activities
  – Extend Truck loading hours from 12pm to 1pm
  – Extend metered parking time limit to 2 hours
  – Some metered parking hours extended until 10pm
Parking Proposal

Broadway – Wadsworth Ave

- No changes to existing curb regulations
Parking Proposal

Wadsworth Ave – St Nicholas Ave

- Adds 3 spaces for short term curb access
- Truck loading hours extended to 1pm
- Adjusts meter time limit to 2 hours
- Extends metered parking until 10pm
- Adds 7 metered spaces (currently No Standing 3pm-7pm)

Short term curb access (under study)
Currently: 1 Hr Metered Parking, 9am-7pm (ex. Sun)

2 Hr Metered Parking 9a-10p (ex. Sun)
Currently: 1 Hr Metered Parking, 9am-7pm (ex. Sun)

Truck Loading 8:30 am-1pm (M-F)
Currently: Truck Loading 9am-12pm
2 Hr Metered Parking 1pm-10pm (M-F)
Currently: 1 Hr Metered Parking 12pm-3pm,
No Standing 3pm-7pm
2 Hr Metered Parking 8:30am-10pm (Sat)
Currently: 1 Hr Metered Parking 9am-7pm
Parking Proposal

St Nicholas Ave – Audubon Ave

- Truck loading hours extended to 1pm
- Adjusts meter time limit to 2 hours
- Extends metered parking until 10pm
- Adds 5 metered spaces (currently No Standing 3pm-7pm)
- Removes 4 spaces for right turn lane
- Existing Ambulette and No Parking area maintained

Truck Loading 9am-1pm (M-F)
Currently: Truck Loading 9am-12pm
2 Hr Metered Parking
1pm-10pm (M-F)
Currently: 1 Hr Metered Parking 12pm-7pm
2 Hr Metered Parking
8:30am-10pm (Sat)
Currently: 1 Hr Metered Parking 9am-7pm

Truck Loading 8:30 am-1pm (M-F)
Currently: Truck Loading 9am-12pm
2 Hr Metered Parking
1pm-10pm (M-F)
Currently: 1 Hr Metered Parking 12pm-3pm,
No Standing 3pm-7pm
2 Hr Metered Parking
8:30am-10pm (Sat)
Currently: 1 Hr Metered Parking 9am-7pm
Parking Proposal

Audubon Ave – Amsterdam Ave

- Working with FDNY to determine optimal locations for transit and FDNY operations
- Potentially relocates 3 FDNY parking spaces to Audubon Av
- Provides 8 spaces for pickup and drop-off activities on the south curb

FDNY Authorized Parking
Currently: 1 Hr Metered Parking
9am-7pm

Maintains Existing
FDNY Authorized Parking

No Standing Anytime
Currently: FDNY Authorized Parking

Maintains Existing
No Standing Anytime
(allow for pick-up/drop-off)

Bus Stop
Next Steps
Next Steps

1. Incorporate feedback received today

2. Present plan to Community Board 12

3. Finalize plans and develop installation timeline

4. Update CAB with final plan and implementation schedule
Thank you

Questions?