

# Better Buses Restart – 181<sup>st</sup> Street Busway Pilot

Manhattan Community Board 12 Transportation Committee – November 2, 2020



# Table of Contents

---

1. Background
2. Existing Conditions
3. Community Engagement
4. Traffic and Parking Analysis
5. Preliminary Draft Busway Proposal
6. Next Steps

# Background

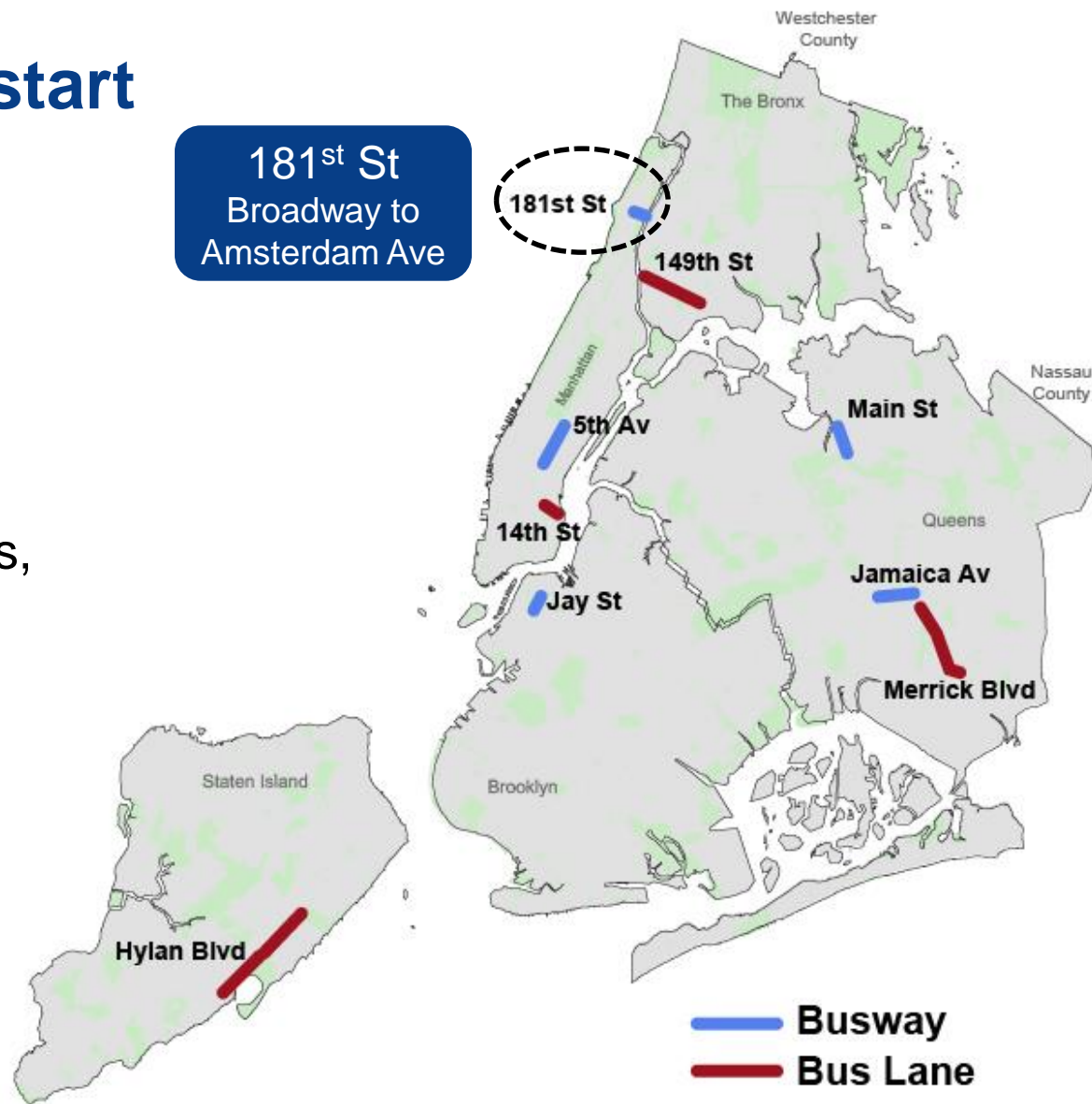


# Better Buses Restart

## 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



# What is a Busway?

- A busway prioritizes bus travel by restricting other traffic traveling through a corridor
  - Includes regulatory signs and bus lane markings
  - Only buses, trucks, and emergency vehicles are allowed to drive continuously along the busway
  - Other vehicles are allowed to turn onto busway for local access, such as visiting a business or pick-up/drop-off, but must make the next available turn off busway
- Thorough evaluation of curb regulations to match the needs of businesses and other entities along the corridor
- Thorough monitoring of bus and traffic operations
- Opportunity for pedestrian safety improvements

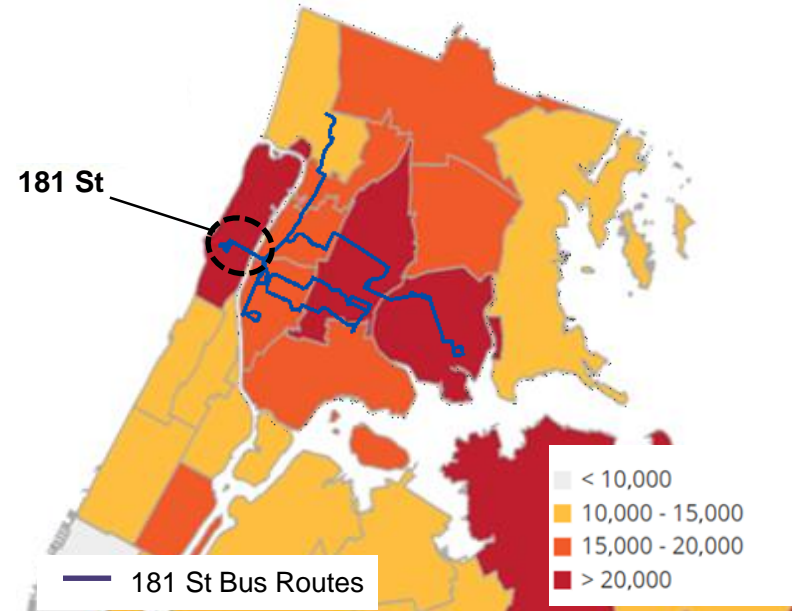


14<sup>th</sup> Street, Manhattan



## Why 181<sup>st</sup> Street?

- 42,000 daily passengers on 5 MTA bus routes
- Routes on 181<sup>st</sup> St serve neighborhoods with high concentrations of essential workers
- Bus passengers comprise 62%-70% of roadway users on 181<sup>st</sup> St
- Average bus speed is 3.7mph
- 69% of Washington Heights and Inwood households do not have access to a car



# 181<sup>st</sup> St Community Advisory Board Process

---

- Community Advisory Board (CAB) guides project before, during, and after implementation
- CAB members include:
  - Manhattan Borough President Gale Brewer
  - State Senator Robert Jackson
  - State Assemblymember Carmen De La Rosa
  - Councilmember Ydanis Rodriguez
  - Washington Heights Business Improvement District
  - Community Board 12
  - Tri-State Transportation Campaign
  - Riders Alliance
  - Yeshiva University
  - New York Presbyterian
  - NYPD
  - FDNY

# What We've Heard from the CAB

## *What We've Heard*

## *Action Items / Next Steps*

### Street Vending

- BID / SBS meeting 7/29/20
- DOT installed 4 city benches and 5 leaning bars at 5 bus stops

### Traffic and Truck Circulation

- Traffic analysis on 181<sup>st</sup> St and surrounding streets to determine potential effects of busway

### Neighborhood Development

- Incorporating anticipated increases in trips into traffic analysis

### Loading Needs

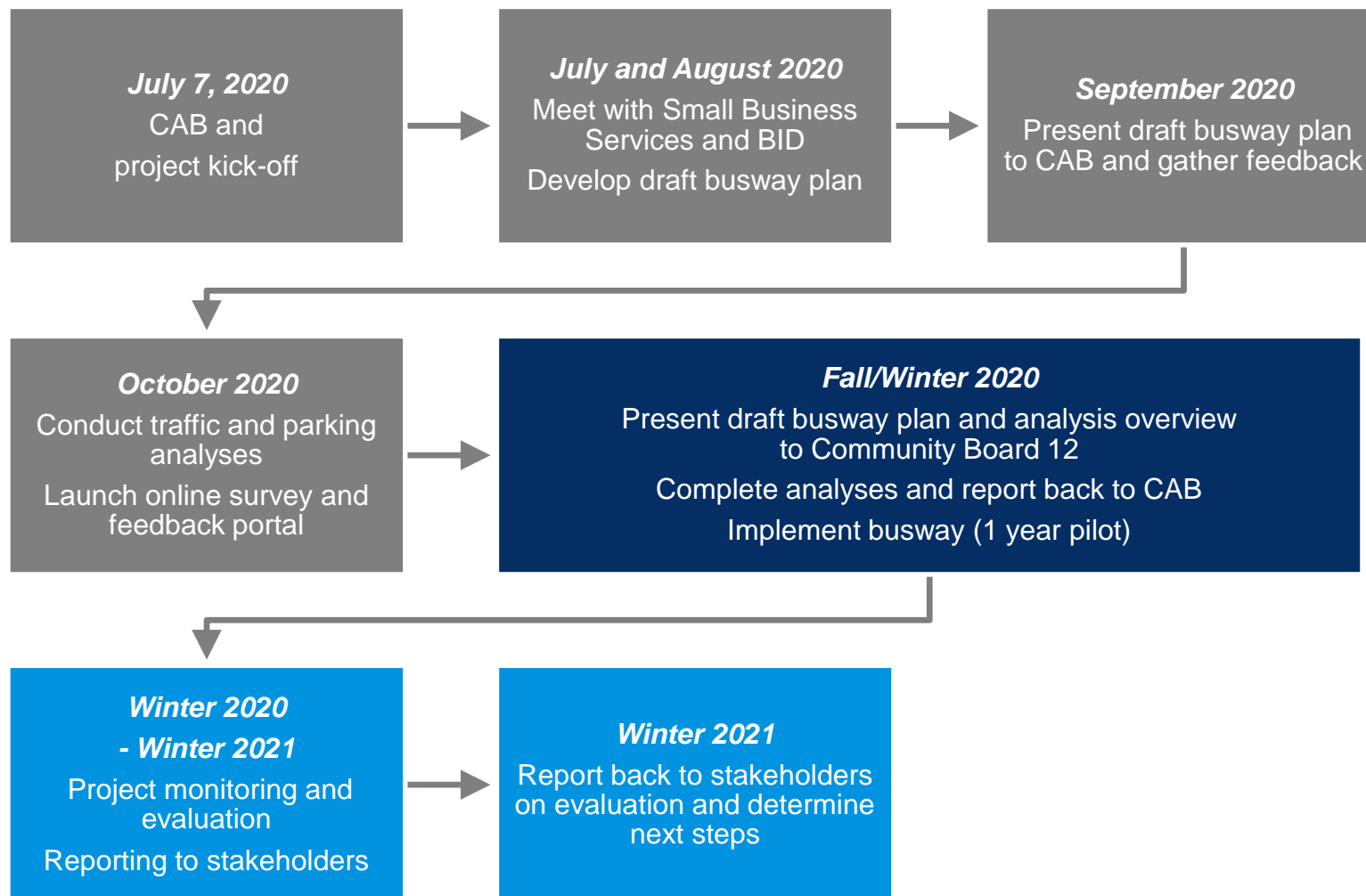
- Accommodations in Busway Design
- Determining optimal curb regulations for whole corridor
- Scheduling meeting with FDNY

### Supporting Local Businesses

- Develop business survey to ensure feedback is received to address concerns



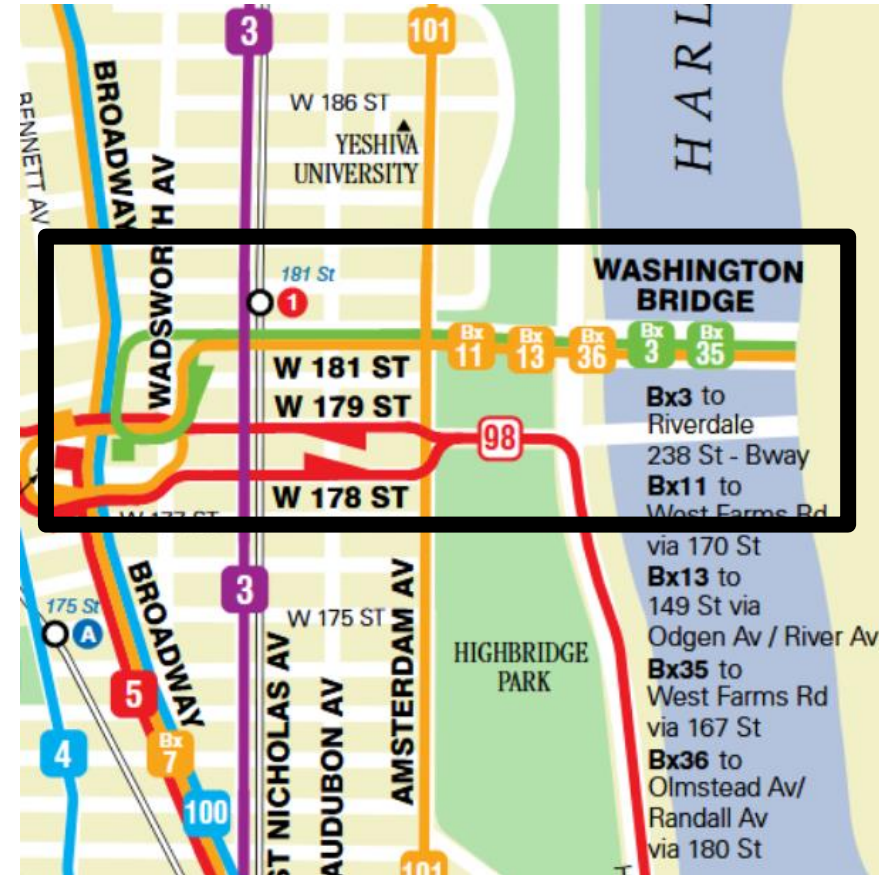
# Project Timeline



# Existing Conditions

# Transit

- 181<sup>st</sup> St is one of the busiest corridors for buses in the city
- 5 NYCT Routes carrying over 42,000 daily passengers on 181<sup>st</sup> St
- 50+ NYCT buses per hr during peak hrs
- Connections to 6 bus routes, 1 and A Trains, and GWB Bus Station

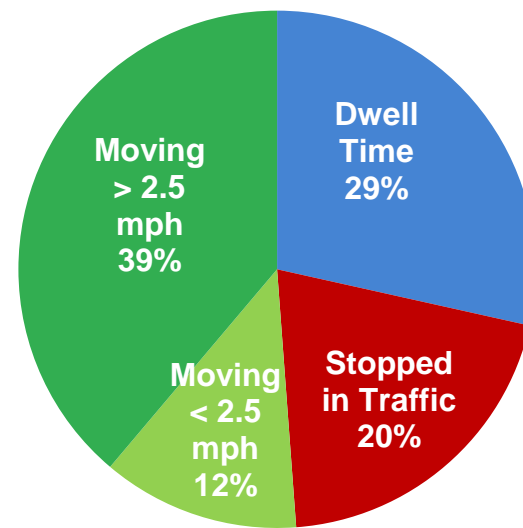


# Transit Speeds

- Buses are slow and unreliable on 181 St
- Average bus speed is 3.7 mph
- Bus “bunching” causes long waits and overcrowding on buses and at stops



*St. Nicholas Ave and 181 St, looking East*



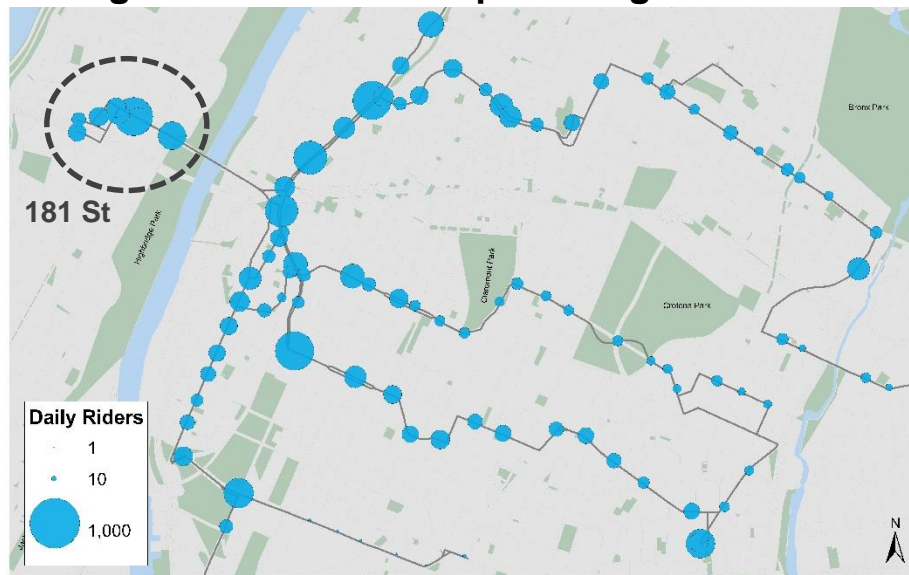
*Data Source – MTA NYCT, May 2019*



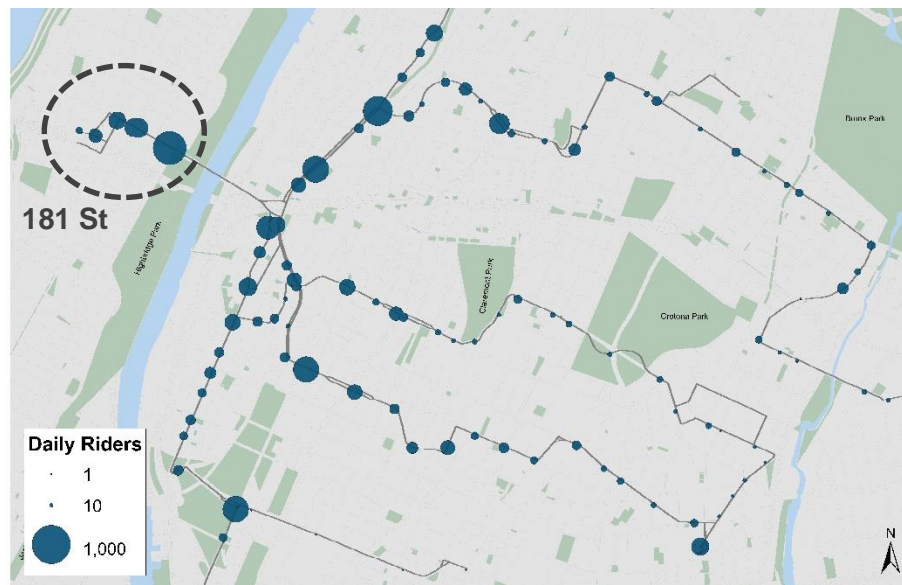
## Travel Patterns – Transit

- Of the 42,000 daily riders, many are traveling just along 181<sup>st</sup> St
- 3,660 bus trips on corridor start and end in Manhattan, which would be directly served by the busway

Origins of riders with trips ending on 181<sup>st</sup> St



Destinations of riders with trips starting on 181<sup>st</sup> St



Source: MTA NYCT

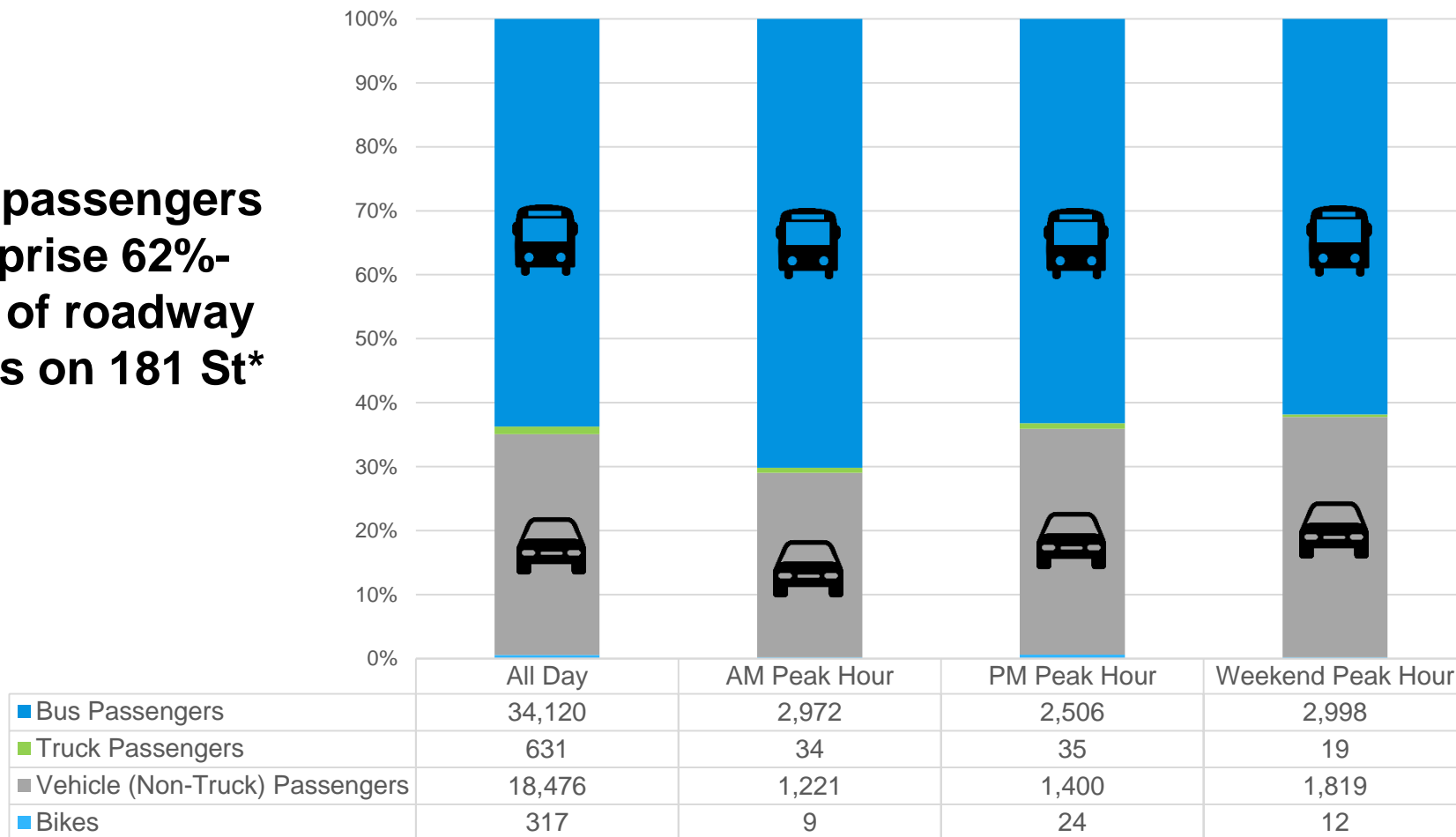
# Travel Patterns – Transit

- In addition to local trips on 181<sup>st</sup> St, ridership data indicates significant amount of Manhattan residents benefit from the bus connections to the Bronx
- During morning rush hours (6am-10am), 3,500 passengers are getting on buses on 181<sup>st</sup> St
- During evening rush hours (3pm-7pm), 5,700 passengers are arriving from Bronx to 181<sup>st</sup> St



# Mode Split

**Bus passengers  
comprise 62%-  
70% of roadway  
users on 181 St\***



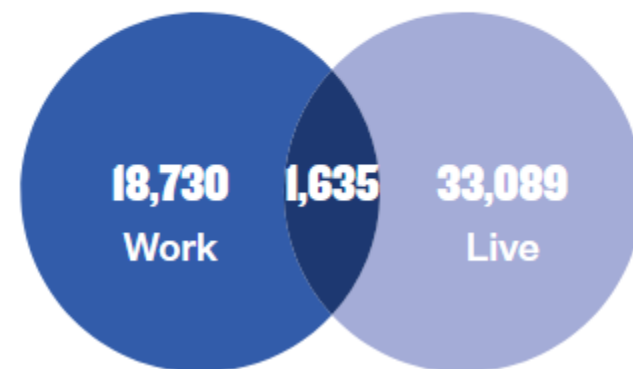
\*Between Audubon Ave and St Nicholas Ave

Data Sources: MTA NYCT, DOT Traffic Counts

# Travel Patterns – Commuting

- 18,730 people work in Washington Heights who do not live in the neighborhood
- Many rely on public transit to access Washington Heights
- 5,900 bus riders on 181<sup>st</sup> St coming from the Bronx during morning peak hours (6am-10am)

Commuting Patterns



**18,730**

Work in Washington Heights,  
live elsewhere

**1,635**

Live & Work in  
Washington Heights

**33,089**

Live in Washington Heights,  
work elsewhere

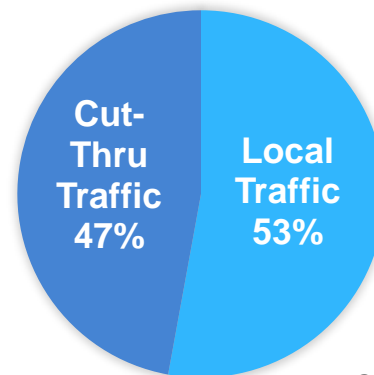
Source: NYC SBS - Commercial District  
Needs Assessment, US Census



# Travel Patterns - Vehicles

- Using Streetlight, an analysis tool that utilizes GPS data, DOT is studying traffic patterns in the area
- Almost half of all traffic is “cut-thru” traffic with destination other than 181<sup>st</sup> St
- Cut-thru traffic could be redirected to larger roadways (e.g. Cross Bronx, 178 St, 179 St)

## Traffic on 181st St



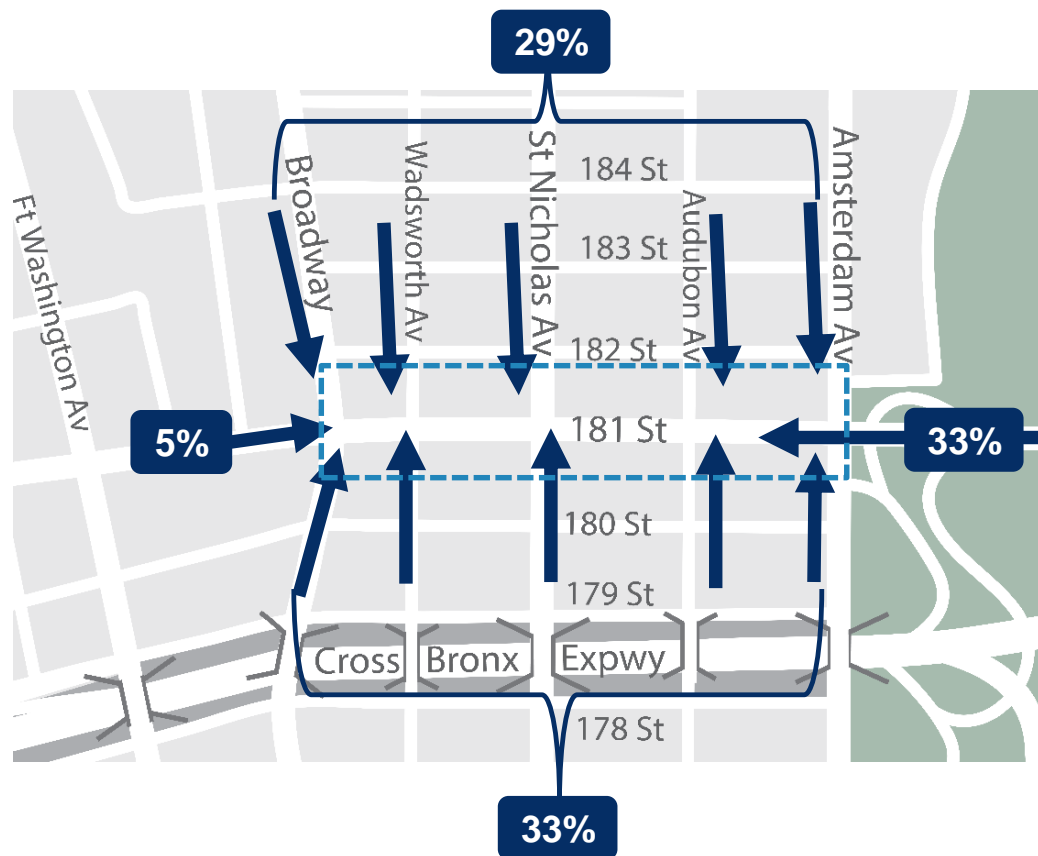
Source: Streetlight



# Travel Patterns - Vehicles

- Majority of vehicles with destination on 181<sup>st</sup> St already using cross streets
- DOT will continue to analyze these data to determine busway effects on traffic network

## Vehicles with 181<sup>st</sup> Street Destination




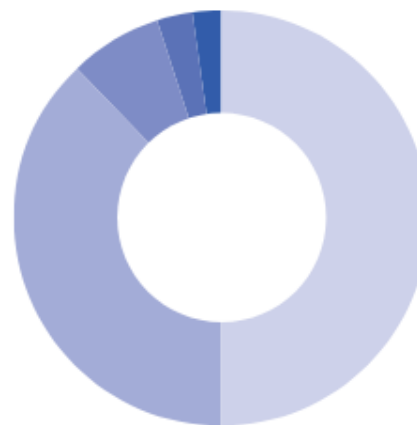
Source: Streetlight

# Local Businesses

- Surveys indicate that 88% of people get to Washington Heights businesses via walking or public transit
- Busway would support transit use and walking
- As project develops, DOT will continue to work with local businesses, BID, and SBS to address concerns

## How people get to businesses in Washington Heights

Walk		50%
Public transportation		38%
Car		7%
Taxi/Ride share		3%
Bike		2%



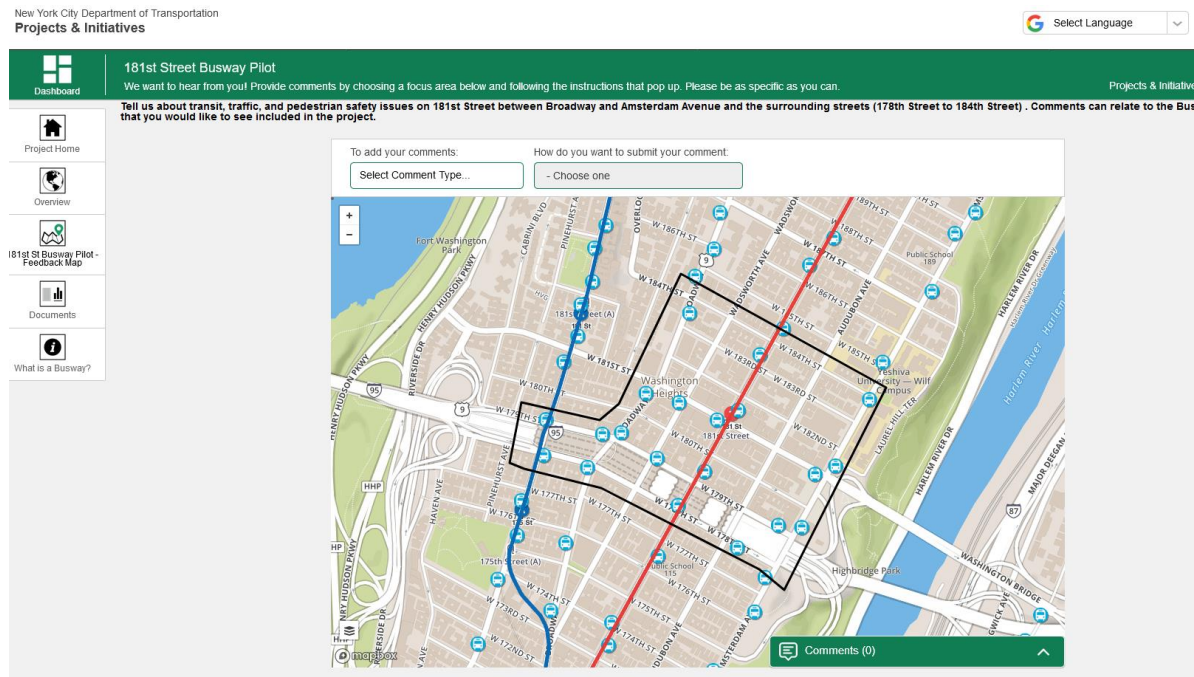
Source: NYCSBS - Commercial District Needs Assessment, CLOTH

# Community Engagement



# Online Project Website

- Launched online website detailing information about the project
- Feedback map allows for comments at specific locations
- Available in multiple languages (via Google Translate)



<https://nycdotprojects.info/181St-Busway>

# Online Survey

---

- Online survey for general public to gather feedback
- Available in English and Spanish
- [www.surveymonkey.com/r/181st](http://www.surveymonkey.com/r/181st)



181st st Busway Survey

Opening Page

NYC DOT is studying a busway on 181st Street between Broadway and Amsterdam Avenue. A busway prioritizes the movement of Buses, Trucks, Access-A-Ride, and Emergency Vehicles. General vehicles would still be able to access 181st Street for delivery, shopping, and pick-up/drop-off, but must make the next available turn off of the corridor.

We'd like your help, this survey will only take a few minutes. Thanks, we really appreciate it!

# Business Outreach

- In November 2019, NYC DOT Street Ambassadors surveyed businesses on 181 St corridor to learn about loading and delivery needs
- Issues identified
  - Double parking
  - Lack of access to the curb for deliveries and loading
  - Traffic congestion

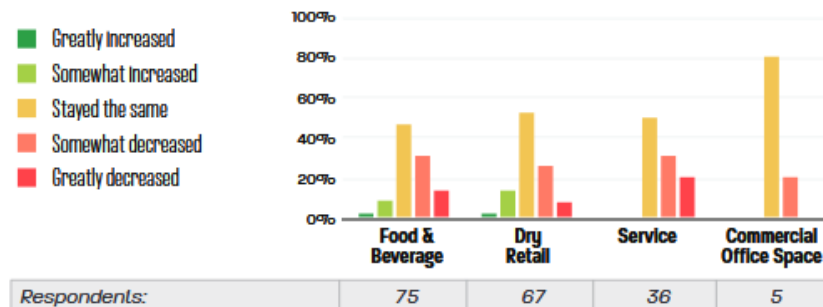


# Business Outreach

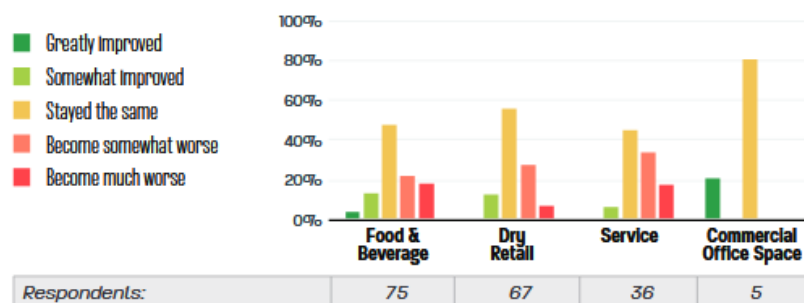
- DOT will develop specific online survey for businesses as part of monitoring plan
- Committed to hearing from businesses to ensure that needs are accommodated where feasible
- Design can be adjusted after implementation if concerns arise

Example questions from 14<sup>th</sup> St Survey

**Since the 14th Street Project changes, the number of customers visiting my business has:**



**Since the 14th Street Project changes my business has...**



*"Business is about the same, we receive about the same amount of customers as before as we have a lot of foot traffic."*

Source: Sam Schwartz Engineering

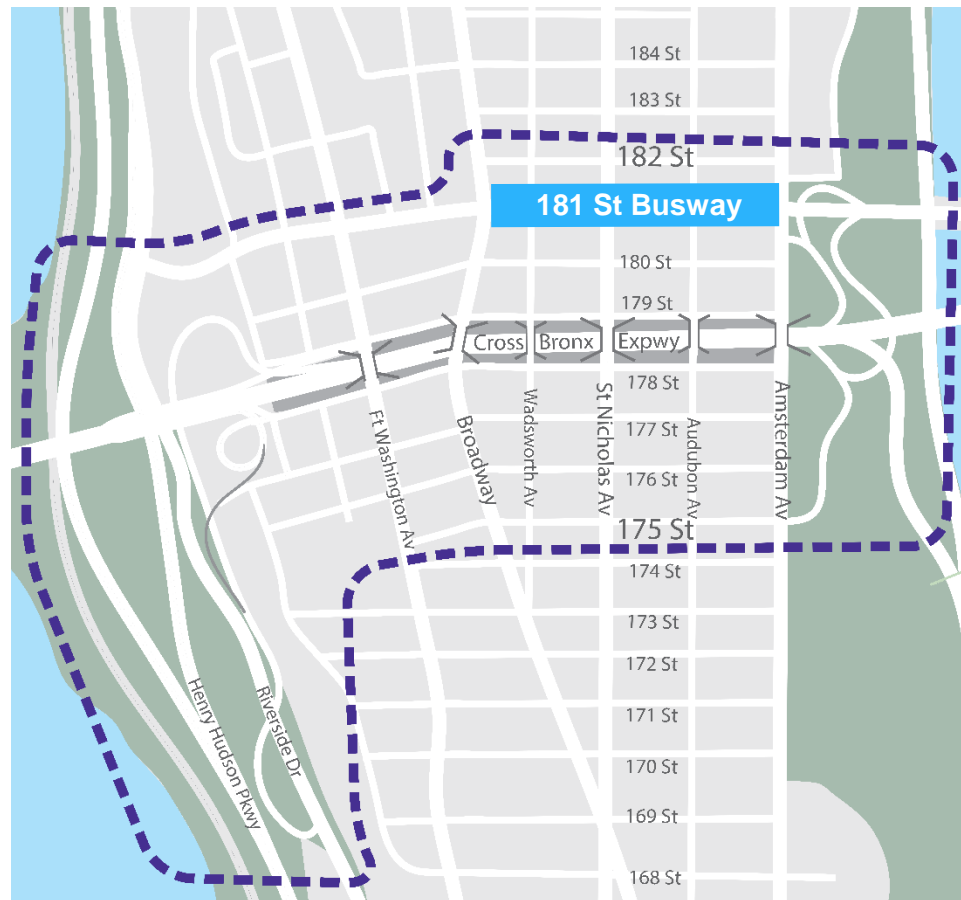


# Traffic and Parking Analysis

# 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 181<sup>st</sup> St
- Detailed results including:
  - Expected bus speed improvements
  - Anticipated traffic diversions



# Traffic Analysis

## Fridays

- Traffic analysis will focus on weekday morning and evening rush hours, which are the most congested time periods
- Will also look specifically at Friday afternoons/evenings



# Traffic Analysis – New Development

## New development to be incorporated into model

1. Coliseum Theater  
Redevelopment
2. Target
3. Supermarket – 312  
Audubon Ave/544 W  
181<sup>st</sup> St
4. WHIN Charter School  
– 508 W 181<sup>st</sup> St
5. 2420 Amsterdam Ave  
(hotel/commercial)

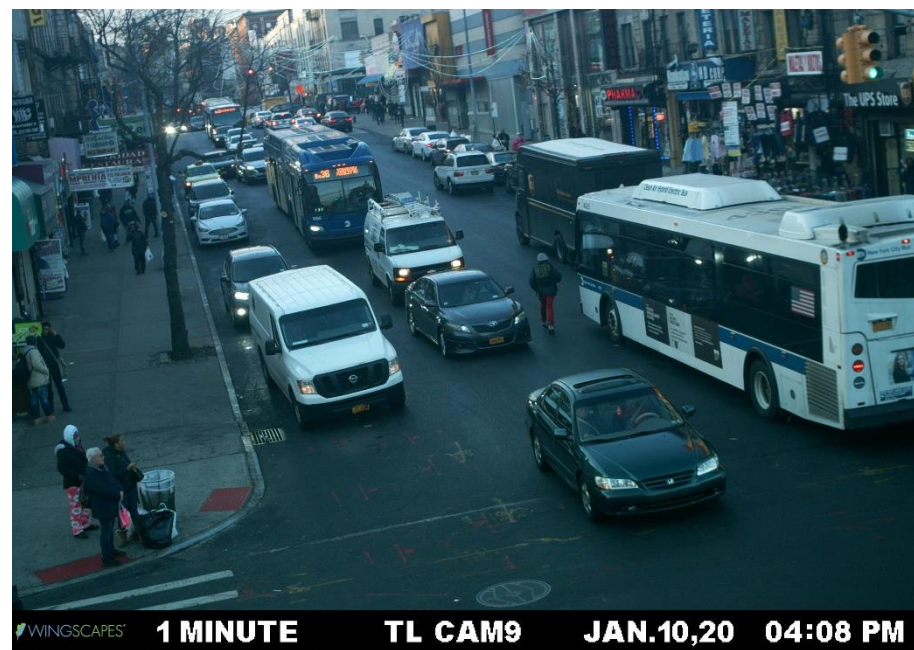




# Parking Analysis

## Time Lapse Study

- Images taken every minute between 6am and 10pm between Thursday, January 9 and Monday, January 13, 2020
- DOT parking analysis tool provides detailed results including:
  - Parking duration
  - Illegal parking/loading/unloading
  - Double parking
  - Types of vehicles parking/loading
- Parking regulations will be catered to specific needs of individual blocks





# Construction Coordination

- Coordinating with DOT Bridges, DDC, and MTA on current construction projects
- Current projects include:
  - Washington Bridge Rehabilitation
  - 181<sup>st</sup> St 1 Train Station Elevator Replacement
  - Curb extensions at 181<sup>st</sup> St / Broadway and 181<sup>st</sup> St / St. Nicholas Ave
- Traffic patterns will be monitored during construction

NYC DOT  
November 18, 2019

## Washington Bridge Notice:

Repairs of the Washington Bridge over the Harlem River (181st Street) will require all hours closure of the Manhattan-bound center lane until further notice.

Both the left and right Manhattan-bound Lanes will remain open.

NYC 311

NYC Emergency Management

NYPD 23rd Precinct

NYPD 25th Precinct

NYPD 40th Precinct

Manhattan Community Board 11



Center Lane Closure  
November 15, 2019  
Hours  
Manhattan-bound lanes will remain open.

## 2 subway stations in Washington Heights closing to replace 'critical' elevators

By Vincent Barone

0 comments Posted on December 18, 2018



The 181st Street No. 1 train subway station will close from March 2021 until February 2022 so its elevator can be replaced. Photo Credit: Jeff Bachner

Photo Source: AMNY

# Preliminary 181<sup>st</sup> Street Busway Proposal

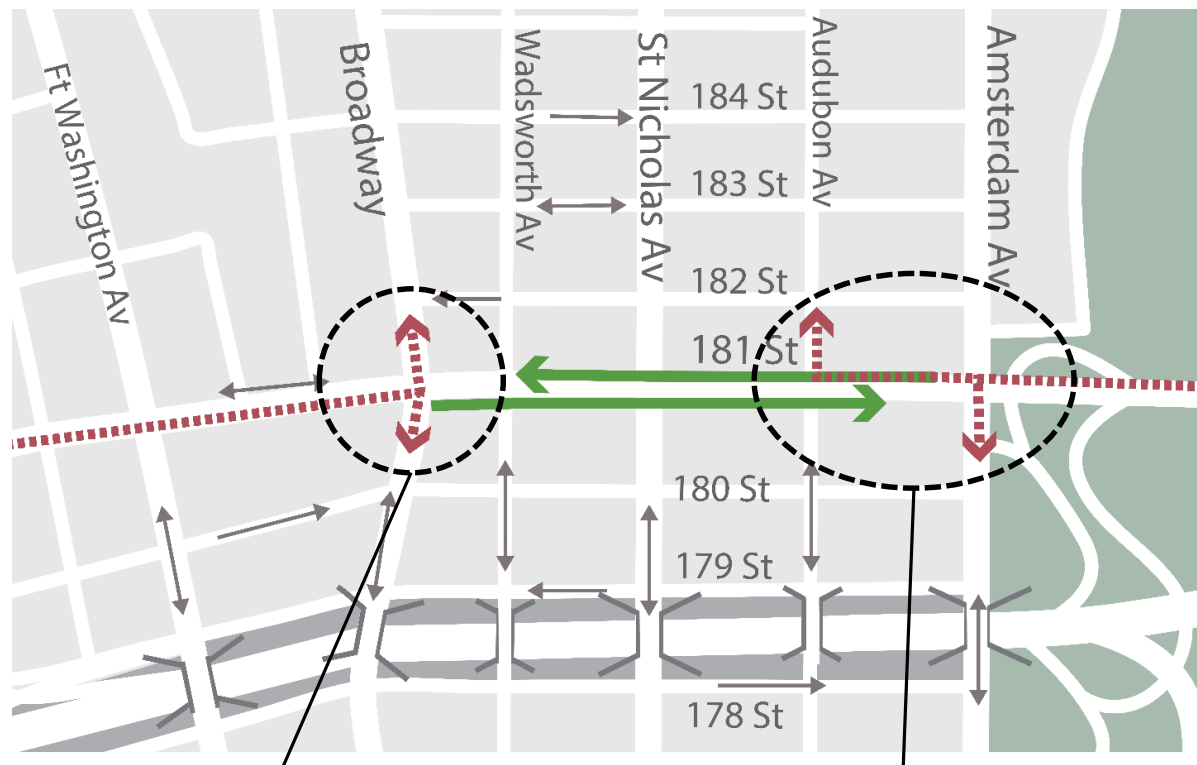
# Preliminary Busway Proposal

- **Busway Extents:**

- Eastbound
  - Broadway to Amsterdam Av
- Westbound
  - Amsterdam Av to Wadsworth Av

- **Busway hours TBD**

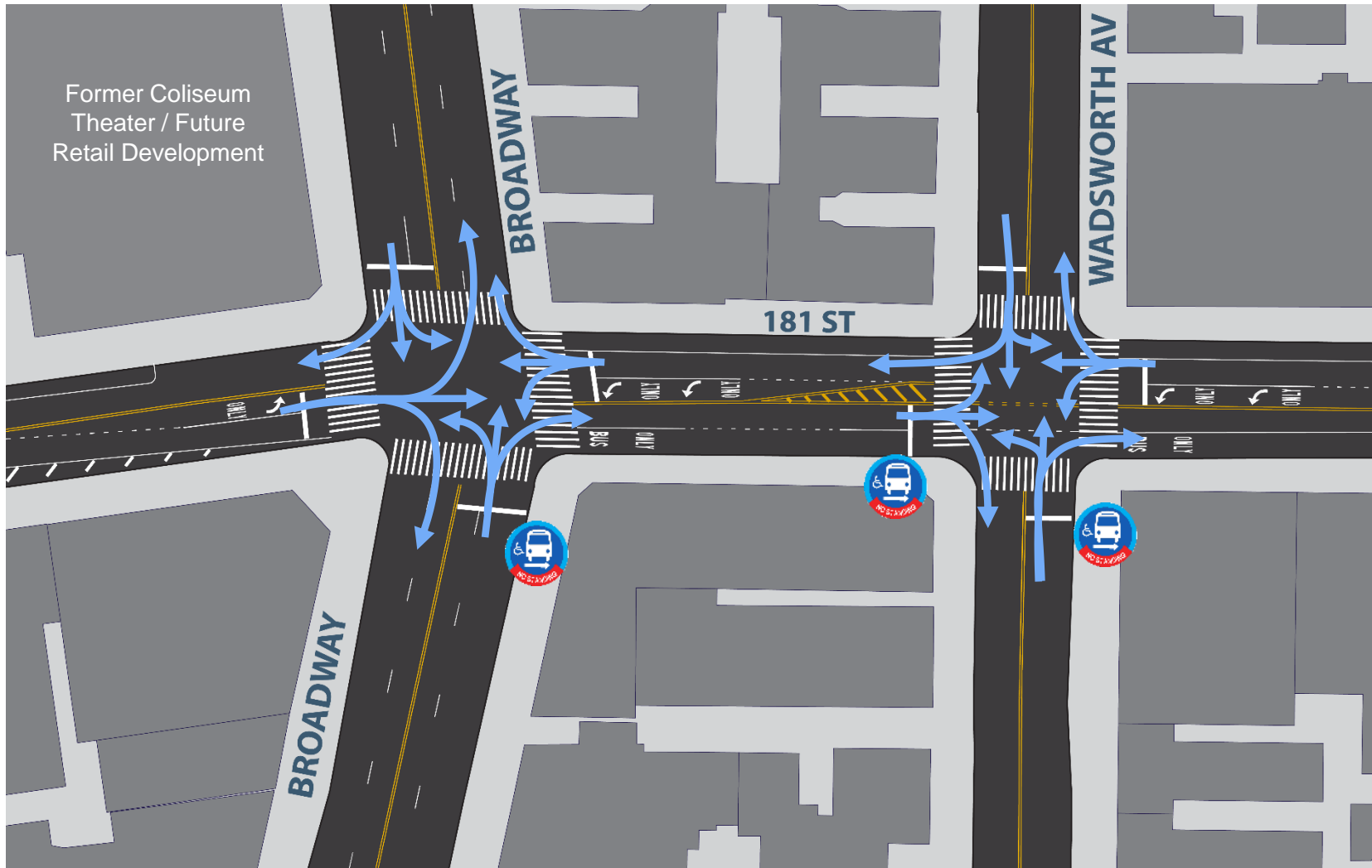
- **Busway will be adjusted based on feedback and traffic analysis**



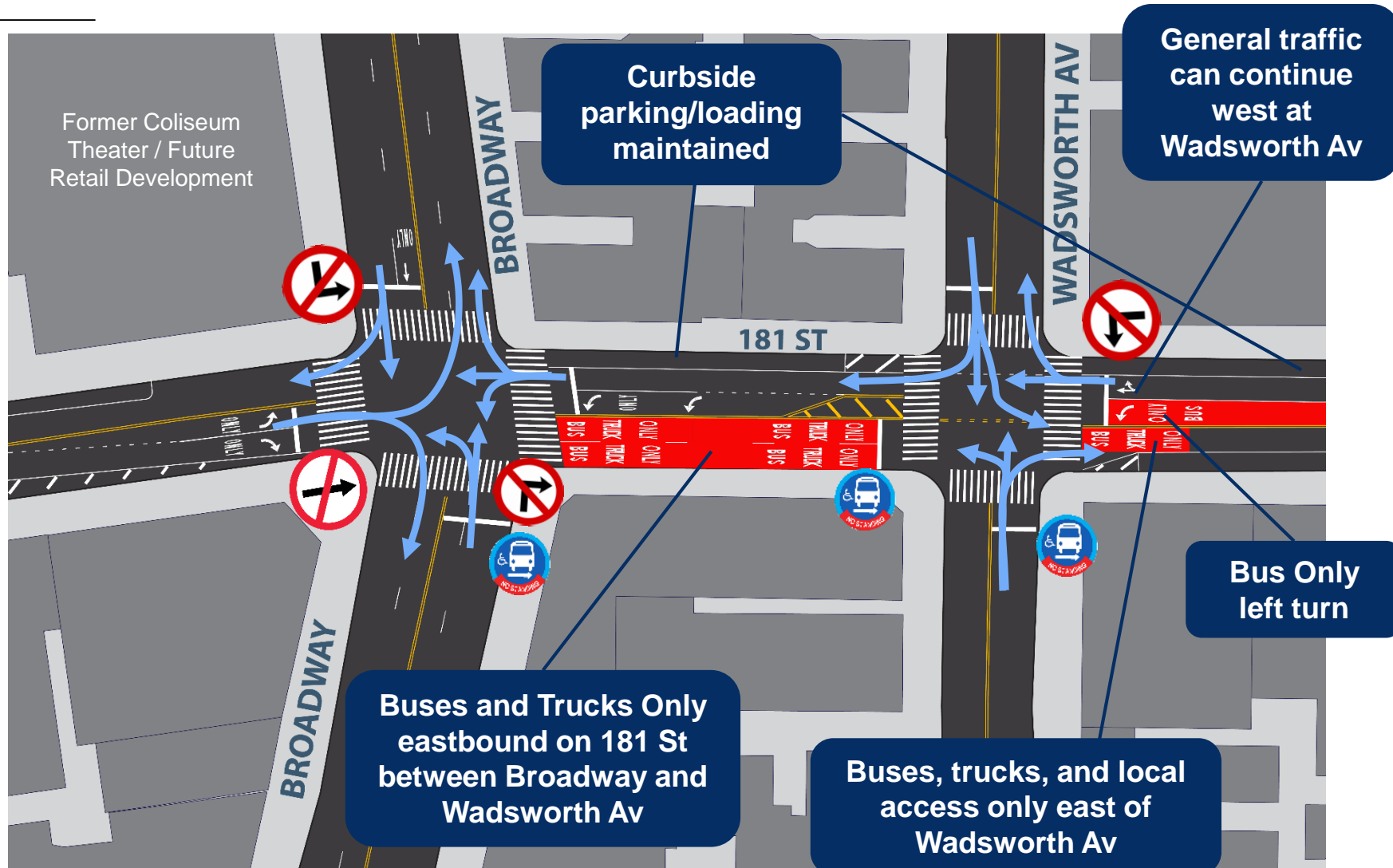
Only Buses and Trucks permitted eastbound on 181 St between Broadway and Wadsworth Av

Due to Washington Bridge rehabilitation, westbound vehicles coming off bridge may continue on 181 St but would have to turn right at Audubon Av. Eastbound vehicles may continue onto bridge

# Broadway – Wadsworth Ave: Existing Conditions

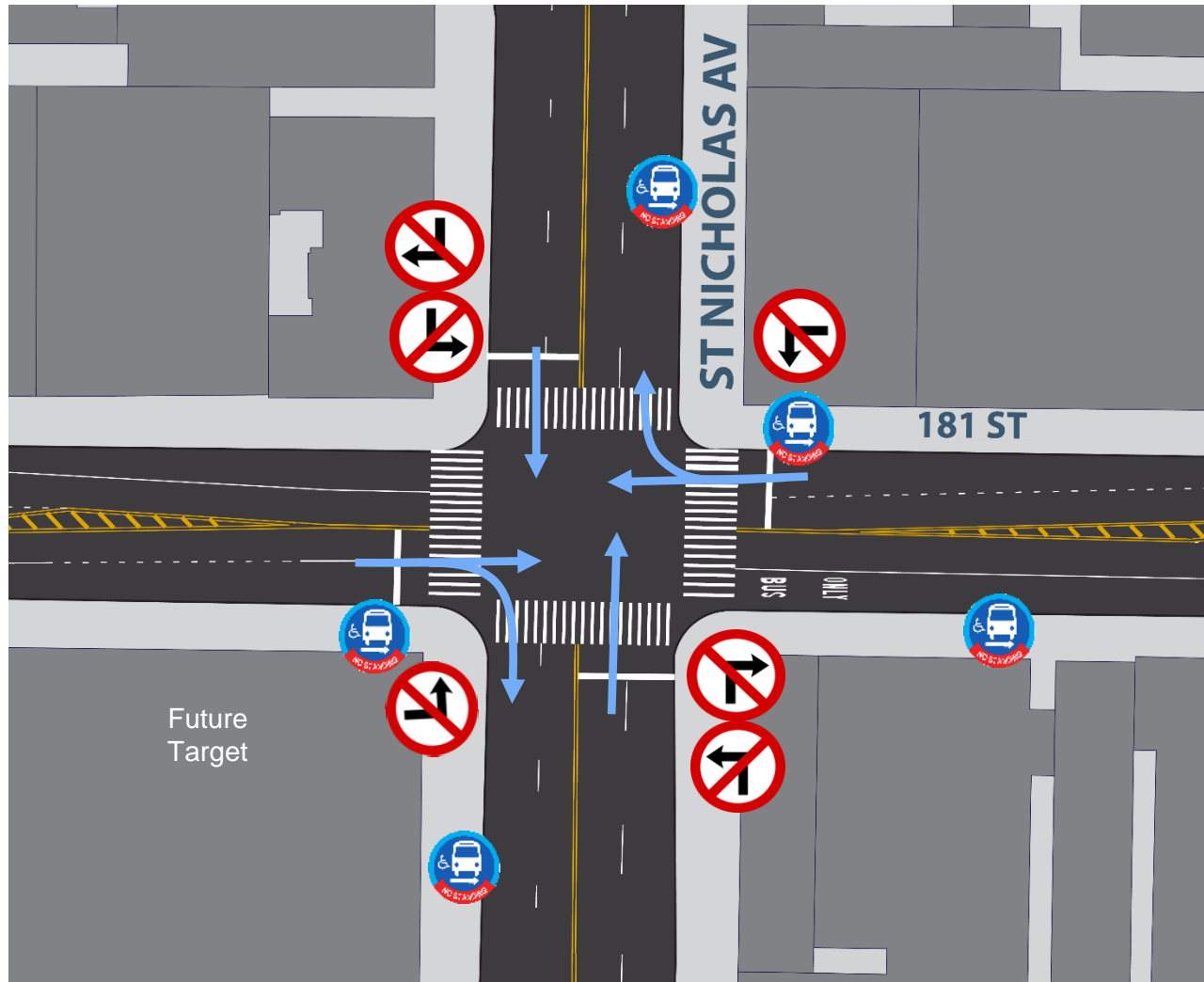


# Broadway – Wadsworth Ave: Preliminary Proposal

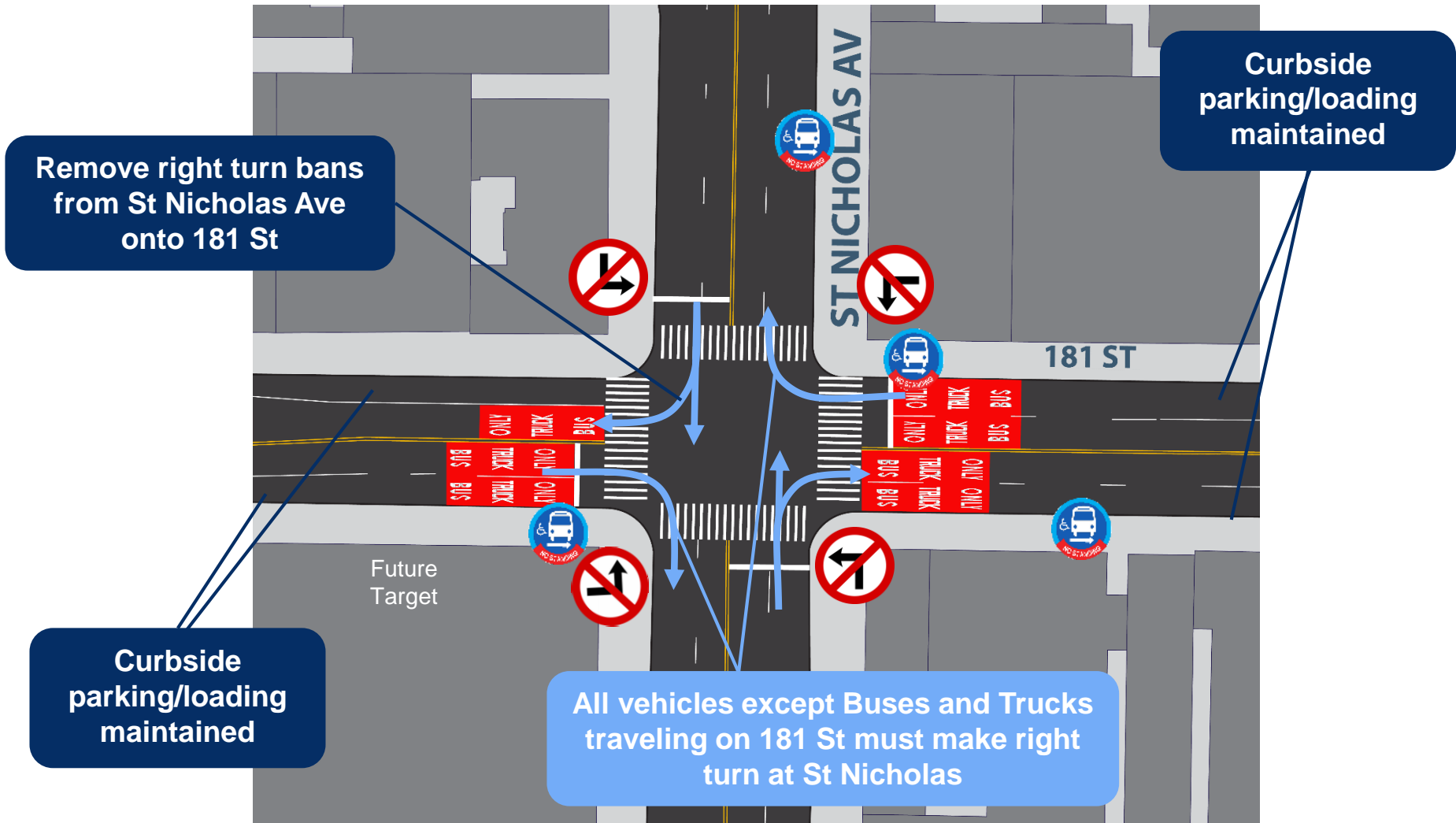




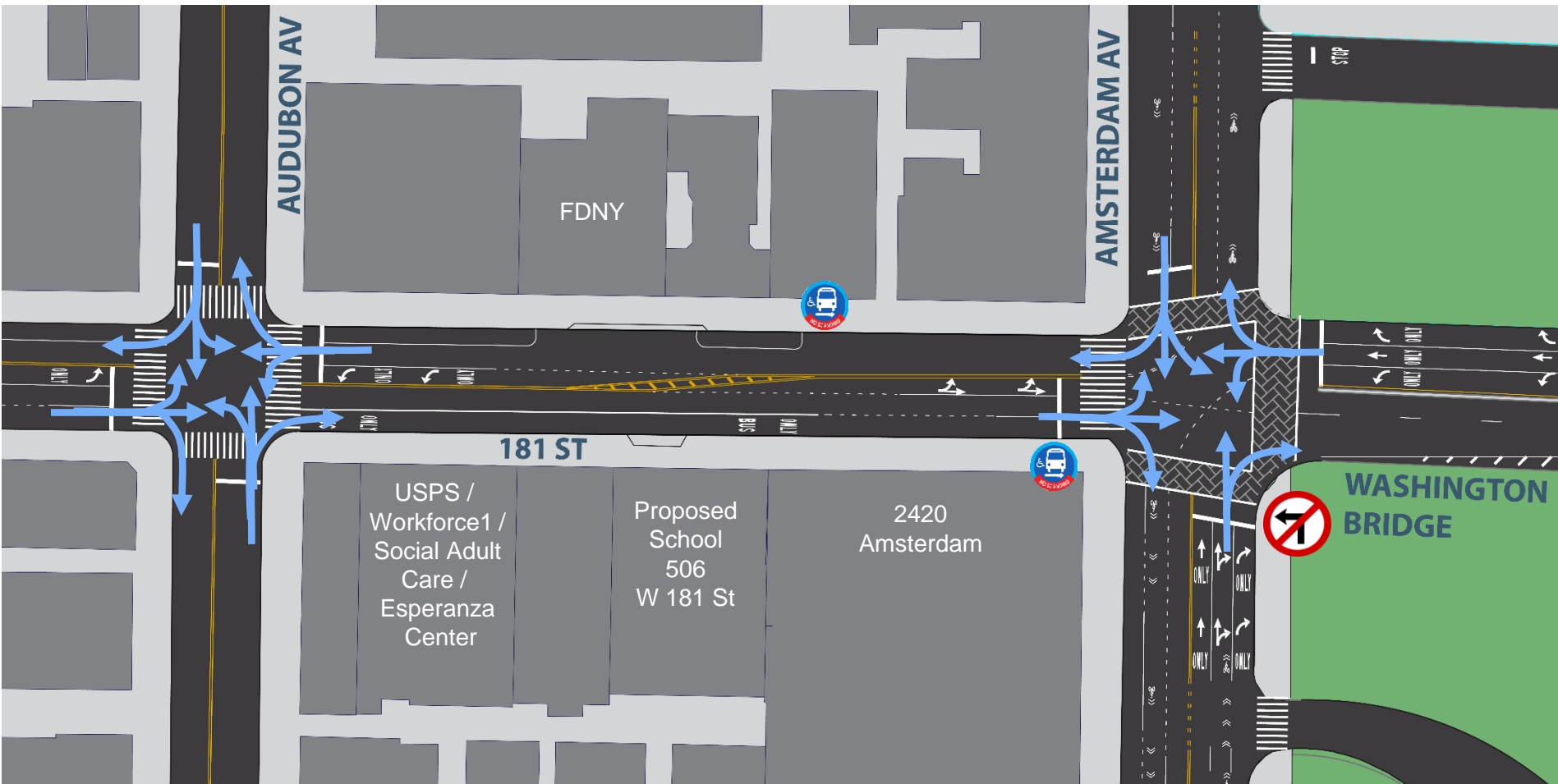
# St. Nicholas Ave: Existing Conditions



# St. Nicholas Ave: Preliminary Proposal



# Audubon Ave – Amsterdam Ave: Existing Conditions



# Audubon Ave – Amsterdam Ave: Preliminary Proposal

Curb extension

AUDUBON AV

FDNY

AMSTERDAM AV

USPS /  
Workforce1 /  
Social Adult  
Care /  
Esperanza  
Center

Proposed  
School  
506  
W 181 St

2420  
Amsterdam

WASHINGTON  
BRIDGE

Parking/loading area allows  
for curbside uses without  
impeding bus flow

Left turn ban at  
Amsterdam Ave

Thru movement onto  
westbound 181<sup>st</sup> St  
maintained due to bridge work  
(Note: will be re-evaluated as  
Washington Bridge rehab  
progresses)

# Preliminary Busway Proposal Summary

---

- Busway Extents:
  - Eastbound
    - Broadway to Amsterdam Av
  - Westbound
    - Amsterdam Av to Wadsworth Av
- Local access permitted on all blocks except eastbound between Broadway and Wadsworth Av
- Parking will be available for pick-up/drop-off activity, short-term parking, and loading/unloading
- Busway hours to be determined
- Busway will be adjusted based on feedback and traffic analysis



# Next Steps

## Next Steps

---

- Incorporate feedback received this evening into proposal
- Completion of traffic analysis and parking study
- Review of online feedback
- Revise busway proposal
- Present analysis results and revised busway proposal to CAB and CB12

# Thank you

---

## Questions?



NYC DOT



NYC DOT



nyc\_dot



NYC DOT