

96th St Bus Priority and Safety Improvements

Presentation to Community Board 7 Transportation Committee

May 14, 2024



Agenda

1. Background and Context
2. Proposal
3. Summary/Next Steps
4. Q&A

Background and Context

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Why 96th Street?

NYC DOT is proposing bus and safety improvements on 96th St because:

- There are 15,500 average weekday riders on M96 and M106
- During peak hours, M96 and M106 are scheduled as frequently as every 2.5 minutes
- Bus speeds are as low as 4 mph during peak hours on a critical uptown crosstown transit connection
- 391 injuries on the corridor in the past 5 years, including 44 who were killed or severely injured



Demographics

Along 96th St:

- 41,326 Residents
- 74% of households do not have access to a private vehicle
- 68% commute to work via public transit, walking, or biking *
- On the East Side, 96th Street borders a Tier 1 DOT Priority Investment Area (PIA) **
 - PIA is determined by population density, socioeconomic makeup, and level of prior DOT investment
- Citywide, bus rider median annual income is lower than drivers (\$30,000 vs. \$47,000) ***

Sources:

*American Community Survey 2021-2017

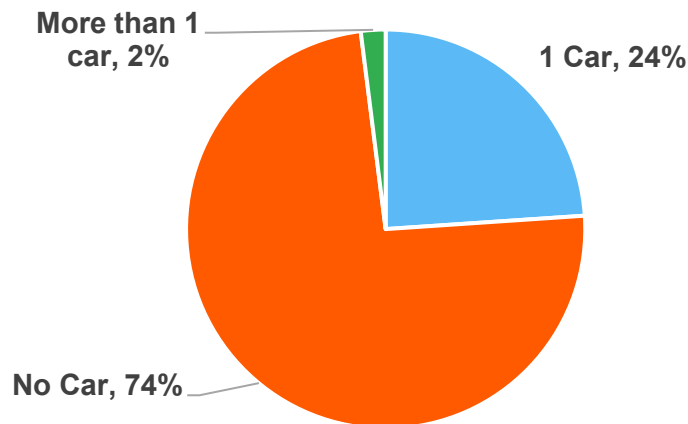
** NYC Streets Plan Update 2024

*** NYC Comptroller Report, "Beyond Rush Hour: COVID 19 and The Future of Public Transit" (2021)

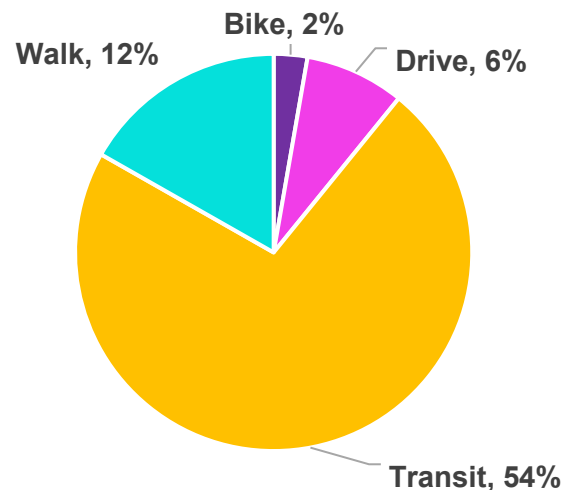
Note:

Travel to work does not add up to 100% due to Work From Home

Car Access by Household



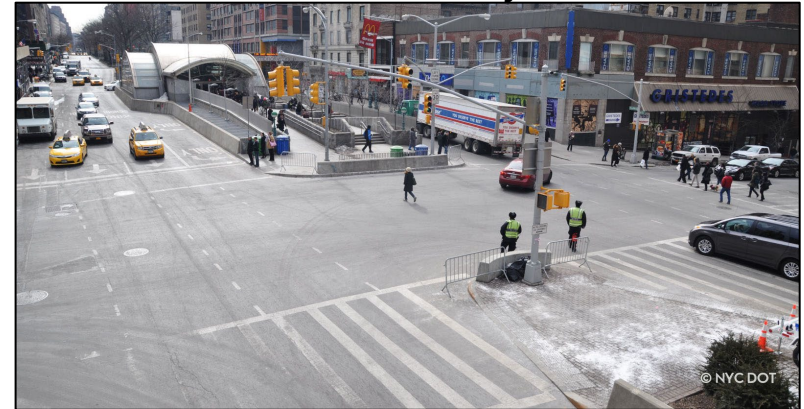
Travel to Work



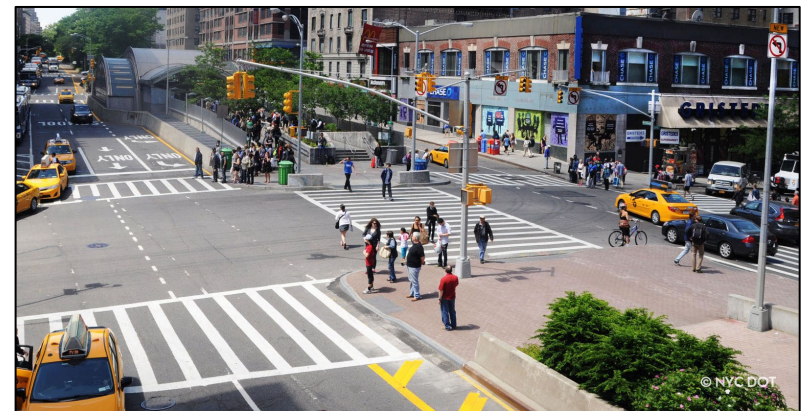
Previous DOT Projects on 96th St

- Columbus Ave Protected Bike Lane (2013)
- 1st Ave Bus and Protected Bike Lanes (2013)
- West End Ave Safety Improvements (2014)
 - Work included safety improvements at 96th St and 97th St
 - Recent additional signal timing improvements made at 96th St to further calm traffic
- 96th St and Broadway Safety Improvements (2014)
- Madison Ave and 96th St Bus and Safety Improvements (2016)
- 2nd Ave Bus and Protected Bike Lanes (2016)
- Amsterdam Ave Protected Bike Lane (2016)
- Central Park West Protected Bike Lane (2020)

96th St and Broadway - Before

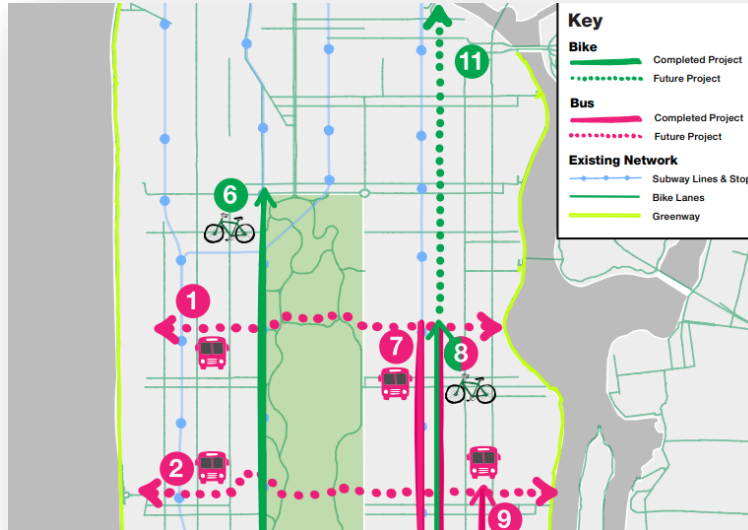


96th St and Broadway - After



Connecting to the Core

- On May 2, DOT announced new efforts to improve car-free access to and through Manhattan's Central Business District (CBD).
- This effort prepares for the implementation of congestion pricing by the Metropolitan Transportation Authority (MTA).
- 37 new projects are in development for 2024 and 2025.



Connecting to the Core



the Manhattan Central Business District

Safer, Greener, and More Convenient Access to

May 2024



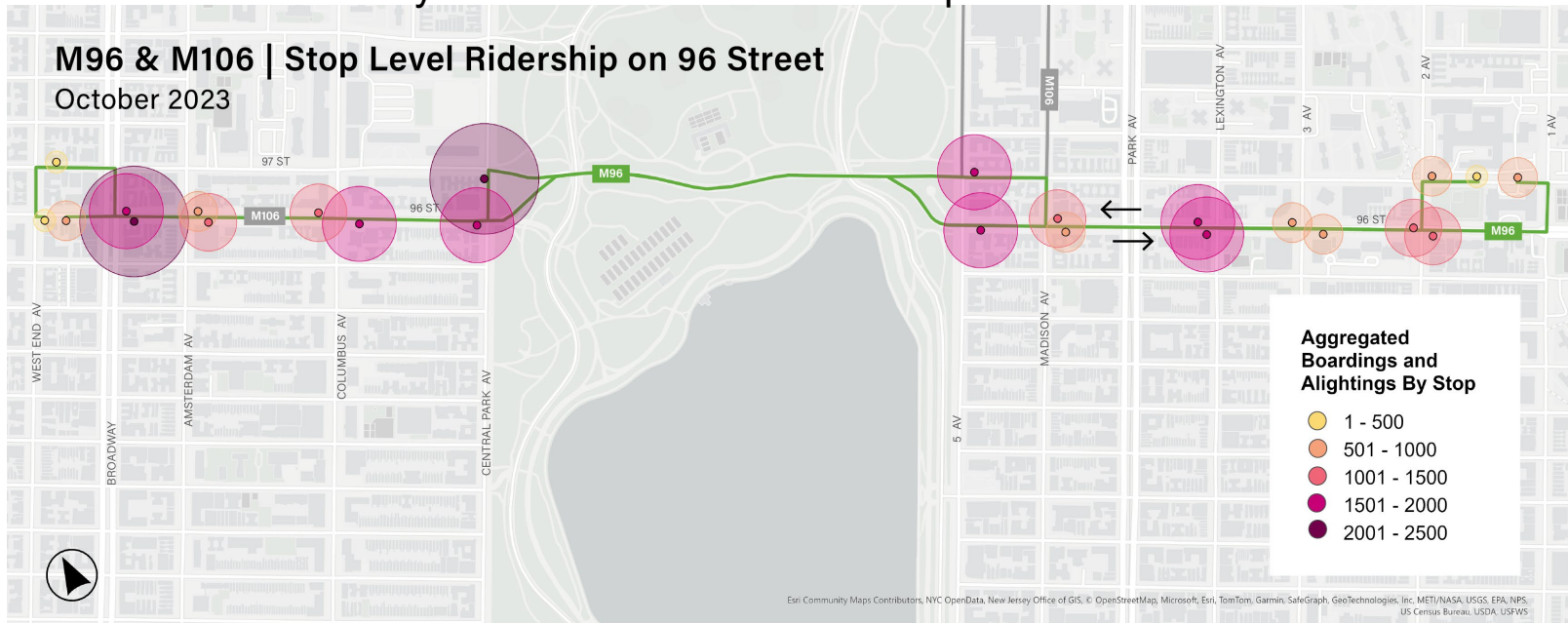
M96 Route Description



- M96 runs from 1st Ave to West End Avenue
 - M106 overlaps on the transverse and west side. It also provides service to destinations on 106th St on the east side.
- Major destinations across the corridor:
 - Connections to 1,2,3,6,Q,B,C subway lines
 - Connections to 14 other bus routes
 - Metropolitan Hospital
 - Mt. Sinai Hospital
 - Central Park
 - Schools, shopping areas, houses of worship, doctors' offices, etc.

96th St Bus Ridership

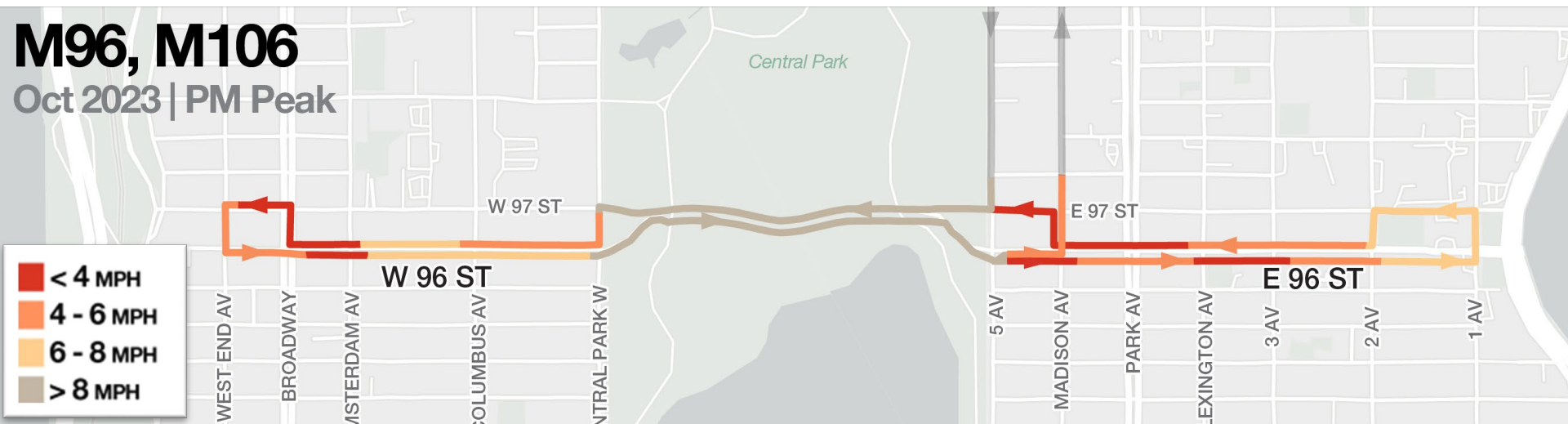
- Average weekday ridership* on 96th St: 14,900
 - Total M96 + M106 ridership jointly rank 3rd in Manhattan crosstown routes by ridership
- Most riders travel between the East and West Sides.
 - Almost 6,000 people per day ride in each direction through Central Park.
- Buses scheduled every 2.5 minutes in AM and PM peaks



*Oct 2023 ridership for all M96 and M106 in project area

96th Street Bus Speeds

- Bus speeds are slow throughout the corridor.
- They are especially slow on the East Side, and around Broadway and Amsterdam Ave.



*October 2023 Average Weekday Bus Speeds, PM Peak, MTA

Traffic Safety Data: 2019-2023

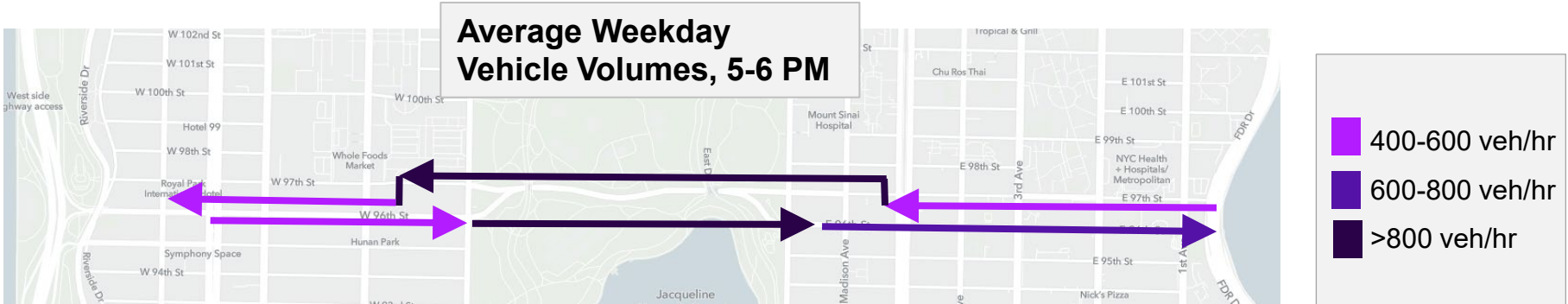
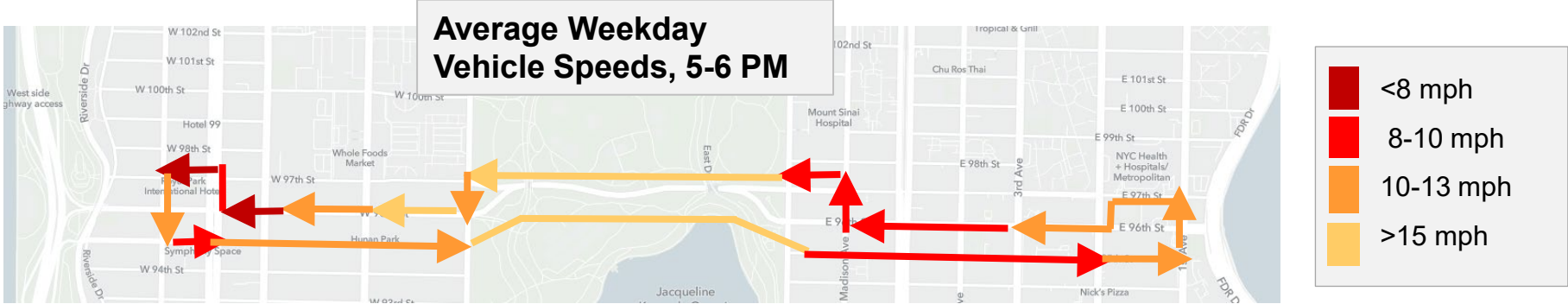
- Recent projects have improved safety throughout the corridor, but there are still a high number of crashes on 96th Street
- Citywide, 96th St is in the top 10% of streets with the most people Killed or Severely Injured (KSI) per mile

Mode	Total Injuries	Severe Injuries	Fatalities	KSI
Pedestrian	94	10	4	14
Bicyclist	87	14	2	16
Motor Vehicle Occupant	197	13	0	13
Other Motorized	13	1	0	1
Total	391	38	6	44

Source: NYPD injury crash data 2019-2023

General Traffic Speeds and Volumes

- General traffic speeds are slower getting across the avenues, and faster through the transverse.
- Volumes are highest going through the transverse.



Source: Speeds from INRIX May 2023, Volumes from automated traffic recorders taken January 2019, and May 2023.

Project Goals

Improve bus service:

- Prioritize transit in the roadway
- Increase bus speeds and reliability
- Enhance east-west transit connections uptown

Improve safety on the corridor:

- Include pedestrian safety in the design and outreach process
- 96th St corridor design concept is coordinated with DOT's Bicycle Unit, future east/west routes in the area are under investigation



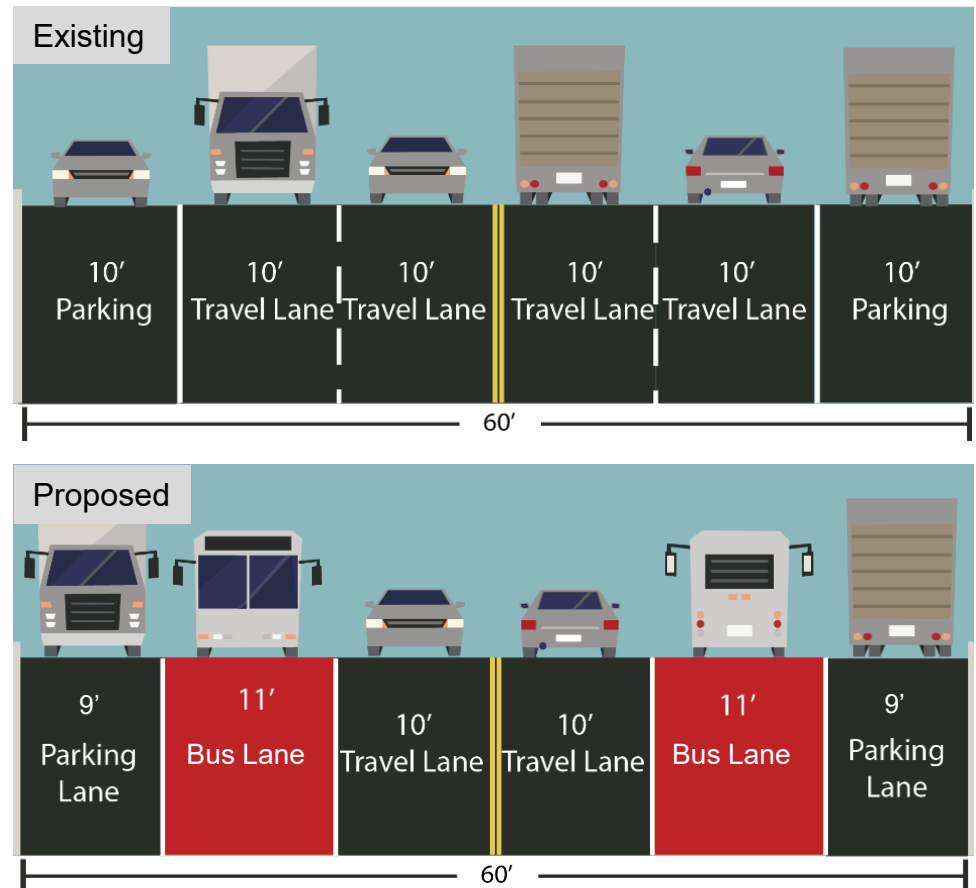
Proposal

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Offset Bus Lane Proposal

An offset bus lane:

- Improves bus speed and reliability
- Allows buses to use bus lane unblocked by parked or standing vehicles
- Maintains curb access for parking, truck loading, and passenger drop-offs/pickups
- Maintains traffic flow for other vehicles

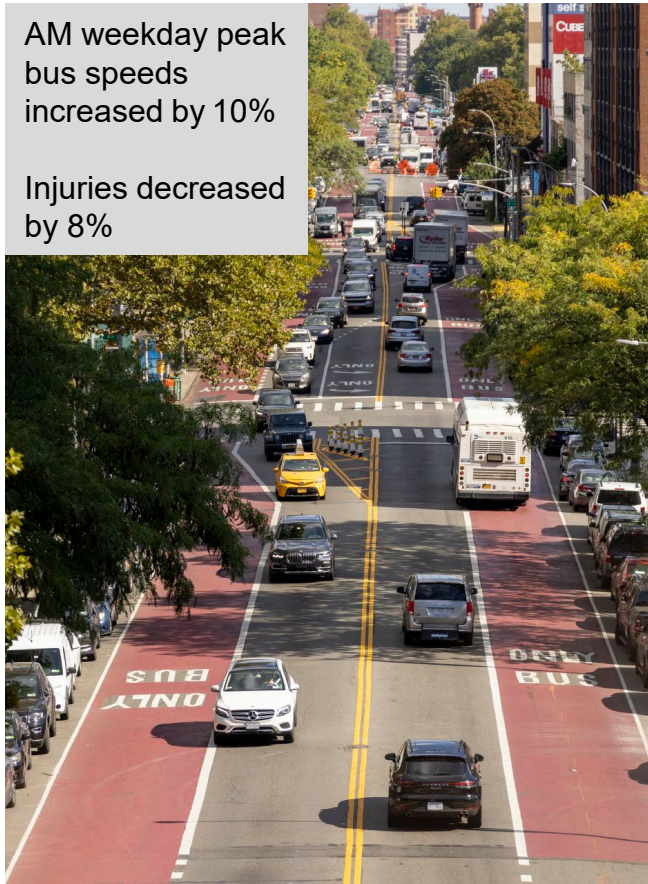


Recent Offset Bus Lane Examples

21st Street, Queens

AM weekday peak
bus speeds
increased by 10%

Injuries decreased
by 8%



Lexington Avenue, Manhattan

PM weekday peak
bus speeds
increased by 19%

Injuries decreased
by 24%



Existing Conditions: 96th St Typical Block

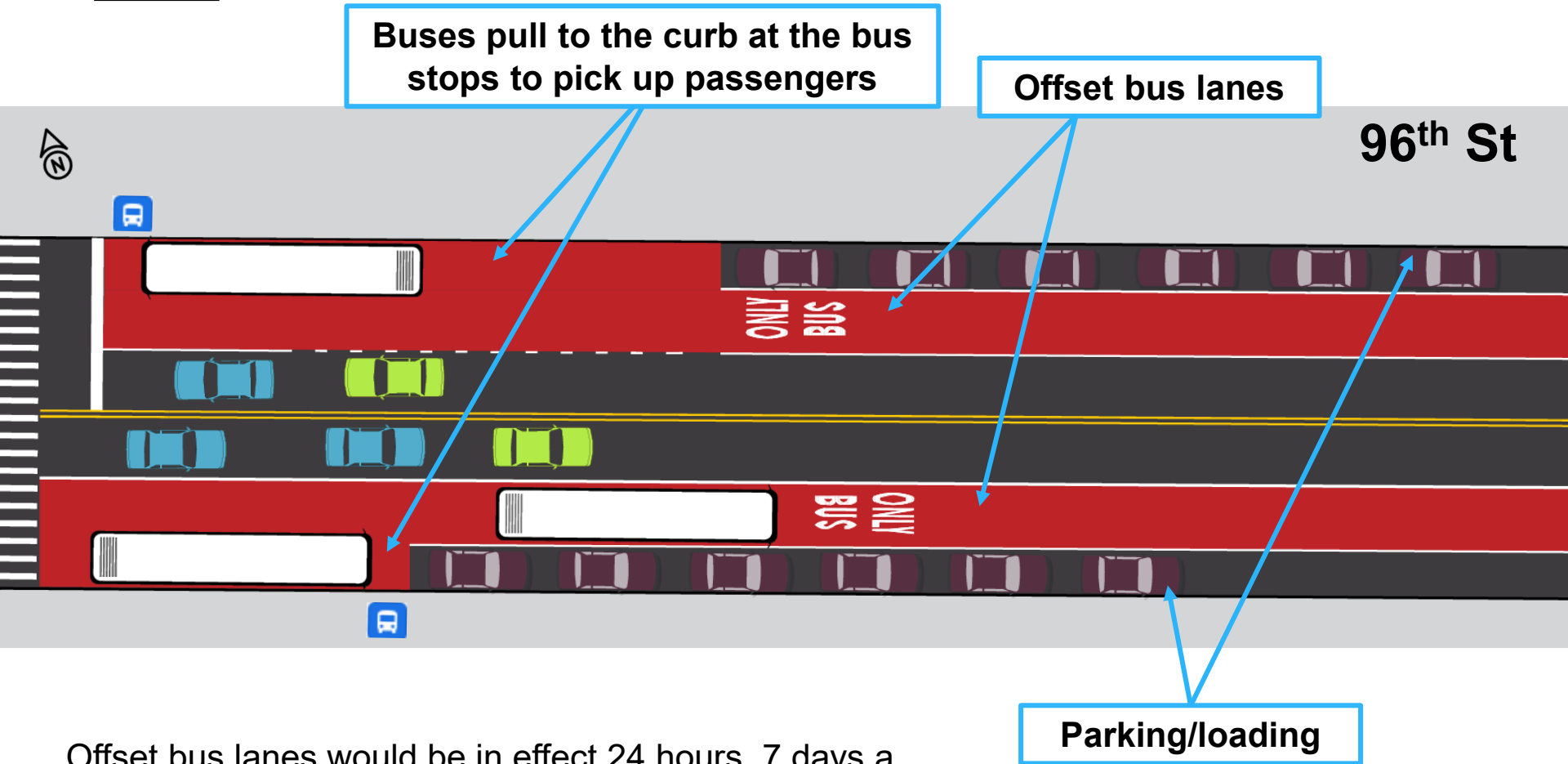
Two general travel lanes in each direction with parking/loading lane at the curb

96th St

Buses travel in mixed traffic, creating speed and reliability issues

Parking/loading

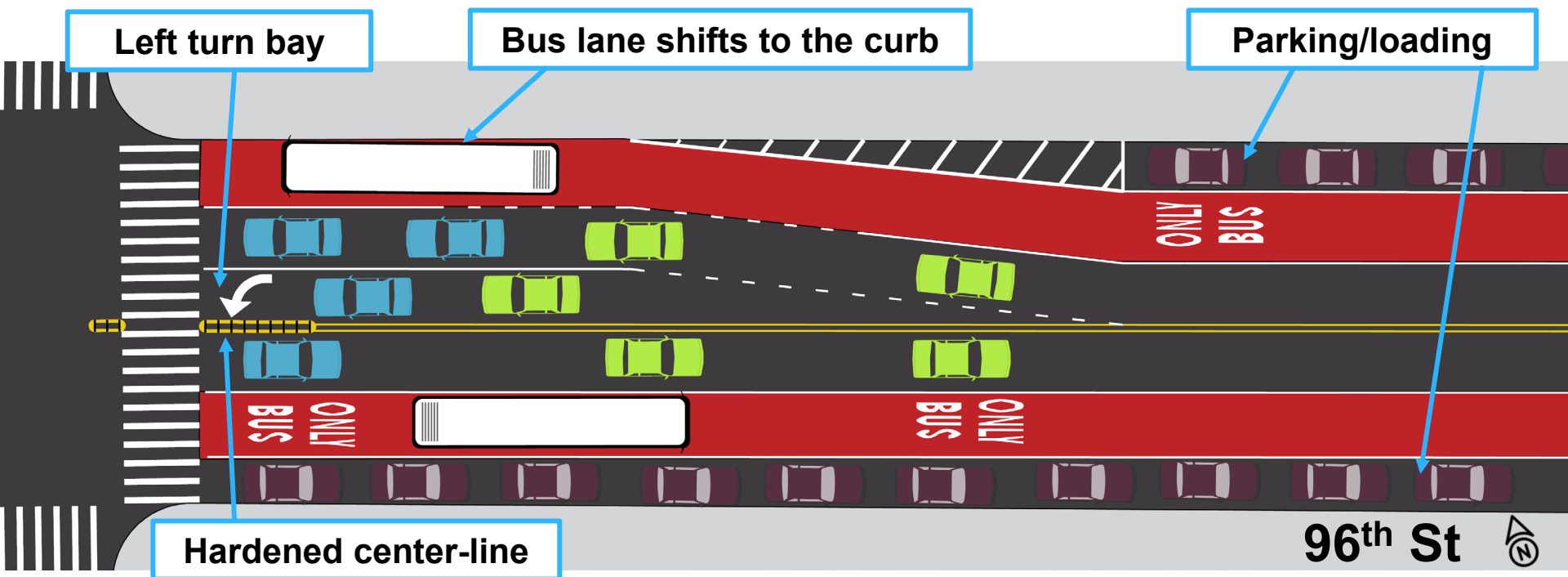
Proposed: Typical Offset Bus Lane



Offset bus lanes would be in effect 24 hours, 7 days a week

Left Turns

- At intersections, left turn bays organize traffic flow and preserve turning movements
- Improves safety by reducing conflict between traffic movements
- Hardened center-line also acts as turn calming tool
- Considering this design at: Central Park West (eastbound), Park Ave (eastbound & westbound), Lexington Ave (westbound), Third Ave (eastbound)



Lengthened Bus Stops

Project Proposes:

- Lengthening three existing bus stops that are significantly below standard length
- 4 potential locations:
 - W 96th St and Amsterdam Ave (eastbound)
 - W 96th St and Columbus Ave (eastbound)
 - W 96th St and Columbus Ave (westbound)
 - Central Park West and W 96th St (westbound)
- Improves bus service by:
 - Allowing both M96 and M106 to access the bus stop at the same time
 - Providing more space for riders to wait for, board, and depart the bus
 - Preventing buses from blocking traffic while waiting to access the bus stop



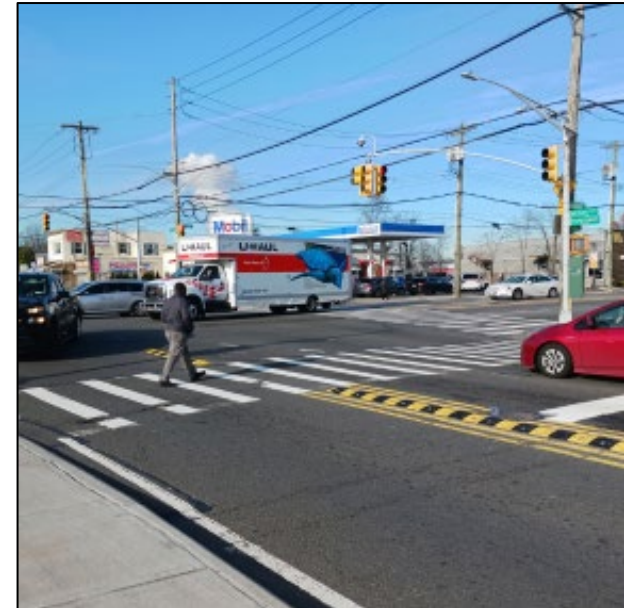
Queue Jump Signals

Project Proposes:

- Queue jump signals allow buses to get a head start to bypass traffic
- Paired with Leading Pedestrian Intervals to improve pedestrian safety
- 3 potential queue jump signals at:
 - 96th St and Central Park West (EB)
 - 97th St and 5th Av (WB)
 - 96th St and 3rd Av (EB+WB)



Pedestrian Safety Improvements

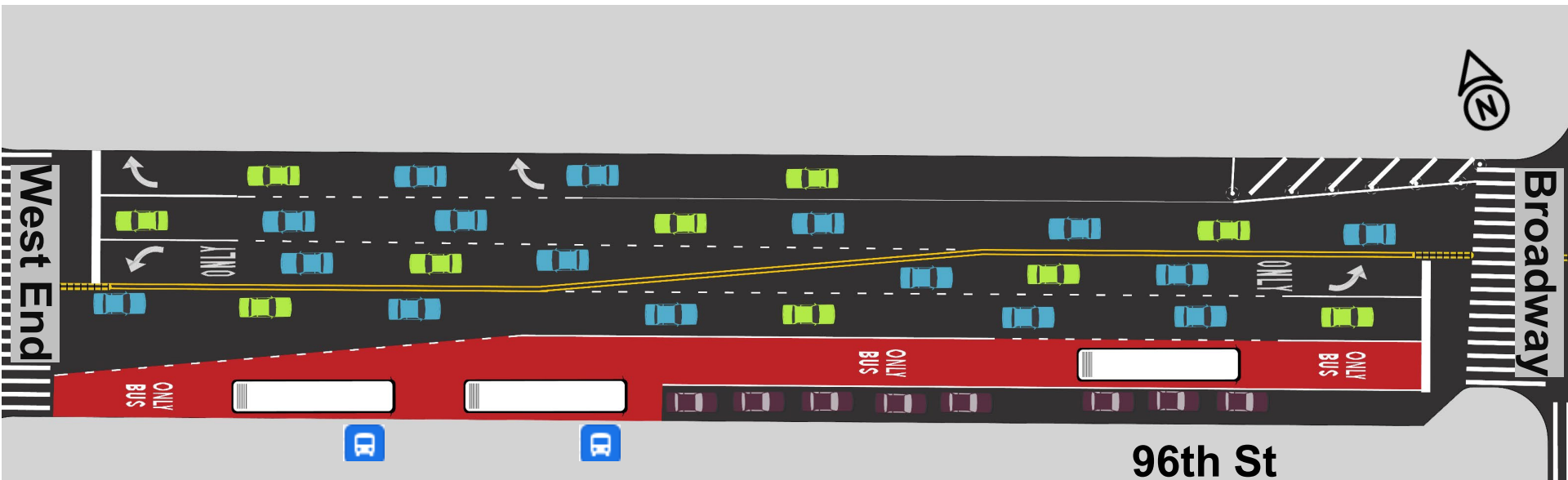


Turn calming treatments would be installed throughout the corridor

W 96th St: West End Ave - Broadway

Project Proposes:

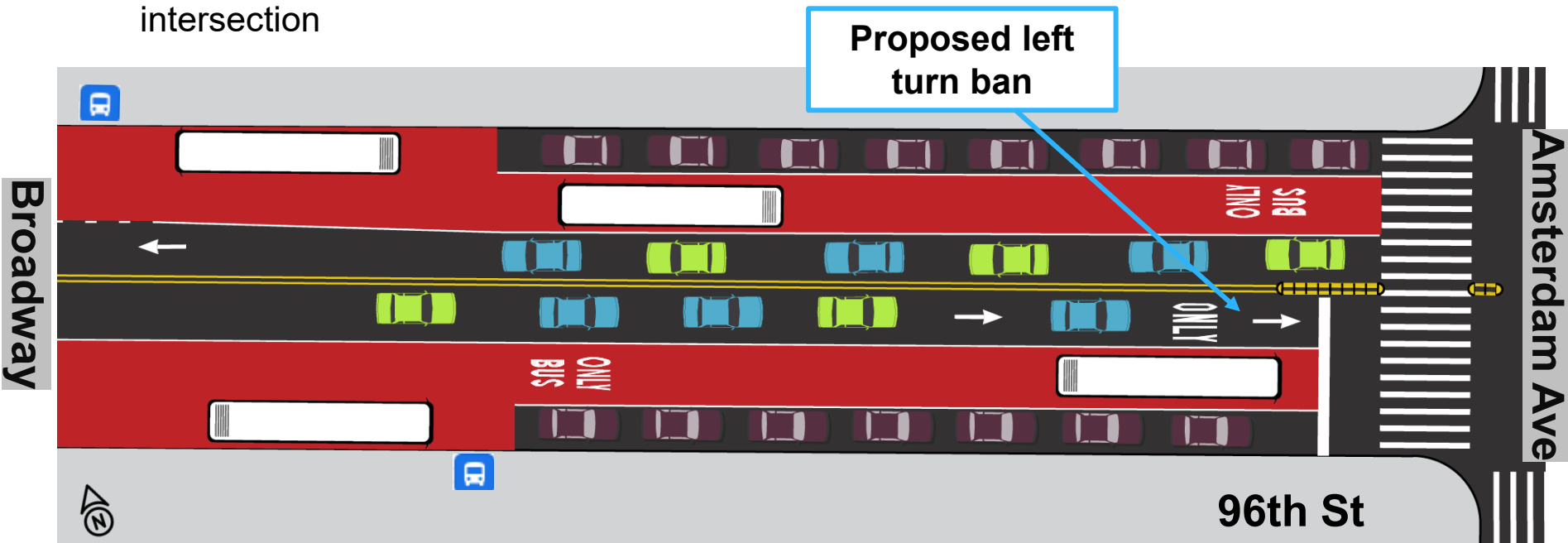
- Eastbound offset bus lane
- Left turn bay to better organize traffic



W 96th St: Broadway - Amsterdam Ave

Offset Bus Lane and Proposed Eastbound Left Turn Ban:

- Typical offset bus lane design
- Existing left turn volumes are low at this intersection (~2 vehicles / signal cycle)
- Banning the left turn improves pedestrian safety as well as traffic flow through the intersection



W 96th Street and Amsterdam Ave

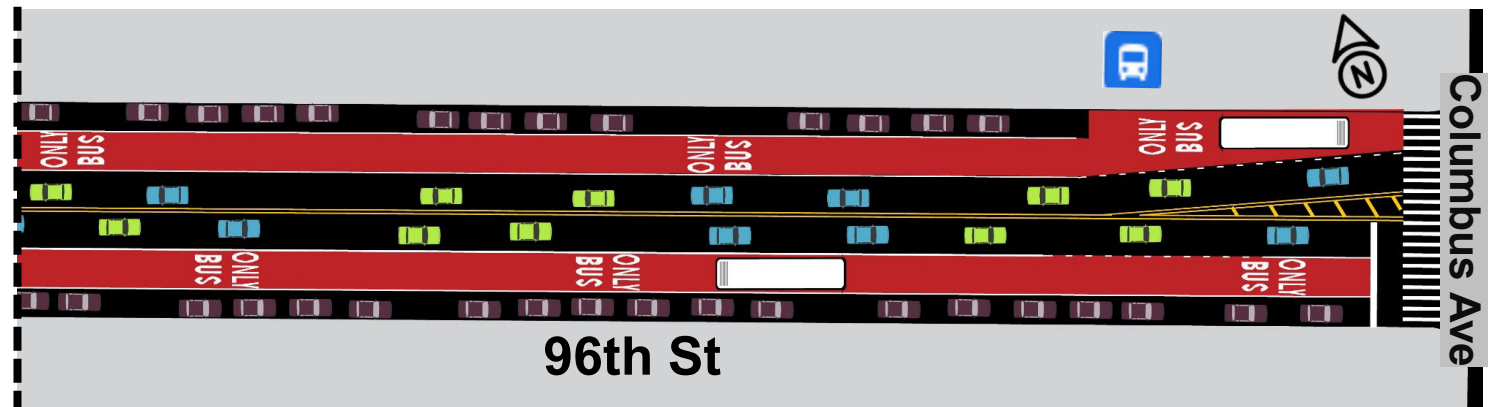
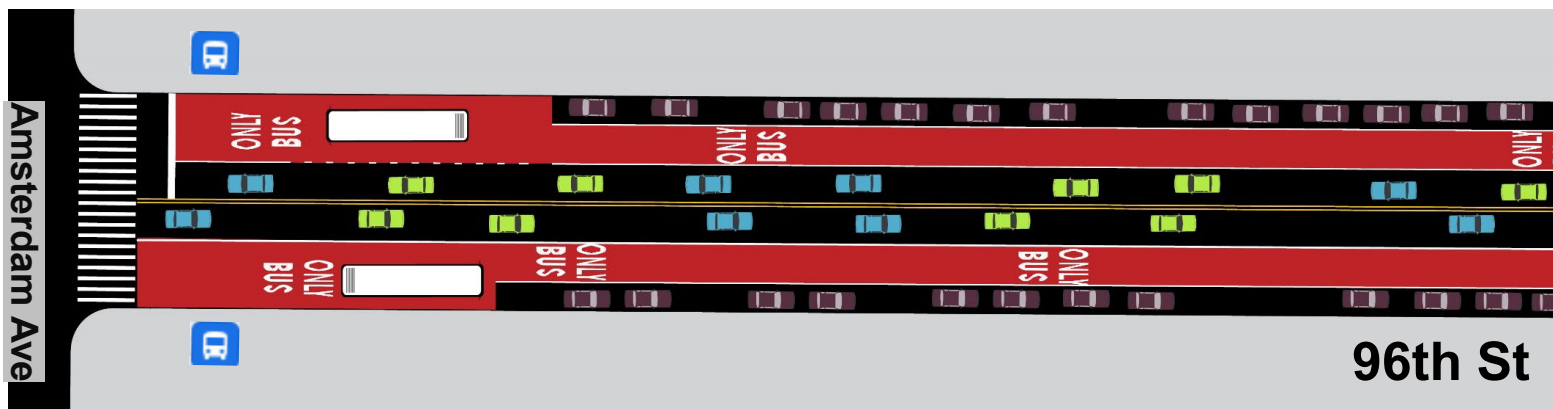
Proposed Eastbound Left Turn Ban – Alternate Routes:



W 96th St: Amsterdam Ave – Columbus Ave

Project Proposes:

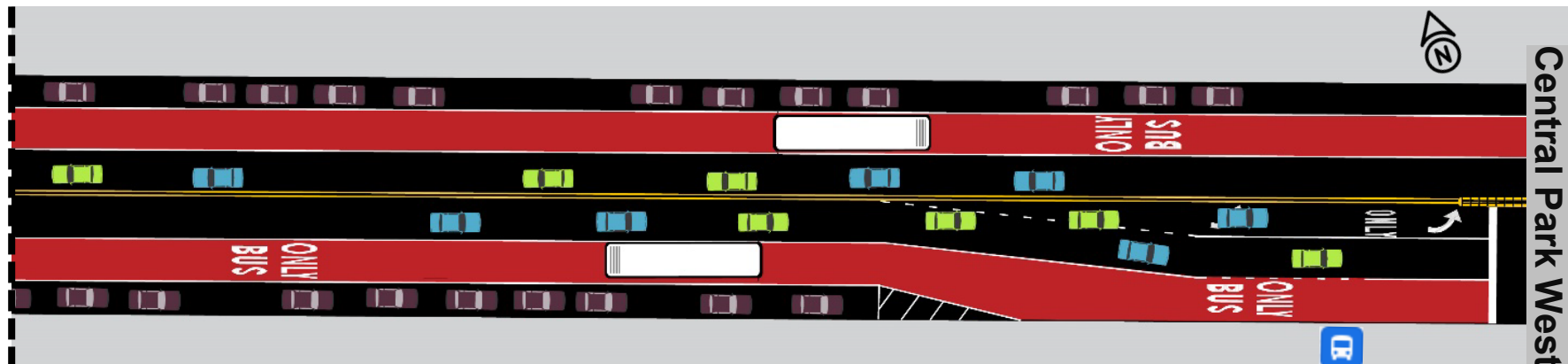
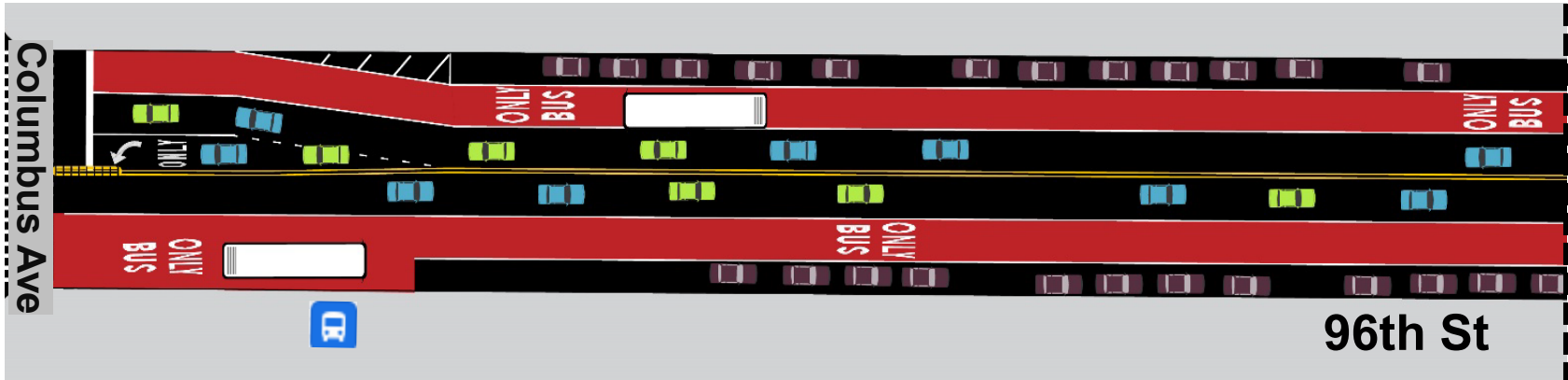
- Typical offset bus lane design in both directions



W 96th St: Columbus Ave - Central Park West

Project Proposes:

- Offset bus lanes shift to curb at intersections for left turn bay design



Summary and Next Steps

3

Summary

Project Proposes:

- Offset and curbside bus lanes to improve bus speeds and reliability throughout the corridor
- Turn bays to ease congestion at intersections with high turn volumes
- Pedestrian safety improvements throughout the corridor



Next Steps

Spring 2024:

- Present to Community Boards 7, 8, and 11
- Continue project design and analysis

Summer 2024:

- Proposed implementation
- Project monitoring

Fall/Winter 2024

- Continue monitoring
- Study potential additional improvements on the corridor

Thank You!

Questions?



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