

# 96th St Bus Priority and Safety Improvements

Presentation to Community Board 8

May 1, 2024



# Agenda

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

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# Background and Context

# 1

# Why 96<sup>th</sup> Street?

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

- There are 15,500 average weekday riders on M96 and M106
- During peak hours, M96 is scheduled as frequently as every 3 minutes
- Bus speeds are as low as 4 mph during peak hours on a critical uptown crosstown transit connection
- 74% of households near the corridor are car-free
- 391 injuries on the corridor in the past 5 years, including 44 who were killed or severely injured



# Previous DOT Projects on 96<sup>th</sup> St

- Columbus Ave Protected Bike Lane (2013)
- 1<sup>st</sup> Ave Bus and Protected Bike Lanes (2013)
- West End Ave Safety Improvements (2014)
  - Work included safety improvements at 96<sup>th</sup> St and 97<sup>th</sup> St
  - Recent additional signal timing improvements made at 96<sup>th</sup> St to further calm traffic
- 96<sup>th</sup> St and Broadway Safety Improvements (2014)
- Madison Ave and 96<sup>th</sup> St Bus and Safety Improvements (2016)
  - Recent follow up adjustments based on field meeting with CIVITAS
- 2<sup>nd</sup> Ave Bus and Protected Bike Lanes (2016)
- Amsterdam Ave Protected Bike Lane (2016)
- Central Park West Protected Bike Lane (2020)

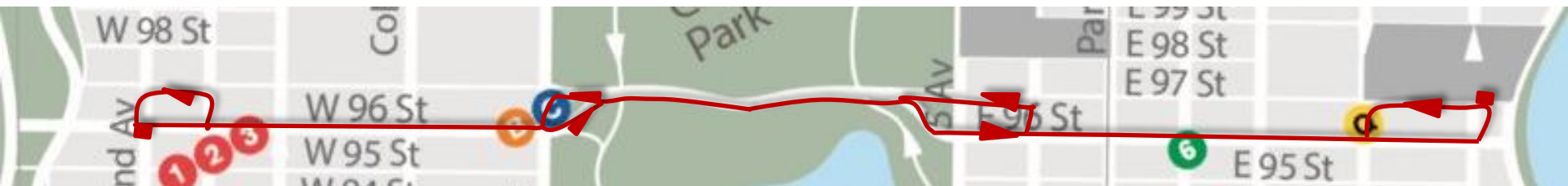
*96<sup>th</sup> St and Broadway - Before*



*96<sup>th</sup> St and Broadway - After*



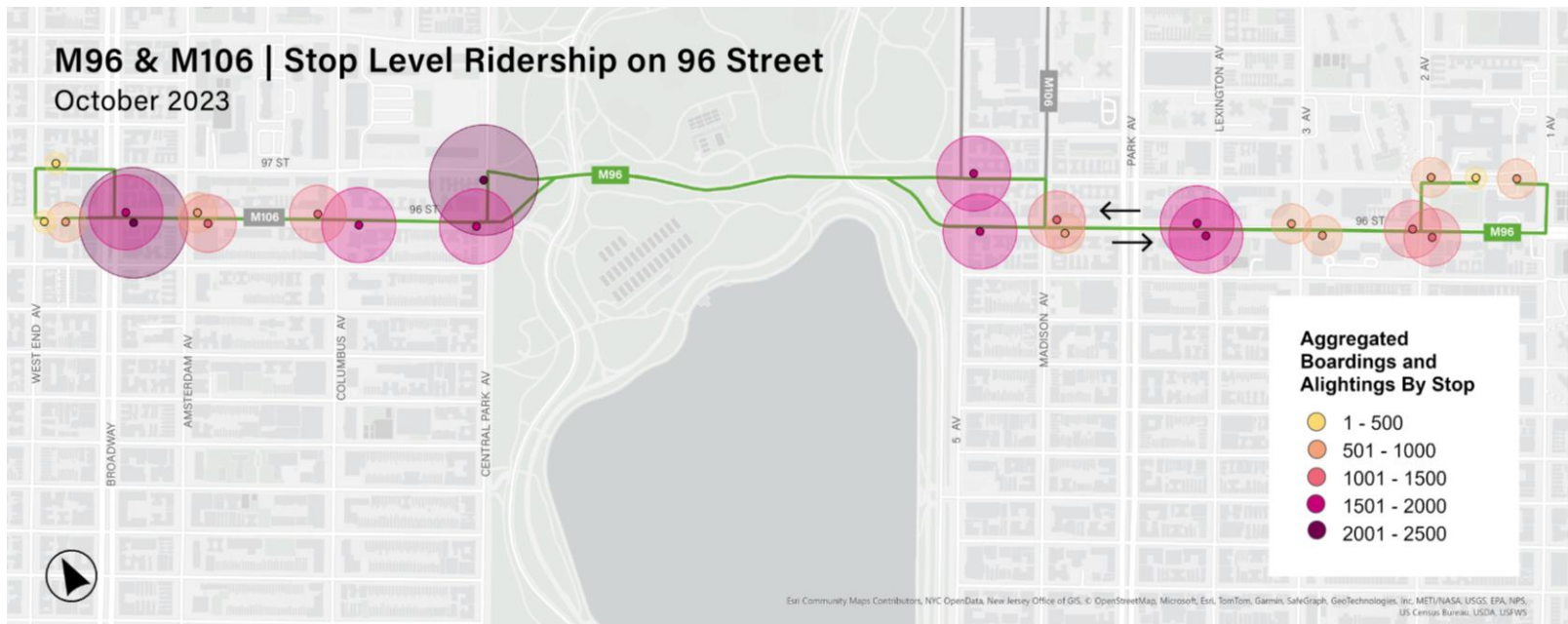
# M96 Route Description



- M96 runs from 1st Ave to West End Avenue
  - M106 overlaps on the transverse and West Side and provides service to destinations on 106<sup>th</sup> 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

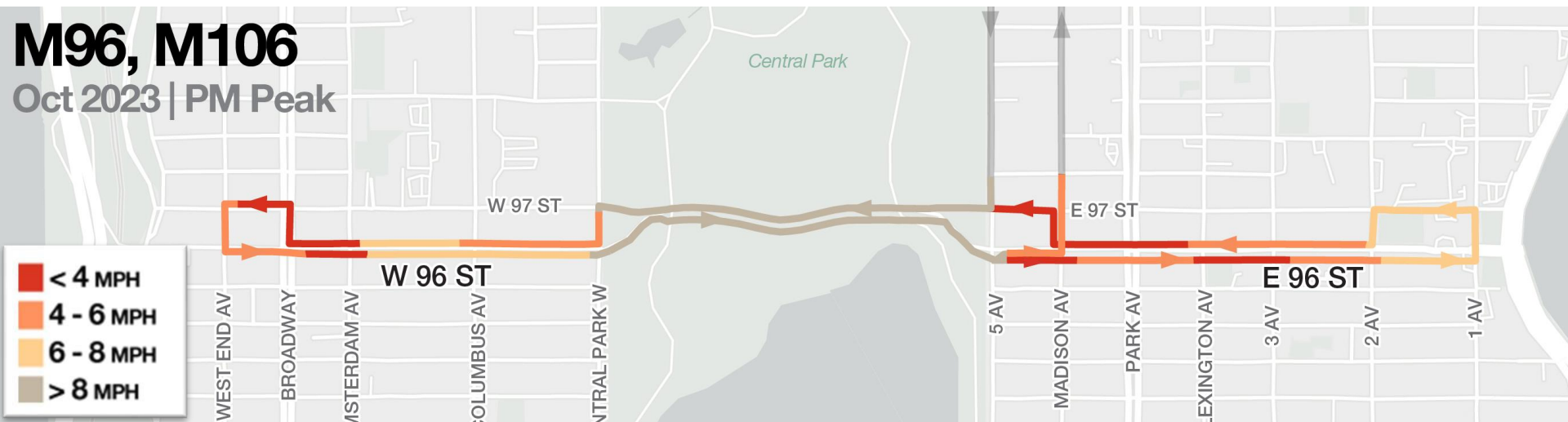
- Average weekday ridership\* on 96<sup>th</sup> St: 14,900
  - Total M96 + M106 ridership jointly rank 3rd in Manhattan crosstown routes by ridership
- Most riders are traveling between the East and West Sides.
  - Almost 6,000 people per day ride in each direction through Central Park.
- Buses scheduled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



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

# 96<sup>th</sup> Street Bus Speeds

- Bus speeds are slow throughout the corridor, 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

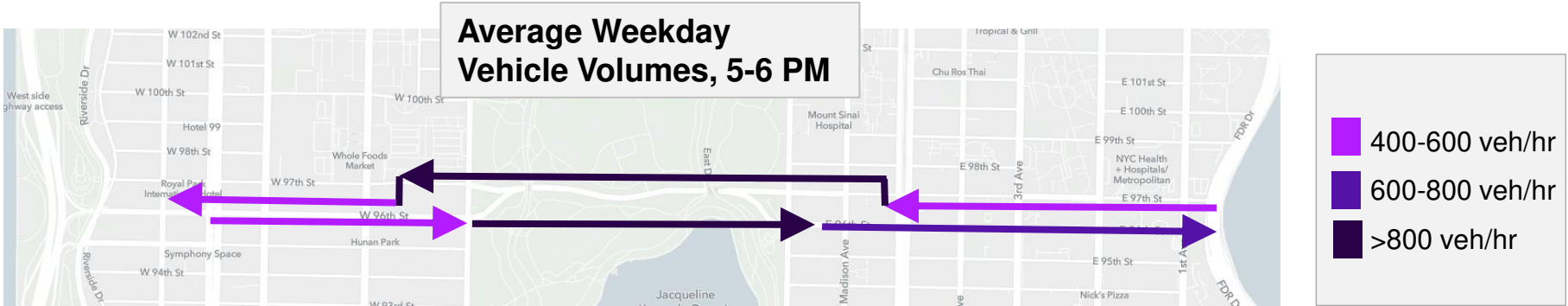
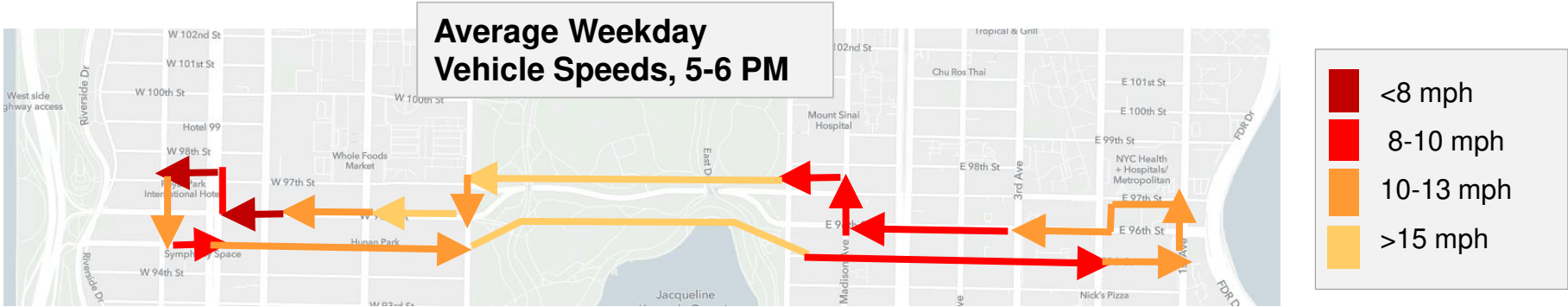
- Recent projects have improved safety throughout the corridor, but there are still a high number of crashes on 96th Street
- Citywide, 96th St is in the top 10% of streets with the most people Killed or Severely Injured (KSI) per mile

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
<b>Total</b>	<b>391</b>	<b>38</b>	<b>6</b>	<b>44</b>

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:

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



W 96<sup>th</sup> St and Broadway

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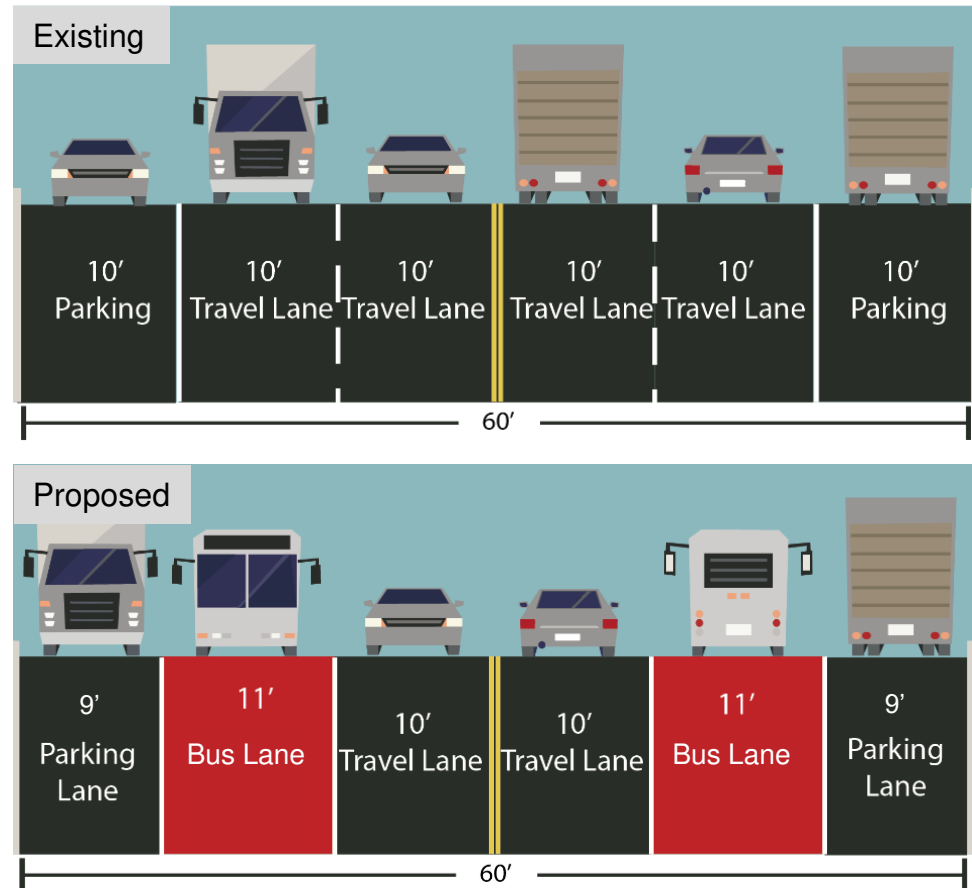
# Proposal

# 2

# Offset Bus Lane Proposal

## An offset bus lane:

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

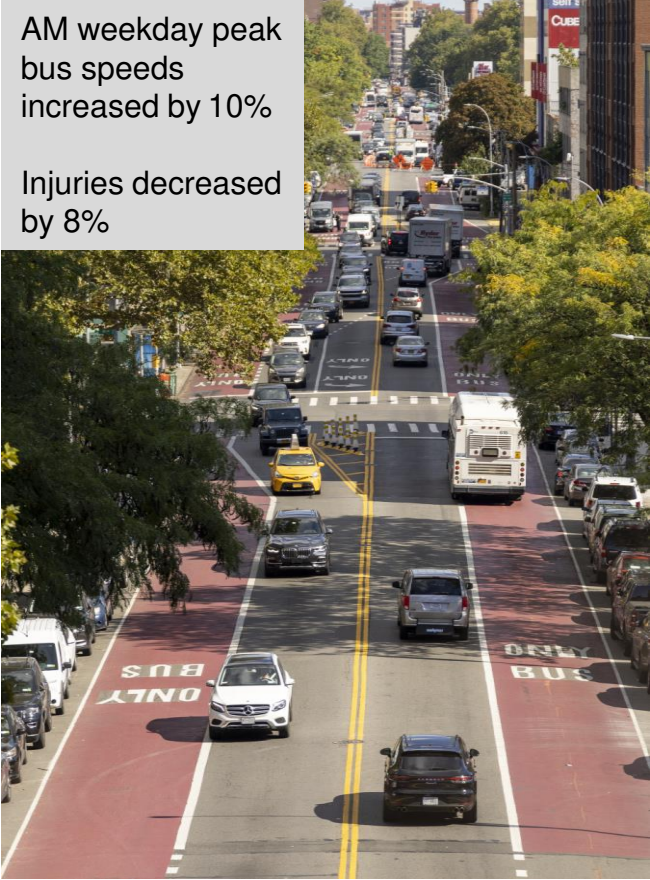


# Recent Offset Bus Lane Examples

## 21st Street, Queens

AM weekday peak  
bus speeds  
increased by 10%

Injuries decreased  
by 8%



## Lexington Avenue, Manhattan

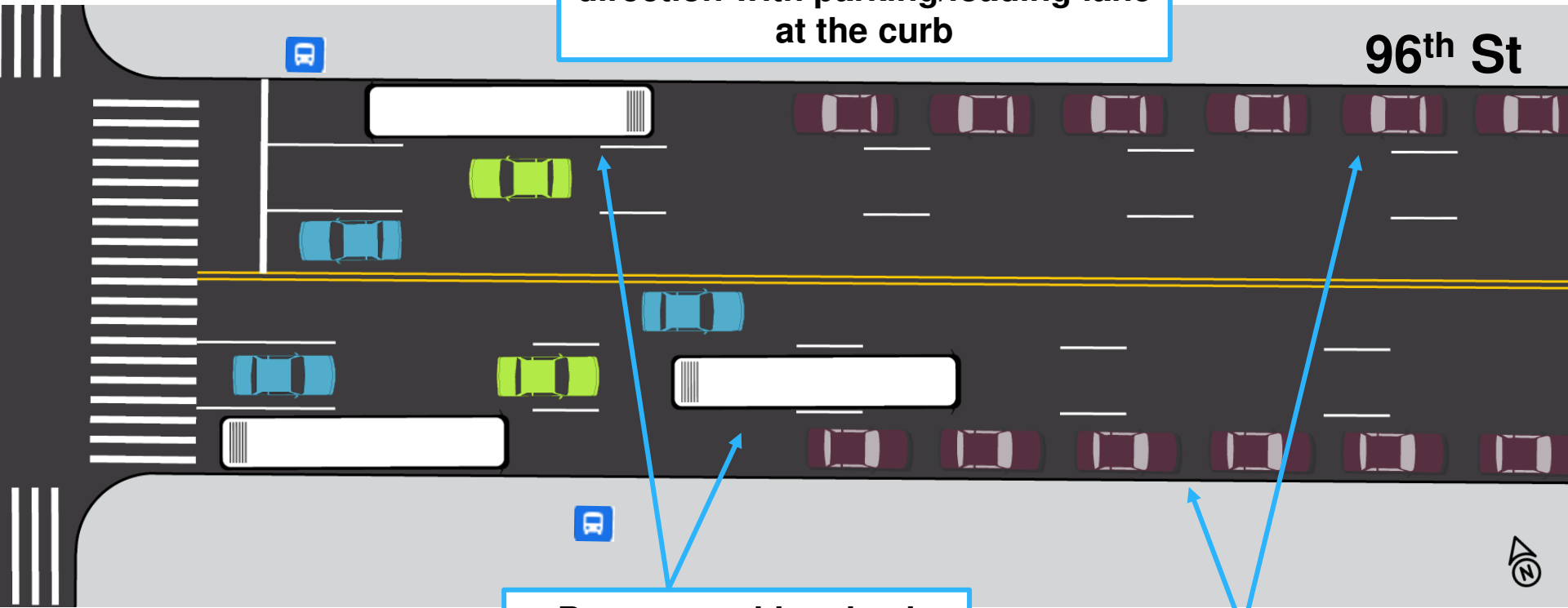
PM weekday peak  
bus speeds  
increased by 19%

Injuries decreased  
by 24%



# Existing Conditions: 96<sup>th</sup> St Typical Block

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

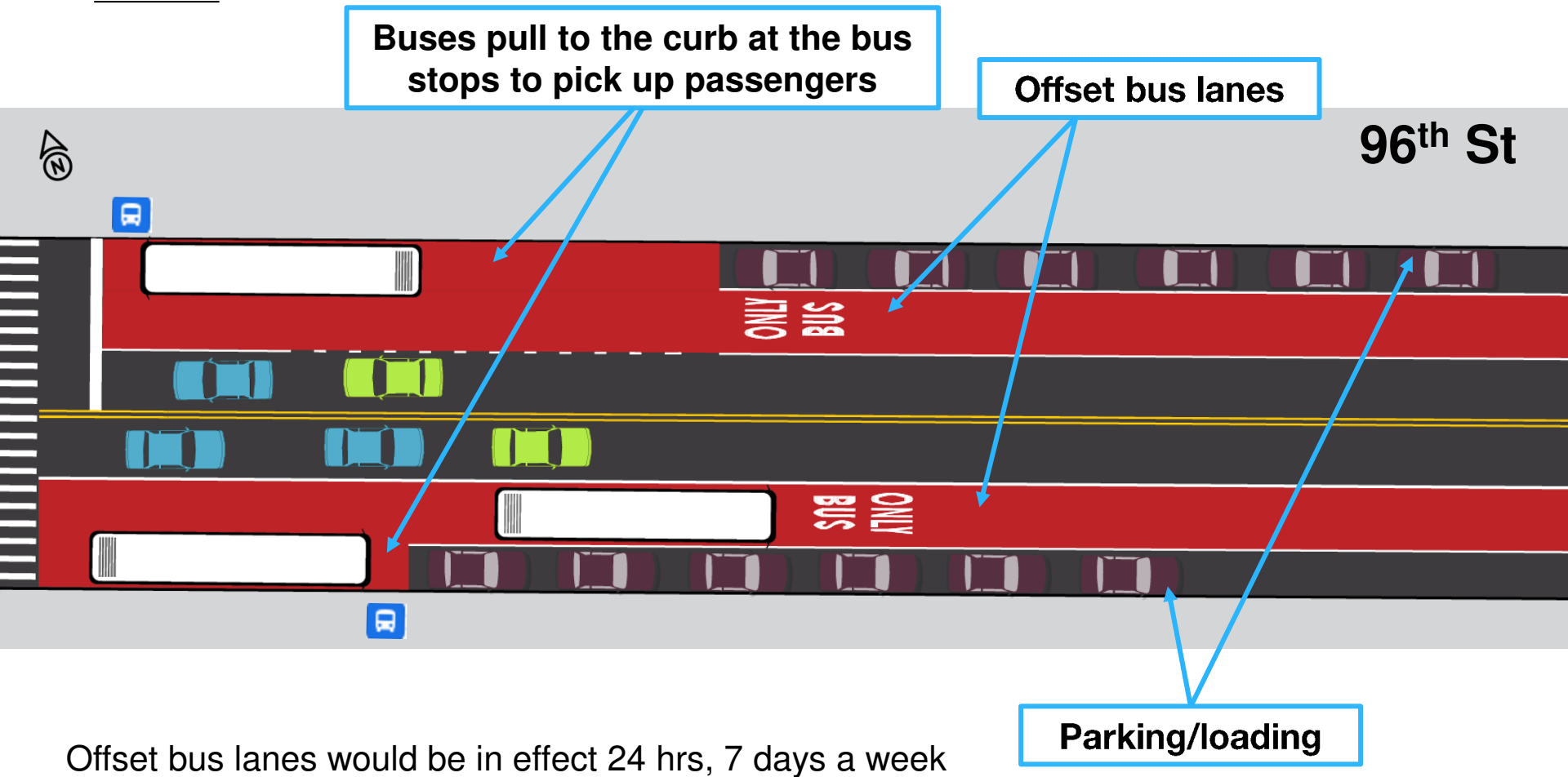


96<sup>th</sup> St

Buses travel in mixed traffic, creating speed and reliability issues

Parking/loading

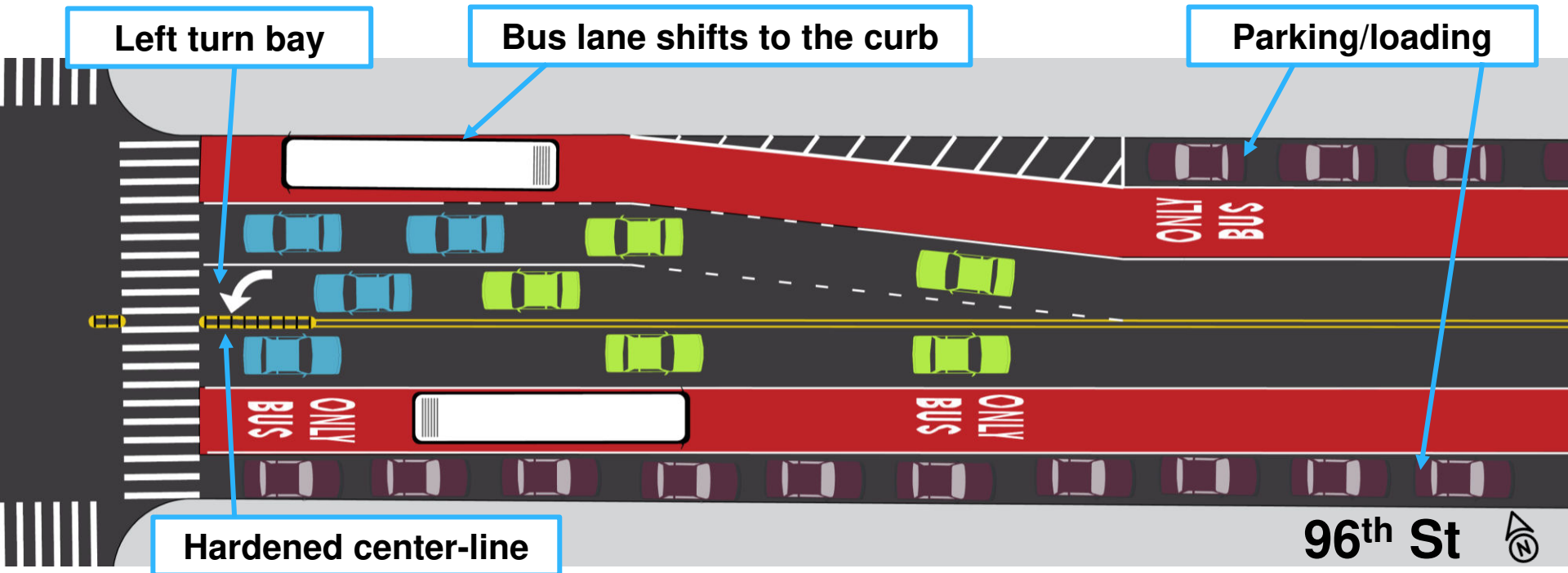
# Proposed: Typical Offset Bus Lane





# Left Turns

- At intersections, left turn bays would be added to facilitate traffic flow and preserve turning movements
- Improves safety by reducing “back pressure”
- 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)



# 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:
  - 96<sup>th</sup> St and Central Park West (EB)
  - 97<sup>th</sup> St and 5<sup>th</sup> Av (WB)
  - 96<sup>th</sup> St and 3<sup>rd</sup> Av (EB+WB)



# Pedestrian Safety Improvements

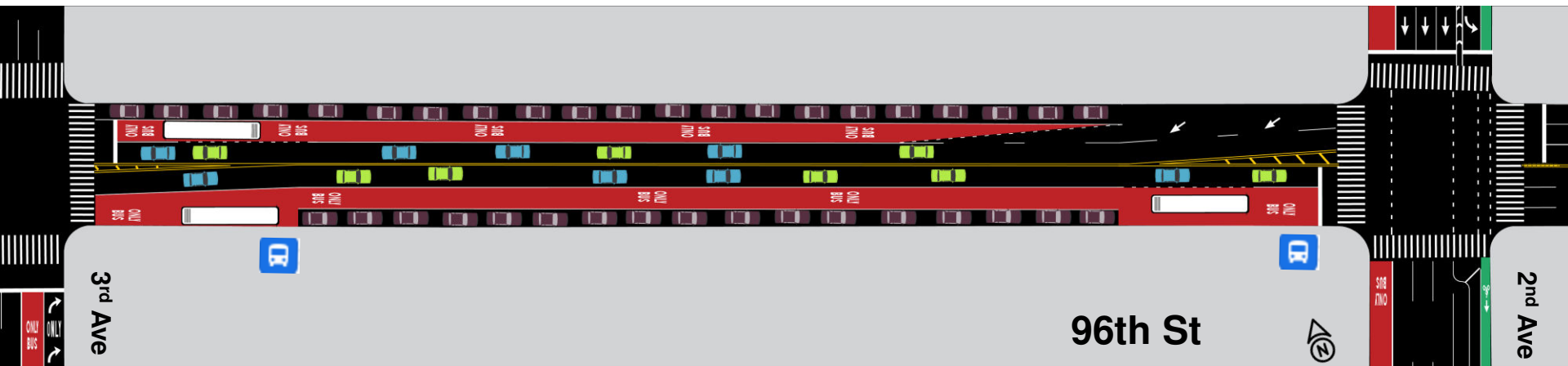
Turn calming treatments would be installed throughout the corridor



# 96th St, 3<sup>rd</sup> Ave – 2<sup>nd</sup> Ave

## Project Proposes:

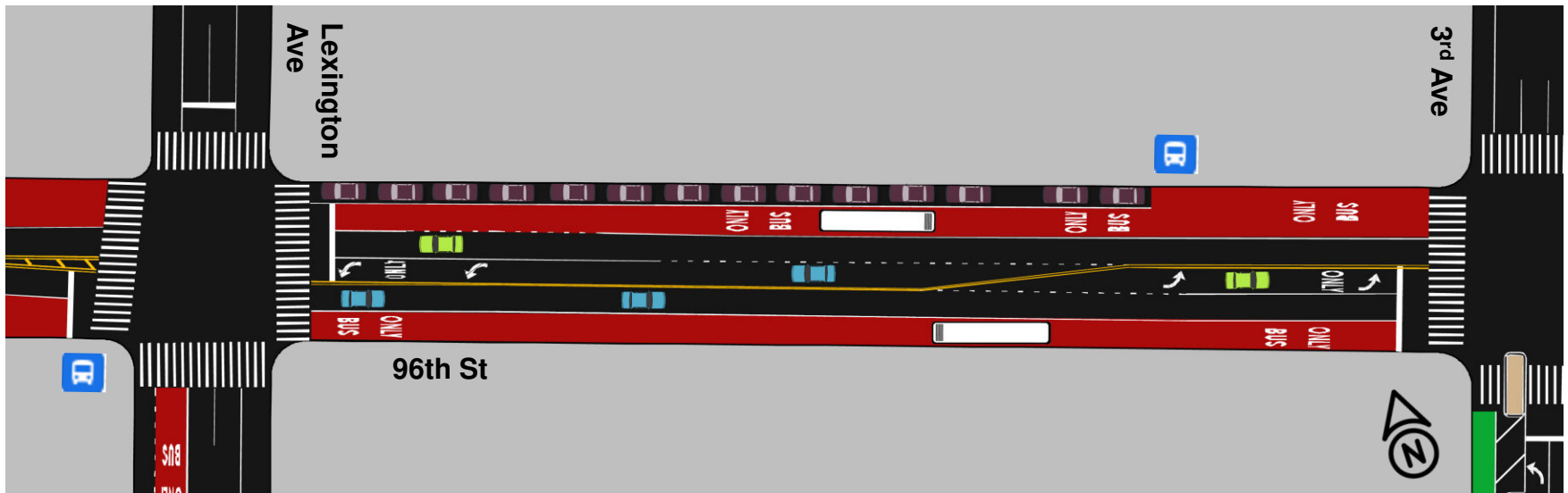
- Offset bus lanes in each direction
- Westbound bus lane has tapered start to allow for vehicle merging
- Eastbound bus lane ends at 2<sup>nd</sup> Ave



# 96th St, Lexington Ave – 3<sup>rd</sup> Ave

## Project Proposes:

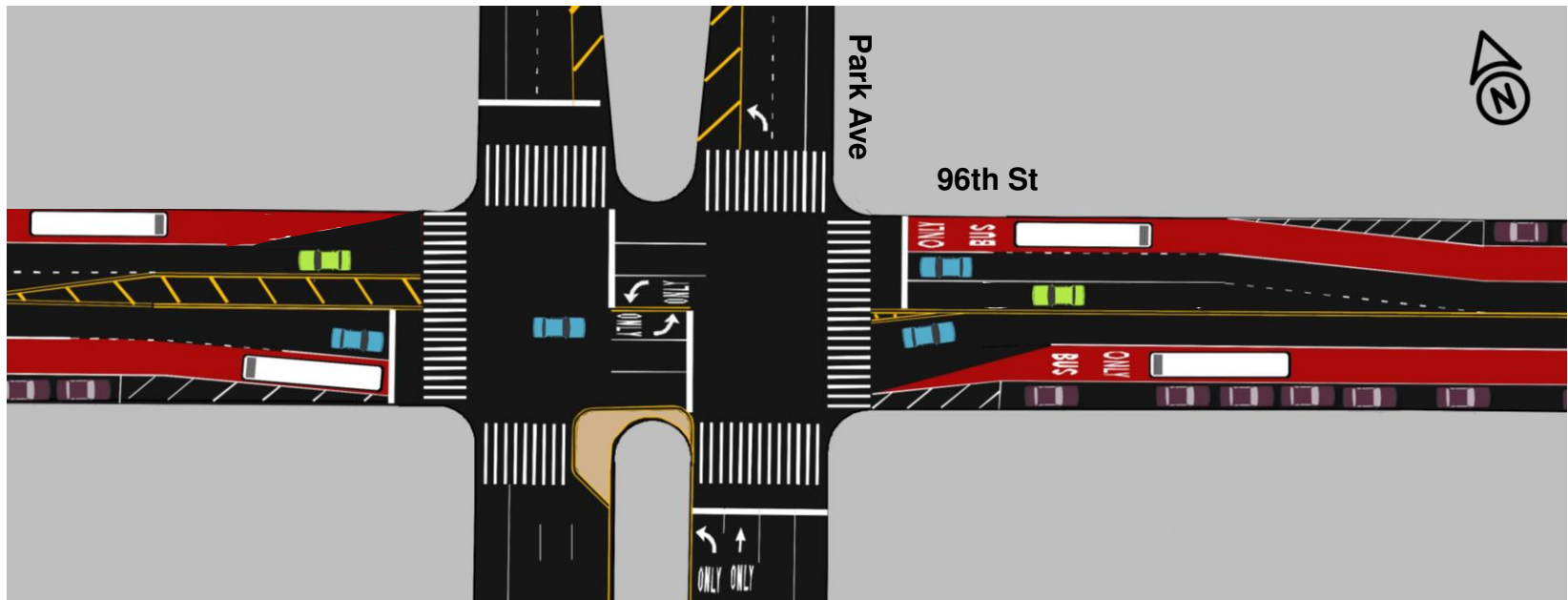
- Eastbound curbside bus lane, in effect 6am-8pm all days, with parking permitted at other times
- Westbound offset bus lane



# 96th St and Park Ave

## Project Proposes:

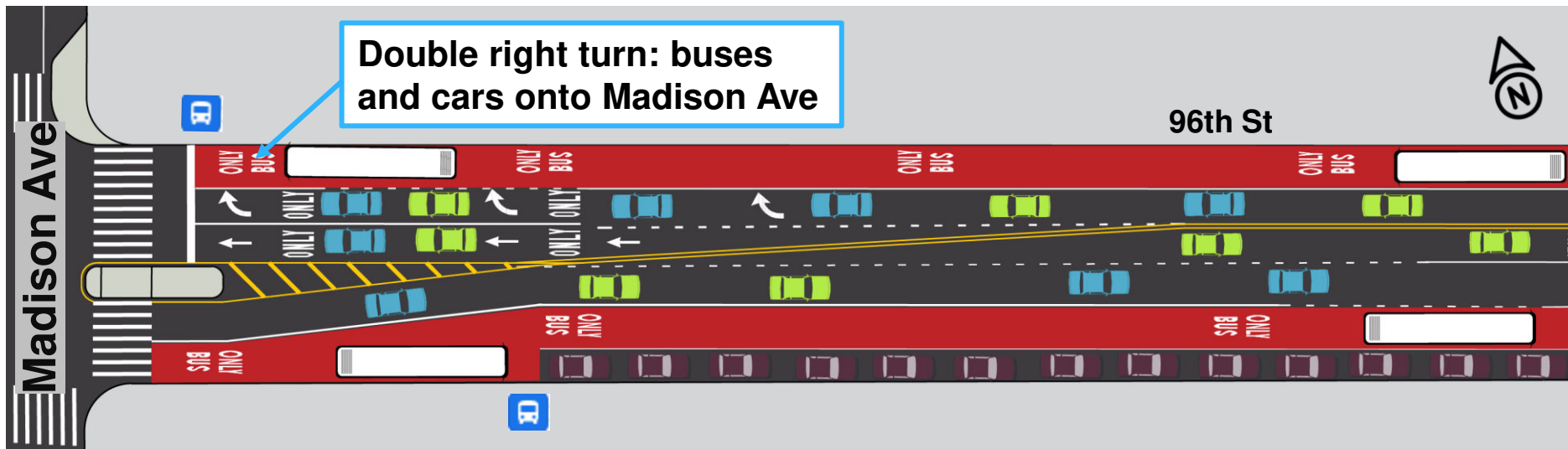
- Offset bus lanes in the eastbound direction
- Offset bus lane shifts to curbside bus lane in the westbound direction
- Addition of turn bays to improve traffic flow and safety



# 96th St, Madison Ave - Park Ave

## Project Proposes:

- A westbound curbside bus lane in effect 24/7
- Existing curb regulations are No Parking Anytime or No Standing Anytime, so no parking removal is required
- An offset eastbound bus lane



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## Summary and Next Steps

# 3



# Summary

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## 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

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## **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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