#### 96th St Bus Priority and Safety Improvements

#### Presentation to Community Board 8

May 1, 2024











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







**Background and Context** 









# Why 96<sup>th</sup> 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 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

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# 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 96th St and 97th 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)

#### 96th St and Broadway - Before



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

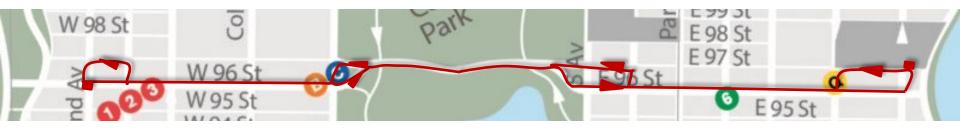








# **M96 Route Description**



- M96 runs from 1st Ave to West End Avenue
  - M106 overlaps on the transverse and west side. It also 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 travel between the East and West Sides.
  - Almost 6,000 people per day ride in each direction through Central Park.



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• 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.
- They are especially slow on the East Side, and around Broadway and Amsterdam Ave.



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\*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

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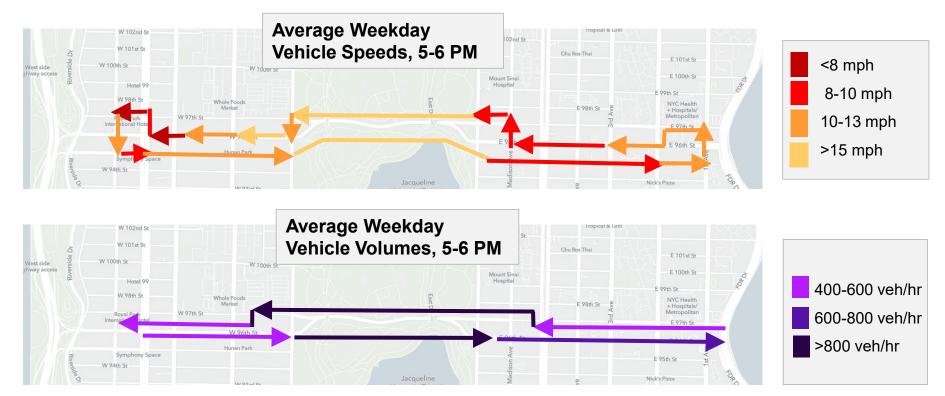
Source: NYPD injury crash data 2019-2023





# **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
- 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









#### **Proposal**





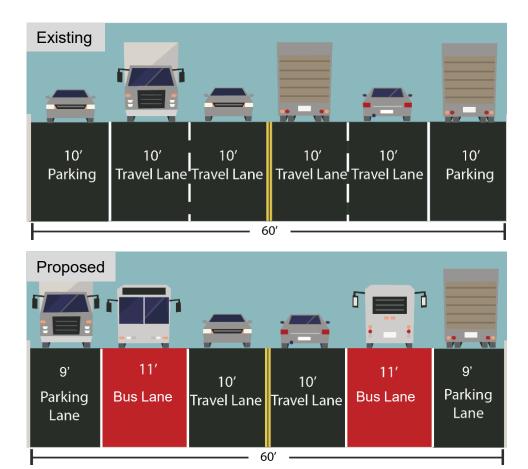




# **Offset Bus Lane Proposal**

#### 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 dropoffs/pickups
- Maintains traffic flow for other vehicles





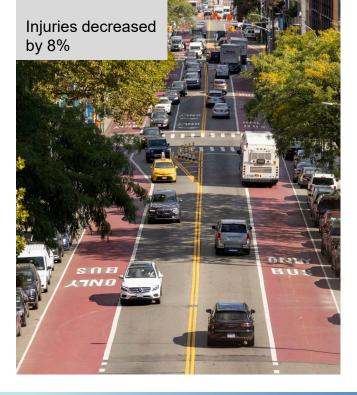




## **Recent Offset Bus Lane Examples**

#### **21st Street, Queens**

AM weekday peak bus speeds increased by 10%



#### Lexington Avenue, Manhattan

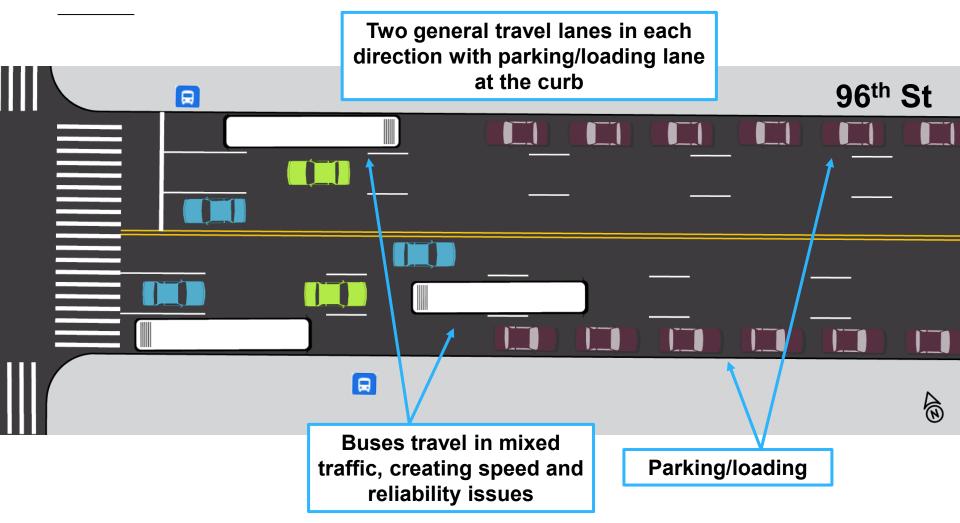








### **Existing Conditions: 96th St Typical Block**

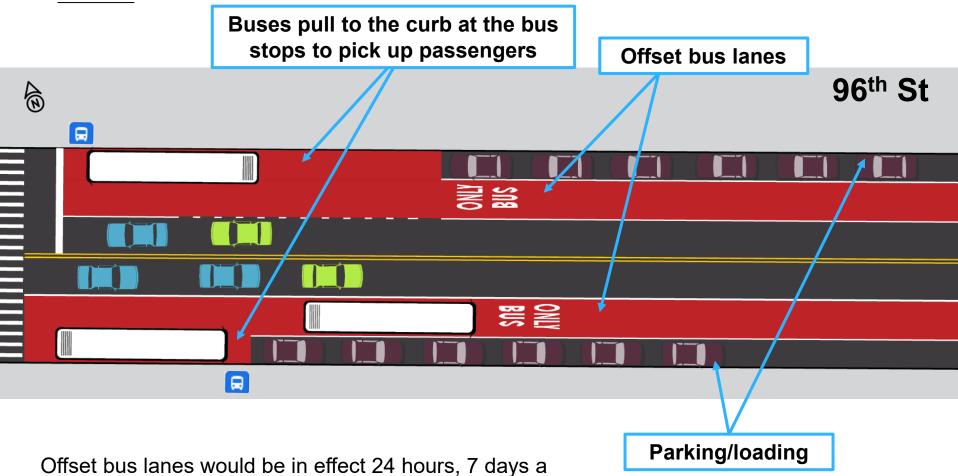








# **Proposed: Typical Offset Bus Lane**



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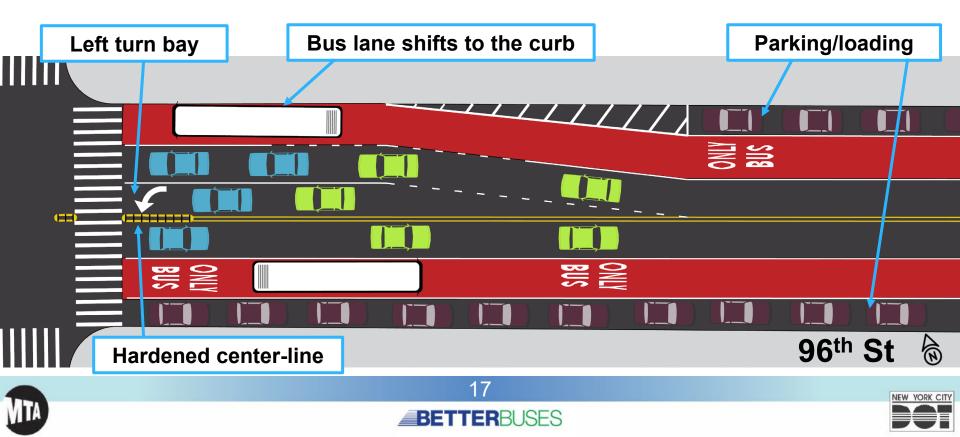
Offset bus lanes would be in effect 24 hours, 7 days a week





## **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)



# **Queue Jump Signals**

- 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)





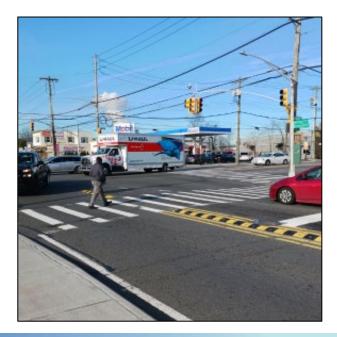




## **Pedestrian Safety Improvements**

Turn calming treatments would be installed throughout the corridor





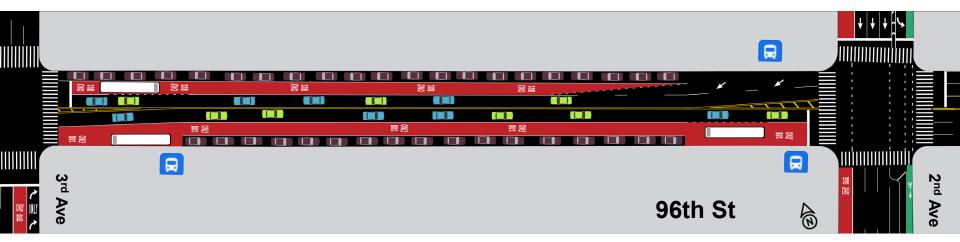






#### 96th St, 3<sup>rd</sup> Ave – 2<sup>nd</sup> Ave

- 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



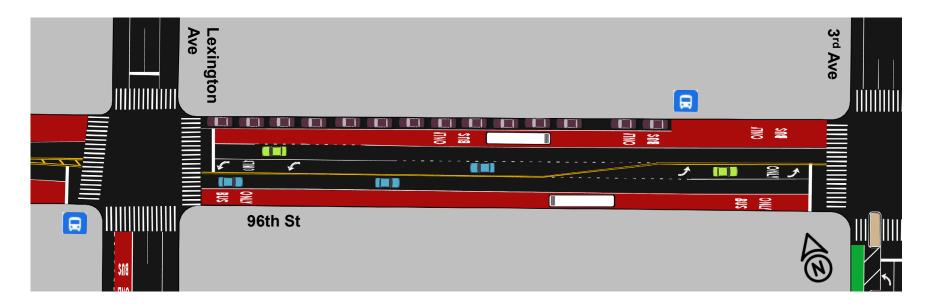






### 96th St, Lexington Ave – 3<sup>rd</sup> Ave

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



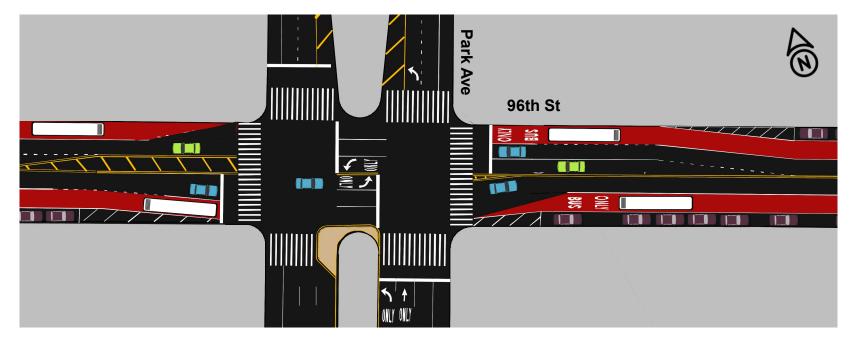






### 96th St and Park Ave

- 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



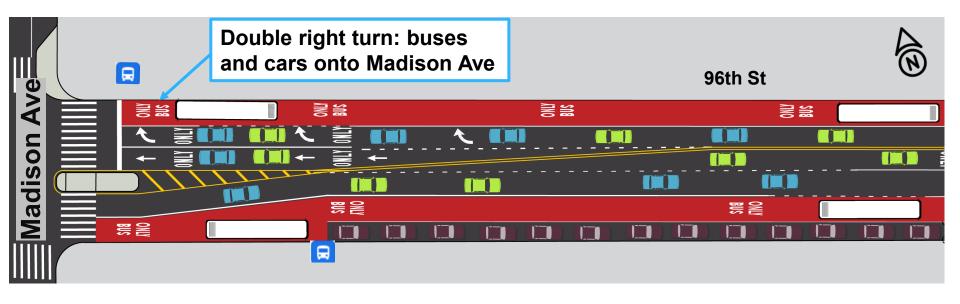






### 96th St, Madison Ave - Park Ave

- 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









**Summary and Next Steps** 









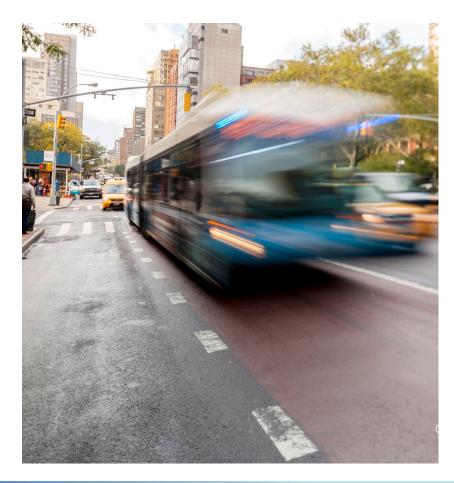
# Summary

#### **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

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# **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?









