



3rd Ave, E 59th St to E 96th St

Complete Streets and Safety Improvements

Presented by New York City Department of Transportation to Manhattan Community Board 8 on October 12th, 2022



Overview

Background

- 3rd Ave, Cooper Sq – 128th St
 - Existing
 - Safety
- NYC Streets Plan
- Pedestrian Safety and Older NYers
- Safer Streets for Cycling
- Safety Benefits of Protected Bike Lanes
- Cycling in Numbers

Project Area

- Mode Overview
- Safety

Proposal

- Existing
- Proposal
- Intersection Treatments

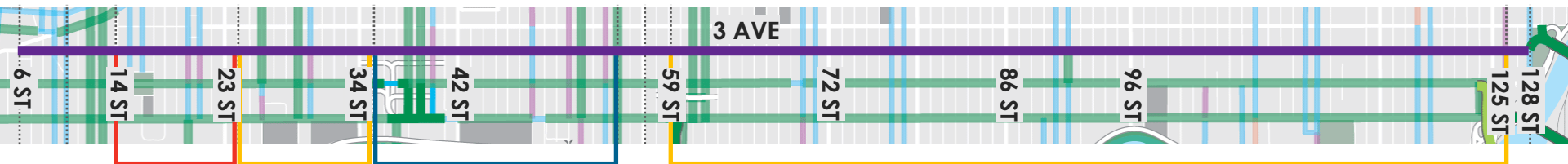
Summary & Next Steps



Background

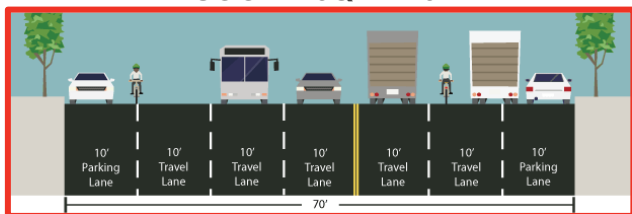
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3rd Ave, Cooper Sq – 128th St

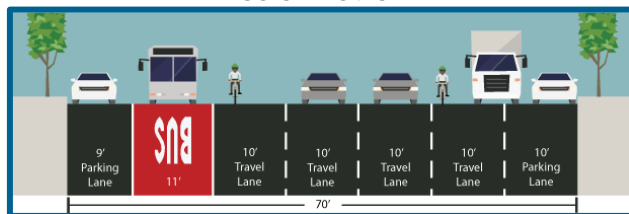


Existing Typical Cross-section:

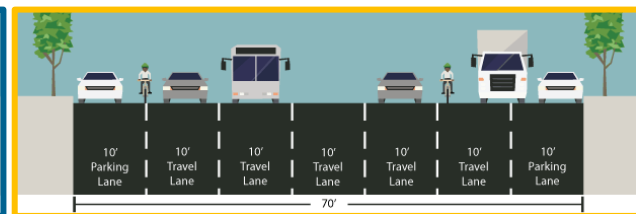
COOPER SQ – 24 ST



35 ST – 59 ST



24 ST – 35 ST & 59 ST – 128 ST



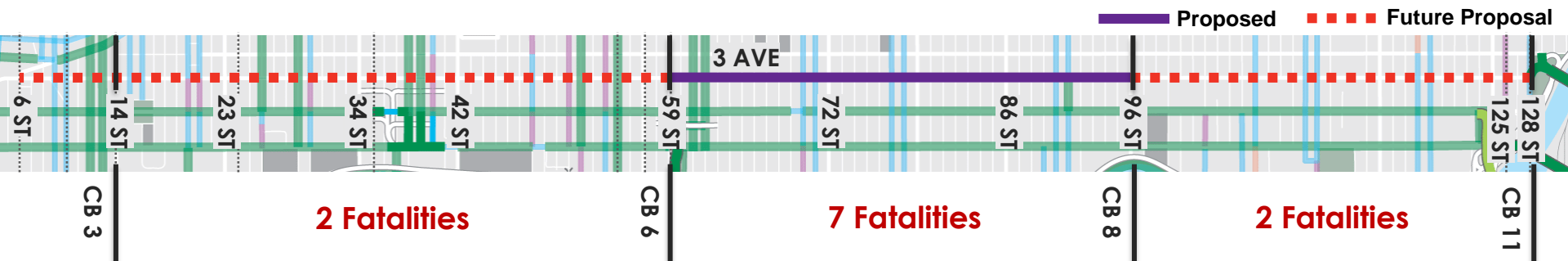
Corridor Background:

3rd Ave, Cooper Sq to 128th St is approximately 6 miles long connecting neighborhoods on the east side of Manhattan

The corridor is approximately 70 feet wide; two-way between Cooper Sq and 24th St, and one-way northbound from 24th St to 128th St

Elected Officials, Community Boards, and Stakeholders request for pedestrian, bicyclist, and bus improvements

3rd Ave, Cooper Sq – 128th St



3rd Ave, 14th St – 59th St (2.23 mi)

Injury Summary, 2016-2020 (5 years)

| Mode | Total Injuries | Severe Injuries | Fatalities | KSI |
|------------------------|----------------|-----------------|------------|-----------|
| Pedestrian | 263 | 23 | 1 | 24 |
| Bicyclist | 131 | 6 | 0 | 6 |
| Motor Vehicle Occupant | 490 | 22 | 1 | 23 |
| Other Motorized | 0 | 0 | 0 | 0 |
| Total | 884 | 51 | 2 | 53 |

Fatalities, 2016 – 10/2022 (7 years): 2

3rd Ave, 59th St – 96th St (1.87 mi)

Injury Summary, 2016-2020 (5 years)

| Mode | Total Injuries | Severe Injuries | Fatalities | KSI |
|------------------------|----------------|-----------------|------------|-----------|
| Pedestrian | 159 | 17 | 3 | 20 |
| Bicyclist | 58 | 5 | 0 | 5 |
| Motor Vehicle Occupant | 243 | 15 | 0 | 15 |
| Other Motorized | 0 | 0 | 0 | 0 |
| Total | 460 | 37 | 3 | 40 |

Fatalities, 2016 – 10/2022 (7 years): 7

3rd Ave, 96th St – 128th St (1.61 mi)

Injury Summary, 2016-2020 (5 years)

| Mode | Total Injuries | Severe Injuries | Fatalities | KSI |
|------------------------|----------------|-----------------|------------|-----------|
| Pedestrian | 148 | 15 | 1 | 16 |
| Bicyclist | 59 | 6 | 0 | 6 |
| Motor Vehicle Occupant | 296 | 16 | 0 | 16 |
| Other Motorized | 0 | 0 | 0 | 0 |
| Total | 503 | 37 | 1 | 38 |

Fatalities, 2016 – 10/2022 (7 years): 2

Source: Fatalities: NYCDOT. Injuries: NYSDOT. KSI: Persons Killed or Severely Injured

NYC Streets Plan (2021)

The NYC Streets Plan (response to LL195) calls on the DOT to expand the overall network coverage and connectivity by:

- **Equitable approach to planning, targeting Priority Investment Areas (PIAs) for street improvement projects**
- Build out the citywide PBL network
- Create safe neighborhood cycling network
- Reenergize the greenways program
- Expand bike parking options
- Improve enforcement of blocked bike lanes

3rd Ave is a Pedestrian and Cycling Priority Area for Future Investment

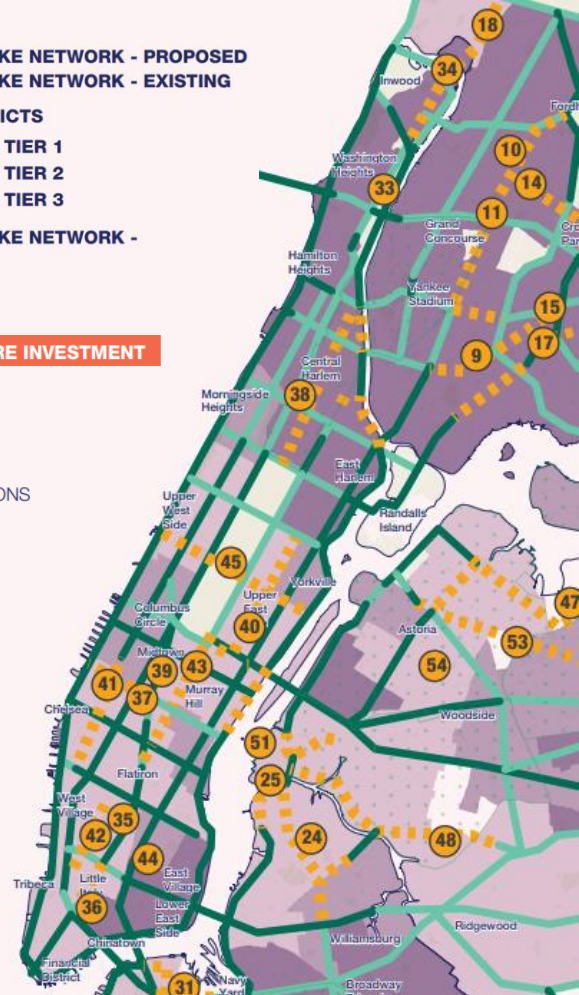


CYCLING PRIORITIZATION AND FUTURE INVESTMENT

MANHATTAN

- 33 NORTHERN AMSTERDAM AVE.
- 34 INWOOD NEIGHBORHOOD CONNECTIONS
- 35 UNIVERSITY PLACE
- 36 CENTRE ST., LAFAYETTE ST.
- 37 7TH AVE.
- 38 ADAM CLAYTON POWELL JR. BLVD.
- 39 BROADWAY BLVD PLAZA
- 40 3RD AVE.
- 41 10TH AVE.
- 42 6TH AVE.
- 43 5TH AVE.
- 44 E. HOUSTON ST.
- 45 72ND ST.

Maps serve as a vision for proposed projects and improvements to be implemented during the five year plan. All geographies are approximate; projects will be developed through detailed design and community feedback.

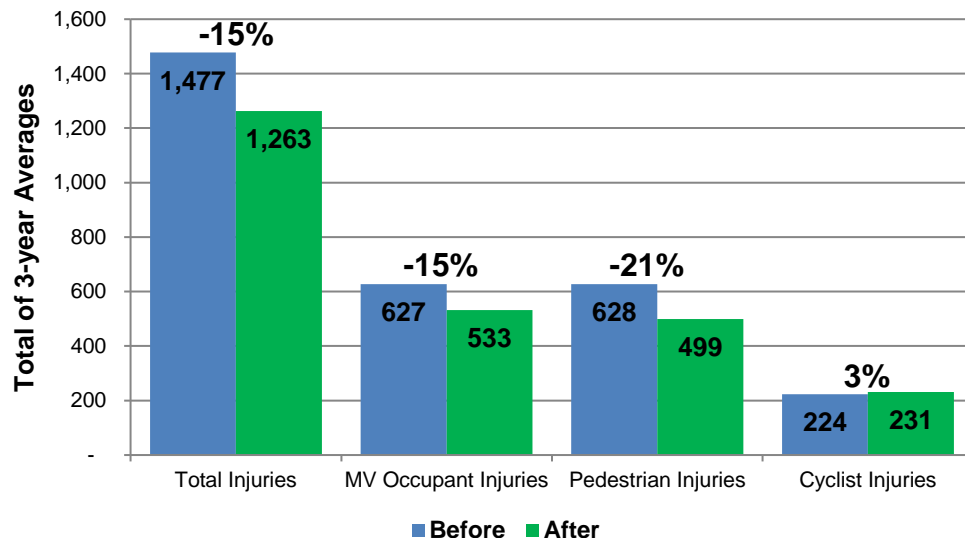


Safety Benefits of Protected Bicycle Lanes

Protected Bike Lanes designs are proven to calm traffic and improve safety for all road users

Protected Bike Lanes

Before and After Crash Data, 2007-2017



Data from 25 separate protected bicycle lane projects installed from 2007-2014 with 3 years of after data. Includes portions of 1 Ave, 2 Ave, 8 Ave, 9 Ave, Broadway, Columbus Ave, Hudson St, Lafayette St / 4 Ave, Sands St, Allen/Pike St, Kent Ave, Prospect Park West, Flushing Ave, Bruckner Blvd & Longfellow Ave, Imlay St / Conover St, Paerdegat Ave. Only sections of projects that included protected bike lanes were analyzed. Source: NYPD AIS/TAMS Crash Database

Protected bike lanes benefit all street users:

Crashes with Injuries

Down 15%

Motor Vehicle Occupant Injuries

Down 15%

Pedestrian Injuries

Down 21%



VISION ZERO

Multi-agency effort to reduce traffic fatalities and injuries

Pedestrian Safety and Older NYers (2022)

Key Findings:

- Seniors make up less than 15% of New York City's population, but over 45% of pedestrian fatalities

Crash Analysis:

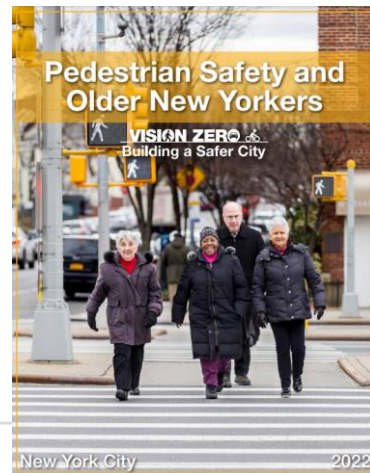
- About 90% of both senior and non-senior adult injuries occur at intersections; 72% of injury crashes occur at signalized intersections

Previous Work:






- Since 2010, the NYC DOT has completed over 900 street improvement projects
- 300 Street Improvement Projects in Senior Pedestrian Focus Areas since 2009

Protected Bike Lanes:

- On streets with protected bike lanes, seniors saw a **39% decrease in KSI** and a **22% drop in overall injuries**. Non-senior adults saw a **24% drop in KSI** and **9% drop in overall injuries**.
- Commonly-used road treatment benefits all adults, it especially improves conditions for seniors.**



Safety Treatment Effectiveness

| Treatment Name & Safety Features | Senior Pedestrian Injuries | Senior Pedestrian KSI | Non-Senior Adult Pedestrian Injuries | Non-Senior Adult Pedestrian KSI |
|--|---|---|--|---|
| Protected Bike Lanes  |  22% |  39% |  9% |  24% |

Safer Streets for Cycling (2021)

Safety & Ridership

Overall:

- **32% reduction in crash risk where bike facilities have been installed**

Protected Bike Lanes

- **Risk reduction of 34% across all study projects**
- On the highest risk streets, cyclist risk is reduced by over 60%

Cycling Volumes:

- Installation of PBL and conventional bike lane increased bicycle volumes by 50%
- On the highest risk streets, bicycling volumes nearly doubled after a bike lane was installed

Source: Safety Stats (Data from 100+ bike lane projects including 35 Protected (31 mi), 50 Conventional (46 mi), and 16 Shared (18 mi) installed between 2009-2018). Risk is defined by injuries per mile per bicyclist volume



Safe Streets For Cycling

How Street Design Affects Bicycle Safety and Ridership

October 2021



Cycling in Numbers

NETWORK EXPANSION

1,426 miles
of bicycle
facilities

546
of protected
bike lanes

28 miles of protected
bike lanes installed in
2021

DAILY CYCLING

773,000
ride a bike
regularly

530,000
of daily
commuter trips

116%
increase in daily
cycling (2009-2019)

EAST RIVER BRIDGES

21,000+
cyclists cross
the ERB daily

15%
growth in
cycling on all
ERB (2019-2020)

35%
Increase on the
QBB Br (2015-2020)

BIKE SHARE

19.5 million
of Citi Bike
trips in 2020

492,500+
of trips in CB 8
(Q3, 2020)

15%
of NYers use bike
share (2018)



Project Area

2

Mode Overview



Pedestrians

- **50%+ of trips are walking trips** in the Manhattan core
- **96% walk to transit and 94% walk from transit**
- Concentration of pedestrian destinations, neighborhood amenities drive volumes of pedestrians



Bicycles

- **1,760+ cyclists** on 3rd Ave, 85th – 86th St (6AM-12AM, 2022)
- High volumes of cyclists; working cyclists make up approximately 36% of cyclists



Buses

- **150+ buses** along 3rd Ave during peak period
- **50,000 riders** use MTA buses along 3rd Ave daily
- Critical northbound service with key connections to Q32, Q60, Q101, 66, 72, SBS 79, SBS 86, 96
- **Average speeds** (M101, 102, 103): **5.4 MPH (AM), 5.2 MPH (PM)**

Source: Average NYC Mobility Survey (2019). Weekday New York City Transit Bus Ridership, New York City Transit

Safety

Vision Zero Priority Corridor Safety Streets for Seniors Focus Area

3 Ave, 59 St to 96th St (Community Board 8)
has the **highest number of crashes resulting in fatalities**

6 pedestrian, and
1 cyclist killed (2016-09/26/2022)
37 severely injured (5 years, 2016-2020)



Project Area

Past Improvements:

Pedestrian Safety :

- Intersection re-design on 3rd Ave at E 60th St, E 79th St, and E 86th St

Protected Bike Lanes:

- East-west connection on 61st & 62nd Streets, Queensboro Br Access
- North-south lanes on 1st and 2nd Avenues connecting Brooklyn, Manhattan and the Bronx
 - **High volume of cyclists on 1st and 2nd Avenues**
- Manhattan CB 8 request for crosstown protected bike lanes

Conventional Bike Lanes:

- Lanes installed on 70th & 71st, 77th & 78th, 90th & 91st Streets

Better Buses:

- Bus lanes installed on 1st, 2nd, Lexington and Fifth Avenues

Curb Regulations:

- Curb regulation changes installed in May 2022



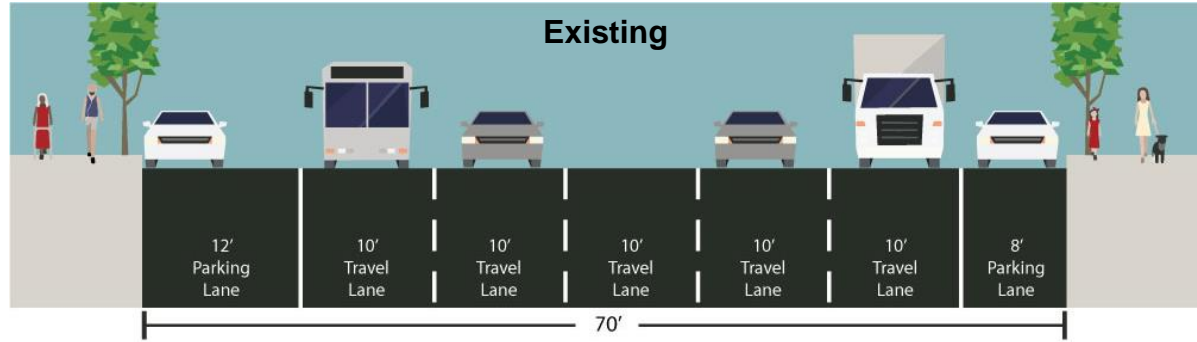
Proposal

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Existing

Existing Conditions:

- Long crossing distance for pedestrians (5+ travel lanes, 70 feet)
- No dedicated space for cyclists
- No dedicated lane for buses (150+ buses; ~50,000 daily riders)
 - M98, M101, M102, M103 bus route
- Chronic double parking, un/loading trucks in moving lanes



Proposed: Mid-block

Proposed:

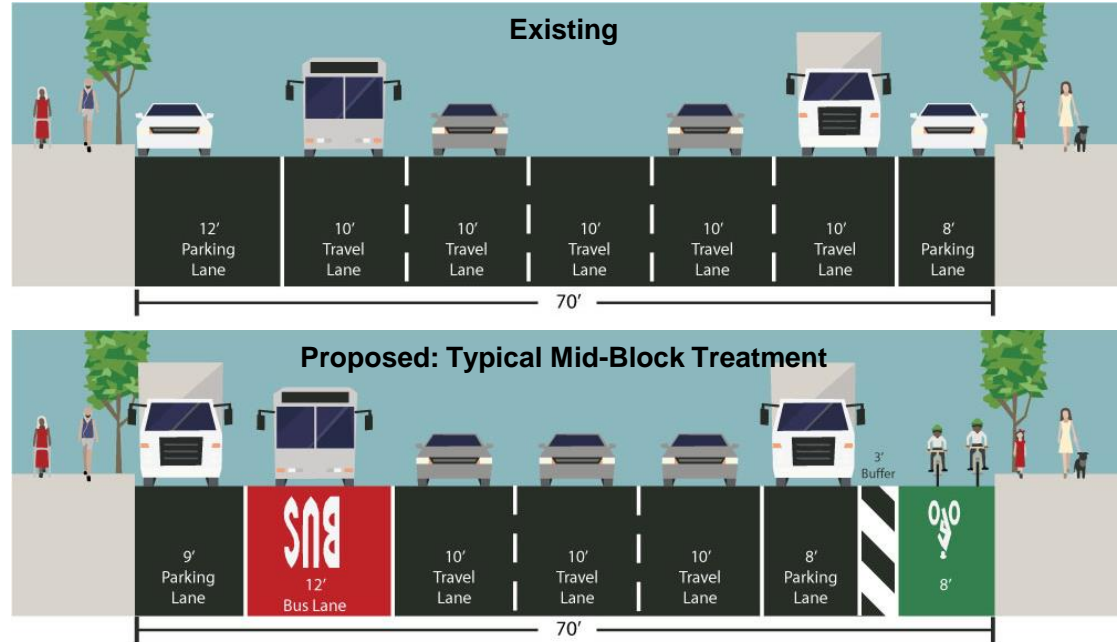
- Parking protected bike lane
- Offset bus lane

Benefits:

- Calms traffic, reduces speeding; improve safety for all users
- Provides safer dedicated space for cyclists that is separated from moving vehicles
- Improve bus speeds and operations

Vehicular Volumes:

- Traffic analysis shows that three travel lanes can accommodate existing peak period volumes (ranging from 1,160 to 1,900 vph)

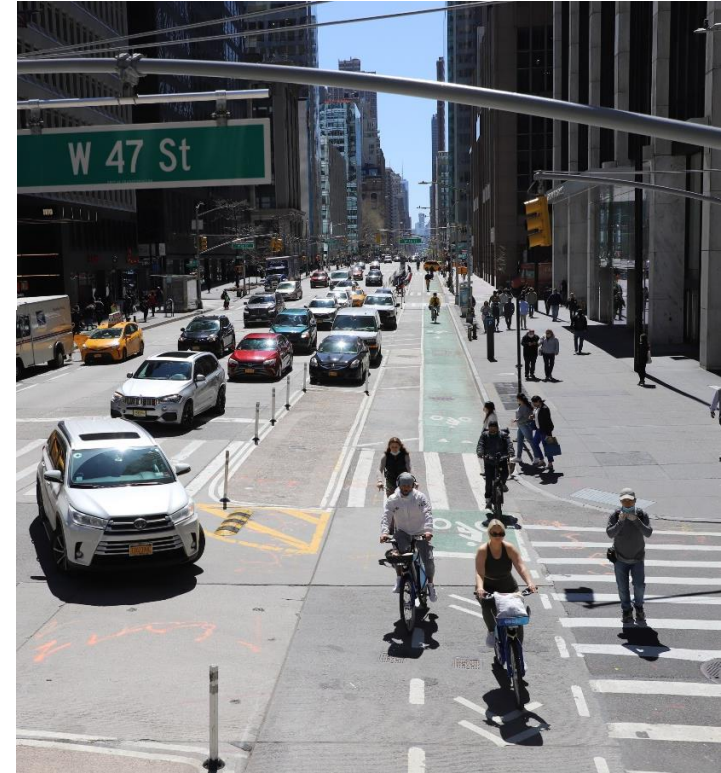
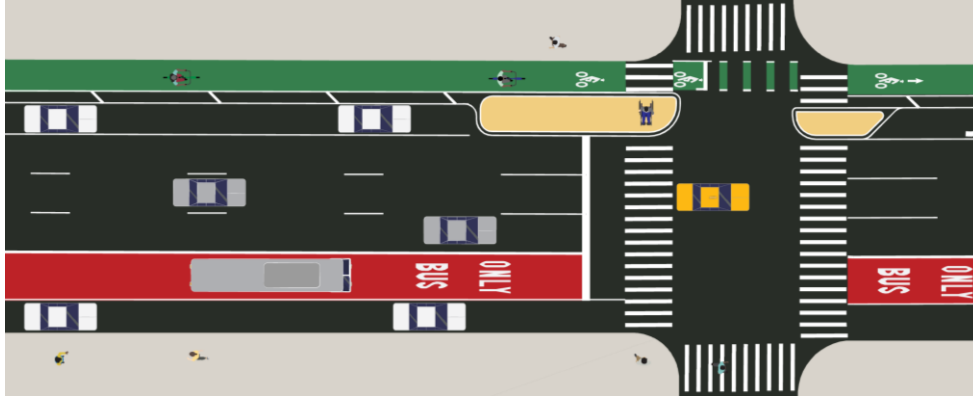


Proposed: Intersection Treatment

Proposed:

- Install Offset Crossings at intersections with lower vehicular volumes
 - Improve visibility of pedestrian and cyclists for turning vehicles
 - Reduce crossing distances, reducing pedestrian exposure
- Minimal parking impact: 1-2 spaces repurposed per block

Offset Crossing

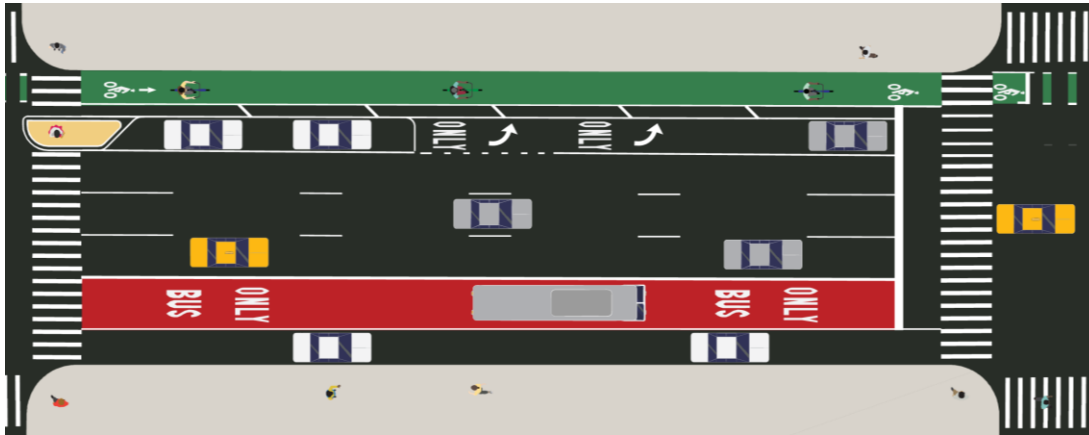


Proposed: Intersection Treatment

Proposed:

- Install Left Turn Lanes with Dedicated Signal Timing at intersections with higher volumes
 - Add protected signal phase; reduces conflicts between pedestrians & cyclists and turning vehicles
 - Reduce pedestrian exposure
- Minimal parking impact: 4-5 spaces repurposed per block

Left Turn Lane

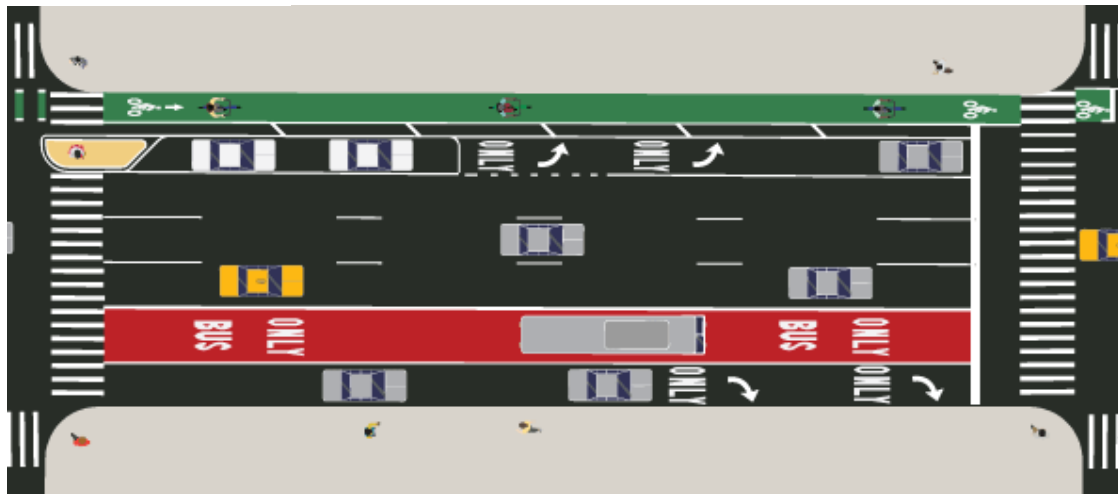


Proposed: Intersection Treatment

Proposed:

- Install right turning lanes at intersections with higher volumes to reduce backpressure, and maintain bus lane clear
- Repurposes ~6 parking spaces per location

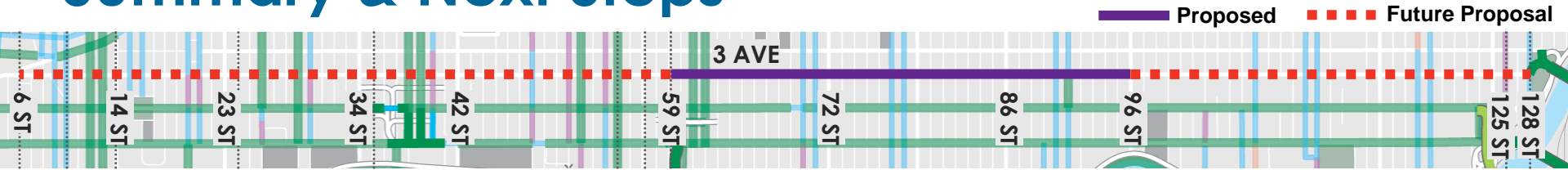
Right Turn Lane



Summary & Next Steps

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Summary & Next Steps



Summary:

- 3rd Ave from 59th St to 96th St has the **highest number of fatalities along the corridor** (6 pedestrians, and 1 cyclist have been killed since 2016)
- Re-design 3rd Ave, E 59th St to E 96th St
 - Add dedicated bus and bicycle lanes, re-design targeted intersections to improve safety & comfort for pedestrians
- Similar street improvement projects resulted in **improved safety for all road users**

Next Steps:

- DOT will continue to monitor curb regulation changes implemented in Spring 2021
- 2023 project implementation along 3rd Ave between 59th St to 96th St
- Continue to work with Elected Officials, Community Boards, and Stakeholders on segments north and south of CB 8

Thank You!

Questions?



NYCDOT



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NYCDOT