



# 3<sup>rd</sup> Ave, E 59<sup>th</sup> St to E 96<sup>th</sup> St

## Complete Streets and Safety Improvements

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



# Overview

## Background

- 3<sup>rd</sup> Ave, Cooper Sq – 128<sup>th</sup> 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

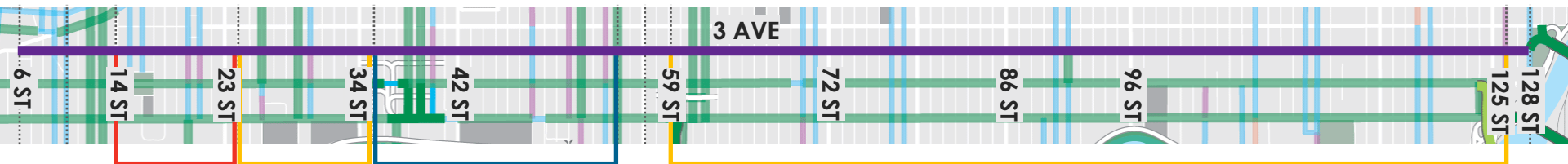


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# Background

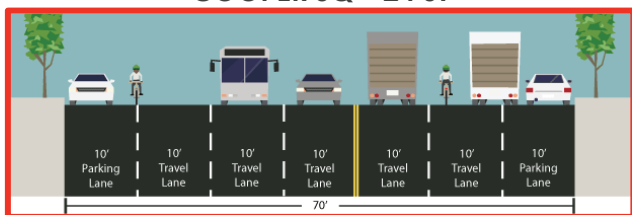
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# 3<sup>rd</sup> Ave, Cooper Sq – 128<sup>th</sup> St

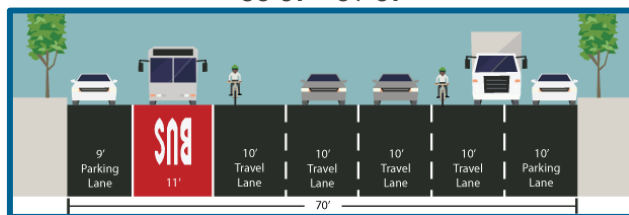


Existing Typical Cross-section:

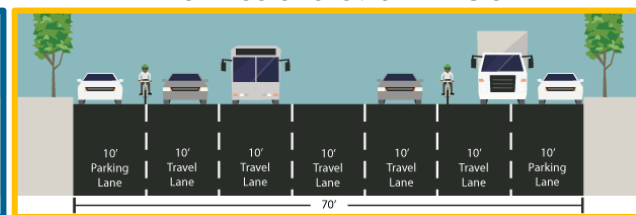
COOPER SQ – 24 ST



35 ST – 59 ST



24 ST – 35 ST & 59 ST – 128 ST



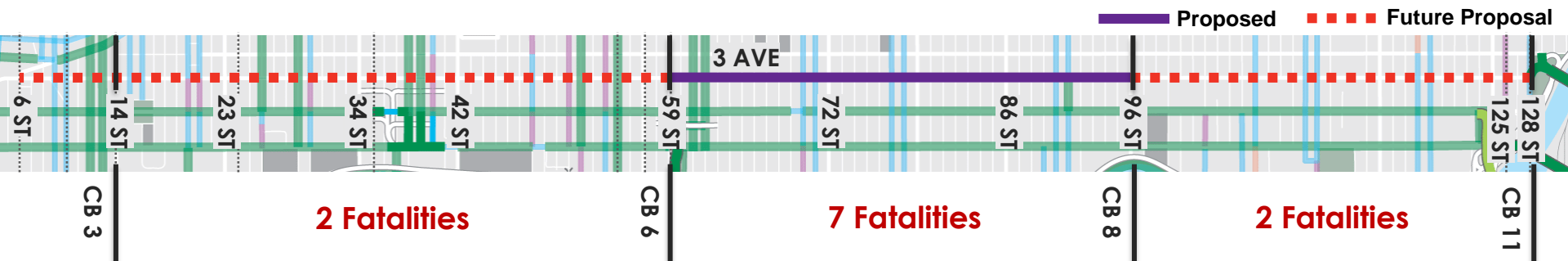
## Corridor Background:

3<sup>rd</sup> Ave, Cooper Sq to 128<sup>th</sup> 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 24<sup>th</sup> St, and one-way northbound from 24<sup>th</sup> St to 128<sup>th</sup> St

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

# 3<sup>rd</sup> Ave, Cooper Sq – 128<sup>th</sup> St



## 3<sup>rd</sup> Ave, 14<sup>th</sup> St – 59<sup>th</sup> 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
<b>Total</b>	<b>884</b>	<b>51</b>	<b>2</b>	<b>53</b>

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

## 3<sup>rd</sup> Ave, 59<sup>th</sup> St – 96<sup>th</sup> 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
<b>Total</b>	<b>460</b>	<b>37</b>	<b>3</b>	<b>40</b>

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

## 3<sup>rd</sup> Ave, 96<sup>th</sup> St – 128<sup>th</sup> 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
<b>Total</b>	<b>503</b>	<b>37</b>	<b>1</b>	<b>38</b>

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**

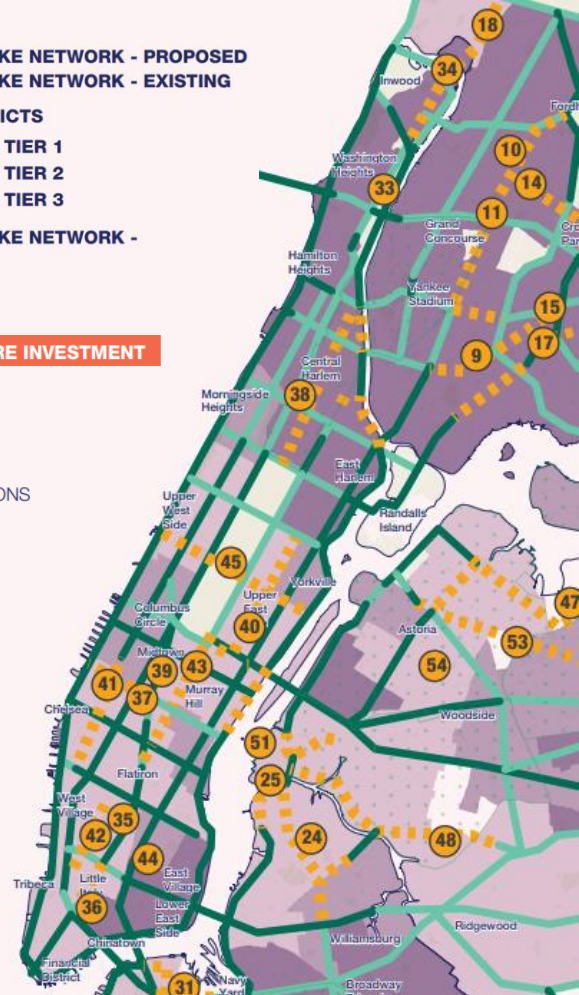


## CYCLING PRIORITIZATION AND FUTURE INVESTMENT

### 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.

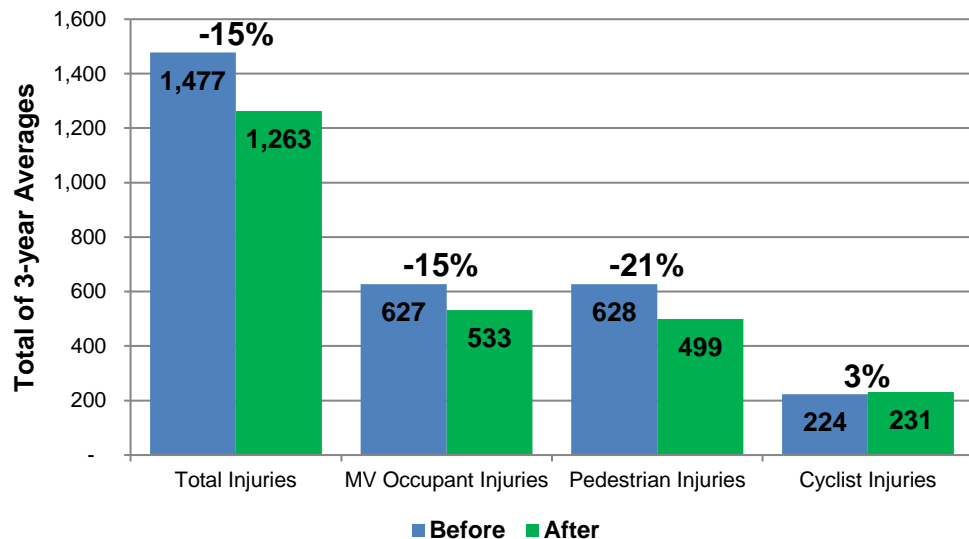


# Safety Benefits of Protected Bicycle Lanes

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:

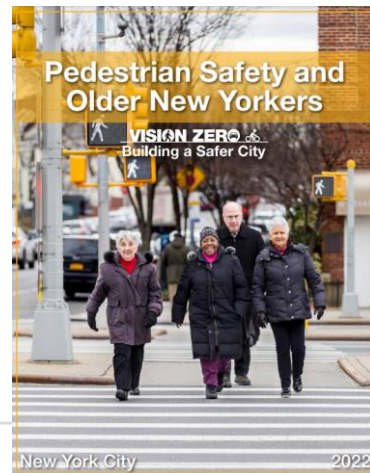
- About 90% of both senior and non-senior adult injuries occur at intersections; 72% of injury crashes occur at signalized intersections

## 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 	 <b>22%</b>	 <b>39%</b>	 <b>9%</b>	 <b>24%</b>



# 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)



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## 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 3<sup>rd</sup> Ave, 85<sup>th</sup> – 86<sup>th</sup> St (6AM-12AM, 2022)
- High volumes of cyclists; working cyclists make up approximately 36% of cyclists



## Buses

- **150+ buses** along 3<sup>rd</sup> Ave during peak period
- **50,000 riders** use MTA buses along 3<sup>rd</sup> 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 96<sup>th</sup> 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 3<sup>rd</sup> Ave at E 60th St, E 79th St, and E 86th St

### Protected Bike Lanes:

- East-west connection on 61<sup>st</sup> & 62<sup>nd</sup> Streets, Queensboro Br Access
- North-south lanes on 1<sup>st</sup> and 2<sup>nd</sup> Avenues connecting Brooklyn, Manhattan and the Bronx
  - **High volume of cyclists on 1<sup>st</sup> and 2<sup>nd</sup> 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 1<sup>st</sup>, 2<sup>nd</sup>, Lexington and Fifth Avenues

### Curb Regulations:

- Curb regulation changes installed in May 2022



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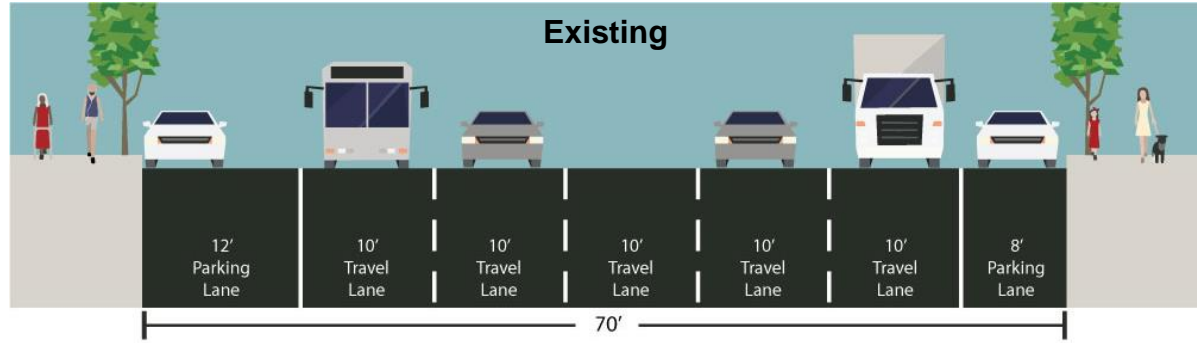
# Proposal

# 2

# 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:

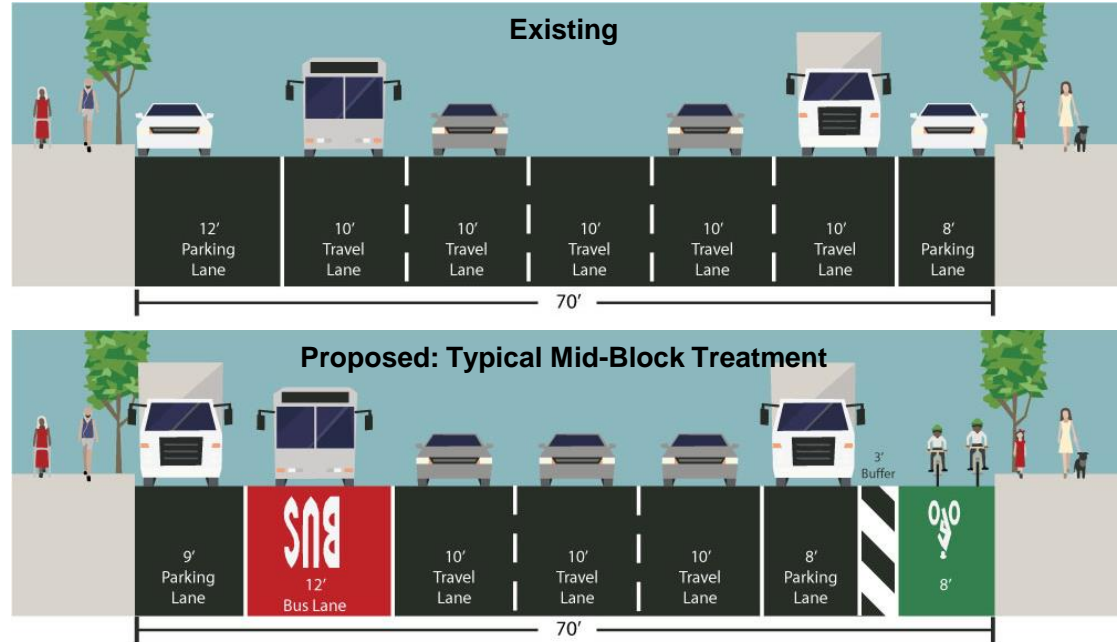
- Parking protected bike lane
- Offset bus lane

## 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)

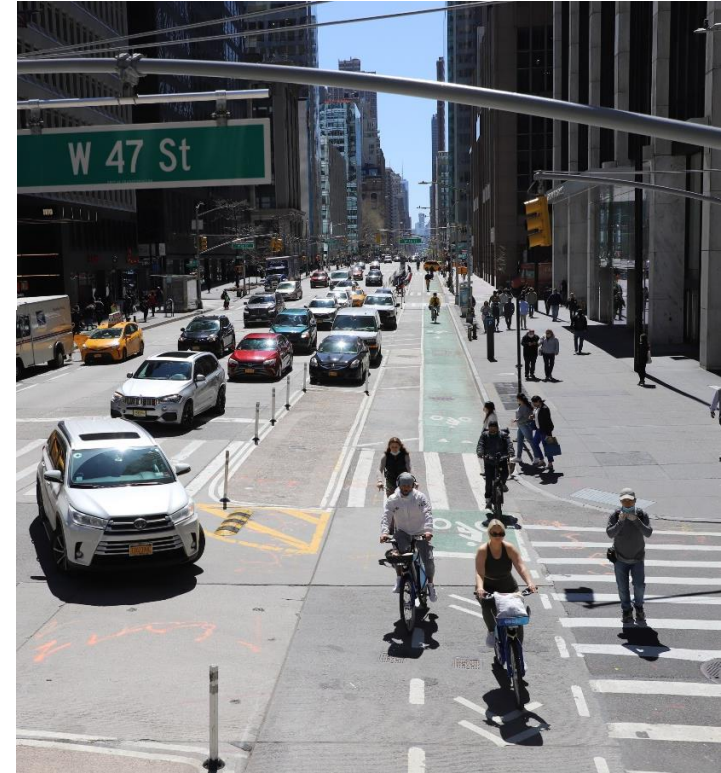
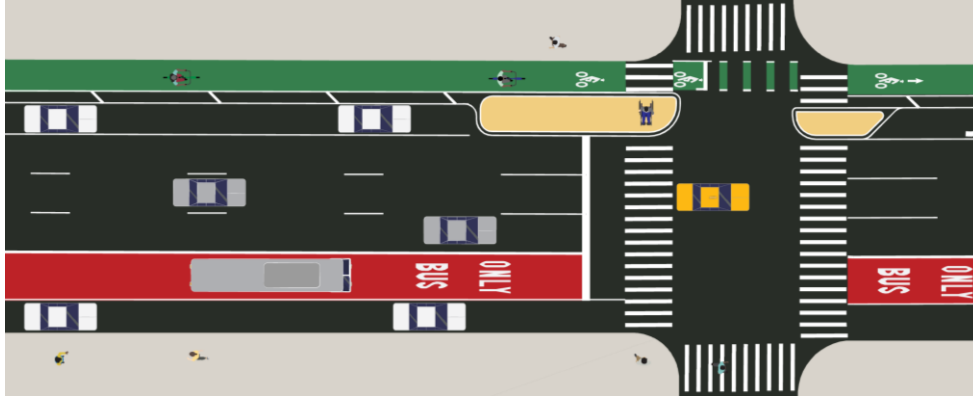


# Proposed: Intersection Treatment

## 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



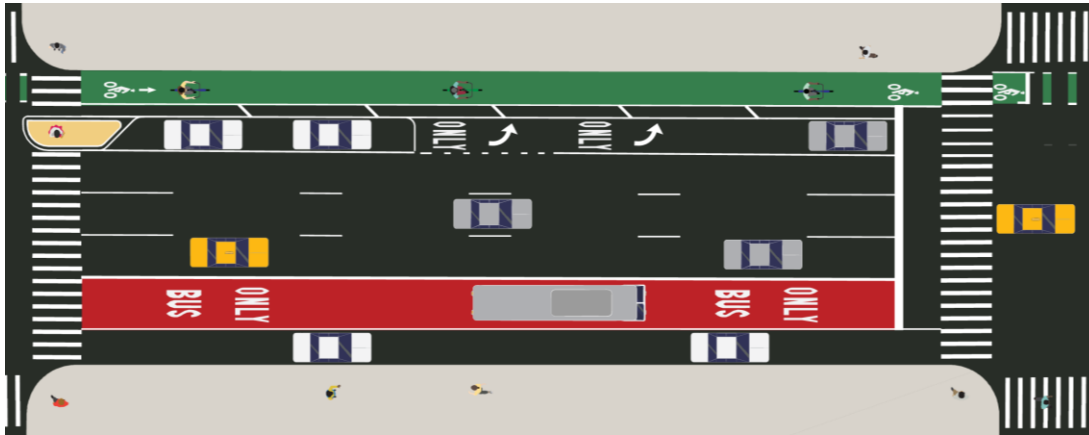


# Proposed: Intersection Treatment

## 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

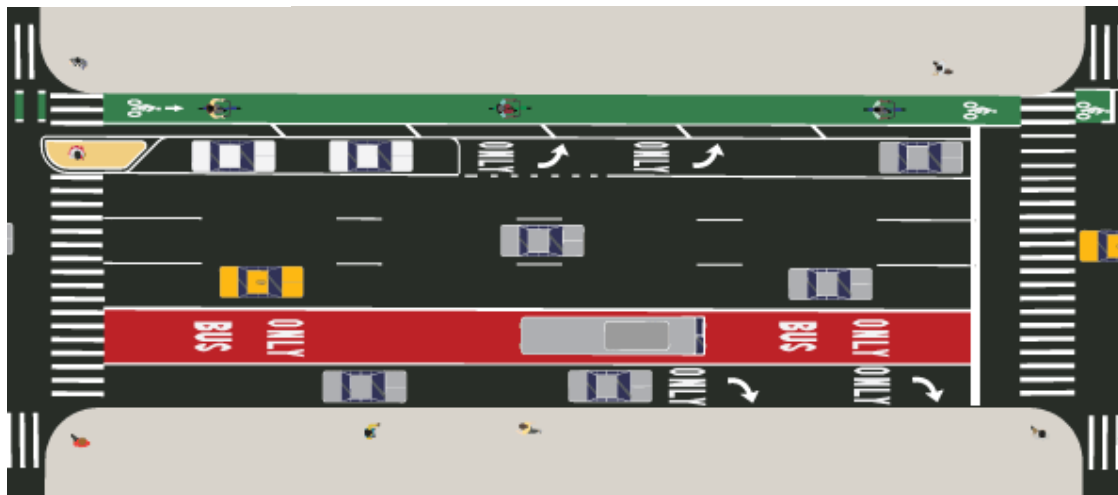


# Proposed: Intersection Treatment

## 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

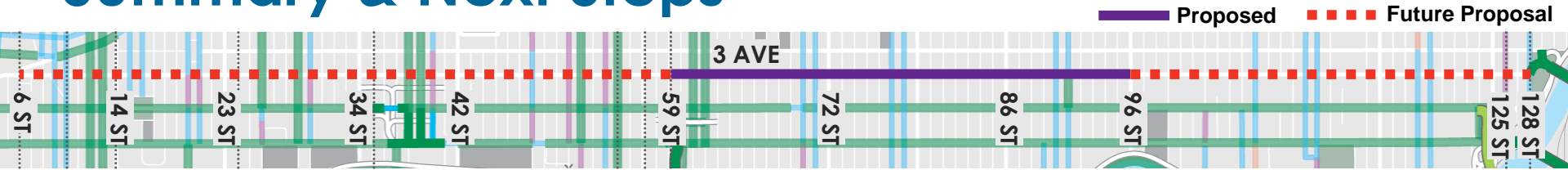


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## Summary & Next Steps

3

# 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 3<sup>rd</sup> 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