

2 Ave, E 43 St to E 34 St Safety Improvements

New York City Department of Transportation

Presentation by the NYC DOT Bicycle Unit to Manhattan Community Board 6, July 2020



2 Ave, E 43 St to E 34 St

Proposal Outline

- Background
- East Side Protected Bicycle
 Network
- Covid-19 Response
 - Temporary Bike Lane
- Proposal:
 - Corridor Design
 - Intersection Design
 - Midtown Tunnel
 - 34 St & 42 St
- Summary of Benefits



Background

Background

Crash History



2 Ave is a Vision Zero Priority Corridor

2 Ave, 43 St - 34 St

Injury Summary, 2012-2016 (5 years)

	Total Injuries	Severe Injuries	Fatalities	KSI
Pedestrian	100	11	0	11
Bicyclists	57	4	0	4
Motor Vehicle Occupant	161	3	0	3
Total	318	18	0	18

Fatalities, 01/01/2013 - 06/29/2020: None

Source: Fatalities: NYCDOT. Injuries: NYSDOT. KSI: Persons killed or severely injured

Protected bike lanes benefit all street users:

Crashes with	Motor Vehicle	Pedestrian
Injuries	Occupant Injuries	Injuries
Down 15%	Down 15%	Down 21%



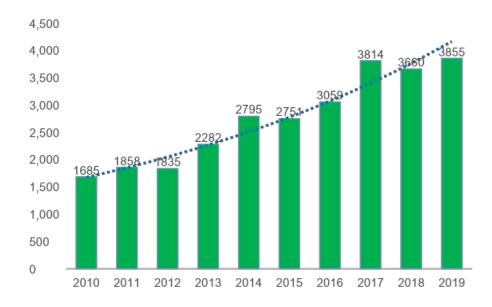
Background

Cycling in Numbers

Bike Counts:

- Cycling on 2 Ave at 50 St increased by 38% over the past five years; more than any other mode
- 4,400 bike trips on 2 Ave at 50 St in September 2019 (*12-hr, 7 a.m. – 7 p.m.*)
- **511,425 Citi Bike trips** in CB 6 in the third quarter of 2019

2 Ave at 50 St: Average Summer Counts



Bicycle Volume Data: Average of three 12-hr (7AM-7PM) counts conducted on weekdays in May, July, and September for each year reported.

East Side Protected Bike Network Implementation Update

East Side Protected Bike Network

Implementation Update



East Side Protected Bike Lane Network

Northbound: 1st Ave

Continuous over 9.5-mile protected bike lane connecting Brooklyn, Manhattan and the Bronx

Southbound: 2nd Ave

- Protected bike lane installed from 34th St 23rd St in 2010
- Enhanced shared lane installed from 59th St to 34th St in 2011
- Protected bike lane installed from 23rd St to 14th St in 2013
- Protected bike lane installed from 59th St to 43rd St in 2017

Protected Bike Network Gaps

Challenges to creating continuous protected bike lane:

- 2nd Ave Subway construction
- High traffic volumes approaching Queensboro Bridge and Midtown Tunnel

East Side Protected Bike Network

2 Ave, E 68 St to E 59 St



East Side Protected Bike Lane Network

Southbound: 2nd Ave

- In the Summer of 2019, DOT installed off-peak parking protected bike lane, and a three-stage crossing at the base of the Queensboro Br
- DOT is working on adding ADA compliant ramps; capital work likely required

Covid-19 Response Temporary Bike Lane

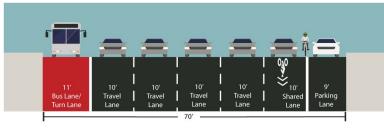


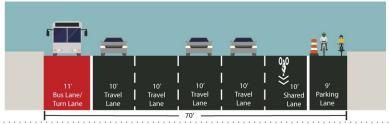
Covid-19 Response

Temporary Bike Lane

Covid-19 Response:

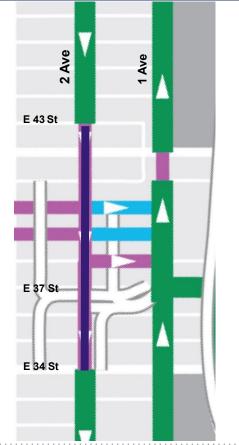
- Temporary Bike Lane installed in March
- Lane is monitored weekly; barrels and signs are moved to the correct location if they have been displaced
- Challenges remain, particularly at the entrance of the Midtown Tunnel







Existing: E 43 St to E 34 St



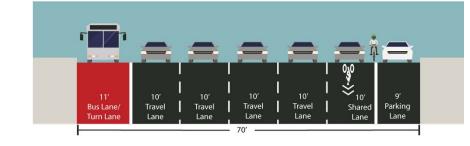


EXISTING CONDITIONS/ ISSUES:

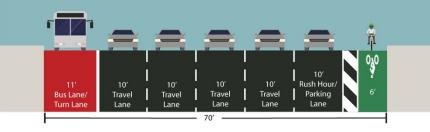
- Gap in the protected bike lane network where facilities are most needed
- Heavily used bike corridor
- Curb access; shared lane is often blocked by double parked vehicles
- High traffic volumes leading up to Queens Midtown Tunnel

Proposed: Rush Hour Design

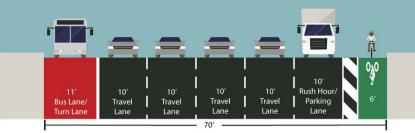




PROPOSED: Peak Period



PROPOSED: Off-Peak Period



Gap in the Protected Bike Network

- Enhanced Shared Lane breaks down during peak hour
- High volume of cyclists despite the lack of dedicate bike infrastructure

Peak Period

- Curbside buffered bike lane
- Five travel lanes
- No loading/unloading

Off-Peak Period

- Parking protected bike lane
- Loading/unloading permitted

Proposed: Rush Hour Design



PROPOSED: Peak Period

- Curbside bike lane provides dedicated space for cyclists
- Maintains five moving lanes when volume is higher
- Loading/unloading during off-peak periods



PROPOSED: Off-Peak Period

- Parking protected bike lane provides dedicated space for cyclists separated from moving vehicles
- Removal of travel lane during off-peak period calms traffic when speeding is more likely to occur
- No loading during peak hours



Proposed: Queens Midtown Tunnel

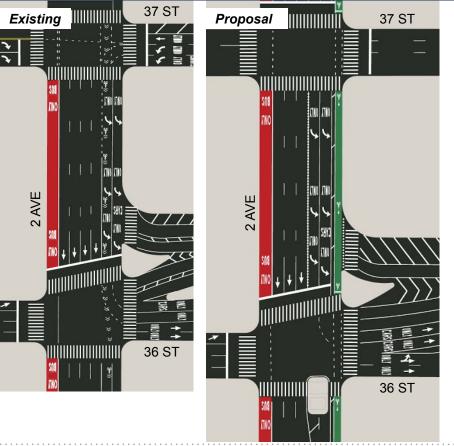




EXISTING CONDITIONS /ISSUES:

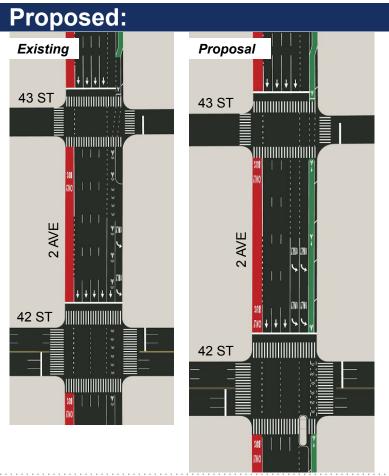
- Complex intersection with heavy vehicular volumes
- No dedicated space for cyclists
- Long crossing for pedestrians across tunnel entrance

Proposed: Queens Midtown Tunnel



Queens Midtown Tunnel

- Install curbside, buffered bike lane
- Maintains two turn lanes where traffic is heavier
- Close the uncontrolled slip lane from 2 Ave to Tunnel entrance
- Change signal timing to separate bikes and pedestrians from left turning vehicles



Geometric Changes: 43 St to 42 St:

- Install two left turn lanes to accommodate heavy turn volumes
- Off-set bike lane three feet from curb to accommodate existing barricades

Signal Timing Changes: 42 St and 34 St:

 Install dedicated signal timing for pedestrians and cyclists along the east crosswalk

Summary of Benefits

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Summary of Benefits

2 Ave, E 43 St to E 34 St

- Closes the last gap of the Protected Bike Lane Network along 2 Ave
- Builds on previous safety improvements
- Provides dedicated space for cyclists
- Shorter, safer pedestrian crossing
- Allows for off-peak commercial parking
- Organizes, calms traffic
- Accommodates truck and bus traffic







