



7TH AVE & 8TH AVE, 39TH ST – 66TH ST

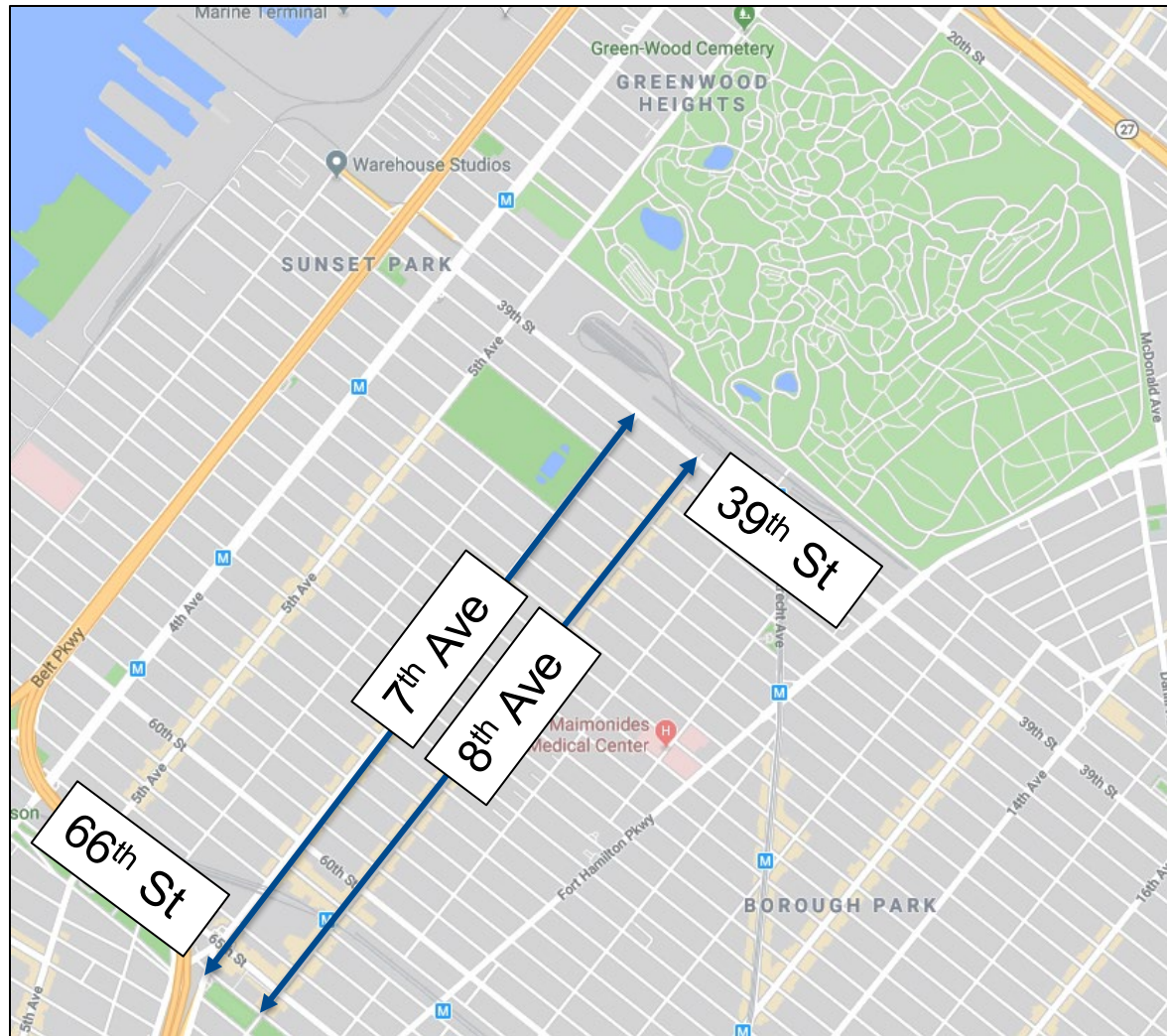
Public Info Session

June 29, 2021



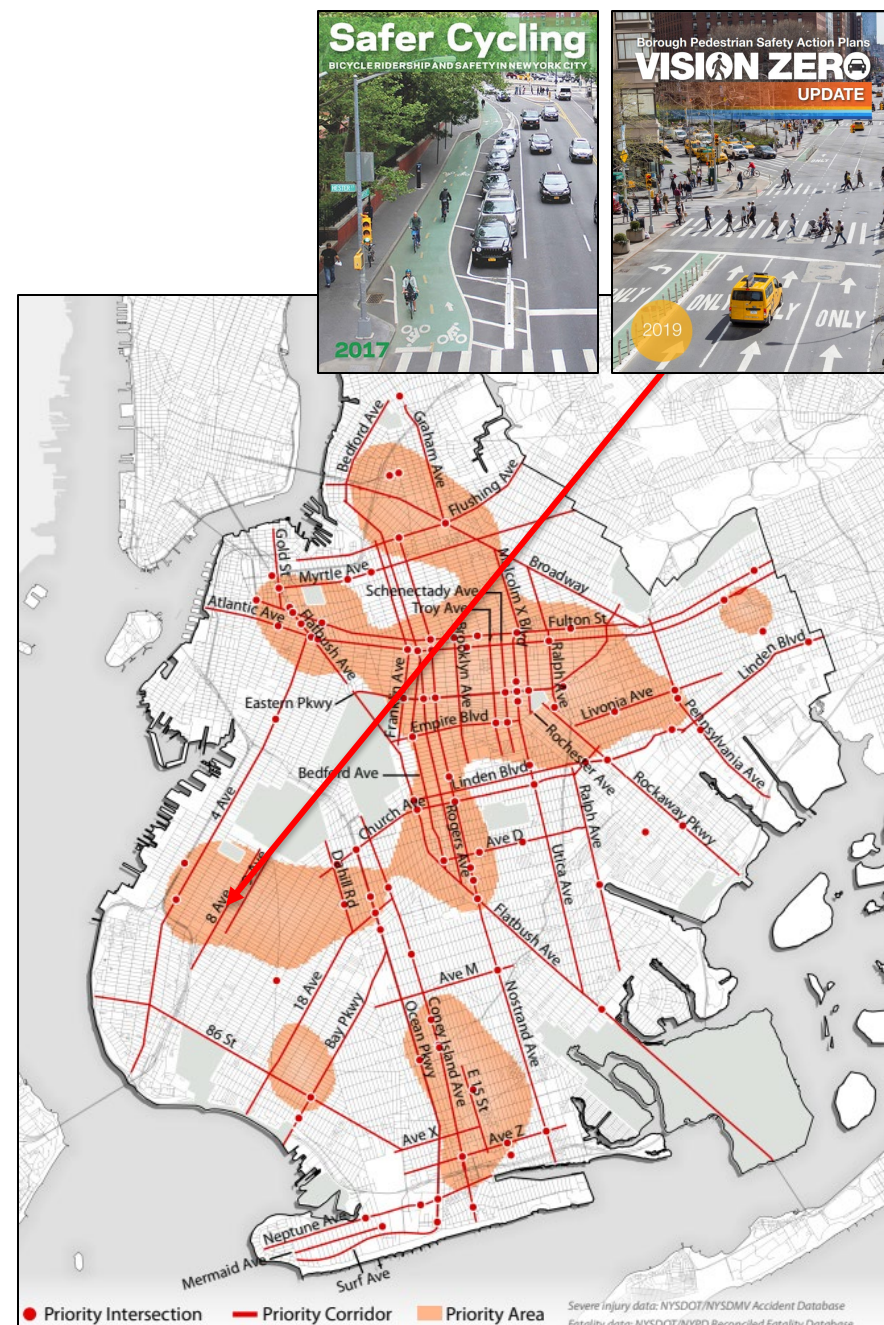
LOCATION

- 7th Ave – 66th St to 39th St
- 8th Ave – 66th St to 39th St
- Commercial heart of Sunset Park's Chinatown
- B70 bus runs on 8th Avenue
- Existing two-way shared bike lane on 7th Ave



BACKGROUND

- 8th Ave is a Vision Zero Priority Corridor
- 7th Ave has comparable crash and injury data
- Located within the Borough Park Senior Pedestrian Focus Area and a Vision Zero Priority Area
- 8th Ave is within a bike priority district (CB 12)
- Project area is within Community Boards 7, 10, and 12
- Community Board 7 requested study of one-way conversions in 2003 and 2015



CURRENT STREET USAGE

Commercial heart of Chinatown

- Double parking, frequent loading, and many trucks result in lane blockages frequently reducing the road to one travel lane, leading to unpredictable movements, congestion, and slow bus speeds (<4.0 MPH)

Pedestrian corridor

- High pedestrian volumes, narrow sidewalks & street vendors result in crowded sidewalks and pedestrian spillover onto the street

Cyclist activity

- North/south connection in Sunset Park. Commuter, recreational, and commercial cyclists



Pedestrians, cars, trucks, cyclists, and buses compete for space on 8th Ave

CRASH TYPES/ANALYSIS

- Vehicle occupant injuries are a result of congested, narrow streets
 - Sideswipes and head-on collisions are 50% more frequent on these corridors compared to the rest of Brooklyn
- The breakdown due to congestion creates unpredictability and non-compliance resulting in pedestrian injuries
 - Many points of conflict are challenging to navigate due to congestion
- Lack of adequate cycling facilities compromises cyclist safety on corridors
 - High frequency of failure to yield crashes, especially on right turns
 - Disproportionate number of midblock cycling injuries



Narrow two way streets and high pedestrian volumes are some of the frequent causes of crashes on 7th Ave and 8th Ave

CORRIDOR INJURIES

- Pedestrian and cyclist injuries represent more than half of total injuries and severe injuries on the corridors
- Traffic injuries to children and seniors on the corridors are 40% more common than borough average (35% vs 25%)
- Between 39th and 66th St, 8th Avenue is tied for the highest number of pedestrians killed or severely injured of all the north/south streets within the Community Boards

Injury Summary, 2014-2018 (5 Years)

	Total Injuries	Severe Injuries	Fatalities	KSI
Pedestrian	233	17	1	18
Bicyclist	32	2	0	2
Motor Vehicle Occupant	242	15	0	15
Total	507	34	1	35

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



A crowded sidewalk on 8th Ave

ON-STREET OUTREACH

- In February 2020, NYC DOT Street Ambassadors administered 391 surveys in the neighborhood about safety and mobility in Sunset Park
 - Partnered with Brooklyn Chinese-American Association, Chinese-American Planning Council, and the Sunset Park Recreation Center
- Largest safety concerns are speeding vehicles, vehicles not yielding, illegally parked vehicles, and heavy vehicle traffic
- 78% of respondents felt that the sidewalks are always too crowded
- Some respondents expressed concerns about the frequency of cyclists on the sidewalk



NYC DOT Street Ambassadors administering surveys.
Top: Sunset Park Recreation Center; Bottom: Brooklyn Chinese American Association

WHAT WE LEARNED

88% of respondents arrived on foot or public transportation

43% of pedestrians feel very unsafe or somewhat unsafe walking on 7th and 8th Ave

54% of cyclists feel unsafe biking on 7th Ave and 8th Ave

Half of respondents who want street changes asked for transit improvements



NYC DOT BUSINESS OUTREACH

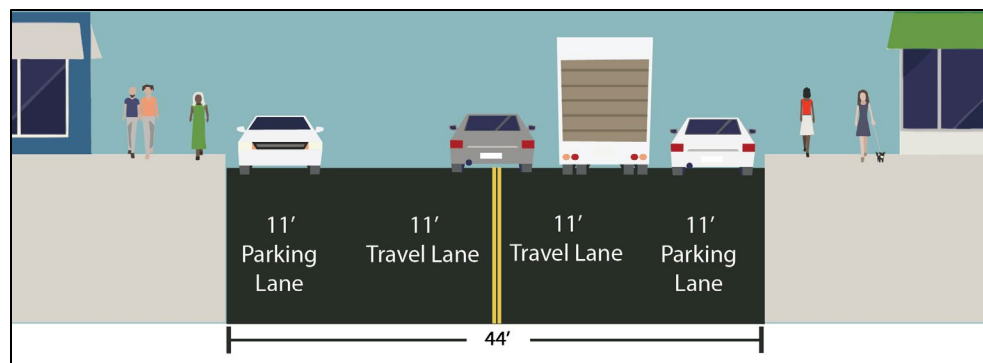
Street Ambassadors

- The NYC DOT Street Ambassadors visited 340 businesses along 7th Ave & 8th Ave over three days in November 2019
- NYC DOT spoke to merchants about when they receive deliveries, vehicle parking patterns, double parking observations, and other loading issues
- 58% of businesses reported that they had difficulty receiving deliveries, most frequently due to the lack of dedicated curb space



CURRENT SAFETY IMPROVEMENT LIMITATIONS

- Both streets are 44' wide two-way streets with parking on both sides
- As two-way streets, both 7 Ave and 8 Ave have limited corridor safety improvement possibilities
- NYC DOT treatments for these roads typically involve narrowing moving lanes to address speeding, which is not the cause of injuries on 7th Ave or 8th Ave



Above: Vehicles maneuver around a double parked truck, slowing traffic in each direction. Below: Diagram shows the limited street width

CURBSIDE CONSIDERATIONS

- Loading
 - Very heavy loading activity at all times. Concentrated on 8th Ave in the 50s
- Buses
 - B70 and charter bus stops every 400 to 700'. Below MTA average spacing guidelines
- Parking
 - Dense corridors – 66% of households in census tracts do not own cars
- Pedestrians
 - 5,070 pedestrian counted in one hour on 8th Ave & 57th St (9/2019)
- Cyclists
 - 600 – 800 cyclists per day recorded in Fall 2019
- Commuter Vans
 - Observed at various locations on 8th Ave



Loading and pedestrian activity are two of the common uses that compete for limited curb space on 7th Ave and 8th Ave

PROPOSAL

- Convert 7th Avenue to southbound between 39th St and 65th St
- Convert 8th Avenue to northbound between 65th St and 39th St
- Add a protected bike lane to each street
- Add additional pedestrian space and aggressive curbside management plan
- Add a contraflow bike lane on 66th St between 7th Ave and 8th Ave to connect northbound cyclists



Similar design implemented on Skillman Ave, QN

ONE-WAY CONVERSIONS

- Substantial corridor safety improvements that address the crash history of 7th Ave & 8th Ave
- Eliminating two-way traffic improves vehicle predictability, reduces possible movements, and conflicts between vehicles, pedestrians, and cyclists
- Allow for the addition of safe, dedicated space for cyclists and expanded space for pedestrians that narrows the roadway to reduce speeding
- Signal progressions improve vehicle and transit mobility



Existing conditions (above) and similar design implemented on Skillman Ave, QN (below)

PROPOSAL – CURBSIDE DETAILS

- Expanded Pedestrian Space
 - Sidewalk expansion on the west curb of 8th Ave from 60th St to 51st St
- New Loading and Parking Regulations
 - Add commercial loading zones at key locations during peak delivery times
 - NYC DOT completed a comprehensive curbside study using time lapse video, stakeholder conversations, and business survey data to determine regulation changes
- Transit
 - Relocate southbound B70 bus from 8th Ave to 7th Ave and consolidate bus stops
- Mobility
 - Add curbside parking protected bike lanes



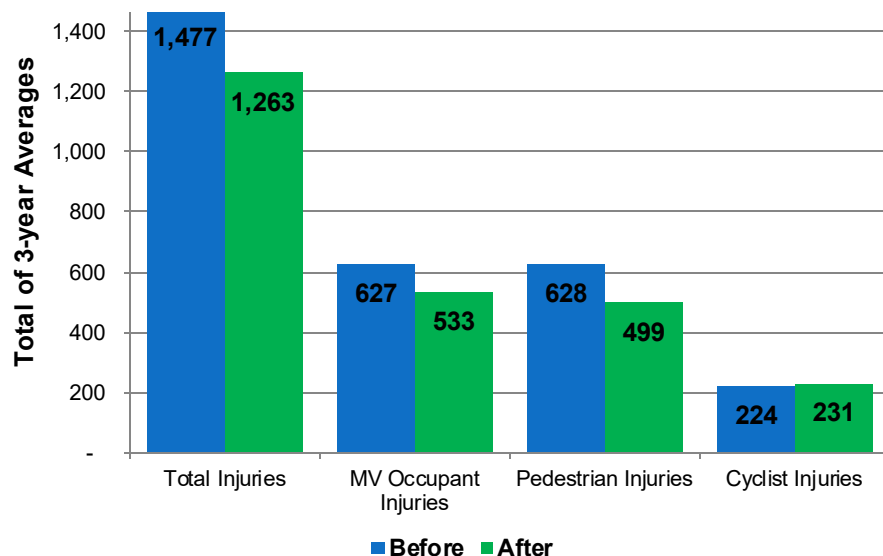
B70 bus passing two trucks loading simultaneously on 8 Ave at 45 St

PROTECTED BIKE LANES

- Street designs that include protected bike lanes increase safety for all users
 - **-15%** drop in all crashes with injuries
 - **-21%** drop in pedestrian injuries*On streets where protected bike lanes were installed 2007-2017*
- Injuries to cyclists increase only 3%, despite a 61% bike volume increase

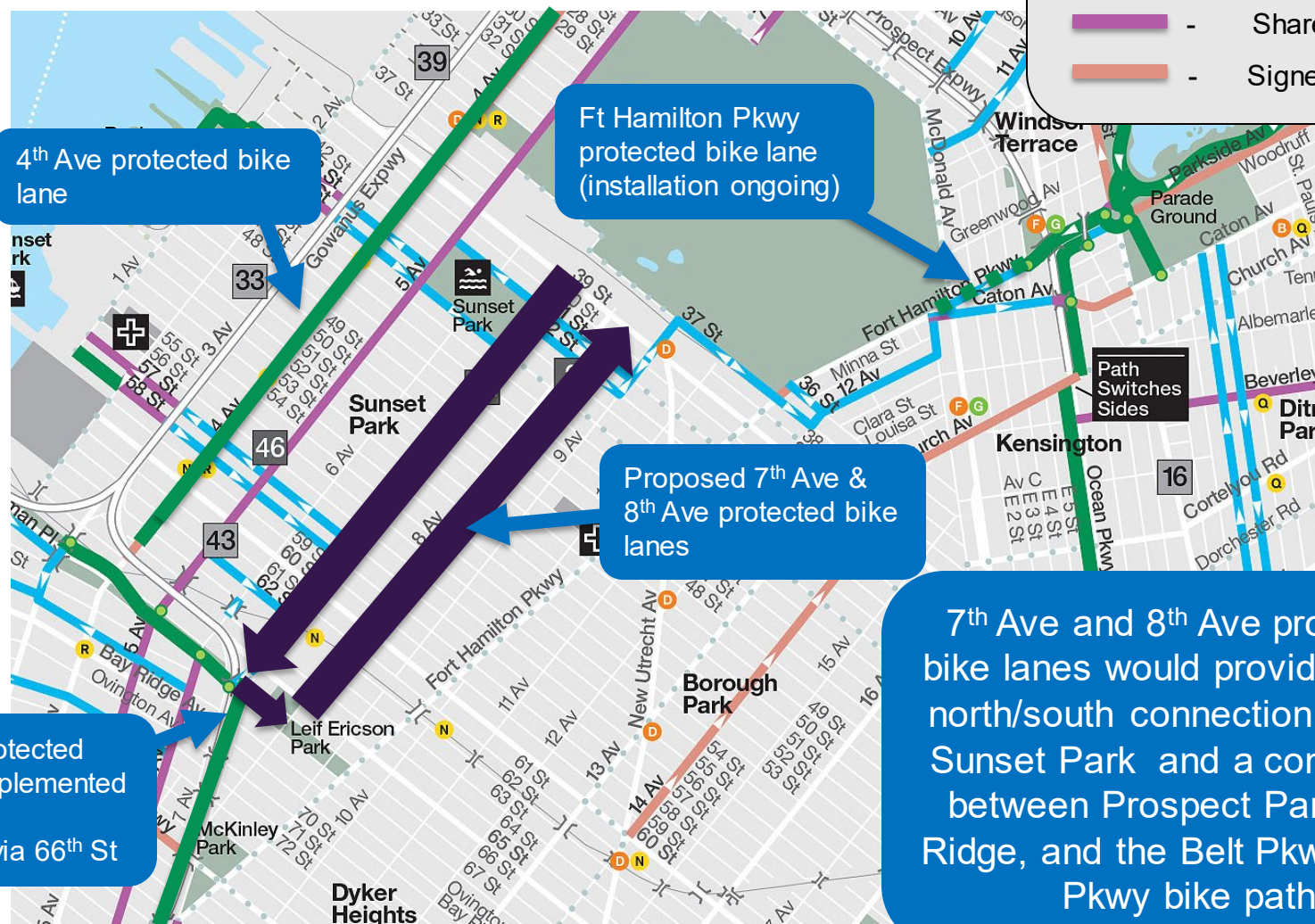
Protected Bike Lanes

Before and After Crash Data, 2007 - 2017



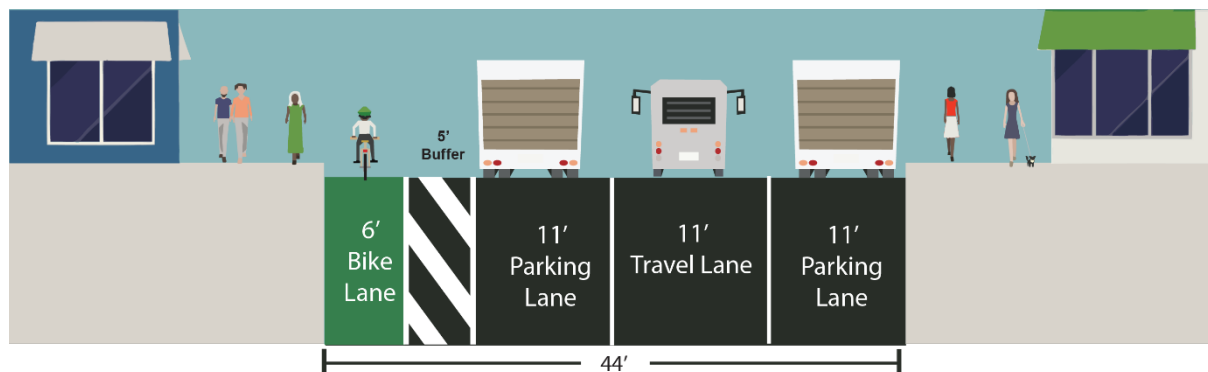
Protected bike lane: Skillman Ave, QN

BIKE NETWORK

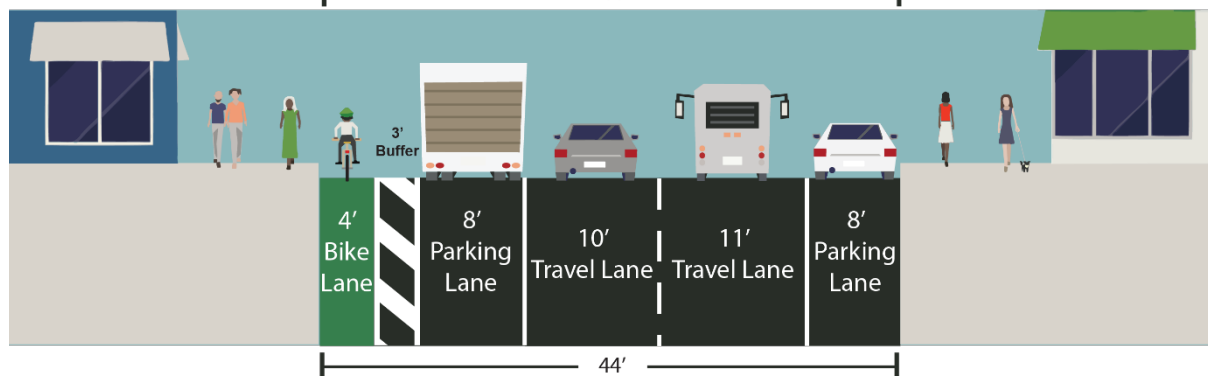


PROPOSED DESIGN- 7TH AVE & 8TH AVE

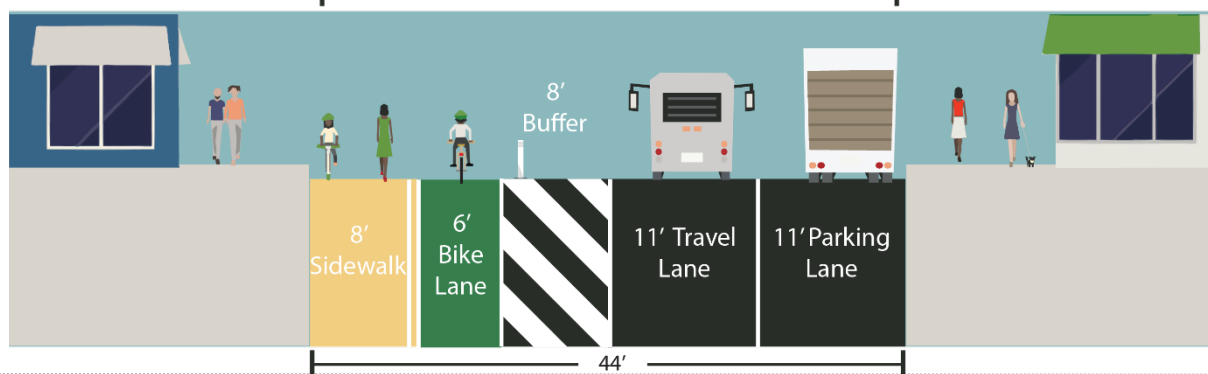
Primary design –
7th Ave & 8th Ave:
One travel lane
and protected
bike lane



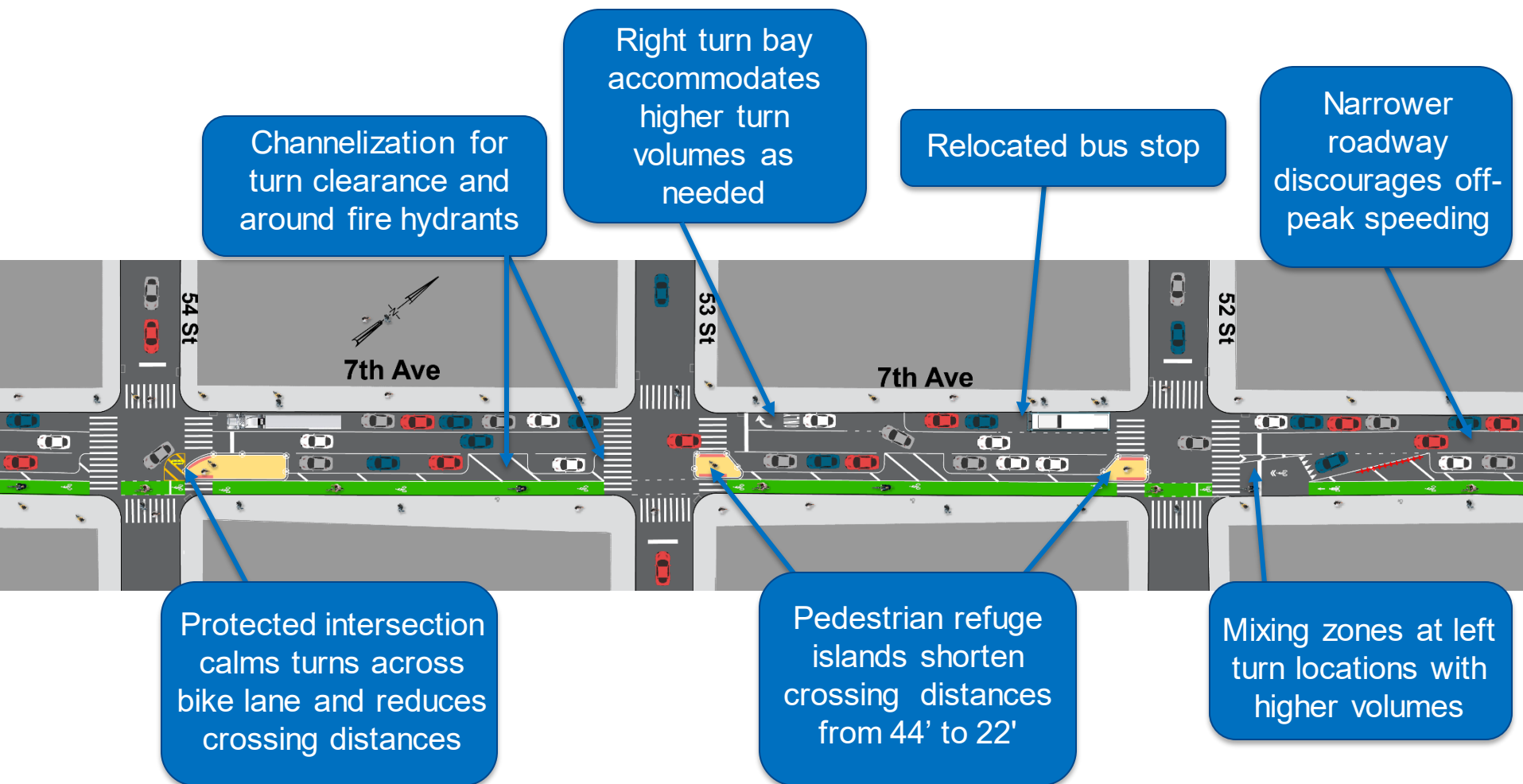
Two-lane design
(65th St to 60th St) –
7th Ave & 8th Ave:
Two travel lanes and
protected bike lane



Pedestrian design
8th Ave, 60th St to 51st
St: One travel lane,
protected bike lane,
pedestrian expansion

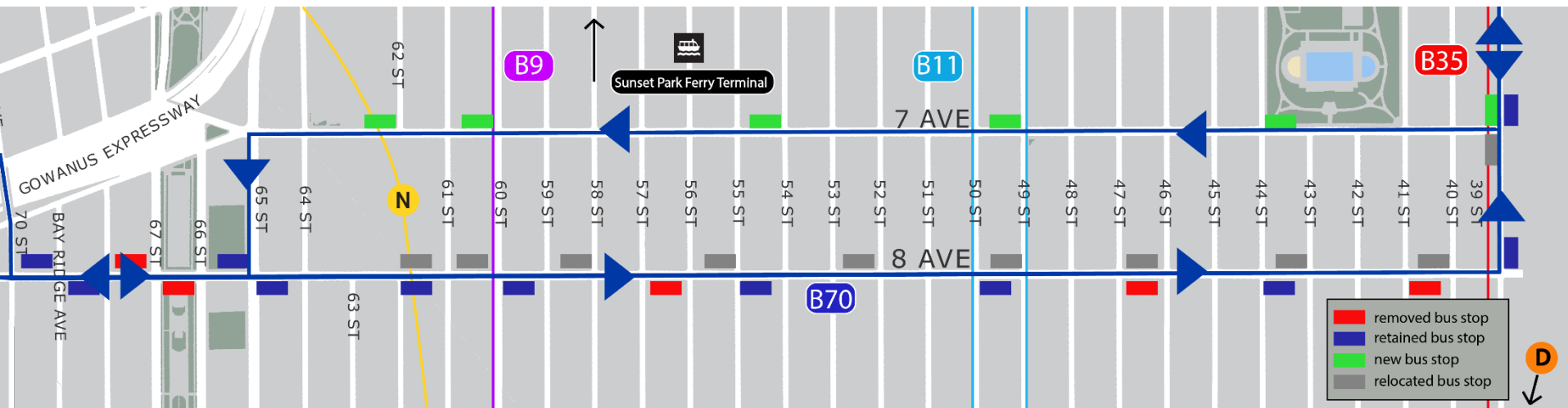


SITE PLAN – TYPICAL BLOCK



B70 REROUTE AND STOP CONSOLIDATION

- NYC DOT and MTA have coordinated closely on plan to improve service for B70 bus on 7th and 8th Aves
- Southbound bus will be rerouted to 7th Ave
- Improved stop spacing in both directions will help speed up service along the corridors
- New traffic signal at 7th Ave and 62nd St will ensure that seamless connection between B70 bus and N train 8th Ave station is maintained



Map showing removed bus stops, retained bus stops, and new bus stops for the B70

PROPOSAL - 65TH ST, 66TH ST, 67TH ST

65th St

- Add eastbound to northbound left turn bay on 65th Street at 8th Ave to accommodate higher turn volumes

66th St

- Add a protected, contra-flow bike lane traveling from 7th Ave to 8th Ave to connect northbound cyclists to 8th Ave

67th St

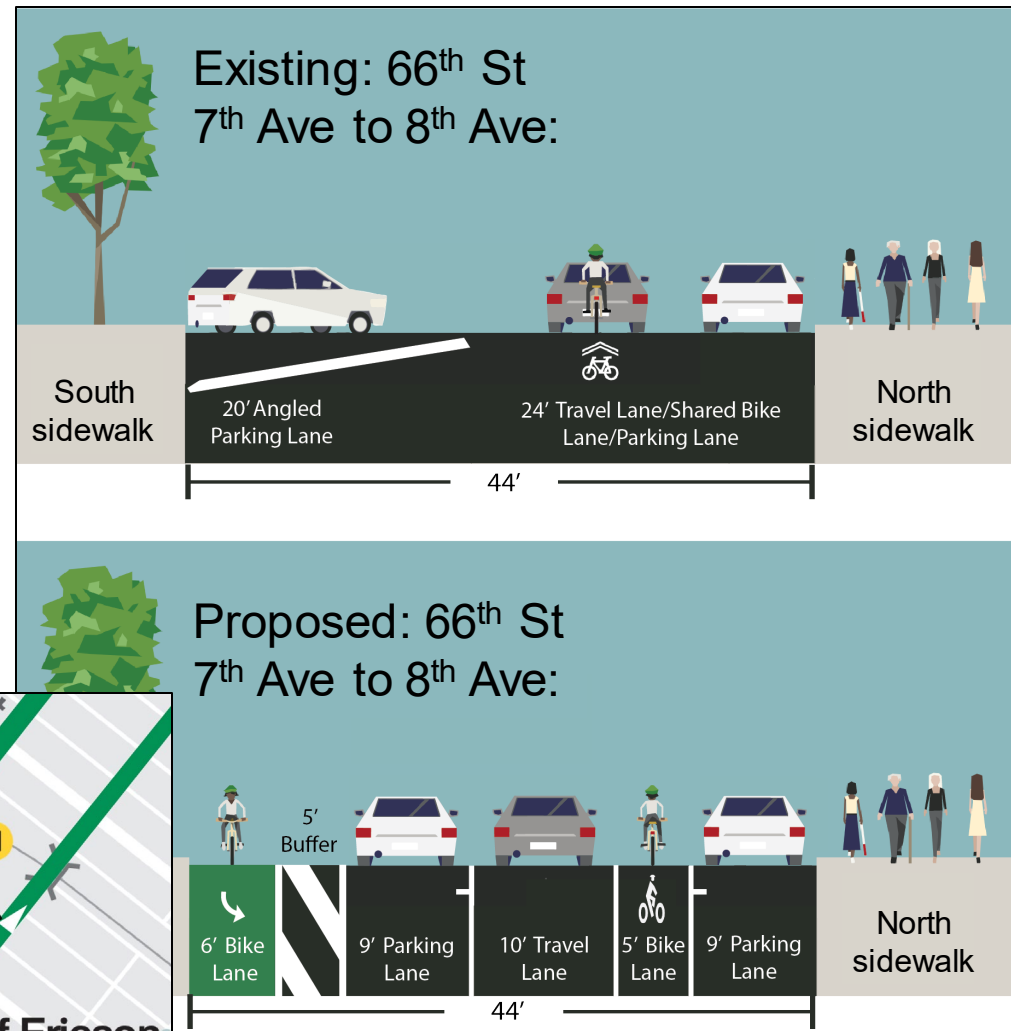
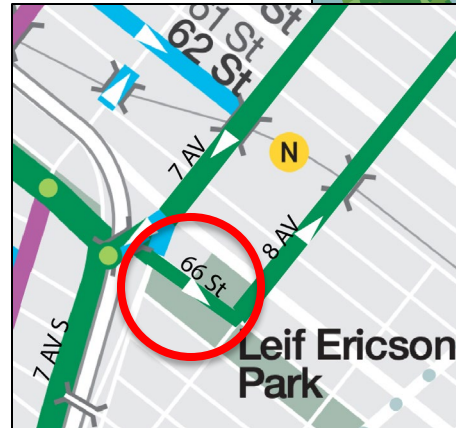
- Add angled parking on the north side adjacent to Leif Ericson Park between 7th Ave & 9th Ave



Current angled parking on 66th St between 7th Ave & 8th Ave

66TH ST – PROPOSED DESIGN

- Northbound cyclists will connect from existing protected bike path at 7th Ave and 66th St via 66th St
- Design will replace angled parking adjacent to park on south side of 66th St with floating parallel parking
- Design adds one block of eastbound contra-flow parking protected bike lane between 7th Ave and 8th Ave



Above: Cross-sections of 66th St
Left: 66th St connection on the bike map

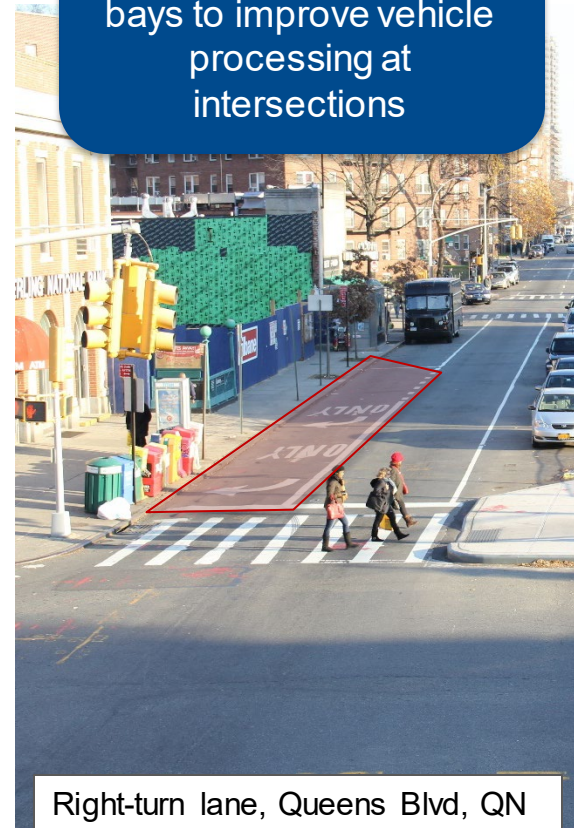
PROTECTED BIKE LANES AND PARKING

- In order to increase visibility, reduce conflicts for all roadway users, and ensure safe and efficient operations, parking is repurposed near intersections

Left turns across the bike lane require removal of parking approaching the intersection to ensure that drivers have unobstructed views of the bike lane before turning across it



Curbside right turn lanes replace parking with turn bays to improve vehicle processing at intersections



Protected left turn: 6th Ave, MN

Mixing Zone, 2nd Ave, MN

Right-turn lane, Queens Blvd, QN

LOADING ZONES

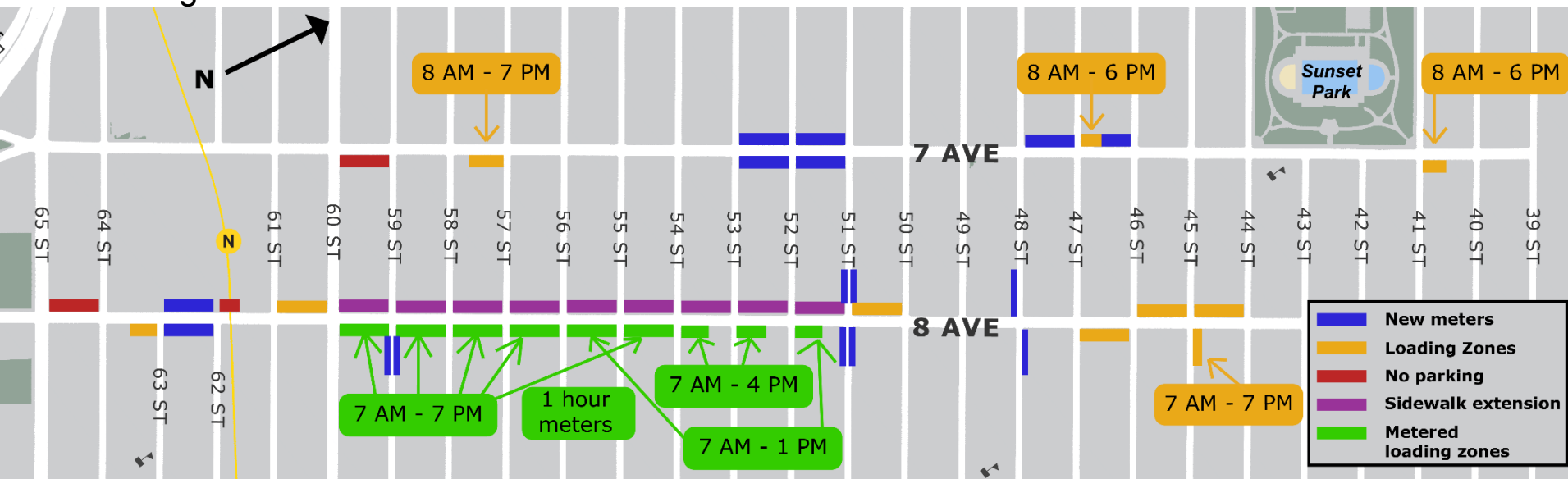
- NYC DOT will install loading zones along the corridors
- Loading zones dedicate curb space to trucks and vans making deliveries for certain hours of the day
- Passenger vehicle parking remains available after loading zone hours
- Loading zone determinations made through business surveys, time lapse videos, and stakeholder conversations
- DOT to install mixture of metered and unmetered loading zones as needed



Trucks use loading zones to access curb to make deliveries without blocking traffic

LOADING, DOUBLE PARKING, METERS

- NYC DOT to update parking regulations along the corridors to reduce truck double parking, provide dedicated loading space, and increase vehicle turnover
- Provide approximately 95 new 2-hour metered parking spots around commercial corridors to improve passenger vehicle access
- Provide new Commercial Loading Zones from 7 AM – 10 AM (except where noted below)
- Adjacent to the sidewalk expansion, update meters from 2-hour to 1-hour and install Metered Loading Zones



PARKING IMPACTS

- Design will result in repurposing of approximately 185 spots across the 3.3 miles of streets being impacted as part of the Street Improvement Project
- More than 90% of total parking spots on all streets between 39th St and 67th St and between 7th and 8th Ave to remain available

Element	Parking Change
Protected Bike Lane Design (Protected Left Turns, Mixing Zones, Pedestrian Islands, etc.)	- 122
Sidewalk Extension (West curb, 8 th Ave – 60 th St to 51 st St)	- 69
Right Turn Lanes	- 52
Bus Stop Changes and Relocations	+ 25
Parking Changes on 65 th St, 66 th St, and 67 th St	+ 35
Total	Net loss of 183 parking spots

TIMELINE

June 2021

- Present plan to CB7, 10, and 12

Early Summer 2021

- Continue to present plan to community stakeholders, solicit feedback, and adjust plan accordingly

Summer/Fall 2021

- Project implementation in phases with ongoing community engagement

Fall 2021 forward

- Project monitoring and adjustments as needed



8th Ave at 57th St

SUMMARY

- Directly addresses crash history of Vision Zero Priority Corridor through street conversion and design
- Provides much needed pedestrian space and improves pedestrian safety in the heart of Brooklyn's Chinatown
- Provides a safe, direct connection for cyclists in Sunset Park
- Improves the reliability of the B70 bus
- Project planning reflects the needs of businesses and residents in the area
- Aligns with NYC DOT Green Wave and NYC Master Transportation plans of expanding Protected Bike Lane network



THANK YOU!

Questions?



NYCDOT



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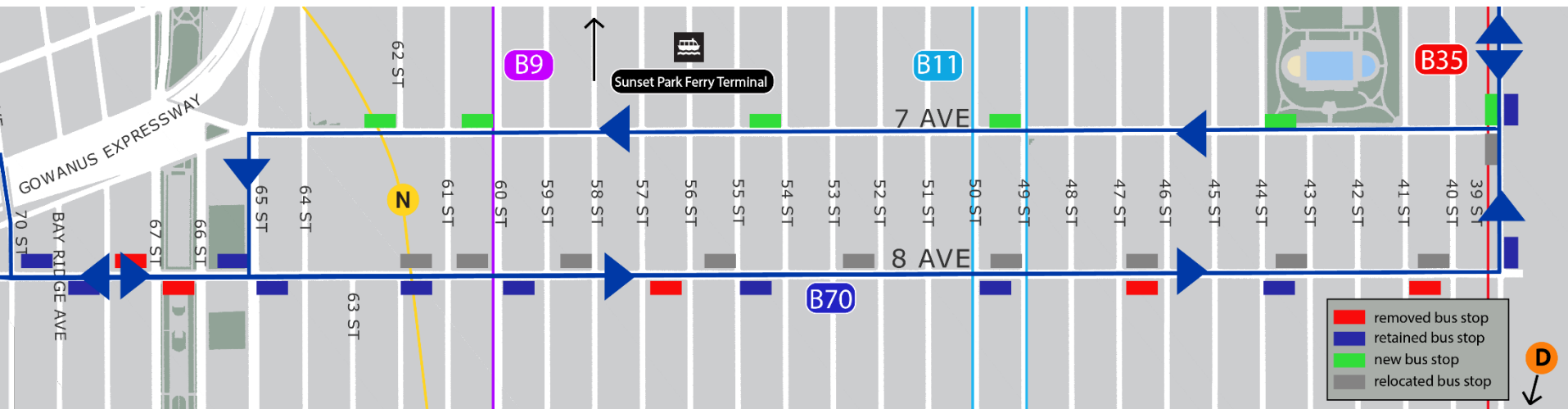


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NYCDOT

B70 BUS STOP CONSOLIDATION PROPOSAL



Northbound B70

8th Ave/Bay Ridge Ave

8th Ave/67th St

8th Ave/65th St

8th Ave/62nd St

8th Ave/60th St

8th Ave/57th St

8th Ave/55th St

8th Ave/52nd St

8th Ave/50th St

8th Ave/47th St

8th Ave/44th St

8th Ave/41st St

39th St/8th Ave

39th St/7th Ave

Southbound B70

39th St/7th Ave

8th Ave/40th St

7th Ave/43rd St

8th Ave/46th St

7th Ave/49th St

8th Ave/52nd St

7th Ave/54th St

8th Ave/55th St

8th Ave/58th St

7th Ave/60th St

7th Ave/62nd St

8th Ave/65th St

8th Ave/67th St

8th Ave/Bay Ridge Ave

CRASH AND INJURY DATA

- 8th Avenue, between 39th St and 66th St, is among the top 10% of Brooklyn streets for rates of people killed or severely injured per mile. 7th Ave is in the top 33%
- 8th Avenue and 60th Street is the intersection with the highest rate of pedestrian severe injuries (3 severe injuries within 5 year study period)
- Pedestrian or cyclist injuries have occurred at every single intersection in the project area (with the exception of 7th Ave and 46th St)

Injury Summary, 2014-2018 (5 Years)				
	Total Injuries	Severe Injuries	Fatalities	KSI
Pedestrian	128	11	0	11
Bicyclist	15	1	0	1
Motor Vehicle Occupant	112	7	0	7
Total	255	19	0	19
Source: Fatalities: NYCDOT, Injuries: NYSDOT KSI: Persons Killed or Severely Injured				

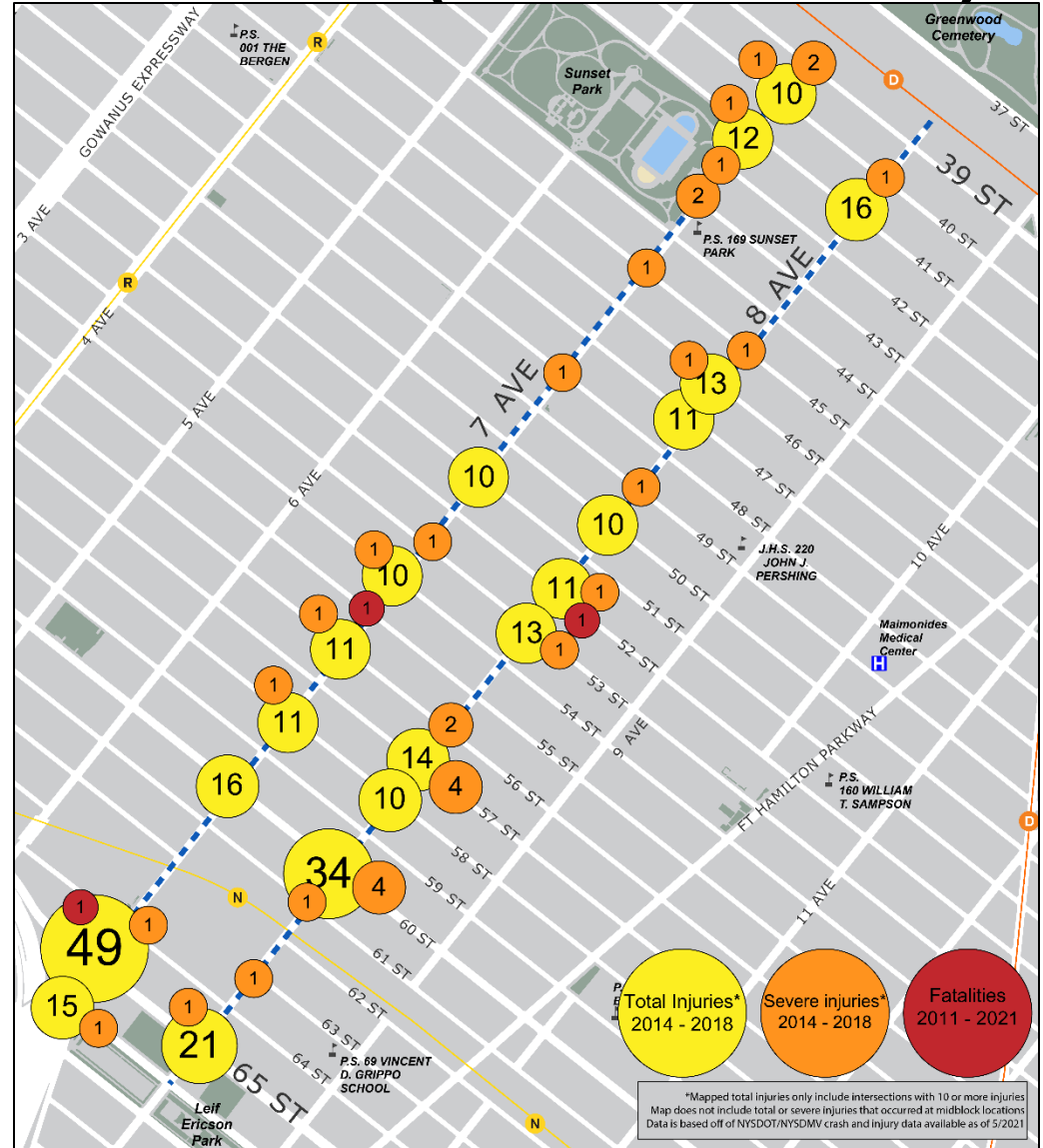
8th Ave injury data (39th St to 66th St)

Injury Summary, 2014-2018 (5 Years)				
	Total Injuries	Severe Injuries	Fatalities	KSI
Pedestrian	105	6	1	7
Bicyclist	17	1	0	1
Motor Vehicle Occupant	130	8	0	8
Total	252	15	1	16
Source: Fatalities: NYCDOT, Injuries: NYSDOT KSI: Persons Killed or Severely Injured				

7th Ave injury data (39th St to 66th St)

CRASH AND INJURY DATA (CONTINUED)

- Distribution of corridor injuries shows injuries occur throughout the corridors with intersections in all portions having multiple injuries and severe injuries spread throughout
- Map does not display intersections that had fewer than 10 injuries within study period



CRASH AND INJURY DATA (CONTINUED)

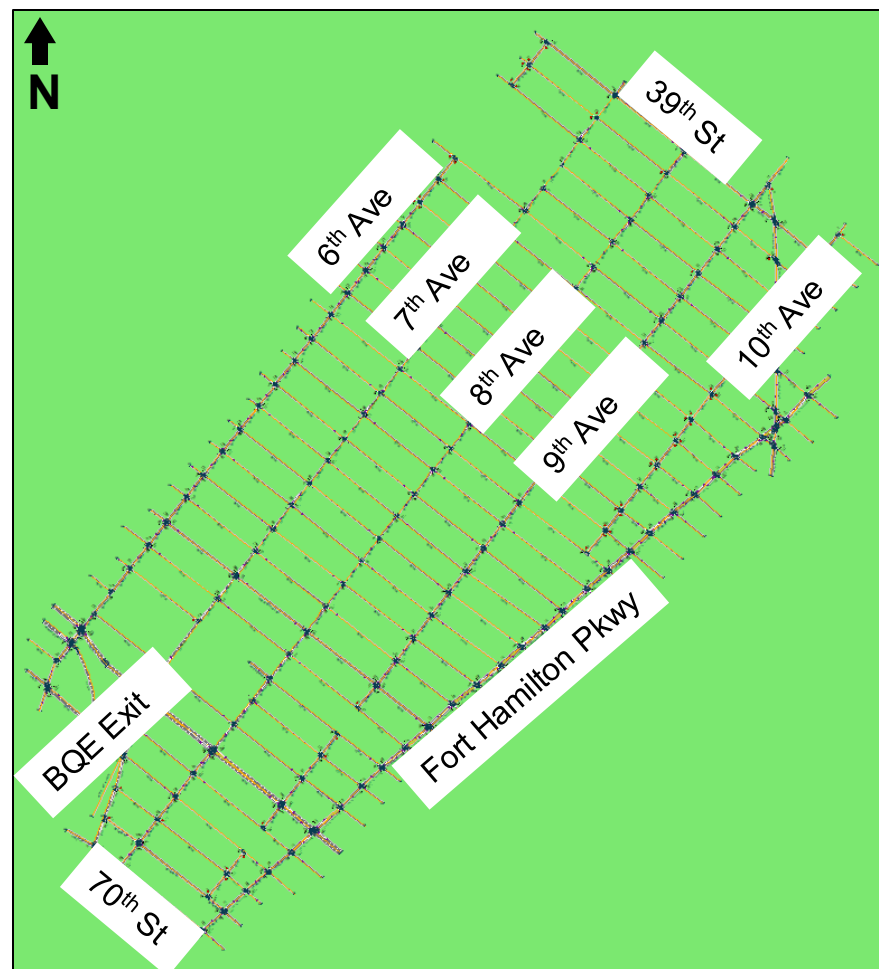
- Top three actions by pedestrians when injured
 1. Crossing in the crosswalk with signal (47%)
 2. Crossing against signal (15%)
 3. Crossing at location with no signal/crosswalk (13%)
- Top three vehicle actions causing pedestrian injuries
 1. Going straight (38%)
 2. Turning left (31%)
 3. Turning right (12%)
- Top three actions by cyclists causing injuries*
 1. Other actions/undefined (22%)
 2. Midblock crashes (16%)
 3. Crossing with signal (9%)

* 53% of cyclist injuries are unclassified from NYSDMV data

TRAFFIC MODELING

Methodology

- NYC DOT built a comprehensive and detailed traffic model that includes all streets from 6th Ave to Ft Hamilton Pkwy and 39th St to 70th St
- Modeling included all east-west cross streets between 39th St and 70th St
- DOT used origin and destination trip-tracking software (Streetlight) to determine current travel patterns and apply them to proposed conditions

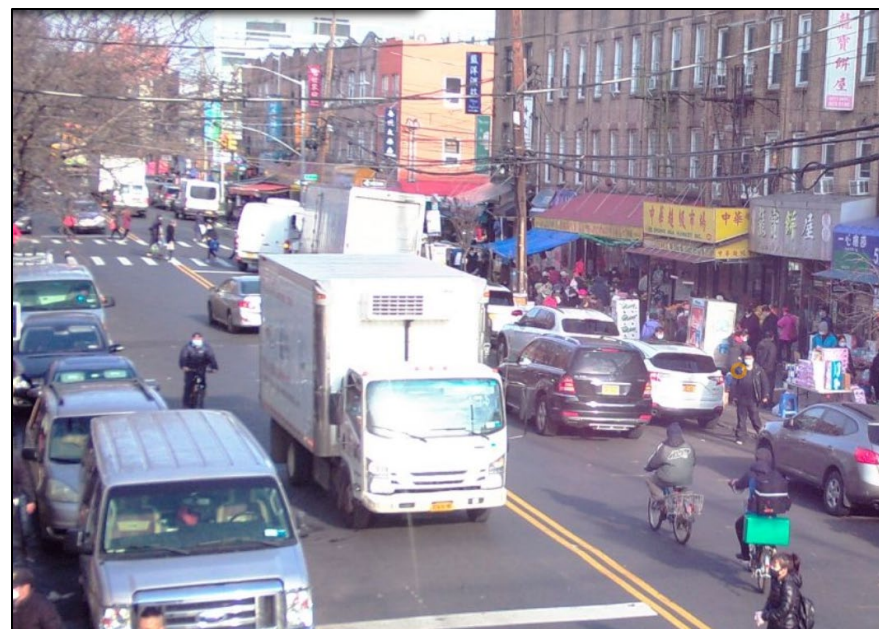


Map of model that DOT created to analyze project impacts

TRAFFIC MODELING (CONTINUED)

Traffic Volumes

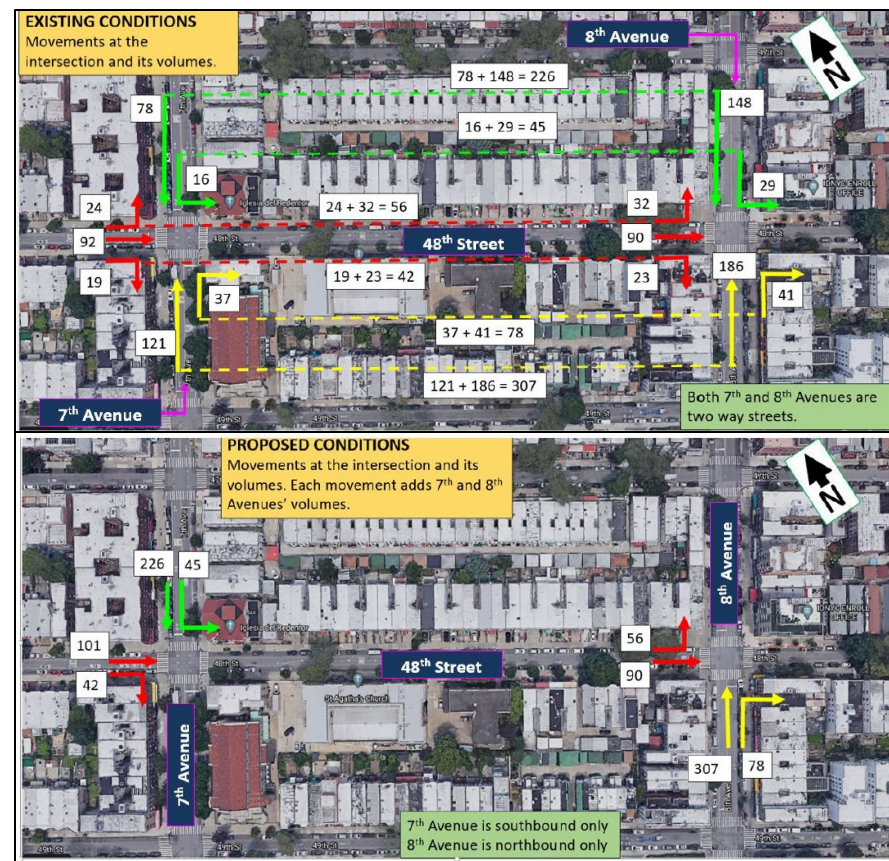
- NYC DOT collected multiple days of traffic counts in September 2019 and averaged volumes for analysis
 - Traffic counts included both Turning Movement Counts for peak hour capacity analysis, Automatic Traffic Recorders for 24 hour traffic pattern characteristics, and in field observations by DOT staff
- Identified AM peak hour from 7:30 – 8:30 and PM peak hour from 5:15 – 6:15 for a typical weekday
- Heaviest volumes between 60th St and 65th St with a peak volume of 341 SB vehicles on 8th Ave in the PM peak hour
- North of 60th St, no intersections have more than 250 vehicles per hour in one direction



Screenshot from traffic camera used to collect data – 8th Ave and 57th St

TRAFFIC MODELING (CONTINUED)

- NYC DOT summed all intersection movements to analyze proposed conditions
 - All northbound volumes from 7th and 8th Ave are assigned to 8th Ave and southbound volumes are assigned to 7th Ave
 - Model assumes that existing volumes are kept within the existing street network (7th and 8th Ave, 39th St to 67th St)
- NYC DOT design accommodates projected diversions
 - Right turn bays and mixing zones added at select locations to ensure more efficient processing of vehicles
 - Left turn bay added at 7th Ave and 64th St due to existing and projected circulation patterns
 - Left turn bay added to 65th St at 8th Ave to accommodate increase of northbound travel on 8th Ave
 - Two lanes added to 7th Ave between 59th St and 65th St and 8th Ave between 65th St and 60th St to accommodate higher traffic volumes



Example of methodology: Existing peak volumes at 7th Ave and 8th Ave at 48th St were maintained and reassigned as per conversion

RESULTS FROM ANALYSIS

- The design right-sizes 7th and 8th Avenues while accommodating projected traffic demands by adding turn bays, mixing zones, and lane additions in combination with signal timing changes
- One-way conversions enhance traffic movement by allowing for more streamlined signal progression and speed management during peak and off-peak periods
- Due to large number of east/west options, no cross streets are expected to receive a disproportionately large number of rerouted/diverted vehicles



A cyclist and vehicle travel on 7th Ave between 44th and 43rd St

OUTREACH TO DATE

Community Boards:

- Community Board 7 District Manager and Transportation Committee Chair
- Community Board 10 Transportation Committee

Elected Officials:

- City Council Member' Menchaca's Office
- Assembly Member Mitaynes' Office
- Assembly Member Abbate's Office

Representatives from Government Agencies:

- Department of Sanitation
- MTA
- FDNY
- NYPD
- NYC Small Business Services

Representatives from Community and Stakeholder Organizations:

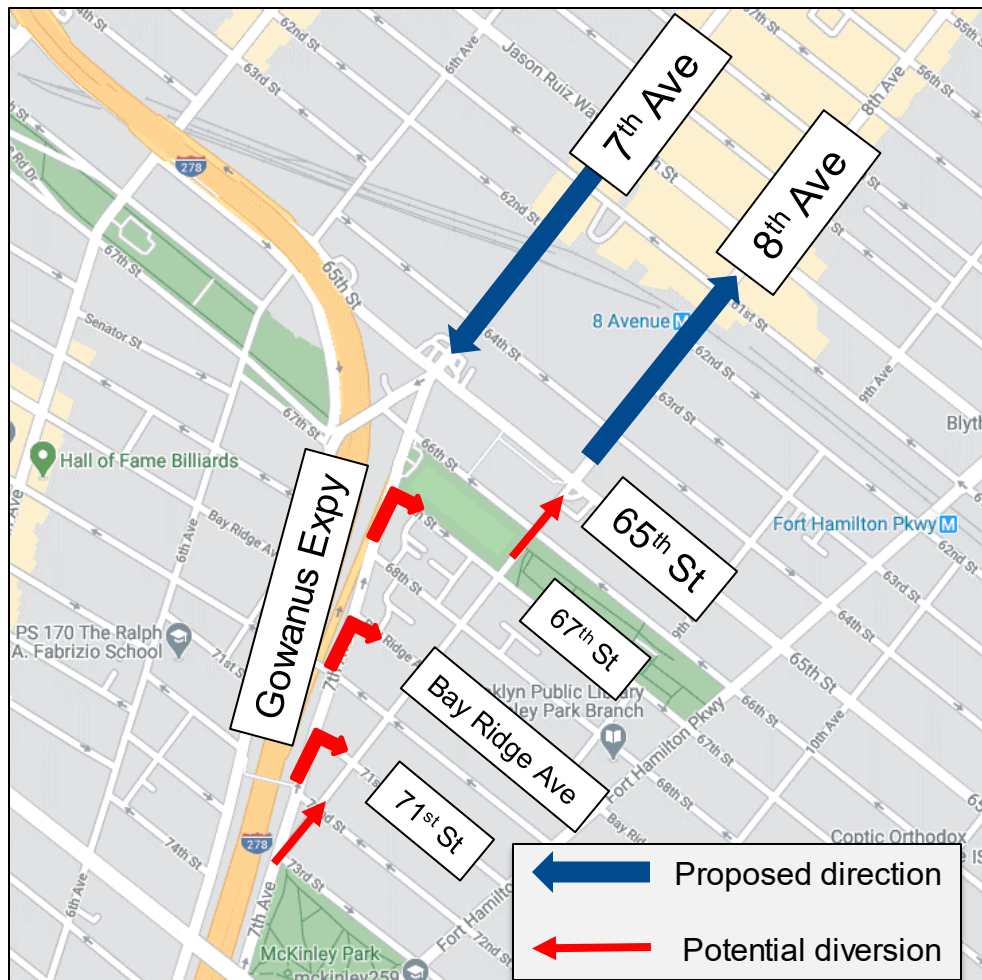
- Sunset Park School
- Families for Safe Streets
- Transportation Alternatives
- Get Women Cycling
- UPROSE
- Chinese-American Planning Council
- Brooklyn Chinese-American Association
- Parent Child Relationship
- Academy Medical Services
- Several Neighborhood Businesses

CONVERSION DETAILS

- Conversions of 7th Ave & 8th Ave to one-way pairs will have effects on 65th Street between 7th Ave and 8th Ave and surrounding streets
- 65th Street and 7th Ave is a very congested intersection due to the BQE exit, existing congestion on 65th Street, and access to and from neighborhood streets
- NYC DOT's proposal will include design elements to minimize impacts on the street network while making improvements to vehicle processing
 - One-way conversions allow for signal progression on 7th and 8th Aves to improve vehicle processing



BENEFITS OF PROPOSED CONVERSIONS



- Proposed design reduces the total northbound volume at 65th St and 7th Ave
 - Northbound vehicles on 7th Ave have multiple options to reroute to 8th Ave before 65th St
- Proposed design improves safety at the intersection of 7th Ave and 65th St
 - Removal of northbound through, eastbound lefts, and westbound rights reduce the total vehicle movements, reducing conflicts and improving safety
- Proposed design minimizes impacts
 - Two thirds of existing northbound vehicles are already turning at 65th St and 7th Ave

Various options for 7th Ave NB vehicles to divert to 8th Ave NB before 65th St

BENEFITS OF PROPOSED CONVERSIONS



Many NB vehicles on 7th Ave merge, change lanes, cross a bike path, and make unpredictable movements approaching 65th St

- Proposal simplifies the northbound approach to 65th St on 7th Ave
 - With only two possible northbound movements and two northbound lanes, the design reduces conflicts and improves predictability for vehicles
- Proposal eliminates northbound cyclist conflict
 - Northbound cyclists will no longer continue onto 7th Ave, removing conflict of right turning vehicles turning across a bike lane