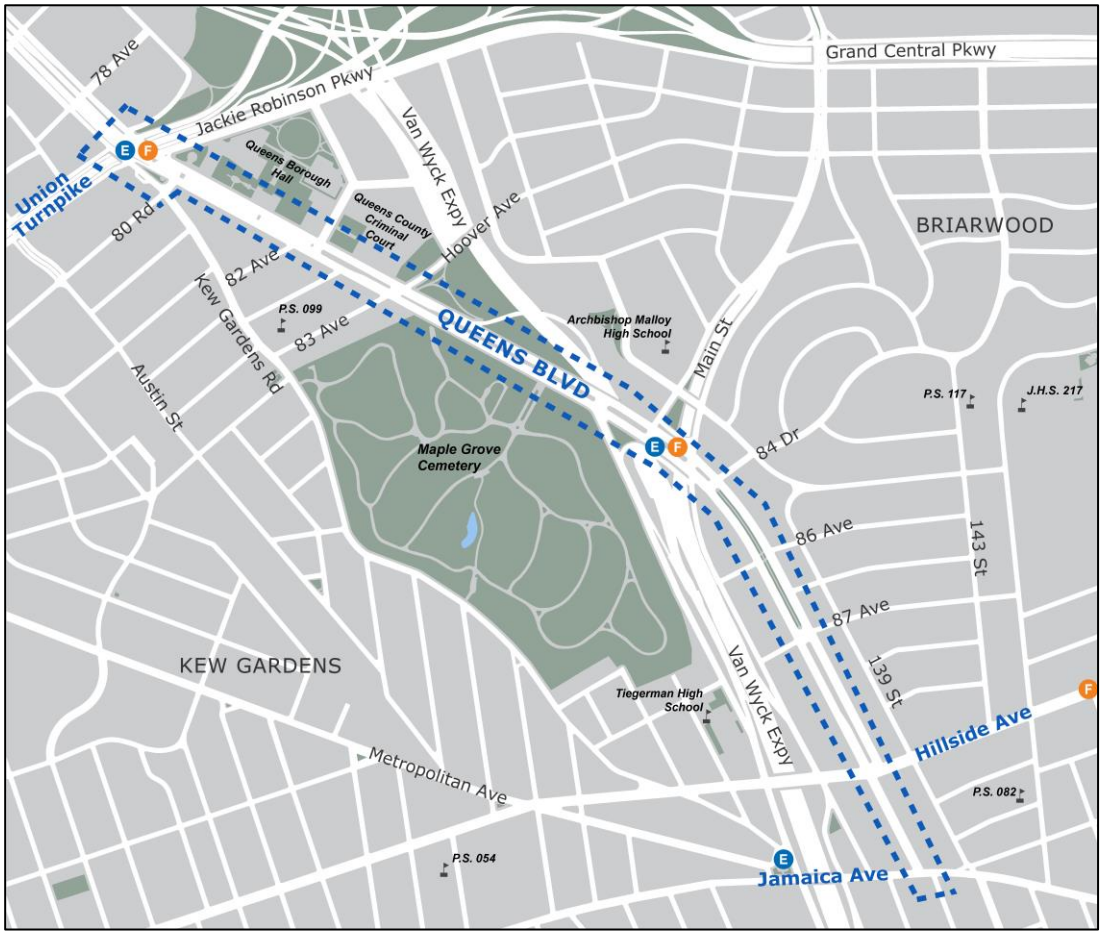
Queens Boulevard
Union Turnpike to Hillside Ave

Queens Community Board 8

May 24, 2023

Project Location

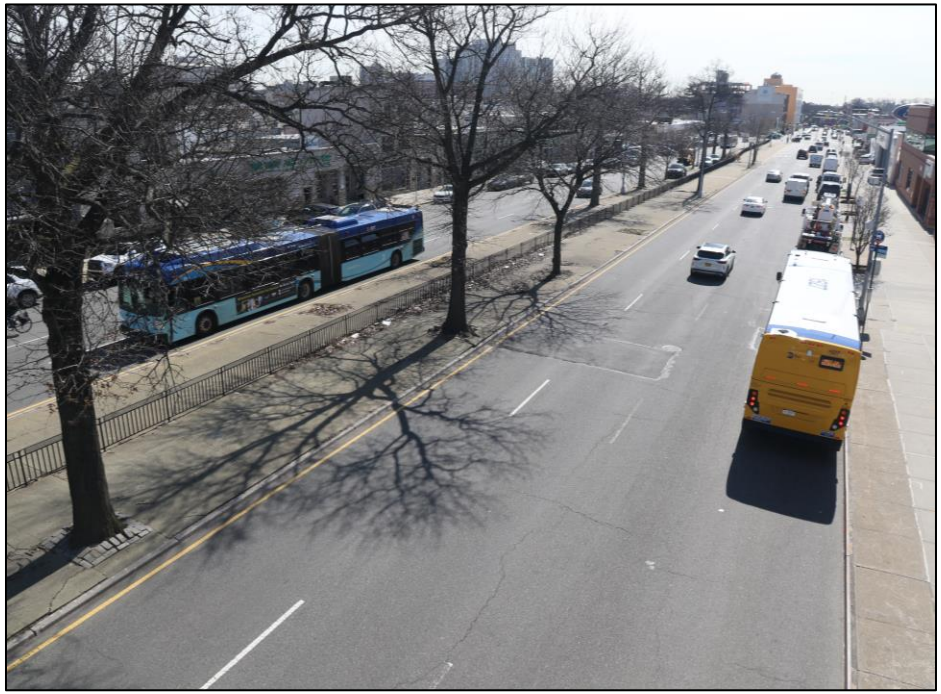
- Queens Blvd between Union Turnpike and Jamaica Ave
- 1.2-mile-long corridor connecting Forest Hills to Jamaica
- Border of Queens Community Boards 8 and 9 at the Van Wyck Expressway



Queens Blvd between Union Turnpike and Jamaica Ave

Corridor Details

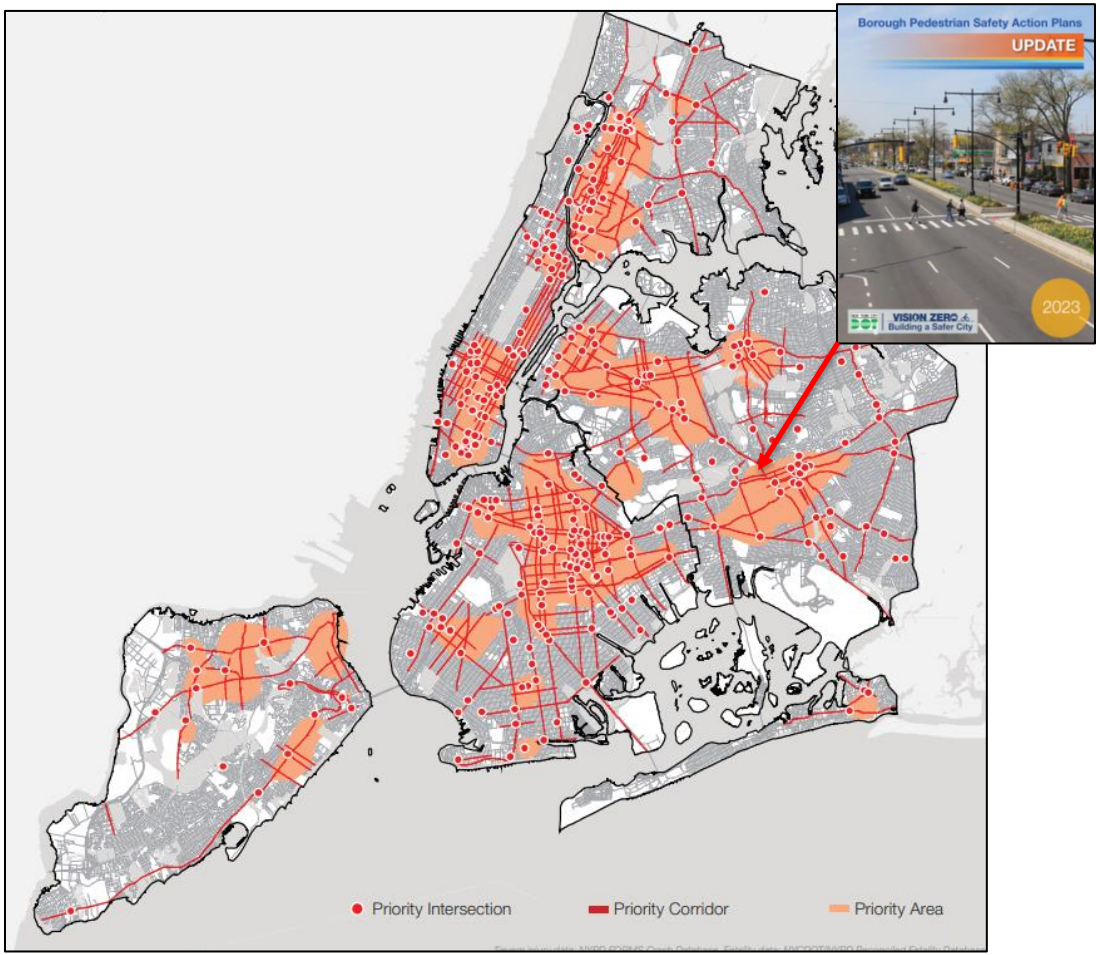
- Q60, Q20A, Q20B local buses, Q44 Select Bus and QM21, X63, X64, and X68 express buses run on Queens Blvd
- Queens Blvd is a through truck route
- Queens Borough Hall and Queens Criminal Court are located on the northern edge of the corridor
- Portions of the corridor are commercial, with a heavy auto shop presence on the southern end
- Major connector to and from the Van Wyck Expressway



Queens Blvd at 87th Ave

Vision Zero

- In 2023, NYC DOT released new Vision Zero Priority Geographies – identifying streets with the highest rates of pedestrian severe injuries citywide
- Queens Boulevard is a Vision Zero Priority Corridor with 4.1 pedestrian KSI per mile (2017 – 2021)
- Queens Blvd south of the Van Wyck Expressway is in a Vision Zero Priority Area



Map of Vision Zero Priority Geographies

Crash and Injury Data

- Between 2016 and 2020, 233 people have been injured on this portion of Queens Blvd
- Majority of injuries are motor vehicle occupant injuries but 5 out of 6 severe injuries were to pedestrians
- 2021 pedestrian fatality at Queens Blvd and 84 Dr

Injury Summary, 2016-2020 (5 Years)

Mode	Total Injuries	Severe Injuries	Fatalities	KSI
Pedestrian	44	5	0	5
Bicyclist	9	0	0	0
Motor Vehicle Occupant	180	1	0	1
Other Motorized	0	0	0	0
Total	233	6	0	6

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

Map of injuries on Queens Blvd between 2016 and 2020.

Crash and Injury Data

- Most common pedestrian injury occurs when crossing in a crosswalk with the signal (driver failure to yield)
    - Left turn crashes are the most common

- Rear-end crashes are the most common motorist injuries, indicating high rates of speeding
- Right angle and sideswipe crashes are also frequent due to speeding, multiple travel lanes, and double parking

Drivers, pedestrians, and a cyclist, Queens Blvd and 83 Ave

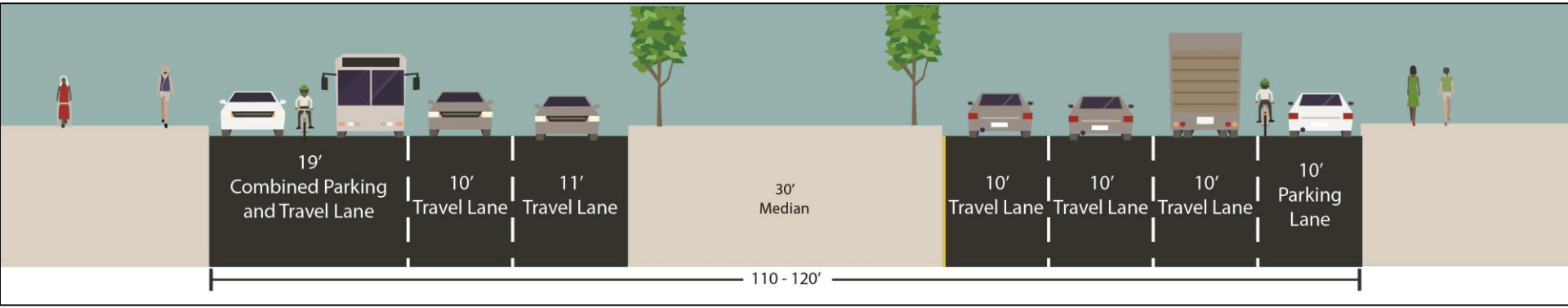
Queens Boulevard Previous Work

- Starting in 2015 and finishing in 2021, NYC DOT redesigned Queens Boulevard between Roosevelt Ave and Union Turnpike
- Redesign added a Protected Bike Lane, pedestrian path, expanded pedestrian space, and slowed turning vehicles
- Project has shown substantial safety improvements for all roadway users and has led to a considerable increase in cyclist volumes
    - 33.7% reduction in injuries
    - 42% reduction in pedestrian injuries
    - Cyclist volumes have more than doubled

Before and After: Queens Blvd, Woodside

Existing Conditions - Geometry

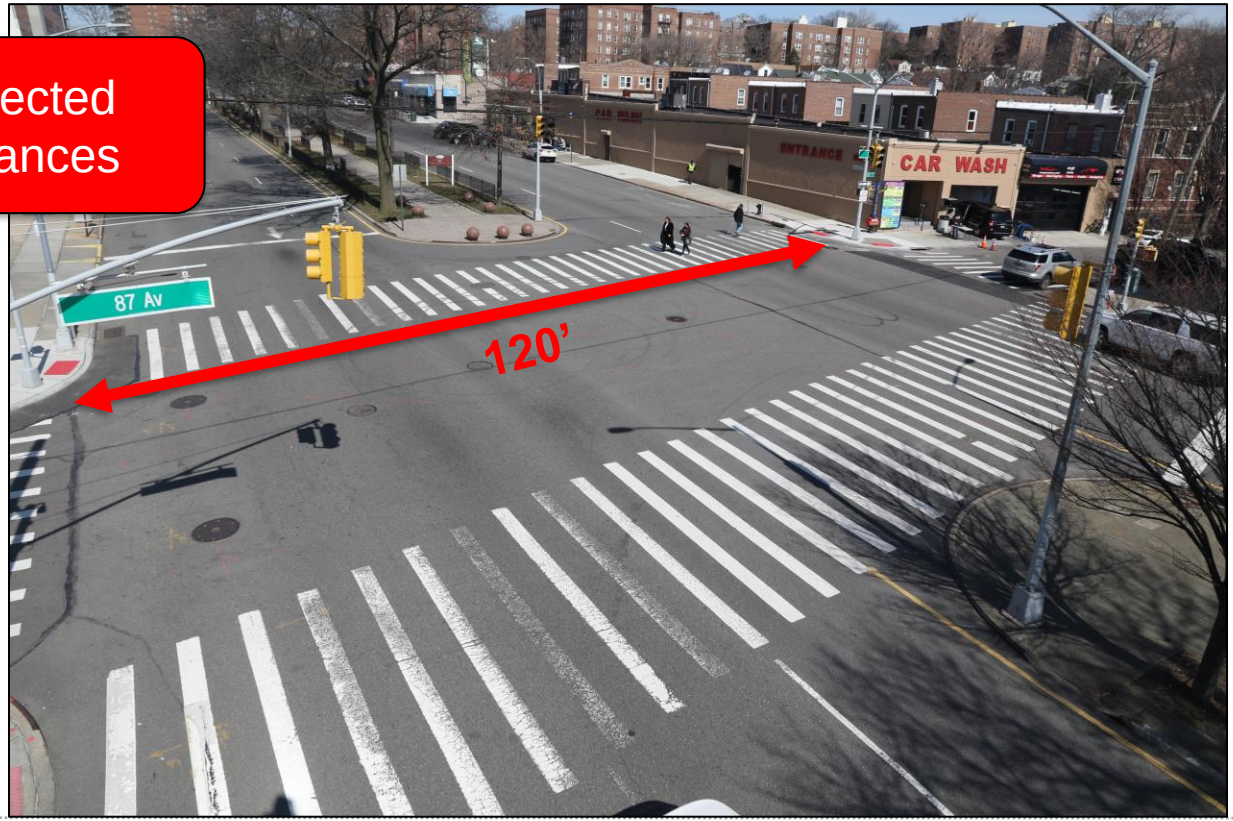
- Queens Blvd between Union Turnpike and Hillside Ave primarily consists of 40’ wide roadbeds separated by a wide, planted median
- Each direction has three travel lanes and curbside parking
- Large, open intersections with long crossing distances



Cross-Section of Queens Blvd with 3 travel lanes in each direction, and a planted, center median

Existing Conditions

Long, unprotected crossing distances



Queens Blvd and 87 Ave

Existing Conditions

Dangerous left turn conflicts between drivers and pedestrians

Queens Blvd and 84 Dr

Existing Conditions

Lack of safe biking facilities on a high-speed, open road

Queens Blvd near 83 Ave

Existing Conditions

Overly wide road and low vehicle volumes encourages faster, less safe driving

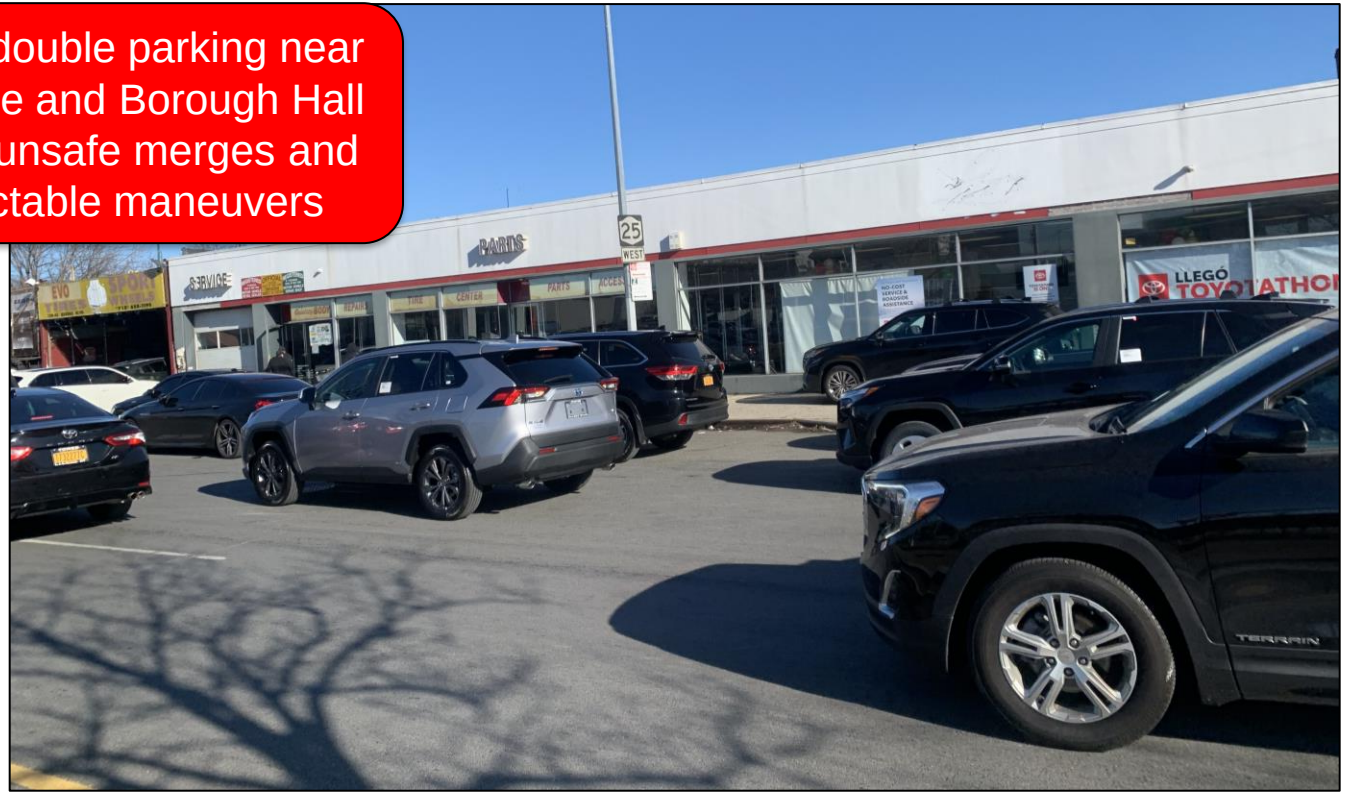
79% of drivers observed over the speed limit

Maximum observed daytime speed of 52 MPH

Queens Blvd and 86 Ave

Existing Conditions

Frequent double parking near Hillside Ave and Borough Hall results in unsafe merges and unpredictable maneuvers



Queens Blvd at Hillside Ave

Existing Conditions

Large, open intersections encourage U-Turns and overlapping, unsafe left turns

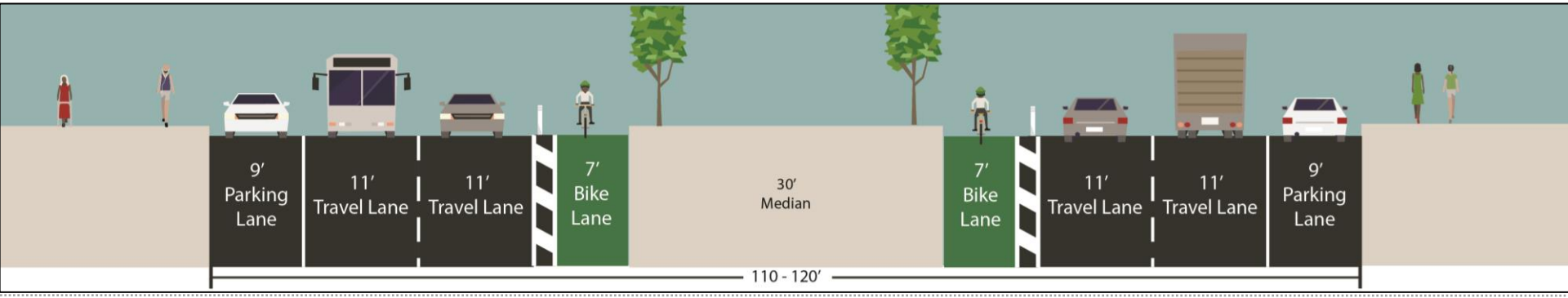
Queens Blvd at 87 Ave

Proposal

- Repurpose a travel lane from Queens Boulevard and add a Protected Bike Lane to the median to reduce speeding and provide a safe bike connection

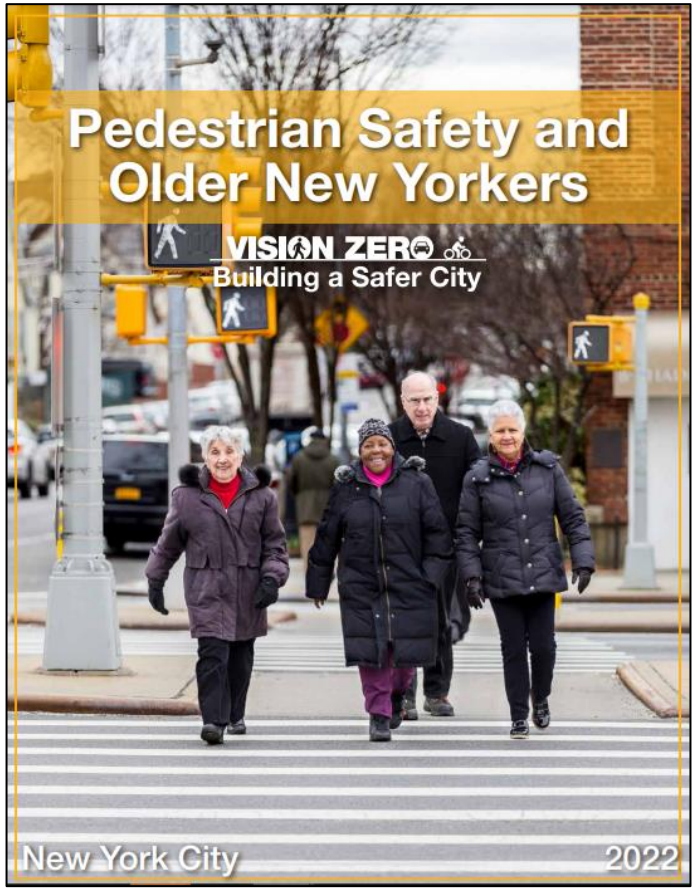
- Install dedicated left turn signals for left turns off Queens Blvd to reduce conflicts between drivers, cyclists, and pedestrians

- Add painted median tips and channelization where feasible to provide additional pedestrian refuge space, encourage slower, safer turns, and visually tighten intersections

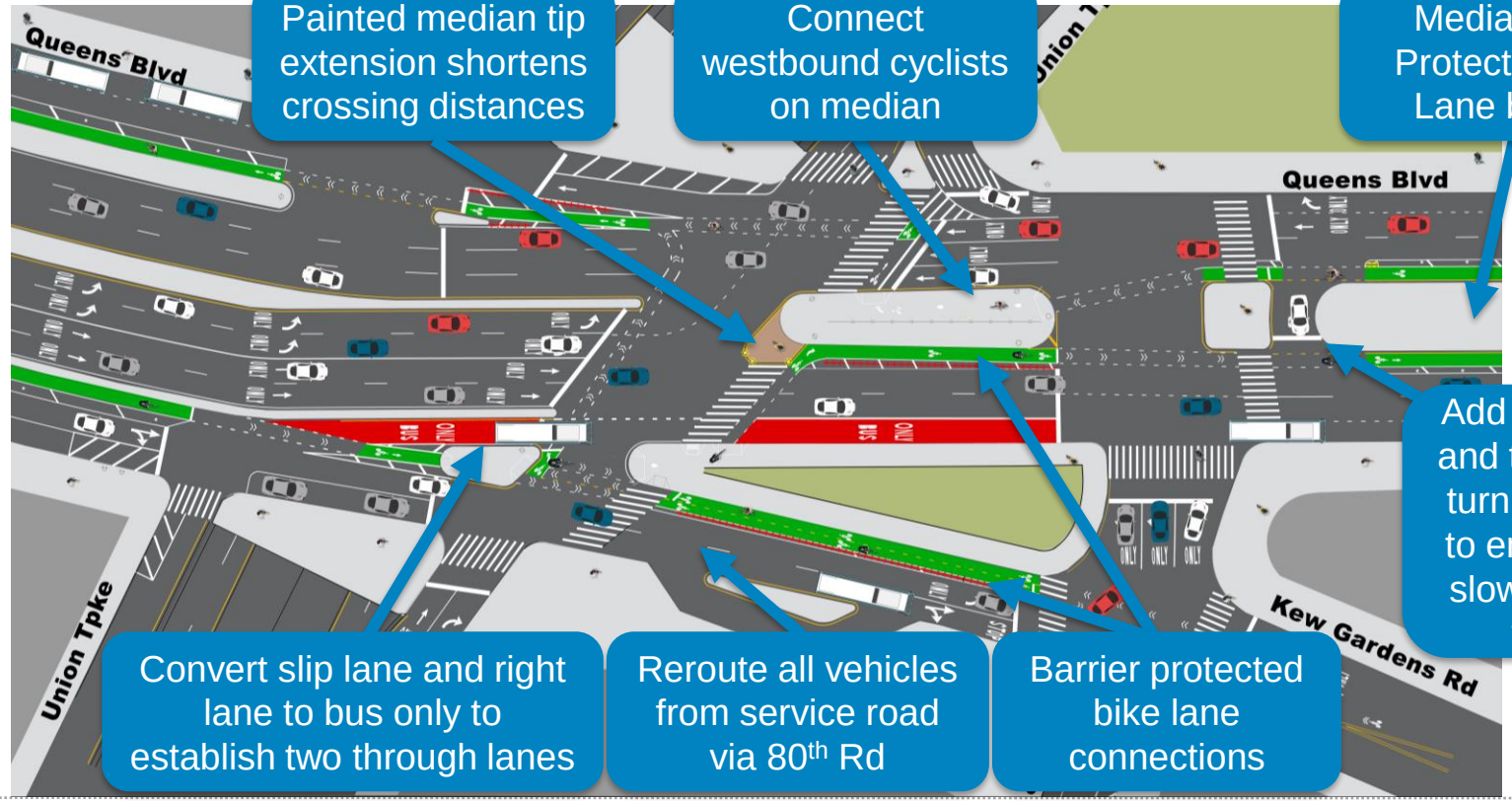


Protected Bike Lane Safety

- As part of DOT's Pedestrian Safety and Older New Yorkers study (2022), DOT analyzed the impact of Protected Bike Lanes on safety for roadway users
- Protected Bike Lane designs are proven to calm traffic and improve safety for all roadway users
- Safety improvements associated with Protected Bike Lanes are most impactful for the most vulnerable roadway users
    - All users:
        - 14.8% injury reduction
        - 16.1% KSI reduction
    - Pedestrians
        - 17.8% injury reduction
        - 29.2% KSI reduction
    - Senior Pedestrians
        - 22% injury reduction
        - 39% KSI reduction



Details of Proposal – Union Turnpike & 80 Rd



Painted median tip extension shortens crossing distances

Connect westbound cyclists on median

Median-side Protected Bike Lane begins

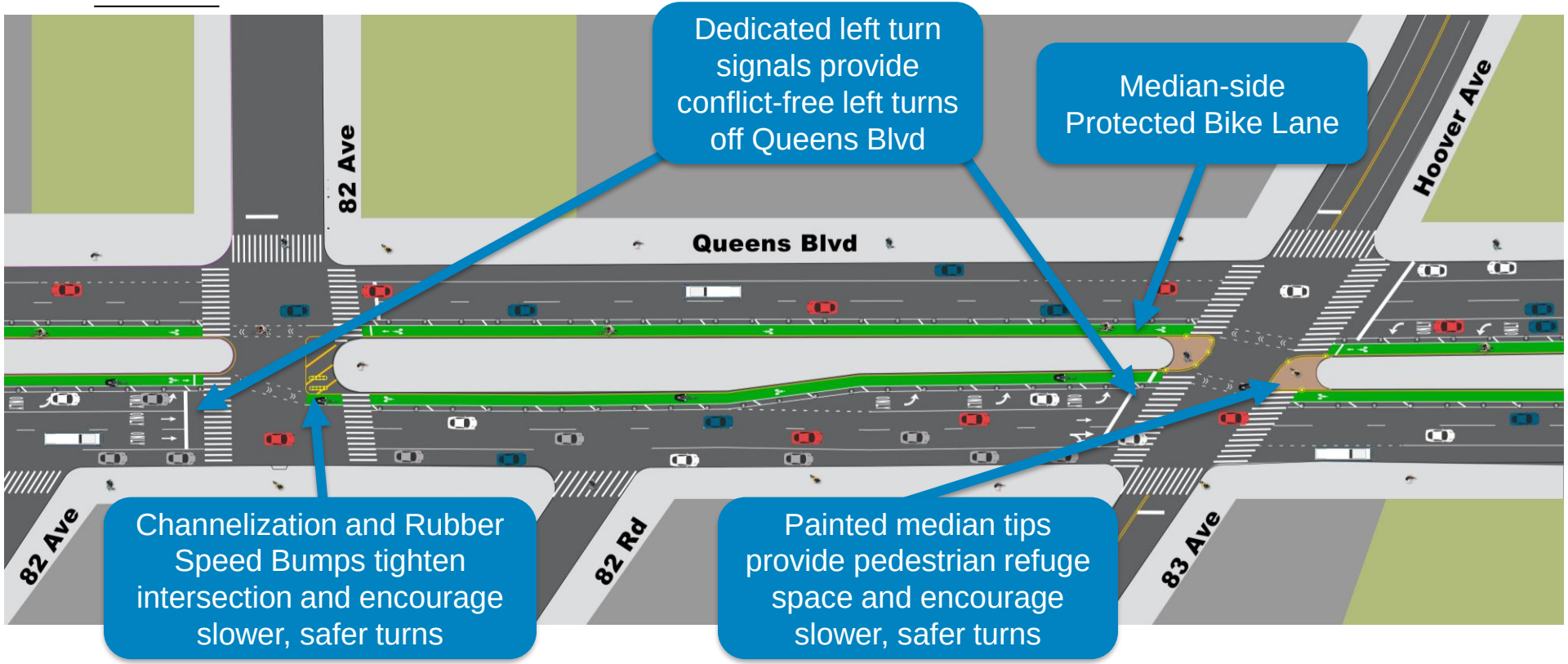
Add stop sign and tighten U-turn at 80 Rd to encourage slower, safer turns

Convert slip lane and right lane to bus only to establish two through lanes

Reroute all vehicles from service road via 80th Rd

Barrier protected bike lane connections

Details of Proposal – 82nd Ave & 83rd Ave

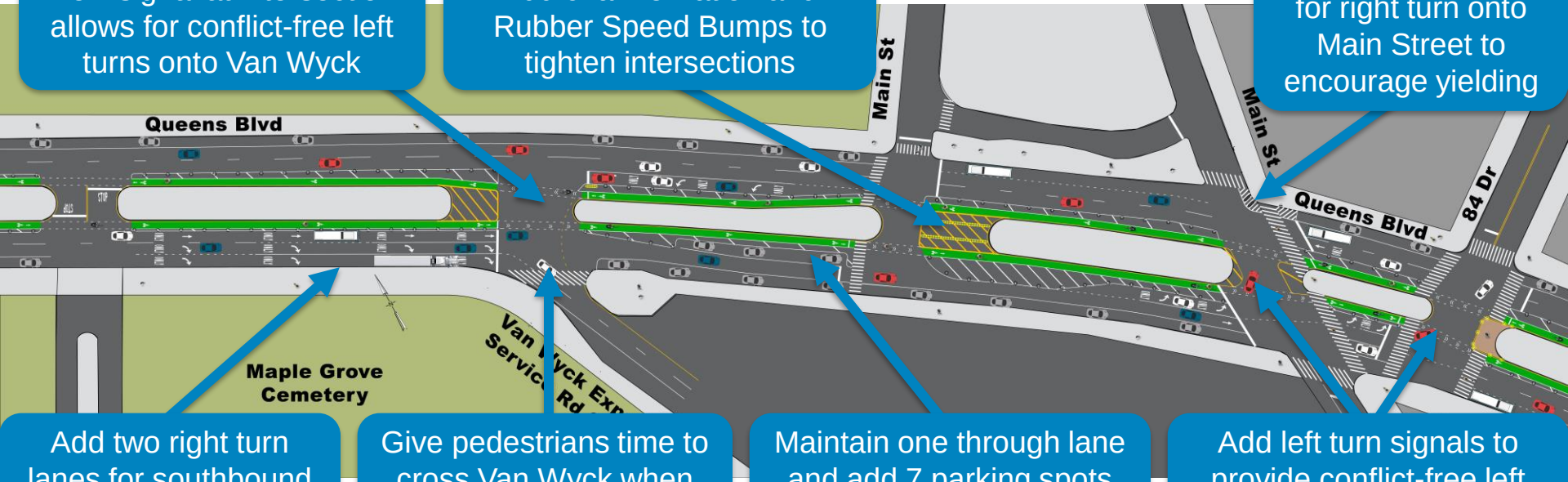


Details of Proposal – Van Wyck Expy – 84 Dr

New signal at intersection allows for conflict-free left turns onto Van Wyck

Add channelization and Rubber Speed Bumps to tighten intersections

Add Turn Calming for right turn onto Main Street to encourage yielding



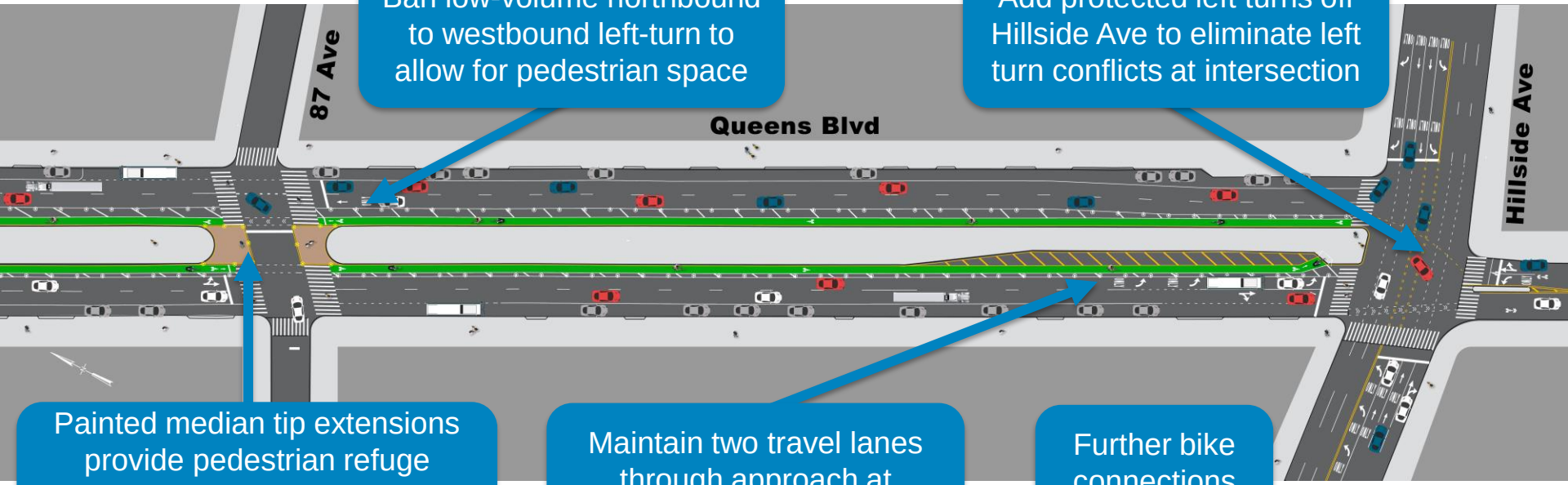
Add two right turn lanes for southbound Queens Blvd

Give pedestrians time to cross Van Wyck when no turns are permitted

Maintain one through lane and add 7 parking spots to protect bike lane

Add left turn signals to provide conflict-free left turns off Queens Blvd

Details of Proposal – 87 Ave – Hillside Ave



Ban low-volume northbound to westbound left-turn to allow for pedestrian space

Add protected left turns off Hillside Ave to eliminate left turn conflicts at intersection

Painted median tip extensions provide pedestrian refuge space, tighten intersection, and encourage slower, safer turns

Maintain two travel lanes through approach at Hillside Ave

Further bike connections under study

Summary

- Protected Bike Lane provides a safe and dedicated bike connection between Forest Hills and Jamaica and is a proven safety improvement for all roadway users
- Removal of travel lane aligns the capacity of the roadway with the existing volumes and encourages slower, safer speeds
- Addition of left turn signals reduce conflicts at intersections between drivers, cyclists, and pedestrians
- Painted median tip extensions provide pedestrian refuge space, tighten intersections, and encourage slower, safer turns

Similar design implemented on Allen St, MN

Thank You!

VISION ZERO
Building a Safer City

NEW YORK CITY DOT

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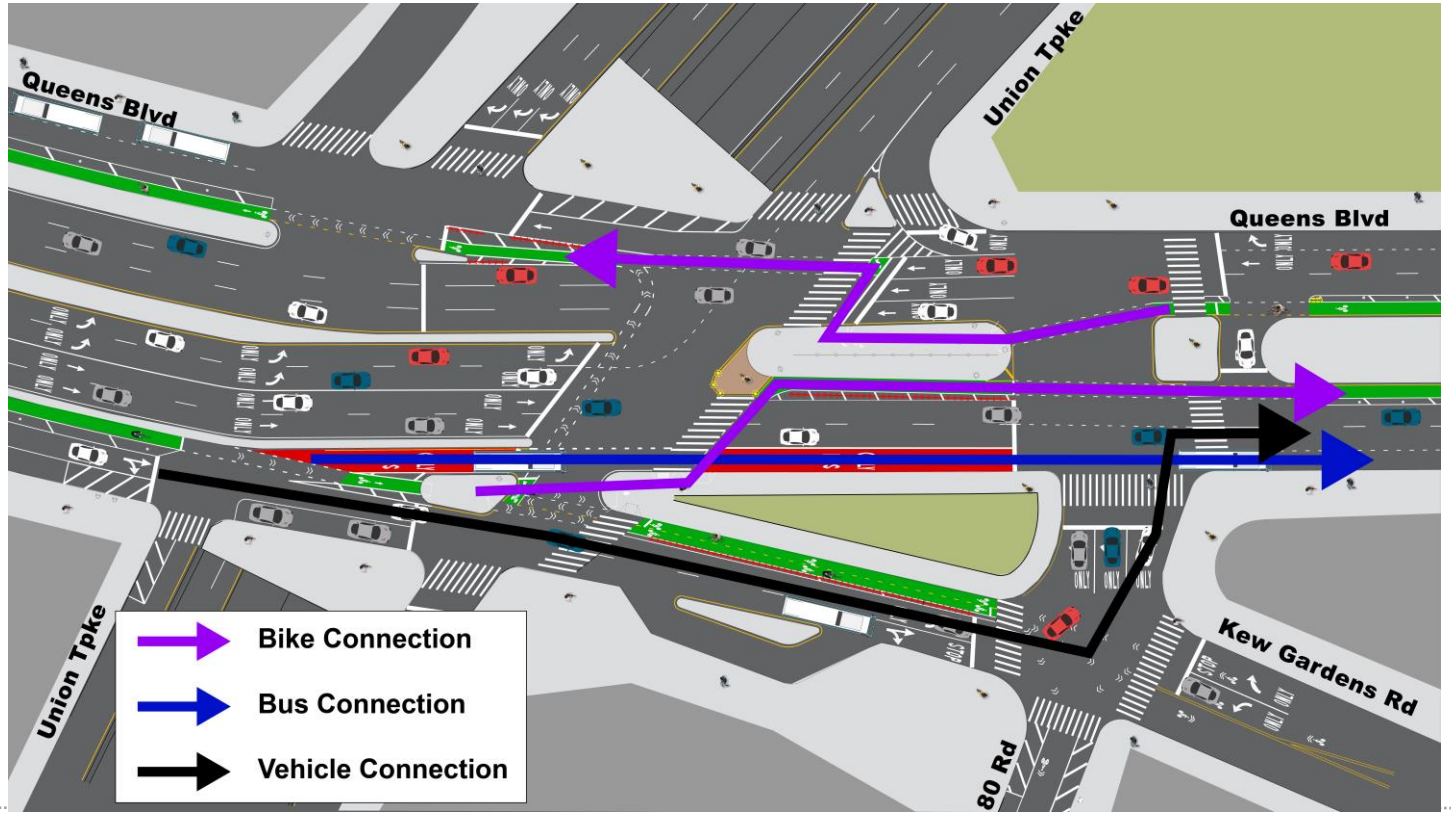
Union Turnpike and 80 Rd – Intersection Connections



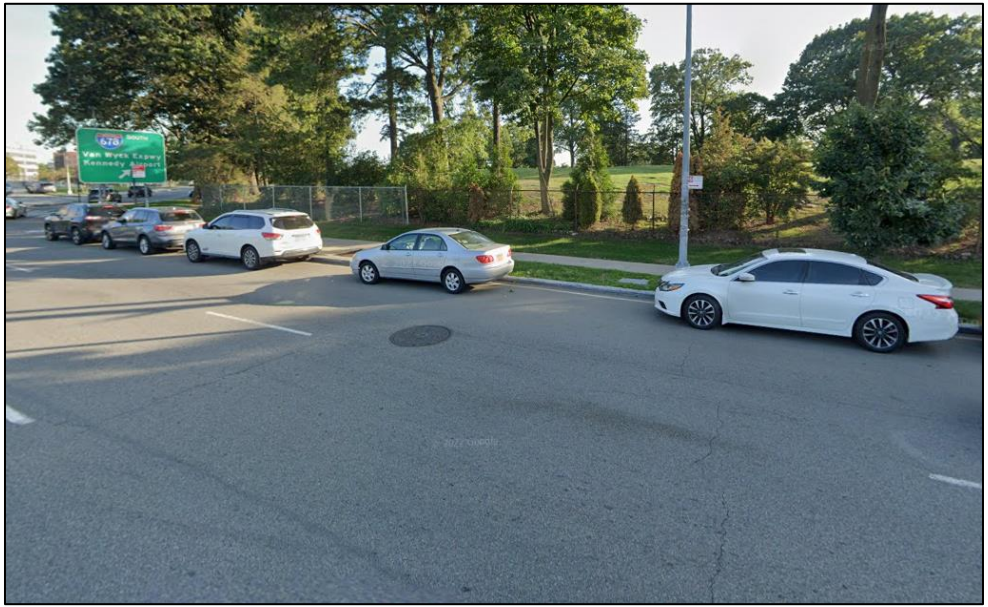
Appendix - Analysis

- DOT collected vehicle volumes in winter 2022 across project limits
- DOT performed extensive traffic analysis to account for existing vehicle volumes with reduction of travel lanes
- Majority of project will be able to accommodate vehicle volumes with two travel lanes with minimal additional impacts
- Minor congestion increases expected between 83rd Ave and Union Turnpike during rush hour in peak direction and northbound at Main Street in AM peak
- DOT adjusting signal timing as possible to reduce delays and will continue to monitor corridor post-implementation should additional changes be needed

A school bus turns onto the Van Wyck as a pedestrian crosses. Design changes and a new signal are being installed here to reduce conflicts and congestion

Appendix - Parking

- Net loss of approximately 8 parking spots across 1.2 miles
- Approximately 15 parking spots repurposed on southbound Queens Blvd between Maple Grove Cemetery and Van Wyck Service Road Southbound to accommodate right turn lane
- Approximately 7 parking spots gained on southbound Queens Blvd between Van Wyck Service Road Southbound and Main Street



Vehicles parked alongside the cemetery, where parking will be repurposed to provide access to the Van Wyck Expressway