

#### **Queens Boulevard, Skillman Ave to Roosevelt Ave**

Queens Community Board 2

June 6, 2024

# **Project Location**

- Queens Boulevard between Skillman Ave and Roosevelt Ave
- 1.0 mile stretch through the heart of Sunnyside connecting Long Island City, Queens Plaza and the Queensboro Bridge, and neighborhoods to the east



Project Limits: Queens Blvd, Skillman Ave to Roosevelt Ave

### Background

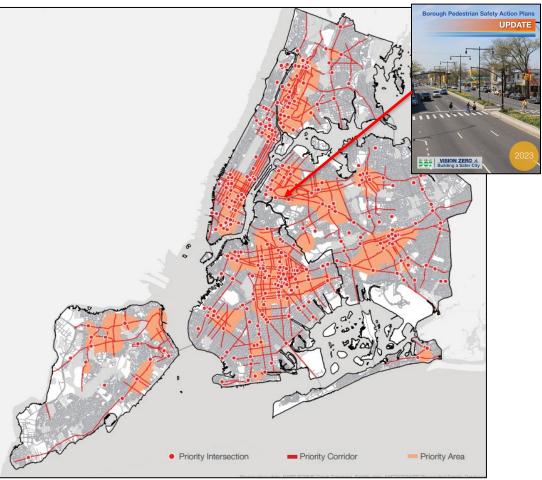
- Q60 Bus, Q32 bus, and numerous express buses (QM1, 4, 5, 6, 31, 35, 36, 44, X63, 64, and 68) run on this portion of Queens Blvd
- Queens Boulevard is a through truck route
- Queens Boulevard is a busy commercial corridor with commercial land use on the eastern half and more industrial uses on the western half
- 7 train runs on Queens Boulevard



Queens Blvd at 40th St, looking west

# **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 is within a Vision Zero Priority Area



#### Map of Vision Zero Priority Geographies

# **Crash and Injury Data**

- Between 2019 and 2023, 351 people have been injured on this portion of Queens Boulevard
- 11 severe injuries have occurred on this stretch of Queens Boulevard

Injury Summary, 2019-2023 (5 Years)				
Mode	Total Injuries	Severe Injuries	Fatalities	KSI
Pedestrian	48	1	0	1
Bicyclist	32	1	0	1
Motor Vehicle Occupant	255	6	0	6
Other Motorized	16	3	0	3
Total	351	11	0	11



Map of Injuries, Queens Blvd, Skillman Ave to Roosevelt Ave

# **Crash and Injury Data**

- Most common pedestrian injuries are caused by drivers failing to yield when making a left turn onto Queens Boulevard
- Highest rate of driver injuries caused by rear-end crashes, indicating high rates of speeding
  - Sideswipe crashes are also common, indicating speeding and aggressive driving
- Rate of severe injuries on this portion of Queens Boulevard (9.8 KSI/mile) puts it in the top 10% most dangerous streets in all of Queens





A taxi turns left onto Queens Blvd at 39<sup>th</sup> St in front of a pedestrian; above. Pedestrians, a cyclist, and drivers on Queens Blvd, below

### **Queens Boulevard Previous Work**

- Starting in 2015 and finishing in 2023, NYC DOT redesigned Queens Boulevard between Roosevelt Ave and Hillside Ave
- Redesigns added a Protected Bike Lane, 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
  - 68% reduction in fatalities
  - 34% reduction in injuries
  - 42% reduction in pedestrian injuries
  - Cyclist volumes have increased by 122 250% across the corridor

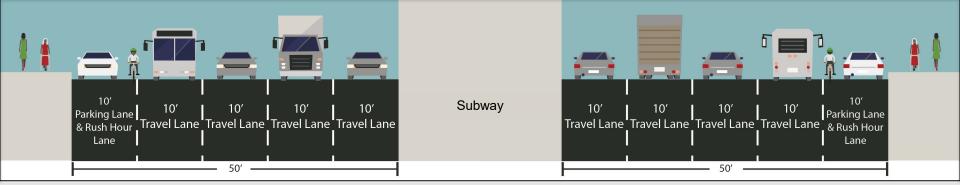




Before and After: Queens Blvd, Woodside

### **Existing Conditions - Geometry**

- Queens Blvd between Van Dam St and Roosevelt Ave consists of two 50' wide roadways separated by the 7 train and parking lots underneath the subway
- Each direction has four full time travel lanes and a parking lane/rush hour lane that is frequently unusable for rush hour travel
- Long crossing distances for pedestrians at intersections, no space for cyclists along road



Cross-Section of Queens Blvd with 4 full-time travel lanes in each direction, separated by the 7 train structure

#### Pedestrians

- Heavy pedestrian volumes and long crossing distances
- Large, wide intersections allow drivers to take fast turns onto Queens Blvd, endangering pedestrians
  - Fail-to-yield left turns cause the most frequent injuries to pedestrians on the corridor
- Leading Pedestrian Intervals exist for pedestrians crossing Queens Blvd

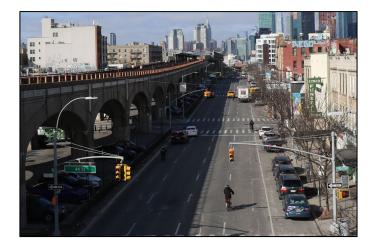




A truck turns left into pedestrians crossing Queens Blvd at 47<sup>th</sup> St, above; pedestrians crossing Queens Blvd at 39 St, below

### Cyclists

- High cyclist volumes (over 300 daily cyclists)
  despite no bicycling infrastructure
- Lack of dedicated roadway space leads to cyclists sharing travel lanes with fast moving buses, trucks, and vehicles
- Cyclists often have to swerve around doubleparked vehicles

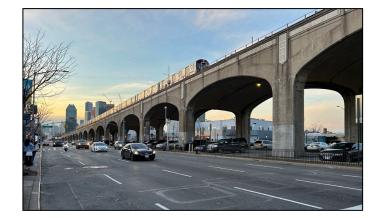




Cyclists riding on Queens Blvd

#### **Drivers**

- Four to five travel lanes encourage high speeds, especially during off-peak hours
- Aggressive driving leads to high rate of rearend and right-angle crashes and injuries
- Wide roadway and intersections encourage fast turns onto Queens Boulevard in dense pedestrian areas – particularly left turns





Drivers and vehicles on Queens Blvd, above A car turns through the crosswalk at 47<sup>th</sup> St, below

### Parking and Loading

- DOT Street Ambassadors surveyed businesses on Queens Blvd to understand loading and delivery patterns
- 59 businesses on Queens Blvd completed DOT's survey about loading patterns and needs
- 11 AM 1 PM reported as busiest time for receiving deliveries
- Box trucks are most frequent vehicle used to make deliveries
- Most deliveries occur from double parked vehicles in front of businesses, with more frequent double parking observed between 40<sup>th</sup> St and 48<sup>th</sup> St





Above: DOT employee surveys in front of a business Below: A box truck unloads on Queens Blvd

#### **On-Street Perception**

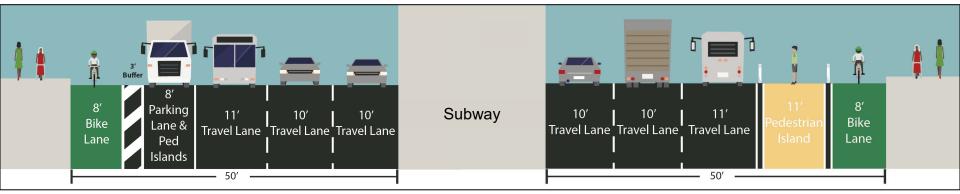
- DOT Street Ambassadors and outreach efforts surveyed 295 respondents about Queens Blvd roadway safety perceptions and changes
- Most respondents felt unsafe from traffic when crossing Queens Blvd
- Most common traffic safety concerns were speeding vehicles and vehicles failing to yield
- Most desired improvements were Protected Bike Lanes and bus lanes
- Respondents most frequently identified removing curbside parking and moving lanes as acceptable tradeoffs for roadway improvements



DOT Street Ambassadors surveying on Queens Blvd

### Proposal

- Remove a travel lane and eliminate rush hour regulations to encourage safer driving speeds on Queens Blvd
- Add a curbside bike lane protected with a floating parking lane to provide a safe cycling connection
- Add pedestrian islands at all feasible locations to shorten crossing distances and encourage slower, safer turns



Cross-Section of Queens Blvd proposal with 3 travel lanes, floating parking/pedestrian islands, and a curbside Protected Bike Lane

### **Protected Bike Lane Safety**

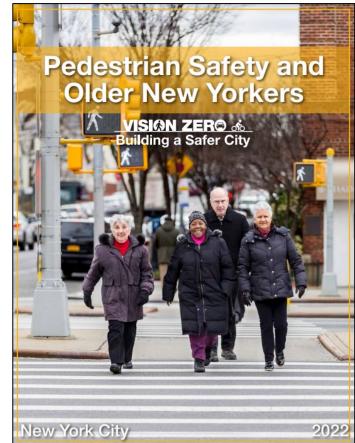
- As part of DOT's Pedestrian Safety and Older New Yorkers study (2022), DOT analyzed the impact of Protected Bike Lanes on safety for roadway users
- Protected Bike Lane designs are proven to calm traffic and improve safety for all roadway users
- Safety improvements associated with Protected Bike Lanes are most impactful for the most vulnerable roadway users

•All users:

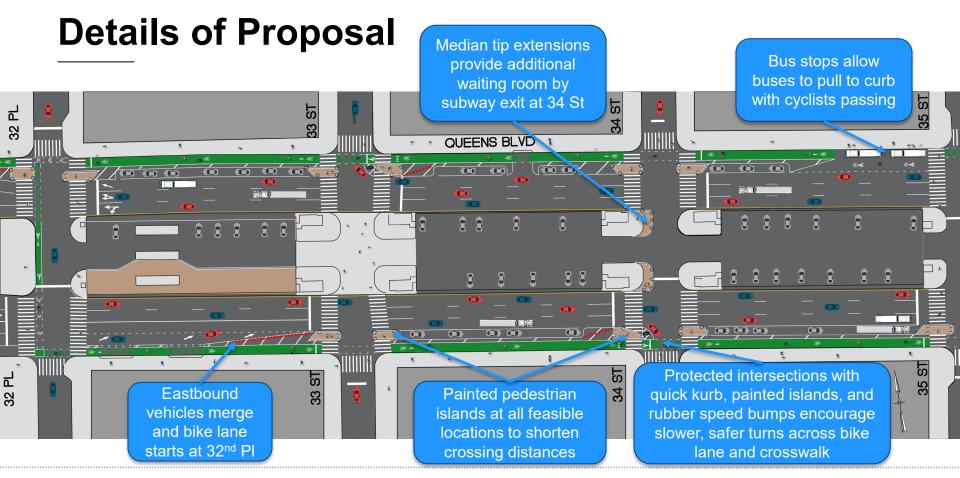
- •14.8% injury reduction
- •16.1% KSI reduction

Pedestrians

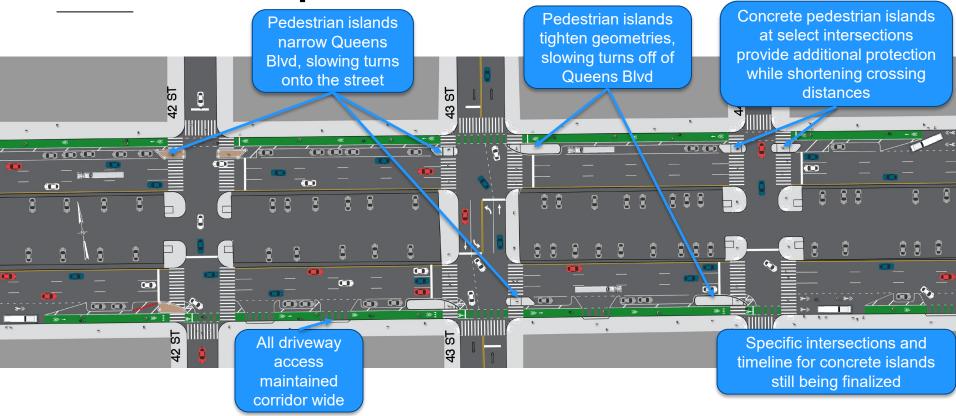
- •17.8% injury reduction•29.2% KSI reduction
- Senior Pedestrians
  - •22% injury reduction•39% KSI reduction



Cover of NYC DOT's Pedestrian Safety and Older New Yorkers Report

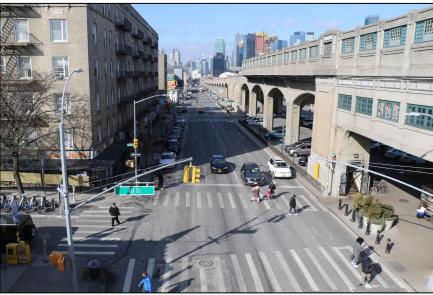


### **Details of Proposal**



### **Pedestrian Improvements**

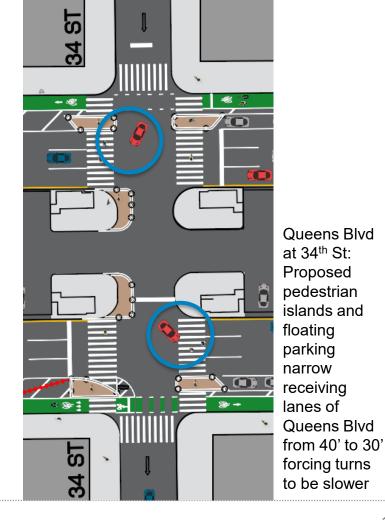
- Protected Bike Lane design will lead to significant pedestrian safety improvements along the corridor
- Pedestrian islands reduce crossing distances from 50' to 31' – 33' reducing exposure to turning vehicles
  - 34 out of 35 crosswalks within the corridor will be shortened with pedestrian islands
  - DOT investigating pursuing islands at high volume and high crash locations in concrete
- Leading Pedestrian Intervals increased (where feasible) from 7 seconds to 10 seconds to give more conflict-free pedestrian crossing time
- Protected Bike Lane design slows all turns onto Queens Boulevard, resulting in safer turns and improved yielding



Pedestrians crossing Queens Blvd

### **Slower, Safer Turns**

- Left turns onto Queens Blvd are the highest crash movement for pedestrians
- Proposed design focuses on creating slower, safer turns onto and off of Queens Blvd
- Protected Bike Lane and floating parking lane narrows roadway, preventing overly fast turns onto Queens Blvd and increasing yielding
- Protected intersection design with pedestrian islands, quick kurb, and rubber speed bumps slow turns off of Queens Blvd, increasing yielding to pedestrians and cyclists



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# **Cyclist Improvements**

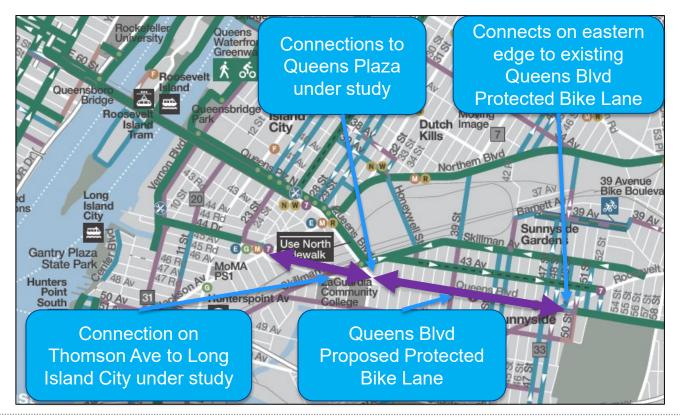
- Protected Bike Lane provides cyclists with a separated, safe bike lane connecting directly to the existing Queens Blvd bike lane east of Roosevelt Ave
- New DOT design provides wider bike lane and narrower buffer space, allowing for different speed bikes and social cycling
- Protected Intersections will improve yielding to cyclists by vehicles turning across bike lane onto side streets
- Future bike connections under study will expand bike connections into Long Island City





Above: Protected Intersection, 6<sup>th</sup> Ave, MN Below: Wider Protected Bike Lane, 9<sup>th</sup> Ave, MN

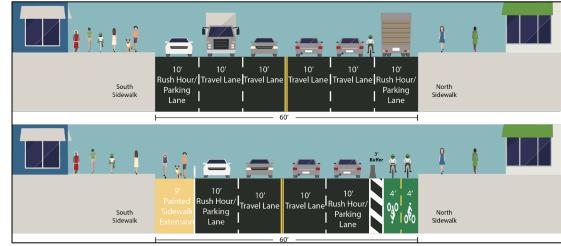
### **Bike Network Connection**



### **Thomson Ave Design Concept**

DOT is investigating the feasibility of a bike connection between Van Dam St and Jackson Ave

- Investigating removal of one lane of traffic in each direction
- Add a painted sidewalk extension on the south curb
  - Greater need for pedestrian space generated from buildings such as LaGuardia Community College and Bard High School
- Adding a 2-way jersey barrier protected bike lane on north curb
  - North side of Skillman Ave is free from turn conflicts
  - Connects to 44 Dr bike lane and proposed Queens Blvd protected bike lane
  - Bus boarding island needed at Thomson Ave and Van Dam St



Thomson Ave cross-section: Above: Existing conditions. Below: Initial design proposal being studied

# **Driver Improvements**

- Lane reduction will discourage speeding without increasing congestion on the corridor – reducing rear end and right-angle crashes caused by speeding
- Proposal adds truck loading zones, reducing double parking – improving travel and reducing side swipe crashes
- Protected Bike Lane gives cyclists dedicated space separate from drivers, improving predictability and reducing interactions





Above: Double parked truck on Queens Blvd Below: Queens Blvd with excess capacity during midday hours

# **Curbside Improvements**

- DOT to pursue a comprehensive curb management strategy along Queens Blvd informed by our merchant survey and additional observations
- DOT to aggressively install loading zones along Queens Blvd to facilitate delivery access and minimize double parking along corridor – particularly in more commercial area east of 39<sup>th</sup> St
- Parking regulations to be maintained underneath the 7 train provide sufficient parking spaces for drivers accessing Queens Blvd
- Removal of rush-hour regulations allows addition of parking and loading zones throughout the entirety of the day
- DOT to investigate and pursue meter regulation changes as needed

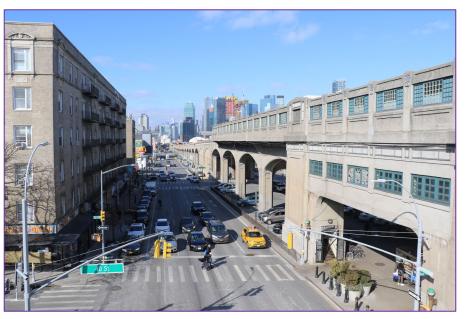




Trucks double parking on Queens Blvd

### **Benefits of Project**

- Protected Bike Lane adds 2.0 lane miles of a safe cyclist connection through Sunnyside
- Shortened pedestrian crossing distances across Queens Blvd reduce conflict points with drivers
- Slower, safer turns onto and off of Queens Blvd, improve yielding to pedestrians and cyclists
- Narrowed Queens Blvd roadway encourages safer vehicle speeds along the corridor
- Completes safety improvements along the length of Queens Blvd, transforming the Vision Zero Priority Corridor into a multi-modal boulevard for 7 miles across Queens from Queens Plaza to Hillside Ave



Queens Blvd at 44th St

### **Thank You!**







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# **Appendix - Analysis**

- DOT collected traffic, bike, and pedestrian volume data in 2019, 2021, and 2023 on Queens Blvd to model the changes
- Analysis showed minimal impacts to travel times along corridor during peak hours
- During most of day, Queens Blvd has excess capacity
- Queensboro Bridge continues to serve as bottleneck that will impact area-wide congestion, regardless of Queens Blvd vehicle capacity
- Travel patterns along Queens Blvd may undergo adjustments, but corridor travel time is expected to remain like current conditions



Late morning at Queens Blvd at 33<sup>rd</sup> St. During much of the day, Queens Blvd has excess road space

# Appendix – Curbside Versus Median-side

- Bike lane on the median was thoroughly investigated, but ultimately is not being pursued due primarily to the following reasons:
  - Median bike lane would frequently be blocked by vehicles making left turns off of Queens Blvd and waiting under the 7 – leading to dangerous interactions
  - Median bike lane does not slow turns onto Queens Blvd or shorten crossing distances – resulting in minimal to no pedestrian safety benefits
  - Median bike lane does not allow cyclists to easily access Sunnyside streets or businesses
  - Median bike lane would require substandard lane widths, resulting in buses frequently blocking travel lane at stops



Left turning vehicles would frequently block a median-side bike lane, endangering cyclists



Buses would have insufficient space to pull into stops without blocking traffic

# **Appendix - Parking**

- Protected Bike Lane will repurpose some parking for
  - Pedestrian islands/daylighting at intersections
  - Visibility for drivers turning across the bike lane
  - Allowing buses to pull into and out of bus stops safely
- Analysis of current use shows sufficient parking remains for usage
- Queens Blvd has additional parking underneath the 7 train
- Loading zones will provide additional curbside space for deliveries, reducing double parking
- Removal of rush hour lanes means that all parking spots will be available at all times of day, as opposed to being time-limited
- Total estimated repurposing of 50 parking spots, averages less than 2 spots per block. Total number may vary as design finalized