

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

Queens Community Board 2

May 7, 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

# **Corridor Context**

- Queens Blvd connects directly to Queens Plaza, the Queensboro Bridge, Thomson Ave, and Midtown Manhattan
- Congestion Pricing expected to start in June 2024
- Queensboro Bridge South Outer Roadway to be converted to pedestrian path in Summer 2024 and north outer roadway to become dedicated two-way bike lane
- These improvements are expected to reduce the number of vehicles driving into midtown Manhattan and increase the bike and pedestrian demand for crossing into Manhattan via the Queensboro Bridge



Congestion pricing cameras installed in Manhattan



Ed Koch Queensboro Bridge

## **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 surveyed 215 respondents on Queens Blvd about roadway safety perceptions and changes
- Most common traffic safety concerns were speeding vehicles and vehicles failing to yield
- Most desired improvements were Protected Bike Lanes and bus lanes
- Respondents identified removing curbside parking and moving lanes as acceptable tradeoffs for roadway improvements

#### \* Survey remains open and can be taken in the next few weeks



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**



nyc.gov/visionzero

### **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 ٠ parking lane narrows roadway, preventing overly fast turns onto Queens Blvd and increasing yielding
- Protected intersection design with ٠ pedestrian islands, quick kurb, and rubber speed bumps slow turns off of Queens Blvd, increasing yielding to pedestrians and cyclists



Proposed pedestrian islands and parking receiving lanes of Queens Blvd from 40' to 30' forcing turns to be slower

# **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!**







# **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
- Traffic analysis does not take into account any anticipated vehicle reductions due to congestion pricing



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