NORTHERN BLVD AND BROADWAY
PROTECTED BIKE LANE

Presented to Queens Community Board 2 Transportation Committee
February 2, 2021
Northern Blvd is an important corridor leading to the Queensboro Bridge for people in both motor vehicles and bikes.

Northern Blvd and Broadway have primarily commercial land uses, particularly automobile-oriented uses with off-street parking east of Steinway St.

Temporary bike lanes installed in September 2020.
Background

Green Wave: A Plan for Cycling in New York City

Analysis of fatalities key factors (2014-Present):
• 60% of fatalities happened at intersections; 23% involved a vehicle turn; 16% involved a driver’s failure to yield the right of way
• Nearly 90% of fatalities happened on streets without bike lanes

Citywide Protected Bicycle Lane (PBL) Network
• Build 30 miles of protected bicycle lane annually, guided by a PBL vision document.

Better Design:
• Implement new design standards based on national & international best practices to enhance safety at intersections.
• Continue piloting new designs with rigorous safety analysis

Education and Outreach:
• Launch next phase of Vision Zero public awareness campaign, educating drivers with a focus on cyclist safety — and expand the “Get There” bicycle encouragement/rules of the road campaign
• Educate all street users about safe truck operation on city streets
• Increase helmet giveaways and helmet use encouragement.
Existing Conditions Bicycling

• Temporary bike lanes installed in 2020
  o Northern Blvd: Curbside protected lane replaced rush hour lane or third moving lane
  o Broadway: Standard lane protected with delineators did not impact parking or moving lanes

• Consistent bike volumes
  o 674 bikes 12-hr weekend count
  o Weekday bike traffic to Queensboro Bridge

Oct 2020, Northern Blvd between 34th Ave and 49th St
Northern Blvd and Broadway Protected Bike Lanes

Project Area Safety

Northern Blvd and Broadway
41st Ave – 68th St
Crash History 2014-2018

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<th>Severe Injuries</th>
<th>Fatalities</th>
<th>KSI</th>
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<td>Pedestrian</td>
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<tr>
<td>Total</td>
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<td>31</td>
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- 15.0 Killed or Severely Injured (KSI) per mile puts the corridor in the top 10% of dangerous corridors in Queens
- Three fatalities in five years
Issues Speeding and Dangerous Driving

- Northern Blvd experiences high frequency of off-peak speeding
  - 60% of westbound between 46th St and 45th St at 10AM in April 2016
  - 57% of eastbound drivers between 40th Ave and 31st St at 10 AM in July 2019
- Between 2014 and 2018, NYC DOT completed the following safety improvements on Northern Blvd in Community Boards 1 and 2:
  - Constructed 4 pedestrian safety islands at 33rd St, 34th St, 39th Ave, 48th St
  - Constructed curb extensions at 48th St and 34th Ave
  - Banned a left turn at 39th Ave
  - Installed 10 second Leading Pedestrian Intervals (LPI) at all feasible intersections (typical LPI is 7 seconds)
  - Installed high-visibility crosswalks and refurbished markings between Queens Plaza and 68th St
Issues East-West Bicycle Connections

- Lack of direct bicycle connections from Central Queens residential areas to Western Queens and Manhattan job centers
- The 34th Ave Open Street COVID response revealed strong demand for opportunities for safe biking and walking
- 34th Ave Open Street is more useful if it is part of a safe street network
Proposed Design Goals

• Improve street safety for pedestrian and drivers
  o Reduce off-peak speeding to prevent serious crashes with injuries
  o Shorten pedestrian crossing distances to enhance safe neighborhood walking connections

• Create safe, comfortable bike route to Queensboro Bridge
  o Provide dedicated space for biking

• Maintain motor vehicle circulation
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

Data from 25 separate protected bicycle lane projects installed from 2007-2014 with 3 years of after data. Includes portions of 1 Ave, 2 Ave, 8 Ave, 9 Ave, Broadway, Columbus Ave, Hudson St, Lafayette St / 4 Ave, Sands St, Allen/Pike St, Kent Ave, Prospect Park West, Flushing Ave, Bruckner Blvd & Longfellow Ave, Imlay St / Conover St, Paerdegat Ave. Only sections of projects that included protected bike lanes were analyzed.

Source: NYPD AIS/TAMS Crash Database
Proposed Design Northern Blvd

- Temporary bike lanes effectively removed parking
- New design makes parking arrangement permanent
- NYC DOT will harden bike lane barriers at high conflict areas
Proposed Design Northern Blvd

Existing Temp Lanes

- Upgrade retains dedicated bike lane and delineators
- Adds green paint and intersection markings
Proposed Design Broadway

- Temporary bike lanes did not impact parking
- Parking lane keeps bike lane clear of parked vehicles
Proposed Design Broadway

- Upgrades temporary standard bike lane to protected lane
- No loss of traffic capacity
Turn Treatments **Offset Crossings**

- Offset crossings slow right-turning vehicles to mitigate conflict with bikes traveling in same direction
- Pedestrian island shortens crossing distance
- Daylighting the intersection ensures visibility between turning vehicles and people on bikes
Parking Impacts

- All parking spaces between 41st Ave and Broadway converted to protected bike lane in 2020
  - No additional spaces will be affected on Northern Blvd
  - East of Honeywell St off-street parking is more abundant
- Proposed Broadway bike lanes will convert 22 parking spaces
Next Steps

- Continue outreach for Northern Blvd and Broadway protected bike lanes
- Implementation of Northern Blvd and Broadway protected bike lanes this summer
- Ongoing outreach for 34th Avenue between Broadway and 69th Street
  - DOT currently conducting community outreach and developing a design for this stretch
Northern Blvd and Broadway Protected Bike Lanes

Summary  Project Benefits

- Connects Central Queens to Queensboro Bridge with high quality protected bike lanes
- Increases pedestrian safety by shortening crossing distances
- Discourages speeding by narrowing roadway
- Enhances safety and builds on NYC DOT’s ongoing efforts to improve safety on one of the Borough’s dangerous corridors
- Protects bicycle lane from double parking
- Maintains traffic capacity