• Buffered bike lanes installed on 34th Ave in 2008
• Shared lanes installed on 59th and 60th St in 2008
• Phase 3 Citi Bike expansion zone
• Residential and industrial land uses
Existing Conditions

• 2020 34th Ave Open Street
  o Created new pedestrian and bike priority space
  o Permanent changes planned for 2022
  o Reduced traffic volumes
  o “Green Wave” signal timing changes intended to reduce delays for people on bikes

• 2021 Northern Blvd/ Broadway Protected Lanes
  o Upgraded temporary bike lanes

• Very high bike volumes on 34th Ave Open Street
  o 1,382 bikes 12-hr weekday count
  o 1,358 bikes 12-hr weekend count

Sept 2021, 34th Ave between 73rd St and 74th St
Issues 34th Ave Industrial Corridor

• Trucks and loading vehicles can cause added risk for pedestrians and people riding bikes
• It is necessary to safely accommodate loading
• Standard bike lanes are vulnerable to blockage by double parked vehicles
• Wide two-way street with long pedestrian crossings
Issues East-West Bicycle Connections

• Lack of direct protected bicycle connections from Central Queens residential areas to Western Queens and Manhattan job centers

• The opening of the Northern Blvd and Broadway protected bike lanes in 2021 and the 34th Ave Open Streets created a nearly continuous corridor of high quality bicycle facilities

• 34th Ave between Broadway and 69th St represents the last link of standard bike lanes between Astoria/LIC and Jackson Heights/Corona
Project Area Safety

34th Avenue
Broadway – 69th St
Crash History 2015-2019

<table>
<thead>
<tr>
<th></th>
<th>Total Injuries</th>
<th>Severe Injuries</th>
<th>Fatalities</th>
<th>KSI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pedestrian</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Bicyclists</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Motor Vehicle Occupant</td>
<td>34</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>51</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

- 5.9 Killed or Severely Injured (KSI) per mile puts the corridor in the top 33% of dangerous corridors in Queens
SAFETY – 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

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
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.
Proposed Design Goals

• Improve street safety for pedestrians and drivers
  o Reduce 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 and connections to 34th Ave, Northern Blvd, 39th Ave Bike Boulevard
  o Provide protected space for people biking
  o Add new dedicated spaces for biking

• Maintain motor vehicle circulation
Proposed Design 34th Avenue, 60th Street to 69th Street

- Pedestrian islands shorten crossing distances
- ~15 parking spaces converted at pedestrian islands
Proposed Design 34th Avenue, 60th Street to 69th Street

- Redesign adds green paint, floating parking lane, and pedestrian islands
- Maintains 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.

---

**34th Avenue Protected Bike Lane**

**4th Avenue at 7th Street, Brooklyn**
34th Avenue Protected Bike Lane

Connections: 59th and 60th Streets

- Existing shared lanes meet standards to be upgraded to conventional bike lanes
- Connects 39th Ave Bike Boulevard to 34th Ave
Connections: 59th and 60th Streets

- Maintains traffic capacity
- No impact to parking
Summary  Project Benefits

Protected bike lanes benefit all street users:

Crashes with Injuries  Motor Vehicle Occupant Injuries  Pedestrian Injuries
Down 15%  Down 15%  Down 21%

- Connects Central Queens to Queensboro Bridge with high quality protected bike lanes
- Increases pedestrian safety by shortening crossing distances
- Discourages speeding by narrowing roadway
- Protects bicycle lane from double parking
- Upgrades shared lanes on 59th St and 60th St
- Maintains traffic capacity
- ~15 parking spaces converted to pedestrian islands and buffers