Background

- Request from Council Member Van Bramer for safety improvements at the intersection of Northern and Broadway
- Additional request from Council Member Van Bramer for improvements at 41st St/36th Ave/Northern Blvd
- Request from community member for improvements at the intersection of 37th St/37th Ave/Northern Blvd
Safety Data

- Northern Blvd is a Vision Zero Priority Corridor
- 22 KSI (Killed or Severely Injured) in the project area

### Northern Blvd - Honeywell St to Broadway, QN

#### Injury Summary, 2010-2014 (5 Years)

<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>43</td>
<td>9</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Bicyclist</td>
<td>21</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Motor Vehicle Occupant</td>
<td>265</td>
<td>9</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>329</td>
<td>21</td>
<td>1</td>
<td>22</td>
</tr>
</tbody>
</table>

**Fatalities, 01/01/2010-12/31/2016:** 1

Source: Fatalities: NYC DOT
Injuries: NYS DOT
KSI: Persons Killed or Severely Injured

Map with points marked:
- Pedestrian
- Vehicular
- Bicyclist

Fatality location marked at Honeywell St.
Primary Corridor Issue

Conflicts between turning vehicles and pedestrians and long crossings
Proposal

- Construct 15 pedestrian safety islands
Proposal

- Improve operations at 8 locations

- Investigating possibility for signal changes along the corridor:
  - LPI
  - All Pedestrian Phase
  - Split phase left turn

- Investigating sidewalk treatment where driveways are signalized
Existing Conditions – Honeywell St

- Low volume left turn
- Heavy left turn coming off of bridge
Proposed Conditions – Honeywell St

Vehicles affected by ban:
- 35 cars in AM peak
- 15 cars in PM peak

Alternate route using 31st St

Close bay, ban turn and construct island

Construct island in channelization
Existing Conditions – 37th St

- Unclear merge/poor visibility
- No crosswalk to triangle
Proposed Conditions – 37th St

- Construct island in channelization
- Enlarge triangle and add crosswalks
- Make 37th St leg one-way southbound
- Close left turn bay, ban turn, and construct islands
- Move stop control to 37th Ave

Vehicles affected by ban:
- 40 cars in AM peak
- 55 cars in PM peak

Alternate route using 35th St
Existing Conditions – Steinway St

Skewed intersection, long crossing
Proposed Conditions – Steinway St

Vehicles affected by ban:
15 cars in AM peak
20 cars in PM peak
Alternate route using 36th Ave

Construct curb extension, shortening crosswalks, ban right turn
Alternate Routes – Steinway St

Include signage directing Steinway bound vehicles to use 36th Ave

Banned movements under proposal
Alternate Route

Vehicles affected by ban:
15 cars in AM peak
20 cars in PM peak
Existing Conditions – 41st St

Sharp left turn into crosswalk

Low volume left turn with redundant bay
Proposed Conditions – 41st St

Vehicles affected by ban:
- 5 cars in AM peak
- 0 cars in PM peak
Alternate left turn at 41st St

Close bay and construct island

Investigating signalized driveway sidewalk treatment
Existing Conditions – 48th St

- No continuation of curb along Northern Blvd
- No crossing on west side of intersection
- Northbound movement conflicts with southbound movement
Proposed Conditions – 48th St

- Construct islands in channelization*
- Reverse 48th St to one-way northbound from Northern to Broadway
- Add curb extension to shorten crosswalks
- Add two new crosswalks

*Pending completion of transit work
Reversal Proposal

Existing

Proposed Street Direction

Existing Street Direction

Bus network changes under analysis by MTA
Existing Conditions – 50th St

No crossing on east side of intersection
Proposed Conditions – 50th St

- Reverse 49th St to one-way southbound from Broadway to Northern, creating pair with 48th St
- Add crosswalk on east side
- Bay not needed with new street direction, close bay and build island
- Build island in existing channelization
Existing Conditions – Woodside Ave

Substandard island and triangle

Wide radius corner lengthens crosswalk and encourages high speed turns
Proposed Conditions – Woodside Ave

- Move stop bar back and signalize slip movement
- Expand triangle
- Expand island
- Expand corner
Existing Conditions – Broadway

- Long crossing
- All pedestrian phase unclear, predominant pedestrian movement
- Low volume right turn
- Excess lane with merge
Proposed Conditions – Broadway

Mark pedestrian phase crossing

Vehicles affected by ban:
- 0 cars in AM peak
- 5 cars in PM peak
Alternate right turn at 55th St

Ban turn, mark as wide parking lane

Construct island

Mark as wide parking lane
Proposal Summary

• Construct 15 Pedestrian Safety Islands
• Ban left turn at 39th Ave, 37th St, 36th Ave,
• Enlarge triangle at 37th St, converting one block of 37th St to one way SB from 37th Ave to Northern Blvd
• Construct curb extension, banning westbound right turn at Steinway St
• Reverse 48th St from southbound to northbound from Northern to Broadway
• Reverse 49th St from northbound to southbound from Northern to Broadway
• Add curb extension at 48th St
• Expand triangles and corner at Newtown/Woodside Ave
• Ban right turn for NB Broadway to Northern Blvd