AVENUES V, W, X

School Safety Improvements

Presentation for CB 15 | Spring 2019
Background

**Vision Zero**

- Multi-agency effort to reduce traffic fatalities in NYC
- Borough Action Plans released in 2019
- Priority Intersections, Corridors, and Areas identified for each borough

**Avenues V, W, X**

- Nostrand Avenue is a Vision Zero Priority
- Vision Zero Priority Bike Area

Project area includes a Vision Zero Area & Priority Corridor
Background

Project Location
Background

Safety Data

Safety Data, 2012-2016

- 487 total injuries
- 48 severe injuries
- 42% of those severely injured were pedestrians
- 4 total fatalities, of which 3 were pedestrians

<table>
<thead>
<tr>
<th>Injury Summary, 2012-2016 (5 Years)</th>
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<tbody>
<tr>
<td>Total Injuries</td>
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<tr>
<td>----------------</td>
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<tr>
<td>Pedestrian</td>
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<tr>
<td>Bicyclist</td>
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<td>Motor Vehicle Occupant</td>
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<tr>
<td>Total</td>
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Fatalities, 01/01/2012-12/31/2019: 4

Source: Fatalities: NYCDOT
Injuries: NYSDOT
KSI: Persons Killed or Severely Injured
Avenues V, W, X

Presentation Overview
Avenue V (Nostrand Ave to Bragg St)

Overview
Avenue V (Nostrand Ave to Bragg St)

Existing: Wide Street with Few Pedestrian Crossings

- Long distances between crosswalks encourage unprotected mid-block crossings
- Wide roadway with low traffic volumes and speeding
- Shared through/left turn lane causes unpredictable vehicular movements
Avenue V (Nostrand Ave to Bragg St)

Proposal: 4 to 3 Lane Conversion

Left turn bays, painted median and parking lane stripes to separate and organize traffic movements.
Avenue V (Nostrand Ave to Bragg St)
Proposal Detail: 4 to 3 Lane Conversion

Left turn bays improve traffic flow and improve safety
Pedestrian refuge islands create safer crossings and vehicle turns

EXISTING
Ave V at Batchelder St, looking east

PROPOSED
Example: W 6th St, Brooklyn
Avenue V (Nostrand Ave to Bragg St)
Proposal Detail: 4 to 3 Lane Traffic Calming

- Consistent moving lane reduces speeding, reduces conflict
- Removing one lane in each direction discourages speeding
- Left turn bays improve traffic flow and create safer left turns
Avenue V (Nostrand Ave to Bragg St)
Proposal Detail: Benefits of 4 to 3 Lane Conversion

-24% Change in Crashes with Injuries
West 6th St, Brooklyn

-15% Change in Crashes with Injuries
Empire Blvd, Brooklyn

-28% Change in Crashes with Injuries
Allerton Ave, Bronx

-20% Change in Crashes with Injuries
Southern Blvd, Bronx
Avenue V (Nostrand Ave to Bragg St)
Proposal Detail: Traffic Volumes

**Congested Lane**
- 700 vehicles per hour or above

**Existing (2 lanes)**
- Maximum* 180 vehicles per lane

**Proposal (1 lane + left turn bays)**
- Maximum 360 vehicles per lane
  *Maximum Recorded Weekday Peak Volume (AM & PM) at Ave V & Bragg St

**Left Turn Bays**
- Left turn bays in 6 locations will further improve capacity
Avenue V (Nostrand Ave to Bragg St)

Proposal: Shorter, Safer Pedestrian Crossings

New concrete pedestrian islands & painted curb extensions improve pedestrian visibility and reduce pedestrian crossing distances.
Avenue W (Nostrand Ave to Bragg St)

Overview
Avenue W (Nostrand Ave to Bragg St)

Existing: Minimal Crossing and Poor Visibility

- Narrow median does not provide refuge for pedestrians in the intersection
- Wide, unmarked street encourages speeding and unpredictable vehicular movements
- Median cut-through is not ADA accessible
- Low visibility at crosswalk
- Long distances between crosswalks encourage unprotected mid-block crossings
Proposal: Shorter, Safer Pedestrian Crossings

Avenue W (Nostrand Ave to Bragg St)

- New bike lanes in both directions
- Painted markings narrow travel lanes and calm traffic
- New concrete median tip extensions improve pedestrian visibility and shorten crossings
- Painted curb extensions improve pedestrian visibility
Avenue W (Nostrand Ave to Bragg St)

Proposal: New Unprotected Mid-Block Crossings and Improved Visibility

New mid-block crossings with accessible cut-throughs and median extensions provide safe crossings and improve pedestrian visibility.

Example: Gold St, Brooklyn
Avenue W (Nostrand Ave to Bragg St)
Proposal Detail: Bike Lanes

Painted travel lanes separate and organize traffic movements

New standard bike lanes provide dedicated space for cyclists

Existing: Ave W at Batchelder St

Example: Bike Lane in Ridgewood, QN
Avenue X (Nostrand Ave to Bragg St)

Overview
Avenue X (Nostrand Ave to Bragg St)

**Existing: Wide Street with Few Pedestrian Crossings**

- Wide roadway with low traffic volumes and speeding
- No dedicated left turn bay
- Long distances between crosswalks encourage unprotected mid-block crossings

Wide roadway with low traffic volumes and speeding
Proposal: New Pedestrian Crossings and 4 to 3 Lane Conversion

Avenue X (Nostrand Ave to Bragg St)

- New uncontrolled crossing and concrete pedestrian islands improve pedestrian visibility and reduce pedestrian crossing distances
- Painted curb extensions improve pedestrian visibility
- New bike lanes in both directions
- Left turn bays, painted median and parking lane stripes separate and organize traffic movements
Avenue X (Nostrand Ave to Bragg St)
Proposal Detail: 4 to 3 Lane Conversion

EXISTING

Existing: Ave X at Brown St

New standard bike lanes provide dedicated space for cyclists

PROPOSED

Example: Morningside Ave, Manhattan

Flush painted median and left turn bays separate and organize traffic movements
Appendix
Proposal Detail: Traffic Volumes

Congested Lane
• 700 vehicles per hour or above

Existing (2 lanes)
• Maximum* 129 vehicles per lane

Proposal (1 lane + left turn bays)
• Maximum 258 vehicles per lane
  *Maximum Recorded Weekday Peak Volume (AM & PM) at Ave V & Batchelder St

Left Turn Bays
• Left turn bays in 5 locations will further improve capacity
Avenue V (Bedford Ave to Nostrand Ave)

Overview
Avenue V (Bedford Ave to Nostrand Ave)

Existing: Wide, One-way Street

Inconsistent circulation pattern; most of Avenue V is two way.
Avenue V (Bedford Ave to Nostrand Ave)

Proposal: Improve Roadway Network and Reduce Speeding

Two-way conversion creates better connections with surrounding streets

Converting traffic to two-way will normalize the street and discourage speeding
Avenue V (E 22nd St to Bedford Ave)

Overview
Avenue V (E 22nd to Bedford Ave)

Existing: Multi-leg Intersection with Wide Angle Turns

- Wide, multi-leg intersection
- Grand Car Wash
- PS 206
- Drivers block school crosswalk while accessing unofficial car wash driveway
- Long crossing distances at E 23rd and Ave V
- Wide, one-way street encourages speeding
Avenue V (E 22\textsuperscript{nd} St to Bedford Ave)

Existing: Car Wash Entry is Dangerous for Pedestrians

- Complicated, multi-leg intersection
- Long pedestrian crossing distances
- Vehicle behavior at Grand Car Wash disrupts pedestrian movements and endangers school-aged pedestrians
Avenue V (E 22nd St to Bedford Ave)

Existing: Car Wash Entry is Dangerous for Pedestrians

Car wash entry directly conflicts with crosswalk.
Pedestrians are unprotected in crosswalk.
Car wash queue obstructs sidewalk and creates dangerous conditions for school-aged pedestrians.
Turning vehicles block pedestrian movements.
Pedestrians are unprotected in crosswalk.
Avenue V (E 22\textsuperscript{nd} St to Bedford Ave)

Proposal: Safer, Shorter Pedestrian Crossings

Prevent vehicles from using sidewalk as an entrance to Grand Car Wash

Painted curb extensions shorten pedestrian crossings and improve pedestrian visibility

Marked angle parking, adding ten parking spots
Avenue W & X (E 16th St to Nostrand Ave & Bragg St to Gerritsen Ave)

Overview
Avenue W & X (E 16th St to Nostrand Ave & Bragg St to Gerritsen Ave)

**Existing: Wide Street**

- Wide street encourages speeding and unpredictable vehicular movements
- No designated lane for cyclists
Proposal Detail: Organize Wide Roadway

Existing: Ave W

Narrower painted travel lanes discourage speeding and reduce unpredictable vehicular movements

Example: Vanderbilt Ave, BK

New standard bike lanes provide dedicated space for cyclists
Avenue W & X (E 16th St to Nostrand Ave & Bragg St to Gerritsen Ave)
Proposal Detail: Connect Bike Lanes

- Conventional Bicycle Lane
- Shared Lane
- Protected Bicycle Lane
- Signed Route
Batchelder St & Bragg St

Overview
Batchelder St & Bragg St

Existing: Inefficient Use of Unmarked Parking

Existing: Parking use on Bragg St between Aves V and X

Current parking behavior varies greatly, creating inefficient use of space
Batchelder St & Bragg St

Proposal: Marked Angle Parking

Narrower painted travel lanes discourage speeding and reduce unpredictable vehicular movements.

Marked angle parking will help make street parking more efficient.

Proposed: Batchelder St and Bragg St between Ave V and Ave X.
Avenues V, W, X
Proposal: Parking Summary

Avenue V:
+10 spots due to new angled parking

Avenue W:
-20 spots for new crosswalks

Batchelder St:
-2 spots for new sidewalk extensions

Ave X:
-3 spots for new crosswalks

Bragg St:
+19 spots due to new marked angle parking (replacing 90° parking)

Knapp St:
-1 spot for improved sight lines

Total Parking Impact: +1 spots
THANK YOU!