Grand Concourse, 138th St to 158th St
Corridor Safety Improvements
Existing Issues: Injuries

**Total Injuries 2010-2014**

Study found considerable speeding on the corridor:
- Northbound: 79 - 82%
- Southbound: 53 - 72%

149th St is a Vision Zero priority intersection
13 Pedestrian Injuries (2 Fatalities) (2010-2014)

<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>24</td>
<td>3</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Bicyclist</td>
<td>10</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Motor Vehicle Occupant</td>
<td>182</td>
<td>7</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>216</td>
<td>11</td>
<td>2</td>
<td>13</td>
</tr>
</tbody>
</table>
Existing Conditions

- **Signal pole in middle of pedestrian crossing**
- **Cut-back median allows for fast, uncontrolled turns that conflict with pedestrians**
- **Inadequate refuge and not ADA accessible**
- **Long crossing distances**
  - Street width varies from 80’ to 120’
Existing Conditions

No pedestrian refuge

149th St
Proposed Plans: Typical

- Reduce to 5 lanes (2 moving lanes in each direction + 1 left turning lane)
- Install left turn bays at intersections
- Upgrade crosswalks to high visibility
- Stripe parking lanes and bus stops
- Install concrete or painted median tip extensions at intersections

Pennsylvania Avenue, Brooklyn
140th St – 151st St, 156th St - 158th St: Typical

Existing

Proposed

Construct 10 concrete median tip extensions

Install 2 painted median tip extensions
Implement safety improvements at intersections with complicated geometry

Concrete median tip extensions and pedestrian islands

Concrete island extensions

Painted pedestrian spaces

Wide parking lanes
153rd St: Existing Issues

Long crossing distances

Excess road capacity

4 northbound moving lanes, 4-5 southbound moving lanes
153rd St: Existing Conditions

- Narrow median on north side does not provide sufficient refuge for pedestrians.
- Slip lane with yield control.
- Long, three part crossing.
- Bus stops in crosswalks (Bx1, Bx2).

Franz Sigel Park
GRAND CONCOURSE
E 153 ST
Cardinal Hayes High School
153rd St: Proposed Plans

- Shift southbound bus stop out of the crosswalk area
- Concrete median tip extensions with trees
- Expanded sidewalk with paint
- Expanded concrete triangle and lengthen bus stop
- Wide parking lanes
- Expanded concrete triangle with paint
- Upgrade slip lane to Stop control
- Add parking along south triangle
- No loss to parking
- Close slip lane outside Cardinal Hayes High School and create pedestrian space
Existing Issues: 156th St

Excess road capacity

4 northbound thru lanes + 1 northbound turn bay

Long crossing distances
Existing Issues: 156th St

Bx1/2 buses have difficulty pulling all the way into stop
Existing Conditions: 156th St

- Excessively wide roadway (3-5 lanes in each direction)
- Bus cannot pull all the way to sidewalk
- Long crossing distances with insufficient refuge
- Shared thru and left turn lane blocks thru traffic
Proposed Plans: 156th St

- Exclusive left turn lane
- Concrete median tip extensions with trees
- Wide parking lanes
- Concrete curb extension
- Pedestrian island with trees
Project Benefits

Simpler, safer intersections

Reduced speeding and weaving

Safer, shorter pedestrian crossings

Better refuge for pedestrians

Improved pedestrian visibility

Clarified vehicular movements

Parking maintained

Traffic flow maintained

Similar treatments have improved safety

Adam Clayton Powell Jr Blvd, 133 St – 153 St, Manhattan
(3 year averages)
• 26% reduction in total injuries
• 37% reduction in pedestrian injuries

4th Avenue, 15 St – 65 St, Brooklyn
(2 year averages)
• 17% reduction in total injuries
• 34% reduction in pedestrian injuries

Pennsylvania Ave, Brooklyn
(2 year averages)
• 12% reduction in total injuries
• 29% reduction in pedestrian injuries
Proposal Summary

1. Reduce the number of moving lanes from 6 to 5, including a left turn lanes where needed

2. Install 14 concrete and 2 painted median tip extensions at intersections along the corridor

3. Expand concrete triangles in paint/gravel (north side) and concrete (south side) and close south slip lane with paint/gravel at 153rd St outside Cardinal Hayes High School. Extend west sidewalk by Franz Sigel Park in paint/gravel.

4. Install 1 concrete island and 1 concrete curb extension at 156th St

5. Install parking lanes and channelization to clarify traffic movements

6. Upgrade all crosswalks to high visibility crosswalks

7. Update markings on the corridor

8. Install pedestrian ramps along the corridor