Broadway – Amsterdam – West 71st Street
Pedestrian Safety Intersection Redesign

Commissioner Janette Sadik-Khan  New York City Department of Transportation
Office Research, Implementation and Safety
Project Background

- Elected Officials interest in improving intersection
- Upper West Side Senior Pedestrian focus area
- Upper West Side Transportation Study
- NYPD High Crash Location
- CB 7 requested pedestrian safety improvements
- Community group support
Existing Conditions

- Irregular, multi-legged intersection
- Wide streets with long crossing distances
- High pedestrian volumes due to heavy transit and retail uses
- High percentile of crashes for all modes

Ranked in 94th Percentile for pedestrian crashes

### On Street from Street to Street

2004-2008 (Five Years)

<table>
<thead>
<tr>
<th></th>
<th>Total Injuries</th>
<th>Avg Inj/Yr</th>
<th>Severity Percentile of Borough Intersections*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pedestrian</td>
<td>15</td>
<td>3</td>
<td>94%</td>
</tr>
<tr>
<td>Bicyclist</td>
<td>4</td>
<td>0.8</td>
<td>88%</td>
</tr>
<tr>
<td>Motor Vehicle Occupant</td>
<td>18</td>
<td>3.6</td>
<td>80%</td>
</tr>
<tr>
<td>Total Injuries</td>
<td>37</td>
<td>7.4</td>
<td>90%</td>
</tr>
</tbody>
</table>

Source Data: NYS Dept. of Motor Vehicles (Injuries and Severity)
NYCDOT (Fatalities)

* Percentile of Borough Intersections: Percentage of intersections in the same borough with fewer crashes per year, after accounting for severity of crashes.
Existing Conditions

- Long crossing distances and not enough time to cross the street
- Multiple pedestrian/vehicle conflict points
- Heavy vehicular volumes with numerous trucks and buses

West 71st St. and Amsterdam, facing north

West 71st St at Broadway and Amsterdam, facing south

SB Broadway and NB Broadway/Amsterdam, facing north
Benefits of Proposal

• Shorter, safer pedestrian crossings
• Better street alignment
• Additional pedestrian space
• Additional crossing opportunities
• More time to cross the street
• Reduces pedestrian/vehicular conflicts
• Slows turning vehicles
Proposal

- Extend subway island to better align and shorten crosswalks and provide more pedestrian space
- Install curb extensions to shorten crossing distances
- Remove a moving lane on SB Broadway and NB Amsterdam
- Provide SB left turn bay
- Provide additional pedestrian crosswalks
• The average delay for SB Broadway increases by 19 seconds

• The average delay for NB Broadway increases by 8 seconds

• The average delay for NB Amsterdam and WB West 71st Street remain relatively unchanged

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<table>
<thead>
<tr>
<th>Intersection Approach</th>
<th>Mvmt</th>
<th>Existing Conditions</th>
<th>Proposed Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>AM Peak (8:00-9:00 am)</td>
<td>MD Peak (1:00-2:00 pm)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>v/c Ratio</td>
<td>Avg Delay</td>
</tr>
<tr>
<td>WB - West 71st Street</td>
<td>TR</td>
<td>0.61</td>
<td>35.3</td>
</tr>
<tr>
<td>NB - Amsterdam Avenue</td>
<td>T</td>
<td>0.61</td>
<td>34.0</td>
</tr>
<tr>
<td>NB - Broadway</td>
<td>T</td>
<td>0.63</td>
<td>28.8</td>
</tr>
<tr>
<td>SB - Broadway</td>
<td>TR</td>
<td>0.60</td>
<td>27.7</td>
</tr>
<tr>
<td>Overall Intersection</td>
<td></td>
<td>30.6</td>
<td>32.9</td>
</tr>
</tbody>
</table>

Notes:
1 Intersection approaches: EB=Eastbound, WB=Westbound, NB=Northbound, SB=Southbound
2 Intersection movement: L=left turn, T=through, R=right turn, LT=left-through, TR=through-right
Next Steps

• Complete Survey: Fall 2010
• Finalize design: Fall 2010
• Implementation
  • Operational: Anticipated Spring 2011
  • Capital construction: Anticipated late 2011
Questions?

Thank You

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