Project Background

- Extend design on Columbus Avenue
  - W 110 St to W 96 St: Protected Path
  - W 77 St to W 69\textsuperscript{th} St: Protected Path
  - W 69\textsuperscript{th} St to W 63\textsuperscript{rd} St: Enhanced Shared Lane
  - W 63\textsuperscript{rd} St to W 59\textsuperscript{th} St: Protected Path

- Provide connections to existing bicycle facilities
  - 106\textsuperscript{th} St
  - 9\textsuperscript{th} Avenue
  - Columbus Avenue

- Tailor design to improve traffic flow in congested areas
- Provide loading zones for businesses with need
Business Outreach

• Visited all surrounding businesses to review their need for potential loading regulations

• Spoke with 189 businesses

• 5 New loading zones/extension recommended
  - 107-108: WS Movers
  - 106-105: Adel Wine, 99 Cent Store
  - 98-97: Duane Reade
  - 76-75: Duane Reade
  - 74-73: Pioneer Supermarket
Rush Hour Regulation Changes

- Low vehicle volumes from 110th to 96th St
  - *868 cars during peak hour (8:00-9:00am)
- Removal of rush hour regulations, 7-10am M-F
- Return of 105 car parking spaces (110th to 96th)

* Count taken between W 107th St and W 106th St and is the average of three consecutive weekdays (Monday-Thursday) taken the week of 3/26/12
### Parking/Loading Changes

<table>
<thead>
<tr>
<th>Parking Regulation Changes</th>
<th>Parking Space Equivalents (Approx.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>110&lt;sup&gt;th&lt;/sup&gt; to 65&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>Spaces Converted to Daytime Loading Zones</td>
<td>19</td>
</tr>
<tr>
<td>Spaces Gained from Rush Hour Lane Removal</td>
<td>105</td>
</tr>
</tbody>
</table>

- Loading zones are available for overnight and weekend community parking

<table>
<thead>
<tr>
<th>East Side Repurposed Parking Space (west side not affected by islands &amp; turn lanes)</th>
<th>Parking Space Equivalents (Approx.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>110&lt;sup&gt;th&lt;/sup&gt; to 65&lt;sup&gt;th&lt;/sup&gt;</td>
</tr>
<tr>
<td>Turn Lanes/ Mixing Zones</td>
<td>23</td>
</tr>
<tr>
<td>Pedestrian Islands</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total Spaces Repurposed</strong></td>
<td><strong>32</strong></td>
</tr>
<tr>
<td><strong>Total Existing Parking Spaces</strong></td>
<td><strong>149</strong></td>
</tr>
<tr>
<td><strong>Percent of Spaces Repurposed</strong></td>
<td><strong>21%</strong></td>
</tr>
</tbody>
</table>

- W 96<sup>th</sup> St to W 77<sup>th</sup> St:
  - (6) parking spots gained with new mixing zone length

Note: Upper Section, 17 islands, 4 mixing zones, 1 turn lane; Lower 12 islands, 3 mixing zone, 1 turn lane
• Turning Conflict is Real & Potentially Deadly
  • Citywide, left turning pedestrian killed/severely injured crashes outnumber right turning crashes by 3 to 1
Protected Bicycle Path Mixing Zone

• Mixing Zone Provides Space to Negotiate Conflict
  • Informs cyclist that vehicle is turning, no guesswork
  • Removes vehicle from traffic stream/eliminates “back pressure”
  • Gentle approach angle, vehicle gradually approaches cyclist, no abrupt “hook” turns

• Mixing Zone Provides Visibility
  • Eliminates visual obstruction of parked cars
  • Angle improves drivers’ peripheral vision
  • Cyclist & Motorist can see each other and avoid crash
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Thank You