Broadway and Dyckman Street/Riverside Drive
Safety and Mobility Improvements

Commissioner Janette Sadik-Khan  New York City Department of Transportation

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Existing Conditions

• Queue Spill Back and Turning Conflicts

Looking East at intersection

Looking North at intersection
Existing Conditions

- Eastbound Riverside Dr. Queues and Turn Conflicts
Existing Conditions

• Conflicts Between Northbound Left Turns/Southbound Right Turns and Pedestrians

Looking South at intersection

108'

Looking North at intersection

108'

75°
### Three-year Crash Data at Dyckman St and Riverside Dr/Broadway

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Injuries</strong></td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>18</td>
</tr>
<tr>
<td><strong>Pedestrian</strong></td>
<td>3</td>
<td>0</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td><strong>Bicyclist</strong></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td><strong>Motor Vehicle</strong></td>
<td>3</td>
<td>5</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total Crashes</strong></td>
<td>41</td>
<td>43</td>
<td>44</td>
<td>128</td>
</tr>
</tbody>
</table>

Data source: NYPD
Accident Pattern

# = No. of Crashes

* Predominately turning conflicts
Simulation Example (1)
Northbound Left Turn conflict with an Pedestrian
Simulation Example (2)
Pedestrians waiting for a gap because of left turns
Proposal

- Prohibit left turns
- Provide conflict-free crossings for pedestrians at West Crosswalk (32 seconds) and South Crosswalk (additional 26 seconds)
- Provide additional green time for Riverside Dr. and Broadway movements
- Shorten south and west crosswalks distances by 18 feet and 12 feet, respectively.
- Improve safety and mobility of all street users (pedestrians, cyclists and motorists)
Proposed Short-Term Improvements

1. New conflict-free crossing
2. Improved traffic flow and reduction in congestion

Benefit

Northbound left-turn prohibition
Projected Diverted Traffic
Northbound – MD Peak Hour
Potential Accident Reduction - Northbound Left turn Prohibition
Proposed Short-Term Improvements

1. Fewer pedestrian-vehicle conflicts
2. Improved traffic flow and reduction in congestion
Projected Diverted Traffic
Southbound – AM Peak Hour

No Left Turns at Dyckman St
Use Alternate Route
Potential Accident Reduction
- Southbound Left Turn Prohibition
Proposed Short-Term Improvements

1. New **conflict-free** & less conflict crossings
2. Improved traffic flow and reduction in congestion
3. Additional green time for pedestrians & traffic

North & southbound left-turn prohibitions
Projected Diverted Traffic
- Peak Hour Volumes

No Left Turns at Dyckman St
Use Alternate Route
No Left Turns at Dyckman St
Use Alternate Route
Potential Accident Reduction
- North/Southbound Left turn Prohibitions
Proposed Short-Term Improvements

1. New conflict-free crossing
2. Improved traffic flow and reduction in congestion
Projected Diverted Traffic
Northbound – PM Peak Hour

No Left Turns At Broadway
Use Alternate Route
Potential Accident Reduction
- Westbound Left turn Prohibition
Proposed Geometric Changes
Crosswalk Length Changes

Existing Condition

Proposed Condition

RIVERSIDE DR.

DYCKMAN ST.

BROADWAY

Existing Condition
Proposed Condition
Project Benefits

- Two new conflict-free crossings with reduced crossing distance
- Additional green time for pedestrians and traffic
- Improved safety and mobility for all street users (pedestrians, cyclists, and motorists)
Thank You