Outline

• Background
• Design Discussion
• Making it Work
• Summary
• Next Steps
• Logical northbound pairing for Columbus Ave
• CB 7 and electeds requested that DOT study Amsterdam
• Recent Citi Bike expansion uptown to W 86th St
• Over 19 people killed or severely injured per mile (including two fatalities)
• High traffic volumes, bus route, local truck route, active curbside loading
DOT Street Ambassadors surveyed 439 people on the street and visited 227 merchants along the corridor.

Ambassadors were on Amsterdam Ave November 2\textsuperscript{nd}-7\textsuperscript{th}, November 28\textsuperscript{th}, and December 16, 2015.
Of the 227 merchants that DOT visited, 165 took the survey:

- **52%** of merchants reported that delivery vehicles typically double-parked in front of their businesses.
- **33%** of merchants reported that customer parking was a concern for their businesses.
- **61%** of merchants that deliver use a bike to do so, another **19%** deliver on foot.
Of the **439** people that DOT surveyed:

- **2%** of people used a personal vehicle to get to Amsterdam Ave
- **93%** of people walked or took transit to get to Amsterdam Ave
- **86%** of people said that this was the mode of transportation that they typically used to make this trip
Design

Existing Issues

59% of vehicles are speeding at off-peak times

Long crossing distances

High peak vehicle volumes

Current design encourages bad driver behavior

Not designed to a neighborhood scale

Source: Radar speed study taken on October 6, 2015 btw. W 81th St and W 82th St on Amsterdam Avenue
Design Proposal

Existing

- West Sidewalk
  - 10’ Parking Lane
  - 10’ Travel Lane
  - 10’ Travel Lane
  - 10’ Travel Lane
  - 10’ Parking Lane

- East Sidewalk

Proposed

- West Sidewalk
  - 6’ Parking
  - 9’ Island / Parking Lane
  - 10’ Travel Lane
  - 10’ Travel Lane
  - 10’ Paid Commercial / Parking Lane

- East Sidewalk

Curbside parking protected lane
Pedestrian safety islands
Lane reduction with turn lanes
Updated curb regulations
Design Proposal

- Off-peak traffic calming
- Bicycle lane protected from traffic
- New trees
- Reduced crossing distances
- Neighborhood scale design

Columbus Avenue at W 107th St
In general protected bike lanes in Manhattan improve safety for all users:

- Total injuries have dropped by 20%
- Crashes with injuries have been reduced by 17%
- Pedestrian injuries are down by 22%
- Cyclist injuries show a minor improvement even as bicycle volumes have dramatically increased

27% fewer injuries overall on Columbus Ave between W 96th St and W 77th St

Protected bicycle lane projects with 3 years of after data include the following: 9th Ave (16th-31st), 8th Ave (Bank-23rd, 23rd-34th), Broadway (59th-47th, 33rd-26th, 23rd-18th), 1st Avenue (Houston to 34th), 2nd Ave (Houston-34th), Columbus Ave (96th-77th) Note: Only sections of projects that included protected bicycle lanes were analyzed

Source: NYPD AIS/TAMS Crash Database
Making it Work
Parking Consideration

25% of the parking space on the corridor will be repurposed for left turn treatments and pedestrian safety islands.

Convert specific blocks to daytime (7am-7pm) commercial loading zones on east and west sides of the street.

Columbus Avenue at W 106th St
Indicates a combination of open metered parking and metered commercial
Indicates metered commercial 7am-7pm Monday to Friday

Note 1: Metered parking to remain unless otherwise indicated.
Note 2: Specifics of regulations north of W 106th St pending further consultation with the Columbus Amsterdam BID
Making it Work

Beacon Theater

- Trucks remain curbside during load-ins and load-outs.
- Use temporary barriers to create a protected lane on the east side of truck activity.
- Maintain visibility of cyclists to left turning vehicles.
Ban the left turn from Amsterdam Ave to W 91st St for vehicles

Maintain the existing No Parking regulation in the floating parking
Making it Work

Expected Outcome

<table>
<thead>
<tr>
<th>Cross Street</th>
<th>Amsterdam 6-7 PM Peak Volumes (veh/hr)</th>
<th>Delay (s)</th>
<th>Volume-to-Capacity Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>W 96th</td>
<td>1,687</td>
<td>12.8</td>
<td>0.91</td>
</tr>
<tr>
<td>W 86th</td>
<td>1,704</td>
<td>6.5</td>
<td>0.81</td>
</tr>
<tr>
<td>W 82nd</td>
<td>1,545</td>
<td>3.0</td>
<td>0.66</td>
</tr>
<tr>
<td>W 79th</td>
<td>1,330</td>
<td>40.9</td>
<td>0.85</td>
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<tr>
<td>W 77th</td>
<td>1,377</td>
<td>4.8</td>
<td>0.62</td>
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</tbody>
</table>

* Benefit from conversion from LPI to Split LPI

Proposed Condition v/c Ratios

- W 96: v/c - 0.78
- W 86: v/c - 0.91
- W 82: v/c - 0.83
- W 79: v/c - 0.72
- W 77: v/c - 0.69

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<td>35.5</td>
<td>0.72</td>
</tr>
<tr>
<td>W 77th</td>
<td>1,363</td>
<td>4.5</td>
<td>0.69</td>
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Making it Work
Overall

**Existing**

- West Sidewalk
- 10’ Parking Lane
- 10’ Travel Lane
- 10’ Travel Lane
- 10’ Travel Lane
- 10’ Parking Lane
- East Sidewalk

**Proposed**

- West Sidewalk
- 6’
- 9’ Island / Parking Lane
- 10’ Travel Lane
- 10’ Travel Lane
- 10’ Travel Lane
- 10’ Paid Commercial / Parking Lane
- East Sidewalk

3 through lanes process efficiently

Traffic is organized into through, turns, and proper loading zones

Efficient signal progression
Amsterdam Avenue

- Protected bicycle lane provides northbound route for cyclists
- Reduced pedestrian crossing distances with islands
- Design for neighborhood street with safety benefits expected for all users
- Lane reduction with left turn treatments
- High peak hour traffic volumes require some signal adjustments
- Left turn treatments and paid commercial spaces reduce parkable area
- Traffic flow will be maintained
- Connections to new route via CPW at 77th/78th and 90th/91st
Phase 1 – 72nd – 110th
• Implement in Spring 2016, nearly two miles of protected lanes and new infrastructure

Phase 2 – South of 72nd
• Gather feedback & develop proposals
• Consider network connections
• Coordinate with 2016 capital project at 71st/Amsterdam/Broadway
• Complete improvements on Columbus south of 65th St
• Any route will require careful planning through complex intersection of 71st/Amsterdam/Broadway