Lincoln Square Bow Tie
Proposed Pedestrian Safety Improvements

New York City Department of Transportation
Presented by the Pedestrian Projects Group on December 9, 2014 to Community Board 7
Lincoln Center Bow Tie
Proposed Timeline

2014
April – CB7 intro presentation
June – DOT community workshop
TODAY – Initial presentation to CB7

2015
• CB7 presentation for approval
• Project implementation
Project Area

Lincoln Square Bowtie Study Area
Broadway/Columbus bet. 62nd & 66th

W 66th St
W 65th St
W 64th St
W 63rd St

Columbus Ave
Broadway
Top Issues

1. **Pedestrian Crossings**  More direct, more time to cross

2. **Pedestrian Space**  Claiming space to shorten crossings and alleviate crowding

3. **Pedestrian Signals**  Countdown clocks

4. **Traffic Conflicts**  Street operations and confusion among drivers/cyclists/pedestrians

5. **Street Markings**  On-street space delineation

6. **Bus Stops**  Assess locations

7. **Median Tips**  Widen opening and fix ponding

8. **Bike Lane Connections**  In favor of
Top Issues

Looking east at Broadway and W 64th St

Pedestrian Crossings
Top Issues

Looking east at Broadway and W 65th St

Pedestrian Crossings
Top Issues

Columbus Ave sidewalk connectivity

Pedestrian Crossings
Top Issues

Pedestrian Crossings

Indirect crossing on north leg

Pedestrian Crossings
Top Issues

Looking south from Broadway and W 65th St

Pedestrian Crossings
Top Issues

Looking south at Broadway and W 66th St

Pedestrian Space
Top Issues

Pedestrian Signals

Looking east at Columbus and W 65th St
Top Issues

Looking east at Columbus and W 65th St

Traffic Conflicts
Top Issues

Looking south at Columbus and W 66th St

Traffic Conflicts
Top Issues

Looking west at Columbus and W 66th St

Traffic Conflicts
Top Issues

Looking north from W 64th St and Broadway
Top Issues

Street Markings
Top Issues

Looking north at Broadway and W 65th St
Looking east at Broadway and W 64th St
Top Issues

Looking north from Columbus and W 64th St

Bicycle Connection
Safety Data

Total Injuries 2008-2012

Fatalities 2008-2012

18
24
39
19
22
Safety Data

Pedestrian Fatalities 2008-2012

Pedestrian Injuries 2008-2012

11

14

8

3

10

1

2

4

5

6

7

9

12

13

15
Lincoln Center Bow Tie
Data – Crash Data

Lincoln Square Area
Injury Summary, 2008-2012 (5 years)

<table>
<thead>
<tr>
<th></th>
<th>Total Injuries</th>
<th>Severe Injuries</th>
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<tbody>
<tr>
<td>Pedestrian</td>
<td>46</td>
<td>2</td>
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<tr>
<td>Bicyclist</td>
<td>16</td>
<td>2</td>
</tr>
<tr>
<td>Motor Vehicle Occupant</td>
<td>61</td>
<td>6</td>
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<tr>
<td>Total</td>
<td>123</td>
<td>10</td>
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35% of motor vehicle crashes involved sideswiping

39% of pedestrian crashes took place when pedestrians are crossing with signal.

1 pedestrian fatality

Top 5% KSI* in Manhattan

*Killed or Seriously Injured intersection safety metric
Safety Data

High concentration of pedestrian injuries at left turn locations

High concentration of vehicle crashes at point of merging/turning vehicles

Columbus Ave

W 65th St

W 66th St

W 64th St

W 63rd St

Lincoln Center Bow Tie Area

Crash Mapping 2008-2012

- Pedestrian Crash
- Bicycle Crash
- Motor Vehicle Crash
Focused Solutions

1. Shorten Pedestrian Crossings
2. Improve Pedestrian Space
3. Reduce Vehicle/Pedestrian Conflicts
4. Create Additional, Safe Crossings
5. Improve Pedestrian Signal Timing
6. Clarify Street Markings
7. Connect Bike Lanes
Organization

Bow Tie north of 65\textsuperscript{th} St

Bow Tie at 65\textsuperscript{th} St

Bow Tie south of 65\textsuperscript{th} St
Bow Tie North of 65th St

New “pedestrian only” signal phase

Pedestrians allowed to fully cross with vehicles held

Left turn lane extended full block

S/b and w/b vehicles held to prevent “overflowing” small block (Columbus btwn 66/65)
Bow Tie North of 65th St

- Painted sidewalk extensions
- Reduced crowding at corners
- Enlarged park space
- Shorter, better aligned crosswalks

Proposal

Typical painted sidewalk extension at Bowling Green
Bow Tie North of 65th St

- Market parking relocated
- Late bus merge at 65th St eliminated – improving traffic flow
- M7 and M11 bus stop
- M20 bus stop shares existing M66 stop
Bow Tie North of 65th St

Protected path extends from W 69th to W 67th

Bike path continues down Columbus
Bow Tie at 65th St

New Columbus Ave crosswalks

E/b 65th St right turns stop at new signal
Bow Tie at 65th St

Proposal

Existing access

Proposed access
Bow Tie at 65th St

- Painted sidewalk extension
- New concrete elements
- 5 new pedestrian crossings
- 4 shorter existing pedestrian crossings
Bow Tie at 65th St

- S/b left turn from Columbus to Broadway restricted (except buses)
- Eliminates confusing vehicle merging/jockeying
- Allows for fully protected Broadway crossing
Traffic Analysis

AM/PM peak vehicles/hr

Advanced signage to be installed
Bow Tie at 65th St

*Investigating Leading Pedestrian Interval for east crosswalk

N/b right turn restriction 56/40 peak vehicles/hr

Reduces conflicts in 65th St crosswalk

Exclusive right turn lane
Bow Tie at 65th St

- **S/b left turn ban 105/135 peak vehicles/hr**
- **New crosswalks**
- **Create less complicated signal at 64th St**
- **Eliminates vehicle/ped conflict in east crosswalk**
Bow Tie at 65th St

Widen and create openings at Broadway mall tips
Bow Tie South of 65th St

Proposal

Widen openings at mall tips
Bow Tie South of 65th St

S/B bike lane continues

Protected path picks up south of 62nd st
Bow Tie South of 65th St

- Reorganize curb regulations for more efficient drop offs/pick ups
- Late night curb regulations to provide flexible curb use after events
- Provide truck loading regulations to reduce double parking
Public meeting issues

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Project Scope Summary

Road Markings
- Add crosswalks (4) to continue Columbus sidewalks
- Add crosswalks (3) at W 64th St across Broadway and Columbus
- Extend Columbus Ave left turn lane full block
- Right turn lane approaching W 64th Street on Broadway

Painted Pedestrian Space
- Neckdown on south side of Tucker Square
- Neckdown on southeast corner of W 65th St and Columbus Ave
- Sidewalk extension on west side of Tucker Square, extending to intersection of W 66th

Concrete
- Median extension on southeast corner of existing small pedestrian triangle
- Median extension of north side of Broadway mall at W 65th
- Neckdown on north side of Dante Park
- Median connection between Broadway malls at W 64th St and Broadway

Widen Openings at Broadway Mall Tips
- North side of W 65th St
- North and south side of W 64th St, W 63rd St & W 62nd St

Curb Regulation Changes
- Relocate M7, M11, M20 bus stop
- Extend truck loading regulation on east side of Columbus between W 62nd and W 63rd
- Add late night curb regulations on west side of Dante Park
- Move relocated 1 hr parking to west side of Columbus Ave
- Shift farmers market parking to north and east side of Tucker Square

Restrictions
- S/b left turn from Columbus to Broadway
- N/b right turn from Broadway to W 65th St
- S/b left turn from Broadway to W 64th St

Bicycles
- Continue protected bicycle path from W 69th St to W 67th St, and W 62nd St to W 59th St
- Continue bicycle lane from W 67th St to W 62nd St