Lincoln Square Bow Tie

Proposed Timeline

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

2015
Today - Presentation for Approval
• Project implementation if approved
Project Area

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

- Columbus Ave
- W 64th St
- W 65th St
- W 66th St
- W 63rd St
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

Pedestrian Crossings

Columbus Ave sidewalk connectivity

Pedestrian Crossings
Top Issues

Pedestrian Crossings

Indirect crossing on north leg
Top Issues

Looking south at Broadway and W 66th St

Pedestrian Space
Top Issues

Looking east at Columbus and W 65th St

Pedestrian Signals
Top Issues

Looking east at Columbus and W 65th St

Pedestrian/Traffic Conflicts
Top Issues

Looking south at Columbus and W 66th St

Pedestrian/Traffic Conflicts
Top Issues

Traffic Conflicts

Looking north from W 64th St and Broadway
Looking north at Broadway and W 65th St
Safety Data

Fatalities 2008-2012
1

Total Injuries 2008-2012

- 2008:
  - Injuries: 39
  - Fatalities: 1

- 2012:
  - Injuries: 24
  - Fatalities: 1

- Total Injuries 2008-2012:
  - Injuries: 103
  - Fatalities: 2
Safety Data

Pedestrian Fatalities 2008-2012

Pedestrian Injuries 2008-2012

11

14

10

3

1

8
Lincoln Square 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>
</tr>
<tr>
<td>Bicyclist</td>
<td>16</td>
<td>2</td>
</tr>
<tr>
<td>Motor Vehicle Occupant</td>
<td>61</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>123</td>
<td>10</td>
</tr>
</tbody>
</table>

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 turn locations

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

Lincoln Square Bow Tie Area

Crash Mapping 2008-2012
- Blue Circle: Pedestrian Crash
- Green Circle: Bicycle Crash
- Red Circle: 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
* Indicates update from 12/9/14 meeting
Bow Tie North of 65th St

New leading pedestrian interval “LPI”

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 neckdowns*
- Reduced crowding at corners
- Shorter, better aligned crosswalks
- Widen openings at Broadway mall tips and address ponding condition
Bow Tie North of 65th St

- M7 bus stop
- M11 bus stop
- M20 bus stop shares existing M66 stop

Late bus merge at 65th St eliminated – improving traffic flow

Proposal

M20 bus stop shares existing M66 stop

W. 66th St

W. 67th St

Columbus Ave

Alice Tully Hall

Tucker Square

*M11 bus stop*
Protected path extends from W 69th to W 67th

Long mixing zone shifts cyclists outside of turning vehicles

*Paint green lanes and green backed bicycle markings*

*Flexible bollards added to lane edge in buffer*
Protected Lane North of Bow Tie

Flexible bollard and painted buffer provide additional lane protection approaching W 65th St

Proposed Columbus Ave cross section between W 65 and W 66
Bow Tie at 65th St

Proposal

New Columbus Ave crosswalks

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

The Church of Jesus Christ of LDS

W. 65th St

Avery Fisher Hall

Dante Park

W. 64th St

Proposal

Existing access

Proposed access
Bow Tie at 65th St

- Painted sidewalk extension
- New brick/hex paver/concrete elements
- Existing pedestrian crossings shortened
Bow Tie at 65th St

S/b left turn from Columbus to Broadway restricted (except buses)

Allows for fully protected Broadway pedestrian and bicycle crossing

Eliminates confusing vehicle merging/jockeying
Bow Tie at 65th St

N/b right turn ban reduces conflicts in 65th St crosswalk

N/b right turn ban allows for fully protected pedestrian phase for east leg crosswalk

Proposal

Exclusive right turn lane at 64th

Investigating LPI for east crosswalk
**Bow Tie at 65th St**

- New crosswalks
- Left turn ban allows crosswalk to be installed from NE corner
- Left turn ban reduces vehicle/pedestrian conflict in east crosswalk
- Close Broadway median to provide new concrete pedestrian refuge

**Proposal**

- The Church of Jesus Christ of LDS
- Avery Fisher Hall
- Dante Park
- W. 65th St
- W. 64th St
*Paint green lanes to improve lane visibility*
Bow Tie South of 65th St

*Parking protected bicycle lane continues south*

Widen openings at mall tips and address ponding condition
1. **Pedestrian Crossings**  More direct, more time to cross

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8. **Bike Lane Connections**  In favor of
Road Markings
- Add crosswalks (4) to continue Columbus Ave sidewalks
- Add crosswalks (3) at W 64th St across Broadway and Columbus Ave
- Extend Columbus Ave left turn lane approaching W 65th St to full block
- Stripe 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
- *Neckdown on northwest corner of Tucker Square at W 66th St

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

Widen Openings and Address Ponding Issues 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, M20 bus stop
- Modify truck loading regulation on east side of Columbus between W 62nd St and W 63rd St
- Modify curb regulations on west side of Dante Park

Restrictions
- S/b left turn from Columbus Ave 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 65th St to W 59th St
Contact: Nina Haiman at nhaiman@dot.nyc.gov

www.nyc.gov/dot

Thank You