8 AVE & COLUMBUS CIRCLE

Bike Safety Improvements

Presented on June 20 and June 25, and July 10, 2018
Background
Background

GROWTH IN CYCLING – Trends

- **+156%**
  Growth in daily cycling in New York City (2006-2016)

- **+107%**
  Growth in biking to work in Manhattan (2011-2016)

- **+55%**
  Growth in number bikes crossing 50th St in Midtown (2012-2017)

North-South Trips at 50th St (7am-7pm, Weekdays)
GROWTH IN CYCLING – Citi Bike

Citi Bike regularly serves over 70,000 trips per day

Total Number of Citi Bike Trips in NYC:

2017 - 16 million
2016 - 14 million
2015 - 10 million

April – Sept 2017

2.4 million
Citi Bike trips started or ended in CB 4

3.3 million
Citi Bike trips started or ended in CB 5

1.3 million
Citi Bike trips started or ended in CB 7
Background

BIKE NETWORK – Midtown West / Upper West Side

Previously Installed
• Hudson River Greenway
• 9th Avenue
• 8th Avenue
• Broadway
• Columbus Ave
• Amsterdam Ave

Proposed Future
• 52nd St, 55th St

Gap in Protected Bike Lane Network
• 8th Avenue protected bike lane ends at 56th St, only shared lane connection to Columbus Circle, Central Park, CPW
• 48% increase in cycling trips on 8th Ave at 50th St (2013-2017)
• Columbus Circle is challenging for cyclists to navigate

Assemblymember Linda Rosenthal requested improvements to intersection of 8th Ave and W 57th St
Community Board 7 requested improvements to Columbus Circle
Background

**SAFETY – Vision Zero**

8th Ave

is a Vision Zero Priority Corridor

Top 10% of borough corridors in KSI/mile

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8th Ave (56th – 58th St) & Columbus Cir, MN

Injury Summary, 2012-2016 (5 years)

<table>
<thead>
<tr>
<th></th>
<th>Total Injuries</th>
<th>Severe Injuries</th>
<th>Fatalities</th>
<th>KSI</th>
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<tbody>
<tr>
<td>Pedestrian</td>
<td>47</td>
<td>6</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Bicyclists</td>
<td>34</td>
<td>5</td>
<td>0</td>
<td>5</td>
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<tr>
<td>Motor Vehicle</td>
<td>64</td>
<td>6</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>145</td>
<td>17</td>
<td>0</td>
<td>17</td>
</tr>
</tbody>
</table>

**Source:** Fatalities: NYCDOT, Injuries: NYSDOT. KSI: Persons Killed or Severely Injured. *Includes fatalities from 2012-2018
SAFETY – Protected Bike Lanes

Protected bike lanes improve safety for all road users

On streets with protected bike lanes:

- Pedestrian injuries decrease 21%
- Motorist injuries decrease 15%
- Injuries to cyclists increase only 3%, despite a 61% bike volume increase

On Columbus Ave (W 96th to W 69th St):

- Cyclist volumes increased 30%*
- Total injuries decreased 30%*

Data from 25 separate protected bicycle lane projects installed from 2007-2014 with 3 years of after data. Includes portions of 1 Ave, 2 Ave, 8 Ave, 9 Ave, Broadway, Columbus Ave, Hudson St, Lafayette St / 4 Ave, Sands St, Allen/Pike St, Kent Ave, Prospect Park West, Flushing Ave, Bruckner Blvd & East 163 St, Imlay St / Conover St, Paerdegat Ave. Only sections of projects that included protected bike lanes were analyzed. Source: NYPD AIS/TAMS Crash Database

* Columbus 76-69: total injuries decreased 33% while bike volumes increased 15%. Columbus 96-77: total injuries decreased 20% and bike volumes increased 50%.
Proposal
EXISTING CONDITIONS - 8th Ave

- Protected lane on 8th Ave ends at W 56th St
- Buffered bicycle lane from W 56th St to W 57th St
- Cyclists must cross the street at W 57th St to continue in a shared lane on the east side of the street between W 57th St and W 58th St
- Cyclists enter Columbus Circle via bike lane on east side of the street
• Continue 8th Avenue protected lane design to Columbus Circle
• Install pedestrian refuge islands at 57th and 58th Streets to shorten crossing distances
• Install split phase left turn at 57th Street intersection
  • Pedestrians and cyclists have protected time to cross
  • Motorists have dedicated time to make left turns
Shared lane markings and a short bike lane designate route for cyclists around east side of circle

Multiple lanes of turning vehicles at each exit of the circle

Cyclists must cross multiple sets of turn lanes to continue uptown on Central Park West
No change to the number of vehicle lanes or signal timing

Cyclists cross at Central Park South to access Broadway and Central Park West

Cyclists have direct, conflict-free access from 8th Ave to new buffered bike lane around inside of circle

Provides dedicated space for cyclists on the inside of the circle
Proposal

PROPOSED DESIGN

Pedestrians
- Shorten crossing distances
- Calm traffic
- Protected time to cross 57th St on west side of 8th Ave

Cyclists
- Protected bike lane connection to Columbus Circle
- Dedicated cycling space within the circle
- Clear bike routes to exit the circle

Motorists
- Maintain adequate vehicle capacity
- Maintain existing vehicle lanes within the circle
THANK YOU!

Questions?