CATHEDRAL PKWY
Bike Lanes and Safety Improvements

Manhattan CB 7 Transportation Committee
November 14, 2017
PRESENTATION OVERVIEW

Update to CB 7

Background
- Mobility
  - NYC in Numbers
  - Citi Bike
- Harlem Bike Network
  - Community Outreach
  - Proposed Routes

Proposal
- Cathedral Pkwy/110th St
  - Riverside Dr to Columbus Ave
  - Columbus Ave to Frederick Douglass Circle
  - Frederick Douglass Circle

Summary
- Benefits of Design Elements
As the city grows, there is higher demand on the transportation system and people are increasingly turning to mass transit, FHV carpooling, and cycling.

- +370,000 New York City residents
- +520,000 new jobs
- +20% growth in tourists
- +10% growth in subway trips
- +80% growth in daily cycling trips
Recent Trends

Total Number of Citi Bike Trips in NYC:

2016 - 14 million trips
2015 - 10 million trips

Citi Bike regularly serves over 70,000 trips per day

more than

Staten Island Ferry  Boro (green) Taxi
Background

HARLEM BIKE NETWORK – Public Outreach

Vision Zero

Harlem River Bridges Access Plan

Citi Bike

Street Ambassadors
### Background

#### HARLEM BIKE NETWORK – Proposed Routes

**110th/111th St**
- Limited east-west through streets (first opportunity after 72nd St)
- Identified as a priority route during HRBAP workshops and S.A. deployment
- Re-design of W 110th St, and FD Circle (community safety concerns)

**126th St/128th St** *(alternative to 125th St)*
- Identified as a priority route during HRBAP workshops and S.A. deployment
- Limited possibilities for direct routes
- Connects to Willis Ave and RFK

**5th Ave**
- Strong desire for protected bike lane identified through S.A. outreach
- Excess width encourages speeding and other unsafe behavior
- Serve people traveling south as well as those traveling north on other streets

**Connections**
- Connection to the Manhattan Waterfront Greenway (west and east side)
- Southbound bicycle connection from Amsterdam Ave to Columbus Ave

### Map Details
- **Citi Bike Expansion Area in Upper Manhattan**
- **Marcus Garvey Park**
- **St. Nicholas Park**
- **Hudson River Greenway**
- **Amsterdam Ave**
- **Riverside Park**
- **Thomas Jefferson Park**
Proposals
Project Area

1 110th St
Riverside Dr Service Rd to F.D. Circle

- Access to Greenway and Park
- Cross-town Connection
- Build on Previous Safety Project
- No parking loss

110th St Counts
(Manhattan Ave to Central Park W)

- 1,401 (weekend)
- 637 (weekday)
SAFETY

Injury Summary, 2010-2014 (5 years)

West 110th St
(Riverside Dr to Manhattan Ave)

<table>
<thead>
<tr>
<th></th>
<th>Total Injuries</th>
<th>Severe Injuries</th>
<th>Fatalities</th>
<th>KSI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pedestrian</td>
<td>35</td>
<td>4</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Bicyclists</td>
<td>22</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Motor Vehicle Occupant</td>
<td>69</td>
<td>4</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>126</td>
<td>11</td>
<td>1</td>
<td>12</td>
</tr>
</tbody>
</table>

Fatalities, 01/01/2011 – 01/23/2017: 1

1 cyclist was killed
39 cyclists were severely injured in CB 7 (2010-2014)

Source: Fatalities: NYCDOT, Injuries: NYSDOT. KSI: Persons Killed or Severely Injured
**Existing and Issues**

- Width varies from 50 to 80 ft
- Street is 80’ wide (for two blocks closest to park)
- **No dedicated space** for cyclists
- **Cyclist position in roadway unpredictable** for drivers and pedestrians
- Community request for improvements
Proposal

Cathedral Pkwy (Riverside Dr Service Rd to Columbus Ave) – 50’-60’ Typical Cross Section

Traffic Calming Project Implemented in 2014:
- Crashes with injuries decreased 33%
- Pedestrian injuries decreased 59%

Re-design creates continuous east-west connection between Manhattan Waterfront and Central Park

- Visually narrows the roadway, reduces crashes with injuries
- Re-design of roadway creates dedicated space for vehicles and cyclists
- Increases predictability for all road users
- No Parking or Travel Lane Loss
Cathedral Pkwy (Columbus Ave to Frederick Douglass Circle)

- Install two-way protected bike lane on
  - Consolidates bike traffic to one route, away from
  - Creates facility that is comfortable for all skill levels
  - Reconfigures roadway to create protected bike lanes
  - Install painted curb extensions to shorten pedestrian crossing and slow vehicles turning onto residential block
  - Add markings to indicate two standard width travel lanes
  - Narrows roadway, calms traffic
  - Connects XX to existing bike network at signalized intersection
  - Connects to proposed future protected bike lanes on XX

Establish shared path on sidewalk:
- Install bike stamps and yield to pedestrian signs
- Eases transition & protects cyclists at corner
- Work with businesses to resolve issue of parking on sidewalk

INSTALL BIKE LANES (RECONFIGURE ROADWAY)
INSTALL PEDESTRIAN ISLAND ??? (LOCATION)
*MOST DIRECT CROSSTOWN ROUTE*

Proposal

Re-design creates continuous east-west connection between Manhattan Waterfront and Central Park

- Painted pedestrian space creates **safer, shorter pedestrian crossings**
- Improves alignment

Peak Volumes
(W 110th between Manhattan Ave and Columbus Ave):

- WB - 844
- EB - 455
PROPOSED DESIGN ELEMENTS

Connection to bike lanes on:
- Amsterdam Ave
- Columbus Ave
- Central Park West
- Frederick Douglass Blvd

Proposal
PROPOSED DESIGN – Frederick Douglass Circle

- Community request for safety improvements

- Install markings to guide motorists, and cyclists through circle

- Standard width moving lanes calm traffic

- Install guide signs

Bike connection to:
- Central Park
- Frederick Douglass Blvd
Summary
BENEFITS OF DESIGN ELEMENTS

Vehicles
- Roadway markings organize the roadway
- Improve alignment, and visibility
- Establish standard width; discourage speeding

Cyclists
- Provide dedicated space for cyclists
- Increase predictability of cyclists location for motorists and pedestrians
- Connection to existing network
- Provide wayfinding

Refuge islands, painted pedestrian space, and high visibility crosswalks
- Create shorter, safer pedestrian crossings
- Improve alignment at intersections
- Discourage drivers from encroaching into crosswalk

Street re-designs improve safety for all road users
Questions?

THANK YOU!

NEW YORK CITY DOT

NYC DOT  NYC DOT  nyc_dot  NYC DOT