MIDTOWN CROSSTOWN  PROTECTED BIKE LANES

Presented to Manhattan Community Boards 4, 5, 6
January 2018
PRESENTATION OVERVIEW

1. Background
2. Proposed Routes
3. Route Details
4. Summary
Background
Midtown 59th St to 13th St

Heavy commercial activity, transportation hubs, and tourist destinations
Major attractions cause congestion for all users

NY Waterway Ferry
Javitz Center
Lincoln Tunnel
High Line
Penn Station
ESB
Madison Square Park
Union Square
Grand Central Terminal
Rockefeller Center
Bryant Park
Central Park
Times Square
Times Square
Queens Midtown Tunnel
East River/Citywide Ferry

Heavy Loading Activity
High Pedestrian Volumes
Inadequate Bike Facilities
Midtown Biking

Bike route network established with strong north – south facilities
Lack of cross town options contributes to safety issues

People are biking in Midtown

- More than 25,000 bikes cross 50th St daily, 75% increase from 2006 to 2016
- 9,891 Citi Bike trips start and end in Midtown (compared to 15,837 taxi trips)
- Bike commuting mode share is 1.9% for Midtown residents, compared to 1.2% citywide

Biking is an efficient option for trips in Midtown but there are deterrents

- Citi Bikes are faster and cheaper than taxis
- Protected bike lanes on avenues, lack of protected crosstown routes

Safety concerns are a barrier to increased ridership

- 10% more women bike in protected bike lanes than in unprotected bike lanes (50th St count)
Cyclist fatalities remain low, despite dramatic growth in cycling citywide

However, the majority of cyclist fatalities have occurred on streets without bike lanes

Recent crashes in Midtown

6/12/2017  W 26th St between 7th and 8th Aves
            No bike lane

6/17/2017  7th Ave at W 29th St
            No bike lane

9/11/2017  7th Ave at W 30th St
            No bike lane

9/24/2017  21st St at 9th Ave
            Conventional bike lane

Community Boards 4, 5, and 6 are highest cyclist KSI in Manhattan
Midtown Bicyclist Safety

Protected bike lanes in Manhattan improve safety for all users.

On streets with protected bike lanes:

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

Protected Bicycle Lanes Before and After Installation

<table>
<thead>
<tr>
<th></th>
<th>Before</th>
<th>After</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crashes with Injuries</td>
<td>514</td>
<td>426</td>
<td>-17%</td>
</tr>
<tr>
<td>MV Occupant Injuries</td>
<td>221</td>
<td>166</td>
<td>-25%</td>
</tr>
<tr>
<td>Pedestrian Injuries</td>
<td>280</td>
<td>220</td>
<td>-22%</td>
</tr>
<tr>
<td>Cyclist Injuries</td>
<td>100</td>
<td>98</td>
<td>-2%</td>
</tr>
<tr>
<td>Total Injuries</td>
<td>601</td>
<td>484</td>
<td>-20%</td>
</tr>
</tbody>
</table>

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
Midtown Bicycle Ridership Growth

*Ridership has grown in the Citi Bike Service Area*

In Midtown, there were **6 million** Citi Bike trips in 2017 alone.

Citi Bike data shows:

- Yearly subscribers ride frequently around transportation, economic and residential hubs
- Daily users ride to and from tourist hot spots

For all trips that begin and end in the Midtown Core, Citi Bikes are at least **2 mph faster** and **$6 cheaper** than taxis.
Proposed Crosstown Routes & Design
Crosstown Bike Routes Strategy

Proposed Routes - accessible every ½ mile through Midtown

- Union Square (USq)
  - 13th St
  - Part of L Train Mitigation

- Madison Square (MSq)
  - 26th St and 29th St
  - In Development / Planning

- Central Park South (CPS)
  - 52nd St and 55th St
  - In Development / Planning

- Times Square (TSq)
  - Area Under Study
  - In Development

- Protected Bike Lane
- Conventional or Shared Bike Lane
- Area Under Study
Midtown Crosstown Routes

Proposal Overview

Project Goals

- Install new protected crosstown bicycle lanes and upgrade existing bicycle lanes
- Improve crosstown bicycle access to destinations, transit and greenways
- Use redesign to alleviate traffic and loading pressure

Proposed Routes

*Madison Square Routes*

1. 26th St
2. 29th St
Crosstown Bike Routes  Route Selection

Why did we choose these streets?

1. Greenway Connections

Hudson River Greenway Access Point

2. Complements Congestion Management Plan

Proposed bike routes do not overlap with Clear Lanes Initiative

Clear Lanes

Restored turns with turn lane
Crosstown Bike Routes

Route Selection continued

Why did we choose these streets?

3. Street Width and Connectivity

- Uninterrupted from Hudson River Greenway to 1st Avenue
- Wide enough to fit a protected bike lane for most of the corridor
- Have more 34’ – wide blocks than adjacent streets

Protected Bike Lane  Typical

[Diagram showing street widths and bike lane configurations]
Curb Management

Accommodations for land uses
- Hotels / commercial floating loading
- Theaters / loading zones
- Update parking regulations to mitigate double parking
- Additional locations delineated for pick ups/drop offs
- Maintain emergency access with No Standing zones
26th St and 29th St
Madison Square Corridor

- Connections to Madison Square Park, Bellevue Hospital, colleges, commercial uses, multi-family residences, industrial uses
26th St and 29th St

1 26th St

12 Ave – 9 Ave, 8 Ave - Broadway
Madison Ave – 3 Ave

Existing Conditions

- Land Use: commercial, multi-family residence, colleges
- West side loading docks
- Parking Loss: approximately 2 to 9 spaces per avenue block (commercial / residential regs)
- Intersection Design: mixing zones for right turns across bike lane
26th St and 29th St

1 26th St

**Atypical Blocks**

### 9 Ave – 8 Ave

**Extra wide block**

**Existing Conditions**

- North Curb
- South Curb
- 50’ Travel & Parking Lane

**Proposed Design**

- North Curb
- South Curb
- 6’ Pedestrian Space
- 3’ Curb Extension
- 3’ Buffer
- 8’ Parking Lane
- 11’ Travel Lane
- 8’ Parking Lane

### Broadway – Madison Ave, 3 Ave – 2 Ave

**Curbside lane will require parking removal**

**Existing Conditions**

- North Curb
- South Curb
- 29’ Combined Travel & Parking Lane

**Proposed Design**

- North Curb
- South Curb
- 6’ Buffer
- 11’ Travel Lane
- 8’ Parking Lane

### 2 Ave – 1 Ave

**Two-way block presents alignment challenges, curbside lane will require parking removal**

**Existing Conditions**

- North Curb
- South Curb
- 17’ Travel Lane
- 34’

**Proposed Design**

- North Curb
- South Curb
- 6’
- 11’ Travel Lane
- 17’ Travel Lane

- Land Use: park edge, commercial, multi-family residential
- Parking loss 82 spaces
  (Broadway– Madison Ave, 3rd Ave – 1st Ave)
Existing Conditions:

10th Ave – 9th Ave
8th Ave - Madison Ave
3rd Ave – 1st Ave

- Land Use: Commercial, Multi-Family Residence
- Enhances existing conventional bike lanes
- Parking Loss: approximately 2 to 8 spaces per avenue block (commercial / residential regs)
- Intersection Design: mixing zones for left turns across bike lane, turn lanes for right turns
29th St

Atypical Blocks

9 Ave – 8 Ave

Extra wide block

**Existing Conditions**

<table>
<thead>
<tr>
<th>North Curb</th>
<th>South Curb</th>
</tr>
</thead>
<tbody>
<tr>
<td>13' Parking Lane</td>
<td>12' Parking Lane</td>
</tr>
<tr>
<td>11' Travel Lane</td>
<td>5'</td>
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**Proposed Design**

<table>
<thead>
<tr>
<th>North Curb</th>
<th>South Curb</th>
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<tbody>
<tr>
<td>8' Parking Lane</td>
<td>6'</td>
</tr>
<tr>
<td>11' Travel Lane</td>
<td></td>
</tr>
</tbody>
</table>

- Land Use: commercial, multi-family residential
- Intersection Design: mixing zones for left turns across bike lane, turn lanes for right turns

Madison Ave – 3 Ave

Curbside lane will require parking removal

**Existing Conditions**

<table>
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<th>South Curb</th>
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<tbody>
<tr>
<td>8' Parking Lane</td>
<td>9' Parking Lane</td>
</tr>
<tr>
<td>13' Shared Travel Lane</td>
<td></td>
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</tbody>
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**Proposed Design**

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- Parking Loss: 37 spaces (Madison Ave – 3rd Ave)
### 29th St

**Atypical Blocks**

#### 12 Ave – 11 Ave

**Existing Conditions**

- Parking along both curbs

#### 10 Ave – 9 Ave

**Existing Conditions**

- USPS loading docks on north curb

**Proposed Design**

- Intersection Design: right turn lane
- Land Use: industrial - USPS facility

#### Existing Conditions

- Parking along both curbs

#### Proposed Design

- Intersection Design: right turn lane
- Land Use: industrial - USPS facility
Summary
Summary: Proposed Design

Proposed Bike Routes

Protected Bike Lane *Typical*

Conventional Bike Lanes *Typical*
Summary: Proposed Design

Design Benefits

<table>
<thead>
<tr>
<th>Cyclist Safety</th>
<th>Simplified Vehicular Movements</th>
<th>Curb Management</th>
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<tbody>
<tr>
<td>• Cyclists are separated from traffic by parked cars</td>
<td>• Ease congestion by providing space for turns</td>
<td>• Preserves loading and curbside access</td>
</tr>
<tr>
<td></td>
<td>• Mixing zones reduce back pressure on turning vehicles</td>
<td></td>
</tr>
</tbody>
</table>

- Curbside access preserved
- Mixing zone
- Loading and metered parking maintained
- Parking-protected bike lane
Curb Management

*Midtown Crosstown*

**Summary: Making it Work**

**Curb Management**

Remove some long term vehicle storage, but preserve short term curbside access and emergency clearance in the commercial Midtown core blocks

- **North Curb**
  - Restrict curbside use, while allowing short term access
    - Increase No Parking zones
    - Existing loading zones will have to be maintained where necessary

- **South Curb**

- **Emergency Access**
  - 80’ No Stopping Anytime zones (2-3 per block, sited at hydrants and driveways to minimize impact)
Summary: Making it Work

Congestion Management

- Continue to accommodate growth of midtown bicycle ridership

![Manhattan Bike Commuting Graph]

Taxis are used heavily in Midtown, but bikes are faster, cheaper, and bicycle ridership is growing

- **98%** Growth in commuting to work by bike in Manhattan between 2010 and 2015, the largest growth of any borough

- **74.9%** Growth in number of cyclists crossing 50th St between 2006 and 2016

- **31%** of adult New Yorkers living near bike share cycled in 2013 and 2014
Next Steps

2018  **Winter**
- Community Board Presentations *(26th St, 29th St)*
- Design Adjustments made with Community Feedback
- Finalize Central Park South Corridors *(55th St, 52nd St)*

**Spring - Summer**
- Updated Community Board Presentations *(26th St, 29th St, 52nd St, 55th St)*
- Phased Implementation of select routes

**Fall**
- Community Board Presentations *(Times Square Corridors)*

2019  **Spring – Fall**
- Complete Implementation of all Crosstown Routes

*Note: 13th St will be presented during L Train Mitigation project outreach*
THANK YOU!

Questions?