E 106 St to Randall’s Island
Street Safety and Improved Access
Central Park to Randall’s Island
Background – Neighborhood Context

Open Space
- Central Park
- Waterfront/Greenway
- Randall’s Island
  - Over 50% of total MN playing fields

Main 2-way through streets
- E 116 St
- E 106 St
- E 96 St
Central Park to Randall’s Island

**Issues Overview**

1. **Access to Randall’s Island**
   - Underused park space

2. **E 106 St: Critical Corridor**
   - Design does not serve all users

3. **Inter-borough Connections**
   - Gaps in overall network
1. Access to Randall’s Island
Proposed Connections

Review:
FDR Service Rd was not preferred by community residents

New Proposal:

Preferred Option: Direct access for EB and WB cyclists on E 102 St

Alternative Option: Standard one-way pair: EB on E102 St WB on E105 St
Issue #1
Access to Randall’s Island

Insufficient Signage

1 Av and E 102 St looking east
1. Access to Randall’s Island: Preferred Option
Existing Conditions – E 102 St

Low vehicle traffic
PM peak: 100 vph; little through traffic
Used to access greenway and bridge
Space not clearly designated for safe use
1. Access to Randall’s Island: Preferred Option
Existing Conditions – E 102 St
1. Access to Randall’s Island: Preferred Option
Proposed Improvements – E 102 St

- South Sidewalk
  - 8’ Parking Lane

- Shared Lane
  - 12’

- North Sidewalk
  - 9’ Parking Lane

- 34’ Width
1. Access to Randall’s Island: Preferred Option
Precedent Photos – E 102 St

Baltimore, MD

Union Street, Brooklyn

Plaza Street, Brooklyn
1. Access to Randall’s Island: Preferred Option

Proposed Improvements – E 102 St

- **EB Shared Lane** from 2 Av
- **Pedestrian space / Gateway**
- **Access to bridge with bike stamps**
- **WB Contra-Flow Bike Lane** FDR to 1 Av
- **Parking retained on both sides**
- **New ramp**
- **EB Shared Lane** 1 Av to FDR
1. Access to Randall’s Island: Alternative Option

Proposed Routing

- 105th Street – Westbound
- 102nd Street - Eastbound
1. Access to Randall’s Island: Alternative Option
Existing Conditions – E 102 St

South Sidewalk

34'

Combined Moving/Parking Lane

North Sidewalk

34'
1. Access to Randall’s Island: Alternative Option
Proposed Improvements – E 102 St

- South Sidewalk
  - 8' Parking Lane

- 10' Moving Lane
  - 3' Buffer

- 5'

- 8' Parking Lane
  - North Sidewalk

- 34'
1. Access to Randall’s Island: Alternative Option
Existing Conditions – E 105 St
1. Access to Randall’s Island: Alternative Option
Proposed Improvements– E 105 St

- South Sidewalk
  - Parking Lane 8’
  - Moving Lane 10’
  - Buffer 3’
  - North Sidewalk
  - Parking Lane 8’

Total width: 34’
1. Access to Randall’s Island underused park space

2. E 106 St: Critical Corridor design does not serve all users

3. Inter-borough Connections gaps in overall network
2. 106 St: Critical Corridor

Existing Conditions

- **High crash corridor:**
  27.1 KSI/mile (2007-2011)
  Ranks in top 1/3 of Manhattan corridors
- **Senior Safety Area**

- 4 Moving lanes
- Curbside parking
- Low volumes:
  - **WB** AM Peak 409
  - PM Peak 500
  - **EB** AM Peak 315
  - PM Peak 368
2. 106 St: Critical Corridor
Existing Conditions

Safety at Intersections

- Long crossing – 60ft
- Drivers take advantage of wide roadway, low volumes
- Illegal double right turns

Most common crash type:
Right turning vehicles
Pedestrians crossing with signal
2. 106 St: Critical Corridor
Proposed Improvements – Complete Street

Convert 4 lanes to 2 lanes with left turn bays and bike lanes

Safety Benefits

Calms traffic, increases safety for all users

Safer, simpler left turns

Creates space for bicycle lanes, providing key cross-town connection
2. 106 St: Critical Corridor
Proposed Improvements – Complete Street

Pedestrian islands at high crash intersections
- 2 Av
- 3 Av
* Studying feasibility at Lexington Av

Safety Benefits
- Shorten crossings (25ft)
- Provide safe space to wait
- Increase visibility
- Prevent illegal double right turns
- Tighter radius forces slower turns
### Three Year Before and After Crash Analysis on 4 to 3 Traffic Lane Conversions

<table>
<thead>
<tr>
<th>Road</th>
<th>Change in Total Injuries</th>
</tr>
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<tbody>
<tr>
<td>West 6th Street</td>
<td>-24%</td>
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<tr>
<td>65th St – 86th St</td>
<td></td>
</tr>
<tr>
<td>Macombs Road*</td>
<td>-42%</td>
</tr>
<tr>
<td>University Av – Jerome Ave</td>
<td></td>
</tr>
<tr>
<td>Allerton Avenue</td>
<td>-35%</td>
</tr>
<tr>
<td>Boston Rd – E Gun Hill Rd</td>
<td></td>
</tr>
<tr>
<td>Empire Boulevard</td>
<td>-27%</td>
</tr>
<tr>
<td>Bedford Av – Utica Av</td>
<td></td>
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</tbody>
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* 2-Yr Before and After Crash Analysis
3. Unclear Connections
Proposed Improvements

• Wayfinding signage
• Street markings
• Roadway organization

Reveal recreational & commuting opportunities
1.) **Access to Randall’s Island**
Highlight access at 103 St Bridge

2.) **E 106th St: Create Complete Street**
Enhance safety for all users
Create bike connection from Central Park to Randall’s Island & Greenway

3.) **Clarify Connections**
Reveal local & inter-borough network links with signage & markings
2. 106 St: Critical Corridor
Corridor Solution – Proposed Improvements

Corridor improvements
Convert 4 lanes to 2 travel lanes + left turn bays
- Striped center median/turn bay
- Bike Lanes
- Provide options for all users – from 5 Av to FDR Svc Rd

Intersection improvements
- Safe place to wait
- Crossings shortened to 25ft

Pedestrian Refuge Islands
- 3 Av & 2 Av
- Increase visibility for pedestrians & drivers
- Remedy illegal double right turns
- Tighter radius forces cars to slow

PROPOSED

Pedestrian Refuge Islands

9’ Parking Lane
5’ Moving Lane
11’ Turn Bay/Flush Median
11’ Moving Lane
5’ Parking Lane

North Sidewalk
South Sidewalk

10’ 60’