Project Area

Manhattan Side

Brooklyn Side

Map showing locations such as Canal St, Bowery, Manhattan Bridge, Jay St, Concord St, Flatbush Avenue Extension, and others.

Chrysler St

TWO BRIDGES

FDR Drive

Manhattan Bridge

Brooklyn Bridge

DUMBO

VINEG

BROOKLYN

DOWNTOWN

BROOKLYN

CHINATOWN

Dah Shop

Madison St

Cherry St

Allen St

Grand St

28A

29A

McLaughlin Park

Central Park

BROOKLYN HEIGHTS

Adams St

Brooklyn Bridge
Background

- Community requests for pedestrian safety and access improvements, including Council Member Chin
- Vision Zero location
- High Crash Corridor – in top 10% of locations in Manhattan with crashes resulting in fatalities or severe injuries

### Canal St - Bowery to Chrystie St, MN

**Injury Summary, 2009-2013 (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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<tr>
<td>Pedestrian</td>
<td>16</td>
<td>7</td>
<td>1</td>
<td>8</td>
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<tr>
<td>Bicyclist</td>
<td>8</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Motor Vehicle Occupant</td>
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<td>9</td>
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<td>9</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>157</strong></td>
<td><strong>16</strong></td>
<td><strong>1</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

Fatalities, 01/01/2009-4/27/2015: 1

Source: Fatalities: NYCDOT
Injuries: NYSDOT
KSI: Persons Killed or Severely Injured
Pedestrian Issues: Bowery Slip

Unmarked & uncontrolled crossing with high-speed vehicle conflict

High pedestrian volume (1,525) In peak hour
Pedestrian Issues: Bowery

Long, uncomfortable crossings of Bridge entrance
Manhattan Existing Operations

All other times Lower Deck: Manhattan bound

Lower Deck is only Brooklyn bound 30 out of 168 hours per week

3-9PM Lower Deck: Brooklyn bound
Inconsistent Operations

Reversal operation is inefficient & subject to non-compliance

PM, Canal St should be open

AM, Canal St should be closed
Traffic Issues: Conflict

133 crashes from 2009 - 2013

23.5% of vehicles make a conflict movement

Canal aligned for 3 PM to 9 PM use only

All other times awkward lane shift

40 crashes from 2009 - 2013

19% of vehicles make a conflict movement

Unclear and conflicting lane assignments
Traffic Issues: Bowery Conflicts
Traffic Issues: Canal St Confusion
Traffic Issues: Chrystie St Conflicts
Rapid Response Toolkit

- Pavement markings
- Painted and/or textured surfaces
- Concrete sidewalk extensions
- New signage
- Signals
- Planters and delineators
Manhattan Proposal:
Operational Changes

- Lower Roadway Manhattan-bound at all times
- Lower Roadway two lanes to Canal St at all times
- Signal and crosswalk added
- North Upper Roadway Left turn removed at all times
- Canal St to Upper Roadway at all times
No left turns onto Canal from North Upper Roadway
Proposal: Bowery Slip

- Extended sidewalk
- New marked crosswalk
- New signalized intersection

1,525 pedestrians in peak hour
Existing long crossing distances

Proposal: Pedestrian exposure reduced by 42%

New concrete curb extension

New painted pedestrian space

Concrete median tip extension

New concrete curb extension

Proposal: Bridge Entrance

Existing long crossing distances
Proposal: Bridge Entrance

Existing conflicting turns

Proposal: Signed and clear lane assignments

Right hand turn lane to Lower Roadway
Upper Roadway capacity: 2 lanes at 2,000 vehicles per hour = 4,000

Limit to what the Canal & Bowery intersection can process = ~2,500 vehicles per hour.
Traffic Considerations

Existing Typical

Brooklyn bound PM peak hour: 2,550 spread over Upper and Lower Roadways

2006-07 Bridge Construction

PM peak hour: ~2,400 vehicles accommodated on Upper Roadway during Lower Roadway closure
Summary

• Reduces pedestrian crossing distances
• Improves pedestrian access and safety
• Clarifies traffic movements
• Maintains traffic capacity