First Avenue/Second Avenue Bicycle Route Extensions
Agenda

• Summary of 2010 Implementation
• Traffic, Bicycle and Pedestrian Data
• 2011 Implementation
2010 Implementation

- Significant expansion of the Manhattan avenue protected bicycle path mileage
- Installed over 50 pedestrian refuge islands
Traffic Data

PM Peak Hour Traffic Volumes

First Avenue

- 14th St
- 23rd St
- 34th St
- 57th St
- 60th St

Second Avenue

- 14th St
- 23rd St
- 34th St
- 42nd St
- 60th St

Very minor changes in traffic volumes through project area

PM Peak hour: 5:30 pm to 6:30 pm
Before data collected June 9-15, 2009
After data collected April 4-10, 2011
Traffic Data

Taxi Speeds

First Avenue

Second Avenue

Traffic speeds remained mostly level through project area
## Safety Data

### First Avenue
1st St to 34th Street

<table>
<thead>
<tr>
<th></th>
<th>Before</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Before</td>
<td>Average per 4 months</td>
<td>After</td>
<td>Percent change</td>
</tr>
<tr>
<td>Crashes</td>
<td>521</td>
<td>173.7</td>
<td>165</td>
<td>-5.0%</td>
</tr>
<tr>
<td>Crashes with injuries</td>
<td>107</td>
<td>35.7</td>
<td>24</td>
<td>-32.7%</td>
</tr>
<tr>
<td>Total Injuries</td>
<td>121</td>
<td>40.3</td>
<td>26</td>
<td>-35.5%</td>
</tr>
</tbody>
</table>

**Before period:** 12/01/07-03/31/08, 12/01/08 - 03/31/09, 12/01/09 - 03/31/10  
**After period:** 12/01/10-03/31/11

### Second Avenue
34th Street to 1st St

<table>
<thead>
<tr>
<th></th>
<th>Before</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total Before</td>
<td>Average per 6 months</td>
<td>After</td>
<td>Percent change</td>
</tr>
<tr>
<td>Crashes</td>
<td>983</td>
<td>327.7</td>
<td>300</td>
<td>-8.4%</td>
</tr>
<tr>
<td>Crashes with injuries</td>
<td>218</td>
<td>72.7</td>
<td>56</td>
<td>-22.9%</td>
</tr>
<tr>
<td>Total Injuries</td>
<td>239</td>
<td>79.7</td>
<td>62</td>
<td>-22.2%</td>
</tr>
</tbody>
</table>

**Before period:** 10/01/07 - 03/31/08, 10/01/08 - 03/31/09, 10/01/09 - 03/31/10  
**After period:** 10/01/10 - 03/31/11

**Source:**  
NYPD Accident Database (TAMS data)
Bicycle Volumes - Weekdays

First Avenue
Between St Marks Pl and E 9th St
Cyclist Volumes - 12 Hour: 7am-7pm, Weekdays

<table>
<thead>
<tr>
<th>Month</th>
<th>Before</th>
<th>Change</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 2010</td>
<td>787</td>
<td></td>
<td></td>
</tr>
<tr>
<td>November 2010</td>
<td>2,007</td>
<td>+155%</td>
<td></td>
</tr>
<tr>
<td>December 2010</td>
<td>1,238</td>
<td>+57%</td>
<td></td>
</tr>
<tr>
<td>January 2011</td>
<td>1,004</td>
<td>+28%</td>
<td></td>
</tr>
<tr>
<td>February 2011</td>
<td>1,191</td>
<td>+51%</td>
<td></td>
</tr>
<tr>
<td>March 2011</td>
<td>1,441</td>
<td>+83%</td>
<td></td>
</tr>
<tr>
<td>April 2011</td>
<td>1,994</td>
<td>+153%</td>
<td></td>
</tr>
</tbody>
</table>

Notes:
Data from a single weekday count (06/29/10; 11/03/10; 12/09/10, 01/06/11, 02/15/10, 03/08/11, 04/21/11)
Bicycle Volumes - Weekdays

Second Avenue
Between St Marks Pl and E 9th St
Cyclist Volumes - 12 Hour: 7am-7pm, Weekdays

Before

<table>
<thead>
<tr>
<th>Month</th>
<th>Volume</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 2010</td>
<td>1,226</td>
<td></td>
</tr>
<tr>
<td>November 2010</td>
<td>1,247</td>
<td>+2%</td>
</tr>
<tr>
<td>December 2010</td>
<td>1,067</td>
<td>-13%</td>
</tr>
<tr>
<td>January 2011</td>
<td>1,049</td>
<td>-14%</td>
</tr>
<tr>
<td>February 2011</td>
<td>1,129</td>
<td>-8%</td>
</tr>
<tr>
<td>March 2011</td>
<td>1,023</td>
<td>-17%</td>
</tr>
</tbody>
</table>

After

<table>
<thead>
<tr>
<th>Month</th>
<th>Volume</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 2011</td>
<td>1,903</td>
<td>+55%</td>
</tr>
</tbody>
</table>

Notes:
Data from a single weekday count (06/24/10; 11/03/10; 12/09/10, 01/06/11, 02/15/10, 03/08/11, 04/21/11)
Planned 2011 Bicycle Facilities

2010: Bike paths installed below 34th Street

2011: Extend bike facilities to 59th Street

Existing Cycling Volume at 50th Street:
First Ave: 828*
Second Ave: 1,118*

*Average of 3 single day counts (7am-7pm) May, August and September 2010
Protected Bicycle Path

E 34th Street to E 46th Street

- Mixing Zones - accommodate vehicle/bike turning conflict
- Pedestrian Islands (12) - Shorten pedestrian crossings
- Total protection for cyclists mid-block
- No loss of loading zone space
- 16 total parking spaces repurposed for pedestrian islands and mixing zones
- E 46th Street to E 49th Street - bike lane
Shared Bicycle Lane

First Avenue - East 49th St to East 57th St
Second Avenue - East 59th St to East 34th St

- High vehicle volumes to/from QBB, to QMT
- Modified shared lane design to enhance cyclist’s safety
  - Additional shared lane bike symbols
  - Solid lane striping, discourages unnecessary lane changing
  - Opportunity for additional overhead signage
- No loss of loading zones
- No loss of parking spaces
- Increase in availability of weekday parking/loading spaces due to removal of peak period restrictions:
  - 1st Ave: Daytime parking capacity increasing 31%
  - 2nd Ave: Daytime parking capacity increasing 45%