Plaza Street Bicycle Connections
Community Boards 6 & 8
Timeline

- **2004**: Plaza Street Buffered Bike Lane Installed
- **2007-2013**: Bike Network Enhancements: GAP Southeast, Vanderbilt, Berkeley/Lincoln, PPW, Eastern Parkway (under construction)
- **2010**: DOT Proposes converting bike lane to two-way as part of GAP project
- **2011**: GapCo & other community members express concerns with 2010 Design Proposal
- **2012**: DOT proposes new design option
• 27% of AM commuter bicycle traffic is contraflow

Weekday count taken 11/9/11 between Berkeley & Union 7:00am to 9:00am
Existing Conditions – Contraflow Cyclists
Existing Conditions

- Existing traffic direction forces long trips crossing busy streets
- Two-way facility will shorten connector trips to 2 or 3 blocks
- Short trips require attention to ons and offs

<table>
<thead>
<tr>
<th>Plaza Street Bike Trip Length</th>
<th># Blocks</th>
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<tr>
<td>From</td>
<td>To</td>
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<tr>
<td>Vanderbilt</td>
<td>EP</td>
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<td>PPW</td>
<td>Lincoln</td>
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<td>Lincoln</td>
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Community Concerns:

- Reduced effective roadway & potential impact on through traffic
- Reduction of parking for bike path access and turn lanes: Approx. 30 spaces
2012 Design Proposal

Typical cross-section, actual street width varies 40 to 44 feet
Proposed Improvements - Traffic Calming

- 11-Foot wide travel lane
  - Discourages speeding

- Speed Bumps
  - Control illegal speeding
  - Discourage cut-throughs

- Painted Sidewalk Extensions
  - Emphasize right of way of crossing pedestrians
  - Proposed locations:
    - SWC at Berkeley Place
    - SEC of Flatbush Ave
    - NEC of Vanderbilt Ave
Proposed Improvements - Traffic Calming

Speed Bump Through Bike Lane

Painted Sidewalk Extension
Comparing Designs

1. Sense of Protection
2. Bike Network Access
3. Limited Impact on Other Street Users
4. Limited Parking Loss
Comparison: Sense of Protection

2010 Protected Bike Path

2012 Two-way Bike Lane

Less demand for protection due to low traffic volumes
Comparison: Bike Network Access

2010 Protected Bike Path

- 22’ Combined Parking/Moving Lane
- 7’ Floating Parking Lane
- 3’ Buffer
- 8’ Sidewalk

2012 Two-way Bike Lane

- 9’ Parking/Loading Lane
- 11’ Moving Lane
- 3’ Buffer
- 4’ Bike Lanes
- 4’ Parking Lane
- 9’ Inner Sidewalk
Comparison: Bike Network Access

**2010**  Protected Bike Path
- Safety: poor visibility
- Mobility: two-stage turn required

**2012**  Two-way Bike Lane
- Safety: excellent sight lines for turns
- Mobility: simpler/quicker turns, cyclist can pick out gaps in traffic
Comparison: Impact on Other Street Users

**2010** Protected Bike Path

- **Sidewalk**
- **22’** Combined Parking/Moving Lane
- **7’** Floating Parking Lane
- **3’** Buffer
- **8’** Sidewalk

**2012** Two-way Bike Lane

- **Outer Sidewalk**
  - **9’** Parking/Loading Lane
- **Moving Lane**
  - **11’**
- **Buffer**
  - **3’**
- **Bike Lanes**
  - **4’**
  - **4’**
- **Parking Lane**
  - **9’**
- **Inner Sidewalk**
Comparison: Impact on Other Street Users
Comparison: Limiting Parking Loss

Limiting Parking Loss

**2010** Protected Bike Path

Removed 30 of 92 spaces along berm

**2012** Two-way Bike Lane

No spaces removed
<table>
<thead>
<tr>
<th>Sense of Protection</th>
<th>Bike Network Access</th>
<th>Limiting Impact on Other Street Users</th>
<th>Limiting Parking Loss</th>
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**2010 Protected Bike Path:**

- 22’ Combined Parking/Moving Lane
- 7’ Floating Parking Lane
- 3’ Buffer
- Sidewalk

**2012 Two-way Bike Lane:**

- 9’ Parking/Loading Lane
- 11’ Moving Lane
- 4’ Bike Lane
- 4’ Parking Lane
- Sidewalk
Inspiration for Innovative Design

- Contra-flow treatment already successful in major U.S. cities
- Ocean Parkway Service Road two-way lane installed 2009
Proposal Summary

Proposal:
• Addresses 2010 community concerns
• Two-way buffered bicycle lane
• Narrow existing moving lane to standard width
• Wide separation between vehicles and contra-flow bikes
• Speed bumps & painted neckdowns

Benefits:
• Improved cycling route flexibility & connectivity
• Easy on/off for short bike trips
• Traffic calming on residential street – safer for all users
• Predictability of two-way cyclists – safer ped crossing
• No parking loss
Thank You

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