Clarendon Road
Traffic Calming and Bicycle Lane Project

Presentation to Brooklyn
Community Boards 14 & 17

NYC Department of Transportation
Offices of Traffic Planning and Alternative Modes
May 2008
Why are we here?

- Local Concerns over Speeding
- Speed Study Confirmed
- Proposal to Calm Traffic
Project Intentions

1. Reduce Speeds by Reducing Lane Width
2. Improve Bicycle Access

Grand Street, Manhattan: 2-way street with Bicycle Lane, a Moving Lane, Turning Lanes and Center Median
Existing Conditions – West of E 37th St

Flatbush Ave to E 37th St (16 blocks, 0.8 mi) – Excessively Wide (50’)

- 25’ Parking & Moving Lane
- 25’ Parking & Moving Lane
Existing Conditions – East of E 37th St.

E 37th St. to Ditmas Ave. (23 blocks, 1.2 mi) – Excessively Wide (60’)

- 20’ Parking & Moving Lane
- 10’ Moving Lane
- 10’ Moving Lane
- 20’ Parking & Moving Lane

Often Used as 1 lane

2 - 10’ Moving Lanes

Parking Lane

Parking Lane
Existing Conditions - Volumes

• Relatively Light Volumes
• No significant difference between 1 or 2-moving lane segments

Average Daily Traffic Volumes – Clarendon Road, 2007

<table>
<thead>
<tr>
<th></th>
<th>Brooklyn Ave. &amp; 35th St. (1 moving lane)</th>
<th>Schenectady Ave. &amp; E 48th St. (2 moving lanes)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Eastbound</strong></td>
<td>6,465 (5 cars/minute)</td>
<td>8,274 (6 cars/minute)</td>
</tr>
<tr>
<td><strong>Westbound</strong></td>
<td>8,058 (6 cars/minute)</td>
<td>7,360 (5 cars/minute)</td>
</tr>
</tbody>
</table>
Existing Conditions – Speed Study

**Eastbound** between Nostrand Avenue and Utica Avenue

- Speeding rampant

<table>
<thead>
<tr>
<th>Location</th>
<th>Average Speed (mph)</th>
<th>% Speeding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nostrand Ave to E 32nd St</td>
<td>43</td>
<td>91%</td>
</tr>
<tr>
<td>E 34th St to E 38th St</td>
<td>44</td>
<td>99%</td>
</tr>
<tr>
<td>E 38th St to Albany Ave</td>
<td>55</td>
<td>100%</td>
</tr>
<tr>
<td>Albany Ave to Troy Ave</td>
<td>54</td>
<td>99%</td>
</tr>
<tr>
<td>Schenectady Ave to Utica Ave</td>
<td>49</td>
<td>98%</td>
</tr>
</tbody>
</table>

NYC 30mph speed limit
# Existing Conditions – Speed Study

**Westbound** between Utica Avenue and Nostrand Avenue

- Slightly slower, but still very high and frequent

<table>
<thead>
<tr>
<th>Route</th>
<th>Average Speed (mph)</th>
<th>% speeding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utica Ave. to Schenectady Ave.</td>
<td>44</td>
<td>93%</td>
</tr>
<tr>
<td>Troy Ave. to Albany Ave.</td>
<td>50</td>
<td>93%</td>
</tr>
<tr>
<td>Albany Ave. to E 38th St.</td>
<td>45</td>
<td>100%</td>
</tr>
<tr>
<td>E 38th St. to E 34th St.</td>
<td>42</td>
<td>91%</td>
</tr>
<tr>
<td>E 32nd St. to Nostrand Ave.</td>
<td>42</td>
<td>86%</td>
</tr>
</tbody>
</table>

NYC 30mph speed limit
Options

1. Speed Humps?
   - Roadway too wide

2. Stop Signs/Traffic Signals?
   - Only for regulating converging traffic
   - Do not function as traffic calming devices

3. Adjust Signal Timing?
   - Limited ability to slow speeds along entire corridor

4. Road narrowing (Dieting)
   - Narrower roadway = Slower Speeds
What’s the Plan?

• Reduce moving lane width
  Narrower Streets = Slower Speeds

1. Widen existing median where possible
   • provide traffic calming

2. Install 5’ bike lanes
   • further restrict roadway
   • add underserved area to bike network

Planned Design: Widened median with Class 2 Bike Lane
NYC DOT Bicycle & Traffic Calming Projects

Traffic Calming Initiatives

• Target corridors with safety and/or quality of life concerns
• Improve streets for all users
• Apply city resources to improve key streets
  – Street repaving
  – Signs & markings

Bicycle Network Development

• 200 Mile, 3 Year Bicycle Route Route Commitment
• Targeting Areas of High Demand & Key Connections
Why Bike Lanes?

- Enhance Speed Reduction Goals
- Connect East Flatbush to Bike Network
- Achieve Mayor’s Sustainability Goals

NYC bike route map

Clarendon Rd. Corridor

Linkage with Bedford Ave bike lane
Narrower Streets = Slower Speeds

Existing Condition – Flatbush to E 37th St. – 50’ road width

Planned Condition – Flatbush to E 37th St. – slower streets for All Users
Narrower Streets = Slower Speeds

Planned Condition – Flatbush to E 37th St. – 50’ road width

<table>
<thead>
<tr>
<th>SIDEWALK</th>
<th>8’ Parking Lane</th>
<th>5’ Bike Lane</th>
<th>11’ Moving Lane</th>
<th>CENTERLINE</th>
<th>11’ Moving Lane</th>
<th>5’ Bike Lane</th>
<th>8’ Parking Lane</th>
<th>SIDEWALK</th>
</tr>
</thead>
</table>

RENDON RD
Narrower Streets = Slower Speeds

Existing Conditions – E 37th St. to Ditmas Ave. – 60’ road width

Planned Condition – E 37th St. to Ditmas Ave. – slower streets for All Users
Narrower Streets = Slower Speeds

Planned Condition – E 37th St. to Ditmas Ave. – 60’ road width

- 9’ Parking Lane
- 5’ Bike Lane
- 11’ Moving Lane
- 11’ Moving Lane
- 5’ Bike Lane
- 9’ Parking Lane

- 10’ center buffer w/ 10’ turning lane

S I D E W A L K

9’ Parking Lane
5’ Bike Lane
11’ Moving Lane
11’ Moving Lane
5’ Bike Lane
9’ Parking Lane

S I D E W A L K
Precedent for Successful Traffic Calming

Vanderbilt Avenue between Atlantic Avenue and Grand Army Plaza

- 20% decrease in average speeds
- 50% average decrease in *number* of speeders

<table>
<thead>
<tr>
<th></th>
<th>Before Traffic Calming</th>
<th>After Traffic Calming</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent traveling above speed limit (30mph)</td>
<td>76%</td>
<td>27%</td>
</tr>
<tr>
<td>Average Speeds (mph)</td>
<td>35</td>
<td>28</td>
</tr>
</tbody>
</table>
Narrow & Defined Lanes = Slower Speeds

Proposed Condition – Clarendon between Flatbush and E 37th St. – 50’
Narrow & Defined Lanes = Slower Speeds

Proposed Condition – Clarendon between E 37th St. and Ditmas Ave. – 60’

11’ travel lane
10’ median with left turn bays
11’ travel lane
Design Approach for Clarendon

1. Reduce Speeds by Reducing Lane Width
   → Widened Median, Narrowed Moving lanes

2. Improving Bicycle Access
   → On Street, Marked Bicycle Lanes

3. Traffic Calming for All Street Users
   → Slower speeds = Safer Streets
Project Timeline

Community Concern (Fall 2007)
DOT Study (Winter 2007-2008)
Clarendon Road Repaved (May)
Community Input (Spring 2008)
New Markings Installed (following community input)

Post Implementation Monitoring
- Monitor new speeds
- Refinements to signal timing