TRAFFIC CALMING

Empire Boulevard
between Utica and Bedford Avenues
June 22, 2009

Presentation for Community Board 9
Commissioner Janette Sadik-Khan
Office of Research, Implementation & Safety
Why are we here?

- Community concerns over speeding, pedestrian safety and desire for traffic calming
- Empire & Troy was one of NYC’s Top 20 High Pedestrian Crash Locations in 2007

Proposal aims to:
1) **Improve Pedestrian Safety and Comfort**
2) **Calm Traffic**
3) **Improve the Streetscape**
Background Data

- Empire & Troy 2007
  - 7 crashes
  - A Top 20 High Pedestrian Crash Location (tied for 2nd)
- Empire Blvd 1997-2007
  - 6 Fatalities
  - 33 Serious Injuries
  - High proportion of mid-block crashes
Speeding

- Major factor in pedestrian injuries is speeding
- Small changes in speed lead to large differences in injuries
  - When a pedestrian is struck
    - At 20 mph = 5% chance of dying
    - At 30 mph = 45% chance of dying
    - At 40 mph = 85% chance of dying

Empire Blvd - 85% Percentile Speeds

<table>
<thead>
<tr>
<th>Time</th>
<th>Bedford-Rogers</th>
<th>New York-Nostrand</th>
<th>Brooklyn-Kingston</th>
<th>Albany-Troy</th>
<th>Utica-Schenectady</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EB</td>
<td>WB</td>
<td>EB</td>
<td>WB</td>
<td>EB</td>
</tr>
<tr>
<td>1-3 pm</td>
<td>31</td>
<td>31</td>
<td>38</td>
<td>26</td>
<td>34</td>
</tr>
<tr>
<td>3-5 pm</td>
<td>30</td>
<td>28</td>
<td>32</td>
<td>26</td>
<td>34</td>
</tr>
<tr>
<td>5-7 pm</td>
<td>37</td>
<td>33</td>
<td>35</td>
<td>32</td>
<td>33</td>
</tr>
<tr>
<td>7-9 pm</td>
<td>36</td>
<td>34</td>
<td>36</td>
<td>35</td>
<td>39</td>
</tr>
</tbody>
</table>
Causes of Speeding

- Empire Blvd is nearly twice the necessary width for the traffic volume it currently handles
- Excess capacity encourage high speeds
- From Bedford to Schenectady on Empire, average peak traffic was approximately 600vph in each direction
Other Safety Problems

60’ road = long crossing:
- 12 seconds to cross for typical adult
- 20 seconds for seniors and children

No raised medians to shelter crossing pedestrians
Pedestrian Traffic

Empire Blvd and Troy Ave

- Pedestrian traffic peaks in the morning and during school dismissal times
- Crashes were distributed evenly throughout the day and night
- Crashes result from unsafe street environment, rather than high pedestrian volumes

<table>
<thead>
<tr>
<th>Time</th>
<th>Number of Crossings</th>
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<tbody>
<tr>
<td>7:45am – 8:45am</td>
<td>350 street crossings</td>
</tr>
<tr>
<td>2:45pm – 3:45pm</td>
<td>525 street crossings</td>
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</tbody>
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Proposed solution

• **Road Diet**
  – Empire Blvd reconfigured to one moving lane in each direction
  – Bike lane installed in each direction
  – Narrowed road reduces speeding
  – Vehicles turning onto Empire Blvd. are slowed by reduced roadway width
  – Left turn bays reduce delays for through movements
  – Four raised and protected pedestrian islands to facilitate safe crossings
  – Trees and landscaping add to streetscape
  – All parking spaces are preserved
Empire – Existing Conditions

- 8' Parking Lane with Bus Stops
- 11' Moving Lane
- 11' Moving Lane
- 11' Moving Lane
- 11' Moving Lane
- 8' Parking Lane with Bus Stops
Empire - Proposed Design

Broadway, Williamsburg

- 9' Parking Lane with Bus Stops
- 5' Bike Lane
- 11' Moving Lane
- 10' Center median with left turn bays & pedestrian refuge islands at intersections
- 11' Moving Lane
- 5' Bike Lane
- 9' Parking Lane with Bus Stops

SIDEWALK
Vanderbilt Avenue Traffic Calming Project (July 2008)

- **Speeding**
  - 21% decrease in average speeds
  - 64% decrease in number of speeders

- **Crashes**
  - 22% reduction in injuries since implementation
Clarendon Road Traffic Calming Project – July 2008

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

- **Crashes**
  - 25% decrease in pedestrian crashes
Thank You!

Questions and Comments

Contact: Hillary Poole, Division of Traffic Planning
HPoole@dot.nyc.gov

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