Burke Ave
Traffic Calming
Community Board 12 Transportation Committee, Bronx

February 4, 2014
Commissioner Polly Trottenberg
New York City Department of Transportation
Office of Research, Implementation and Safety
Project area: Burke Ave from Bronx Park E to E Gun Hill Rd
Corridor runs through 2 Community Boards CB 11 & CB 12
6 lanes (4 travel, 2 parking)
60’ wide roadway
Need: Why Burke Ave?

- Community request to improve safety along route
- High amount of severe injuries
- High speeds
  - Max recorded speed of 50 mph
  - Speeders (85th Percentile) avg 37 mph

<table>
<thead>
<tr>
<th></th>
<th>Total Injuries</th>
<th>Severe Injuries</th>
<th>Fatalities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pedestrian</td>
<td>44</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Bicyclist</td>
<td>9</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Motor Vehicle Occupant</td>
<td>262</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>315</td>
<td>9</td>
<td>0</td>
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</tbody>
</table>
Project Details

- Install flush center median with turn bays
- Parking lane stripe
- Remove one through travel lane in each direction
- Refurbish crosswalks and markings at necessary locations

**Existing Conditions**

Boston Rd at Burke Ave, Bronx, looking west

**Example of Proposed Treatment**

Linden Blvd & Nostrand Ave, Brooklyn, looking east
Project Proposal

Project Limits: Burke Ave from Bronx Park East to E Gun Hill Rd

**EXISTING**

<table>
<thead>
<tr>
<th>60'</th>
<th>Combined Parking/Moving Lane</th>
<th>Moving Lane</th>
<th>Moving Lane</th>
<th>Combined Parking/Moving Lane</th>
</tr>
</thead>
<tbody>
<tr>
<td>19'</td>
<td>Sidewalk</td>
<td>11'</td>
<td>11'</td>
<td>19'</td>
</tr>
</tbody>
</table>

**PROPOSED**

<table>
<thead>
<tr>
<th>14'</th>
<th>Wide Parking Lane</th>
<th>11'</th>
<th>10'</th>
<th>11'</th>
<th>14'</th>
</tr>
</thead>
<tbody>
<tr>
<td>Side walk</td>
<td>11'</td>
<td>Moving Lane</td>
<td>Turn Bay/Flush Median</td>
<td>Moving Lane</td>
<td>Wide Parking Lane</td>
</tr>
</tbody>
</table>

Install left turn bays and painted medians

Install wide 14' parking lane stripe
Evaluation of Lane Removal

**Congested Lane**
- 700 vehicles per hour or above

**Existing (2 lanes)**
- Maximum 163 vehicles per lane

**Proposal (1 lane + left turn bays)**
- Maximum 327 vehicles per lane

Maximum Recorded Peak Volume (AM & PM)

Modeled Intersection Typical of Route Burke Ave at Boston Rd (AM Peak 8-9)
- Existing: **18.6** secs delay
- Proposal: **20** secs delay

Very minor increase in delay

<table>
<thead>
<tr>
<th>163 Existing Max Lane Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>327 Proposal Max Lane Volume</td>
</tr>
</tbody>
</table>
Safety Issue
• 33% of crashes involving pedestrians occurred at uncontrolled intersections

Proposed Solution
• 4 way stops requested for Bronx Park E, Wallace Ave, Colden Ave, Barnes Ave and Pearsall Ave
• Study involves analyzing volumes, crashes, and injuries; the intersection must meet certain thresholds for a 4 way stop to be considered
Safety Issue - Laconia Ave at Burke Ave

High amount of Right Angle Crashes
- Stop controlled only for Laconia Ave not for Burke Ave
- Vehicles traveling NB on Laconia Ave have difficulty judging gaps in traffic due to the closeness of the Boston Rd intersection and are hitting vehicles traveling EB and WB

68% of Crashes Right Angle
Total 38 Injuries
5 year period

~150 peak hourly volume
Proposed Solution - Laconia Ave at Burke Ave

Remove Conflict
- Force NB Laconia Ave right
- Enforce with use of Qwick Kurb
Alternative Routes Comparison
Existing Route 2 Signals 1 Stop

1. 3 Signals 1 Stop
2. 2 Signals 1 Stop

Proposed Solution - Laconia Ave at Burke Ave
Proposed Solution - Laconia Ave at Burke Ave

Alternative Route Comparison
Existing Route 2 Signals 1 Stop

3 1 Signals 4 Stop

Alternative Route

E Gun Hill Rd

Boston Rd

Yates Ave

Laconia Ave
Safety Issue - E Gun Hill Rd at Burke Ave

Dangerous Right Turn
• Driver must watch movements from 2 directions
  • Wilson Ave
  • E Gun Hill Rd or Burke Ave
• Pedestrians (5 injuries 07’-11’)

~17 peak hourly volume
Proposed Solution - E Gun Hill Rd at Burke Ave

Remove Dangerous Conflict
- Force NB Wilson Ave right
- Enforce with use of Qwick Kurb

Improve Pedestrian Crossings
- Shorten Crossing Distance
- Remove Ped/Vehicle conflict
- Increase Pedestrian Space
Proposed Solution – E Gun Hill Rd at Burke Ave

- E Gun Hill Rd
- Wilson Ave

Old Route
~17 peak hourly volume

Alternative Route

Bouck Ave

Burke Ave

Wilson Ave
Increase Ped Space with Concrete – E Gun Hill Rd at Burke Ave

Peak VPH
AM: 8
PM: 17
Painted Curb Extension - E Gun Hill Rd at Burke Ave
Proposal Benefits

Painted Median and Parking Stripe
• Less weaving and better organized traffic
• Safer pedestrian crossings
• Removes excess capacity and reduces ability to speed

Left Turn Bays
• Simpler, safer left turns

Laconia Ave at Burke Ave
• Removal of dangerous conflict causing right angle crashes

E Gun Hill Rd at Burke Ave
• Simplify intersection to reduce dangerous conflicts
• Safer pedestrian crossings