Staten Island Expressway
FUTURE BUS/HOV LANE OPERATIONS
SIE Existing Bus Lane

-Opened Nov. 2005
-VNB to Slosson Ave.
-2.6 miles in length
-Operates daily 24 hours per day
-Operates as a Pilot Program with 2+ HOV in peak direction – AM eastbound/PM westbound
Bus Lane Extension West of Slosson Avenue

- Will extend existing configuration to Victory Blvd. area
- Will continue striped buffer separation
Bus/HOV Lane Extension Objectives

- Improve mobility on the SIE
- Reduce travel time for transit first and then for carpool/vanpool riders
- Increase attraction for transit use and then for carpooling
- Reduce person-hours of delay
- Increase flexibility that allows for future operating changes
Options Considered

- Bus Only
- Bus/HOV3+
- Bus/HOV2+

Time of Day Operation
- Peak period usage in both directions
- 24/7 use
- Weekend use
- No Weekend use
- Off-peak and weekend by all traffic
Issues

- Traffic Service (Level of Service) and Vehicle Occupancy
- Regional System Connectivity
- Safety, Operation and Enforcement
# 2009 Traffic Counts

Staten Island Expressway Occupancy

<table>
<thead>
<tr>
<th>Location</th>
<th>Buses</th>
<th>HOV2+</th>
<th>HOV3+</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Eastbound AM</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Richmond Ave. to Victory Blvd.</td>
<td>36</td>
<td>408</td>
<td>42</td>
</tr>
<tr>
<td>Slosson Ave. to Hylan Blvd.</td>
<td>76</td>
<td>470</td>
<td>31</td>
</tr>
<tr>
<td><strong>Westbound PM</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Victory to Richmond</td>
<td>44</td>
<td>939</td>
<td>81</td>
</tr>
<tr>
<td>Hylan to Slosson</td>
<td>54</td>
<td>530</td>
<td>45</td>
</tr>
</tbody>
</table>
## Existing Bus/HOV Lane Usage

<table>
<thead>
<tr>
<th>Location</th>
<th>Buses</th>
<th>HOV2+</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Eastbound AM Peak Hour</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fingerboard Area</td>
<td>72</td>
<td>547</td>
<td>319</td>
</tr>
<tr>
<td>34% are violators</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Westbound PM Peak Hour</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fingerboard Area</td>
<td>46</td>
<td>560</td>
<td>724</td>
</tr>
<tr>
<td>54% are violators</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Future Lane Use Forecasts

SIE Eastbound Morning – Slosson Avenue to the Verrazano Bridge

<table>
<thead>
<tr>
<th>Year</th>
<th>Buses/HOV3+</th>
<th>Buses/HOV2+</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>195</td>
<td>770</td>
</tr>
<tr>
<td>2035</td>
<td>240</td>
<td>1635*</td>
</tr>
</tbody>
</table>

*Would operate at speeds less than 35 mph
## Future Lane Use Forecasts

SIE Westbound Evening – Verrazano Narrows Bridge to Slosson Avenue

<table>
<thead>
<tr>
<th>Year</th>
<th>Buses/HOV3+</th>
<th>Buses/HOV2+</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>80</td>
<td>710</td>
</tr>
<tr>
<td>2035</td>
<td>160</td>
<td>1440*</td>
</tr>
</tbody>
</table>

*Would operate at speeds less than 40mph*
EB SIE Weekday Usage

HOURLY ATR COUNTS-BRADLEY AVENUE
EB Total

NUMBER OF VEHICLES
0
1,000
2,000
3,000
4,000
5,000
6,000
12 AM
1 AM
2 AM
3 AM
4 AM
5 AM
6 AM
7 AM
8 AM
9 AM
10 AM
11 AM
12 PM
1 PM
2 PM
3 PM
4 PM
5 PM
6 PM
7 PM
8 PM
9 PM
10 PM
11 PM

HOUR BEGINNING

Average Weekday
WB SIE Weekday Usage

HOURLY ATR COUNTS-BRADLEY AVENUE
WB Total

NUMBER OF VEHICLES
0
1,000
2,000
3,000
4,000
5,000
6,000
12 AM
1 AM
2 AM
3 AM
4 AM
5 AM
6 AM
7 AM
8 AM
9 AM
10 AM
11 AM
12 PM
1 PM
2 PM
3 PM
4 PM
5 PM
6 PM
7 PM
8 PM
9 PM
10 PM
11 PM

HOUR BEGINNING

Average Weekday
EB SIE Weekend Usage

HOURLY ATR COUNTS-BRADLEY AVENUE

EB Total

NUMBER OF VEHICLES

HOUR BEGINNING

Average Saturday

Average Sunday
WB SIE Weekend Usage

HOURLY ATR COUNTS-BRADLEY AVENUE
WB Total

HOUR BEGINNING
NUMBER OF VEHICLES
Average Saturday
Average Sunday
Other Factors

- I-278 HOV Definition
  - Gowanus - already 3+ definition of HOV
  - Goethals – proposed 3+ definition for new bridge

- Access/Safety – access needs to be limited for safety with buffer separation

- Time of Day Operation – needs to be operated from at least 5:00 AM to 9:00 PM daily

- Increased enforcement
Proposed Recommendations

- Continue to operate the Pilot Program 2+ through construction to help move traffic during the construction on the SIE
- Once complete to Victory Blvd. – permanent definition will be Buses and 3+ HOV
- Operate the Lane in both directions 24 hours a day for 7 days a week
Proposed Schedule

- Final Design Complete – September 2010
- Contract Letting – Early 2011
- Construction Complete – Mid 2013
- 2013 – Final Operation in Place