Purpose

- Improve travel times for bus riders
- Improve customer service information for bus riders
- Test bus lane enforcement and signal priority technology prior to large-scale implementation

Outreach

- DOT presented plans to the Transportation Committees of Manhattan’s Community Boards 4, 5, and 6 (CB4, 5, and 6) and held public workshops and open houses in spring 2008 for initial phase of project
- Outreach for the next project phase includes community advisory committee formed for this project, community boards in the project area and residents and businesses

Approach

- Provided real time bus arrival information at eight locations on 34th Street
- Installed left-turn signal priority for buses on 34th Street at Seventh Avenue
- Implemented video camera enforcement for bus lane violations by medallion taxi drivers

Results

- Bus ridership increased on M16 and M34 routes, while other crosstown bus routes experienced ridership declines
- Demonstrated feasibility of signal priority system and improved safety for buses using the system
- Successfully tested and operated camera enforcement technology and adjudicated violations by taxi drivers; State Legislature subsequently authorized use of camera enforcement for all vehicles
- Total number of crashes involving injuries to motor vehicle occupants lower than any of the 10 prior years

34th Street is a major east-west corridor in Manhattan. Some of the most popular destinations in the city including Penn Station, Madison Square Garden, NYU Medical Center, the Empire State Building, Herald Square and the Javits Center are located on or near 34th Street. These attractions and connections contribute to the high volumes of people and vehicles that travel to, and along, this street every day.
DOT together with the MTA are implementing street and bus service improvements on 34th Street to make bus service faster, more reliable and more attractive in this growing corridor under the agencies’ joint SBS initiative. The 34th Street SBS project corridor extends for two miles from the East River/34th Street ferry terminal to Twelfth Avenue. It is served by crosstown M16 and M34 bus routes, which together carry over 17,000 passengers per day, and is also used by commuter buses that carry over 16,000 passengers per day. During rush-hour, over 100 transit buses an hour currently traverse 34th Street, and hundreds of additional tour buses use the street over the course of the day.

In September 2008, DOT implemented the first stage of the 34th Street SBS. This initial work included curbside lanes painted in bright terra cotta red with high visibility overhead signage. It also included restriping the street to create wider lanes between Third Avenue and Ninth Avenue and new left-turn lanes. Outreach for the initial phase included presentations to CB4, 5, and 6 and public open houses. This initial phase led to improved bus travel times for the 33,000 bus riders using the street, as reported in the 2008 Sustainable Streets Index.

Further enhancements were made in late 2008 and 2009 to improve travel times and customer service information. These included left turn signal priority, camera enforcement of bus lane violations by taxis and real-time bus arrival information. DOT continues outreach efforts with CB4, 5, and 6; the community advisory committee specifically created for this project; the 34th Street Partnership, the local Business Improvement District (BID); and other businesses and residents.

In November 2008, DOT and the MTA began testing technology and management systems to enable the use of a bus-only signal priority system. Devices with radio-frequency identification (RFID) emitters were installed in buses departing from several different bus depots on the M4 and Q32 routes, and an RFID reader was installed on 34th Street to recognize an approaching bus. After a successful testing period, a turn-signal priority system was activated at 34th Street and Seventh Avenue which gives buses an exclusive signal phase to turn left onto southbound Seventh Avenue. This change provided a safer turn for buses at this busy intersection. Additionally, this allowed DOT to test the use of this technology and evaluate it for potential use at other specific locations.

In order to address the issue of vehicles blocking the bus lane, DOT began a pilot program in February 2009 to enforce bus lane violations by taxi drivers. New York City traffic rules provide that vehicles (including taxis) are permitted to enter a bus lane only to make the next right turn or to expeditiously pick-up or drop-off passengers. DOT and TLC developed a program to use video evidence of a violation for TLC to issue a summons to the taxi medallion owner, who under TLC rules is responsible for violations committed using their licensed taxicabs. DOT submitted images to TLC to show video evidence of a violation, along with an affidavit from the video reviewer. TLC then issued a summons based on the images. TLC summonses were adjudicated before TLC administrative law judges. Medallion owners found to be in violation are subject to a $150 fine. This method of camera enforcement is permissible under the TLC adjudicatory process and did not require legislative approval. The first violations were sent to TLC in May 2009 and hearings began in August 2009.

During the pilot, DOT tested various cameras along the corridor. This technical testing time allowed DOT to select and implement the best possible video enforcement technology for bus lane violations. The full operation of the system for the purpose of issuing TLC summonses began in April 2010.

In June 2010, New York State enacted legislation enabling camera enforcement for all vehicles, on all SBS routes in New York City. DOT and MTA have installed bus lane enforcement cameras along 34th Street and elsewhere, which automate the enforcement process by issuing violation notices to all vehicles that illegally drive or park in the bus lane.
Bus ridership increased on 34th Street by 3-6% after implementation of bus countdown clocks and related improvements to bus service, even as other crosstown bus routes experienced an average drop of 5%.

To improve customer service information, electronic signs displaying real-time bus arrival information were installed at eight bus stops on 34th Street in August 2009. The signs show the projected number of minutes until the next three buses arrive. The eight locations with real-time bus information are: westbound at First Avenue, Second Avenue, Third Avenue and Lexington Avenue and eastbound at Park Avenue, Eighth Avenue, Ninth Avenue and Tenth Avenue. The information is also available on the MTA website, and can be accessed on mobile devices at http://bustime.mta.info/bustime/home.jsp.

Since the bus arrival signs were installed, ridership along the corridor has increased 3% during the weekday and 6% on weekends, substantially better performance than other crosstown routes. By comparison, crosstown routes on 14th, 23rd, 42nd and 57th Streets showed an average ridership loss of 4% on weekdays and 6% on weekends.

The number of crashes involving injuries to motor vehicle occupants for the two years after implementation is lower than the 10 prior years, although the change was not statistically significant based on two years of “after” data (for crash analysis methodology, see page 72).

DOT is investigating the feasibility of implementing the final stage of the 34th Street SBS by 2012. DOT is consulting extensively with a community advisory committee formed for this project, the three community boards and area residents and businesses in the planning and design of this project.

### Crashes with Injuries along 34th Street

<table>
<thead>
<tr>
<th></th>
<th>Before* (three previous years)</th>
<th>After1</th>
<th>After2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Crashes with Injuries</td>
<td>166</td>
<td>149</td>
<td>135</td>
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<tr>
<td>Motor Vehicle Occupants</td>
<td>76</td>
<td>80</td>
<td>58</td>
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<tr>
<td>Pedestrians</td>
<td>72</td>
<td>72</td>
<td>58</td>
</tr>
<tr>
<td>Bicyclists</td>
<td>18</td>
<td>20</td>
<td>21</td>
</tr>
</tbody>
</table>

*Before columns show the crash history for each of the three years immediately prior to project implementation. After column shows number of crashes since implementation (through October 2010) at annual rate. See page 72 for further information on crash data source and analysis methodology. The sum of the three specific categories may not equal “Total Crashes with Injuries” because some crashes involved injuries in multiple categories.

### Crosstown Bus Ridership

<table>
<thead>
<tr>
<th></th>
<th>Day</th>
<th>Before</th>
<th>After</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>34th St (M34+M16)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weekday</td>
<td>17,156</td>
<td>17,753</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>Weekend</td>
<td>13,211</td>
<td>13,968</td>
<td>6%</td>
<td></td>
</tr>
<tr>
<td>Other Crosstown Buses (M14, M23, M42, M57 and M31)</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weekday</td>
<td>91,027</td>
<td>86,959</td>
<td>-4%</td>
<td></td>
</tr>
<tr>
<td>Weekend</td>
<td>86,398</td>
<td>80,988</td>
<td>-6%</td>
<td></td>
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</tbody>
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