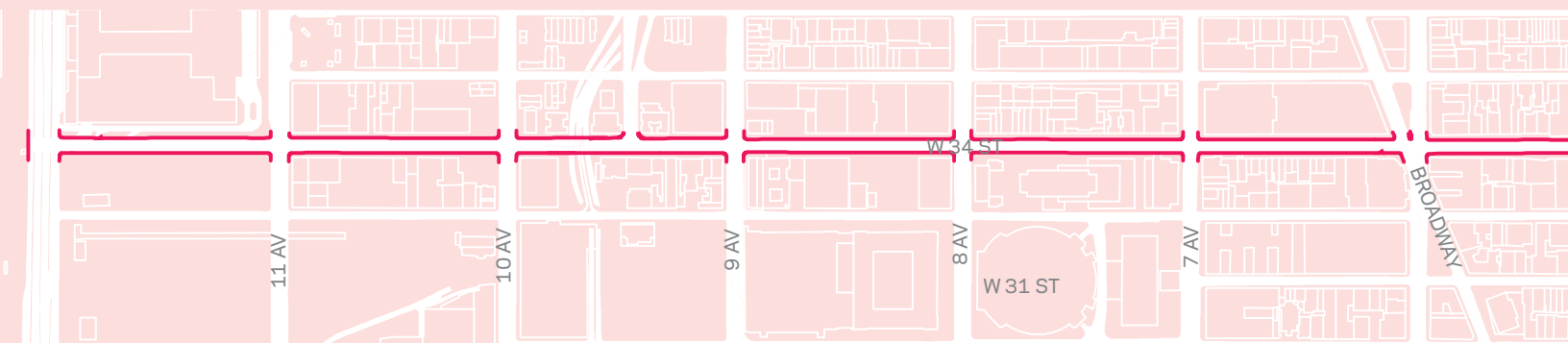
34th Street Select Bus Service



Purpose

- Improve travel times for bus riders
- Develop 34th Street as a transit corridor
- Test new Bus Rapid Transit (BRT) technology and treatments for possible use citywide

Outreach

- DOT invited all Manhattan community boards to an open house in January 2008
- Concept plan developed in winter 2008 and finalized in spring 2008 after DOT presentations to Community Boards 4, 5 and 6
- DOT sponsored an open house on the 34th Street design plans with DOT staff available to answer questions in April 2008

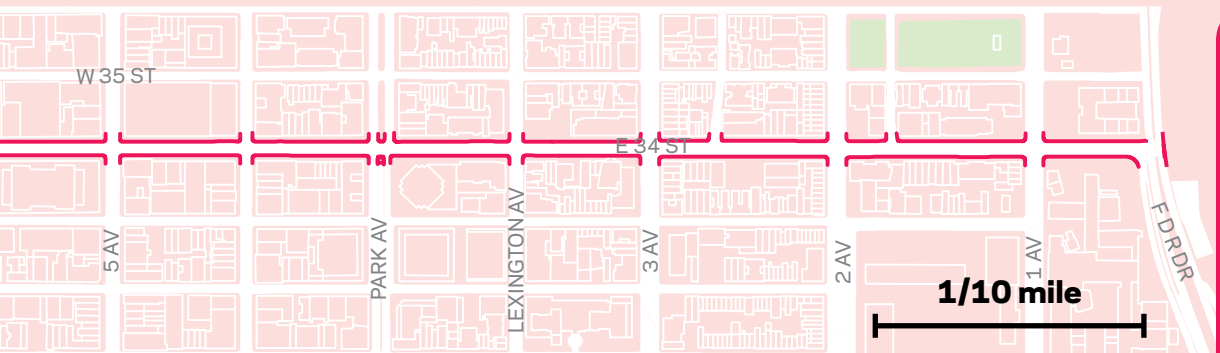
Approach

- Dedicated bus lane in both directions
- Widened lanes and reduced overall number of lanes from six to five
- Installed new markings and signs to create enhanced bus lanes
- Installed left-turn signal priority for buses at Seventh Avenue
- Tested "soft barriers" designed to maintain integrity of the bus lanes

Results

- Improved speed of M34 bus by 17% from First Avenue to Eleventh Avenue
- Time waiting at traffic lights decreased by 29%
- Showed "soft barriers" reduced the number of moving vehicles in the lane, but did not prevent vehicles from parking in the bus lane

34th Street is a major crosstown bus route serving 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. These attractions and connections contribute to the high volumes of people and vehicles that travel to, and along, this street every day.



34th Street Select Bus Service

More than 30,000 people ride buses on 34th Street each weekday. About 17,300 ride a local bus—either the M34 that traverses 34th Street river to river or the M16, which travels along 34th Street between Tenth Avenue and the FDR Service Road. Another 15,000 riders use express buses that serve Midtown from Brooklyn, Queens, Staten Island and New Jersey. These buses primarily serve neighborhoods that lack direct subway access and thus provide important connectivity between outer borough neighborhoods and Manhattan jobs.

Manhattan crosstown buses are among the slowest bus routes in New York City. Midtown buses travel on average of about 4.5 m.p.h.[1]. Prior to installing the 34th Street project, buses were delayed by: general traffic congestion, vehicles parked at the curb, the large number of pedestrians, and the relatively narrow lanes that reduced the effective vehicle-carrying capacity of each lane. The resulting congestion made bus service unreliable and therefore decreased the attractiveness of transit. Improving bus speeds is important to enhancing mobility along this important corridor.

The 34th Street bus project added new and improved bus lanes along 34th Street from First Avenue to Eleventh Avenue. These lanes are painted red and have high visibility overhead signage. The road was restriped to allow wider lanes and new left-turn lanes, and some vehicular turns were prohibited to improve pedestrian safety. MTA New York City Transit (NYCT) removed a stop and streamlined the bus schedule. DOT also tested soft barriers to help protect the bus lane and is piloting left turn signal priority and video enforcement for taxis along the corridor.

This project is part of a larger program of bus improvement initiatives that include the joint DOT / NYCT Select Bus Service (SBS) program, which is New York City's initial implementation of Bus Rapid Transit (BRT). The success of these projects is based in part on managing roadway capacity more efficiently by dedicating street space to this high performance mode.

Beginning in January 2008, DOT held public meetings to discuss these plans with the community boards and elected officials who serve the corridor and with the 34th Street Partnership. Two community boards passed resolutions in favor of the plan and suggestions made by community leaders were incorporated into the final plan. The 34th Street Partnership was also very supportive of the project. In addition, DOT held an open house in April 2008 to provide the public with an opportunity to ask questions, provide feedback and obtain information on the project. In April 2008, plans were also presented to the larger public at a special event on BRT with the advocacy community. Cumulatively, these meetings and the feedback they generated helped to guide DOT's final designs for 34th Street.

DOT and NYCT conducted a survey of the running time of the M34 in April 2008 and again in May 2009 to measure the impact of these changes on bus travel times. Observations recorded overall running times for the entire route and tracked delays due to traffic lights, passengers boarding, obstructions in the lane and other delays. DOT monitored the number of vehicles driving and parking in the bus lanes both before and after the soft barriers were installed.

[1] Data source: New York City Transit

The soft barriers decreased unauthorized vehicle travel in the bus lane by 57% but did not prevent vehicle parking in bus lane..

M34 Time Delays: First Avenue-Eleventh Avenue

Delays	Before	After	% Change
Average in Motion Time	11:11	08:52	-21%
Average Dwell Time	10:30	09:49	-6%
Average Signal Time	07:01	05:01	-29%
Average Other Delays	01:00	00:57	-4%
Total Running Time	29:42	24:39	-17%

Project implemented in September 2008. Time shown in minutes, seconds. Before data collected in April 2008. After data collected in May 2009

The M34's speed improved by 17% between First and Eleventh Avenues

Travel times on the M34 bus route improved after implementation, mainly due to faster bus speeds within the bus lane and decreased time spent at traffic lights. The dedicated lanes allow buses to pass the queues of vehicles waiting at red lights, leading to a 29% decrease in delays at traffic lights. While the bus was in motion, its speed increased by 26%, from 9.1 m.p.h. to 11.5 m.p.h.

The deployment of soft barriers (raised red dots) decreased unauthorized vehicle travel in bus lanes but did not prevent vehicles from standing and parking in the bus lane, highlighting the importance of enforcement to keep the lanes clear. The soft barrier pilot was designed in part to test the durability of the dots during winter weather conditions. By the end of the winter, more than 95% of the dots had disappeared, primarily due to snow plowing.

Overall, this project showed that a wide, dedicated bus lane can substantially increase bus speeds, even with some blockage of the lane by vehicles, pedestrians and others. Implementation of additional improvements, such as taxi video enforcement and off-board fare collection, will provide further improvements.

DOT and NYCT are working to bring more substantial bus improvements to 34th Street with a two-way protected Transitway. NYCDOT has selected the Transitway as the Locally Preferred Alternative for the 34th Street corridor. This project will speed local and express buses even further on 34th Street, while significantly expanding pedestrian space and accommodating new growth along the corridor.

Bicycles, pedi-cabs and pedestrians in the bus lane still present challenges to improving bus speeds.