

New York City Bus Lane Camera Enforcement

Program Review
2015 to mid-2017





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Introduction

New York City has the highest bus ridership in the United States, with 2.4 million passenger trips made daily. However, New York City also has the slowest bus speeds in the country, with buses averaging under eight miles per hour. As part of efforts to improve bus service, the New York City Department of Transportation (DOT), working closely with the Metropolitan Transportation Authority (MTA), MTA New York City Transit (NYCT), and MTA Bus Company (MTA Bus), has installed bus lanes around the city to allow buses to keep moving on congested streets. DOT's traffic rules require keeping bus lanes clear of other traffic, and therefore effectively improve bus speeds.

In the summer of 2010, New York City and the MTA were given legislative authorization to begin operating a camera-based bus lane enforcement system which outlined specific restrictions regarding the time, day of week, and methods of enforcement. Select Bus Service (SBS) is the brand name used by NYCT for services operated under the Bus Rapid Transit demonstration

program. Based on this authority, the City and the MTA initiated implementation of a camera-based enforcement system beginning in November 2010. In 2015, New York State legislation extended the authorization through September 20, 2020.

This report gives a basic overview of the implementation of the camera-based enforcement system, including the outreach and education completed in advance of beginning a system, and also discusses the results of the demonstration program in terms of bus speeds and reliability.



Outreach and Education

Prior to implementing the camera enforcement program, DOT and NYCT conducted a joint outreach and public education campaign to raise awareness of bus lanes and make sure that the rules of bus lanes are clear to the public.

NYCT conducted bus and subway ad and media campaigns to raise bus lane awareness, beginning in 2010 with the start of SBS on the M15 in Manhattan. At the same time, DOT distributed a brochure to drivers, bus riders, and community stakeholders along SBS corridors. The brochure, available at www.nyc.gov/buslanes, has been translated into the top six most common languages spoken in New York City; all information in the brochure is also available by calling 311. In addition, DOT and the New York City Taxi and Limousine Commission continually work together to educate taxi and livery drivers, including

direct messaging to drivers and fleet owners. DOT has also worked with the New York Police Department, AAA, the Motor Trucking Association, and local Business Improvement Districts to educate the public about bus lane rules. As each new bus lane is implemented, similar forms of outreach occur along the corridor. Further, DOT now also uses social media channels, including Facebook and Twitter, to announce when enforcement on a corridor goes into effect.

Camera Operations

Under the City's traffic rules, bus lanes in New York City can be legally used by non-bus vehicles for a number of purposes, including making the next legal right turn, accessing the curb, or to avoid an emergency vehicle. As a result, the camera enforcement system needs to be able to differentiate between these legal activities and illegal uses of the bus lane before issuing violations. The systems therefore rely on the use of recorded video that is reviewed by trained camera operators before a violation is issued.

Two types of violation monitoring equipment have been used to date. DOT has implemented a fixed location camera system. In the fixed system, two cameras are mounted above the bus lane. One camera provides a high quality view of the rear of a vehicle, clearly showing the vehicle's license plate, but not showing the driver of the vehicle. The second camera provides a wider angle view of the street, clearly showing both potential actions in the bus lane, and also showing other activity on the street that might have forced a vehicle to use the bus lane. As of this report (April 2017), fixed location cameras have been installed at 94 locations along the First Avenue/Second Avenue, 34th Street, Fordham Road, Hylan Boulevard,

Nostrand Avenue, 125th Street, Webster Avenue, Flushing-Jamaica, Utica Avenue, and 23rd Street, SBS corridors. The total cost of this system is \$12,204,288 in capital costs, and \$383,520¹ in annual operating costs.

The second system was a NYCT pilot for on-bus mobile cameras. This pilot program was discontinued.

Program Results: Violations and Adjudication

Under the bus lane camera enforcement program, notices of liability are sent out by DOT and by NYCT, depending on whether the violation was recorded under the fixed location or mobile camera program respectively. These notices of liability include information about the date, time and location of the violation, a photo of the vehicle recorded, and a link to a website with a personalized PIN that allows the video of the violation to be viewed. The notices of liability are then sent to the New York City Department of Finance (DOF) for adjudication.

DOF adjudicates all traffic violations for the City, and has developed a high quality process to adjudicate the violations identified through the bus lane camera program.

From January 1, 2015, through April 30, 2017, 299,493 violations were recorded by the bus lane camera enforcement system, and an equal number of notices of liability were issued. A monthly breakdown of these violations is provided in Table 1.

TABLE 1

Monthly breakdown of violations recorded by the bus lane camera enforcement system

Month	Camera Violations	Active Cameras ²	Month	Camera Violations	Active Cameras ²	Month	Camera Violations	Active Cameras ²
January '15	8,775	41	January '16	9,557	42	January '17	8,312	74
February '15	8,216	43	February '16	8,734	43	February '17	8,285	77
March '15	8,529	43	March '16	10,939	54	March '17	9,878	82
April '15	8,809	42	April '16	9,156	56	April '17	8,346	83
May '15	10,098	41	May '16	10,793	54			
June '15	10,765	43	June '16	14,265	64			
July '15	10,746	41	July '16	14,165	63			
August '15	9,795	44	August '16	13,390	64			
September '15	9,702	43	September '16	16,541	69			
October '15	11,043	43	October '16	12,898	70			
November '15	10,899	43	November '16	13,708	70			
December '15	10,964	41	December '16	12,185	76			

Of the 299,493 notices of liability issued in the January 2015 to April 2017 period, a total of 36,369 (12%) were challenged by recipients, and needed to go through the full adjudication process. Of these challenges, 7,606 (21% of challenged notices) were found not guilty, or about 2.5% of total cases.

2015 to May 24, 2017, was \$30,584,990.51³, or about \$102 per violation issued. This figure includes the base fine of \$115, and includes both late payment penalties, and violations dismissed or otherwise not paid to date.

The total amount of revenue collected as a result of violations issued by the program between January 1,

Program Results: Bus Service

The SBS program has been a huge success, with all evaluated SBS routes implemented to date showing substantial increases in both speed and ridership. These speed enhancements rely in part on a well-enforced set of bus lanes, as is provided by the bus lane camera

enforcement system. A detailed report on the effect of bus lane camera enforcement on SBS routes, including current ridership statistics, is provided in Table 2.

TABLE 2

Results of the implementation of SBS routes with bus lane camera enforcement

Bus Route	Increase in Bus Speed ⁴	Increase in Ridership ⁵	2016 Ridership (Average Weekday)
Bx12 SBS	20%	10%	48,124
M15 SBS	15%	10%	44,797
M34/A SBS	23%	12%	14,901
S79 SBS	13% - 19%	11%	11,375
Bx41 SBS	19% - 23%	20%	23,558
B44 SBS	15 - 31%	10%	37,418
M60 SBS	n/a	n/a	16,751
Q44 SBS	n/a	n/a	27,712
B46 SBS	7% - 8%	n/a	43,463

1. Maintenance and capital costs reflect total number of camera systems installed as of June 2017
2. Number of active cameras reflects cameras in operation in a given month due to camera system maintenance
3. Violation numbers totals include fines collected until 5/24/2017, the date for which data is most recently available; this number does not include all violations issued in May 2017 as January 2017-May 2017 violations are not final until adjudicated
4. Increases in bus speed can be view by route at nyc.gov/brt. Studies on the M60, Q44, and B46 routes are in progress
5. Increases in ridership reflect changes post-SBS implementation compared to the service that SBS replaced

