

Bx12 Select Bus Service One Year Report

October 2009

This report presents the status of the Bx12 Select Bus Service program as of June 30, 2009. The service was launched on Sunday, June 29, 2008. Route and station stops are shown in Figure 1. The Bx12 SBS program continues to work quite well, with most expectations met or exceeded. This report will present all the information that has been collected in the first year of service on a variety of measures.

Ridership:

The September 2008 to June 30, 2009 average weekday bus ridership for the Bx12 Select Bus Service and Bx12 Local corridor has increased by almost 7%, confirming preliminary findings that ridership has grown substantially as a result of this initiative. In June 2009, 31,079 customers rode the Bx12 SBS (while 15,047 customers rode the Bx12 local). The statistics in the table below use 10 months ending in June 30, 2009 compared to 10 months ending in June 30, 2008. This is an accurate comparison for the purposes of this report as it removes the post-fare increase months in 2009.

Table 1. September 2007 to June 2008 and September 2008 vs. June 2009 Ridership Figures

Bx12 Ridership and Revenue Before and After SBS Implementation

	Avg. Weekday Ridership			Avg. Weekday Revenue				
		All Other Local				ΑII	Other Local	
	Bx12	Routes	Difference		Bx12*		Routes*	Difference
Sept 2007-June 2008	43,214	2,317,424		\$	41,464	\$	2,228,140	
Sept 2008-June 2009	46,122	2,297,243		\$	45,585	\$	2,261,519	
Change	6.7%	-0.9%	7.6%		9.9%		1.5%	8.4%

	Avg. Weekend Ridership		Avg. Weekend Revenue					
	All Other Local		All Other Local					
	Bx12	Routes	Difference		Bx12*		Routes*	Difference
Sept 2007-June 2008	52,420	2,497,689		\$	60,337	\$	2,839,162	
Sept 2008-June 2009	55,080	2,484,025		\$	63,741	\$	2,876,967	
Change	5.1%	-0.5%	5.6%		5.6%		1.3%	4.3%

	Total Ridership			Total Revenue			
	All Other Local		All Other Local				
	Bx12	Routes	Difference	Bx12*	Routes*	Difference	
Sept 2007-June 2008	11,517,903	602,931,508		\$ 11,513,422	\$ 599,402,358		
Sept 2008-June 2009	12,247,305	600,404,777		\$ 12,523,526	\$ 607,621,306		
Change	6.3%	-0.4%	6.8%	8.8%	1.4%	7.4%	

^{*} Part of the revenue increase was due to the March 2, 2008 fare change.



Therefore, the growth in Bx12 Select Bus Service ridership is even more striking because bus ridership in the Bronx has essentially been flat. System wide, which includes all other local routes; there was a 1% decrease in ridership.

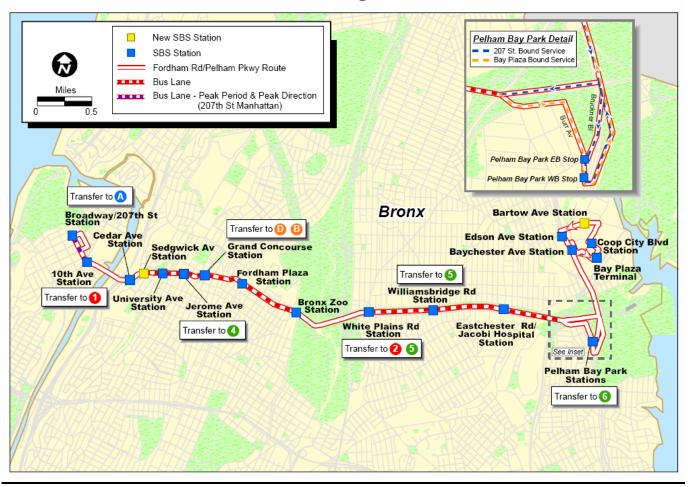
Overall, the Fordham corridor weekday ridership increased almost 7%, versus a 1% drop on other local routes in the City. Corridor weekend ridership increased over 5% while weekend ridership on local routes in the city declined by 0.5%.

The Bx12 SBS has experienced a 20% decrease in running time when compared to the Bx12 Limited stop service it replaced. Travel time savings is discussed in further detail on page 4.



Figure 1. Bx12 Select Bus Service Route and Stations Map

Fordham Rd/Pelham Pkwy Select Bus Service





Bus Travel Times:

NYCT's Operations Planning Division conducted time and delay travel studies before and after SBS implementation. Overall travel times showed a significant decrease across the corridor on the Bx12 SBS as compared to the Bx12 Limited, with an average travel time savings of approximately 19%. Pre-SBS running time on the Bx12 Limited was 58 minutes on average, as compared to 47 minutes on the SBS.

With the introduction of the off-board fare payment system, dwell times (boarding and alighting the bus) as a percentage of travel time fell from 27% to 21%. The time buses stopped at traffic signals and for traffic congestion also fell significantly, from 21% to 16% of total travel time. The Traffic Signal Priority that was installed in 20 intersections was a contributing factor that reduced the time the buses were stopped at red light traffic signals.

SBS Time and Delay – Before and After Implementation **Before** After Average Running Time = 58 minutes Average Running Time = 47 minutes **Dwell Time** 27% **Dwell Time** 16 minutes 21% In Motion 10 minutes **Time** 49% **Stop Delays** In Motion **Stop Delays** 29 minutes 21% Time 16% 12 minutes 61% 8 minutes 28 minutes Other Delays 3% **Other Delays** 3%

Figure 2. Findings from 2008 Time and Delay Study



Customer Survey:

NYCT's Corporate Communications Department conducted a comprehensive survey of Bx12 Local and Bx12 SBS customers in August 2009; one year from their initial post-SBS implementation survey in August 2008. Overall, customer satisfaction with Select Bus Service is still very high with 97% of SBS customers either satisfied or very satisfied with the service. The majority of riders were very positive with regard to average wait time, speed of their ride, the cleanliness of the SBS bus, accuracy of route signage as well as their ability to get a seat on the SBS bus. More specifically, the survey found the following,

- 95% of customers responded that they were satisfied or very satisfied with their average wait time for the SBS
- 96% of customers said they were satisfied or very satisfied with the speed of their ride
- 32% of local customers also said their service improved
- 30% of customers said that they were riding more frequently than before
- 69% of customers said that paying on the street was more convenient than paying on board the bus
- 72% of customers said that the off-board fare payment system causes the bus to spend less time stopped at the bus stop

In July 2007, NYCT's Corporate Communications and Market Research Division administered a Fordham Road Shopper Access Survey to measure how many people on Fordham Road are there to shop, their method of arriving at Fordham Road, as well as other variables. In December 2008, a follow up survey was administered on Fordham Road to measure changes in customers shopping patterns and how they arrive at Fordham Road.

Since 2007, there has been an increase in people coming to Fordham Road by bus; in 2007, 37% of all interviewees arrived by bus and in 2008 it was 42%. To contrast this increase in bus ridership, there has been a decrease in the percentage of shoppers who drive to and park on Fordham Road. In 2007, 11% of all people who drove to Fordham Road also parked on Fordham Road; in 2008, only 2% of all motorists parked on Fordham Road.

It is also worth noting that the 2008 Citywide Survey of Customer Satisfaction with NYCT local bus service found that only 68% of NYCT local bus service customers are satisfied or very satisfied with the bus service. When contrasted with the 98% satisfaction rate reported by Select Bus Service customers, it is evident that the Select Bus Service is the preferable transportation option for NYCT bus riders.



Fare Inspection Statistics:

The NYCT Department of Security continues to patrol the route with a dedicated force primarily to ensure that customers pay their fare. Their instructions are to explain the process of fare payment and to educate the customer. Summonses are issued only to blatant or repeat offenders. Between June 29, 2008 and July 29, 2009, the Department of Security reports the following statistics:

Eagle Team Statistical Comparison between Six Month and One Year Evaluation June 29,2008 to **December** January 1, 2009 **Totals since** 31,2008 to June30, 2009 Implementation % Change Warnings Issued 1427 454 -68% 1.881 Summons Issued 1601 2,072 29% 3,673 Refusals 295 289 -2% 584 **Assists** 7701 5,916 -23% 13,617 Total 11024 8,731 -21% 19,755

Table 2. NYCT Department of Security Statistics

When compared to the statistic listed in the Bx12 SBS Six Month Status Report, the Eagle Team has issued 68% fewer warnings and 29% more summonses. Further, 2% more customers have refused to show their ID between January 1, 2009 and June 30, 2009 than was reported in the previous report. Eagle Team personnel have assisted 23% fewer customers in either obtaining proof of payment fare receipts or in understanding how to use the system; this would indicate that more customers are familiar with how the SBS works and therefore do not require the assistance of security personnel.

Security personnel have made several spot checks at different locations to determine the ratio of fare evaders. These checks indicated a fare evasion ratio of approximately 10%. By way of comparison, observations made on Bx12 buses prior to the implementation of Select Bus Service, indicated a baseline fare evasion ratio of 13%. On any busy bus route, especially one with articulated buses, there will be some people who enter through the rear door of the bus. In the case of the Bx12 Limited stop service, staff observations suggested that the problem had become severe. Therefore, prior to Select Bus Service implementation, analysts rode numerous Bx12 trips, on weekdays and weekends, to establish a baseline factor for fare evasion on the route. See Figure 3. Before and after data were, however, collected in different ways, limiting comparability.



Figure 3. Fare Evasion Prior to SBS

Fare Evasion on Bx12 Bus Route Prior to Select Bus (SBS) Implementation Data Based on 6,596 Passenger Boardings				
	Legal	Questionable	Illegal	
Percentage of Boardings	82%	5%	13%	

Parking and Moving Violations on Fordham Road:

The New York Police Department's Surface Traffic Enforcement Division (STED) issued a total of 8,388 total summonses between June 2008 and June 2009. Seventy-six percent of all summonses issued, however, were issued within the first six months of service. Between June 2008 and December 2008, the number of parking summonses issued was 2,611; between January 2009 and June 2009, 568 parking summonses were issued on Fordham Road. Also, compared to the first six months of service, STED has issued 84% fewer moving violation summonses on Fordham Road. The local NYPD precincts may have also issued some tickets on Fordham Road which are not included in these numbers.

Table 3. NYPD Surface Traffic Enforcement Division Summonses Issued on Fordham Road

Parking and Moving Violations on Fordham Road					
	Parking	Moving			Total
	Summonses	Summonses	Criminal	TLC	Summonses
June to December 2008	2611	3494	59	577	6741
January 2008 to June 2009	568	548	138	393	1647
Decline in Citations	-78%	-84%	134%	- 32%	-76%
Total for One Year Period	3179	4042	197	970	8388

Availability of Fare Payment Machines:

The availability of AFC Machinery continues to be excellent, with machines available approximately 99% of the time. Figure 4 below presents availability for August 2008 as compared to August 2009. When a machine is out-of-service for any reason, the information is called in to the Bus Command Center by street supervisors and Bus Operators. The Bus Command Center relays the call to AFC Maintenance's Bronx Field Office from where maintainers are dispatched to the location. These personnel are also responsible for probing each machine regularly to download MetroCard updates and to collect ridership data. There have also been longer-term outages (not included in the total figures representing total percentage of availability in the cart below) due to temporary loss of electrical supply.



Because of the addition of SBS stops on Sedgwick Avenue and Bartow Avenue, the number of MetroCard Fare Collector (MFC) machines in place on the corridor has increased from 54 to 58, with 41 coin machines as opposed to the 39 when the corridor was first implemented. During the month of July 2008, the first full month for which MFC availability data was available after implementation, 461 work orders were generated by machines that had either gone out of service or had other electrical problems. In August 2009, 218 work orders were generated; an over 50% reduction when compared to July 2008. This shows an improvement in overall MFC operations.

Figure 5. MetroCard & Coin Payment Machine Availability – 2009

SBS & MUNI Availability

Coin Fare Collector MUNI Meter (CFC-MUNI) MetroCard Fare Collector Select Bus Services (MFC-SBS)

July-09

Equipment	No. of Machines in Service	No. of Work Orders	Hours of Operations	Out-of Service Hours*	Average Down- Time (Hr)	%Availability
MFC-SBS	58	166	30,549	254	1.53	99.17%
CFC-MUNI	41	52	21,601	159	3.05	99.26%
SBS & MUNI	99	218	52,150	412	1.89	99.21%

^{*} Out of service hours excludes any machine outage during non-operating period.



Customer Complaints:

The overall number of complaints on the Bx12 SBS as received by NYCT Customers Services from email, letters or telephone calls is very small – 119 for the first six months of operation. There has been an 18% decline in the number of customer complaints received by Customer Services. Complaints include not receiving a transfer, being charged twice, fare machine not issuing a receipt, and bus operators not waiting for customer. The predominant complaint, approximately 70%, are from customers whose MetroCards were captured by the machines. This capture rate is statistically insignificant and well within acceptable failure rates when compared to the 90,000 transactions each month that occur. Customers remain very sensitive to having their cards captured. Staff is currently investigating this problem to better understand why this occurs and to identify a solution.

Table 4. Customer Complaint Statistics between July 1, 2008 and June 30, 2009

2008 Co	mplaints	2009 Complaints			
Month	Complaints	Month	Complaints		
July	35	January	34		
August	17	February	10		
September	11	March	17		
October	12	April	19		
November	23	May	11		
December	21	June	6		
Total:	119		97		



Other Noteworthy Issues

New SBS Stops

In response to ongoing requests from residents and elected officials, a new stop was installed at Sedgwick Avenue in both directions and put into service on January 4, 2009. This stop was formerly a limited stop. Customers at this location stated that the local Bx12 does not travel into Manhattan during the day and they, especially the elderly, would have a steep walk to either the University Avenue or Cedar Avenue stop.

The westbound Bartow Avenue stop at Co-op City was installed in March 2009. This location was originally programmed as a SBS stop, but it was not installed in June 2008 due to community concerns as to its precise location.

The addition of these new stops has had a minimal effect on travel times. This effect was primarily due to a reallocation of exiting customers from other stops who would now use the new stops which are more convenient to them.

Pelham Parkway Sidewalks

Following the initiation of service on the new route, several customers and elected officials complained about the quality of the stop along Pelham Parkway. Based on these complaints, it became clear that these bus stops needed improvements, particularly in terms of adding new paved areas where bus stops had been lengthened to provide separate stopping bays for local and SBS services. NYCDOT and NYCT worked closely with the Department of Parks and Recreation to identify areas where paving could be added, without negatively impacting trees and other park vegetation. NYCDOT's Division of Roadway Repair and Maintenance installed new paved waiting areas during the fall of 2008, to remedy this situation and ensure the accessibility of both bus services. Since the installation of these sidewalks, no additional complaints have been received regarding this issue.

Instructional Decals on Fare Machinery

The first instructional decals on the MetroCard Machines and the Coin Collector Machines were only in English. These have been reprinted in English and Spanish and with a higher-quality adhesive. Staff observed how customers used the machines and incorporated that information in the redesign of the decals.



Fare Machinery

NYCT is in the process of purchasing MetroCard Fare Collection Machines for upcoming SBS corridors. The new machines will be weatherproof and have a wireless modem, thereby eliminating the need to probe MFC machines and reducing associated maintenance costs. They will also have an advanced screen that will give SBS customers an English or Spanish language option. The new machines will be installed on Fordham Road in 2011 and will replace the MEMs that are currently in place.

Cleaning Fare Machinery and Stations

Currently there is no formal system in place with regard to who is responsible for maintaining the cleanliness of the fare machinery and SBS stations. Given the location on Fordham Road which has heavy pedestrian and vehicular traffic, a great deal of waste collects inside the SBS bus shelters. A permanent arrangement needs to be identified for the long term and for future SBS routes in other corridors.

Electrical Outages

Since Select Bus Service was implemented on Fordham Road, one of the key issues with the service has been electrical outages at the stations. When there is an electrical outage and customers are unable to obtain a receipt from the MetroCard machines, the Coin Collector Machines are still available as they run on reserve battery power. However, if the customer does not have coins and it is a short term station outage, NYCT bus drivers allow passengers to board the bus without dipping their MetroCard. If, however, the station is experiencing an extended electrical outage, the customers must pay their fare on board the bus. Again, it is necessary to establish a formal protocol for rectifying these outages, since this type of problem is an unavoidable reality when operating electrical machinery on a public sidewalk.