



New York City Transit

**Evaluation of 2010 Service
Reductions**

September 23, 2011

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Introduction

In June 2010, New York City Transit (NYCT) reduced subway and bus service citywide in response to a large budget gap facing NYCT's parent agency, the Metropolitan Transportation Authority (MTA). The MTA 2010 budget gap totaled \$900 million, and the MTA and all of its constituent agencies embarked upon a comprehensive cost reduction program, including staff reductions, renegotiation of contracts and service cuts.¹

The 2010 service cuts resulted in a substantial net annual cost savings at NYCT of approximately \$67.8 million (\$51.2 million from bus service and \$16.6 million from subway service). However, these cost savings – as vital as they were to ensuring the fiscal integrity of MTA operations – came at the expense of a loss in bus ridership estimated in the range of approximately 1%, as well as less convenient service for 15% of bus and subway riders.

Eighty-five percent of all bus and subway riders were not affected by the service reductions, and for those riders the impact has been neutral. And, of those riders who were impacted, 48% were minimally affected by small schedule adjustments in train frequencies on weekends to allow for construction work. In a few cases, the cost-saving service restructurings have actually yielded some customer benefits and have opened new markets.

Without the absolute need to stabilize MTA finances, NYCT would not have proposed or implemented this full package of service reductions. Given the fiscal situation in 2010, however, the service cuts were necessary as a means of preserving appropriate levels of subway and bus service for the city as a whole. It must be noted as well that the majority of subway and bus riders were unaffected by the service cuts, because the reductions affected the least used and/or least cost-effective routes in the system or reallocated service within corridors to improve efficiency.

In developing the service reduction plan, NYCT followed several principles designed to minimize customer inconvenience:

- Affect the fewest number of riders.
- Minimize the negative effects to riders (e.g., longer waiting times).
- Maintain network coverage (even if it requires lower frequencies or altered routings).
- Operate service within existing or proposed service and capacity guidelines.
- Improve the cost-efficiency of the service provided.

Based on these tenets, NYCT focused the reductions on the least utilized routes, route segments, and times of day, while also seeking to maintain, or enhance, the cost-effectiveness of services retained and/or restructured. The adopted reductions included:

¹ Additional service reductions were made by other MTA agencies – MTA Bus Company, Long Island Bus, Long Island Rail Road, and Metro-North Railroad. These reductions are not the subject of this report.

Subway and Staten Island Railway (SIR)

- Discontinuation of two routes (**V** and **W**), as well as SIR baseball specials.
- Restructuring of four routes (**G**, **M**, **N**, and **Q**).
- Frequency reductions to accommodate construction work during off-peak hours.
- Frequency reductions based on revised off-peak service and capacity guidelines.

Local and Express Buses

- Discontinuation of 20 local and 12 express routes.
- Discontinuation of weekend service on 12 local and 2 express routes.
- Reroutes of bus service where possible to replace discontinued routes.
- Changes in the hours of operation to 39 local bus routes.

Proposals for MTA service cuts, including those for NYCT services, were the subject of public hearings held in March 2010 in all five boroughs of New York City, as well as in suburban counties. As a result of the public input received at these hearings and/or through written submissions, NYCT revised some of its proposed service reductions. The final package of service reductions was approved by the MTA Board at its April 2010 meeting. The bus service reductions and were implemented on June 27, 2010. The subway service reductions were implemented on December 12, 2010.

The proposed service cuts listed in a summary publication, *2010 NYC Transit Service Reductions*, January 28, 2010 and revised March 19, 2010, were distributed to the MTA Board, posted on the MTA website, and made available at public hearings. This follow-up report summarizes the reductions and addresses how ridership and cost effectiveness have changed since most of the changes were implemented in June 2010, based on observations since the reductions were implemented.

Methodology

The methodology used to evaluate the impacts of the service reductions varies somewhat for subways and buses due to the different types of impacts and data available by mode.

Subway Impacts

Multiple types of impacts for each service change were examined using various data analyses, including:

- Ridership changes were examined using station entry (turnstile registration) data at directly and indirectly affected stations. Station registrations from September, October and November 2010 were compared to station registrations for the same months in 2009.

- Travel patterns were examined, using origin-destination station pairs inferred from MetroCard data, to determine how riders were now making their trips. This data shows travel patterns during the AM peak hour.²
- Changes in passengers carried on board trains, particularly at peak load points in the AM and PM peak hours, were examined per MTA service guidelines.
- Operational issues, such as reliability of service, relating particularly to weekend and off-peak frequency changes, were examined.
- As detailed below, since ridership analysis showed that the subway service changes did not result in a loss of subway ridership, a separate cost efficiency analysis for the subway changes was not done. The subway changes improved cost efficiency by carrying more riders while, at the same time, meeting our cost-savings targets.

Bus Impacts

Similar types of impacts for bus service changes were examined using various data analyses, including:

- MetroCard swipes in fareboxes on bus routes that were directly affected by the service reductions and on bus routes that riders may have shifted to were analyzed. Changes in subway ridership and changes in the number of transfers between buses and subways were also analyzed when appropriate.³
- Changes in the number of passengers carried on board buses, particularly on routes that may have experienced increased loads due to ridership shifts from discontinued routes, were analyzed per MTA service guidelines.
- To determine the cost efficiency of the bus service changes, the cost per rider before the service change was compared to the cost per rider after the change on the remaining affected routes using the same 2009 comparable cost factors. Note that a decrease in the cost per rider indicates an improvement in cost efficiency and vice versa. Also, note that given contractually mandated wage increases and volatile fuel costs, NYCT's cost factors have increased and that reinstating the service reductions would be more costly now.
- Operational issues, such as running time increases or reduced reliability due to traffic, were also considered.

Findings

The June 2010 service cuts affected a large number of bus and subway routes, and the overall reduction in service was expected to result in a net reduction in NYCT ridership. Nearly all of the reduction was projected to affect bus ridership; the loss from subway

² Similar origin-destination data cannot be inferred from MetroCard data for buses, because MetroCard swipes in bus fareboxes are not linked to specific locations, only to specific routes.

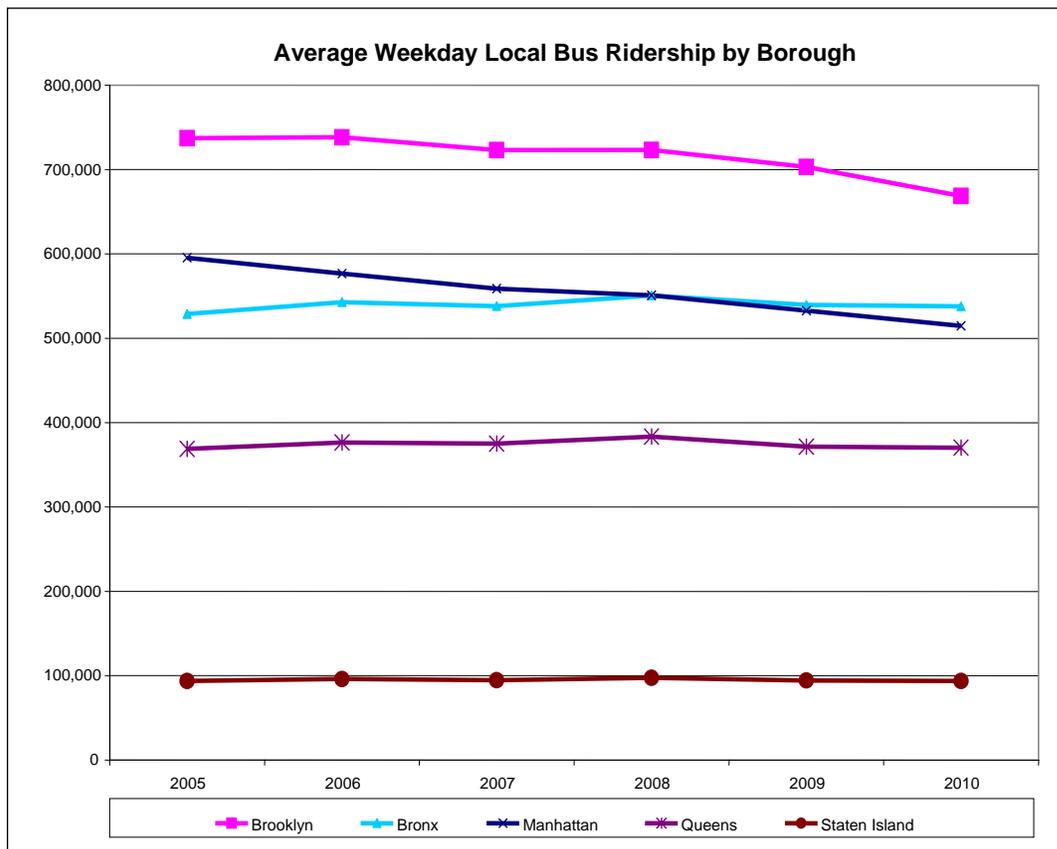
³ Unless otherwise noted, average weekday ridership is for the period from September – November 2009 and 2010, and average Saturday and Sunday ridership is for the period from July – November 2009 and 2010. December is excluded due to the post-Christmas blizzard of 2010, which affected ridership significantly. July and August are excluded from the average weekday numbers as weekday ridership typically drops in the summer months, while weekend ridership does not fall as much during the summer.

service changes was forecast to be extremely small due to the minor changes in frequency and multiple alternatives available for affected riders. In addition to riders lost to NYCT altogether, many of the bus service cuts affected routes that closely paralleled alternative subway lines, resulting in the anticipated shift of some bus riders to the subway, which is a more efficient mode.

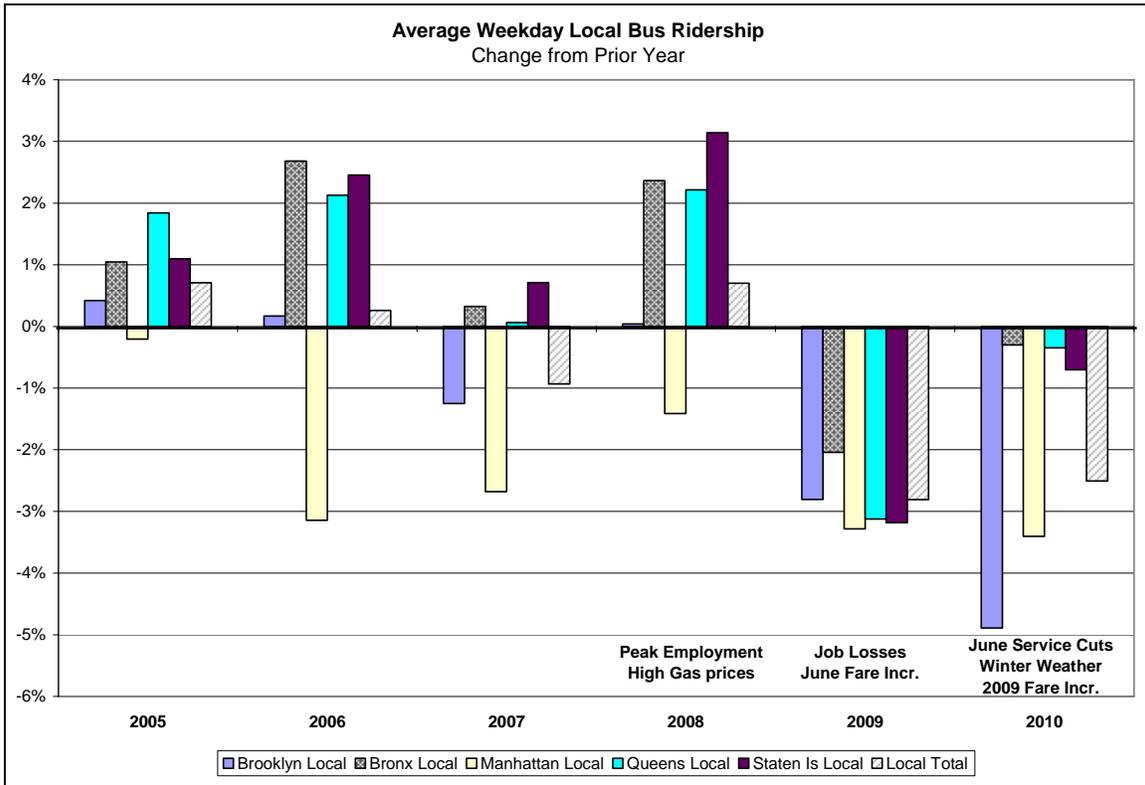
Systemwide Ridership Changes

In addition to the service changes, there are many factors that can affect ridership, such as fare increases, the economy and demographics. Over the past ten years, subway ridership increased to a 50-year high. During this same timeframe, despite a period of rising employment, bus ridership was generally flat. More recently, bus ridership began to decline significantly in 2009, well before the service changes. This was primarily a result of the weak economy and the June 2009 fare increase. The generally negative trend for bus ridership continued into early 2010 and likely would have continued without the service reductions. In many cases, these declining routes were targeted in the Service Reductions under the guiding principle of trying to affect the least number of passengers.

As shown in the chart below, local bus ridership trends since 2005 have varied widely by borough. Bronx, Queens and Staten Island ridership has remained relatively stable throughout the period, while Manhattan ridership has been declining since 2005. Brooklyn ridership was fairly stable until 2008, but declined significantly in 2009 and had the largest decline of any borough in 2010.



In the next chart, which shows the percent change from prior year, the differences by borough are more apparent. The graph shows Manhattan ridership has decreased every year since 2005, Brooklyn ridership has underperformed the system each year since 2005, and Bronx, Queens and Staten Island have outperformed the system average nearly every year.



Projected and Actual Ridership Loss Resulting From Service Reductions

The service reductions were projected to cause a loss of approximately 0.2 percent of total bus and subway riders. On buses, a modest ridership loss was projected from affected riders who did not divert to alternative NYC Transit bus routes. While some of these riders would be lost entirely to NYC Transit, a substantial number were expected to divert to alternative subway routes. The subway service changes were projected to result in virtually no ridership loss since all riders had convenient alternative subway service, and total subway ridership was projected to increase as former bus riders diverted to subway alternatives.

As shown in the tables on the next page, the actual impact of the service cuts is estimated to be a net loss of 0.3 percent of systemwide riders, representing a negligible difference from the projection. Of the estimated 1.7 percent bus ridership loss, more than one-third diverted to the subway, resulting in an estimated 1.1 percent net loss of bus riders. The subway carries more than twice as many riders as the bus system, so the 0.6 percent of diverted bus riders diverted resulted in a 0.3 percent increase in subway riders. It is important to note that the total bus ridership decrease and subway ridership increase

during this period were larger than these estimates, due to the continuation of prior trends and other factors affecting ridership.

Average Weekday Bus Ridership Change July-Dec 2009 to 2010

	Estimated Actual
Estimated Bus Ridership Loss from Service Reductions	-1.7%
Estimated Lost Bus Riders Diverted to Subway Alternatives	+0.6%
Estimated Net Loss of Bus Riders to NYCT	-1.1%

Average Weekday Subway Ridership Change July-Dec 2009 to 2010

	Estimated Actual
Estimated Subway Ridership Loss from Service Reductions	n/a
Estimated Increased Subway Use by Former Bus Riders	+0.3%
Estimated Net Change in Subway Riders Due to Service Cuts	+0.3%

Avg. Weekday Subway and Bus Ridership Change July-Dec 2009 to 2010

	Estimated Actual
Estimated Net Ridership Loss from Service Reductions	-0.3%

On weekends, ridership is much more discretionary and can vary widely based on weather conditions, special events, and temporary service changes on the subway (which can divert large numbers of riders to nearby bus routes). These factors can be even more pronounced at the route and borough levels, making it impossible to isolate the effects of the service cuts, thus our analysis focused on weekdays.

Subway Line-Specific Findings

While more than ten times as many subway riders than bus riders were affected by the 2010 Service Reductions, the actual impact to subway riders was typically much smaller. Service was maintained to all subway stations, but some riders now need to make an additional transfer to complete their trips. In most cases, subway riders experienced minor changes in service frequency and more heavily loaded trains. As detailed above, it does not appear that subway ridership decreased as a result of the 2010 subway service reductions. In fact, as anticipated, the 2010 bus reductions resulted in more subway riders.

Follow-Up Actions:

While some trains are carrying more riders as a result of the subway cuts, train loads remain within MTA Loading Guidelines, except during the morning shoulder period on the **J** line as result of the rerouting of the **M** line. In July, 2011, service was added to address this issue. Also, in July 2011, uptown **M** service was rescheduled during the morning rush hour to address operational concerns regarding uneven service that developed with the replacement of the **V** with the **M** along 6th Avenue.

New Direct Access:

While most of the subway riders affected by the subway service reductions were negatively affected, in a few cases the subway service reductions provided more direct service, leading to small increases in ridership. The rerouting of the **M** up 6th Avenue to replace the **V** has allowed weekday riders of the **M** in north Brooklyn and Ridgewood, Queens, direct access to Midtown Manhattan without the need to transfer. Also, the change to have the weekday **N** make local stops between Canal Street and 34th Street on weekdays to replace the **W** has given weekday riders in Brooklyn a direct “short-cut” via the Manhattan Bridge to four well-utilized local stations, Prince Street, 8th Street, 23rd Street, and 28th Street without the need to transfer.⁴

Bus Route-Specific Findings

In analyzing the bus service reductions, in some cases it is not possible to know how all customers’ travel patterns have changed. Conservatively, riders that do not show up on other bus routes or at nearby subway stations are assumed to not be taking transit for their trips.

Generally, bus service reductions resulted in the following three types of outcomes:

- In some cases, all or most ridership shifted to other bus or subway routes - ridership increased, or stayed roughly the same, and the remaining routes were more cost efficient.
- In most cases, some riders shifted to other bus and subway routes – ridership decreased, while overall cost efficiency on the remaining routes improved.
- In a few cases, most riders no longer took transit – ridership decreased and cost efficiency decreased. Note, even though the remaining routes were less efficient, the projected savings were still achieved.

Specific ridership and cost per rider data for the bus service reductions is provided in the attached “Evaluation of Changes to Bus Service.” In most cases, bus loading information is also provided and is shown as a percent of MTA’s Loading Guideline. The collection and analysis of weekday loading information was given a higher priority than weekend loading information, since MTA’s weekend loading guideline calls for a seated-load and buses can readily accommodate additional riders as standees. Also, the most directly affected bus routes have been checked, but NYCT is still in the process of collecting and analyzing data for indirectly affected routes. Based on loading information, NYCT has and will continue to adjust service levels on bus routes to reflect changes in ridership, per MTA loading guidelines – in some cases providing more frequent service and in other cases less frequent service.

There have been a few cases in which the service reductions have not worked out as anticipated, in that the remaining routes exceeded MTA loading guidelines, operational reliability suffered, travel time was more onerous than anticipated, ridership dropped significantly, and/or cost efficiency declined. In most of these cases, NYCT has taken action, or is proposing to take action, either to add service on the remaining routes or to

⁴ Prior to the June 2010 service cuts, the **N** served these four local stops late nights and weekends only.

restructure service to improve its adequacy and/or efficiency. NYCT is constantly adjusting service levels on bus routes to reflect changes in ridership, per the MTA loading guidelines, and has or is in the process of adjusting the levels of service on the affected routes throughout the five boroughs. NYCT has also had to undertake changes to route-paths to correct these deficiencies, which are described in more detail below underneath each borough.

Below is a summary by borough of the analyses:

Bronx

The effects of the service reductions in the Bronx varied considerably in terms of ridership, with some showing increases and others decreases, but most of the routes experienced improved cost efficiency. A summary of specific route information is below:

- The major restructuring of several bus routes in Co-op City (Bx25/26, Bx28/38, Bx29 and Bx30) resulted in an overall slight decline in average weekday ridership and an increase in weekend ridership on the affected routes, with an overall improvement in cost efficiency weekdays and weekends.
- The restructuring of bus service in the eastern Bronx (Bx4, Bx5, Bx8, Bx14 and Bx24) to compensate for the discontinuation of the Bx14, led to an overall decrease in ridership and a decrease in cost efficiency.
- In the western Bronx, the discontinuation of off-peak service on the Bx20 resulted in an overall increase in ridership on the affected bus routes and an improvement in cost efficiency.
- Changes on the Bx41 and Bx39 also resulted in overall ridership increases, as some Bx41 riders shifted to the subway and to the Bx39. Cost efficiency on the remaining bus routes decreased on weekdays and improved on weekends.
- Service changes on the Bx15/Bx55 and the discontinuation of weekend service on the Bx34 resulted in overall ridership losses, but cost efficiency improved on the affected routes.

Major follow up actions already taken include:

- Revising, at no net cost, the bus route structure in eastern Bronx, including restoring the Bx8 to its prior route, implementing the Bx4A to address the need for bus service in Parkchester, and implementing the Bx24 in the Country Club section of the Bronx. (Implemented January 2011.)

Brooklyn

Most Brooklyn routes affected by the 2010 Service Reductions did not experience increases in ridership, which to some degree, is a reflection of the borough general bus ridership trend as discussed above. Brooklyn also has relatively good subway coverage and many of the routes that were cut had relatively convenient subway alternatives, but it is difficult to definitively determine how many shifted to the subway. A summary of specific route information is below:

- The major restructuring of several bus routes (B57, B61, B75 and B77) in the Red Hook Section of Brownstone Brooklyn resulted in an overall increase in weekday and weekend ridership on the affected routes, with an overall improvement in cost efficiency weekdays and weekends.
- The restructuring of the 7th Avenue portion of the B67/B69 in Brownstone Brooklyn resulted in an overall decrease in weekday and weekend ridership, with a decrease in cost efficiency on weekdays and an increase in cost efficiency on weekends.
- The rerouting of the B4 between Ocean Parkway and the Sheepshead Bay station via Av Z resulted in overall ridership decreases, and an overall decrease in cost efficiency on weekdays and an increase on weekends.
- The discontinuation of the B13 north of Wyckoff/DeKalb Avenue resulted in overall weekday ridership increases when riders that shifted to the **L** subway line are included, and an improvement in cost efficiency on weekdays. Weekend subway service disruptions hinder making conclusions about weekend ridership shifts.
- The discontinuation of weekend B2 service resulted in an overall ridership loss, but a significant number of these riders did shift to the B100, an MTA Bus route. Cost efficiency for the B100 improved slightly.
- The changes to the B1/B64 routes and the B12/Q24 routes resulted in overall ridership decreases weekdays and weekends, but cost efficiency improved weekdays and weekends.
- The restructuring of the bus routes in Bay Ridge, affecting the B37, B70 and B8, and the truncation of the B48 south of Fulton Street both resulted in overall decreases in ridership and cost efficiency on weekdays and weekends. Some riders may have shifted to parallel bus and subway routes (the **R** train in the case of the B37 and the Franklin Avenue **S** in the case of the B48).
- The truncation of the B3 south of Avenue U/71st Street appears to have resulted in a decrease in ridership, but this decrease from 2009 may reflect the fact that there had been higher ridership on the B3 due to the temporary closing of the Avenue U **B** **C** subway station in 2009. The cost efficiency of the B3 decreased due to the ridership loss.
- The consolidation of the X27/X28 and the X37/X38 express bus routes weekdays resulted in uneven bus loads and much longer travel times on trips ending in Midtown than projected. Overall ridership decreased, but the remaining routes were more cost efficient.
- It is difficult to analyze the service reductions on the B23, B24 B39, B51, B71, and the X27/X28 on weekends. All of these routes had very low ridership and most of them had multiple transit alternatives, some with very high ridership, making it difficult to determine where and if riders shifted to other transit services.

Major follow up actions already taken include:

- Rescheduling rush hour B67 and B69 buses in Brooklyn at no net cost, to correct bus-bunching problems that emerged when the B69 was rerouted onto 7th Avenue. (Implemented September 2011.)
- Restoring X37 and X38 express bus service between southern Brooklyn and Midtown Manhattan, to address longer than anticipated travel times and crowding on X27 and X28 express bus service. (Implemented July 2011.)

Manhattan

Weekday Manhattan routes affected by the 2010 Service Reductions when analyzed together did not experience overall increases in ridership, which to some degree, is a reflection of the borough general bus ridership trend, as discussed above, and the fact that there are many convenient subway alternatives. However, in all cases, the weekday cost per rider analyses indicate that overall routes are operating more efficiently. A summary of specific route information is below:

- The restructuring of several bus routes (M9, M15, M20 and M21) on the Lower East Side resulted in an overall decrease in weekday and an increase in weekend ridership on the affected routes, with an overall improvement in cost efficiency weekdays and weekends.
- The restructuring of North-South bus routes (M1, M2, M3, M4, M5 and M6) resulted in an overall decrease in weekday and weekend ridership, with an improvement in cost efficiency on weekdays and weekends.
- The truncation of the M10 south of Columbus Circle resulted in a decrease in weekday and a very slight increase in weekend ridership, and improved cost efficiency both weekdays and weekends.
- The changes to the, the M8, M27, M30, M42, M50, M98 and M104 resulted in an overall decrease in ridership, but in all cases, except for weekends on the M42/M104, resulted in improved cost efficiency on the overall affected routes.

Major follow up actions already taken include:

- Restoring weekend service on the M50 local bus along 49th and 50th Streets in Manhattan, while also discontinuing service at all times along its eastern end between 42nd and 49th Streets to make the weekend add-back cost neutral. (Implemented July 2011.)

Queens

In most cases, the service reductions resulted in decreases in overall bus ridership. In all but one case, cost efficiency for the remaining routes stayed the same or did not improve, but NYCT still achieved financial savings. A summary of specific route information is below:

- The changes to the Q26, Q42 and Q31 resulted in an overall decrease in ridership and cost efficiency.
- The discontinuation of the Q74 resulted in an overall ridership increase and improved cost efficiency.

- The discontinuation of the Q14 and the creation of the new Q15A route resulted in an overall decrease in ridership, but overall cost efficiency improved.
- The discontinuation of the Q79 was difficult to analyze. This very low ridership route did not have convenient transit alternatives. It is assumed that most riders are driving or taking car services to make their trip.

Staten Island

In some cases, the discontinuation of a local bus route combined with the rerouting of another service to replace the discontinued segment resulted in overall ridership decreases and decreases in cost efficiency. This was not unexpected. The local bus reroutes typically made the revised routes less efficient, but these changes provided bus service to areas that would not otherwise be served by transit, which was one of NYCT's guiding principles in developing the service cuts. The service reductions on express buses are either difficult to analyze due to their extremely low ridership and the multiple local bus alternatives, or resulted in increased ridership and cost efficiency. A summary of specific route information is below:

- The changes to the X1-X9 and X13/X14 bus routes increased ridership and improved cost efficiency.
- The discontinuation of the S54 on weekends decreased ridership, but improved cost efficiency.
- The changes to the S42/52, S60/S66 and S76 resulted in ridership losses and a reduction in cost efficiencies, but maintained transit service to areas that would otherwise not be served.
- The discontinuation of the X16, X18 and X20 were difficult to analyze given their low ridership and the multiple transit alternatives available.
- The discontinuation of the Howland Hook section of the S40/S90 route affected very few riders, all of whom appear to be walking to the nearest bus stop, and cost efficiency improved.

Conclusions

Despite attempts to minimize negative impacts, the service reductions did result in certain customers losing access to transit service or experiencing a degradation in their service. When service cuts are driven by the need to reduce costs, such customer impacts are essentially unavoidable. However, many of the riders affected by the service reductions have been able to use alternate subway or bus service, and those other services have generally been able to handle the additional ridership.

Overall, the service reductions in June 2010 have largely worked out as anticipated, although as discussed above, a small number of the cuts have required, or will require some revisions. While some ridership has been lost entirely, many of the riders affected by the service cuts shifted from one bus route to another bus route, or to the subway. The end result has been a more cost-effective transit system, with most riders accommodated within MTA's Loading Guidelines.

A note on the organization of this report – the rest of the report is composed of the “Evaluation of Changes to Subway Service” and the “Evaluation of Changes to Bus Service.” Both sections contain detailed ridership and loading information on the specific service reductions. The “Evaluation of Changes to Bus Service” is generally organized by borough, although some of the cuts with smaller impacts are grouped together thematically at the end of the section.

**Evaluation of Changes to Subway
Service**

Extend **Q to Astoria and Operate **N** Local North of Canal Street to Replace the **W****

Description of Action

- Discontinued the **W**.
- Extended the **Q** to Astoria from its terminal at 57th Street/7th Avenue on weekdays.
- Shifted the **N** from express to local service along Broadway between Times Sq and Canal St.

Projected Net Annual Savings

\$3.4 million

Changes in Avg Weekday Entries at Affected Broadway Stations

Station	Sep-Nov 09	Sep-Nov 10	2009-10 Change	
Lower Manhattan				
Lower Manhattan R Stations: Rector St - City Hall*	20,606	22,010	1404	6.8%
All Lower Manhattan Stations	323,908	322,330	-1,578	-0.5%
Valley				
Prince St - 28 St Local Stations (Excludes 14 St Union Sq)	60,991	65,165	4174	6.8%
All Valley Stations (Franklin St to 28 St)	712,150	729,880	17,730	2.5%

* Whitehall St also serves the **R** in lower Manhattan, but it provides a transfer to the **F** at South Ferry, and thus the impact of eliminating the **W** from Whitehall St cannot be definitively determined.

Changes in Passenger Loads at Peak Load Point

Route	Peak Load Point	Before Service Cuts		After Service Cuts	
		Volume	% Guideline	Volume	% Guideline
N W Before	Queensboro Plaza	18,687	88%	18,077	83%
N Q After					

Discussion

The **W** had run on weekdays from Astoria to Whitehall St, using the Broadway line local tracks. As a weekday-only service, it supplemented **N** service in Astoria and **R** service at Broadway local stations. This measure eliminated the **W**, replacing its northern portion by extending the **Q** to Astoria, and its middle portion by shifting the **N** to local service.

The impact of the discontinuation of the **W** can be divided in three segments:

- The lower Manhattan Broadway segment between Whitehall St and City Hall, where the **R** became the only train service. It was expected that some riders would shift to nearby stations as wait times for intra-Manhattan trips would increase. A detailed analysis of origin-destination patterns revealed that trips between lower Manhattan **R** stations and other Manhattan BMT stations did drop by about 17%. Most of those riders appear to be using the 7th Avenue IRT as an alternative. However, total registrations at these lower Manhattan stations actually increased, due to other factors. Chief among these was the elimination of Bay

Parkway **M** service connecting Brooklyn to lower Manhattan (described in greater detail below), which likely shifted a number of riders to the **R** as an alternative to the **M**. Also, the Cortlandt St station reopened (northbound only) in November of 2009, which boosted the combined registrations along this segment.

- The “Valley” portion of the line between Canal St and 34 St, where the **N** replaced the **W** as the second local. Ridership growth at those local stations exceeded the systemwide “Valley” average due to newly available direct **N** service to Brooklyn; previously such trips would have required a transfer at 14 St-Union Sq or Canal St.
- The Astoria segment from Times Sq to Ditmars Blvd, where the **Q** replaced the **W** as the second Astoria service. There were no significant changes in either station registrations, or in observations of passenger loads at the peak load point (Queensboro Plaza towards Manhattan in the AM peak), which show that the **Q** has adequately replaced the **W** in terms of meeting guideline loads in Queens.

Extend **Q** to Astoria, Operate **N** Local North of Canal St to Replace the **W**



Extend M via Sixth Avenue Line to Replace V

Description of Action:

- Replaced V with M service between Forest Hills-71 Av and Broadway-Lafayette St.
- Discontinued the M along the Nassau Street Line in Manhattan and the 4th Avenue and West End Lines in Brooklyn (between Essex St and Bay Parkway rush hours and between Essex St and Chambers St middays and early evenings).
- Discontinued the V between Broadway-Lafayette St and 2 Av.

Projected Net Annual Savings:

\$4.0 million

Changes in Avg Weekday Entries at Affected Broadway Stations

Station	Sep-Nov 09	Sep-Nov 10	2009-10 Change	
North Brooklyn M Stations				
Non-Transfer Stations, Metropolitan Av-Central Av	20,597	21,584	987	4.8%
Transfer Station (Myrtle-Wyckoff)	16,625	16,758	133	0.8%
J M Z Stations, Myrtle Av-Marcy Av	33,443	36,584	3,141	9.4%
Total Williamsburg-Middle Village	70,665	74,926	4,261	6.0%
Nassau Line Stations with Less Service Due to Loss of Downtown M				
Non-Transfer Stations (Broad St, Bowery)	10,396	8,846	-1,550	-14.9%
Transfer Stations (Fulton St*, Chambers St, Canal St)	151,134	148,780	-2,354	-1.6%
Alternative Stations**	117,128	117,549	421	0.4%
<i>All Lower Manhattan Stations</i>	<i>323,908</i>	<i>322,330</i>	<i>-1,578</i>	<i>-0.5%</i>
Stations Affected by Elimination of V				
2 Av	17,389	17,026	-363	-2.1%
Alternative Stations (Delancey/Essex, B'way-Lafayette St***)	53,641	58,170	4,529	8.4%
<i>All "Valley" Stations (Franklin St to 28 St)</i>	<i>712,150</i>	<i>729,880</i>	<i>17,730</i>	<i>2.5%</i>
West End, 4th Ave and Downtown Brooklyn Stations Affected by Elimination of Bay Parkway M Service				
R Local Stations, 25 St-Lawrence St	22,749	22,552	-197	-0.9%
Express + Transfer Stations (36 St, 9 St, Atl-Pac, DeKalb)	72,609	75,016	2,407	3.3%
Total Former M R Stations	95,358	97,568	2,210	2.3%
West End Stations (Bay Pkwy-9 Av)	47,729	48,258	924	1.9%
<i>All Brooklyn Stations</i>	<i>1,116,363</i>	<i>1,144,884</i>	<i>28,521</i>	<i>2.6%</i>

*Fulton Street was also affected by periodic disruptions from construction of the new Fulton Street Transit Center.

** R Stations (Whitehall St, Rector St, Cortlandt St, City Hall), 4 5 Stations (Bowling Green, Wall St), 2 3 Stations (Wall St).

***Delancey St – Essex St is also an alternative to Bowery.

Changes in Passenger Loads at Peak Load Point

Route	Peak Load Point	Before Service Cuts		After Service Cuts	
		Volume	% Guideline	Volume	% Guideline
Queens					
●●●	Court Sq 23 St	5,660	47%	5,823	51%
North Brooklyn					
●●	Marcy Avenue	9,452	68%	11,387	88%*
●	Marcy Avenue	4,621	66%	4,729	86%*
South Brooklyn					
●	36th Street	9,226	67%	10,889	78%
●	36th Street	12,056	83%	12,029	83%
●	DeKalb Avenue	3,297	42%	No Longer in Service	
●	DeKalb Avenue	6,692	48%	8,618	69%*

* NYCT employs “frequency-based” loading guidelines, which means that corridors with less frequent service have lower loading guideline thresholds. Routes that serve the same basic corridor are combined for this purpose. Because the rerouted ● no longer serves the same corridor as either the ●● or the ●, the effective guidelines on all of these routes have been lowered.

Discussion:

The impacts of this service change can be grouped under the following categories:

- The rerouting of the ● from the Nassau Street corridor to the 6th Avenue corridor created a new one-seat ride for customers between Ridgewood, northern Brooklyn and midtown Manhattan. Along the Myrtle Avenue and Jamaica corridors rapid background development continues to lead to high ridership growth. The rerouting of the ● does not seem to have significantly affected total station registrations; however, there appears to have been some redistribution among stations. Ridership growth at the Myrtle-Wyckoff Avs station, which is served by both the ● and ● trains, was less than corridor-wide growth (or Canarsie line growth). This would indicate that some midtown-bound riders who previously entered at Myrtle-Wyckoff to board the ● train are now entering at ● stations further upstream closer to their homes and riding through directly to midtown via the ●.
- The ●/● was left to serve the Nassau Street corridor by itself. Because lower Manhattan-bound customers are now distributed over 12 trains in the peak hour instead of 18 trains, the ● train does show substantial increases in loading. Loading as a percentage of guideline load rose from 68% to 88%. Note, however, that part of this increase is due to the use of NYCT’s lower “frequency-based” guideline.

While the ●● peak hour load is within guidelines, initial observations showed that loads have exceeded frequency-based guidelines during shoulder periods immediately before and after ●● service; ● trains run on 10-minute headways in the shoulders as opposed to the 5-minute combined ●● headways, and the transition between peak and shoulders is rapid. (Note that these shoulder loads

remain well below NYCT's maximum guideline load of 145 passengers per 60-foot car.)

- The loss of Bay Parkway **M** service left the **R** as the only train to serve the 4th Avenue local corridor in Brooklyn from 36 St north, and the **D** the only train to serve the West End line. This led to a substantial increase in loading on the **R** train, from 48% of the guideline load to 69%. Some of this increased load is also attributable to the newly opened transfer at Jay St-MetroTech, as well as temporary service changes on the Culver (**F G**) line, which have made it more attractive for 4th Avenue customers to ride through the peak load point at DeKalb Av in order to reach the **A C** or **F** trains. Increases in loading have also been observed on **D** trains, where the **M** had supplemented West End service, but it remains within guideline loads. No observable impact was found on the **N**.

As expected, station registrations dropped along the Nassau Street line where **M** service is no longer available. The Broad St station saw the largest decrease on a percentage basis of any station in the system not affected by construction, while the Fulton Street station saw the largest drop on an absolute basis. (Fulton St is one of the stations most affected by construction.)

Alternative lower Manhattan stations, particularly along the **R** line might have been expected to see comparable increases, as they would be the most likely alternatives for people previously using the Bay Parkway **M** service. However, as previously shown, the elimination of the **W** also reduced demand to those stations, which complicates efforts to isolate the offsetting impacts of these two service changes. Moreover, background economic conditions have led lower Manhattan stations to show the slowest ridership growth in the system – in November, lower Manhattan stations actually saw a slight decrease of 0.5% in year-to-year entries. As a result, combined ridership at logical alternative stations only rose by 0.4%

There were slight ridership drops at Lawrence St (now Jay St-MetroTech) and along 4th Avenue local non-transfer stations. Some of those riders shifted to 4th Avenue express and transfer stations where routes other than the **R** are also available – growth at those stations slightly surpassed both the local stops and overall Brooklyn ridership growth. There were no discernible impacts to entries along the West End line in Brooklyn, despite the elimination of rush hour **M** service to Bay Parkway, as entries at those stations grew at 1.9%, higher than growth on the comparable segments of the parallel Sea Beach Line and about the same as on the comparable segments of the Culver line.

- In connecting to the 6th Avenue Line, the **M** train bypasses the 2 Av station, formerly served by the **V** train; the **F** is now the only train stopping at 2 Av. That station saw modest drops in ridership, with many customers appearing to shift to Delancey St-Essex St and Broadway-Lafayette St as alternatives.

- Because **M** trains, at 480 feet long, are shorter than the former **V** trains, which were 600 feet long, passenger capacity of Queens Boulevard and 6th Avenue local service has been marginally reduced.¹ However, this has not led to any significant impacts on crowding levels.

Further Action

To address crowding on the **J** train during the shoulders of the AM peak, NYCT has scheduled one additional **J** train between 7:00 a.m. and 7:30 a.m., and one between 9:00 a.m. and 9:30 a.m. As shown below, when implemented in the June 26, 2011, schedule change, this measure is projected to lower loads from 107% of the guideline to 80% in the early shoulder and from 111% to 83% in the later shoulder.

Adjustment of **J Shoulder Service, Effective Spring 2011 Pick**

Time	Load	Guideline	After Service Cuts Before Adjustment			After Adjustment		
			Trains	Pax/Car	% Guideline	Trains	Pax/Car	% Guideline
7:00 a.m.-7:30 a.m.	2,960	115	3	123	107%	4	92	80%
9:00 a.m.-9:30 a.m.	3,063	115	3	128	111%	4	96	83%

Because the (reverse peak) frequency of the northbound **M** towards Forest Hills is now 6 trains per hour during the morning rush hour, compared to 10 trains per hour on the former northbound **V**, there is less service between the 6th Avenue and 53rd Street corridors. While this change did not lead to loads above guidelines, gaps longer than 10 minutes have periodically emerged for that portion of the **M** during the morning rush hour. As a result, NYCT is adjusting the weekday **M** schedule to even out service, effective with the July 2011, schedule change.

NYCT will continue to closely monitor loads along **D F J M N** and **R** trains, and add service, where feasible, if they continue to rise and exceed guidelines. At a later date, NYCT will evaluate **J M Z** service, particularly relating to express and local stopping patterns between Marcy Av and Myrtle Av.

¹ **M** trains are limited to a maximum length of 480 feet because of platform length restriction between Essex St and Metropolitan Av.

Extend **M** to Replace **V**



Operate the **G** Full Time between Court Sq and Church Av

Description of Action

- Terminated the **G** at Court Sq at all times, discontinuing evening, overnight, and weekend **G** service between Court Sq and Forest Hills-71 Av.
- Added three **G** trips weekday evenings to increase service to levels consistent with MTA guidelines.

Projected Net Annual Savings

\$1.5 million

Discussion

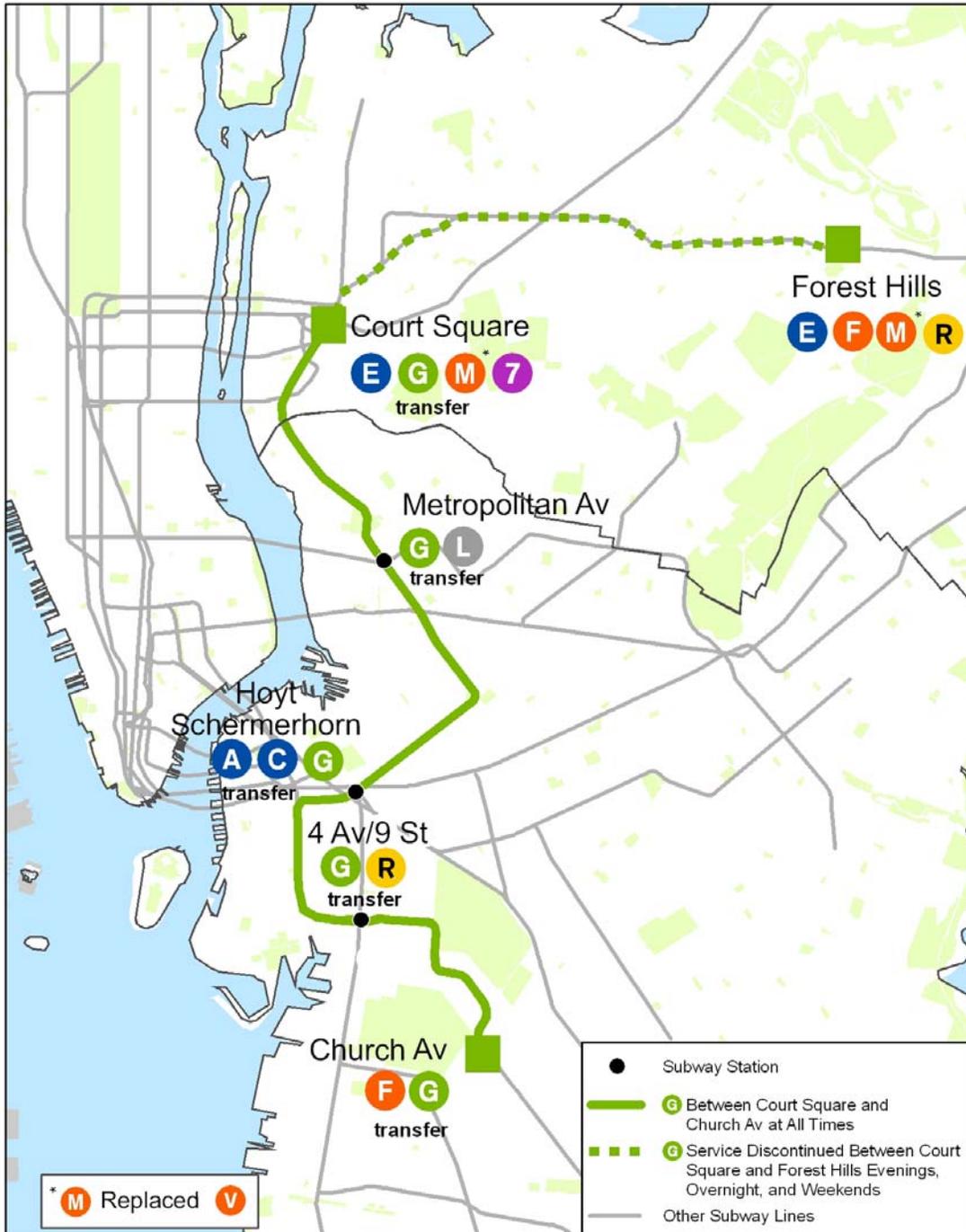
This measure was designed to improve efficiency by eliminating the cost of scheduling a segment of the **G** route that rarely ran. In 2009, the **G** operated between Court Sq and Forest Hills on only three weekends. Service did operate to Forest Hills on a higher proportion of weekday evenings and late nights. During late night hours, the elimination of the **G** between Court Sq and Forest Hills appears to have led to slight decreases in entries at affected stations greater than borough-wide changes in Brooklyn or Queens entries. In Queens, this is largely due to a shift of passengers from the local stations on either side of express stations, because headways at local stations are now every 20 minutes instead of 10 minutes as they were when both the **E** and **G** served those stations. Note that in both cases the absolute changes are on a very small scale compared to the impacts of other subway measures.

During evening hours, the ridership impact was even smaller. In Brooklyn, this likely was due in part to the offsetting impact of the increased frequency of the **G** train.

Changes in Avg. Weekday Evening and Late Night Entries at G Stations

Segment	Period	Nov-09	Nov-10	Change	% Change	All Brooklyn
Crosstown (Brooklyn G Stations)	Evening (9 p.m.-12 a.m.)	2,508	2,443	-65	-3%	2%
	Late Night (12 a.m.-5 a.m.)	985	896	-89	-9%	0%
Segment	Period	Nov-09	Nov-10	Change	% Change	All Queens
Queens Blvd. Local Stations	Evening (9 p.m.-12 a.m.)	4,853	4,923	70	1%	1%
	Late Night (12 a.m.-5 a.m.)	1,847	1,696	-151	-8%	-2%

Operate **G** Between Court Square and Church Av at All Times



Reduce Weekend Train Frequencies to Accommodate Construction Work

Description of Action

- Increased intervals between trains from 8 to 10 minutes on **D F G J M N Q** and **R** on Saturdays.
- Increased intervals between trains from 8 to 10 minutes on **A D E F G N Q R** on Sundays.
- Increased intervals between trains from 6 to 8 minutes on the **1** both Saturdays and Sundays.

Projected Net Annual Savings

\$5.5 million

Discussion

The main objective of this measure was to bring scheduled service more in line with the level of service that actually is operated on weekends due to construction and maintenance work. If construction or maintenance work requires that NYCT operates less service than scheduled, NYCT is not able to generate a savings as crews, per union agreements, are still required to report to work. However, these savings can be captured if the base schedule is changed. By slightly reducing the frequencies in the base timetables, NYCT has been able to more often preserve scheduled service in the face of diversions. Notably, the **C** train has been suspended less often since this change was implemented.

From an operational standpoint, the impact of this service cut was neutral. There was no discernible impact on reliability on the affected lines. For the seven-month period from September through March, terminal on-time performance was essentially level, changing only modestly – rising by 1.2% on IND lines and falling by 1.1% on BMT lines and by 1.3% on the **1**.

Any inconveniences to customers caused by these changes (such as longer waits) have had no discernible impact on demand, as weekend ridership has reached 40-year highs. Moreover, as described above, while scheduled waits are longer, effective waits are unchanged or even shorter because service had been frequently reduced for construction. Because every weekend brings a new set of service diversions, it is not feasible to compare crowding levels before and after the service change in any statistically meaningful way.

Revise Off-Peak Service Levels – Change Maximum Loading Guideline to 125% of Seated Load

Description of Action

- Revised guideline to allow 10-18 standees per car, depending on car type, instead of seated load.
- Reduced train frequencies on **1 7 A L** middays.
- Reduced train frequencies on **1 7 A F** evenings.
- Reduced train frequencies on **7 L** Saturdays.
- Reduced train frequencies on **7 J M L** Saturdays.

Projected Net Annual Savings

\$3.1 million

Discussion

Unlike the other subway service reductions, which were implemented in June 2010, this change was implemented in late December of 2010. As a result, assessment is still ongoing while NYCT continues to collect data. Nevertheless, preliminary load checks show that average passenger loads on affected routes are generally within the new 125% seated load guideline discussed earlier. There have been some short periods during which loads may consistently exceed the new guidelines, particularly on Friday evenings when demand is higher than other weeknights. NYCT will continue to monitor loads on affected routes, and adjust service levels accordingly, where feasible.

Evaluation of Changes to Bus Service

Index of Bus Routes

Route	Page(s)	Route	Page(s)	Route	Page(s)	Route	Page(s)
Bx4A	B-5	B36	B-26	M30	<i>B-52</i>	S42	<i>B-70</i>
Bx5	<i>B-4, B-5</i>	B37	<i>B-23</i>	M31	B-52	S52	<i>B-70</i>
Bx7	B-11	B39	B-86	M42	<i>B-56</i>	S54	<i>B-72, B-86</i>
Bx8	<i>B-4, B-5</i>	B45	B-87	M50	<i>B-54</i>	S57	<i>B-72, B-74, B-86</i>
Bx10	B-11	B48	<i>B-32</i>	M57	<i>B-86</i>	S60	<i>B-74</i>
Bx14	<i>B-4</i>	B51	B-85	M72	<i>B-52, B-86</i>	S66	<i>B-74, B-86</i>
Bx15	<i>B-9</i>	B57	<i>B-15, B-86</i>	M98	<i>B-48</i>	S67	<i>B-74, B-86</i>
Bx16	B-13	B61	<i>B-15</i>	M100	<i>B-86</i>	S74/84	B-76
Bx17	<i>B-86</i>	B62	<i>B-15</i>	M101	B-48	S76/86	<i>B-76</i>
Bx20	<i>B-11</i>	B63	B-23	M102	B-48	S78	B-76
Bx23	B-1	B64	<i>B-20, B-86</i>	M103	B-48	X1	<i>B-78</i>
Bx24	<i>B-5</i>	B65	<i>B-86</i>	M104	<i>B-56</i>	X2	<i>B-78</i>
Bx25	<i>B-1</i>	B67	<i>B-18, B-86</i>	M116	<i>B-86</i>	X3	<i>B-78</i>
Bx26	<i>B-1</i>	B69	<i>B-18, B-86</i>	Q4	B-64	X4	<i>B-78</i>
Bx28	<i>B-1</i>	B70	<i>B-23</i>	Q5	B-64	X5	<i>B-78</i>
Bx29	B-1	B71	B-86	Q14	<i>B-58</i>	X6	<i>B-78</i>
Bx30	<i>B-1</i>	B75	<i>B-15</i>	Q15	<i>B-58</i>	X7	<i>B-78</i>
Bx31	B-13	B77	<i>B-15</i>	Q17	B-68	X8	<i>B-78</i>
Bx34	<i>B-13</i>	B100	B-34	Q20	<i>B-58, B-66</i>	X9	<i>B-78</i>
Bx38	<i>B-1</i>	M1	<i>B-41, B-86</i>	Q24	<i>B-28</i>	X13	<i>B-81</i>
Bx39	<i>B-7</i>	M3	B-41	Q26	<i>B-60</i>	X14	<i>B-81</i>
Bx41	<i>B-7</i>	M4	B-41	Q27	<i>B-60, B-62</i>	X16	<i>B-83</i>
Bx55	<i>B-9</i>	M5	<i>B-41</i>	Q30	<i>B-62, B-87</i>	X18	<i>B-83</i>
BPP	B-85	M6	<i>B-41</i>	Q31	<i>B-62</i>	X20	<i>B-83</i>
B1	<i>B-20</i>	M7	B-46	Q42	<i>B-64</i>	X25	<i>B-83</i>
B2	<i>B-34, B-86</i>	M8	<i>B-50, B-86</i>	Q44	<i>B-66, B-58</i>	X27	<i>B-36</i>
B3	B-84	M9	<i>B-38</i>	Q46	B-66	X28	<i>B-36</i>
B4	<i>B-26</i>	M10	<i>B-46</i>	Q48	<i>B-86</i>	X29	<i>B-84</i>
B7	B-86	M11	<i>B-86</i>	Q64	B-66	X32	<i>B-84</i>
B8	<i>B-23</i>	M14	B-50	Q74	<i>B-66</i>	X37	<i>B-36</i>
B9	B-86	M15	<i>B-38</i>	Q75	<i>B-68</i>	X38	<i>B-36</i>
B12	<i>B-28</i>	M16	<i>B-86</i>	Q79	B-84	X51	<i>B-84</i>
B13	<i>B-30, B-86</i>	M18	B-86	Q83	B-64	X90	<i>B-84</i>
B16	B-86	M20	<i>B-38, B86, B46</i>	Q84	B-64		
B23	B-85	M21	<i>B-38, B-86</i>	Q85	B-64		
B24	<i>B-85, B-86</i>	M22	<i>B-86</i>	Q88	B-68		
B31	<i>B-86</i>	M27	<i>B-54</i>	S40/90	B-84		

Note: Page numbers in italics indicate where route was affect by direct action, non-italicized indicates adjacent routes.

BRONX BUS SERVICE REDUCTION EVALUATIONS

Co-op City Restructuring (Bx25/26, Bx28/38, Bx29, Bx30)

Description of Action

- Rerouted the Bx26 to match the Bx25 path at all times; peak hour-only Bx25 discontinued. The Bx26 no longer serves Sections 1-4 (aside from Asch Loop).
- Divided the Bx28 into two branches, one branch named the Bx38 serving the northern sections of Co-op City including the Bay Plaza Shopping Center, and one branch named the Bx28 serving the southern section (Section 5) via Bartow Avenue. The Bx28 no longer serves Sections 1-4 days and evenings. (Note: the Bx28 replaces the Bx38 in Sections 1-4 overnights.)
- Rerouted the Bx30 out of Asch Loop.

Projected Net Annual Savings

\$2.8 million

Ridership, Cost per Rider and Capacity

	Ridership Change		Cost per Rider						Guideline Capacity	
	2009-2010		Weekday (WD)			Weekend (WE)			WD	WE
	WD	WE	2009	2010	Change	2009	2010	Change	WD	WE
Bx25/26	-734	-1515	\$ 1.82	\$ 1.65	-9%	\$ 1.92	\$ 1.59	-17%	86%*	97%*
Bx28/38	-586	688	\$ 1.56	\$ 1.48	-5%	\$ 1.81	\$ 1.51	-17%	98%*	95%*
Bx29	277	452	\$ 2.02	\$ 1.70	-16%	\$ 2.06	\$ 1.59	-23%	**	72%*
Bx30	1222	1654	\$ 1.61	\$ 1.37	-15%	\$ 1.74	\$ 1.37	-21%	98%*	86%*
QBx1/Q50/Bx23	-408	340	\$ 2.00	\$ 2.04	2%	\$ 2.51	\$ 2.79	11%		†
Total	-229	1619	\$ 1.72	\$ 1.60	-7%	\$ 1.94	\$ 1.68	-13%		
Percent of Total	-0.5%	3%								

* Reflects projected percent of guideline capacity after service adjustments in September 2011.

† MTA Bus Co. will continue to monitor the passengers per bus on this route

Discussion

In addition to reducing operating costs, this restructuring provided more direct access from various points within Co-op City to traffic generators outside of Co-op City. In the past, almost every NYCT route in Co-op City served every part of Co-op City, creating long trips. This restructuring has shortened the travel time for many bus customers.

The combined weekday ridership on these routes decreased by 0.5% from the Fall of 2009 to the Fall of 2010. This is comparable to ridership changes elsewhere in the Bronx. Saturday and Sunday ridership increased 5.6% and 0.3% respectively, which is in contrast to the decline an overall weekend ridership elsewhere in the Bronx. The cost per rider decreased by 7% on weekdays and 13% on weekends. The large increase in ridership on the Bx30 occurred in part due to the reroute of the Bx26 and Bx28 making the Bx30 an important connection between the southern portion of Co-op City (Section 5) and the northern portion (Sections 1-4). In September 2010, MTA Bus Company replaced the QBx1 (which served Co-op City) with the Bx23 and Q50. This change led to further shifts in ridership.

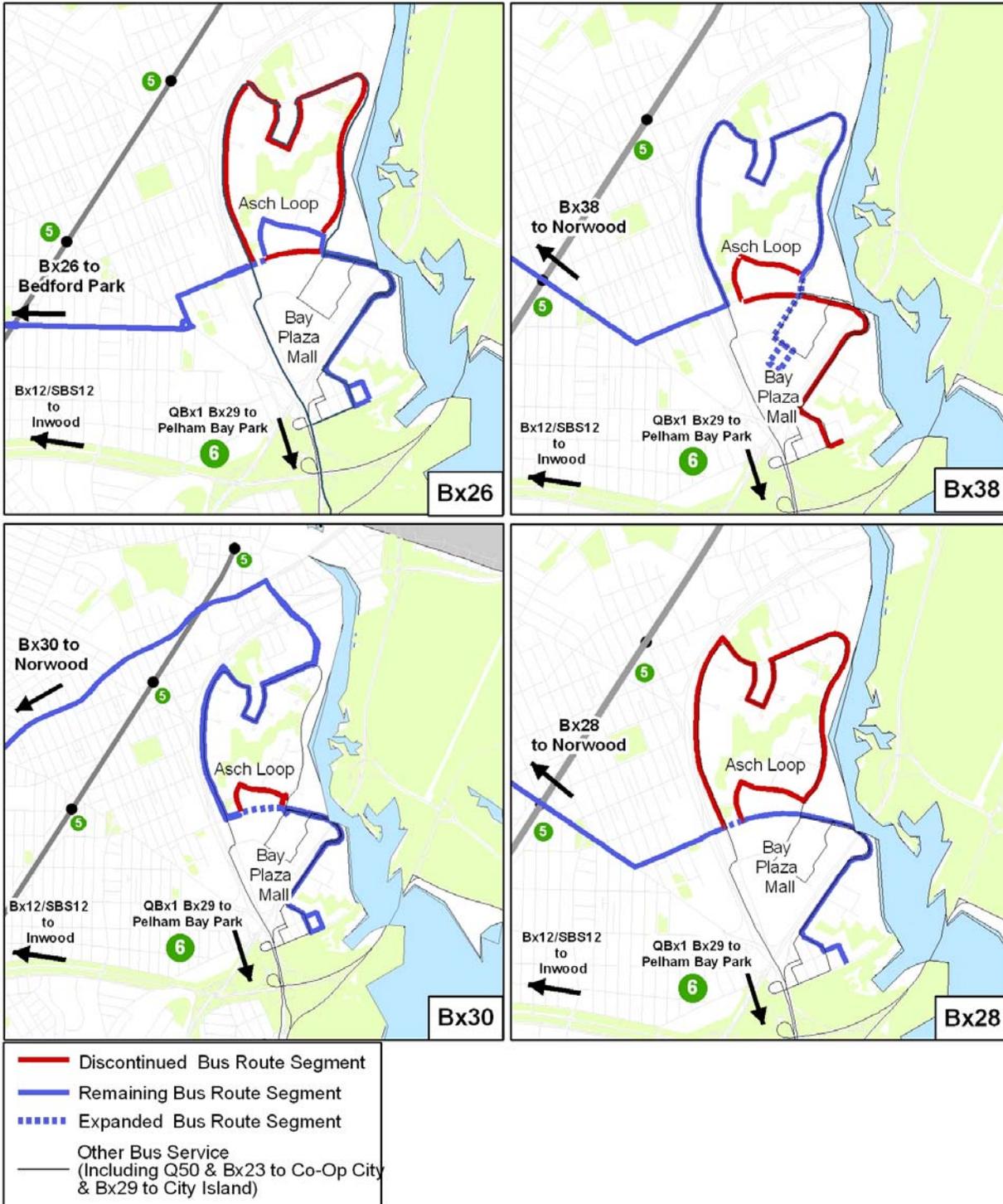
Co-op City experienced substantial changes in service, which led to considerable confusion among customers. In order to address this confusion, NYCT prepared a special Service Information Brochure in early 2011. This brochure explained in detail how to travel by local bus from one section of Co-op City to other sections, to other neighborhoods in the Bronx, and to the subway. It was widely distributed to the community and was delivered to each household in Co-op City.

Follow-Up Actions

In September 2010, the span of the Bx28/Bx38 was extended to cover a service gap between overnight service and all day service. In September 2011, NYCT will increase weekday service on the Bx26, Bx28/38 and Bx30; increase Saturday and Sunday service on the Bx30; and slightly decrease Saturday or Sunday service on the Bx26 and Bx28/38. This will bring the levels of service on these routes in line with guidelines, as shown above under “Guideline Capacity.” Due to on-going community complaints about the difficulty of traveling within Co-op City, NYCT and MTA Bus Company met with interested parties and are working with the community to explore potential options for other cost-neutral modifications to improve Co-op City bus service.

Co-op City Restructuring (Bx25/26, Bx28/38, Bx29, Bx30)

Co-op City Bus Service Restructuring



Eastern Bronx Restructuring (Bx5, Bx8, Bx14)

Description of Action

In June 2010 the following changes were made:

- Discontinued the Bx14 that served Parkchester, Pelham Bay and Country Club.
- Rerouted the Bx8 away from Crosby Avenue to serve Country Club via Stadium Avenue while maintaining a connection to the Pelham Bay Park 6 Station.
- Rerouted the Bx5 from the Bruckner Boulevard Service Road to Crosby Avenue to replace the Bx8.

In response to community requests, in January 2011 the following cost-neutral changes were made:

- Split the eastern end of the Bx4 into two branches with the new branch Bx4A serving the Parkchester neighborhood between Hugh Grant Circle and Westchester Square (replicating the western end of the former Bx14 route).
- Implemented a new Bx24 route between Country Club and the Pelham Bay 6 Station (replicating the eastern end of the former Bx14 route).
- Restored the Bx8 to pre-service cut routing on Layton Avenue and Crosby Avenue.

Projected Net Annual Savings:

\$1.0 million.

Ridership, Cost per Rider and Capacity - Post June 2010

	Ridership Change		Cost per Rider						Guideline Capacity	
	2009-2010		Weekday (WD)			Weekend (WE)			WD	WE
	WD	WE	2009	2010	Change	2009	2010	Change		
Bx05	-808	-538	\$ 1.30	\$ 1.35	4%	\$ 1.30	\$ 1.31	1%		
Bx08	-237	-75	\$ 1.90	\$ 2.26	19%	\$ 2.56	\$ 3.44	34%		
Bx14	-2852	-1995	\$ 1.96			\$ 3.40				
Total	-3897	-2608	\$ 1.57	\$ 1.69	7%	\$ 1.76	\$ 1.77	1%		
Percent of Total	-16%	-14%								
<i>Other Important Routes (Not included in total above):</i>										
Bx4	-157	1832	\$ 1.15	\$ 1.17	1%	\$ 1.50	\$ 1.31	-12%		

Ridership, Cost per Rider and Capacity - Post January 2011 (Compared to table above)

	Ridership Change		Cost per Rider						Guideline Capacity	
	2010-2011		Weekday			Weekend			WD	WE
	WD	WE	2010	2011	Change	2010	2011	Change		
Bx05	-1130	-2109	1.35	\$ 1.49	10%	\$ 1.31	\$ 1.57	19%	78%	94%*
Bx08	-811	-518	2.26	\$ 2.19	-3%	\$ 3.44	\$ 3.10	-10%	**	**
Bx24	332	233		\$ 4.27			\$10.47		**	**
Bx4 (Bx4a)	-761	-3437	1.17	\$ 1.31	12%	\$ 1.31	\$ 1.69	28%	**	**
Total	-1941	-2627	\$ 1.49	\$ 1.60	8%	\$ 1.53	\$ 1.87	22%		
Percent of Total	-3.9%	-5%								

* Reflects projected percent of guideline capacity after service adjustments in September 2011.

** NYCT will continue to monitor the number of passengers per bus consistent with our guidelines.

Discussion

Combined ridership decreased on all routes (except for the Bx8 on weekends), with a larger than expected decrease on the Bx5 on weekdays.

Residents of Country Club, Parkchester, and Locust Point strongly objected to the elimination of the Bx14 and rerouting of the Bx8. In response to complaints, three no-cost actions were implemented in January 2011: 1) the Bx4 was split into two branches at the eastern end of the route with the new branch, called the Bx4A, serving the former Bx14 route in Parkchester between Hugh Grant Circle and Westchester Square, 2) the new Bx24 route was implemented that replicated the portion of the former Bx14 route between Country Club and the Pelham Bay 6 Station, and 3) the Bx8 was returned to pre-June 2010 routing on Layton Avenue and Crosby Avenue.

The Bx4A branch has been well received, but the Bx24 did not satisfy some Country Club residents who have requested that the route to be further extended to Westchester Square. NYCT is evaluating this proposal.

The decrease in Bx5 ridership may be the result of a combination of traffic congestion on Crosby Avenue, short-turns in service to avoid the traffic congestion, insufficient running times and reduced reliability. In summer 2011 there will be a moderate running time increase and a decrease in service to better match demand.

Follow-Up Actions

The Bx5 will be monitored to see if the increase in scheduled running times will help to restore the reliability of the route and increase ridership or if further modifications are necessary. Bus stop spacing will be adjusted on the Bx24 route in Country Club to accommodate community requests for fewer stops on the route.

Bx41 Truncation/Bx39 Extension on White Plains Road

Description of Action

- Discontinued service on the Bx41 in Woodlawn between East Gun Hill Road and East 241st Street.
- Extended the less frequent Bx39 on White Plains Road to East 241 Street where the Bx41 was discontinued (this section is under the subway between the Gun Hill Road and Wakefield Stations).

Projected Net Annual Savings

\$1.1 million

Ridership, Cost per Rider and Capacity

	Ridership Change 2009-2010		Cost per Rider						Guideline Capacity	
			Weekday (WD)			Weekend (WE)			WD	WE
	WD	WE	2009	2010	Change	2009	2010	Change		
Bx39	3908	5999	\$ 1.13	\$ 1.32	17%	\$ 1.25	\$ 1.37	10%	80%**	***
Bx41	-5518	-6336	\$ 1.31	\$ 1.24	-5%	\$ 1.43	\$ 1.30	-9%	81%**	***
Subway*	3056	5004							NA	NA
Total	1446	4667	\$ 1.25	\$ 1.28	2%	\$ 1.37	\$ 1.33	-3%		
Percent of Total	2.1%	5.9%								

* Ridership at Gun Hill Rd, 219 St, 225 St, 233 St, Nereid Av, and Wakefield 241 St ② and ⑤ stations.

** Reflects projected percent of guideline capacity after service adjustments in July 2011.

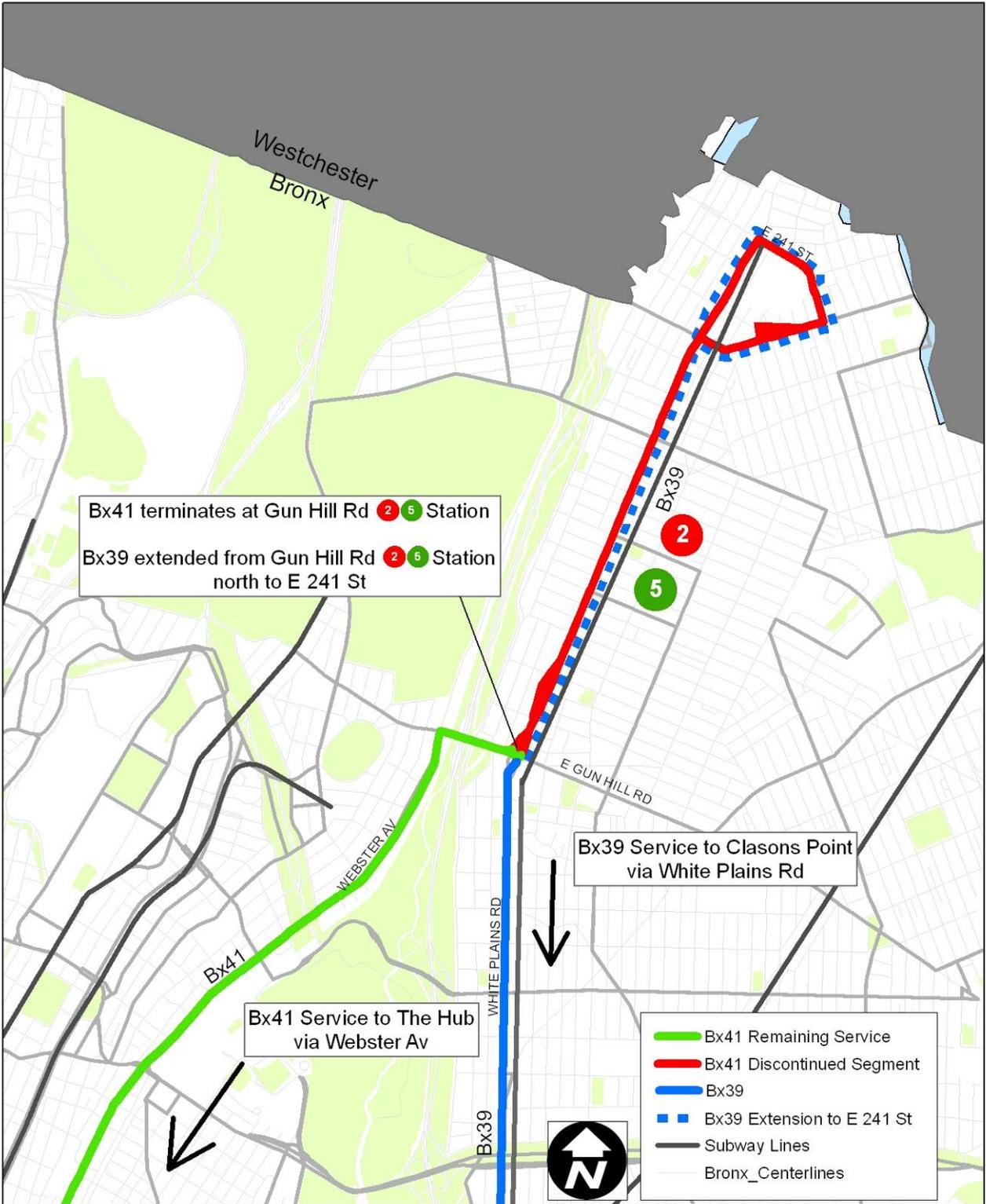
***Pending data collection second quarter of 2011. Preliminary results reflect a need for an increase in service on the Bx39.

Discussion

Overall ridership of the Bx39, and the ② and ⑤ trains (which run above the Bx39 on White Plains Road) increased following the service reductions, off-setting the loss on the Bx41. The restructuring of the Bx39 and Bx41 had the desired effect of encouraging passengers to use the Bx39 as well as more efficient subway service. The combined cost per rider of the two routes increased on weekdays and decreased on weekends.

In July 2010, Bx39 overnight service was extended along White Plains Road to rectify an unintended consequence of the swap (NYCT had not proposed eliminating overnight bus service on White Plains Road). The restructuring of these two routes did not adversely affect crowding; weekday loads are within guidelines. NYCT staff is currently in the process of analyzing weekend loads and will adjust service if necessary.

Bx41 Truncation/Bx39 Extension on White Plains Road



Restructuring of Bx15/Bx55 Service Along Third Avenue

Description of Action

- Discontinued late evening and weekend Bx55 limited-stop service on Third Avenue between East Fordham Road and the Hub in the Bronx.
- Increased local Bx15 service to off-set Bx55 reductions.
- Converted Bx15 to operate with higher-capacity articulated buses.

Projected Net Annual Savings

\$0.5 million

Ridership, Cost per Rider and Capacity

	Ridership Change		Cost per Rider						Guideline Capacity	
	2009-2010		Weekday (WD)			Weekend (WE)			WD	WE
	WD	WE	2009	2010	Change	2009	2010	Change		
Bx15	-2271	5541	\$ 1.28	\$ 1.18	-8%	\$ 1.38	\$ 1.21	-13%	91%**	88%*
Bx55	-437	-10759	\$ 1.16	\$ 1.12	-3%	\$ 1.50			92%**	
Total	-2708	-5218	\$ 1.23	\$ 1.15	-6%	\$ 1.41	\$ 1.21	-14%		
Percent of Total	-6.9%	-12.1%								

*Reflects projected percent of guideline capacity after service adjustments in July 2011.

**Reflects projected percent of guideline capacity after service adjustments in September 2011.

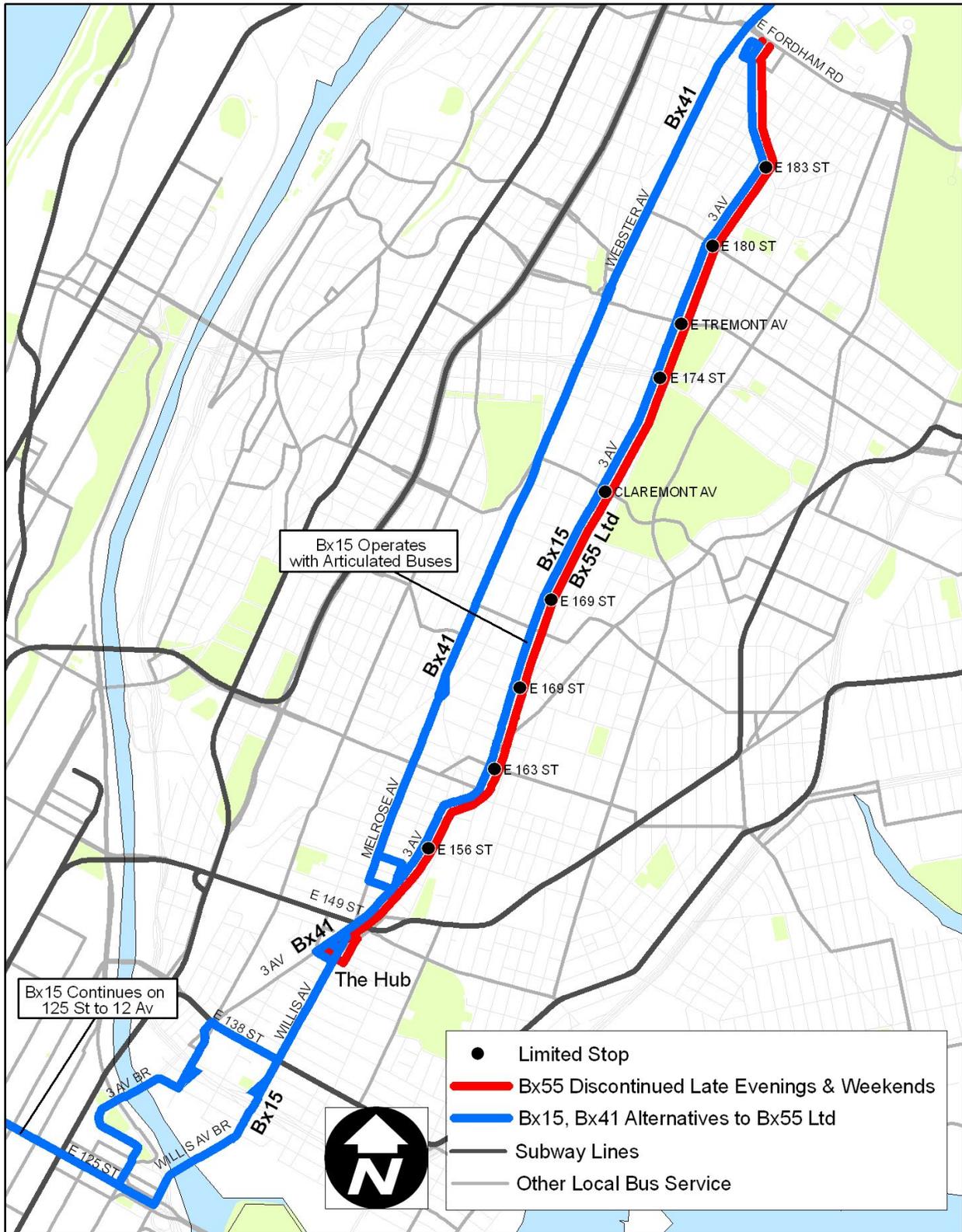
Discussion

Ridership in the corridor dropped significantly following the service reductions, and it is difficult to determine precisely what happened. Some former Bx55 customers may be taking the Bx15 or Bx41, though both of these routes did not experience an increase in ridership that would offset the drop in ridership on the Bx55. It is also possible that the changes encouraged customers to use the numerous cross-town bus routes to nearby subway lines. The cost per rider, however, for both routes has decreased.

Follow-Up Actions

NYCT is proposing to increase service on the Bx15 and to decrease service on the Bx55 in September 2011 during the weekday morning and afternoon peak periods to better match demand. This will bring the levels of service on these routes in line with guidelines, as shown above under “Guideline Capacity.”

Restructuring of Bx15/Bx55 Along Third Avenue



Discontinue Weekday Off-Peak and Saturday Bx20 Service

Description of Action

- Discontinued Bx20 service weekdays off-peak and on Saturdays (the Bx20 did not operate Sundays).
- Retained service during weekday peak hours.

Projected Net Annual Savings

\$0.6 million

Ridership, Cost per Rider and Capacity

	Ridership Change		Cost per Rider						Guideline Capacity	
	2009-2010		Weekday (WD)			Weekend (WE)			WD	WE
	WD	WE	2009	2010	Change	2009	2010	Change		
Bx20	-1025	-1072	\$ 2.23	\$ 1.96	-12%	\$ 2.67			79%	
Bx07	1265	1836	\$ 1.30	\$ 1.17	-10%	\$ 1.38	\$ 1.16	-16%	*	
Bx10	713	512	\$ 1.84	\$ 1.62	-12%	\$ 1.98	\$ 1.86	-6%	*	
Total	953	1276	\$ 1.42	\$ 1.22	-14%	\$ 1.64	\$ 1.39	-15%		
Percent of Total	3.6%	4.8%								

* Data collection scheduled for fourth quarter 2011.

Discussion

Ridership on the Bx7 and Bx10, which operate in the same corridor as the Bx20, increased by more than the ridership loss on the Bx20. The cost per rider for all routes improved on both weekdays and weekend.

Discontinue Weekend Bx34 Service

Description of Action

- Discontinued weekend service on the Bx34, which operates between Katonah Av/East 242nd St and Fordham Rd/Valentine Av in the Bronx.

Projected Net Annual Savings

\$0.6 million

Ridership, Cost per Rider and Capacity

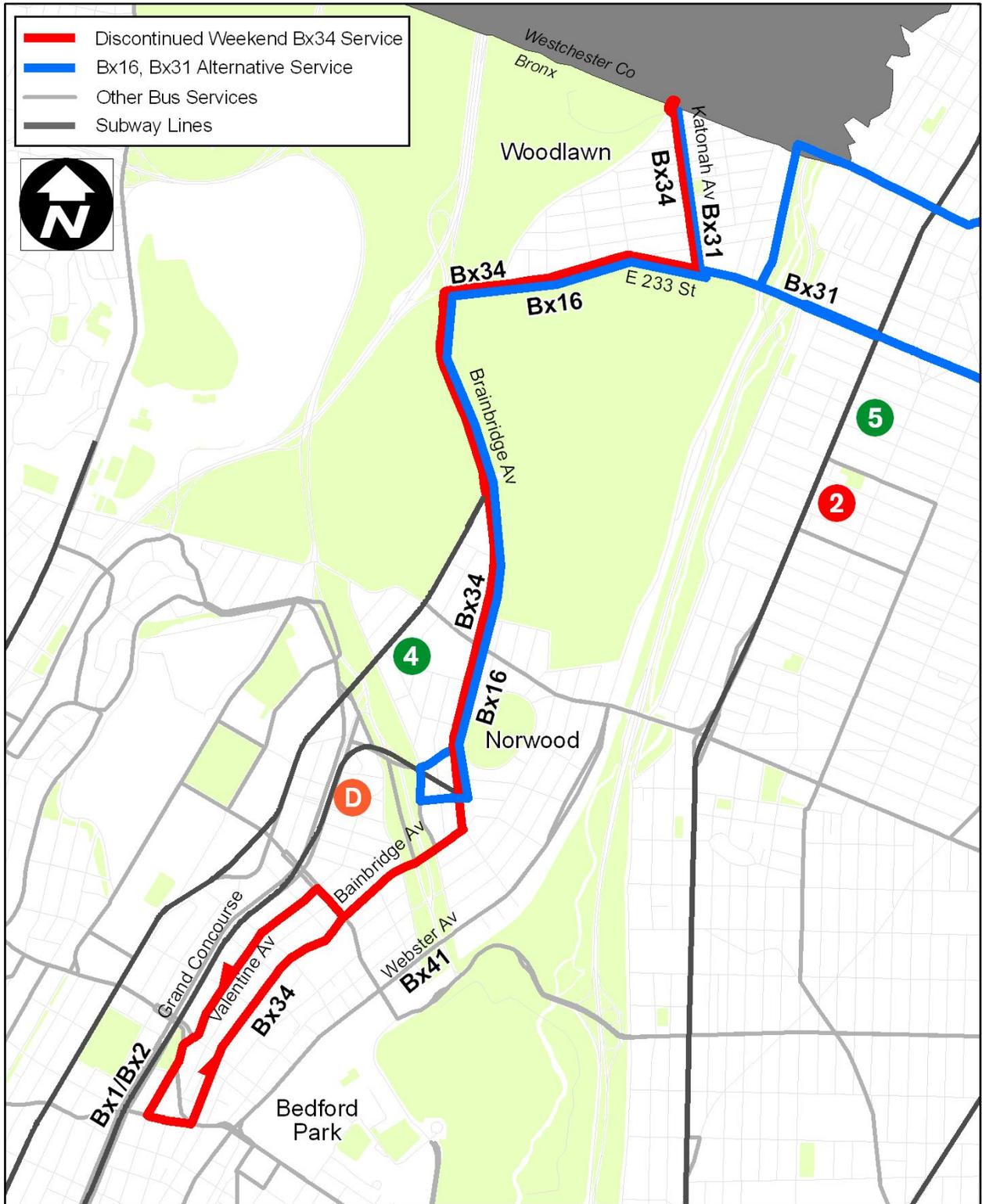
	Ridership Change 2009-2010	Cost per Rider			Guideline Capacity
		Weekend			
	Weekend	2009	2010	Change	Weekend
Bx34	-4363	\$ 2.53			
Bx16	1753	\$ 2.02	\$ 1.47	-27%	*
Bx31	-81	\$ 1.68	\$ 1.64	-2%	66%
Total	-2691	\$ 1.95	\$ 1.58	-19%	
Percent of Total	-14.3%				

* Data collection scheduled for fourth quarter 2011.

Discussion

Weekend ridership on the alternate Bx16 and Bx31 increased, although not as much as ridership declined on the Bx34. Some of the displaced riders, particularly on the southern end of the route, likely shifted to the nearby 4 or D trains. The cost per rider of alternative bus services (Bx16 and Bx31) decreased substantially. The elimination of weekend service on the Bx34 did not adversely affect crowding on the Bx31. NYCT staff is currently in the process of analyzing weekend loads on the Bx16 and will adjust service if necessary.

Discontinue Weekend Bx34



BROOKLYN BUS SERVICE REDUCTION EVALUATIONS

Brownstone Brooklyn Restructuring (Red Hook Portion – B57, B61, B75, B77)

Description of Action

- Combined the B61 and B77 into a single route operating between Downtown Brooklyn and Windsor Terrace via Red Hook. Prior to this change, the B61 provided service between Downtown Brooklyn and Red Hook via Columbia Street and Atlantic Avenue, and the B77 provided service between Red Hook and Park Slope via 9th Street.
- Replaced the segment of the B75 that operated along Court Street/Smith Street, between Downtown Brooklyn and Smith-9th Sts Station with an extension of the B57 (all times except overnights).
- Replaced the segment of the B75 that operated along 9th Street and Prospect Park West between the Smith-9th Sts Station and 20th Street/Prospect Park West with the combined B61/B77 described above (all times).

Projected Net Annual Savings

Brownstone Brooklyn Restructuring (includes Red Hook Portion and 7th Avenue Portion) - \$3.0M

Ridership, Cost per Rider and Capacity

	Ridership Change		Cost per Rider						Guideline Capacity	
	2009-2010		Weekday (WD)			Weekend (WE)			WD	WE
	WD	WE	2009	2010	Change	2009	2010	Change		
B61/B62	4805	7098	\$ 1.56	\$ 1.49	-4%	\$ 1.66	\$ 1.65	-1%	84%*	93%*
B57	545	910	\$ 1.69	\$ 1.73	2%	\$ 2.58	\$ 2.51	-2%	94%**	97%**
B75	-3217	-3246	\$ 1.96			\$ 2.94				
B77	-2985	-4312	\$ 1.87			\$ 1.92				
Subway***	2384	4798								
Total	1532	5248	\$ 1.66	\$ 1.54	-7%	\$ 1.97	\$ 1.80	-9%		
Percent of Total	1.9%	6.6%								

*Reflects projected percent of guideline capacity after service adjustments in July 2011.

**Reflects projected percent of guideline capacity after service adjustments in September 2011.

***Ridership at the Bergen St, Carroll St, Smith-9 Sts, 7 Av, 15 St-Prospect Park **F G** stations and the **F G** portion of ridership at the 4 Av /9 St station.

**** NYCT will continue to monitor the number of passengers per bus consistent with our guidelines.

Discussion

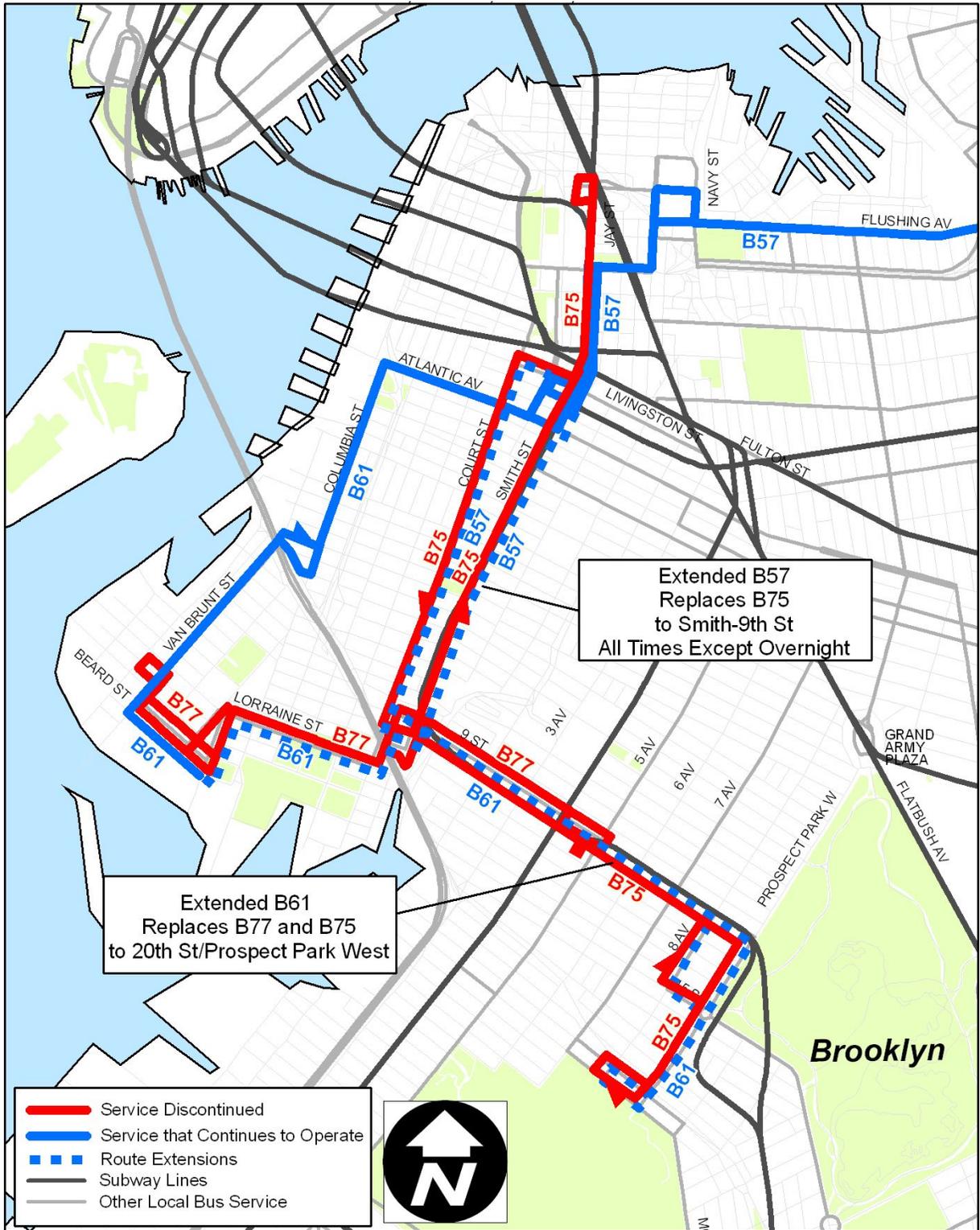
In January, 2010 the B61 was split into two routes, the B61 and B62. As this action (which was unrelated to the service reduction initiative) occurred between the two data points used in this evaluation, ridership on the B62 is also considered in this analysis. While some of the ridership increase on the two routes can be attributed to the increased reliability caused by the split of the routes, it is assumed that the majority of the increase is related to the service reductions. Ridership increased on the remaining routes (B61/62 and B57) on weekdays and weekends. Former B77 customers are now likely using the B61, and former B75 customers are

now likely using the B61, B57, and the **F** and **G** train service, specifically to or from the Bergen St, Carroll St, Smith-9 Sts, 4 Av /9 St, 7 Av and 15 St-Prospect Park stations.

Overall cost per rider for weekdays and weekends was down by almost 10%. On weekdays, the cost per rider of the B57 increased slightly, mainly due to the fact that the route was extended over a relatively low ridership segment (Court and Smith Streets).

The restructuring of these routes did not adversely affect crowding; weekday and weekend loads are within NYCT guidelines.

Brownstone Brooklyn Restructuring (Red Hook Portion – B57, B61, B75, B77)



Brownstone Brooklyn Restructuring (7th Avenue Portion – B67/B69)

Description of Action:

- Rerouted the B69 south of Flatbush Avenue between 8th Avenue/Prospect Park West and 7th Avenue, following the B67 route path to Cortelyou Road.
- Reduced the frequency of weekday B67 and B69 service to provide an appropriate level of combined B67 and B69 service on 7th Avenue. Customers traveling to the 7th Avenue **B** **Q** station see a similar number of buses as they did previously.
- Reduced the hours of weekday B69 service and discontinued weekend B69 service.

Projected Net Annual Savings

See page B-15

Ridership, Cost per Rider and Capacity

	Ridership Change 2009-2010		Cost per Rider						Guideline Capacity	
			Weekday (WD)			Weekend (WE)			WD	WE
	WD	WE	2009	2010	Change	2009	2010	Change		
B67	-2280	-307	\$ 1.56	\$ 1.81	16%	\$ 2.04	\$ 2.21	9%	91%*	**
B69	1172	-1967	\$ 2.61	\$ 1.92	-26%	\$ 3.75				
Total	-1108	-2274	\$ 1.84	\$ 1.86	1%	\$ 2.49	\$ 2.21	-11%		
Percent of Total	-12.2%	-30.9%								

* Reflects projected percent of guideline capacity after service adjustments in September 2011 for the combined B67/B69.

** NYCT will continue to monitor the number of passengers per bus consistent with our guidelines.

Discussion

Restructuring of the B69 by combining it with the B67 in Park Slope increased the viability of this north-south route through Fort Greene and Clinton Hill, which otherwise might have been discontinued. This increase in ridership on weekdays is primarily due to riders shifting from the parallel B67 route which lost riders and experienced an increase in the cost per rider.

Though the B69 rerouting captured some of weekday B67 customers, declines in B67 customers should be viewed at least partially as a separate trend because ridership on the route had already been declining.

Follow-Up Actions

Following this service change NYCT received complaints about bus bunching on the two routes along the sections where both B67 and B69 service operate. Additionally, overall ridership for the two routes declined slightly, so NYCT is proposing to slightly decrease the levels of service and to increase the running-time for both routes. It is expected that this will make the service levels better match demand and that the increase in running time will help alleviate the reliability issues. As shown in the table above, the combined B67/B69 routes will continue to meet MTA loading guidelines.

Brownstone Brooklyn Restructuring (7th Avenue Portion – B67/B69)



Bay Ridge Restructuring – B1/B64 Swap, B64 Truncation South of 25th Avenue

Description of Action

- Swapped the B1, which served 86th Street, 13th Avenue and Bay Ridge Avenue, and the B64, which served Bath Avenue and 86th Street west of 13th Avenue, so that the B1 became a continuous 86th Street crosstown service and the less-frequent B64 served the longer routing via 13th Avenue and Bay Ridge Avenue. This change resulted in scheduling efficiencies.
- Discontinued the segment of the B64 that duplicated the B82 south of Cropsey Avenue/25th Avenue (near Coney Island). B64 service on the remaining portions of the route was unaffected.

Projected Net Annual Savings

Bay Ridge Restructuring (B1/B64 Swap and B70 Rerouting/B8 Overnight) - \$2.8 million
 Truncation of the B64 south of 25th Avenue - \$0.9 million

Ridership, Cost per Rider and Capacity

	Ridership Change		Cost per Rider						Guideline Capacity	
	2009-2010		Weekday (WD)			Weekend (WE)			WD	WE
	WD	WE	2009	2010	Change	2009	2010	Change		
B01	-684	-55	\$ 1.37	\$ 1.15	-16%	\$ 1.53	\$ 1.21	-21%	97%*	**
B64	-1093	-1890	\$ 1.31	\$ 1.85	41%	\$ 1.46	\$ 2.03	38%	86%*	**
Total	-1777	-1945	\$ 1.36	\$ 1.31	-4%	\$ 1.51	\$ 1.43	-6%		
Percent of Total	-6.2%	-5.6%								

*Reflects projected percent of guideline capacity after service adjustments in September 2011.

** Data collection scheduled for fourth quarter 2011.

Discussion

Ridership on the two routes has fallen slightly, although it is worth noting that overall ridership in Brooklyn had been falling prior to the implementation of the service reductions. The cost per rider improved on the B1 and got worse on the B64, though it has improved for the combined routes.

More detailed stop-by-stop ridership shows that the number of people traveling west of the point where the two routes were swapped (13th Avenue) did not change dramatically. Additionally, the number of people transferring between the two routes stayed relatively the same before and after June 2010.

	Before June, 2010	After June, 2010
B1	3788	5300
B64	4225	2061
Total	8013	7361

Ridership on the portion of the B64 south of 13th Avenue declined by 1590 customers per weekday. The section of the B82 route that runs nearby and parallel to the discontinued section of the B64 (south of 25 Avenue) had an increase of 400 passengers per day, which can likely be attributed a shift in riders from the B64. Previous B64 customers may also have shifted to the **D** at the Coney Island-Stillwell Avenue or Bay 50th Street stations or to private automobiles.

Bay Ridge Restructuring – B37 Elimination/B70 Rerouting/B8 Truncation (Except Overnights)

Description of Action

- Discontinued all B37 service, which operated along 3rd Avenue between Downtown Brooklyn and Fort Hamilton; replaced the segment south of Bay Ridge Avenue with the rerouted B70.
- Discontinued B8 service between the VA Hospital and the 95th Street **R** station at all times except late nights and replaced it with the rerouted B70.
- Rerouted the B70 to operate between 8th Avenue/Bay Ridge Avenue and the VA Hospital via Bay Ridge Avenue, 3rd Avenue (replacing the B37), and the 95th Street **R** station (replacing the B8). The discontinued segment of the B70 between Bay Ridge Avenue and 92nd Street on 7th Avenue and Fort Hamilton Parkway is closely paralleled by the B16.

Projected Net Annual Savings:

See page B-22

Ridership, Cost per Rider and Capacity

	Ridership		Cost per Rider						Guideline Capacity	
			Weekday			Weekend			WD	WE
	WD	WE	2009	2010	Chng	2009	2010	Chng		
B70	662	733	\$ 1.39	\$ 1.70	22%	\$ 1.55	\$ 1.82	17%	90%*	77%*
B8	-1708	-1686	\$ 1.41	\$ 1.41	0%	\$ 1.57	\$ 1.60	2%	91%*	****
B63	31	-315	\$ 1.50	\$ 1.47	-2%	\$ 1.56	\$ 1.52	-2%	****	****
B37	-3240	-3057	\$ 2.84			\$ 4.10				
Subway***	970									
Total	-3285	-4325	\$ 1.54	\$ 1.47	-5%	\$ 1.70	\$ 1.60	-6%		
Percent of Total	-4.4%	-4.4%								

* Reflects projected percent of guideline capacity after service adjustments in September 2011.

**Data collection scheduled for fourth quarter 2011.

*** Includes subway trips originating and destined to stations along the **R** train in Brooklyn. Data is based on results from NYCT's Ridership Model and cannot be calculated for weekends.

**** NYCT will continue to monitor the number of passengers per bus consistent with our guidelines.

Discussion

Overall ridership in this area fell by 4.4% for both weekday and weekends. Some B37 riders diverted to the **R** train (970 weekday riders), with no perceptible shift to the parallel B63 on Fifth Avenue.

Ridership patterns on the B8 and B70 between the VA Hospital and Bay Ridge remained largely unchanged (probably in part due to the fact that the B70 was the primary service between the two locations prior to the reductions). The percent of customers boarding the route in this segment remained the same.

In the segment of the route not covered by the new B70, both the B63 bus (on Fifth Avenue) and the **R** train serve as alternatives. Looking at subway ridership using NYCT's model, there has been a disproportional increase in trips between the **R** stations south of 45th Street and the ones between 45th Street and Union Street Stations as well as DeKalb Av Station.

Although the cost per rider for both the B8 and B70 increased, the two routes are still more efficient than the route they replaced (the B37 – which had a cost per rider of \$2.80 on weekdays and \$4.10 on weekends), and NYCT achieved significant savings from this service change.

The restructuring of these routes did not adversely affect crowding, as shown above under “Guideline Capacity.”

Rerouted B4 Service between Ocean Parkway and the Sheepshead Bay Station via Av Z

Description of Action

- Discontinued B4 service during peak hours south of Avenue Z.
- Discontinued B4 service during off-peak hours between Coney Island Hospital and Knapp Street/Voorhies Avenue.

Projected Net Annual Savings

\$0.8 million.

Ridership, Cost per Rider and Capacity

	Ridership Change		Cost per Rider						Guideline Capacity	
	2009-2010		Weekday (WD)			Weekend (WE)			WD	WE
	WD	WE	2009	2010	Change	2009	2010	Change	WD	WE
B4	-1083	-3022	\$ 2.22	\$ 2.47	11%	\$ 3.02	\$ 3.54	17%	80%*	63%*
B36	-469	-132	\$ 1.18	\$ 1.19	2%	\$ 1.30	\$ 1.28	-1%	**	****
Total	-1552	-3154	\$ 1.45	\$ 1.49	3%	\$ 1.85	\$ 1.75	-5%		
Percent of Total	-7%	-14.6%								

*Reflects projected percent of guideline capacity after service adjustments in September 2011.

** Data collection scheduled fourth quarter 2011.

**** NYCT will continue to monitor the number of passengers per bus consistent with our guidelines.

Discussion

B4 ridership declined following the shortening of the B4 route, and it is not clear what transportation alternative customers are using. The nearby B36 lost ridership as well. The cost per rider on the B4 and B36 rose on weekdays, while the weekend change was mixed. Some B4 customers may have shifted to the B44; however, given the size of the route (both in terms of length and ridership), it would be difficult to see any change attributable to the B4.

Follow-Up Actions

To better match demand, In September 2011, NYCT will increase B4 service during the weekday morning peak and to decrease service during the evenings seven days a week. Furthermore, NYCT will adjust the span of service during that time to meet demand at the same time. This will bring the levels of service on this route in line with guidelines, as shown above under “Guideline Capacity.”

Rerouted B4 between Ocean Parkway and the Sheepshead Bay Station via Av Z

B4 Restructuring - Peak Hour



B4 Off Peak



Discontinued B12 Service East of Alabama Avenue and Q24 Service West of Broadway Junction

Description of Action

- Discontinued the segment of the B12 that operated east of Alabama Avenue and duplicated the Q24 and the **A C**. B12 service on the remaining portions of the route was unaffected.
- Discontinued the segment of the Q24 that operated west of the Broadway Junction station, which duplicated the **J Z**. Q24 service on the remaining portions of the route was unaffected.

Projected Net Annual Savings

B12 service reduction - \$1.5 million.

Q24 service reduction - \$0.7 million

Ridership, Cost per Rider and Capacity

	Ridership Change		Cost per Rider						Guideline Capacity	
	2009-2010		Weekday (WD)			Weekend (WE)			WD	WE
	WD	WE	2009	2010	Change	2009	2010	Change		
B12	-2449	-3766	\$ 1.16	\$ 1.01	-12%	\$ 1.28	\$ 1.11	-13%	****	*****
Q24	-1563	-983	\$ 1.65	\$ 1.53	-7%	\$ 1.95	\$ 1.08	-45%	85%***	93%***
Subway*	1347	**								
Total	-2665	-4749	\$ 1.32	\$ 1.18	-11%	\$ 1.50	\$ 1.09	-27%		
Percent of Total	-8%	-11.6%								

* Ridership shown is at the Liberty Av, Van Siclen Av, Shepherd Av, Euclid Av, and Grant Av **A C** Stations and the Alabama Av, Van Siclen Av, Cleveland St, Norwood Av, Crescent St, Cypress Hills, 75 St, 85 St – Forest Pkwy, Woodhaven Blvd, 104 St, 111th St, Sutphin Blvd, and Jamaica Center Parsons/Archer **J Z** Stations.

** Weekend ridership not included as construction work makes comparing across years difficult.

*** Reflects projected percent of guideline capacity after service adjustments in September 2011.

**** Data collection scheduled for fourth quarter 2011.

***** NYCT will continue to monitor the number of passengers per bus consistent with our guidelines.

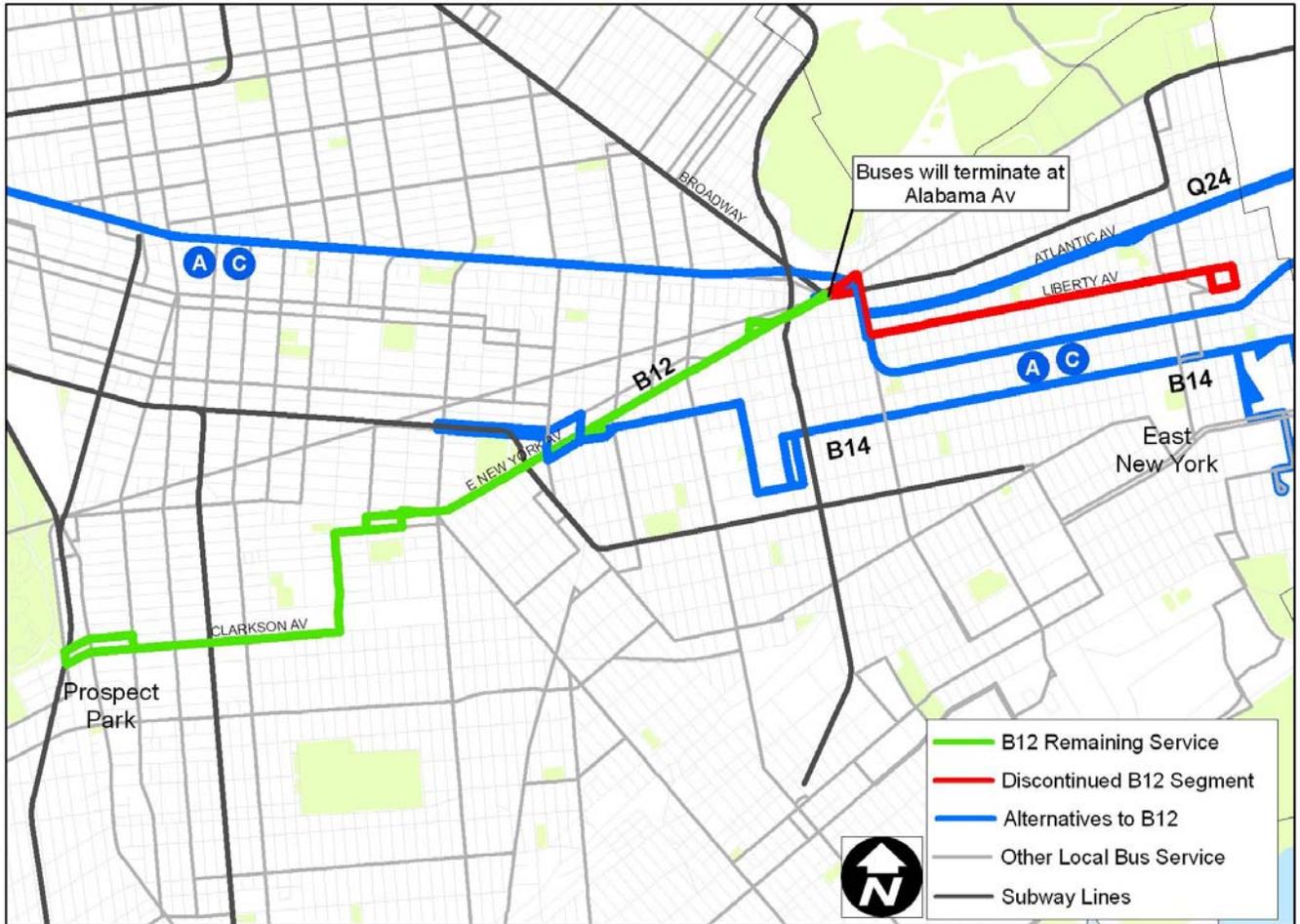
Discussion

Ridership on the B12 and Q24 has decreased with customers having likely shifted to the nearby **A C** and **J Z** trains, which are more cost effective. The cost per rider for both bus routes improved.

Follow-Up Actions

NYCT will decrease Q24 service to better match demand on weekdays (during the morning peak, midday, and evening), Saturdays (during midday and late afternoons) and Sundays (at all times) in September 2011. This will bring the loads for this route closer to the guidelines and make the route more efficient. NYCT plans to check ridership on the B12 in the fourth quarter of 2011.

Discontinued B12 East of Alabama Avenue and Q24 Service West of Broadway Junction



Discontinued B13 Service North of Wyckoff/DeKalb Avenues – Wyckoff Hospital

Description of Action

- Discontinued B13 service along Flushing Avenue and Bushwick Avenue between Wyckoff Hospital and its northern terminal at the Graham Avenue **L** Station. This segment paralleled **L** service.

Projected Net Annual Savings

\$0.5 million

Ridership, Cost per Rider and Capacity

	Ridership		Cost per Rider						Guideline Capacity	
			Weekday (WD)			Weekend (WE)			WD	WE
	WD	WE	2009	2010	Change	2009	2010	Change	WD	WE
B13	-1326	-1064	\$ 2.14	\$ 2.12	-1%	\$ 2.40	\$ 2.46	2%	***	****
Subway**	3631	*								
Total	2305	-1064	\$ 2.14	\$ 2.12	-1%	\$ 2.40	\$ 2.46	2%		
Percent of Total	4.6%	-16.6%								

* Weekend ridership not included as construction work makes comparing across years difficult.

** Ridership shown is at the Jefferson St, Morgan Av, Montrose Av, Grand St, and Graham Av **L** Stations.

*** Data collection scheduled 4th quarter 2011.

**** NYCT will continue to monitor the number of passengers per bus consistent with our guidelines.

Discussion

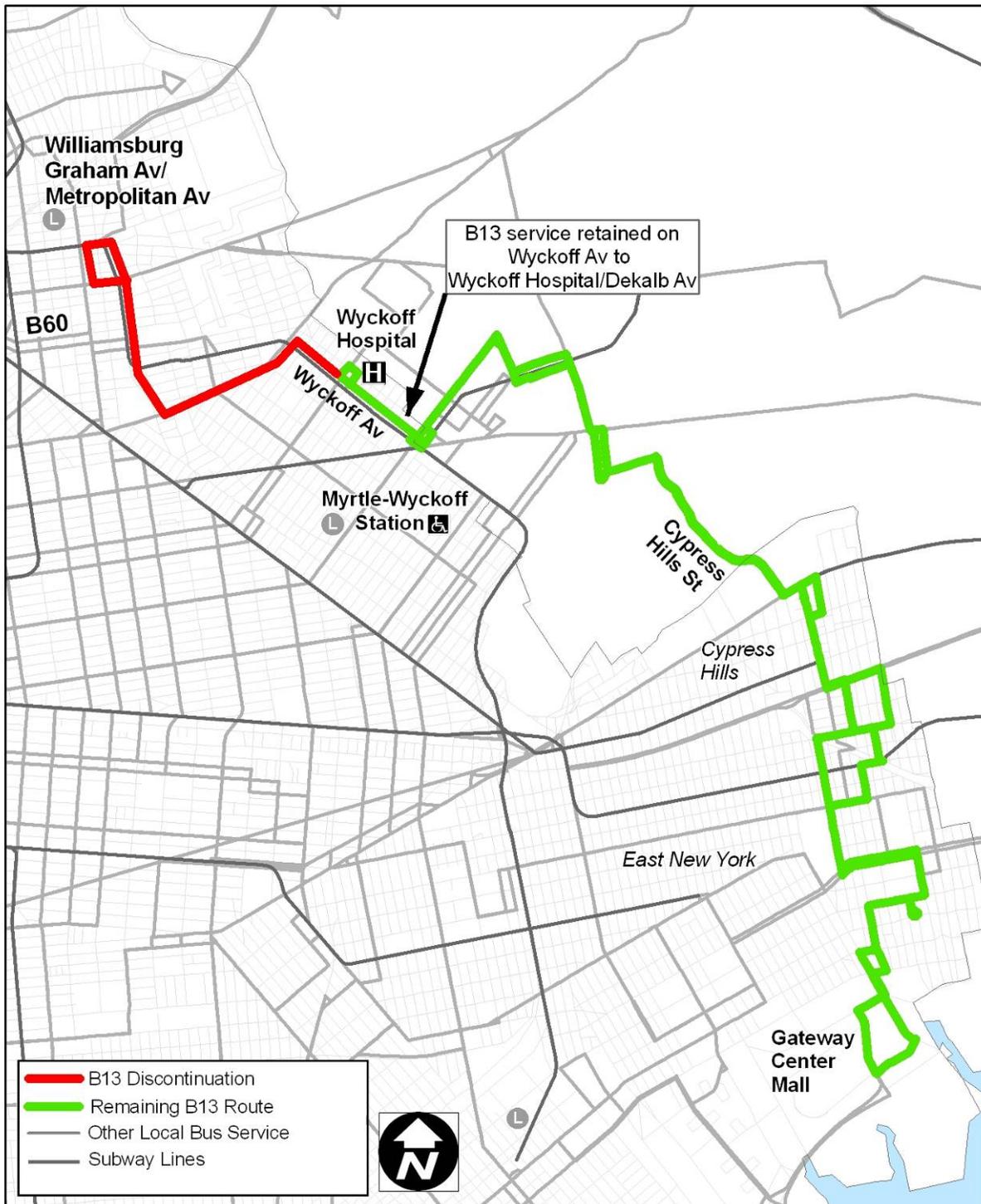
Ridership on the B13 has decreased with the shortening of the route, though many customers likely have shifted to the more efficient and nearby **L** train service. Cost per rider for the route improved for weekdays, with a slight increase on weekends.

Since June 2010, several changes were made to the turn-around of the B13 near Wyckoff Hospital. The initial turn-around was via the streets next to the hospital. However, ambulances and hospital traffic made this turn-around difficult. The turn-around was then changed to run via Himrod Street, but NYCT received complaints from the firehouse on that street and had to change the turn-around a second time. The final turn-around required NYCDOT street sign changes and, as a temporary work around, operators were instructed to turn around via Flushing Avenue, with the last stop for passengers at DeKalb Avenue. The proper signage has now been installed and buses now use the permanent turn-around via DeKalb Avenue and Hart Street.

Follow-Up Actions

NYCT staff intends to collect information on the passenger loads for the route by the end of the year and will adjust service based on this data if necessary.

Discontinue B13 North of Wyckoff/DeKalb Avenues – Wyckoff Hospital



Discontinued B48 Service South of Fulton Street

Description of Action

- Discontinued the segment of the B48 south of Fulton Street, which paralleled the Franklin Avenue **S** Shuttle. B48 service on the remaining portions of the route was unaffected.

Projected Net Annual Savings

\$0.5 million

Ridership, Cost per Rider and Capacity

	Ridership Change		Cost per Rider						Guideline Capacity	
	2009-2010		Weekday (WD)			Weekend (WE)			WD	WE
	WD	WE	2009	2010	Chng	2009	2010	Chng		
B48	-2338	-1989	\$ 1.87	\$ 2.55	36%	\$ 3.08	\$ 3.86	25%	40%	25%
Subway*	1000									
Total	-1338	-1989	\$ 1.87	\$ 2.55	36%	\$ 3.08	\$ 3.86	25%		
Percent of Total	-4.4%	-42.4%								

* Includes estimated increase in subway trips on the Franklin Avenue **S** estimated by NYCT's Ridership Model of MetroCard data assignments.

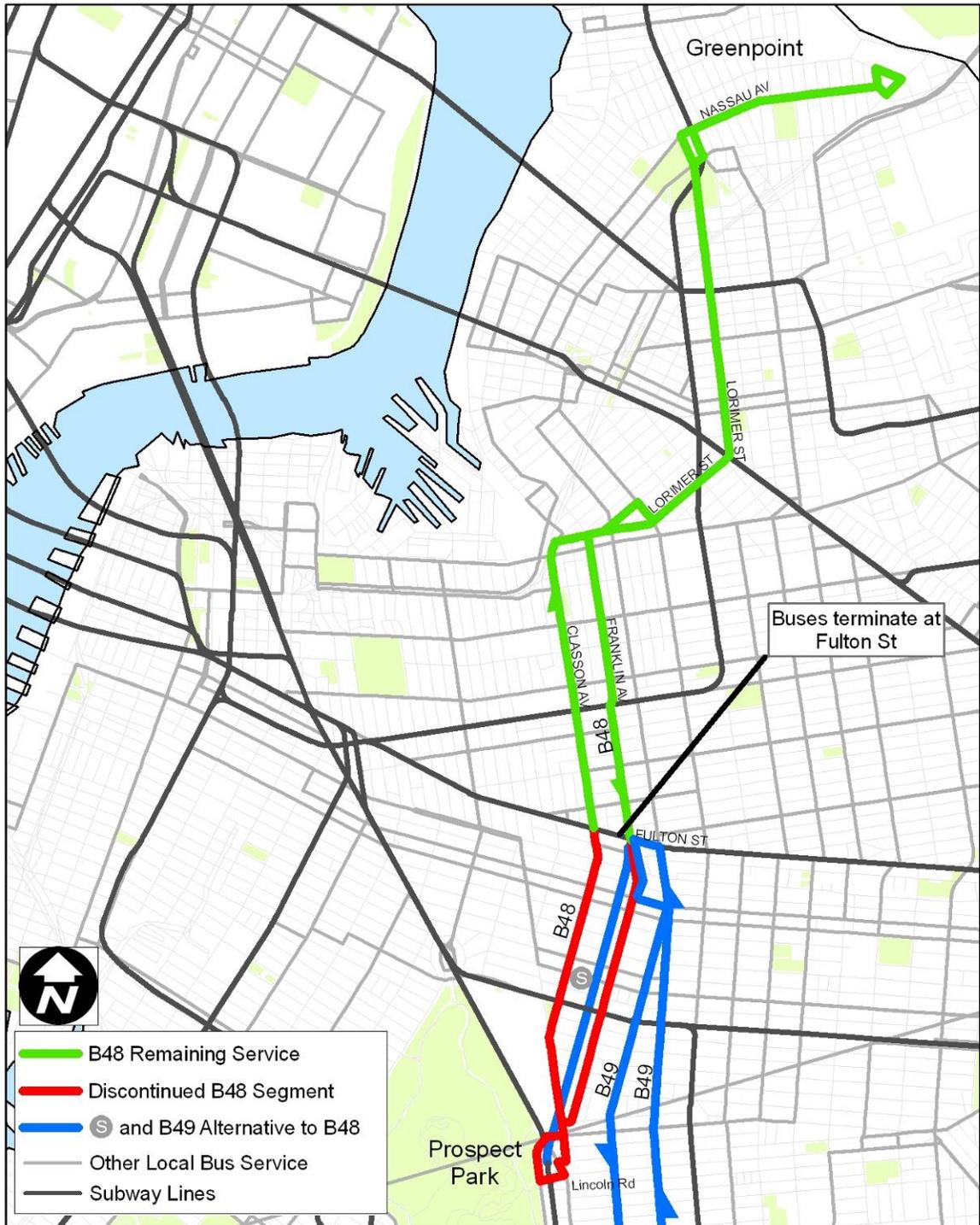
Discussion

Ridership of the B48 declined precipitously with the shortening of the route. Customers primarily shifted to the Franklin Avenue **S** Shuttle (ridership on the shuttle attributable to former B48 riders grew by approximately 1,000 riders per weekday), but the decline in ridership was so severe that efficiency did not improve, and the cost per rider increased substantially. Additionally, some riders could have shifted to the B43, B49 or other routes, but given the decline in overall Brooklyn bus ridership, it is difficult to determine the extent of these shifts.

Follow-Up Actions

The B48 is undergoing further study. It may be necessary to adjust service on this route as part of the implementation of Select Bus Service on the nearby B44; any adjustment undertaken as part of the SBS initiative can be expected to strengthen performance of the B48.

Discontinued B48 South of Fulton Street



Discontinued Weekend B2 Service

Description of Action

- Discontinued B2 service, which operated between Kings Plaza and the East 16th Street/Kings Highway **B** and **Q** subway station, on weekends.
- Weekday B2 service remained unchanged.

Projected Net Annual Savings

\$0.3 million

Cost per Rider and Capacity

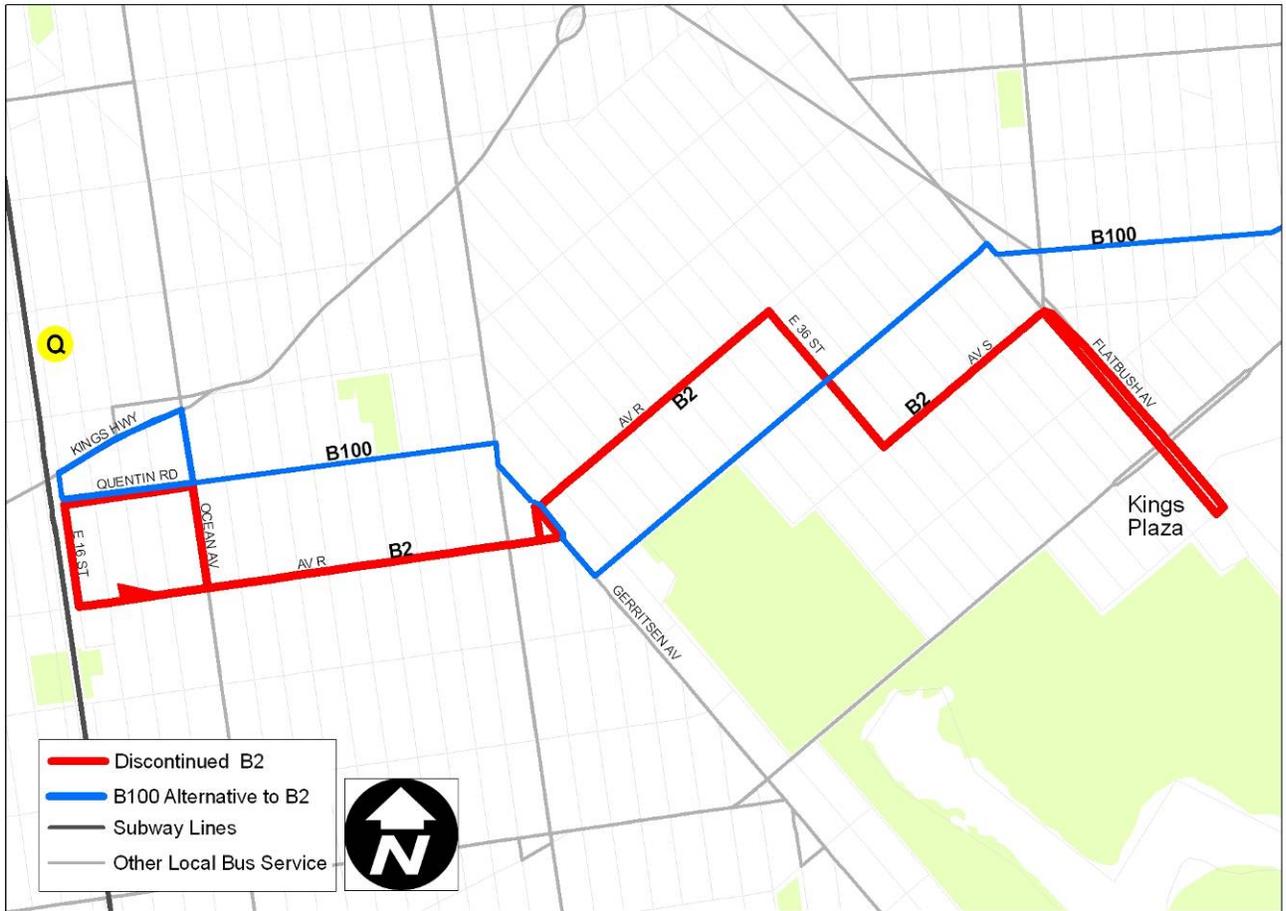
	Ridership Change	Cost per Passenger			Guideline Capacity
	2009-2010	Weekend			
	Weekend	2009	2010	Change	
B02	-2467	\$ 2.39			
B100	812	\$ 2.83	\$ 2.65	-6%	†
Total	-1655	\$ 2.56	\$ 2.65	3%	
Percent of Total	-41.2%				

† MTA Bus Co. will continue to monitor the passengers per bus on this route

Discussion

The B2 weekend service discontinuation resulted in a substantial ridership increase on the B100 on weekends. Service on the B100, which is operated by the MTA Bus Company, was not modified as a result of the service reductions and is the closest viable alternative for former B2 weekend customers. The overall cost per rider for the two routes increased slightly, because the B2 had been the more efficient route, although it declined for the B100. MTA Bus Company staff will continue to monitor the passenger levels and loading on that route to ensure that it meets current MTA Loading Guidelines.

Discontinued Weekend B2



X27/37 and X28/38 Consolidation

Description of Action:

- Combined the separate Midtown and Downtown branches of the X27/X37 and X28/X38 into single routes during rush hours, with the goal of providing more efficient operation while maintaining service to most stops. This service pattern matched the off-peak pattern for the X27 and X28 and had operated during peak hours prior to December 2001.
- Eliminated weekend service on the X27 and X28.

Projected Net Annual Savings

\$0.5 million

Ridership and Cost per Rider and Capacity

	Ridership Change		Cost per Rider						Guideline Capacity	
	2009-2010		Weekday (WD)			Weekend (WE)			WD	WE
	WD	WE	2009	2010	Change	2009	2010	Change		
X27/37									90% (X27/37)*	
X28/38	-336	-1019	\$ 6.93	\$ 3.52	-49%	\$ 11.60			89% (X28/38)*	
Percent of Total	-9.7%	-100%								

*Reflects projected percent of guideline capacity after service adjustments in July 2011.

Discussion

Restructuring the X27/X37 and X28/X38 resulted in ridership losses on both routes and a sharp decline in the cost per rider.

The elimination of the midtown branch on these two routes made it difficult to reliably operate service, which led to imbalanced loads during peak hours. In Summer 2010 NYCT extended selected downtown X27 and X28 trips to end or start at 57th Street to address these issues. To further address both the loading imbalances and traffic delays, in January 2011 select trips (labeled X27B and X28B) bypassed downtown Manhattan via West Street. It was expected that this solution would allow midtown riders to bypass lower Manhattan traffic and separate the ridership in the two markets. However, loading imbalances and traffic delays remained as the travel time impacts were more severe than anticipated.

Follow-Up Actions

Due to the continued operational difficulties, NYCT restored weekday X37 and X38 in July 2011. This is expected to resolve the loading and traffic delay issues.

X27/37 and X28/38 Consolidation



MANHATTAN BUS SERVICE REDUCTION EVALUATIONS

Restructure Bus Service in the Lower East Side/Downtown (M9, M15, M20, M21)

Description of Action

- Rerouted the northern and southern segments of the M9 as follows:
 - The northern segment of the M9 now operates between Houston Street and 1st Avenue/23rd Street via Avenue C, replacing the former northern segment of the M21. Formerly, the M9 traveled across E 14th Street to Union Square.
 - The southern segment now operates between Chatham Square and City Hall/Park Row, instead of to Battery Park City and South Ferry via Water Street, replacing the former M15 City Hall/Park Row Branch.
- Extended the M20 from Battery Park City to South Ferry to replace the M9 in Battery Park City.
- Rerouted the M21 on weekdays to operate as a river-to-river crosstown service on Houston Street, terminating at Grand Street/FDR Drive.
- Discontinued the M21 on weekends.

Projected Net Annual Savings

\$3.4 million

Ridership, Cost per Rider and Capacity

	Ridership Change		Cost per Rider						Guideline Capacity	
	2009-2010		Weekday (WD)			Weekend (WE)			WD	WE
	WD	WE	2009	2010	Change	2009	2010	Change		
M09	-1840	-2238	\$ 1.77	\$ 2.17	22%	\$ 1.93	\$ 2.43	26%	93%**	89%**
M15	412	4412	\$ 1.21	\$ 1.13	-6%	\$ 1.23	\$ 1.14	-8%	93%*	72%*
M21	-704	-1366	\$ 2.89	\$ 4.01	39%	\$ 5.34			74%	
M20	737	1657	\$ 2.99	\$ 2.43	-19%	\$ 3.43	\$ 2.52	-26%	79%**	26%**
Total	-1395	2465	\$ 1.42	\$ 1.35	-5%	\$ 1.54	\$ 1.34	-13%		
Percent of Total	-2.1%	3.7%								

*Reflects projected percent of guideline capacity after service adjustments in July 2011

**Reflects projected percent of guideline capacity after service adjustments in September 2011

Discussion

The reroute of southern segment of the M9 resulted in a shortening of its route length. As a result, it is not unexpected that M9 ridership declined significantly. Despite the fact that the M9 was extended to the north, total route ridership declined.

Lower weekday ridership on the M21 is a result of the curtailment of the Avenue C portion of the route. Gains in ridership from the route extension to FDR Drive/Grand Street have not yet been realized. Some M21 customers may have switched to other services because of the need to transfer to the M15 or M9 to reach area hospitals and other destinations on the east side. Finally M21 ridership may have been constrained by the ongoing construction activity along Houston Street for much 2010.

Ridership has increased on the M15 (most of which is attributable to the implementation of Select Bus Service in October 2010 on the route). While it is likely that some customers destined for the City Hall area have switched from the M15 Park Row branch to the M103, ridership data on the M103 is insufficient to draw any conclusions about ridership shifts from the M15. Certainly some M15 Park Row branch customers also switched to the M9.

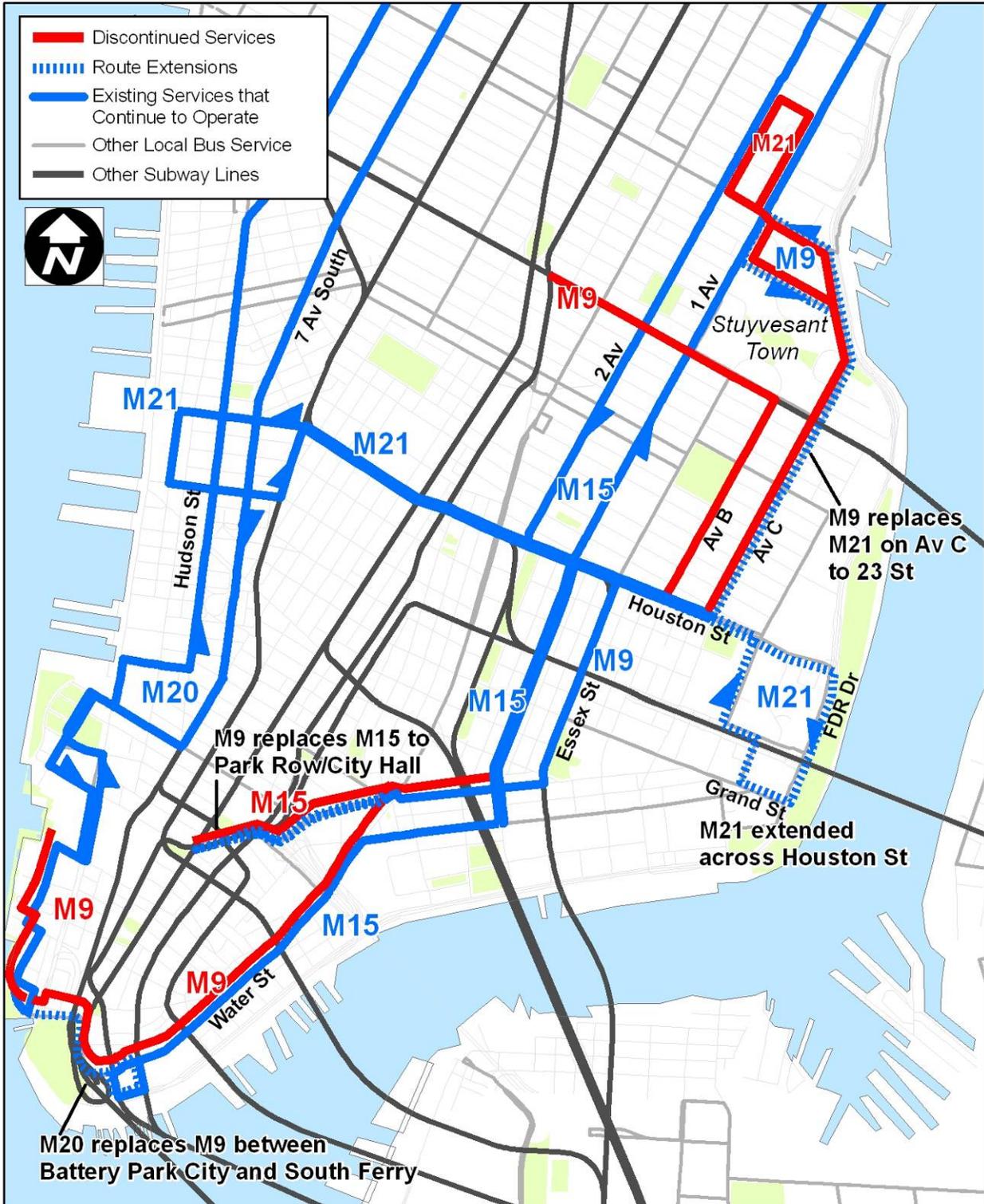
Ridership increased on the M20, which can be attributed to the extension of the M20 to South Ferry and the shortening on the M10 in Midtown.

Generally, for the family of routes affected by these changes, the cost per rider has decreased significantly, indicating a more efficient service pattern and positive outcomes from the restructuring of the Lower East Side/Downtown routes. The restructuring of the M9, M15, M20 and M21 did not result in overcrowded conditions. While overall weekday ridership did decline slightly, this decline may be more indicative of the general decline in Manhattan bus ridership that has been occurring rather than a result of the restructuring of these bus routes.

Follow-Up Actions

NYCT staff will explore opportunities to conduct more outreach to passengers. Better informing customers of the new routes available in this area could help to improve the performance of the M21 and other new routes in the area.

Restructure Bus Service in the Lower East Side/Downtown (M9, M15, M20, M21)



Restructured North-South Bus Service in Manhattan (M1, M2, M3, M4, M5, M6)

Description of Action

- Discontinued the M6, which operated between 57th Street and South Ferry, at all times. The M6 was replaced with an extended M5 service operating between Soho and South Ferry.
- Streamlined the path of the M1 and M3 to operate on a single north-south alignment with the M2, providing more frequent service in the 5th Avenue/Madison Avenue corridor and more efficient scheduling. The route path is southbound via 5th Avenue to 8th Street and northbound via 4th Avenue, Park Avenue South, 25th Street, and Madison Avenue.
- Revised the M1 as follows:
 - Discontinued part-time weekday service extension between 8th Street and South Ferry. Replaced with extended M5 service to South Ferry.
 - Rerouted from Park Avenue South to Fifth Avenue southbound and Madison Avenue northbound, to match the M2 and M3 routing.
 - Discontinued weekend M1 service south of 106th Street to better match capacity with demand in the corridor (service was often disrupted for parades and street fairs).

Projected Net Annual Savings

\$3.4 million

Ridership, Cost per Rider and Capacity

	Ridership Change 2009-2010		Cost per Rider						Guideline Capacity	
			Weekday (WD)			Weekend (WE)			WD	WE
	2009	2010	Change	2009	2010	Change				
M01	-1484	-9338	\$ 1.95	\$ 1.84	-5%	\$ 2.22	\$ 2.70	22%	**	**
M03	-351	1155	\$ 1.56	\$ 1.53	-2%	\$ 1.77	\$ 1.63	-8%	**	**
M04	-303	1273	\$ 1.52	\$ 1.44	-6%	\$ 1.50	\$ 1.42	-5%	**	**
M05	3582	3374	\$ 1.94	\$ 1.92	-1%	\$ 1.81	\$ 1.79	-1%	74%*	77%*
M06	-4353	-6413	\$ 2.72			\$ 3.01				
Total	-2909	-9949	\$ 1.77	\$ 1.66	-7%	\$ 1.88	\$ 1.66	-11%		
Percent of Total	-4.1%	-12.7%								

* Reflects projected percent of guideline capacity after service adjustments in September 2011.

** Ridership counts scheduled for 2011.

Discussion

On all days of the week, ridership has decreased on the M1 and increased on the M5. This was expected as the M1 was shortened and the M5 was made longer to compensate. The M2, M3 and M4 experienced a slight decrease in ridership on weekdays. Cost per rider for all routes in this corridor decreased on weekdays and weekends.

Overall combined ridership on buses in the corridor decreased, so it is possible that some customers shifted to the subway; however, given high levels of subway ridership, it is impossible to determine how many riders may have shifted in this manner.

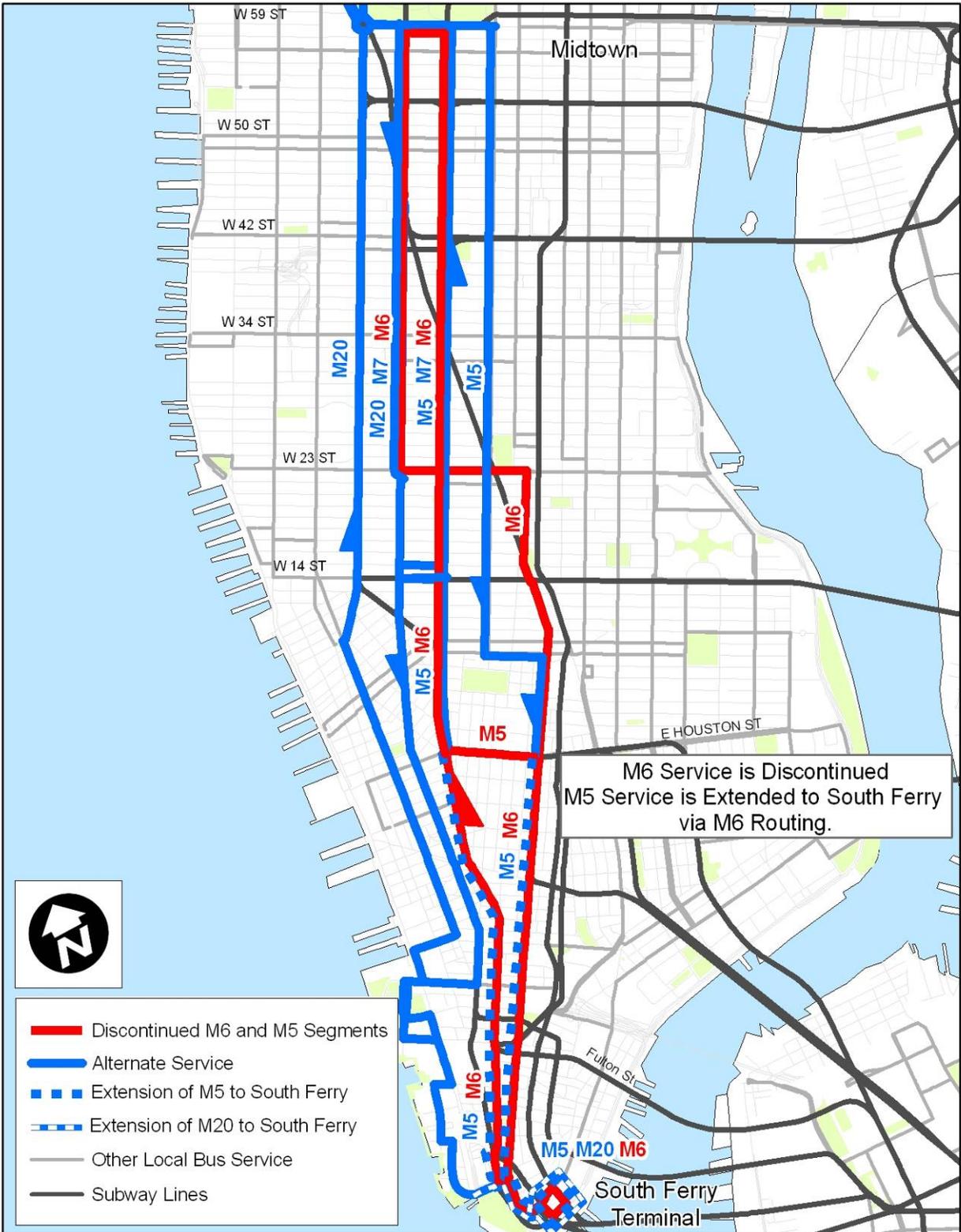
M5 ridership increased due to the extension of its route to South Ferry to compensate for the discontinuation of the M6, and the weekday truncation of the M1 at 8th Street. However, reliability on the M5 declined because of its extended length, traffic congestion at the Holland Tunnel and construction activity in lower Manhattan. M2, M3, M4 and M5 ridership increased on the weekends due to the discontinuation of M1 weekend service south of 106th Street.

Follow-Up Actions

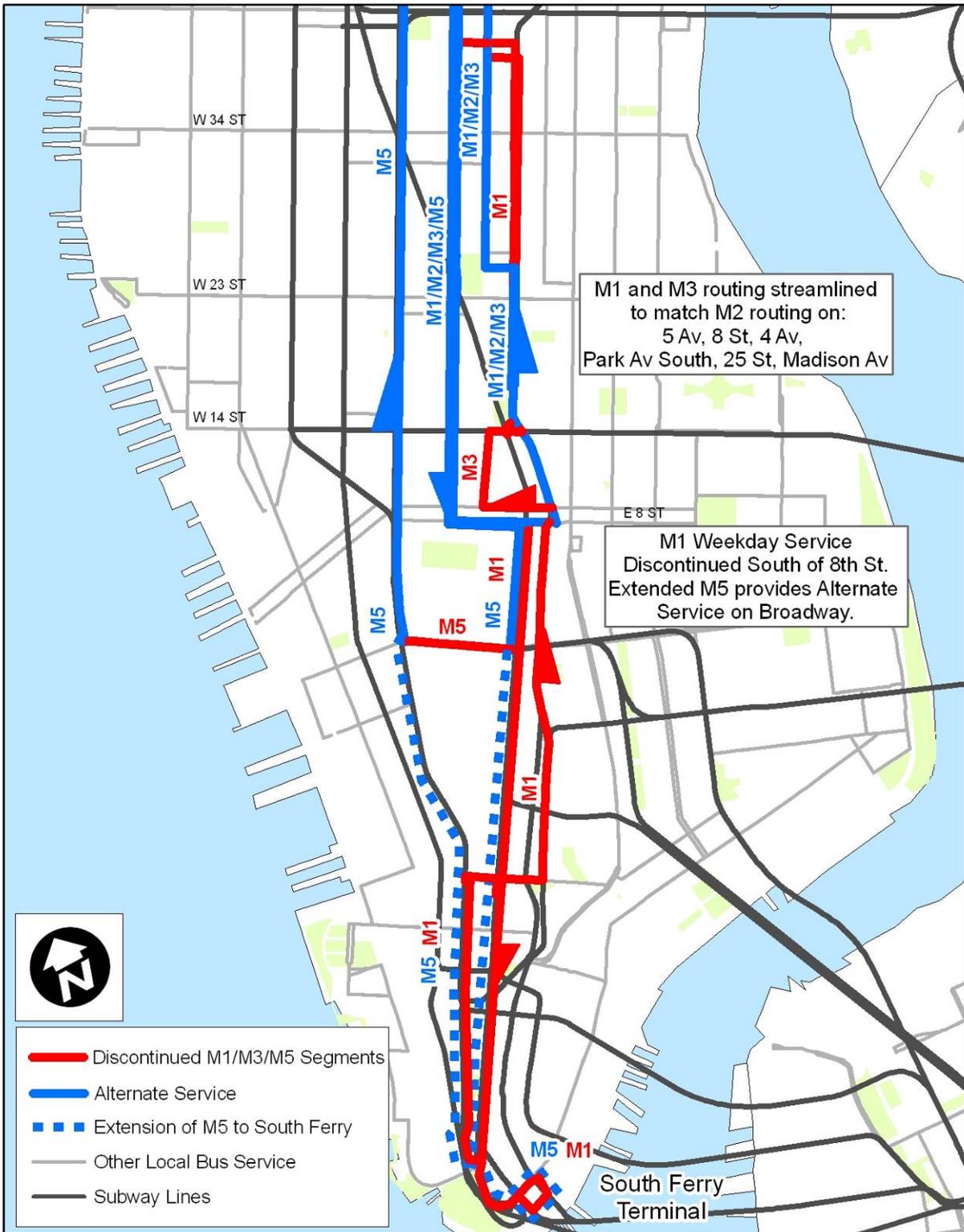
NYCT is proposing minor reductions in M5 weekday frequency for this fall. This will bring the levels of service on this route in line with guidelines. In addition, the schedule will provide for longer travel times to accommodate the increased traffic congestion the route experiences.

This change in travel time is anticipated to restore reliability to the route. NYCT staff is currently in the process of analyzing weekday ridership on the M1, M2, M3, and M4, and weekend ridership on the M3, M4, and M5 and will adjust service as necessary.

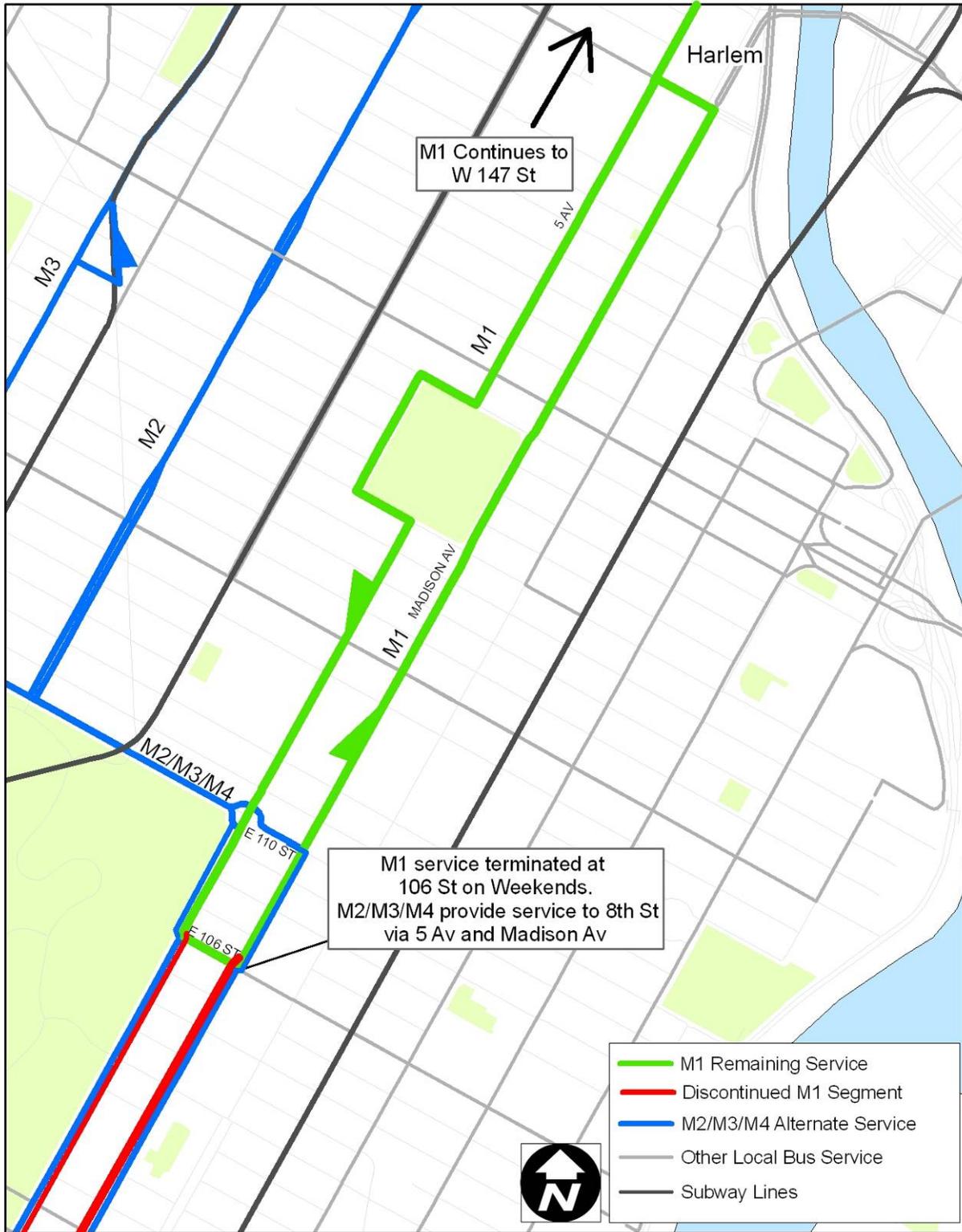
Restructured North-South Bus Service in Manhattan (M1, M2, M3, M4, M5, M6)



Restructured North-South Bus Service in Manhattan (M1, M2, M3, M4, M5, M6)



Restructured North-South Bus Service in Manhattan (M1, M2, M3, M4, M5, M6)



M10 Truncation

Description of Action:

- Discontinued the M10 segment between Columbus Circle and Penn Station, which duplicated the M7 and M20.

Projected Net Annual Savings

\$1.1 million

Ridership, Cost per Rider and Capacity

	Ridership Change		Cost per Rider						Guideline Capacity	
	2009-2010		Weekday (WD)			Weekend (WE)			WD	WE
	WD	WE	2009	2010	Change	2009	2010	Change		
M10	-2253	-2288	\$ 1.91	\$ 1.92	0%	\$ 1.83	\$ 1.80	-2%	71%	66%
M20	737	1657	\$ 2.99	\$ 2.43	-19%	\$ 3.43	\$ 2.52	-26%	79%*	91%
M07	448	664	\$ 1.49	\$ 1.34	-10%	\$ 1.51	\$ 1.51	0%	101%**	101%**
Total	-1068	33	\$ 1.81	\$ 1.66	-8%	\$ 1.83	\$ 1.74	-5%		
Percent of Total	-3.3%	0.1%								

*Reflects projected percent of guideline capacity after service adjustments in September 2011.

** New schedule programmed for April 2012, which will increase service.

Discussion

The M10 had a significant drop in ridership on both weekdays and weekends. Ridership on the M20 and M7 increased weekdays, offsetting about half the loss in M10 weekday ridership. The balance of M10 weekday riders likely shifted to **A B C D** or **1** subway service; however given, high levels of subway ridership, it is impossible to determine how many riders may have shifted in this manner. Ridership increased significantly on the M20 and M7 on Saturdays, but only increased on the M20 on Sundays. Overall cost per rider decreased on the M10, M20 and M7. The truncation of the M10 did not create overcrowding on the M20. NYCT staff is currently in the process of analyzing loads on the M10 and M7 and will adjust service as needed.

M10 Truncation



M98 Truncation

Description of Action

- Truncated the M98, which duplicated M101, M102 and M103 service, and paralleled the 4 5 6 subway lines south of East 68th Street in Manhattan. (The M98 is a week-day only limited-stop service.)
- Discontinued southbound operations into the George Washington Bridge Bus Station to reduce running time. The M98 now stops outside of the Bus Station.

Projected Net Annual Savings

\$0.8 million

Ridership, Cost per Rider and Capacity

	Ridership Change	Cost per Rider			Guideline Capacity
	2009-2010	Weekday			Weekday
	Weekday	2009	2010	Change	
M98	-1229	\$ 3.32	\$ 4.48	35%	88%*
M101-103	-2377	\$ 1.30	\$ 1.25	-3%	**
Total	-3606	\$ 1.40	\$ 1.37	-2%	
Percent of Total	-9.4%				

*Reflects projected percent of guideline capacity after service adjustments in September 2011.

**Data collection scheduled for fourth quarter 2011.

Discussion

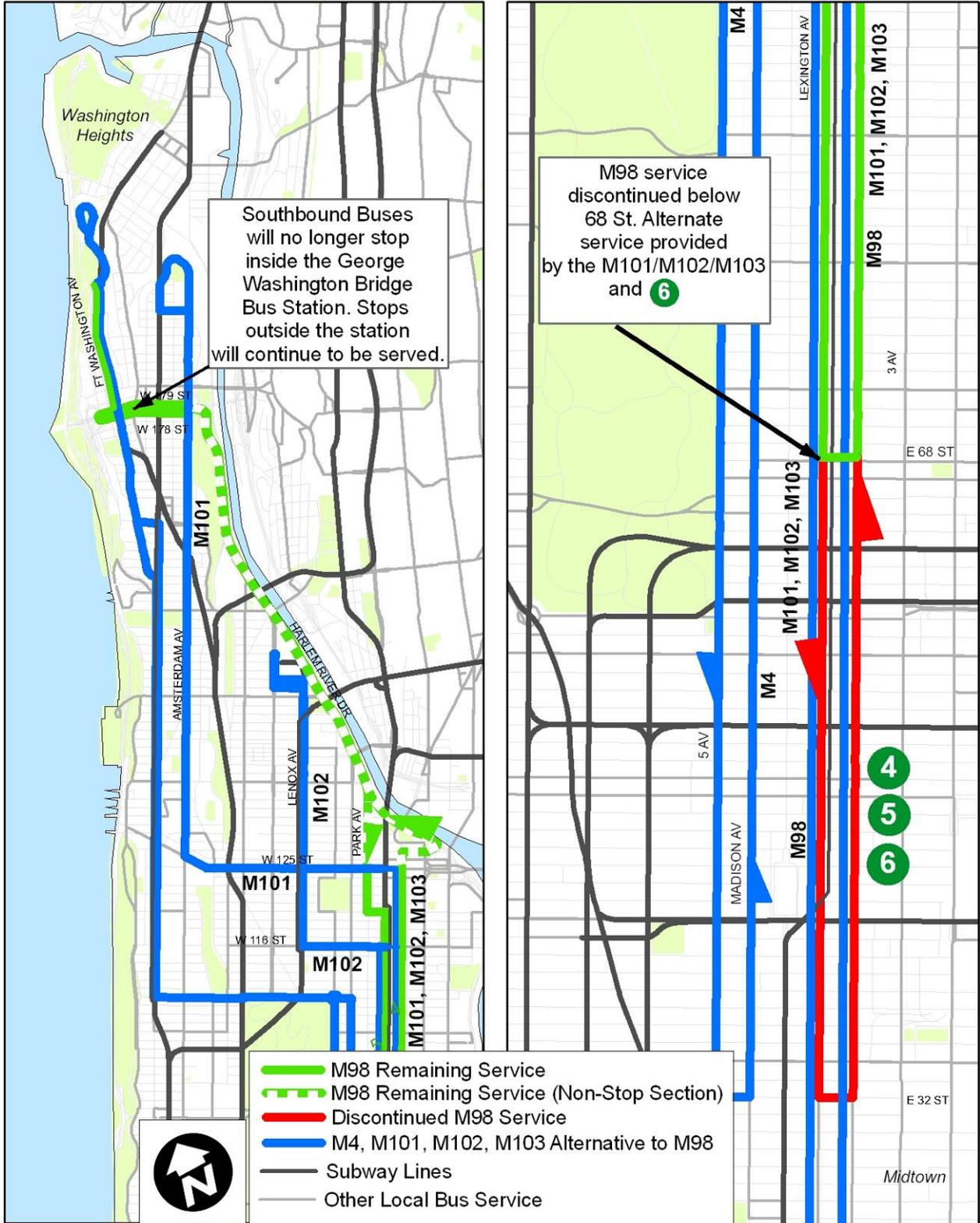
Bus ridership on the Lexington Avenue/Third Avenue corridor was down 9.4% on weekdays, reflecting a downward trend in bus ridership for Manhattan. Cost per rider for the corridor decreased slightly, largely due to the effect of the M101-103, which due to its significantly higher ridership overshadows the effect of the M98.

The shortening of the M98 to 68th Street was expected to shift some customers to more efficient subway service or possibly the M101, M102, or M103; however, the changes in transfers from the M98 to these routes were minimal. Unrelated to the route shortening, changes in operational practices may have reduced reliability, which in turn may have discouraged ridership. Customers have most likely shifted to the subway at various A or 1 stations in Washington Heights. However, given the high level of ridership at these stations, it is not possible to determine how many M98 customers shifted.

Follow-Up Actions

NYCT will be taking steps to improve reliability of this route. NYCT is also proposing to decrease service during weekday morning and afternoon peak periods to better match demand. This will bring the levels of service in line with guidelines.

M98 Truncation



Discontinued Weekend M8 Service

Description of Action

- Discontinued weekend service on the M8, which operated from Christopher Street/West Street in the West Village to East 10 Street/Avenue D in the East Village.

Projected Net Annual Savings

\$0.4 million

Ridership, Cost per Rider and Capacity

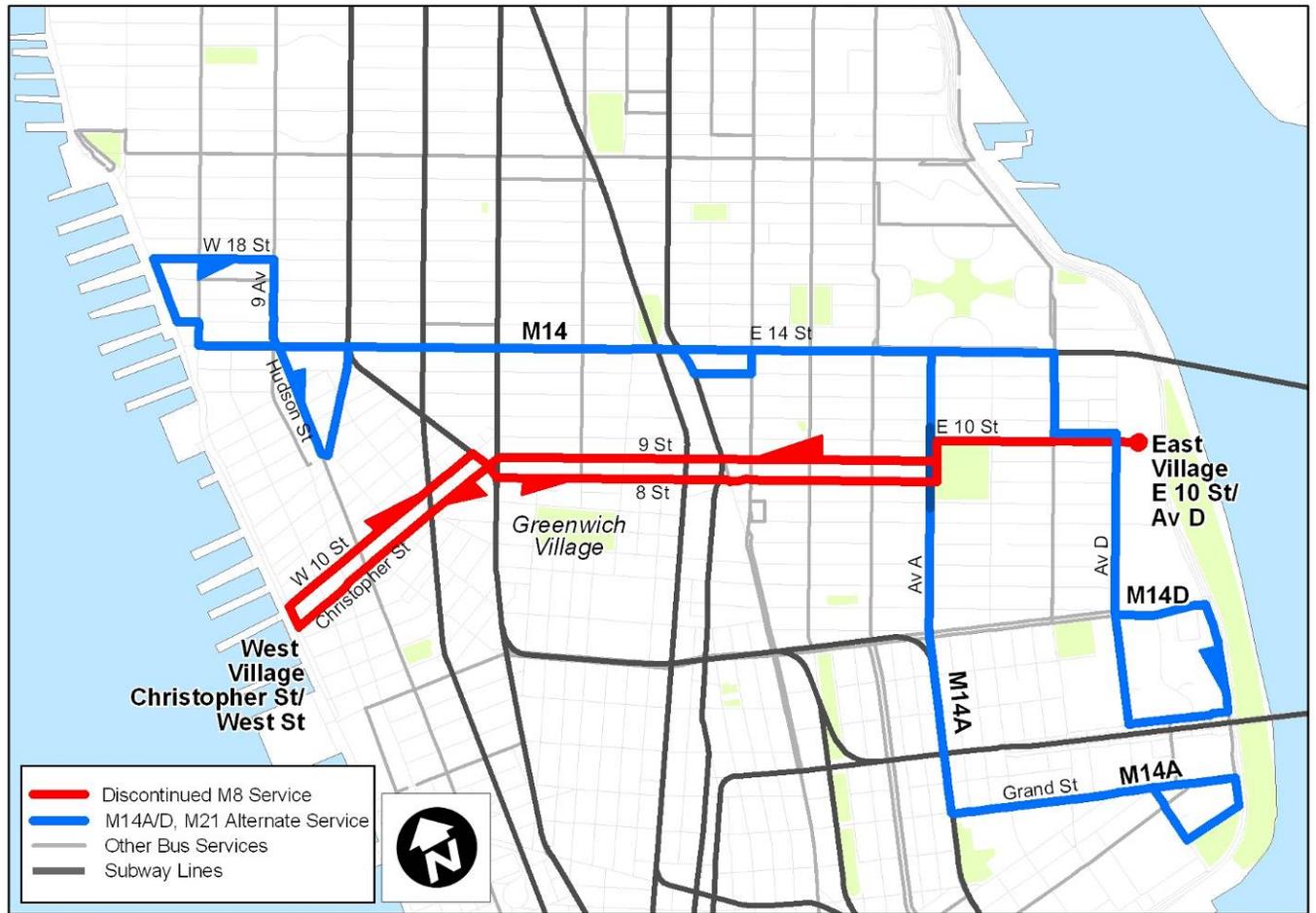
	Ridership Change 2009-2010	Cost per Rider			Guideline Capacity
		Weekend			Weekend
	Weekend	2009	2010	Change	
M08	-2367	\$ 3.52			
M14	1305	\$ 1.15	\$ 1.12	-2%	*
Total	-1062	\$ 1.28	\$ 1.12	-12%	
Percent of Total	-2.4%				

* Data collection scheduled for fourth quarter 2011.

Discussion

With the discontinuation of M8 weekend service, the parallel M14 has seen an increase in weekend ridership; however, this increase is only about half of the previous M8 weekend ridership. Many M8 riders are likely walking to their destinations. Overall, the corridor has seen improvements in cost per rider. NYCT staff will examine ridership levels on the M14 in 2012.

Discontinue Weekend M8



Discontinued M30 Service

Description of Action

- Discontinued M30 service, which operated between East 72nd Street/York Avenue and West 57th Street/Broadway, weekday peak periods only.

Projected Net Annual Savings

\$0.7 million

Ridership, Cost per Rider and Capacity

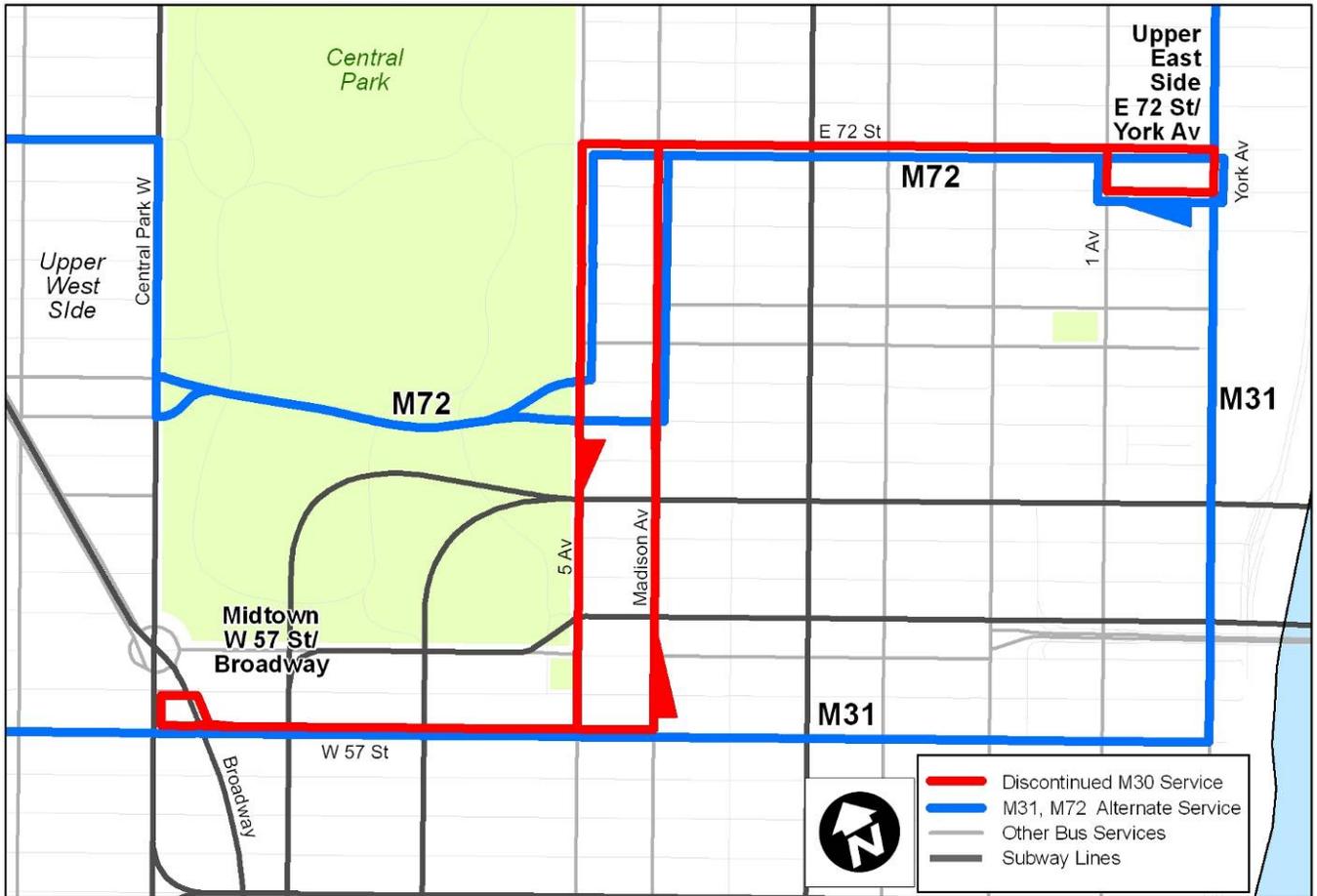
	Ridership Change 2009-2010	Cost per Rider			Guideline Capacity
		Weekday			
	Weekday	2009	2010	Change	Weekday
M30	-1199	\$ 3.36			
M31	402	\$ 1.41	\$ 1.36	-4%	92%*
M72	736	\$ 1.35	\$ 1.43	6%	85%*
Total	-61	\$ 1.51	\$ 1.39	-8%	
Percent of Total	-0.8%				

*Reflects projected percent of guideline capacity after service adjustments in September 2011.

Discussion

A large share of M30 riders have shifted to the M72 as well as other nearby bus routes. The combined cost per rider into the corridor, including the M31 and M72, has improved, although, the cost on the M72 has increased slightly. Loading levels are consistent with guidelines.

Discontinued M30



M27/M50 Discontinuations

Description of Action

- Discontinued M27 at all times. The M27 operated between Port Authority Bus Terminal and East Midtown/United Nations.
- Discontinued M50 weekend service.

Projected Net Annual Savings

M27 - \$1.5 million

M50 - \$0.4 million

Ridership, Cost per Rider and Capacity

	Ridership Change		Cost per Rider						Guideline Capacity	
	2009-2010		Weekday (WD)			Weekend (WE)			WD	WE
	WD	WE	2009	2010	Change	2009	2010	Change		
M27	-2712	-1142	\$ 2.49	\$ 1.69	-32%	\$ 3.32			88%	
M50	117	-2267								
Total	-2595	-3409	\$ 2.49	\$ 1.69	-32%					
Percent of Total	-39.1%	-100.0%								

Note: Cost per Rider for the M27 and M50 are combined for scheduling reasons.

Discussion

Many M27 and M50 riders may have shifted to other transit services, such as the **E** train, or they are walking. Unfortunately, given the numerous changes to those other bus routes, it is difficult to determine the specific ridership changes that may be related to the M27/50. Other weekday M27 customers have shifted to the M50, which has decreased the cost per rider significantly. There has been little public response to the discontinuation of the M27, but the weekend discontinuation of the M50 created significant community complaints.

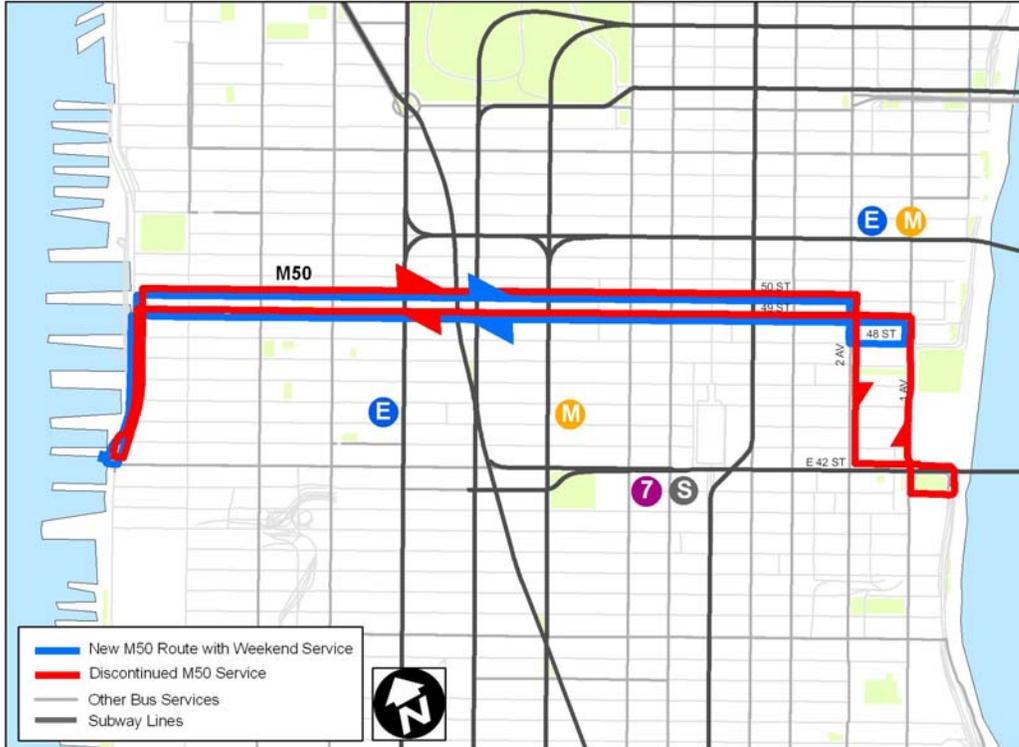
Follow-Up Action

NYCT worked with the community to develop a cost-neutral plan to restore weekend M50 service in July 2011 by shortening the eastern end of the route from 42nd Street to 49th Street.

M27/M50 Discontinuations



M50 Weekend Service and Shortened Route



M42 Removal from the Javits Center/M104 Discontinuation on 42nd Street

Description of Action

- Discontinued M104 service on 42nd Street between Times Square and 1st Avenue at all times.
- Discontinued M42 service to the underused Javits Center terminal so that all westbound M42 service now terminates at the Circle Line Pier on West 42nd Street.

Projected Net Annual Savings

M104 - \$1.0 million

M42 - \$0.2 million

Ridership and Cost per Rider

	Ridership Change		Cost per Rider						Guideline Capacity	
	2009-2010		Weekday (WD)			Weekend (WE)			WD	WE
	WD	WE	2009	2010	Change	2009	2010	Change		
M104	-6746	-6396	\$ 1.47	\$ 1.46	0%	\$ 1.33	\$ 1.53	14%	84%	89%
M42	3897	3387	\$ 1.33	\$ 1.18	-11%	\$ 1.57	\$ 1.11	-30%	90%*	71%*
Total	-2849	-3009	\$ 1.42	\$ 1.31	-7%	\$ 1.38	\$ 1.40	2%		
Percent of Total	-8.5%	-7.7%								

*Reflects projected percent of guideline capacity after service adjustments in September 2011.

Discussion

Ridership of the M104 decreased significantly on weekdays and weekends, while ridership on the M42 has increased substantially both weekdays and weekends. The combined cost per rider improved on weekdays and got slightly worse on the weekends (primarily due to the large decline in riders).

Many M104 customers have likely shifted to either the subway (which has exponentially higher ridership than the M104, making discerning a change related to the elimination of this portion of the route difficult) or the M42, which as previously noted has had a large increase in ridership and efficiency.

Follow-Up Actions

NYCT is slightly decreasing weekday M42 service in September, 2011 and increasing Saturday and Sunday M42 service to better match demand. NYCT had increased service on the M42 in June 2010 in anticipation of more riders shifting from the M104; the adjustments will refine the levels of service. NYCT is decreasing weekday and M104 service, as well, for the same reasons. This will bring the levels of service on these routes in line with guidelines.

M42 Removal from the Javits Center/M104 Discontinuation on 42nd Street



QUEENS BUS SERVICE REDUCTION EVALUATIONS

Q14 Elimination/New Q15A

Description of Action

- Discontinued the Q14, which served 149th and 150th Streets.
- Rerouted select trips of the Q15 to serve 150th Street, north of the Cross Island Parkway; these trips were designated the Q15A route.

Projected Net Annual Savings

\$1.35 million

Ridership, Cost per Rider and Capacity

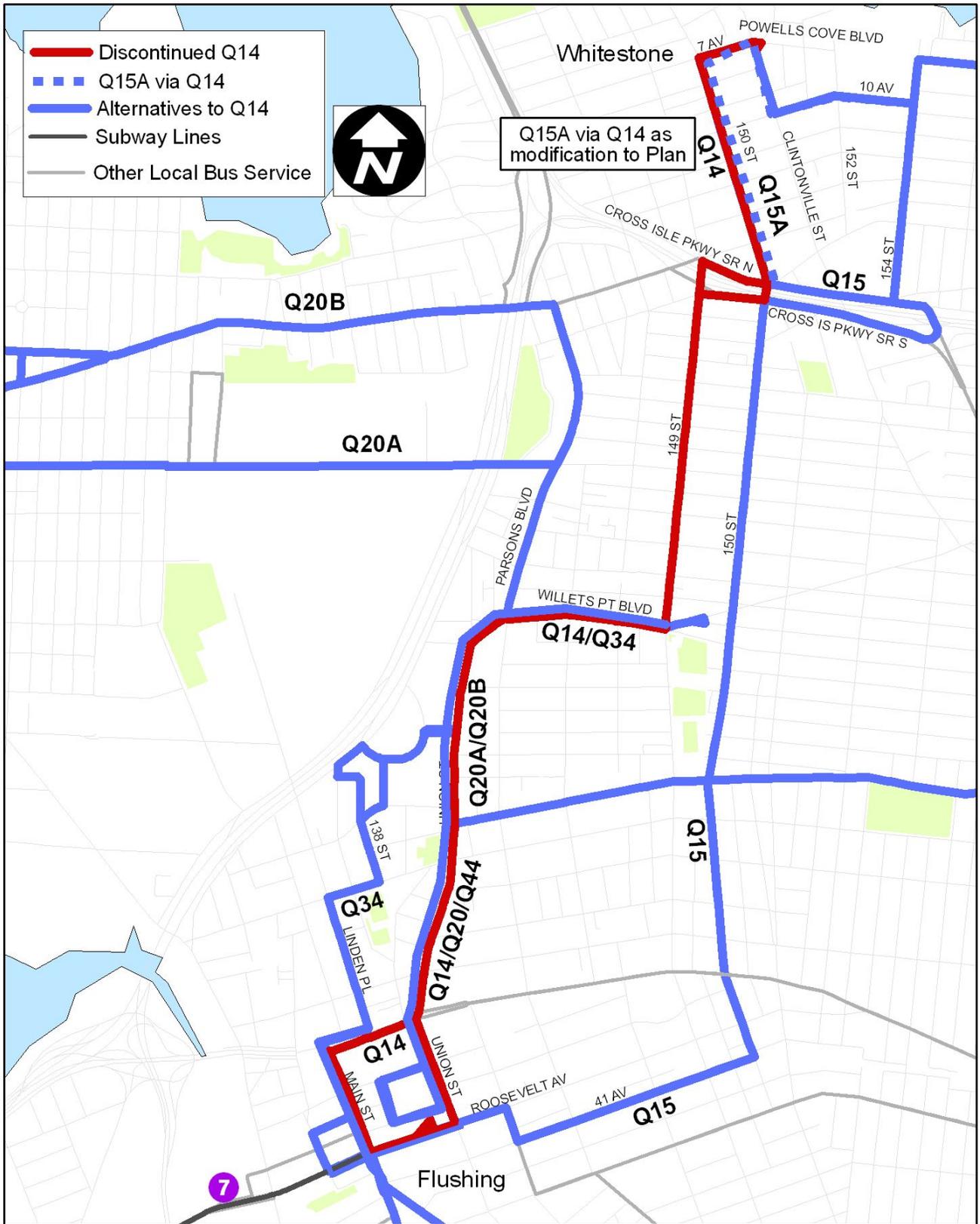
	Ridership Change		Cost per Rider						Guideline Capacity	
	2009-2010		Weekday (WD)			Weekend (WE)			WD	WE
	WD	Weekend	2009	2010	Change	2009	2010	Change		
Q14	-2061	-1685	\$ 2.15			\$ 2.97				
Q15(Q15+Q15A)	917	912	\$ 1.55	\$ 1.41	-9%	\$ 1.86	\$ 1.60	-14%	94%	83%
Total	-1144	-773	\$ 1.73	\$ 1.41	-19%	\$ 2.19	\$ 1.60	-27%		
Percent of Total	-2.6%	-1.4%								
<i>Other Important Routes (Not included in total above):</i>										
Q44/20	1921	3151	1.66	\$ 1.60	-3%	\$ 1.90	\$ 1.83	-4%		

Discussion

Approximately half of Q14 customers appear to have shifted to the Q15 or Q15A. Some of the remaining riders may have shifted to the Q20, Q34 or Q44 on Union St and, given the high levels of automobile ownership in eastern Queens, it is likely that some Q14 customers are now driving instead of using the bus. The cost per rider on the Q15 is down, due to the shift of former Q14 riders.

Initially, there were some complaints from residents living along the new routing of the Q15A, but the complaints have not continued. Service levels are currently consistent with rider demand.

Q14 Elimination/New Q15A



Discontinued Q26 Service Except During Peak Hours

Description of Action

- Discontinued weekday off-peak service on the Q26, which served Parsons Boulevard, 46th Avenue and Hollis Court Boulevard.

Projected Net Annual Savings

\$0.5 million

Ridership, Cost per Rider and Capacity

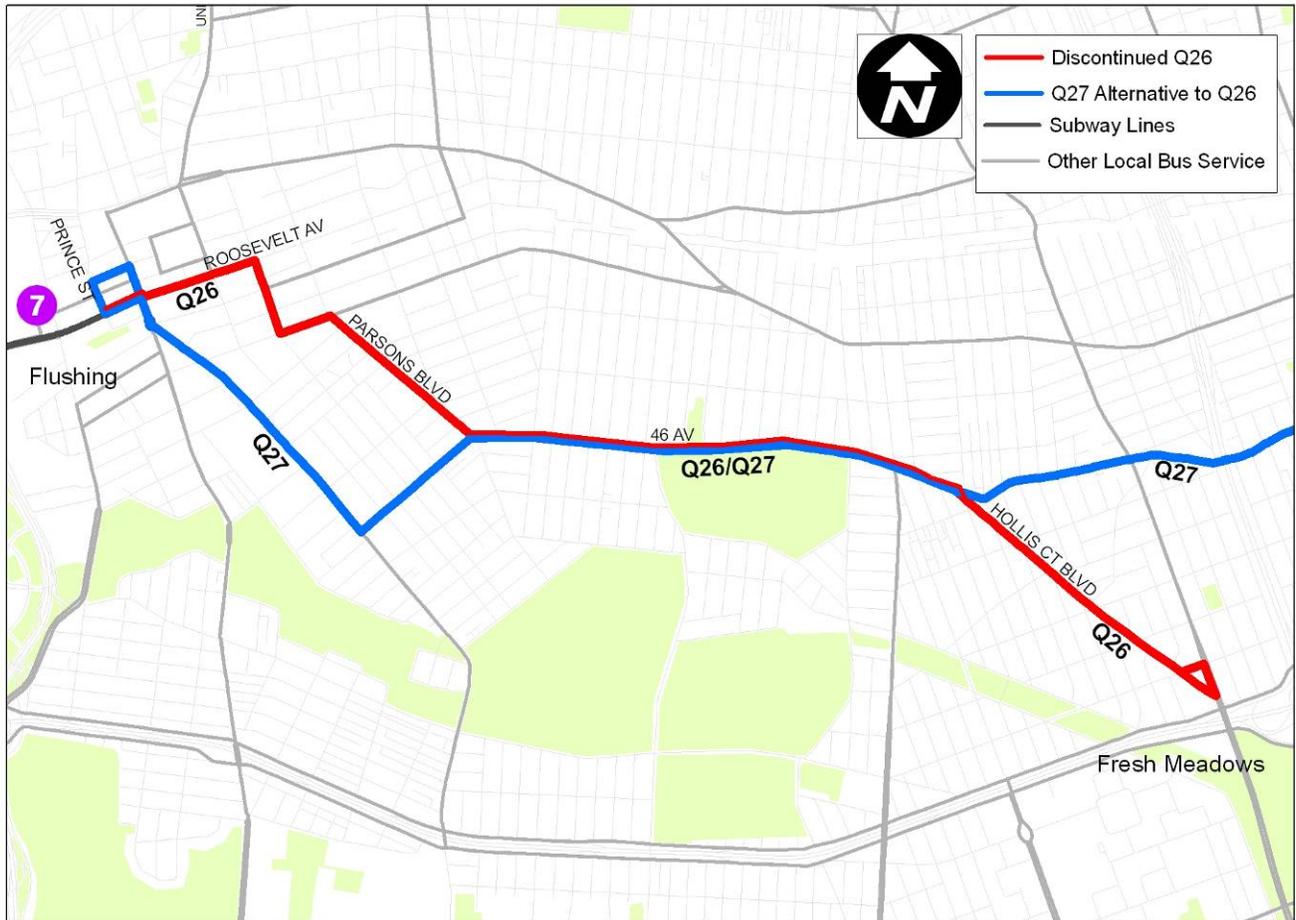
	Ridership Change 2009-2010	Cost per Rider			Guideline Capacity
		Weekday			
		2009	2010	Change	Weekday
	Weekday				
Q26	-527	\$ 2.36	\$ 2.43	3%	*
Q27	-328	\$ 1.49	\$ 1.51	1%	*
Total	-855	\$ 1.55	\$ 1.56	0%	
Percent of Total	-2.9%				

* NYCT will continue to monitor the number of passengers per bus consistent with our guidelines.

Discussion

Ridership of the Q26 is down, with many customers likely opting to drive rather than take transit. Some customers may have shifted to the Q27 on 46th Avenue, though that route also experienced a decrease in ridership. The overall cost per rider on the two routes showed a slight increase due to the decline in ridership

Discontinued Q26



Discontinued Weekend Q31 Service

Description of Action

- Discontinued weekend Q31 service, which operated between Sutphin Boulevard/Archer Avenue and 27th Avenue/Francis Lewis Boulevard.

Projected Net Annual Savings

\$0.4 million

Ridership, Cost per Rider and Capacity

	Ridership	Cost per Rider			Guideline Capacity
		Weekend			Weekend
	Weekend	2009	2010	Change	
Q31	-2395	\$ 3.07			
Q30	685	\$ 2.33	\$ 2.08	-10%	*
Q27	993	\$ 1.58	\$ 2.13	35%	**
Total	-717	\$ 1.85	\$ 2.12	14%	
Percent of Total	-2.3%				

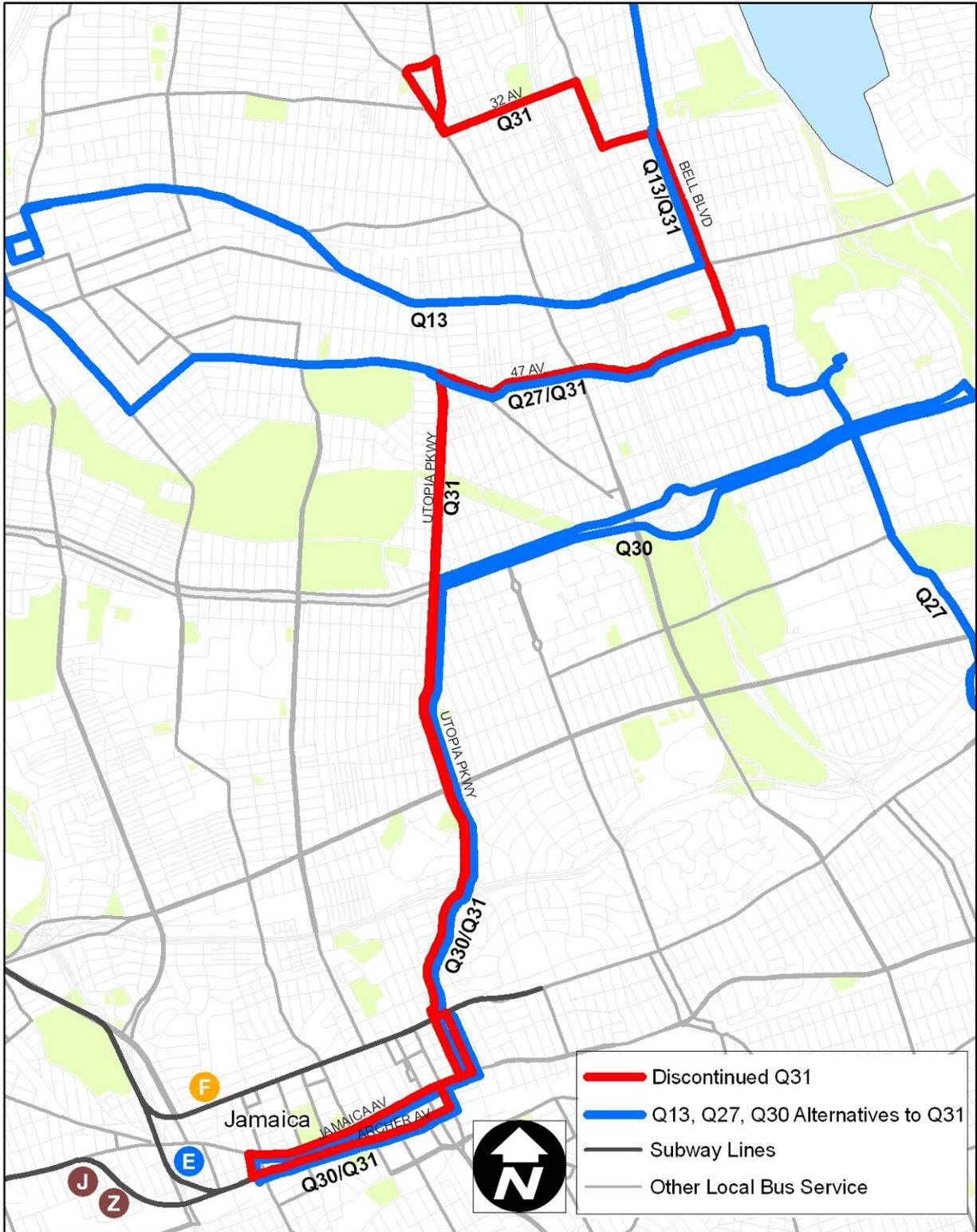
* Data collection scheduled for fourth quarter 2011.

** NYCT will continue to monitor the number of passengers per bus consistent with our guidelines.

Discussion

Weekend ridership on the nearby Q30 and Q27 has increased substantially, likely providing service to the majority of displaced Q31 weekend riders. The cost per rider on the Q30 improved slightly, while the cost per rider on the Q27 increased (largely due to service that was added to the route to address ridership increases that were not due to service reductions).

Discontinue Weekend Q31 Service



Discontinued Q42 Service except during Rush Hours

Description of Action

- Discontinued weekday off-peak and weekend service on the Q42, which operates between Jamaica Center-Parsons/Archer **E J Z** Station and Sayres Avenue/180th Street.
- Retained Q42 service during weekday peak hours.

Projected Net Annual Savings

\$0.2 million

Ridership, Cost per Rider and Capacity

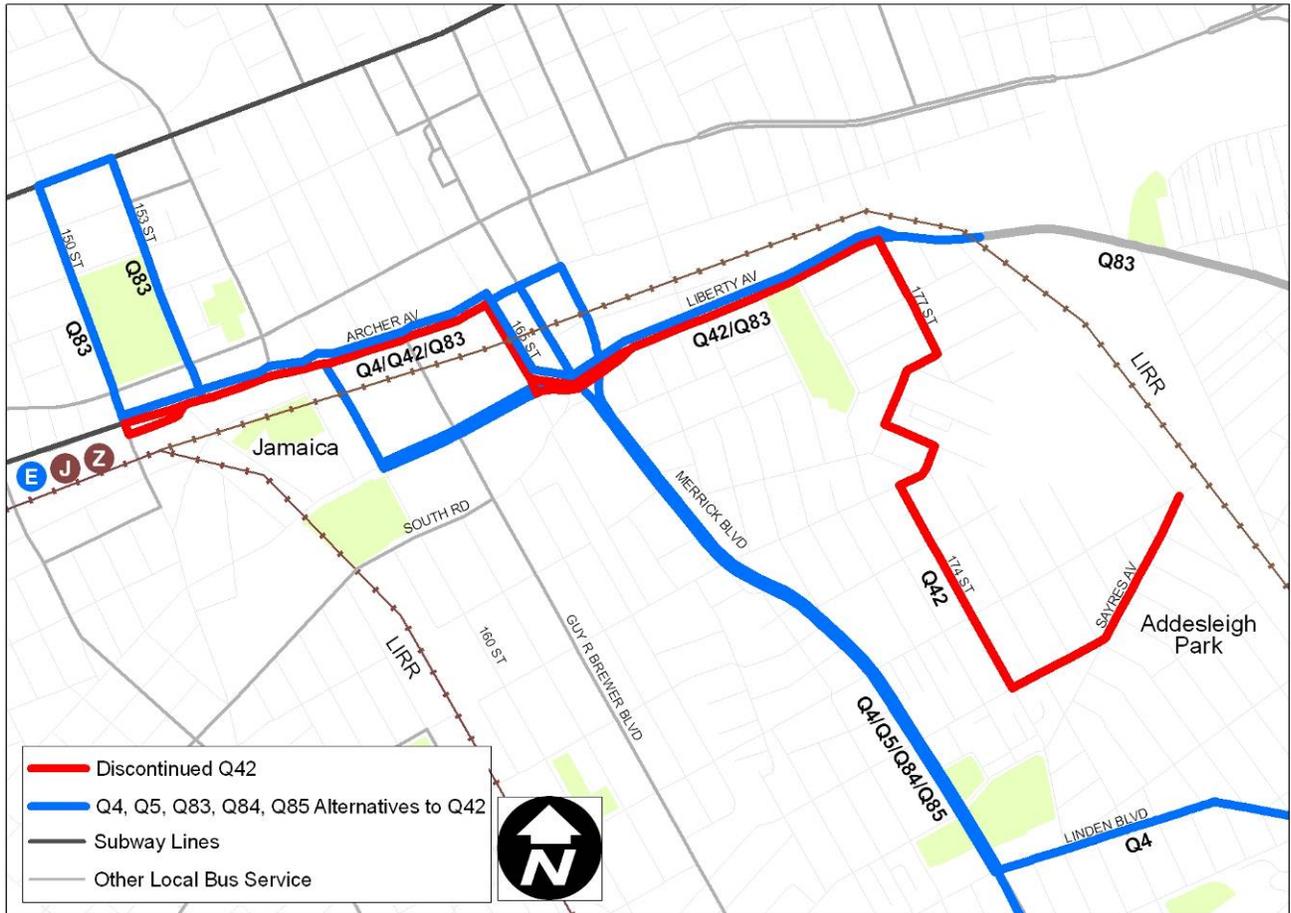
	Ridership 2009-2010	Cost per Rider			Guideline Capacity
		Weekday			Weekday
	Weekday	2009	2010	Change	
Q42	-378	\$ 2.90	\$ 2.83	-2%	*
Q83	-106	\$ 1.89	\$ 1.91	1%	
Q04	-149	\$ 1.64	\$ 1.69	3%	
Q05	405	\$ 1.75	\$ 1.81	4%	
Q84	-184	\$ 2.24	\$ 2.16	-4%	
Q85	56	\$ 1.92	\$ 1.97	2%	
Total	-356	\$ 1.87	\$ 1.90	1%	
Percent of Total	-1.2%				

* NYCT will continue to monitor the number of passengers per bus consistent with our guidelines.

Discussion

The Q4, Q5, Q83, Q84, and Q85 all provide alternate service, but it appears that the Q5 has attracted most of the former Q42 customers. The Q5 provides frequent service during the midday, when the Q42 was discontinued. Though transit ridership is down overall in the corridor, Q5 ridership increased more than enough to offset the loss of Q42 customers. Although, ridership dropped on the Q83, it probably would have dropped more without the addition of some former Q42 customers. The cost per rider decreased slightly on the Q42 but was up slightly for the overall corridor.

Discontinued Q42



Discontinued Q74 Service

Description of Action

- Discontinued the Q74, which operated on weekdays only between the Kew Gardens/Union Turnpike **E F** Station and Queens College.

Projected Net Annual Savings

\$1.2 million

Ridership, Cost per Rider and Capacity

	Ridership 2009-2010	Cost per Rider			Guideline Capacity
		Weekday			
	Weekday	2009	2010	Change	Weekday
Q74	-2088	\$ 2.29			
Q44/20	1921	\$ 1.66	\$ 1.60	-3%	*
Q64	208	\$ 1.15	\$ 1.12	-3%	†
Q46	684	\$ 1.57	\$ 1.59	1%	**
Total	725	\$ 1.58	\$ 1.53	-3%	
Percent of Total	1%				

* NYCT will continue to monitor the number of passengers per bus consistent with our guidelines.

** Data collection scheduled fourth quarter 2011

† MTA Bus Co. will continue to monitor the passengers per bus on this route

Discussion

Q74 ridership primarily shifted to the adjacent Q44/20, which serves the **E F** trains one station farther east into Queens. Other customers may have shifted to the Q64 and possibly the Q46. NYCT will be collecting ridership information on the Q46 and Q44/Q20 later this year and in 2012 and will adjust service levels as needed to meet MTA loading guidelines. The Taxi and Limousine Commission licensed a private operator to provide replacement service for the Q74, but it was discontinued due to low ridership.

Discontinued Q74



Discontinued Q75 Service

Description of Action

- Discontinued the Q75, which operated on weekdays only between 69th Avenue/230th Street in Oakland Gardens, Queens, and the 165th Street Bus Terminal in Jamaica, Queens.

Projected Net Annual Savings

\$1.1 million

Ridership, Cost per Rider and Capacity

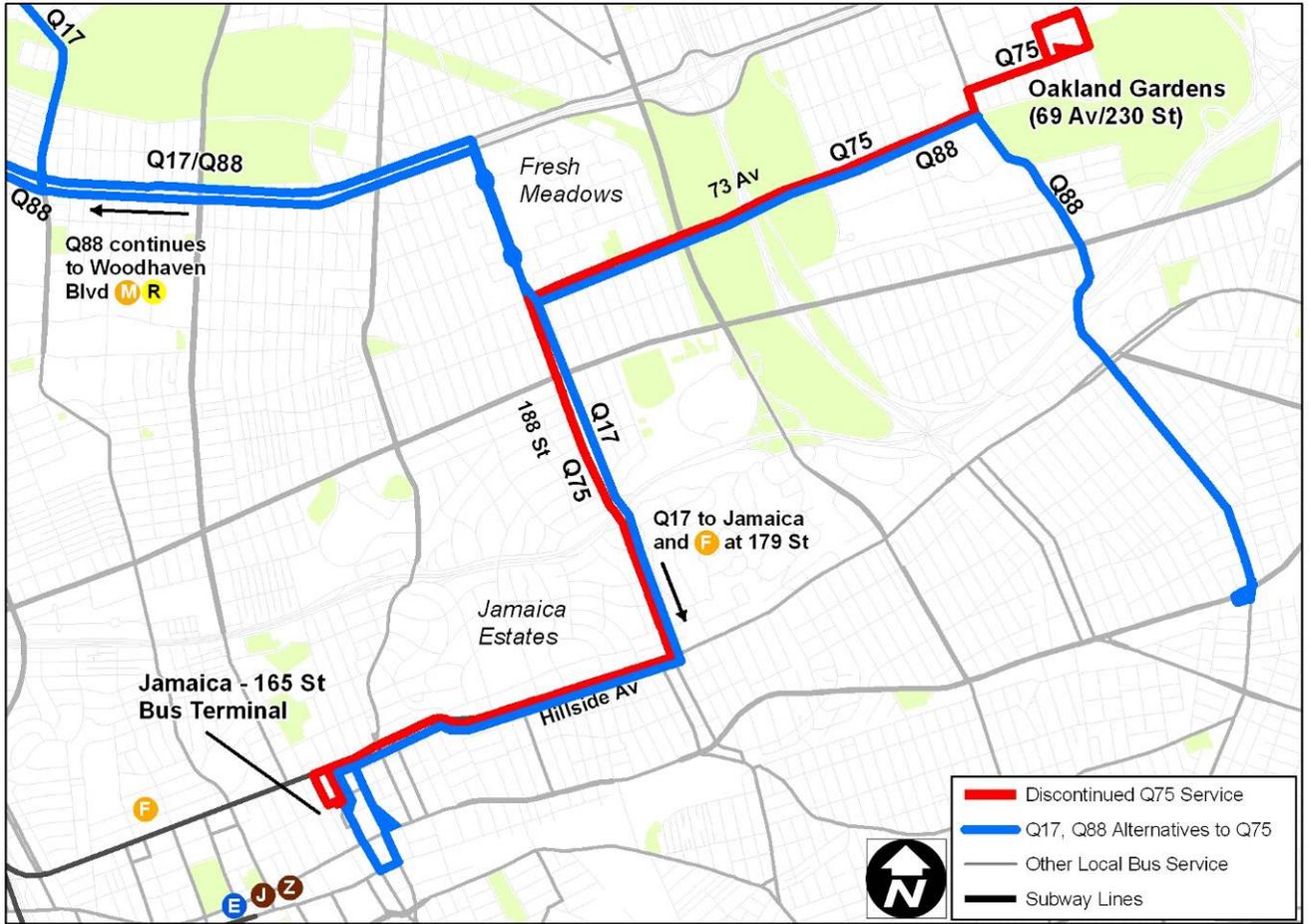
	Ridership	Cost per Rider			Guideline Capacity
	2009-2010	Weekday			
	Weekday	2009	2010	Change	Weekday
Q75	-964	\$ 4.38			
Q17	828	\$ 1.47	\$ 1.46	-1%	89%*
Q88	-346	\$ 1.59	\$ 1.54	-3%	89%*
Total	-482	\$ 1.60	\$ 1.49	-7%	
Percent of Total	-1%				

*Reflects projected percent of guideline capacity after service adjustments in September 2011.

Discussion

A large portion of Q75 ridership appears to have shifted to the Q17. There has been a 5% increase in passengers per mile on the Q17. It is also possible that ridership may have shifted to the Q88 which also operates in the vicinity of the discontinued Q75 route path. However, given that the Q17 and Q88 are long routes that serve many markets outside the former Q75 service area, it is impossible to definitively say whether Q75 riders have shifted to these routes.

Discontinued Q75



STATEN ISLAND BUS SERVICE REDUCTION EVALUATIONS

Restructured S42/S52

Description of Action

- Discontinued off-peak S42 service via Jersey Street and Brighton Avenue.
- Retained peak period S42 service.
- Rerouted the S52 formerly routed via Richmond Terrace and Jersey Street to serve the S42 section via Bay Street, Slosson Terrace and St. Marks Place in New Brighton.

Projected Net Annual Savings

\$0.6 million

Ridership, Cost per Rider and Capacity

	Ridership Change		Cost per Rider						Guideline Capacity	
	2009-2010		Weekday (WD)			Weekend (WE)			WD	WE
	WD	WE	2009	2010	Change	2009	2010	Change		
S42/52	-527	-504	2.61	\$ 2.71	4%	\$ 3.09	\$ 3.15	2%	80%	94%
Percent of Total	-10.1%	-12%								

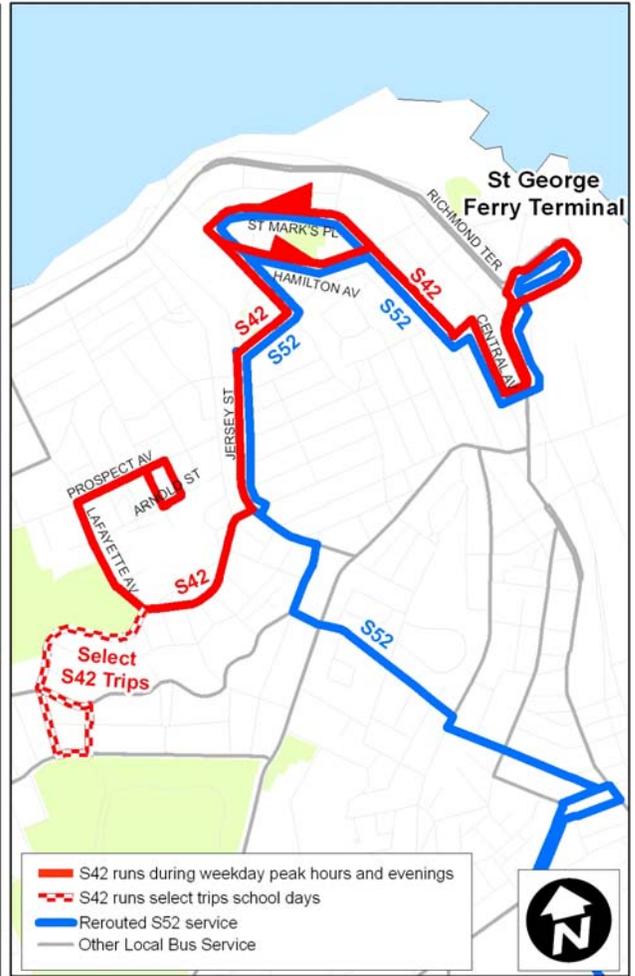
Discussion

About half of S42 customers have switched to the S52, primarily between St. George and Jersey Street/Brighton Avenue. In spite of this shift, overall ridership on the two routes has declined. It is likely that the remaining customers either walked or drove. Efficiency of the combined routes declined for both weekdays and weekends, but transit service to an area that has no other transit services was maintained.

Follow-Up Actions

NYCT is proposing to decrease S52 service on Saturdays during late afternoons and Sundays during late afternoons and evenings to better match demand. NYCT staff will continue to monitor the passenger levels and loading on the route to ensure that it meets MTA Loading Guidelines.

S42/52 Restructuring



Discontinued S54 Service on Weekends

Description of Action

- Discontinued weekend service on the S54, which operated via Broadway, Manor Road, Rockland Avenue and Richmond Road.

Projected Net Annual Savings

\$0.5 million

Ridership, Cost per Rider and Capacity

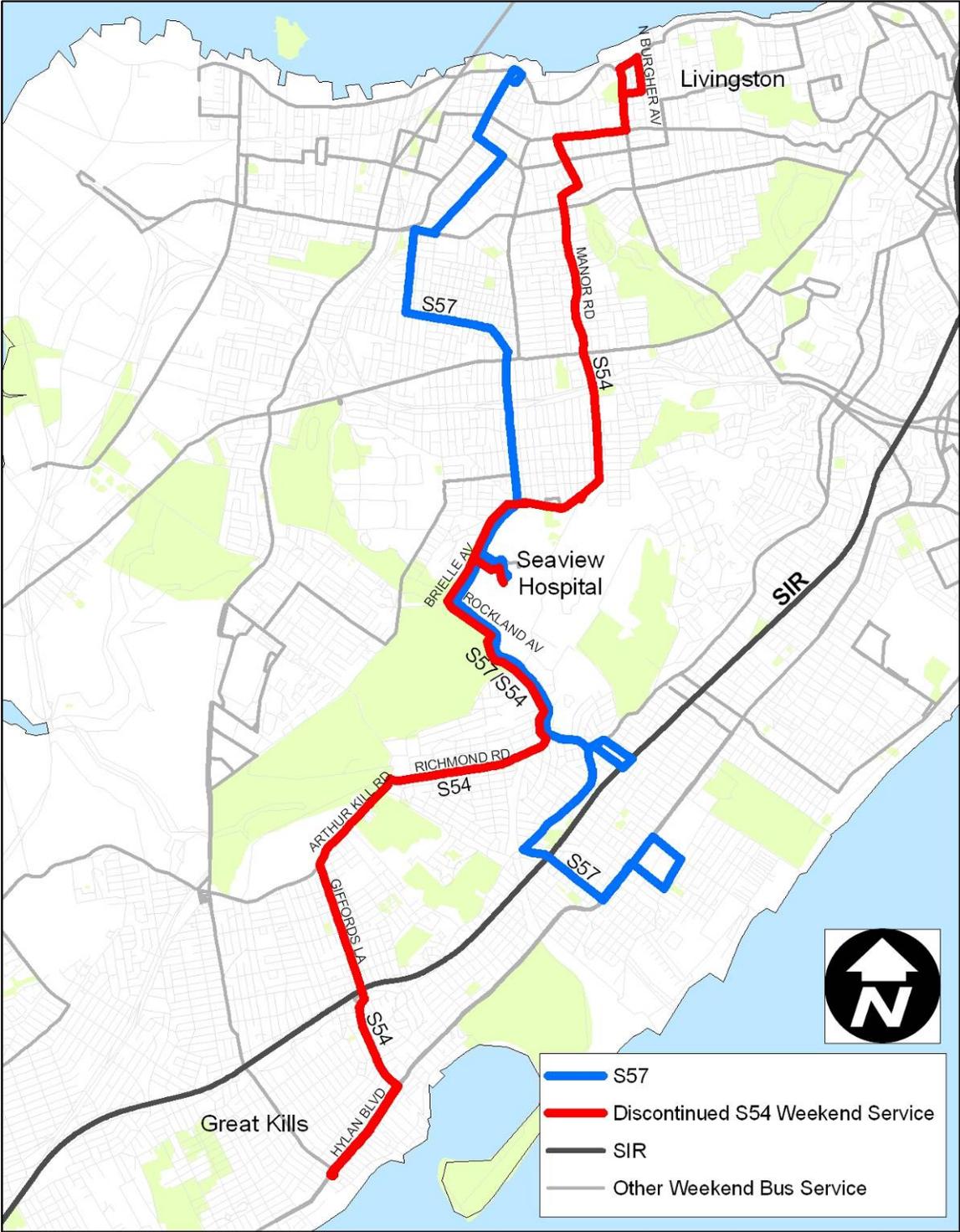
	Ridership Change 2009-2010	Cost per Rider			Guideline Capacity
		Weekend			
	Weekend	2009	2010	Change	Weekend
S54	-1040	\$ 8.00			
S57	65	\$ 6.16	\$ 5.46	-11%	29%*
Total	-975	\$ 6.89	\$ 5.46	-21%	
Percent of Total	-37.1%				

*Reflects projected percent of guideline capacity after service adjustments in July 2011

Discussion

The vast majority of S54 customers have likely shifted to private automobiles, though a small number have shifted to the S57, primarily between Richmond Road and Victory Boulevard. This helped decrease the cost per rider on weekends. Service levels are currently consistent with rider demand.

Discontinued S54



Restructured S60/66 Service

Description of Action

- Discontinued S60 service, which operated between Victory Blvd and Grymes Hill via Howard Avenue and Renwick Avenue.
- Rerouted weekday S66 trips from Victory Boulevard to serve Grymes Hill via Clove Road, Howard Avenue and Highland Avenue.

Projected Net Annual Savings

\$0.25 million

Ridership, Cost per Rider and Capacity

	Ridership Change 2009-2010	Cost per Rider			Guideline Capacity
		Weekday			
	Weekday	2009	2010	Change	Weekday
S60	-200	\$ 7.07			
S61/91	338	2.76	2.69	-2%	***
S62/92	207	2.46	2.40	-2%	***
S66/67	-158	\$ 2.90	\$ 3.41	17%	53%*
S57	-108	\$ 4.60	\$ 4.74	3%	**
Total	-358	\$ 3.73	\$ 4.05	8%	
Percent of Total	-7.5%				

* Reflects projected percent of guideline capacity after service adjustments in July 2011.

** Data collection scheduled for fourth quarter 2011.

*** NYCT will continue to monitor the number of passengers per bus consistent with our guidelines.

Discussion

With the elimination of the S60, the S66 saw an increase in weekday ridership in July 2010 corresponding to the previous number of S60 riders. However, this trend has reversed in subsequent months possibly due to S66 customers in neighborhoods other than Grymes Hill shifting to other Victory Boulevard local routes (S61 and S62), which have shown an increase in ridership. Cost per rider on all routes has increased, although NYCT did achieve savings from this reduction and is providing transit to an area that is not served by other transit services.

Follow-Up Actions

NYCT is proposing to decrease S66 weekday midday service to better match demand and more closely adhere to MTA loading guidelines.

S60/66 Restructuring



Discontinued S76 Service on Weekends

Description of Action

- Discontinued weekend service on the S76, which operated via Richmond Road, Vanderbilt Avenue, New Dorp Lane and Mill Road.

Projected Net Annual Savings

\$0.3 million

Ridership, Cost per Rider and Capacity

	Ridership Change 2009-2010	Cost per Rider			Guideline Capacity
		Weekend			
	Weekend	2009	2010	Change	Weekend
S76/86	-3668	\$ 2.57			
S74/84	1771	\$ 3.40	\$ 3.17	-7%	33%*
S78	358	\$ 3.48	\$ 3.39	-3%	**
Total	-1539	\$ 3.25	\$ 3.27	1%	
Percent of Total	-9%				

*Reflects projected percent of guideline capacity after service adjustments in September 2011

** NYCT will continue to monitor the number of passengers per bus consistent with our guidelines.

Discussion

The majority of weekend S76 customers have likely shifted to the S74/84, which shares the S76 route path in Park Hill, or the S78 and S51, which share the same or a parallel route path in Clifton and Stapleton. The number of passengers per bus is within MTA guidelines.

Discontinued S76



X1-X9 Restructuring on Hylan Boulevard

Description of Action

- Retained peak-hour X1 service but at reduced levels.
- Peak-hour X1 service shortened to terminate at 23rd Street. Prior to the restructuring, the X1 operated between the Eltingville Transit Center on Staten Island and Midtown Manhattan.
- Enhanced peak-hour X3 service between New Dorp and Lower Manhattan and scheduled X3 service in coordination with the X1 to serve Lower Manhattan more efficiently.
- Discontinued X6 service, which operated between Eltingville Transit Center and Midtown.
- Revised service on other routes to accommodate former X1 and X6 riders.

Projected Net Annual Savings

\$1.4 million

Ridership, Cost per Rider and Capacity

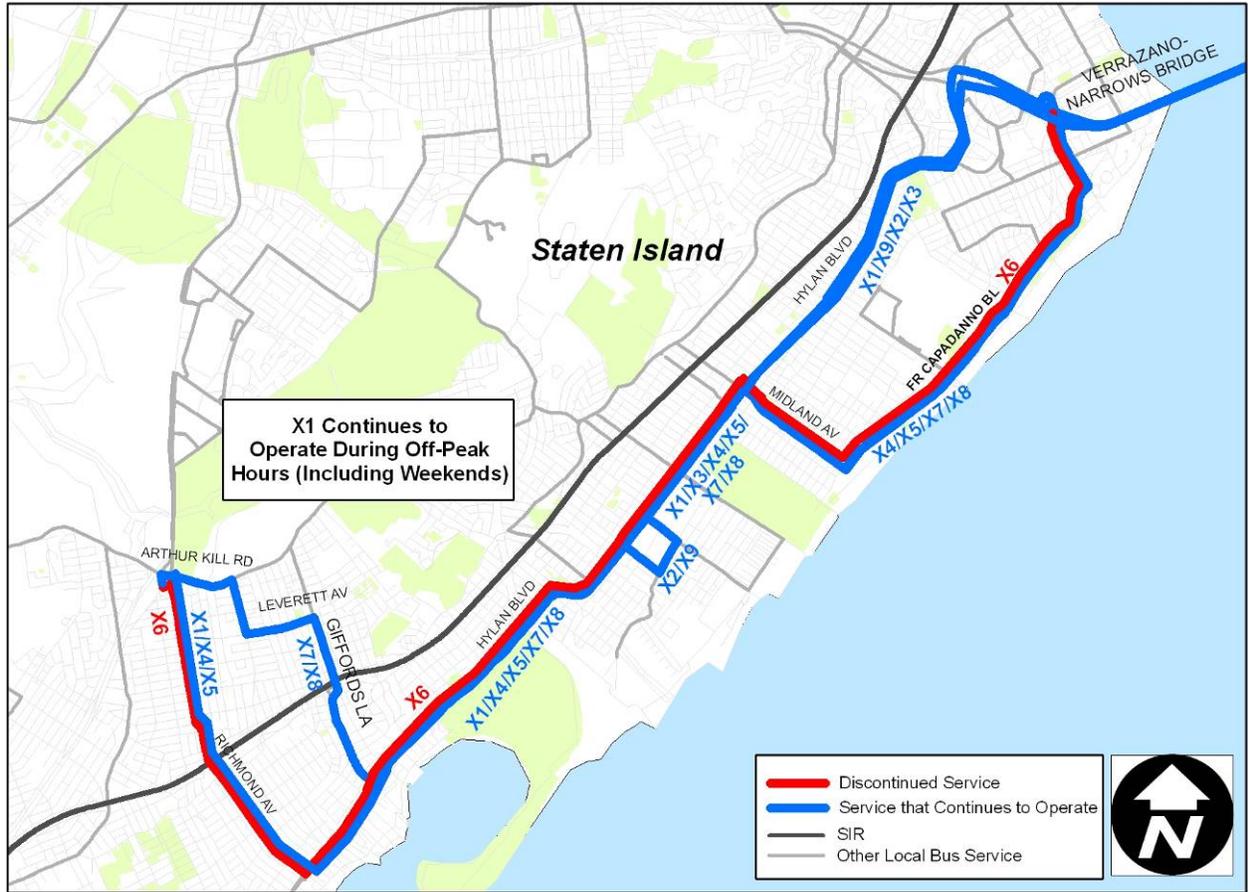
	Ridership Change 2009-2010	Cost per Rider			Guideline Capacity
		Weekday			
	Weekday	2009	2010	Change	Weekday
X01-09	536	\$ 8.14	\$ 7.27	-11%	82%-95%*
Percent of Total	4.2%				

*Reflects projected percent of guideline capacity after service adjustments in September 2011

Discussion

The X1-X9 restructuring has resulted in a noteworthy increase in ridership on weekdays with a decrease in cost per rider. Based on the fact that there was no decline in weekday X1-X9 ridership, it can be assumed that the majority of former X6 riders switched to either the X3, X4, X5 or X7.

X1-X9 Restructuring in Staten Island



X1-X9 Restructuring in Manhattan



X13/X14 Restructuring

Description of Action

- Discontinued X13 service via Forest Avenue and Clove Road.
- Rerouted X14 trips operating on Staten Island via Forest Avenue and Clove Road to serve Lower Manhattan.

Projected Net Annual Savings

\$0.2 million

Ridership, Cost per Rider and Capacity

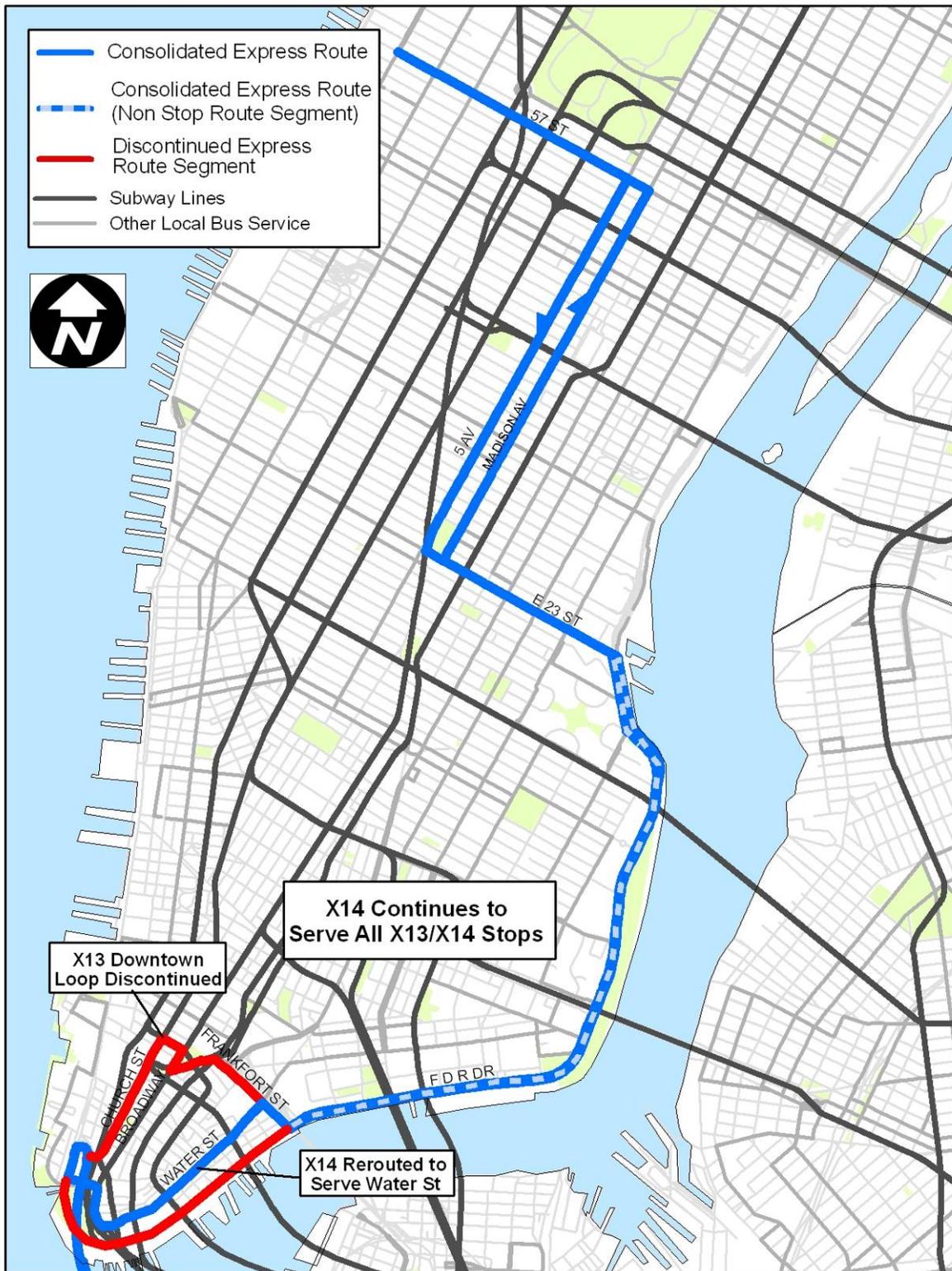
	Ridership Change 2009-2010	Cost per Passenger			Guideline Capacity
		Weekday			
	Weekday	2009	2010	Change	Weekday
X13	-333	\$ 8.34			
X14	408	\$ 9.55	\$ 8.90	-7%	89%*
Total	75	\$ 9.16	\$ 8.90	-3%	
Percent of Total	7.2%				

*Reflects projected percent of guideline capacity after service adjustments in September 2011

Discussion

The X14 appears to have captured the majority of former X13 customers. This could be due to the addition of Lower Manhattan stops on Battery Place and Water Street, which covers a portion of the X13 service area. X13 and X14 buses share the same route path on Staten Island. In addition, ridership shows an increase greater than the total X13 ridership, and it may include displaced customers from the X16 route, which shared several stops with the X14 on Forest Avenue, Clove Road, and Narrows Road on Staten Island. Service levels are currently consistent with rider demand. Initially there were many complaints from former X13 and X16 riders. These complaints have decreased as riders have diverted to other express bus services or local bus service.

X13/X14 Restructuring



OTHER BUS SERVICE REDUCTION EVALUATIONS

Low Ridership Express Bus Route Discontinuations (X25, X32, X20, X18, X16, X29, X51, X90)

It is difficult to definitively determine how the riders of these discontinued express bus routes are now making their trips. These routes carried relatively few riders and, for the Brooklyn, Queens and Manhattan routes, the best alternative was to shift to a nearby subway. Subway routes carry significantly more riders in comparison to express bus routes, and frequent long-term subway construction has altered ridership patterns (particularly in Brooklyn). While some of these express riders most likely did shift to other NYCT services, it is difficult to quantify the shift, and some riders may have ceased making these trips by transit or ceased making these trips altogether. For all these express routes, the direct operating cost per rider was over \$10, so even if some of these riders did not shift to other services, NYCT still improved efficiency by discontinuing the least cost-effective routes.

The **X25**, which provided service between Grand Central and Lower Manhattan, and the **X32**, which provided premium fare service between Queens and the Bronx High School of Science carried too few riders (only 20 and 50 riders, respectively, on an average weekday) to track shifts to other bus or subway services.

The **X29**, which provided service between Brooklyn and both Lower and Midtown Manhattan, carried over 500 riders on an average weekday, but riders could have shifted to the **B** **F** or **Q** subway routes. It would be difficult to say that any change in ridership on those routes was related to the discontinuation of the X29, particularly given that there was construction work on these subway lines, which make comparisons between the years difficult.

The **X90**, which provided service between the Upper East Side of Manhattan and Lower Manhattan, carried 620 riders on an average weekday. Some of these riders may have shifted to the M15 local and Select Bus Service (SBS) or the **4** **5** **6** subway lines; however, given introduction of the M15 SBS, which attracted many new riders, and that the ridership could have shifted to several of the **4** **5** **6** subway stations, it is difficult to be sure how these riders are currently making their trip.

The **X51**, which provided service between Flushing, Queens and Midtown Manhattan, carried approximately 3,000 riders on the average weekday. Average weekday ridership at the **7** line Flushing-Main Street station did increase by more than 500 riders between the fall of 2009 and the fall of 2010. Some of this increase in subway ridership may be previous X51 riders, but this increase may also reflect improved economic conditions.

The **X16**, **X18** and **X20** provided service between Staten Island and Lower Manhattan, and carried 350, 290, and 60 riders, on an average weekday respectively.

- Some X16 riders may have shifted to the X14, which experienced a growth in ridership that exceeded the number riders who had previously taken the X13, which was also

discontinued.¹ Other riders may have shifted to the S44/94, S46/94, S48/98, or S61/91 to the Staten Island Ferry for their trips. However, given so many options, it is difficult to specifically identify how they are now making their trips.

- Similarly, X18 riders had numerous local bus options (the S51, S52, S74, or S78) to the Staten Island Ferry for their trip, so it is difficult to identify a specific notable change in ridership on the various routes.
- Some X20 riders, of which there were only 60 riders on an average weekday, may have shifted to the X3 or X8, but given that there were other service changes affecting these routes and the fact that X20 riders may have also shifted to local buses to the Staten Island Ferry, it is difficult to track how these riders are making their trip now.

Discontinuation of Route Segments Requiring a Longer Walk To Access the Route (B3, S40/S90)

A portion of the **B3** route, which operated between Bensonhurst and Bergen Beach in Brooklyn, was discontinued south of Avenue U/71st Street in an effort to make the route more efficient. We projected that riders would have to walk approximately five minutes to the nearest B3 bus stop. However, weekday ridership on the B3 decreased significantly more than expected, as shown in the table below. This decrease was primarily due to the reopening of the Avenue U **B** **Q** subway station in October 2010 that had been temporarily closed in 2009, and which temporarily boosted ridership on the B3 and the B3K shuttle that operated to the Kings Highway **B** **Q** Station during the station closure.

The Howland Hook segment of the **S40/S90** route, which operates along the northern part of Staten Island, was also discontinued. This change affected very few riders, who now have to walk to the nearest S40/S90 bus stop. As shown in the table below, despite the shortening of the route, ridership increased weekdays and stayed the same on weekends. The route also became more efficient, as the cost per rider decreased on weekdays and weekends.

Ridership, Cost per Riders and Capacity

	Ridership Change		Cost per Rider						Guideline Capacity	
	2009-2010		Weekday			Weekend			WD	WE
	WD	WE	2009	2010	Change	2009	2010	Change		
B3	-1101	-1098	\$ 1.19	\$ 1.22	3%	\$ 1.18	\$ 1.20	2%	82%-95%*	
Percent of Total	-7%	-5%								
S40/S90	72	362	\$ 2.53	\$ 2.48	-2%	\$ 2.45	\$ 2.30	-6%		
Percent of Total	1.8%	5.2%								

Discontinuation of Low Ridership Routes With Inconvenient Transit Alternatives (Q79)

The **Q79**, which served the eastern edge of Queens, was discontinued due to low ridership, with the second lowest average weekday ridership in 2009. Although east/west bus service continues to be provided in the area, the Q79 did not have convenient transit alternatives for north-south travel. It is assumed that most riders are driving or taking car services to make

¹ The X13/X14 restructuring is discussed on page B-81.

their trips. The Taxi and Limousine Commission licensed a private operator to provide replacement service for the Q79, but it was discontinued due to low ridership.

Discontinuation of Routes With Very Low Ridership (Barretto Point Park Pool Shuttle)

The **Barretto Point Park Pool shuttle** in the Hunts Point neighborhood in the Bronx was a seasonal shuttle service operated only in the summer. It carried only approximately 120 riders weekdays and 340 riders weekends. Given this relatively low ridership and the fact that the only transit alternative was the Bx6, which carries over 20,000 riders on an average weekday and an average weekend, it would be difficult to make any conclusions based on the change in ridership on the Bx6. Parks Department reported that attendance at the pool did decrease in the summer of 2010, which may have been in part a result of the discontinuation of the route.

Discontinuation of Routes With Multiple Transit Alternatives (B23, B24, B39, B51, B71, M18, S67)

These routes have multiple alternatives, some with very high ridership, making it difficult to determine where and if riders have shifted to other transit services.

The **B23**, which served the Borough Park, Kensington and Flatbush neighborhoods, was discontinued due to low ridership, with the tenth lowest average weekday ridership in 2009, approximately 1,580 on an average weekday. Riders from the B23 do not appear to have shifted to the closest existing routes, the B16 or B8, whose ridership numbers have approximately stayed the same or decreased, respectively. It is possible that some B23 riders were using the bus to connect to various subway lines (**BQ**, **F**, **D** and **N**), and they are now walking. Other B23 riders may have shifted to the B35 or the B103, but the overlapping route sections were short, so it is difficult to say whether overall changes in ridership on these routes were related to the discontinuation of the B23. The Taxi and Limousine Commission licensed a private operator to provide replacement service for the B23, but it was discontinued due to low ridership.

The **B24**, which provides service between Williamsburg and Greenpoint in Brooklyn via the Sunnyside, Queens, was discontinued weekends. Riders, depending on where they were going, had many different alternate transit alternatives. Some riders, who may have been taking the B24 to the subway, which connects to the **JM**, **G** and **7** lines, may be walking rather than taking the bus. Other riders may take the **G** to the **7**, while still other riders may have shifted to the B43, B48, or taken the Q59 and transferred to the Q39. Given all of these transit options, it is not clear how these riders are now making their trips.

The **B39**, which operated between Williamsburg and the Lower East Side via the Williamsburg Bridge, was discontinued due to low ridership, with the seventh lowest average weekday ridership in 2009 approximately 1,180 on an average weekday. It is likely that some B39 riders shifted to the parallel **JMZ** subway lines. While station entries at the Marcy Av and the Delancey St-Essex St **JMZ** stations did increase by almost the same amount of ridership on the B39, given the very high level of ridership at these stations and the changes in **JMZ** service as part of the 2010 service reductions, it is not possible to determine how many of these riders shifted to the subway. The Taxi and Limousine Commission licensed a private operator to provide replacement service for the B39, but it was discontinued due to low ridership.

The **B51**, which operated between Downtown Brooklyn and Lower Manhattan via the Manhattan Bridge, was discontinued due to low ridership, with the third lowest average weekday ridership in 2009 approximately 900 on an average weekday. Riders may have shifted to various subway connections, including the **2 3 4 5** and **N R** lines. Given the very high level of ridership on these subway lines and the low ridership on the B51, it is not possible to determine how many of these riders shifted to the subway.

The **B71**, which operated between the Brooklyn waterfront through Park Slope to Rogers Av along Eastern Parkway, was discontinued due to low ridership, with the sixth lowest average weekday ridership in 2009 of approximately 1,080 on an average weekday. Some of these riders may have shifted to the B45 or the B65, although these routes appear to have lost overall ridership. These riders may have also shifted to various subway routes, including the **2 3 4 5** lines. Given the very high level of ridership on these subway lines and the low ridership on the B71, it is not possible to determine how many of these riders shifted to the subway. Other riders may have also been taking the B71 to the **F G** lines at Carroll St or the **R** line at Union Street and are now walking to these stations. The Taxi and Limousine Commission licensed a private operator to provide replacement service for the B71, but it was discontinued due to low ridership.

The **M18**, which operated between Washington Heights to Central Park North and 5th Avenue, via Convent Avenue, was discontinued due to low ridership, with the fifth lowest average weekday ridership in 2009 approximately 1,060 on an average weekday. These riders most likely shifted to the M100, M101, and M3, all of which provide convenient transit alternatives. Weekday ridership on M100 increased, while weekday ridership on the M3 and M101 decreased, and weekend ridership on all three routes increased. However, given the very long length of these bus routes and their high ridership in comparison to the M18, it is difficult to determine how many M18 riders switched to each of these routes.

The **S67**, which operated weekday peak hours only between Port Richmond Terminal and St. George via the Westerleigh and Castleton Corners neighborhoods, was discontinued due to low ridership, with approximately 700 average weekday riders in 2009. While it would appear that these riders would shift to the S57 and S66, these routes did not experience overall weekday ridership increases. Some of the riders may have shifted to the S61/91 and the S62/S92 that operate along Victory Boulevard, which did have some weekday ridership increases. Some riders may have also shifted to other routes that go to St. George, such as the S48/S98, S46/S96 or the S44/S94.

Changes to Spans of Service and Elimination of Overnight Service

The changes to spans of service and elimination of overnight service affected such a small number of people and a small number of revenue miles that the changes to the routes' ridership or the passengers per revenue mile would be difficult to determine.