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Existing Conditions Report

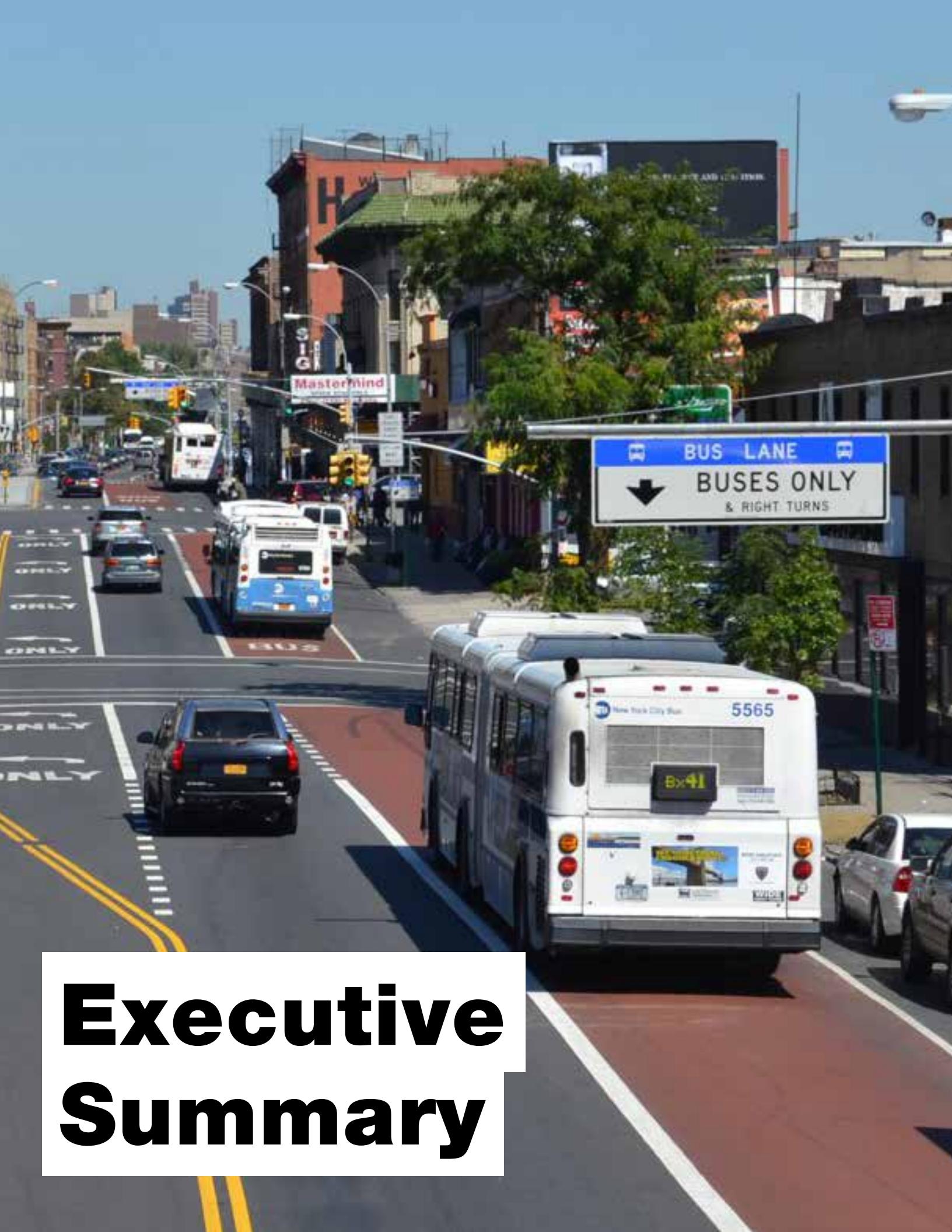
**Bronx Bus
Network Redesign**

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Executive Summary

EXECUTIVE SUMMARY

This Existing Conditions report is the first step in the bus network redesign process. The goal of an Existing Conditions report is to examine the current bus network and determine how effectively and efficiently it serves its customers.

As part of this report, we identified market and service trends to inform decision-making, while looking at the borough with a fresh perspective to draw a new, 21st-century bus network. This report is a joint effort by New York City Transit (NYCT) and MTA Bus Company.

The Bronx Bus Network has not substantially changed in decades. Over that same period, our customers' needs have transformed dramatically. The bus network needs to evolve with them. The opportunity to reimagine the Bronx Bus Network has come at a time when the Bronx is experiencing major growth in all sectors and a major increase in housing.

The continuing decline in bus ridership in the Bronx and in greater New York City further requires a fresh look at how bus service is being provided today. Bus speeds have decreased, with the Bronx having, on average, the second-slowest buses in the city after Manhattan.

This report provides insight into the existing conditions of the Bronx to inform the redesign of the bus network. It includes two major analyses that each produce a separate set of important findings:

- ◊ **Market Analysis** – examines the characteristics of the study area, such as: Who lives in the Bronx? Where in the Bronx do they live? Where do they work? How do they get there? If not for work or home, why do people visit the Bronx and where do they go? What will the Bronx look like in 20 years?
- ◊ **Service Analysis** – examines the bus service delivered by NYCT and MTA Bus Company within the study area and how the service supports the Bronx's residents, workers, and visitors; it also examines how the existing service compares with standards for bus service.

Key Findings

Market Analysis

- ◊ **Population and employment density is concentrated along subway lines.** The Bronx Bus Network complements this pattern with north-south routes that sometimes parallel subway lines, along with east-west routes that connect riders to the subway, and other clusters of activity.
- ◊ **The South Bronx will experience significant growth** in both population and employment. Significant development projects are already underway that will require more frequent, higher capacity bus service.
- ◊ **Only 12 of the Bronx's subway stations are accessible** according to Americans with Disabilities Act (ADA) standards. The network redesign could be particularly important for those customers whose transit options are currently more limited.
- ◊ **About 60 percent of Bronx residents commute by transit.** According to Census ACS data, about 44 percent of Bronx residents identified rail modes as their primary means of transportation, while the remaining 16 percent identified bus as their primary means. Only about 23 percent of residents drive to work.

Service Analysis

- ◊ **Most Bronx residents have access to some level of bus service.** Approximately 96.2 percent of Bronx residents live within a quarter mile (or five-minute) walk of a local, limited, SBS, or express bus stop. There are only a few gaps, which are mostly parks, industrial uses, and cemeteries. This analysis also shows access at different times of the day, indicating where there may be opportunities for service improvements.
- ◊ **Overall, Bronx bus service is very frequent for most of the day.** During peak times, over half of all routes are operating at least every 8 minutes, and several operate every 3 to 5 minutes. During the midday, 34 of the 46 (or 74 percent) local, limited, and SBS routes operate at least every 15 minutes.
- ◊ **The Bronx has the most productive bus network in the city.** More Bronx bus customers board the bus per hour of service provided than any other borough in New York City.
- ◊ **The most productive routes are simple and direct.** They also tend to traverse through high-activity areas and make connections with subway lines and other key bus routes.
- ◊ **The Bronx Bus Network is less reliable than the systemwide average** and has become less reliable since 2014. Buses in the Bronx arrive at less-consistent intervals and are more frequently off-schedule when compared to buses across the city.
- ◊ **Most customers rely on multiple routes or subway lines to get where they need to go.** Only 26 percent of customers use a single bus route for their journey. Meanwhile, 39 percent of customers transfer to another bus route and 35 percent transfer to the subway.
- ◊ **The Bronx Bus Network has very close stop spacing.** Closely-spaced stops lead to frequent stopping and increased travel times.

Next Steps

Following this report, we will release a draft plan of the redesigned Bronx Bus Network that reflects the findings of this report, as well as information gathered from public engagement (workshops, in-person surveying, and online surveying). The draft plan will be developed with support from the New York City Department of Transportation (NYC DOT). Additional public open houses will be held following the release of the draft plan, from which the feedback will inform the development of a final plan.



Introduction

INTRODUCTION

1.5 million residents

6.2% population growth since 2010

57 total bus routes

- ◊ **43 Local/Limited**
- ◊ **3 SBS**
- ◊ **11 Express**

Approximately 2,400 bus stops

55 routes operate 7 days a week

16 routes operate 24/7

96.2% of residents live within a quarter-mile (5-minute) trip to a bus stop

INTRODUCTION

The Bronx is a booming borough composed of many unique neighborhoods, each housing a diverse group of residents that rely on bus service for much, if not all, of their daily transit needs. The Bronx has significant north-south subway coverage, while east-west subway coverage is limited and such trips are largely provided by bus service.

There are 57 bus routes that operate within the Bronx, providing an expansive service coverage area. Forty-four routes are operated by NYCT and 13 routes are operated by MTA Bus Company. Together, these two sub-agencies provide local, limited, Select Bus Service (SBS), and express bus coverage that connects neighborhoods within the Bronx and to the neighboring boroughs of Manhattan and Queens.

NYCT was created in 1953 by the State of New York to take over operations then operated by the New York City Board of Transportation. In 1962, the State established the Manhattan and Bronx Surface Transit Operating Authority as a subsidiary of NYCT to take over bus operations then operated by two private companies, Fifth Avenue Coach Company and Surface Transit, Inc. After this, NYCT operated local bus service in all five boroughs.

MTA Bus Company was created in September 2004 to merge into one organization all services formerly provided by seven private bus companies under franchise agreements with the City of New York. Those companies were: Command Bus, Green Bus Lines, Jamaica Bus, Liberty Lines, New York Bus Company, Triboro Coach, and Queens Surface. The transition of service began in January 2005 and was completed in February 2006. Since the merger into MTA Bus Company, the agency has instituted new maintenance practices, adjusted schedules and travel paths, and normalized service.



Market Analysis

MARKET ANALYSIS FACTS AND FIGURES

Average 33,000+ people per square mile

Average 9,000+ employees per square mile

Getting to Work:

- ◊ **16% take the bus**
- ◊ **23% drive alone**
- ◊ **44% take the subway, railroad, or ferry**

MARKET ANALYSIS

The Market Analysis provides a look at current and future market needs within the Bronx and demonstrates how these needs relate to the current transit network today. Importantly, the analysis extends to the Manhattan neighborhoods of Washington Heights and Inwood to best represent the interconnectivity between these neighborhoods and the Bronx, especially in their respective bus service. Components of the Market Analysis include:

- ◊ **Borough Profile** – a profile of population, employment, and demographics within the Bronx and the adjacent neighborhoods of Inwood and Washington Heights; the profile identifies key themes among these and how they overlay with the existing bus, subway, and commuter rail network in the Bronx.
- ◊ **Travel Patterns** – a summary of travel patterns made within the Bronx today as well as regional trips to adjacent boroughs and counties; assesses whether there are trips being made that warrant new transit service as well as whether today's trips are properly served by the current bus network..
- ◊ **Key Destinations** – a look at key trip generators for those that live in and travel to the Bronx; this includes major commercial centers, retail shopping centers, sports venues, educational institutions, medical facilities, social services, etc.
- ◊ **Future Developments** – assessment of upcoming residential, retail, commercial, and other major developments to occur in the Bronx within a five to 10-year time frame; identification of how bus service can best serve these developments, when possible.

Borough Profile

This section provides an examination of population and employment densities, as well as demographic elements to provide insight on where bus service in the Bronx is most successful. It also helps identify areas where bus service can be improved and/or redesigned to better serve today's customers.

Approximately 1.5 million residents live in the Bronx, according to the U.S. Census 2017 population estimates. The borough's population has increased by roughly 6.2 percent since 2010. This increase is the greatest among all counties in New York State. New York City currently has a population of 8.6 million residents and has experienced a lower growth rate than the Bronx, increasing 5.5 percent since 2010.

Approximately 25 percent of Bronx residents are under 18 years old and 12 percent are 65 years old and over. Women account for roughly 53 percent of Bronx residents and men account for 47 percent.

Population and Employment Density

Population and employment densities are useful indicators of where transit might succeed in an area. Dense neighborhoods, especially with density concentrated along key corridors, are best suited for successful transit service. Less dense, more sprawling areas are less capable of supporting successful transit service. The following sections use New York Metropolitan Transportation Council (NYMTC) socioeconomic and demographic (SED) forecasts for 2015 – 2035..

Population Density (2015)

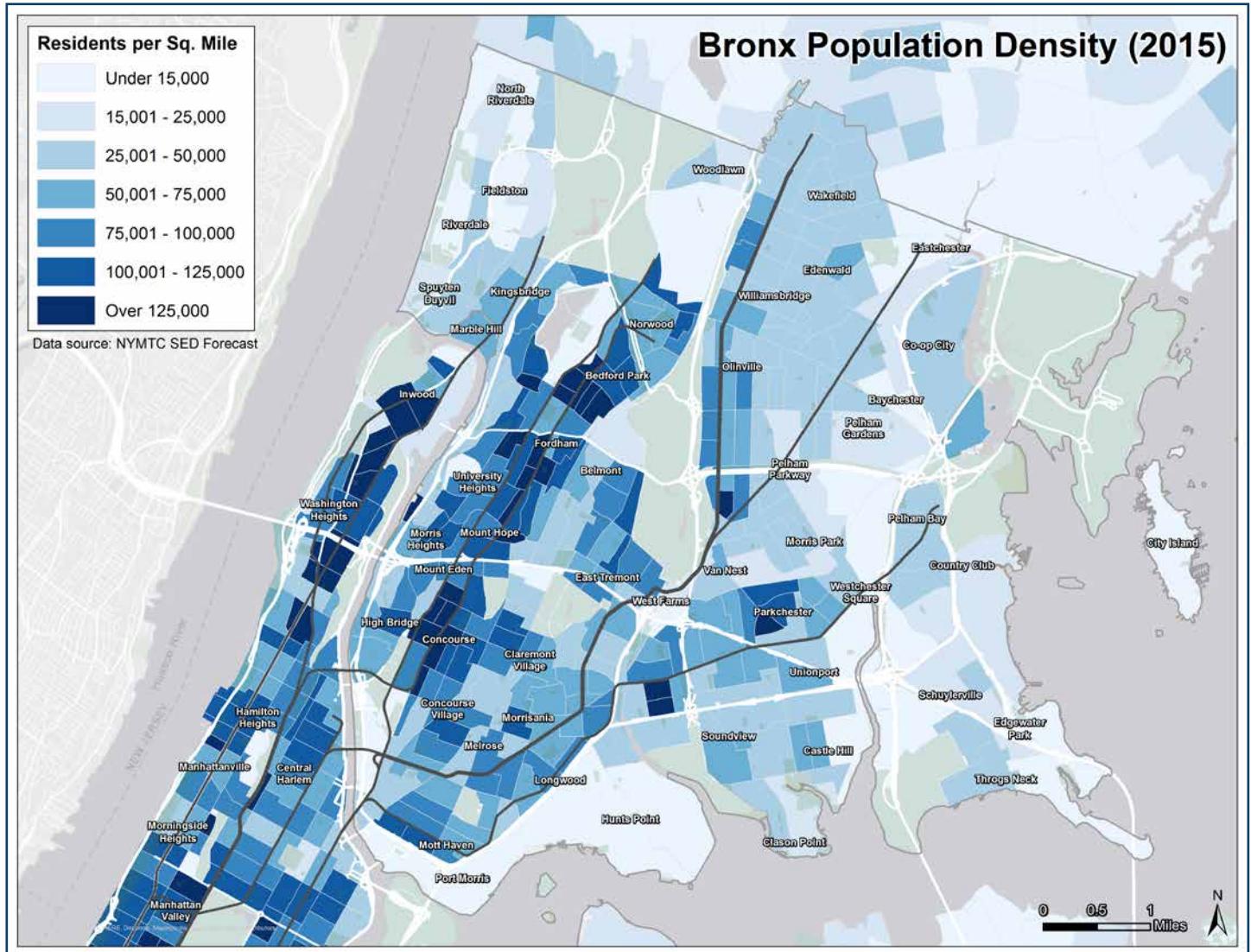
High Population density in the Bronx averages over 33,000 people per square mile.

Overall, densities are quite high and concentrated along existing subway lines and major east-west corridors.

High population density is concentrated along the Grand Concourse **B** **D** and Jerome Avenue **4** subway lines, the Southern Boulevard and White Plains Road **2** **5** subway line, and segments of the Westchester Avenue **6** subway line. In the nearby Manhattan neighborhoods of Washington Heights and Inwood, there is also strong population density along the **1** and **A** subway lines.

High-to-moderate density levels are present along Fordham Road and Pelham Parkway, currently served by the Bx12 SBS route. Similar density is found along East 180th Street and East Tremont Avenue, served by the Bx36 and Bx40/42, respectively.

Population density within the Bronx decreases in the far east region of the borough and in the northwest quadrant. Density in these areas does not surpass more than 50,000 people per square mile.



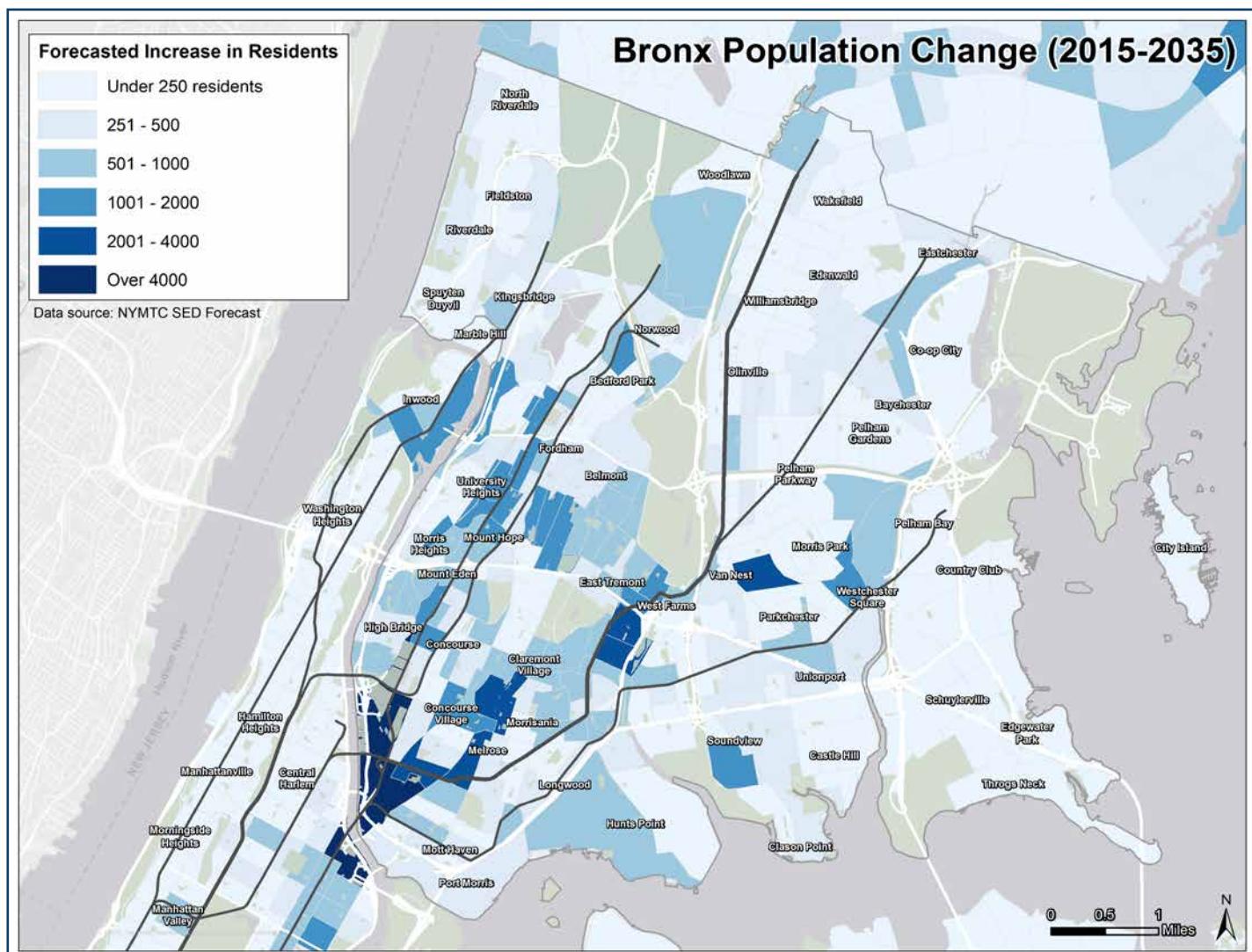
Map 1. Bronx Population Density (2015)

Population Density Change (2015 - 2035)

When redesigning a bus network, it is important to identify where additional population growth may occur to ensure that any changes will meet the needs of both current and future populations within the service area.

Population projections indicate high population growth in the South Bronx, adjacent to the Hub, in the Mott Haven neighborhood, and between the **2** **5** and **6** subway lines in the East Tremont and West Farms neighborhoods.

Moderate population growth is projected along East Tremont Avenue near Westchester Square along the **6** subway line, and in Soundview along Soundview Avenue. Moderate population growth will also occur along the **4** and **B D** subway lines, primarily in the University Heights and Fordham neighborhoods, and along the **1** subway line in the Inwood neighborhood.



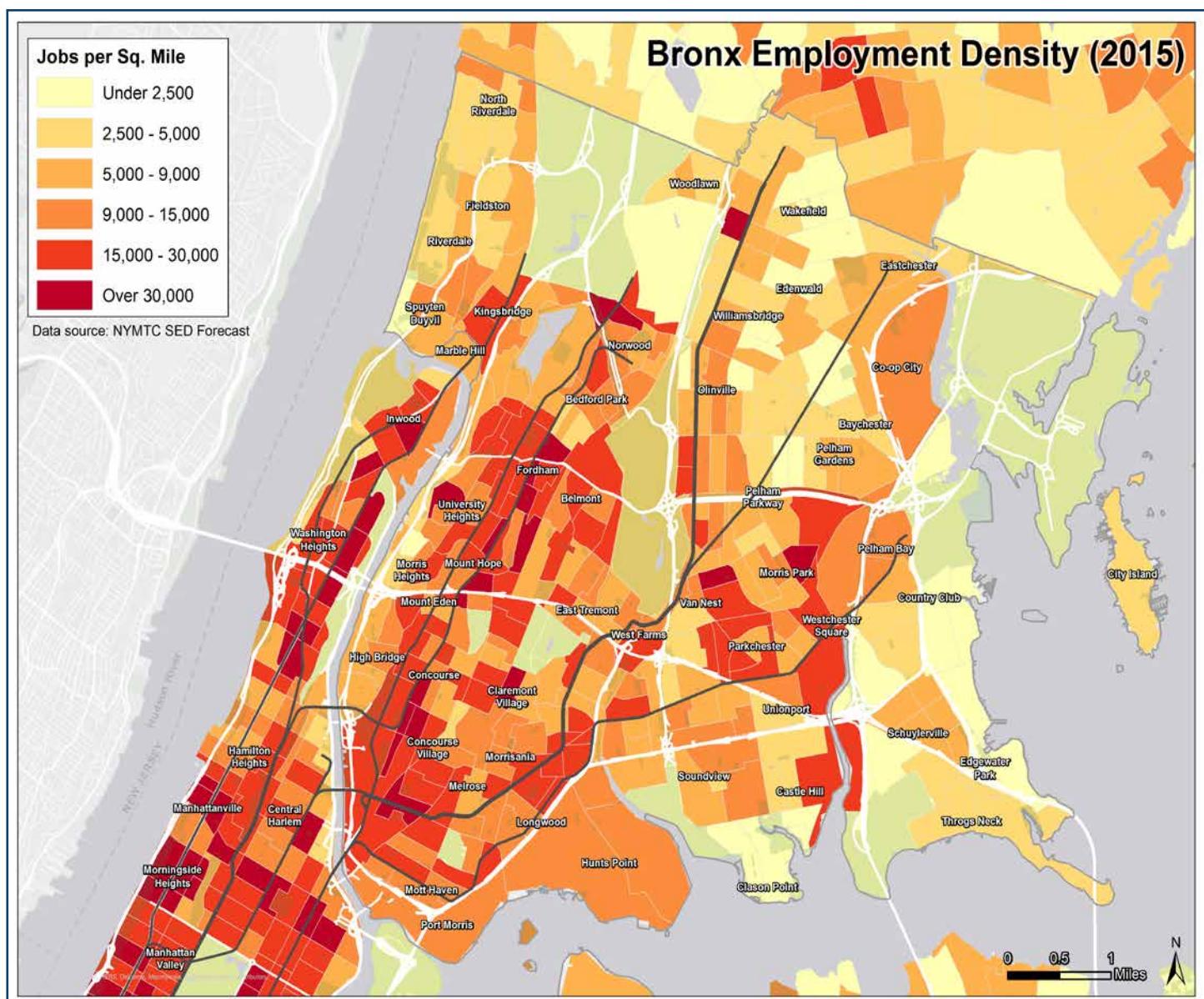
Map 2. Bronx Population Density Change (2015 - 2035)

Employment Density (2015)

Employment density is another key element to examine when redesigning a bus network. The Bronx averages over 9,000 employees per square mile. Overall, employment density is quite high and concentrated along existing subway lines, major east-west corridors, and industrial manufacturing areas in the southeast quadrant of the borough.

High employment density is concentrated along the **A C** and **1** subway lines in Washington Heights and Inwood in Manhattan, and Kingsbridge in the Bronx. Similar density levels are present along the **B D** and **4** subway lines, at the Hub in the South Bronx, along the **2 5** subway line, and in the neighborhoods of Pelham Parkway, Morris Park, and Westchester Square.

More moderate employment density levels are present in Port Morris and Hunts Point, and in the eastern quadrant of the borough, specifically in Pelham Bay, Unionport, Castle Hill, and Soundview.



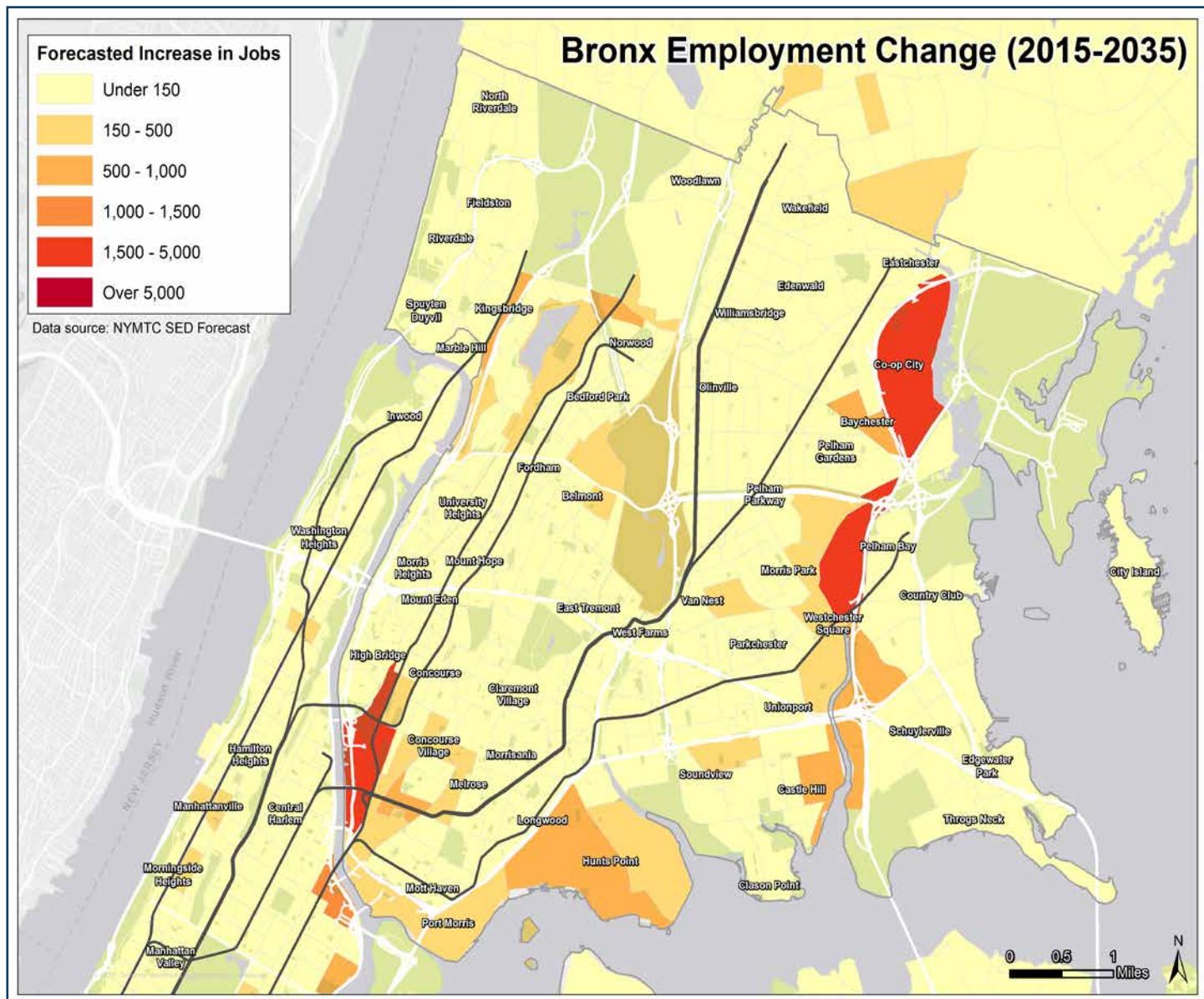
Map 3. Bronx Employment Density (2015)

Employment Density Change (2015 - 2035)

Employment growth is equally important to consider when redesigning a bus network, to ensure the new network meets the needs of future customers.

There are high levels of employment growth projected in Co-op City, Pelham Bay, Westchester Square, Melrose, and High Bridge. These neighborhoods show an increase of 1,500 to 5,000 employees by 2035. It is important to note these high-density employment areas as they may warrant enhanced bus service and/or new bus service.

Moderate levels of employment growth are projected along major thoroughfares, including the Hutchinson River Parkway, Bruckner Boulevard/Expressway, and Major Deegan Expressway. These areas show an increase of 500 to 1,000 employees by 2035. Employment growth along key corridors can support enhanced bus service, where focus is given to high capacity, high frequency bus routes. In addition, pockets of small employment growth are present in Kingsbridge, Norwood, Concourse Village, Belmont, Van Nest, and in Washington Heights.



Map 4. Bronx Employment Change (2015 - 2035)

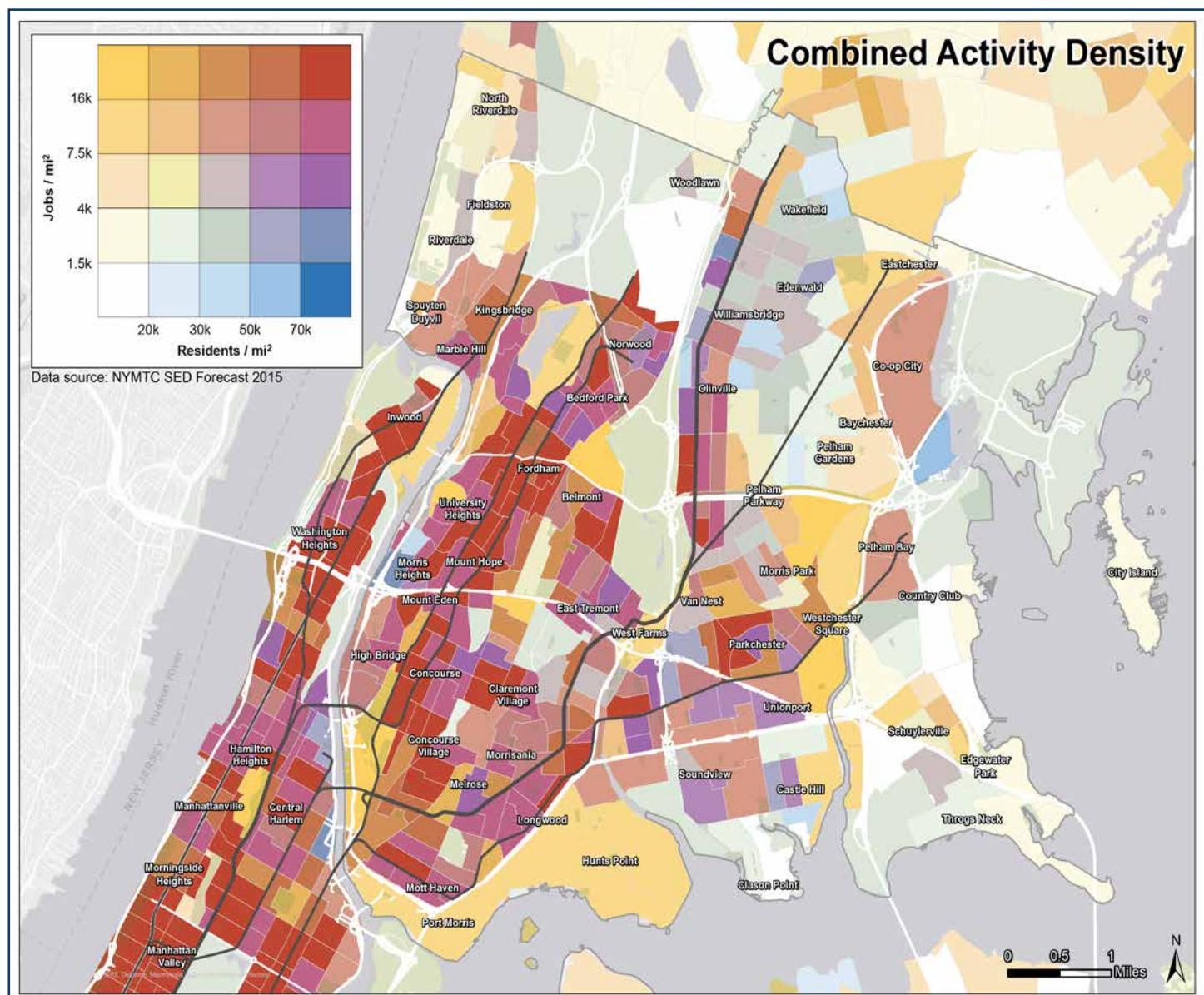
Combined Activity Density (2015)

Combined activity provides a comprehensive view of population and employment density. It highlights levels of daily activity within the Bronx by representing where most trips typically begin and end.

Shades of red indicate a combined high density of jobs and housing. Shades of yellow indicate areas of higher employment density. Shades of blue indicate areas of higher housing density.

The greatest concentrations of combined activity are along the **B** **D** **4** subway lines, in the South Bronx adjacent to the **2** **5** and **6** subway lines, along the Cross-Bronx Expressway, along the Fordham Road/Pelham Parkway corridor, and in the Manhattan neighborhoods of Washington Heights and Inwood.

The northernmost and eastern portions of the borough show lower to moderate combined activity density. There is a greater concentration of jobs alone in North Riverdale, Fieldston, Eastchester, Morris Park, Westchester Square, Castle Hill, Hunts Point, and Port Morris. Medical or industrial facilities are common in these neighborhoods.



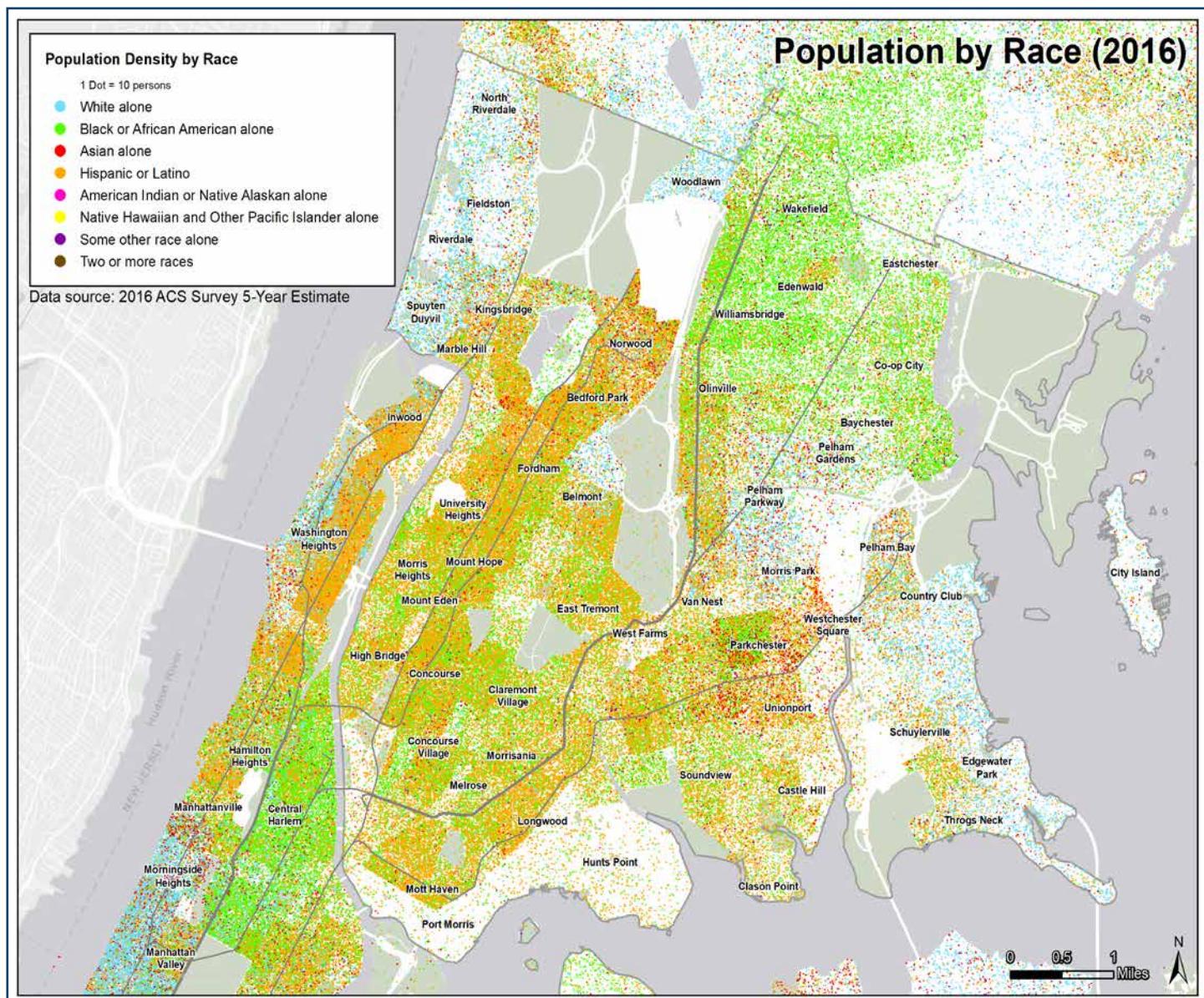
Map 5. Combined Activity Density

Demographics

Population Density by Race (2016)

Examining population density through the lens of racial and ethnic makeup can ensure that bus services are adequately and equitably provided to accommodate all Bronx residents. The following map shows dot density by race for all Bronx residents. One dot represents 10 persons. Each dot is color-coded based on the race categories present within the U.S. Census. Note that the data source for the following demographics sections is the U.S. Census, American Community Survey, 5-Year Estimate 2016.

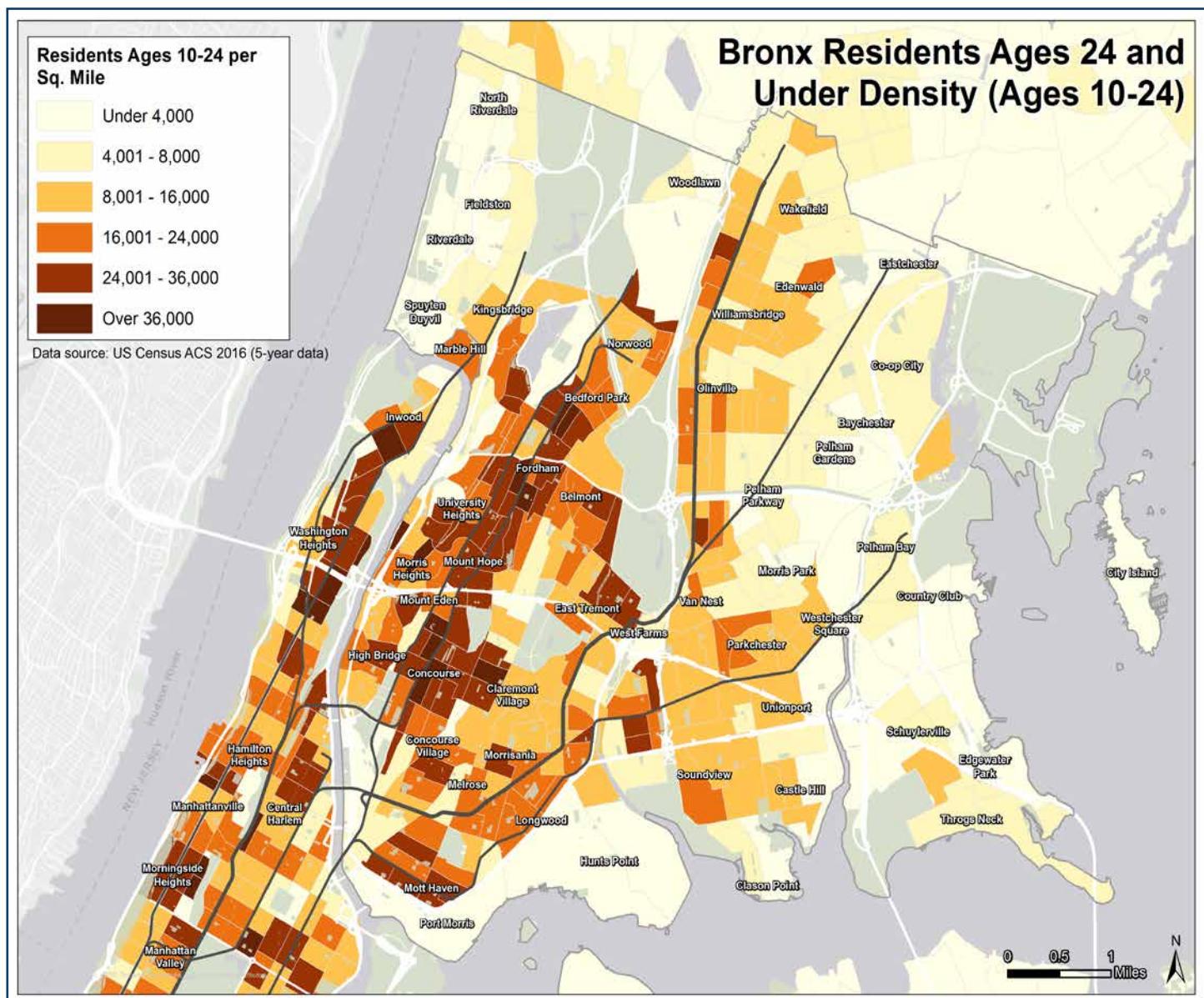
Of all Bronx residents, approximately 56.2 percent identify as Hispanic or Latino. Note that this category is separate and not counted in the following racial groups. The Bronx is comprised of approximately 44.9 percent White residents, 43.7 percent Black or African American residents, 4.5 percent Asian residents, 2.9 percent American Indian and Alaska Native residents, 0.4 percent Native Hawaiian and Other Pacific Islander residents, and 3.6 percent residents that identify as two or more races.



Map 6. Bronx Population by Race (2016)

Bronx Residents Ages 24 and Under Density (Ages 10 - 24)

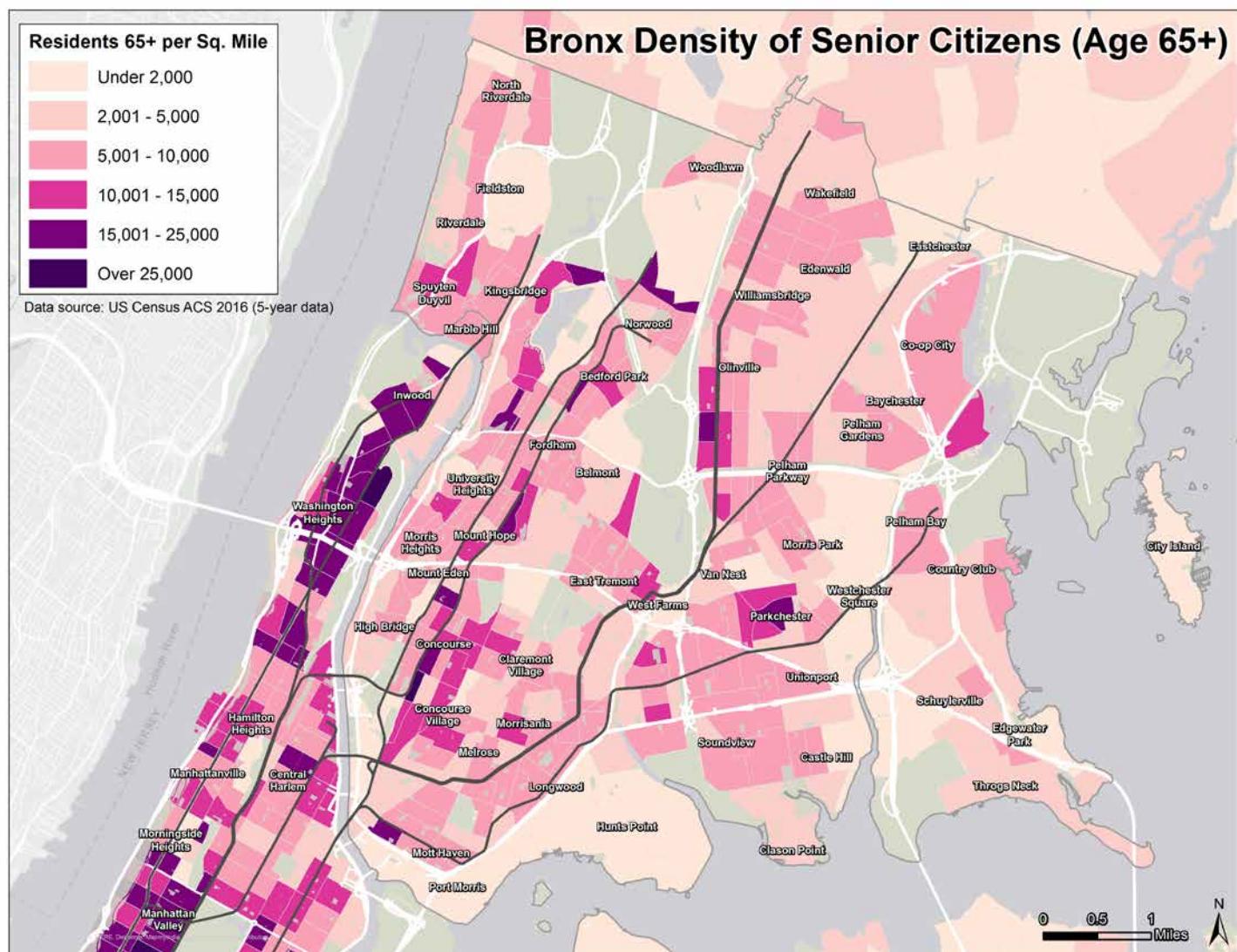
Residents under 24-years-old and younger are most dense (over 36,000 per square mile) along the **B** and **D** subway lines, particularly in the Concourse, Mount Hope, Fordham, and Bedford Park neighborhoods, and along the **1** and **A** subway lines in Inwood and Washington Heights. Similar high density pockets are present in Norwood, adjacent to Moshulu Golf Course and Woodlawn Cemetery, West Farms, adjacent to Westchester Avenue and Sheridan Parkway, and in Mott Haven adjacent to the Major Deegan Expressway.



Map 7. Bronx Residents Ages 24 and Under Density (Ages 10 - 24)

Senior Citizens Density (2016)

The highest concentrations of senior citizens are in the Washington Heights and Inwood neighborhoods, with over 15,000 seniors per square mile. High density pockets are observed along East Gun Hill Road in Norwood, adjacent to the **2 5** subway line in Pelham Parkway, along Unionport Road in Parkchester, and the **B D** subway line in the Mount Hope, Mount Eden, and Concourse neighborhoods. Areas with moderate density are found adjacent to the **4** and **B D** subway lines, along the **2 5** subway line, the **6** subway line in Parkchester, and in the neighborhoods of Spuyten Duyvil, Kingsbridge, Concourse Village, and Co-Op City.



Map 8. Bronx Density of Senior Citizens (Age 65+)

Accessibility (2016)

Those Bronx residents with a disability, as defined by the U.S. Census, are important to consider when examining the current transit markets within the Bronx. Typically, residents with disabilities are more dependent on public transit and must be considered when identifying areas where transit is considered a lifeline service.

As of today, 12 of 70 total subway stations in the Bronx are Americans with Disabilities Act (ADA) accessible. NYCT will continue to upgrade subway stations to be accessible for customers with disabilities. There are plans to make four additional stations ADA accessible: 149 St – Grand Concourse (2, 4, 5), 3 Av – 149 St (2, 5), Bedford Park Blvd – Lehman College (4), and Westchester Sq – E Tremont Av (6). The Bronx Bus Network is responsible for filling in the transit service gaps left by subway stations that are not accessible, both by supplementing service along Bronx corridors and by connecting customers to the subway stations that meet their accessibility needs. Importantly, the bus fleet is well-equipped to serve customers with disabilities as 100 percent of buses have the capacity and equipment necessary for boarding customers in wheelchairs.

The pedestrian infrastructure—sidewalks, street crossings, grades—is a final consideration that can impact customers with disabilities. Sidewalks that have breaks or do not extend all the way to the curb are especially challenging. Of note, segments of the West Bronx have steep grade changes that require significant physical effort to traverse and would be extremely difficult to navigate for persons with mobility issues.

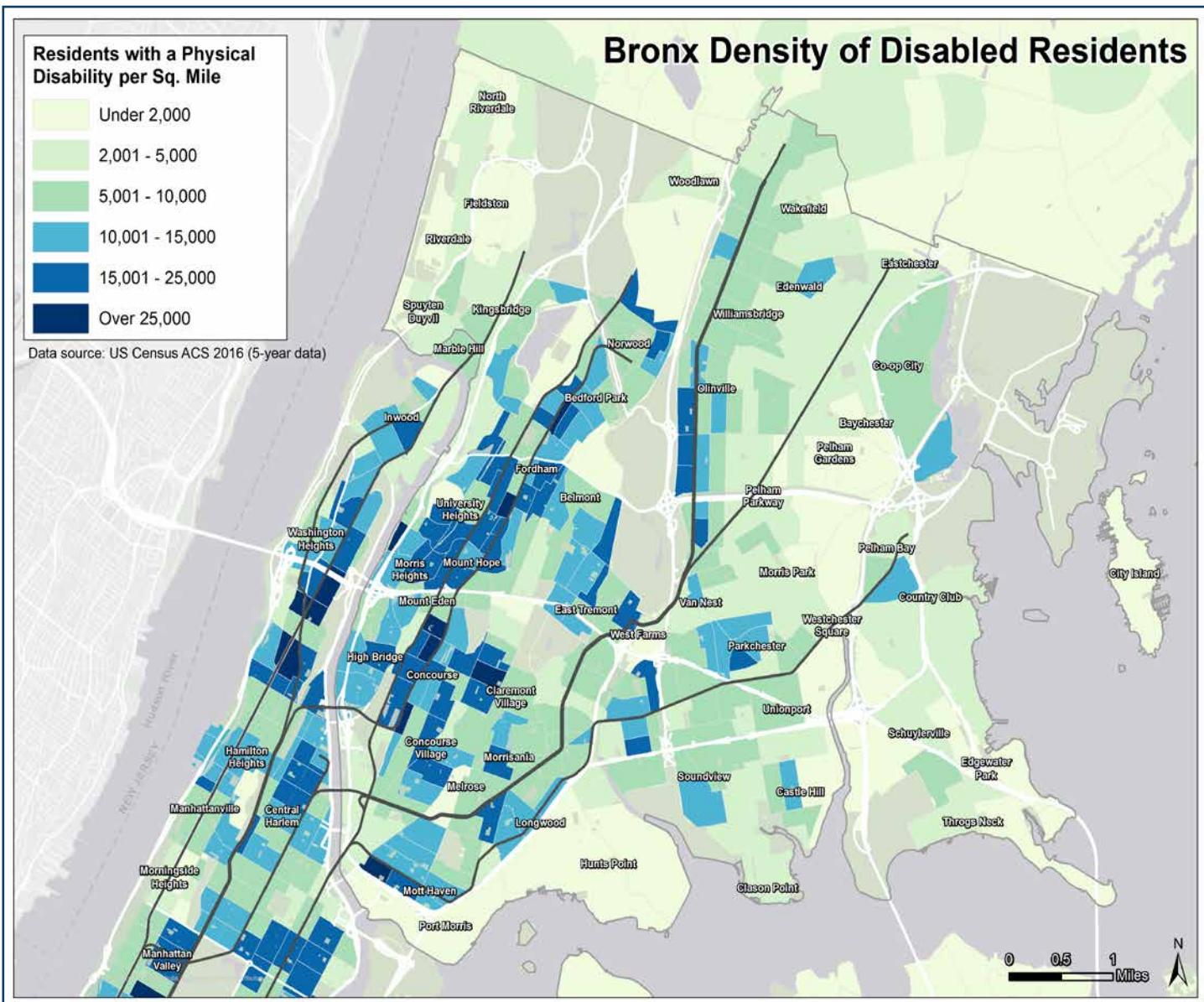
In support of expanding accessibility, NYC DOT has committed to undertaking a citywide survey of bus stop accessibility, so gaps in bus stop accessibility can be addressed in a manner mirroring that of the NYCT program to make subway stations accessible.

The following two maps display the density of disabled residents within the Bronx and those subway stations that are ADA accessible. The second map is crucial to consider when redesigning a bus network, as bus service should continue to provide access to ADA stations for disabled customers. Note that 161 Street – Yankee Stadium station is displayed as a single location due to the close proximity of the (4) and (B, D) stations on the map.

There are high density areas of disabled residents along the (A) and (1) subway lines in Washington Heights and Inwood, in the central Bronx along the (4) and (B, D) subway lines, and in Claremont Village and Mott Haven.

Areas of moderate density of disabled residents are present throughout central Bronx and in several neighborhoods in the eastern region of the borough: Olinville, Van Nest, Parkchester, Co-op City, Country Club, Soundview, and Castle Hill.

There are funded plans to make additional stations accessible in the Bronx. These are shown in Map 10. NYCT has identified other priority stations in the Bronx to undergo accessibility improvements, as well, but those stations have not yet received funding and are not shown here.



Map 9. Bronx Density of Disabled Residents

Accessible Subway Stations

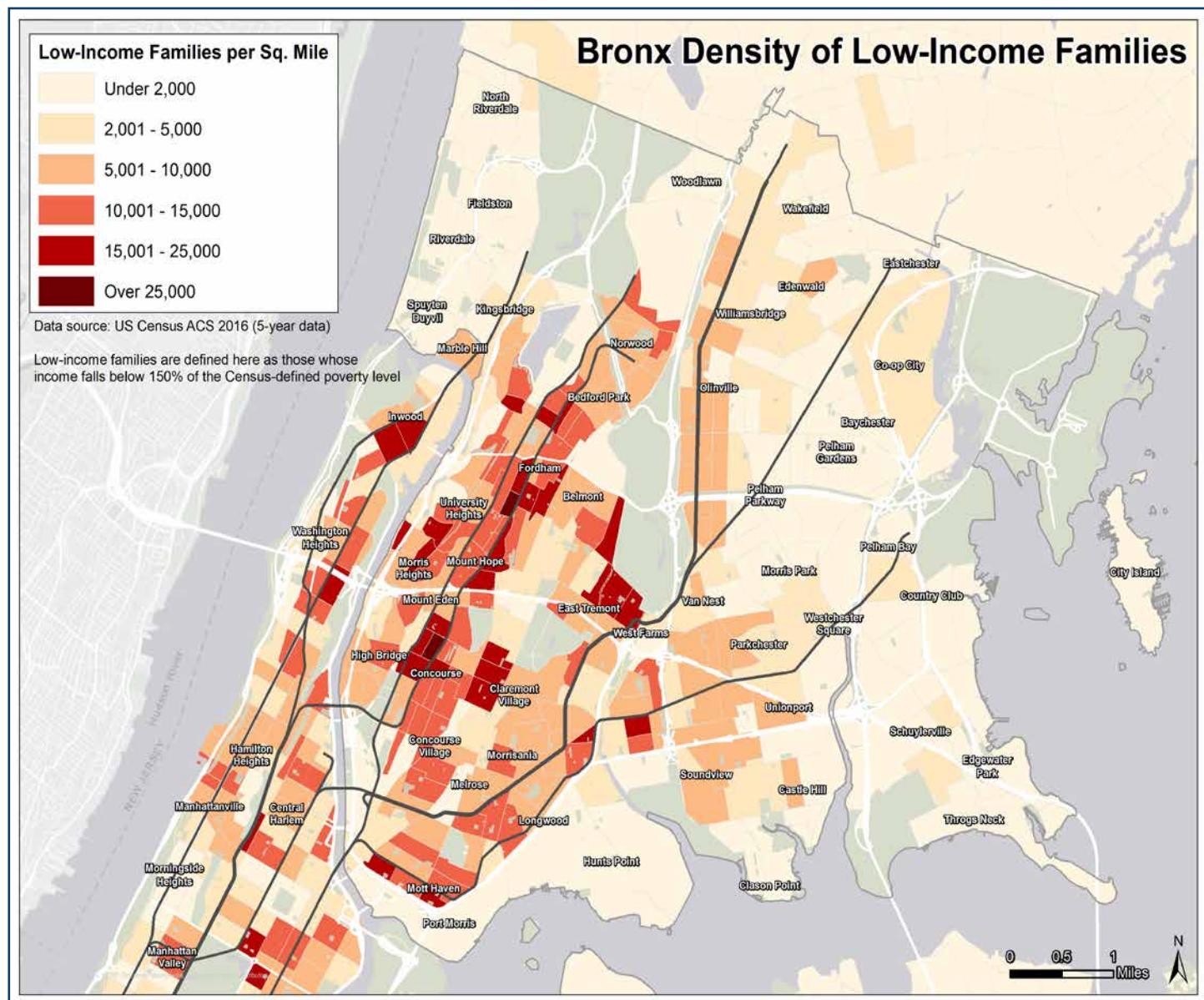


Map 10. Bronx ADA Accessible Subway Stations

Low-Income Density (2016)

Car ownership rates are lower among low-income families. Therefore, they are more likely to rely on public transportation to carry them throughout the city, including the bus network in the Bronx. Providing high frequency, high capacity service along corridors adjacent to low-income populations ensures that the most transit-dependent populations have access to faster, more reliable service.

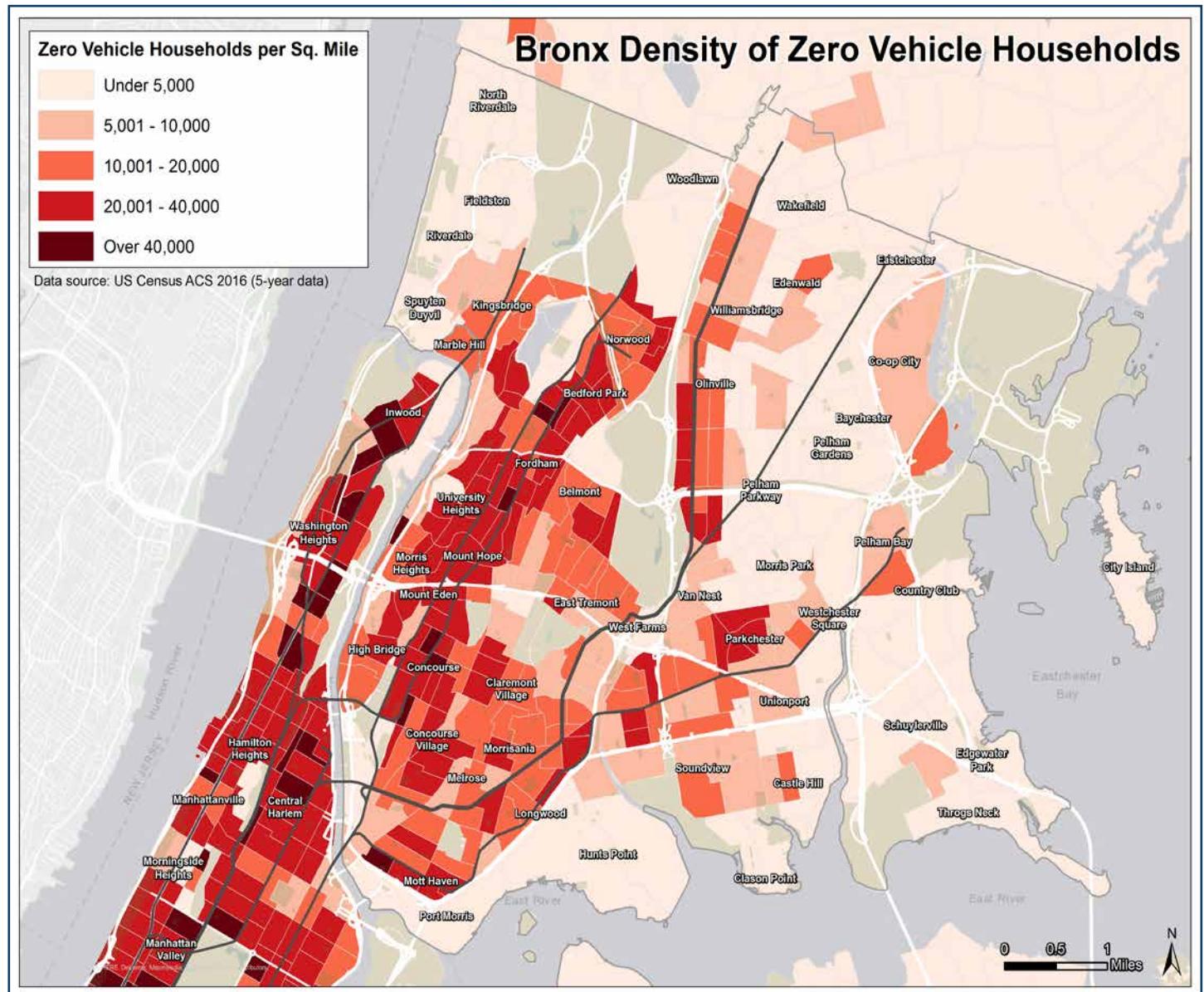
The density of low-income families in the Bronx averages over 3,000 families per square mile. There are several high-density locations, particularly along the **② B** and **④ D** subway lines, the **⑥** subway line, the **①** subway line, and adjacent to East Tremont Avenue in central Bronx. Like the other density types examined, the greatest density is seen in central Bronx and in the Manhattan neighborhoods of Inwood and Washington Heights, while the northern and eastern regions of the borough show a notable decrease in the presence of low-income families.



Map 11. Bronx Density of Low-Income Families

Zero Vehicle Households (2016)

The Bronx averages over 12,000 zero vehicle households per square mile. Zero vehicle refers to those households that do not own a single vehicle. Overall, densities are high and concentrated in the central Bronx along existing subway lines and major east-west corridors. Very high density is present along the Grand Concourse **B D** and Jerome Avenue **4** subway lines, and along **1** and **A** subway lines in the Washington Heights and Inwood neighborhoods.



Map 12. Bronx Density of Zero Vehicle Households

Travel Patterns

Mode of Travel

Examining travel patterns provides useful insight into the commutes that Bronx residents make today and can help inform where they can be improved. Identifying areas for improvement will help when drawing the new network, and ensure that reducing overall commute times to work via public transit is a priority.

The following chart displays the mode of travel to work for residents in the Bronx. Approximately 44 percent of Bronx residents take the subway, railroad, or ferry boat, 16 percent take the bus, 23 percent drive alone, eight percent walk, five percent carpool, three percent work from home, and one percent take a taxicab, bicycle, or motorcycle.

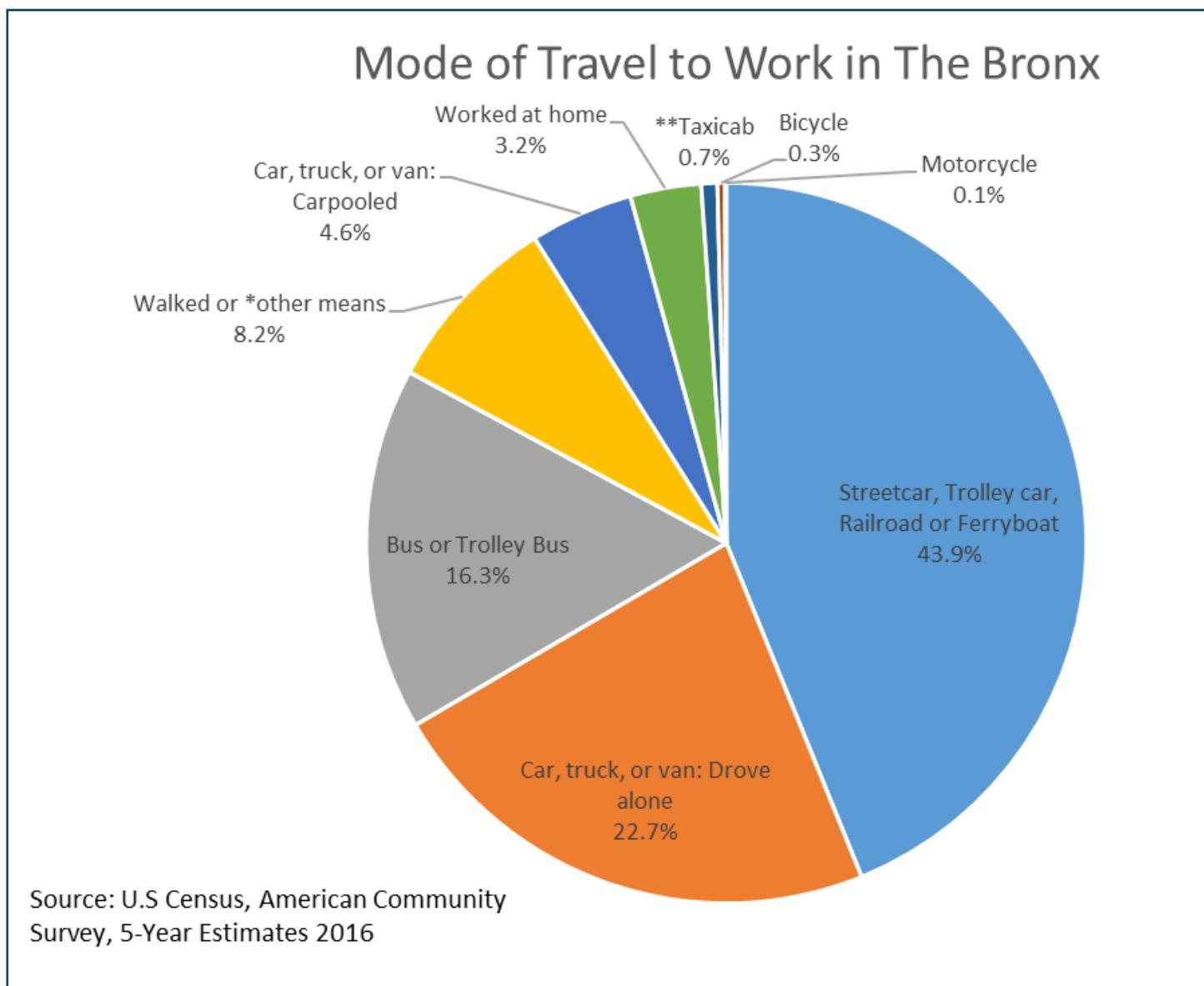


Chart 1. Travel Mode to Work in The Bronx

Travel Time to Work by Mode

The following chart displays travel time to work for Bronx residents based on their mode of choice. For those Bronx residents that take a personal vehicle to work (car, truck, or van), roughly half spend 29 minutes or less on their commute. Of those residents traveling to work by bus, just over half spend 45 minutes or longer on their commute. Similarly, approximately 50 percent of residents traveling to work by subway commute for 60 minutes or more.

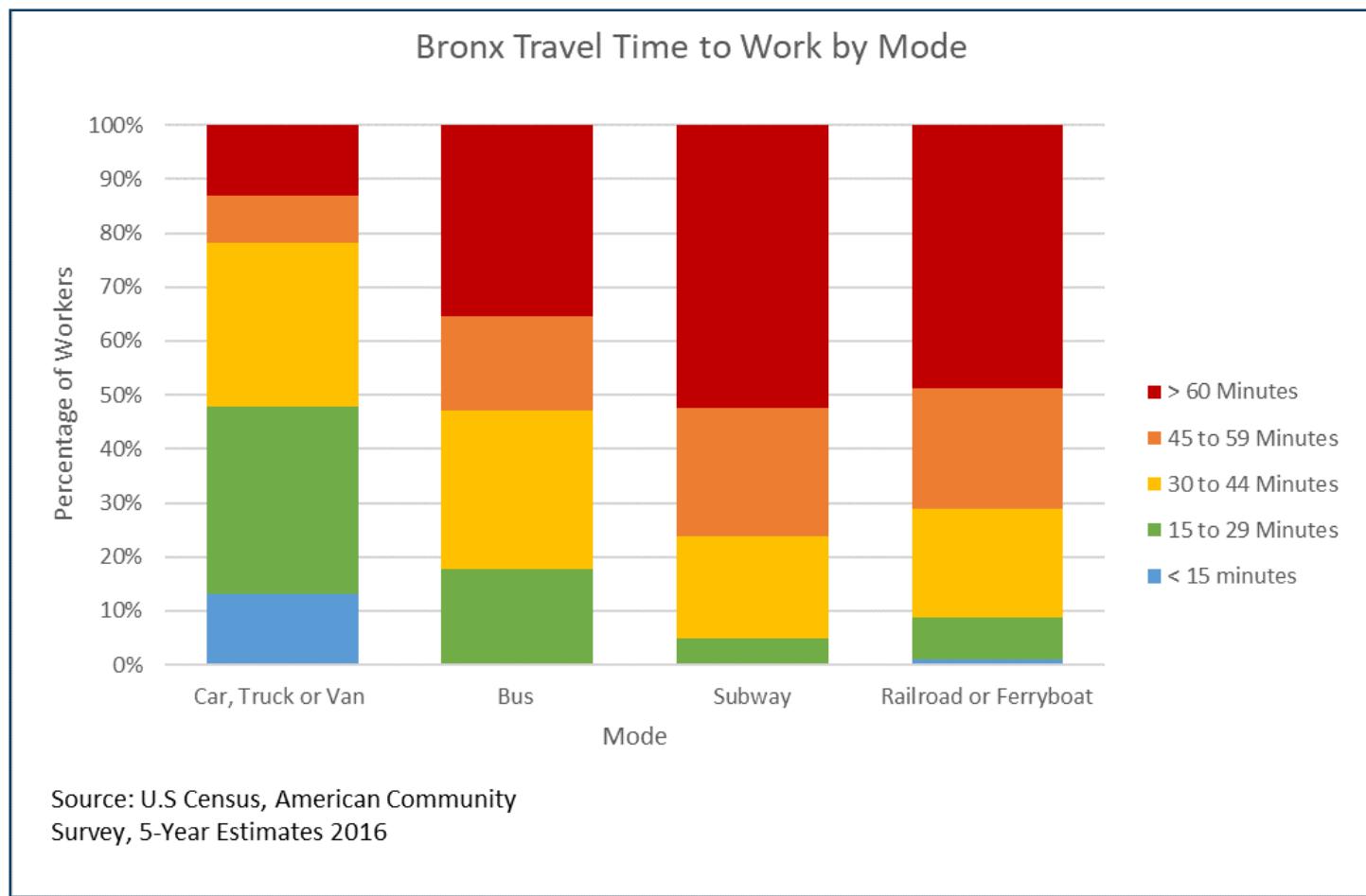
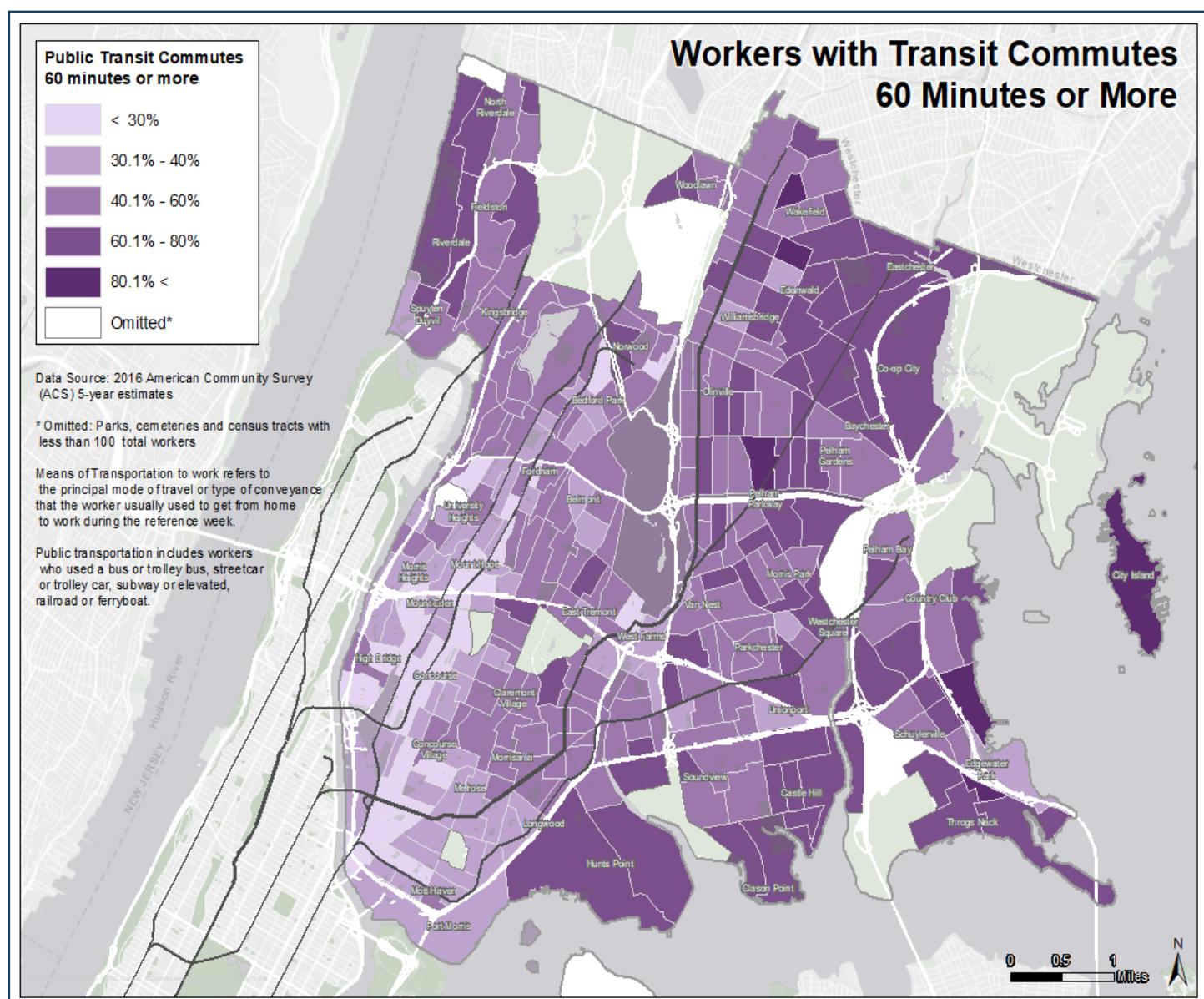


Chart 2. Bronx Travel Time to Work by Mode

Workers with Transit Commutes 60 Minutes or Longer

The following map displays the percent of workers whose commutes to work on public transit are 60 minutes or longer. Public transportation includes workers who used a bus, streetcar or trolley car, subway or elevated, railroad or ferryboat. Overall, most Bronx workers who take public transit to work have a commute that is 60 minutes or more, which will be referred to as a “very long commute.”

The greatest percentage of workers with very long commutes are found in the northern and eastern quadrants of the borough. Specifically, more than 80 percent of workers commuting from Wakefield, Edenwald, Pelham Parkway, City Island, Schuylerville, and Throgs Neck travel 60 minutes or more via public transit.



Map 13. Workers with Transit Commutes 60 Minutes or More

Origin & Destination Analysis

Travel patterns are useful when identifying major travel movements within and outside of the Bronx. Origin-destination data show a high-level view of where people are coming from and where they are going. This points out the most popular travel patterns of commuters in the Bronx, and can inform decision-making when designing a new bus network.

Ridership data and Bus Time GPS data have allowed the MTA to estimate customers' bus stop origins and destinations. This is shown visually in the following map as the average number of weekday bus trips to and from individual neighborhoods. Because there are so many combinations of neighborhood-to-neighborhood links, only those that have an average weekday volume of 1,000 or more are shown in the map. The top 25 bus origin-destination trips are shown in the following table. Note: Transit Analysis Zones (TAZ) are geographic units approximating neighborhood boundaries. In Map 14, lines are drawn between TAZ center-points and not between specific origin and destination points within the TAZ.

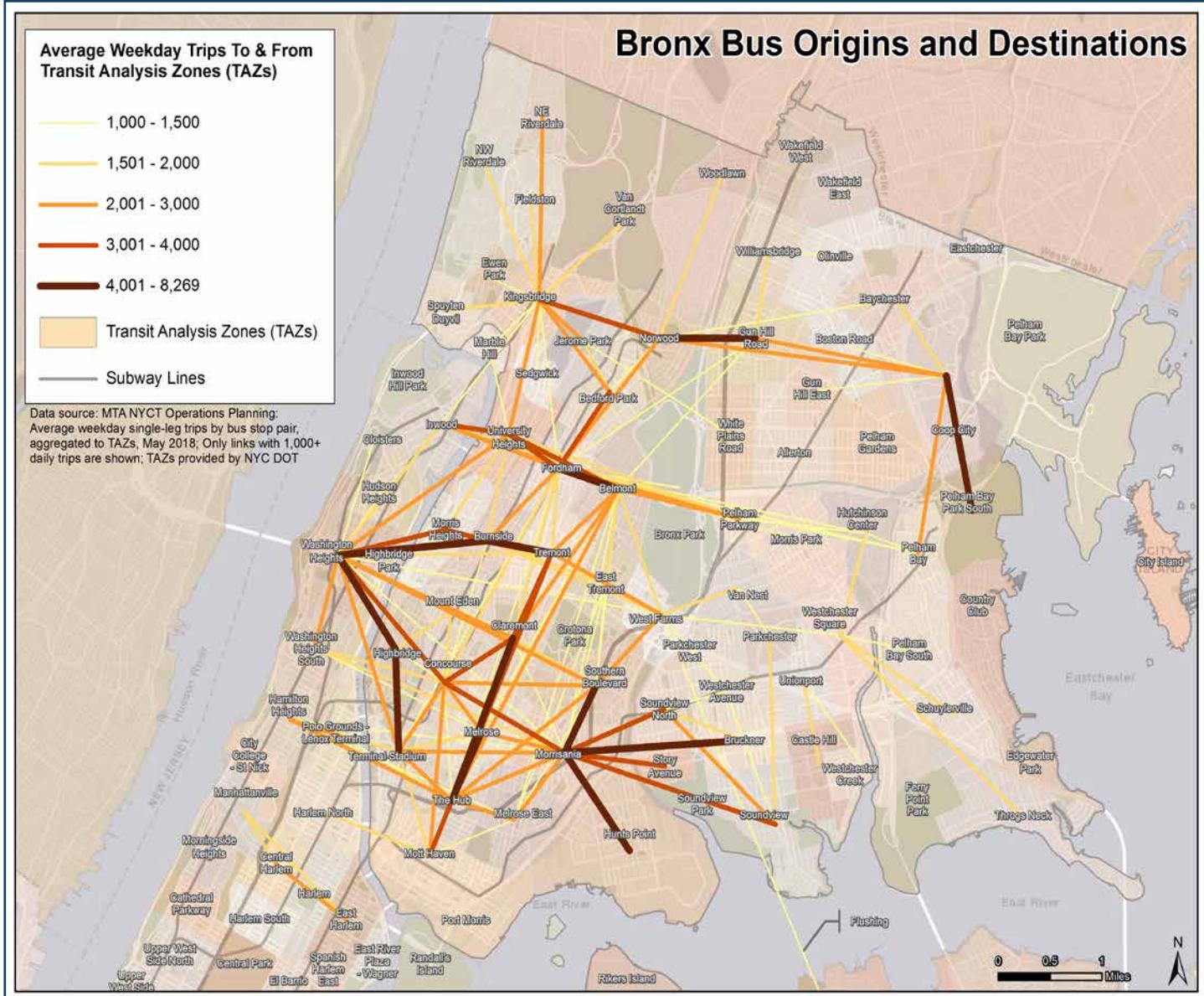
The most popular travel patterns are going to and from high density, high activity areas and the subway. The neighborhoods of Morrisania, Washington Heights, and the Hub are some examples of centers where customers from many different neighborhoods converge and diverge, most likely to transfer to and from the subway. These are represented by the thickest and darkest lines on the map, many of which are horizontal. This may indicate the importance of bus routes to act as east-west feeders into the subway, which is almost a completely north-south system designed to take commuters to Manhattan. But even the lighter, thinner lines can reveal information, perhaps about major bus transfer points or trips with final destinations in the Bronx, rather than Manhattan. While the map is helpful for showing the big picture, this is where diving deeper into the data will be more revealing.

It should be noted that there are limitations to analyzing this information, given that it is currently only available for individual, unlinked trips (where customers get on the bus and where they get off), and it is limited to the current design of the bus network. Many of these trips continue onto the subway or to another bus route, so the full transit journey is not revealed. Additionally, customers are only able to get on and off the bus where the current bus routes go and where the current transit network allows them. Therefore, most of the trips shown are intra-borough (within the Bronx), rather than inter-borough (to Manhattan or Queens). While our planners can visualize where this is happening, they must keep in mind that it might not be the full or preferred travel pattern for customers. Even with these limitations, this dataset can still reveal useful information for the network redesign.

Top 25 Origin-Destination Trips by Transit Analysis Zone (TAZ)		
To/From TAZ	To/From TAZ	Average Weekday Trips
Claremont	The Hub	8,269
Highbridge	Terminal-Stadium	6,450
Melrose	The Hub	6,447
Gun Hill Road	Norwood	6,306
Bruckner	Morrisania	5,661
Burnside	Washington Heights	5,387
Coop City	Pelham Bay Park South	5,291
Hunts Point	Morrisania	5,261
Highbridge	Washington Heights	5,242
Belmont	Fordham	4,326
Burnside	Tremont	4,241
Morrisania	Southern Boulevard	4,220
Inwood	University Heights	3,806
Morrisania	Soundview North	3,622
Concourse	Washington Heights	3,569
Kingsbridge	Norwood	3,421
Claremont	Concourse	3,383
Belmont	University Heights	3,321
Mott Haven	The Hub	3,296
Morris Heights	Washington Heights	3,293
University Heights	Fordham	3,217
Tremont	The Hub	3,209
Morrisania	Concourse	3,183
Flushing North	Flushing	3,177
Story Avenue	Morrisania	3,117

Source: Average weekday single-leg trips by bus stop pair aggregated to TAZs, May 2018

Chart 3. Top 25 Origin-Destination Trips by Transit Analysis Zones (TAZ)



Map 14. Bronx Bus Origins and Destinations

Key Destinations

Key destinations such as educational institutions, hospitals, recreation and tourist facilities, shopping centers, and other large employers are primary drivers of public transit use in any region. Serving customers who need access to these important locations is the prime focus of any public transit network.

The following map displays all key destinations identified within the Bronx. The majority are scattered throughout the borough. The grid nature of the transit network in the Bronx, with the north-south subway lines and the frequent and parallel east-west bus routes (in addition to other key north-south routes), make it possible to connect many destinations with one transfer.

Clusters of many diverse institutions exist on or near Fordham Road and in the South Bronx on 149th and 161st Streets. There is also a concentration of medical institutions in Morris Park along Pelham Parkway and Eastchester Road.

Educational Institutions

Educational institutions are important generators of public transit trips for students, faculty, and staff.

The following map shows all colleges and universities in the Bronx. Some are accessible by subway, but others are farther from a subway station and the only public transit access is by bus.

In addition to colleges and universities, there are numerous middle and high schools within the Bronx, both public and private. Many of these younger students rely on the bus network to get to class on time. Because the vast number of these schools would dominate the map, Map 15 only shows the two specialized high schools located within the borough, which attract students from around the City.

Map 16 displays all secondary schools (middle school and high school). A significant portion of secondary schools are concentrated in the Central Bronx. The density of secondary schools notably decreases in the eastern half of the borough. It is important to note that middle school and high school students typically take the bus to school during the AM peak period, but travel home from school during the midday. This may call for the provision of additional bus service outside the PM peak period.

Hospitals

There are multiple hospitals within the Bronx. As mentioned, the primary cluster is along Eastchester Road in Morris Park, an area not adjacent to the subway. It is important to consider the many hospital staff who do not work a traditional 9-to-5 shift. Therefore, they have different commute times and will be using transit service outside of peak travel hours.

Recreation and Tourism

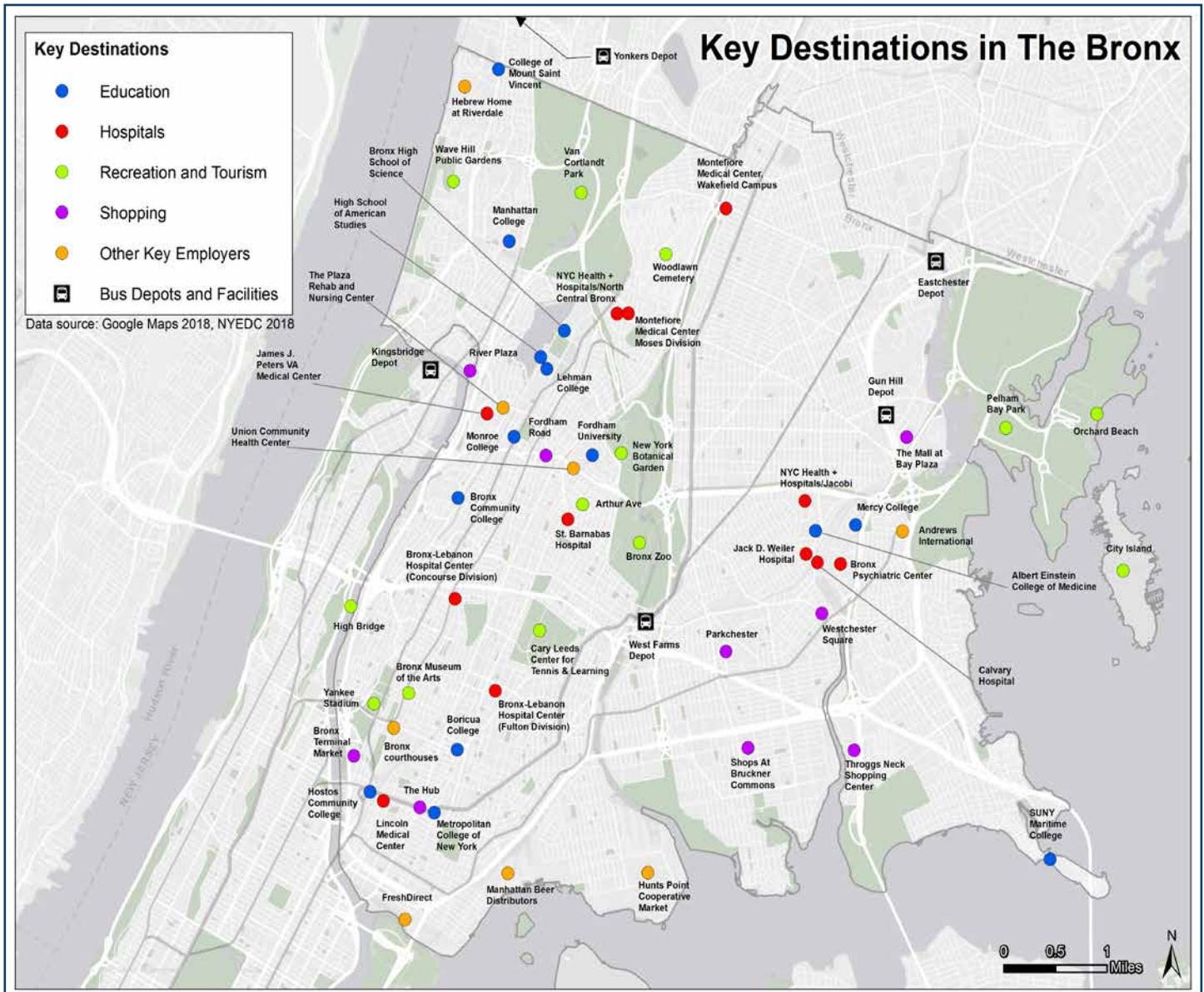
The Bronx contains some of the most-visited tourist destinations within New York City, such as the Bronx Zoo Wildlife Conservation Society, the New York Botanical Garden, the Bronx Museum of the Arts, and Yankee Stadium. There are also some large parks, such as Pelham Bay Park and Van Cortlandt Park. While these parks are destinations in their own right, the large swaths of parkland create challenges for the grid of the bus network, as few streets cut through the entire borough, particularly in the east-west direction.

Shopping

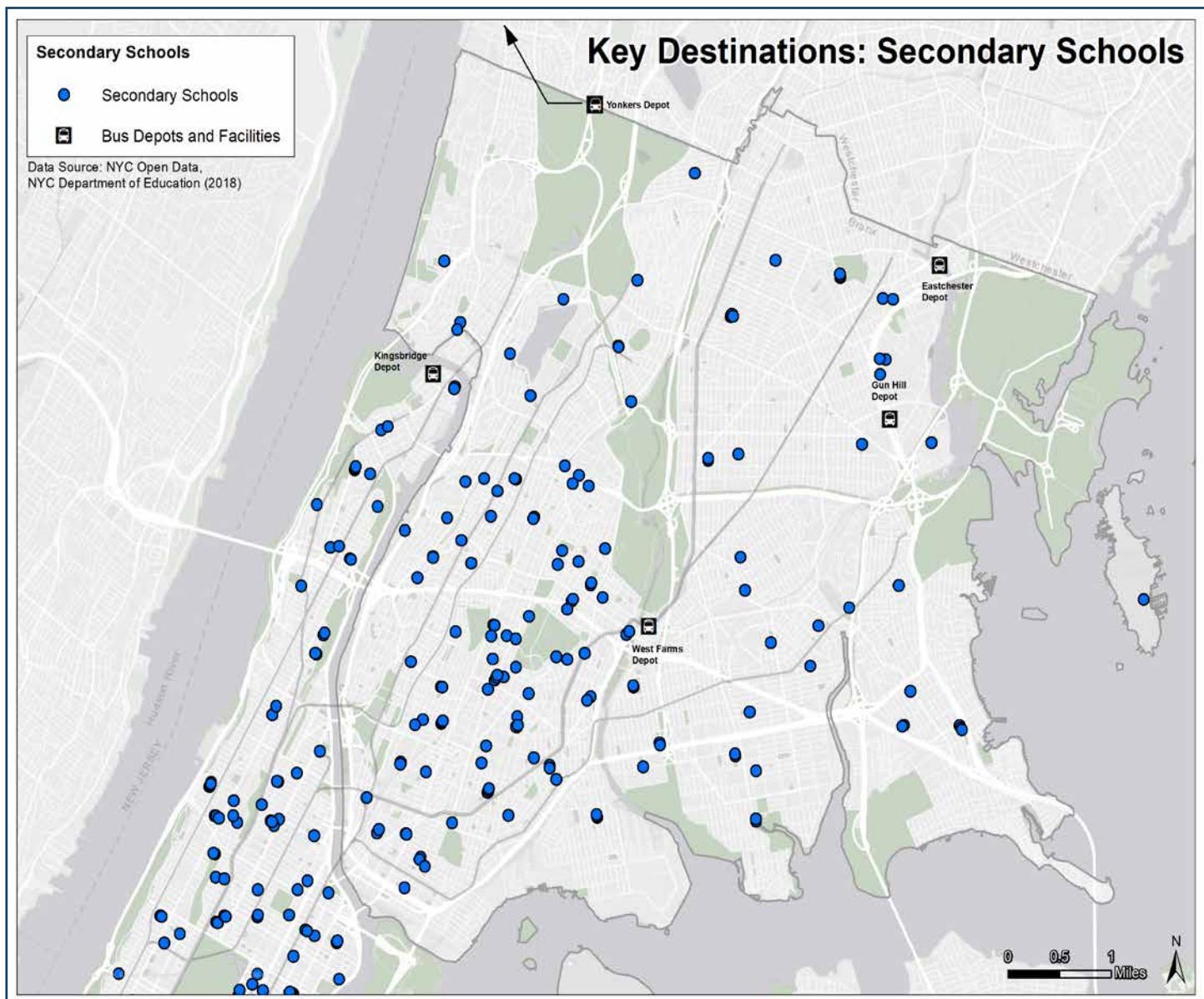
The Bronx contains commercial corridors in every neighborhood, generally on the major streets where bus routes run. Map 14 shows only the larger commercial destinations: shopping malls, many “big box” store locations, and some of the most active commercial corridors. Many of these locations are at nodes in the existing bus network where multiple bus routes connect, providing a confluence of mass transit options that are desirable to developers.

Other Employers

Most of the largest employers in the Bronx are included within the categories described above. Other employers with more than 1,000 employees at a single location are included in the following map, along with a few other notable employers.



Map 15. Key Destinations

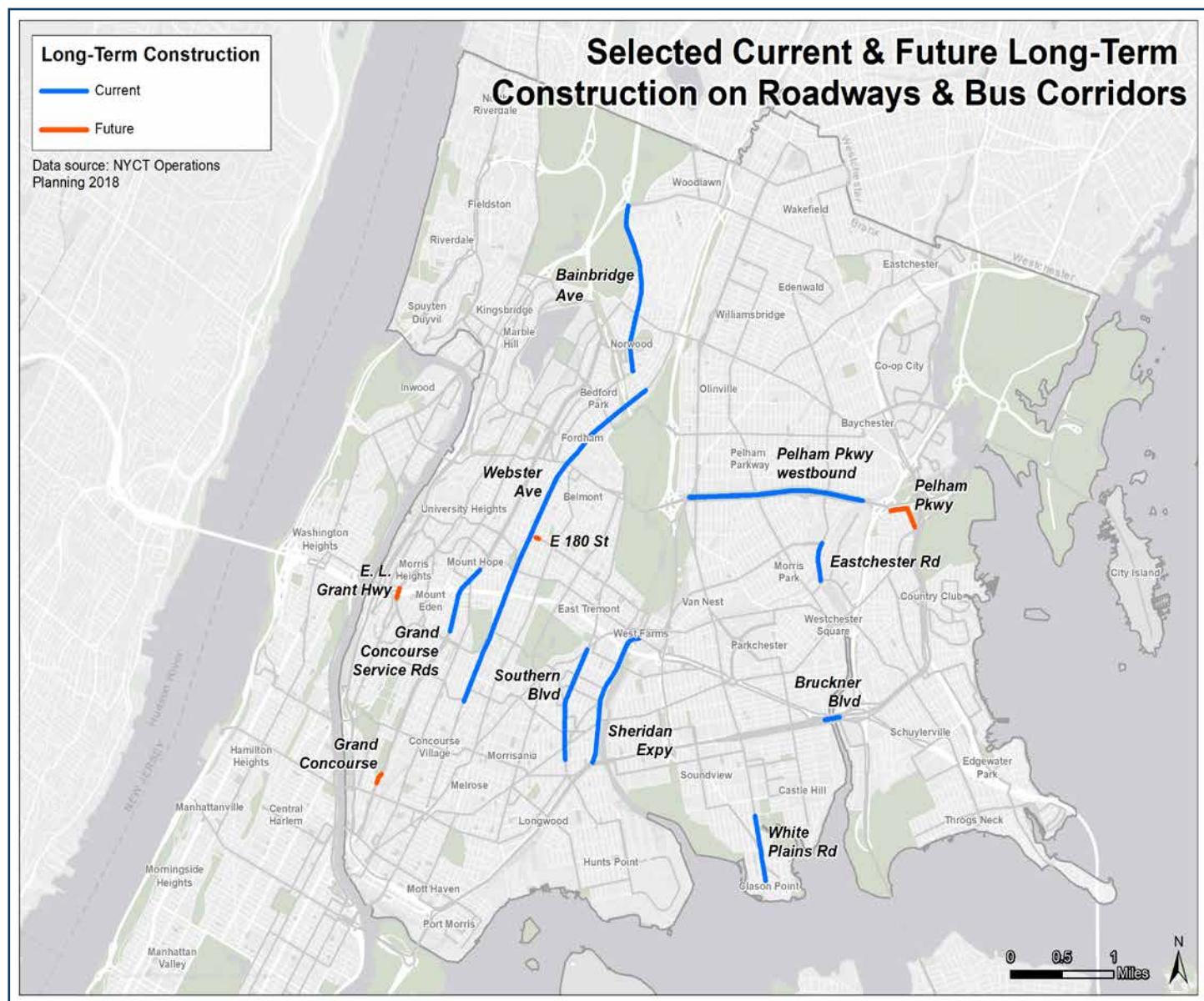


Map 16. Key Destinations – Secondary Schools

Long-Term Construction Projects

It is crucial to identify existing and future major construction projects on roadway and along bus corridors. Doing so provides a strong base map of where service challenges exist and allows for informed decision-making when planning the new bus network.

The following map uses NYCT Operations Planning 2018 data to show current and future long-term construction along major roadways and bus corridors, with blue segments representing current and red future. Note that Webster Avenue and Pelham Parkway (in the southbound direction) are under construction, which likely contributes to ongoing delays of Select Bus Service on both corridors. Furthermore, work on the Sheridan Expressway affects express bus service operating from the Bronx into Manhattan.



Map 17. Selected Current & Future Long-Term Construction on Roadways & Bus Corridors

Future Developments

The Bronx as a whole, and especially the South Bronx, is experiencing a tremendous amount of development that is expected to continue into the next decade. Multiple planned mega-developments will bring new housing, commercial, and cultural centers to the Bronx. The Bronx Bus Network Redesign will find opportunities to improve existing service while anticipating the needs of the future.

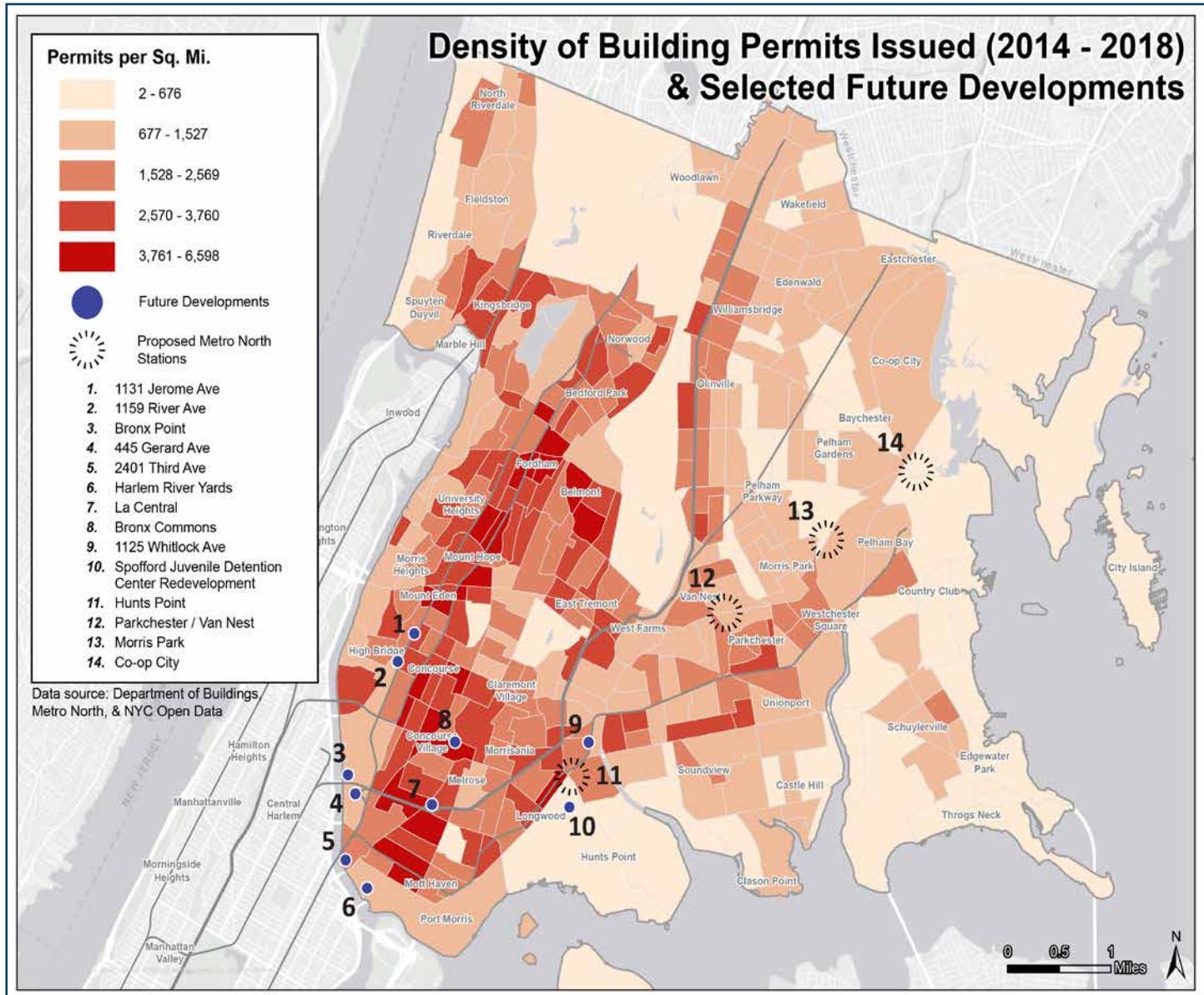
The following chart lists ten of the largest developments planned for the Bronx, combining thousands of new residential units, a soccer stadium, a hip-hop museum, and a host of other amenities. Most developments listed are in the South Bronx, are accessible by subway lines. Important, too, is the implementation of the Department of City Planning's (DCP) Jerome Avenue Neighborhood Plan, which began in 2018. The Plan includes important zoning changes that allow for greater density and more mixed-use development; thus, the listed developments likely precede a period of sustained development taking advantage of new, development-friendly zoning.

The corresponding map shows the ten developments along with the density of building permits issued within the Bronx by the Department of Buildings (DOB) over the last five years. The building permits—ranging from new construction to more basic building alteration—signify investment in an area. The results show a strong correlation with both population and employment density, indicating continued investment in areas that are existing residential and employment centers. The map also includes the locations of the four proposed Metro-North stations, which could attract development interest and provide additional options for commuters in the eastern Bronx.

Significant Future Developments			
Neighborhood	Development	Units	Details
Mott Haven	2401 Third Ave (5)	1,500	<ul style="list-style-type: none"> • Retail facilities • Community facilities
	Bronx Point (3)	1,000	<ul style="list-style-type: none"> • NYC's first hip-hop museum • 1,000 permanently affordable apartments • Waterfront esplanade
	Harlem River Yards (6)	550	<ul style="list-style-type: none"> • NYC's first soccer stadium • 25,000 ft² medical facility • 150,000 ft² retail space • 85,000 ft² park
	445 Gerard Ave (4)	414	<ul style="list-style-type: none"> • 20,000 ft² market • Market-rate and affordable
The Hub	La Central (7)	1,000	<ul style="list-style-type: none"> • YMCA • BronxNet TV studio • Retail facilities • GrowNYC rooftop garden
Hunts Point	Spofford Juvenile Detention Center Redevelopment (10)	740	<ul style="list-style-type: none"> • Office, retail, community facilities • Public open space • All units affordable
Highbridge	1159 River Ave (2)	750	<ul style="list-style-type: none"> • 750,000 ft² across neighboring sites • Parking
Foxhurst	1125 Whitlock Ave (9)	474	<ul style="list-style-type: none"> • Retail, community facilities • All units affordable
Concourse Village	Bronx Commons (8)	305	<ul style="list-style-type: none"> • 14,000 ft² cultural and educational center • 300-seat performance space • Landscaped public plaza • 22,000 ft² retail space
Mount Eden	1131 Jerome Ave (1)	255	<ul style="list-style-type: none"> • 69,000 ft² community space • 19,000 ft² commercial space • All units affordable

Source: Google Maps 2018, NYC Economic Development Corporation 2018

Chart 4. Future Developments



Map 18. Future Developments



Service Analysis

KEY SERVICE ANALYSIS FINDINGS

Network Overview

- ◊ **96.2% of residents live within a quarter-mile (5-minute) trip to a bus stop**
- ◊ **Over half of all bus routes run every 8 minutes or better during peak hours**
- ◊ **Bronx bus routes are the most productive in the city**
- ◊ **Average bus speed: 6.58 MPH**

Average ridership

- ◊ **Weekday: 675,000**
- ◊ **Saturday: 390,800**
- ◊ **Sunday: 296,600**

SERVICE ANALYSIS

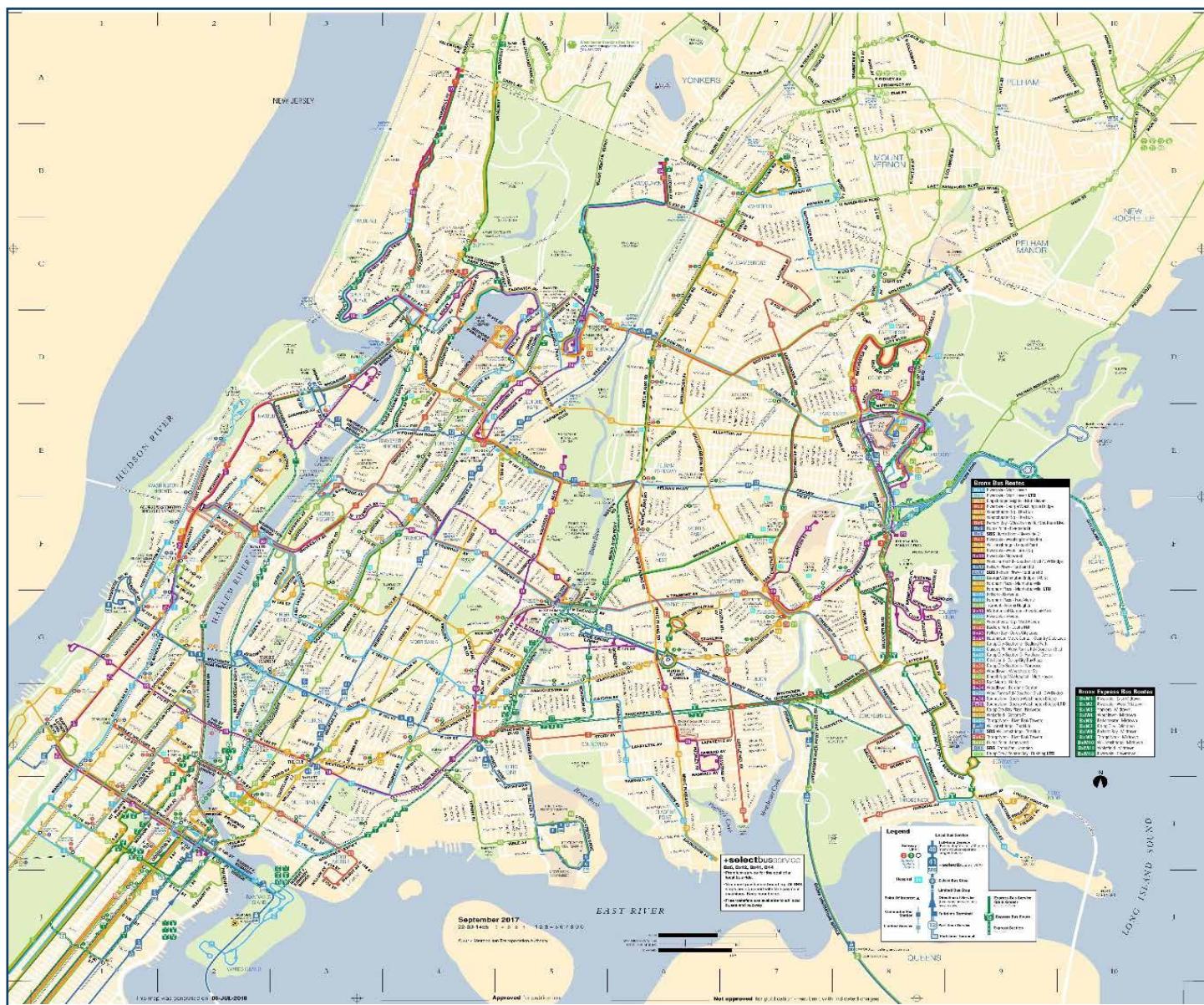
The service analysis provides a summary of the current network within the Bronx, and includes key findings both at the borough-wide and route level. Components of the Service Analysis include: Components of the Service Analysis include:

- ◊ **Network Overview** – describes the existing Bronx network.
- ◊ **Ridership** – provides an in-depth analysis of how customers currently use the Bronx bus network at the borough-wide, route, and stop levels.
- ◊ **Productivity** – measures the ridership of a route or bus network against the level of service provided. Evaluates how well routes perform at the borough-wide and route levels. Bus routes are more productive when they attract more riders per unit of time that they are in service.
- ◊ **Financial Efficiency** – examines the financial efficiency (fare box revenue versus operating costs) of routes at the borough-wide and route levels.
- ◊ **Service Reliability** – assesses the passenger wait times, on-time performance, and customer journey time performance at the borough-wide and route levels.

Network Overview

NYCT provides subway and bus service throughout the Bronx. MTA Bus Company also operates bus service in the borough, primarily express bus service.

Subway service in the Bronx and Upper Manhattan (1 2 4 5 6 A B C D) travels primarily in the north-south direction, providing service to Midtown and Downtown Manhattan with some lines continuing into Brooklyn. Though this allows for efficient travel to the Central Business Districts, many trips cannot realistically be made by subway alone. East-west trips are particularly dependent on the bus network, both within the Bronx and between the Bronx and Upper Manhattan. Trips between the Bronx and Queens, separated by the East River and connected only by three bridges, also rely on bus service or otherwise require an indirect subway trip via Manhattan.



Map 19. Bronx Network Map

NYCT & MTA Bus Company

The scope of the Bronx Bus Network Redesign includes all bus routes operated out of the five Bronx bus depots – Eastchester (MTA Bus), Gun Hill (NYCT), Kingsbridge (NYCT, physically in Manhattan), West Farms (NYCT), and Yonkers (MTA Bus, physically in Westchester County). This encompasses all “Bx” local, limited, and SBS routes, all “BxM” express routes, and the M100 and Q50 routes. Note that the Q44 SBS route has not been included as it operates out of a Queens depot and will be analyzed with the Queens Bus Network Redesign. The scope includes all areas served by these routes, even those physically outside the Bronx. For example, Upper Manhattan is well-served by “Bx” routes crossing the Harlem River into the Bronx.

There are 57 bus routes that operate out of the five Bronx bus depots. These routes operate with a fleet of 928 buses in the peak hour. On an average weekday, these routes operate 8,220 revenue vehicle hours and 60,681 revenue vehicle miles.

The 57 routes can be categorized in the following ways:

- ◊ 44 NYCT routes (including M100)
 - 41 local and/or limited routes
 - 3 SBS routes
- ◊ 13 MTA Bus routes (including Q50)
 - 2 local and/or limited routes
 - 11 express routes

As of January 2019, 29 of these routes operate 40-foot standard buses, 17 operate 60-foot articulated buses, and 11 express routes operate coach buses. A total of 55 routes operate seven days a week, two routes operate weekdays peak hours only (Bx20 and BxM18), and 16 routes operate overnight. There are 14 local and/or limited routes that travel to another borough, specifically 13 Bronx-Manhattan routes (14 if Marble Hill is considered Manhattan) and one Bronx-Queens route (excluding the Q44 SBS as it operates out of a Queens depot).

There are approximately 2,400 bus stops within the Bronx. Approximately 96 percent of Bronx residents are located within one-quarter mile of a bus stop. It should be noted that this includes Access-a-Ride and Westchester Bee-Line bus stops, but excludes bus stops on “Bx” routes physically located outside the borough’s borders.

Bus Rapid Transit

Bus Rapid Transit (BRT) is a “flexible, integrated, high performance transit system with a quality image and a strong identity.” BRT combines the speed, reliability, and amenities of rail-based rapid transit systems with the flexibility of buses. An increasing number of BRT systems are being implemented across the U.S. and the world, but because of BRT’s flexibility, each BRT application is planned and designed to meet the specific needs and characteristics of its market. BRT systems typically incorporate the following package of components appropriate to the markets they serve and the physical environment: high capacity vehicles, improved, faster fare collection, attractive stations, and highly visible bus lanes. Regardless of how these elements are combined, all BRT systems emphasize speed, reliability, and identity.

Select Bus Service (SBS) is New York City's version of BRT: an improved bus service that offers fast, frequent, and reliable service on high-ridership bus routes. Completed in much less time and at much lower cost than subways – which take years to construct and require expensive up-front infrastructure and equipment – SBS offers a more immediate improvement to New York City's transit network benefitting the entire city through improved mobility, reduced greenhouse gas emissions, and reduced congestion.

Designed to provide rail-like service, SBS uses techniques and technologies such as dedicated bus lanes, off-board fare collection, and transit signal priority to improve the quality and performance of transit and, increase mobility and access in the neighborhoods that it serves. SBS projects are also designed to make bus service easier to use, through features like bus bulbs (higher-quality bus stops with widened sidewalks), high-quality passenger information, and overall attention to pedestrian and vehicular safety.

There are currently four SBS routes operating in the Bronx:

- ◊ The Bx6 SBS service is an important interborough route that serves nearly 25,000 daily riders. SBS service began on this route on September 3, 2017, giving riders another option to navigate the South Bronx and Upper Manhattan. The Bx6 is a vital crosstown route that connects riders to multiple subway lines and bus routes in both the Bronx and Manhattan.
- ◊ The Bx12 SBS service launched on June 29, 2008 as the City's first SBS route. The Bx12 SBS replaced the Bx12 Limited service from the Inwood neighborhood in Manhattan to Co-Op City in the Bronx. Since SBS service was implemented on Fordham Road, travel time has decreased by 20 percent. The faster service has spurred a seven percent ridership increase on the Bx12 (including the SBS and local service) from October 2007 to October 2008.
- ◊ The Bx41 SBS service began on June 30, 2013. The route runs along Webster Avenue, a major residential and commercial corridor in the Bronx that has been historically underserved by transit. The route is currently providing faster and more reliable service for more than 20,000 daily Bx41 riders.
- ◊ The Q44 SBS service began on November 29, 2015. The route runs from the Bronx Zoo, over the Bronx-Whitestone Bridge to Flushing, Queens, and to Downtown Jamaica via Main Street. The route provides a vital link between the Bronx and growing job centers in Queens, carrying over 27,000 passengers per day, and connecting the **2 5 6 7 E F**, and **J Z** subway lines, dozens of other bus routes, as well as two Long Island Railroad stations and the AirTrain to JFK Airport.

Hudson Rail Link & Westchester BeeLine

Two other agencies also operate public bus service within the Bronx. Hudson Rail Link is operated by a contractor for Metro-North Railroad. It connects the Riverdale and Spuyten Duyvil stations on the Hudson Line to nearby neighborhoods. As of 2014, more than half of daily Spuyten Duyvil commuters arrived using the bus. There are three bus routes that serve each of the two rail stations, plus a fourth that runs off-peak that covers nearly all bus stops from the other three routes combined. Buses operate on weekdays only, meeting every train except during overnight hours. The fare is the same as the MTA local bus fare and is payable with MetroCard or coins.

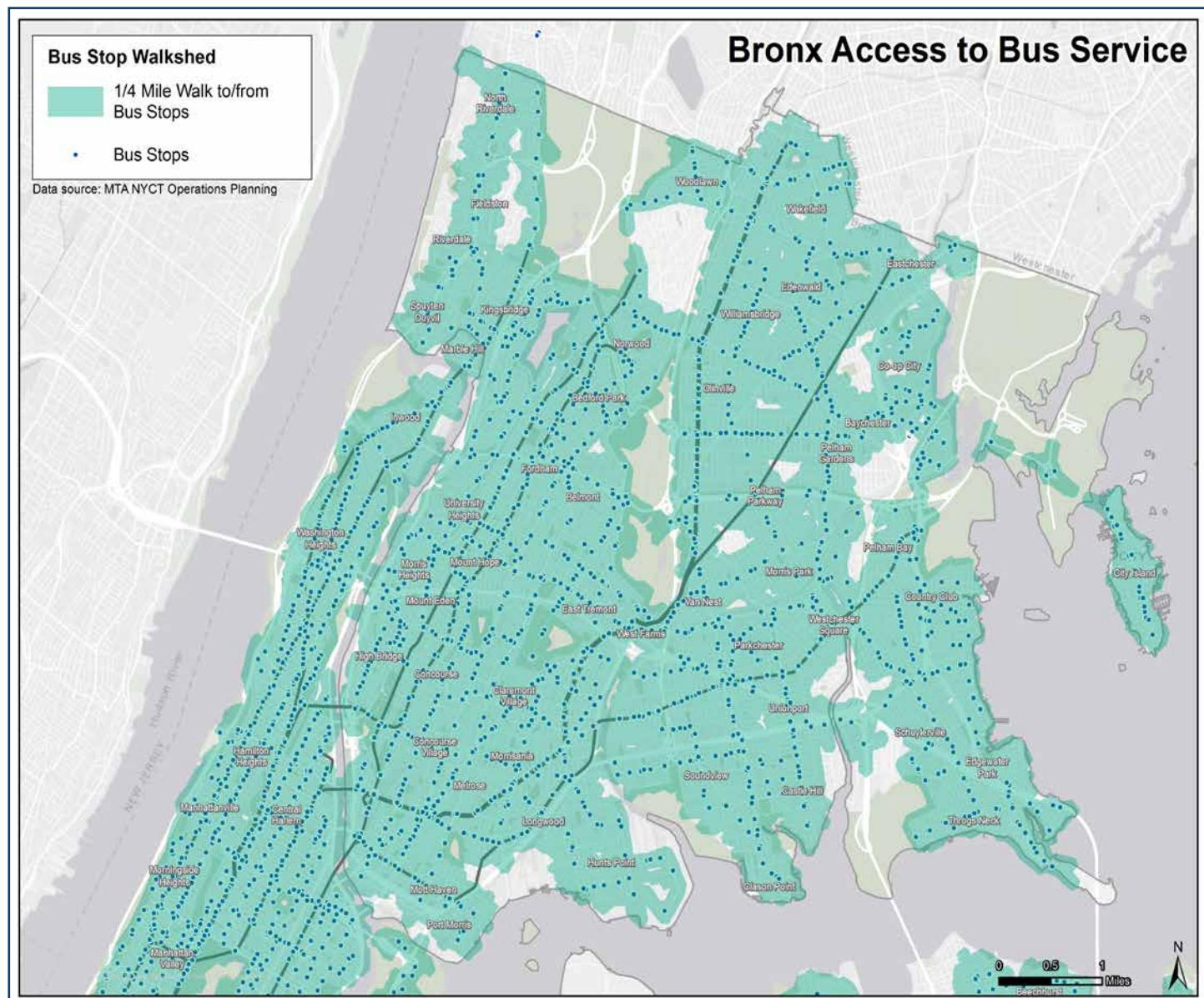
Contractors for Westchester County operate the Westchester Bee-Line. The Bee-Line operates some routes in the Bronx which provide service to/from subway stations, but generally not within the borough. Bee-Line uses the same transfer policy as the MTA: one free transfer to an MTA bus or subway with a Pay-Per-Ride MetroCard, one free paper transfer to an MTA bus with coins.

Service Coverage

Most residents of the Bronx have access to some level of bus service. Access to bus service is measured by the percentage of residents that have a bus stop within a quarter mile of their house. While it is generally accepted that most people are willing to walk or travel up to a quarter mile to get to a bus stop, others may be willing to travel even further, especially for very frequent bus service.

Bronx Access to Bus Service

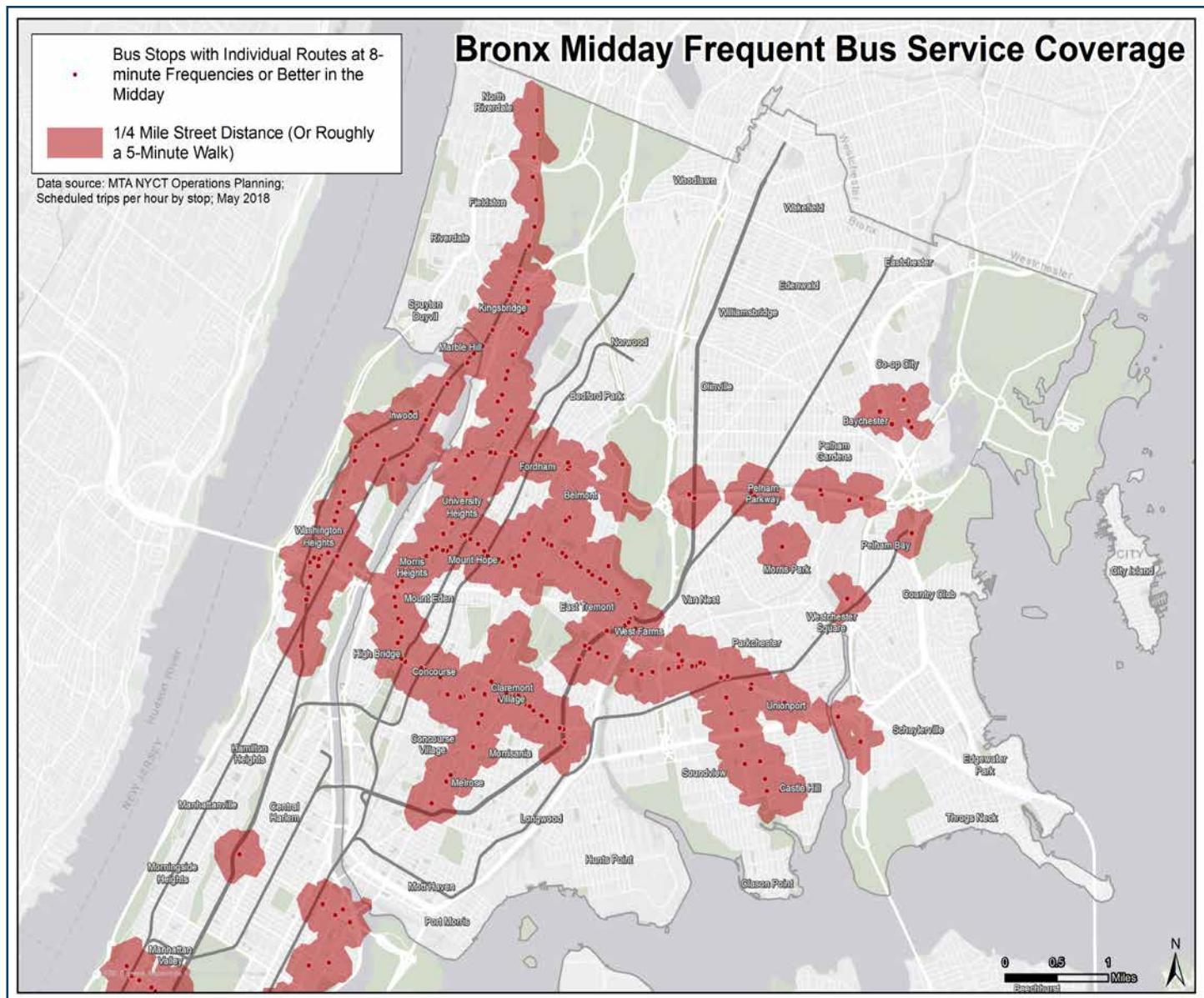
The following map shows the quarter mile walking distance (or walkshed) to and from all bus stops in the Bronx. This distance is not calculated “as the crow flies,” but based on the actual street network. Therefore, it captures the actual street distance an individual would travel to or from a bus stop. As shown, most of the Bronx is covered, except for a few small gaps, most of them parks or cemeteries. When overlaid with Census data, this translates to an estimated 96.2 percent of the total Bronx population that has access to a bus stop within a quarter mile.



Map 20. Bronx Access to Bus Service

Bronx Access to Frequent Bus Service (Weekday Midday)

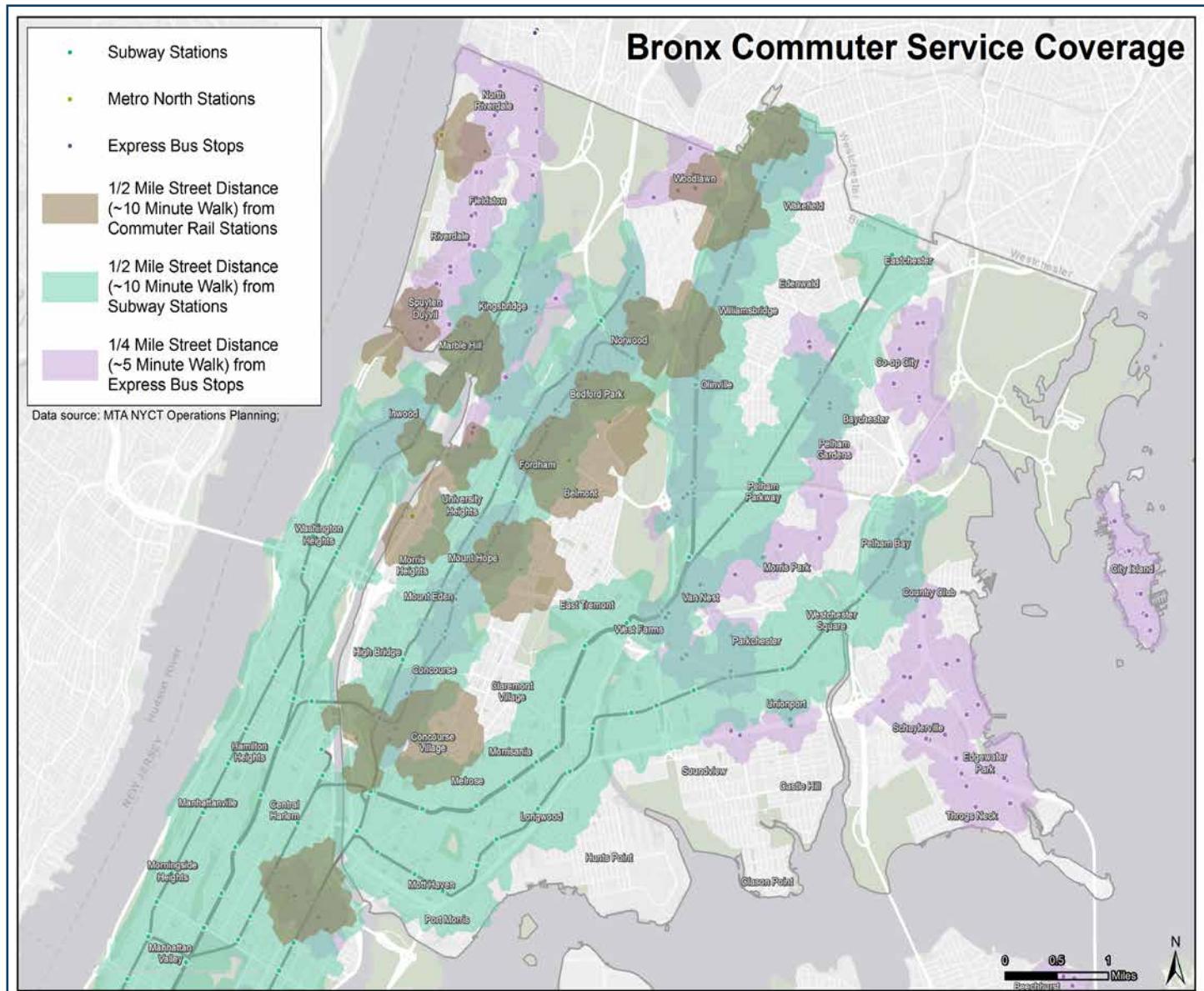
The following map displays those bus stop that, on weekdays, have individual routes at eight-minute frequencies or better during midday. The red areas display the quarter-mile street distance or roughly five-minute walk to access service. In the midday, approximately 40 percent of residents in the Bronx live within five-minute walk of a bus stop with frequent midday service.



Map 21. Bronx Midday Frequent Bus Service Coverage

Bronx Commuter Service Coverage

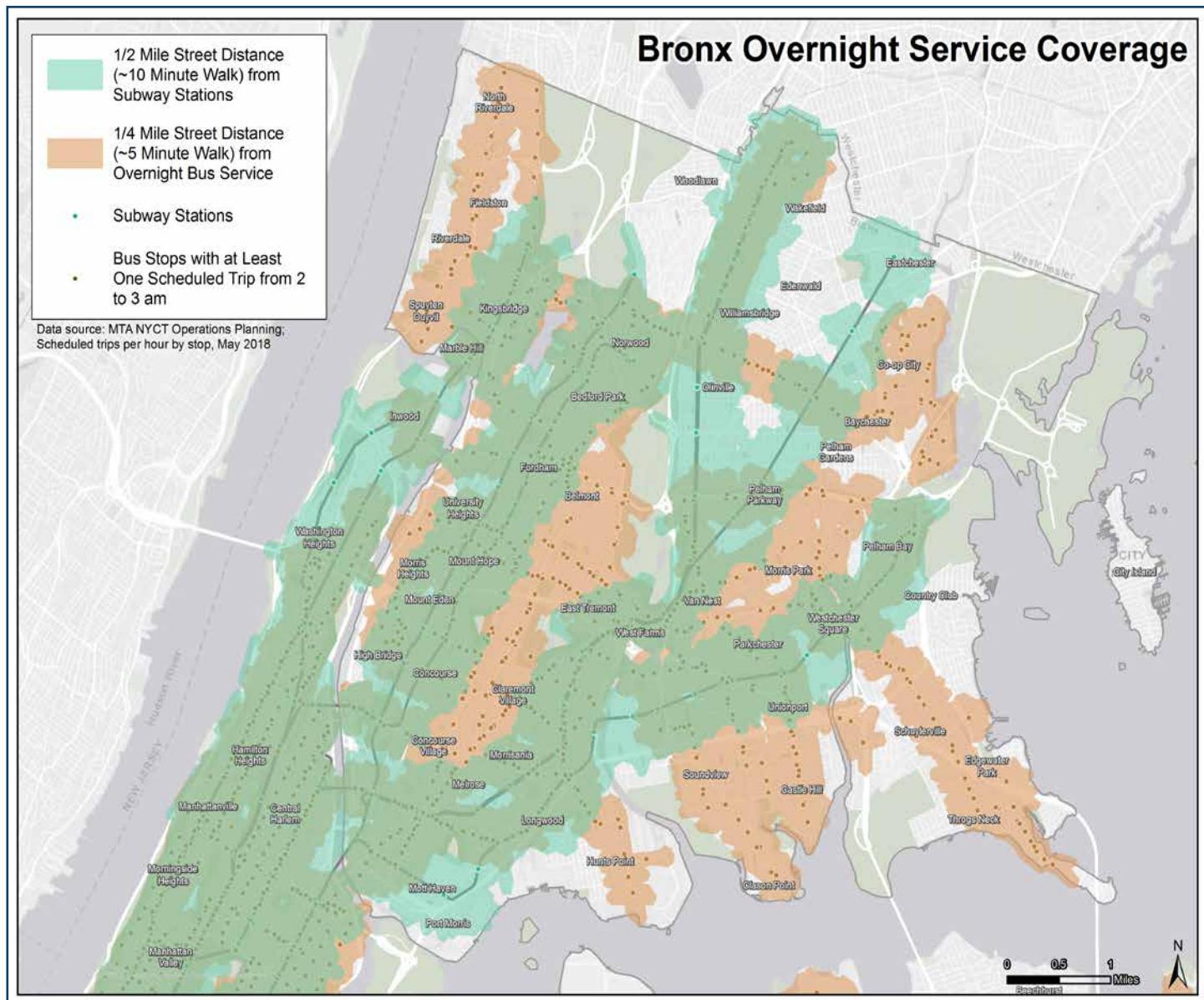
The following map displays commuter service coverage in the Bronx. The brown areas represent a half-mile street distance or roughly 10-minute walk, to access Metro North commuter rail service. The light green areas display half-mile street distance to subway stations. The light purple areas represent quarter-mile street distance, or roughly five-minute walk to express bus stops. Nearly 82 percent of residents in the Bronx live within a quarter and half-mile walking distance of express bus stops and subway and commuter rail stations.



Map 22. Bronx Commuter Service Coverage

Bronx Overnight Service Coverage

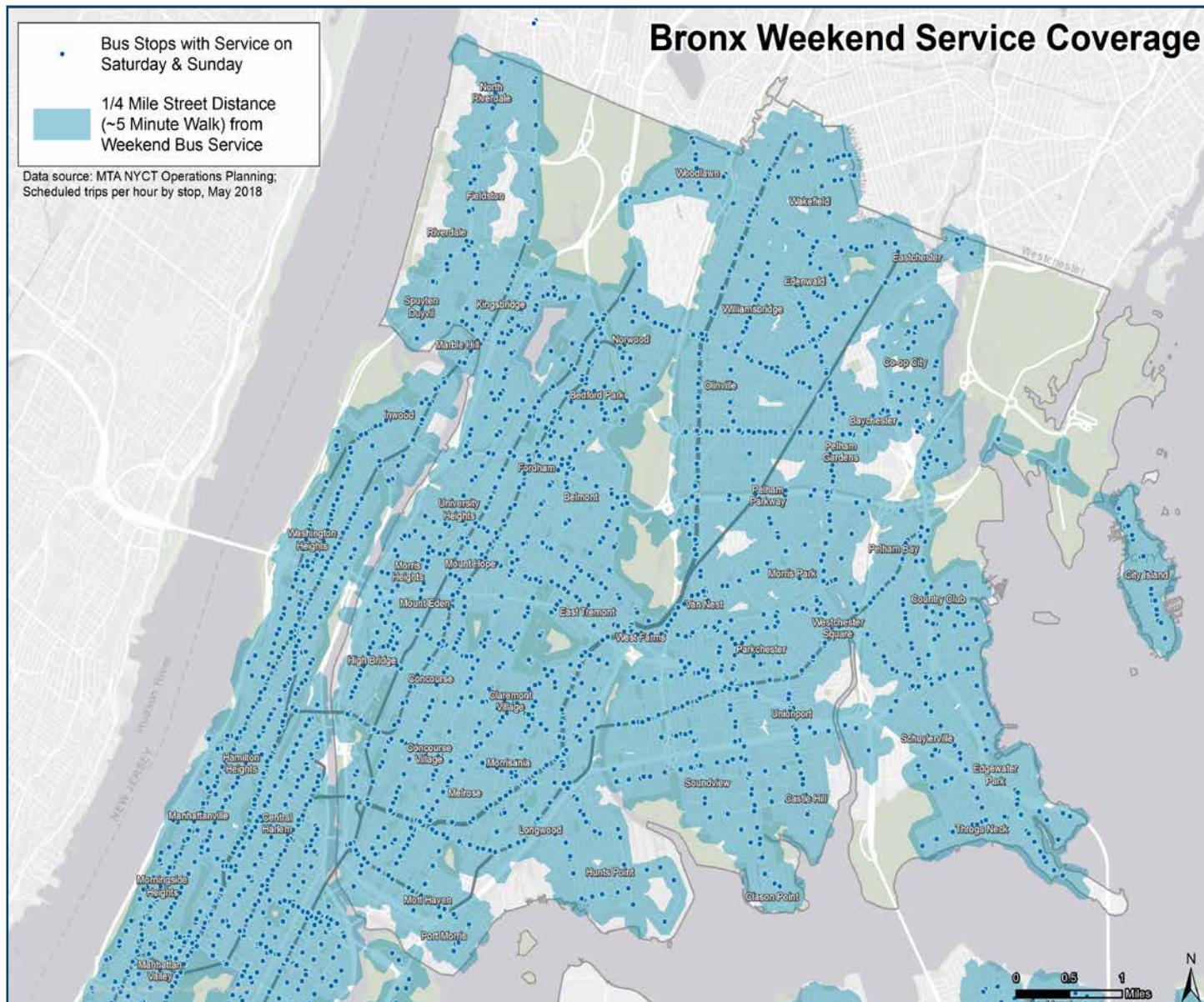
The following map displays overnight service coverage in the Bronx. The light green areas display half-mile street distance to subway stations. The light orange areas represent quarter-mile street distance, or roughly five-minute walk, to overnight bus service. Approximately 90 percent of residents in the Bronx live within a quarter-mile walking distance of overnight bus service and subway stations.



Map 23. Bronx Overnight Service Coverage

Bronx Weekend Service Coverage

The following map displays bus stops with service on Saturday and Sunday in the Bronx. The blue areas show quarter-mile street distance, or roughly five-minute walk, to weekend bus service. Approximately 90 percent of residents in the Bronx live within a quarter-mile walking distance of weekend bus service.



Map 24. Bronx Weekend Service Coverage

Recent & Ongoing Bus Service Changes

The following list details changes to Bronx bus service since 2014:

◊ **September 2014**

Bx24 extended to Hutchinson Metro Center from Westchester Square

◊ **September 2015**

- Weekend service on the Bx5 extended from Pelham Bay Park to the Bay Plaza Shopping Center to provide a one-seat ride for South Bronx customers who did not have direct access to the Plaza
- Additional trips were added to the Bx12 leaving the Mall at Bay Plaza at 12:40 am and 1:20 am every night

◊ **June 2016**

- Bx24 span increased to 24 hours for service between 911 Call Center and the Pelham Bay Park **6** train station

◊ **July 2016**

- Bx10 was rerouted via Paul Avenue away from Goulden Avenue and West 205 Street

◊ **August 2016**

- Westchester Square bus stop on the Bx31 was reorganized to improve on time departures

◊ **December 2016**

- A bus stop on the Bx29 moved to accommodate a new right turn lane from Co-Op City Boulevard on to Bartow Avenue
- Bx29 and Bx38 stop moved back 150 feet and the layover moved to Bartow Avenue which required the existing bus poles to be shifted

◊ **March 2017**

- Bx21 layover and first southbound stop returned to the former layover/first stop on Westchester Avenue; this caused the Bx4 and the Bx4A to use the vacated Bx21 stop on Lane Avenue as the last northbound stop and spillover layover space

◊ **July 2017**

- Bx29 increased overnight service to and from City Island
- Bx29 span of service increased by one hour for weekdays, Saturdays, and Sundays for the entire route

◊ **September 2017**

- Bx6 SBS route was added to the existing Bx6 Local route; existing local service was split into SBS and local service

◊ **August 2018**

- Select Bx27 trips were extended to a part-time terminal at the Soundview Ferry Terminal

In addition to the changes listed above, the 2014 “Review of Bus Service & Performance in Co-Op City with Recommendations for Service Enhancements” provided the following route recommendations specifically for Co-Op City in the Bronx:

- ◊ Modify Bx23 route pattern to operate one uniform service pattern all day, discontinuing the current weekday peak period variants. With the elimination of the peak period variants, the Bx23 would travel in both directions along a single route path serving all sections of Co-op City and the Pelham Bay Park 6 train station at all times during its scheduled service.
- ◊ Install a new Q50 limited stop on Co-op City Boulevard at the eastern intersection with Dreiser Loop in both directions to provide additional travel options for residents in the area.
- ◊ Install a new local Bx23, Bx26, Bx28, Bx30 bus stop in both directions on Asch Loop at Adler Place to provide improved access to Bartow Mall, Asch Loop and parts of Bellamy Loop.
- ◊ Reroute Bx28 through Asch Loop in both directions to provide additional travel options between Asch Loop and Section 5, Gun Hill Road, and points west.
- ◊ Schedule additional trips for most routes that serve Co-op City to meet growing ridership, which will incidentally reduce waiting time (Weekday service adjustments were implemented on the Bx12, Bx12 SBS, Bx26, Bx28/38, Bx29, Bx30 and Q50 in spring 2014).
- ◊ Continue to adjust scheduled running times on the Bx12, Bx12 SBS, Bx28/38, Bx29 and Bx30 to improve schedule adherence.
- ◊ Adjust scheduled running time on the BxM7 to improve schedule adherence (completed for winter 2014).

Service Levels (Frequency)

Consistent, frequent bus service throughout the day defines freedom for many residents of the Bronx. It provides customers with the ability to spontaneously choose when they travel, rather than letting the schedule decide for them. Less-frequent service can require customers to consult a schedule and time their departure, rather than having the liberty to step outside and expect a bus within a short amount of time.

The following charts display route frequencies by hour throughout the entire day for weekdays, Saturdays, and Sundays, with varying colors to represent the frequency. All 57 Bronx bus routes are shown, as well as the Q44 SBS, a Bronx-to-Queens route. Routes that share a corridor for a substantial portion of their alignment (e.g. Bx1 and Bx2) are also shown together, to display what the frequency and span are like in the shared section of the corridor.

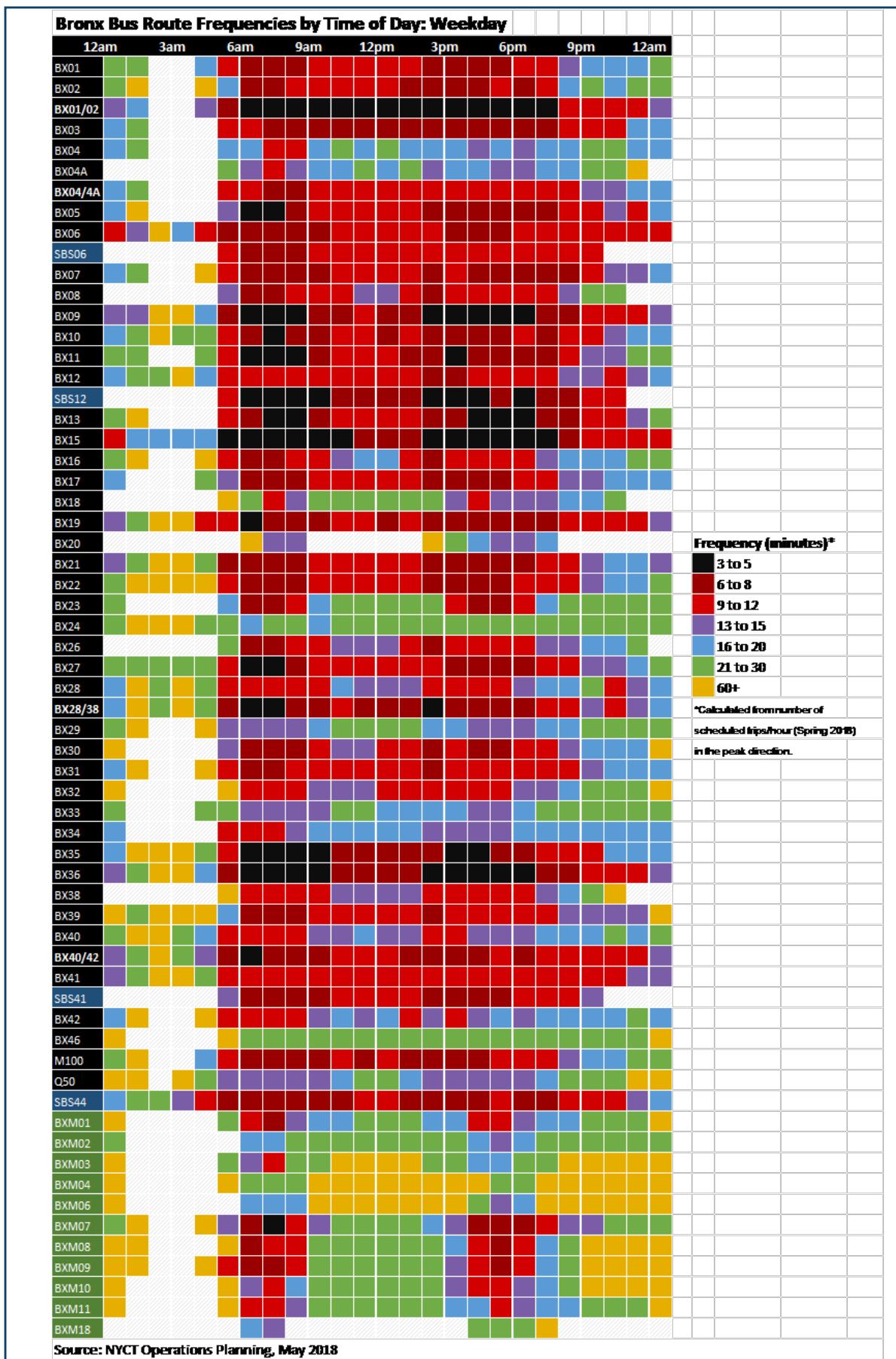


Chart 5. Bronx Bus Route Frequencies by Time of Day: Weekday

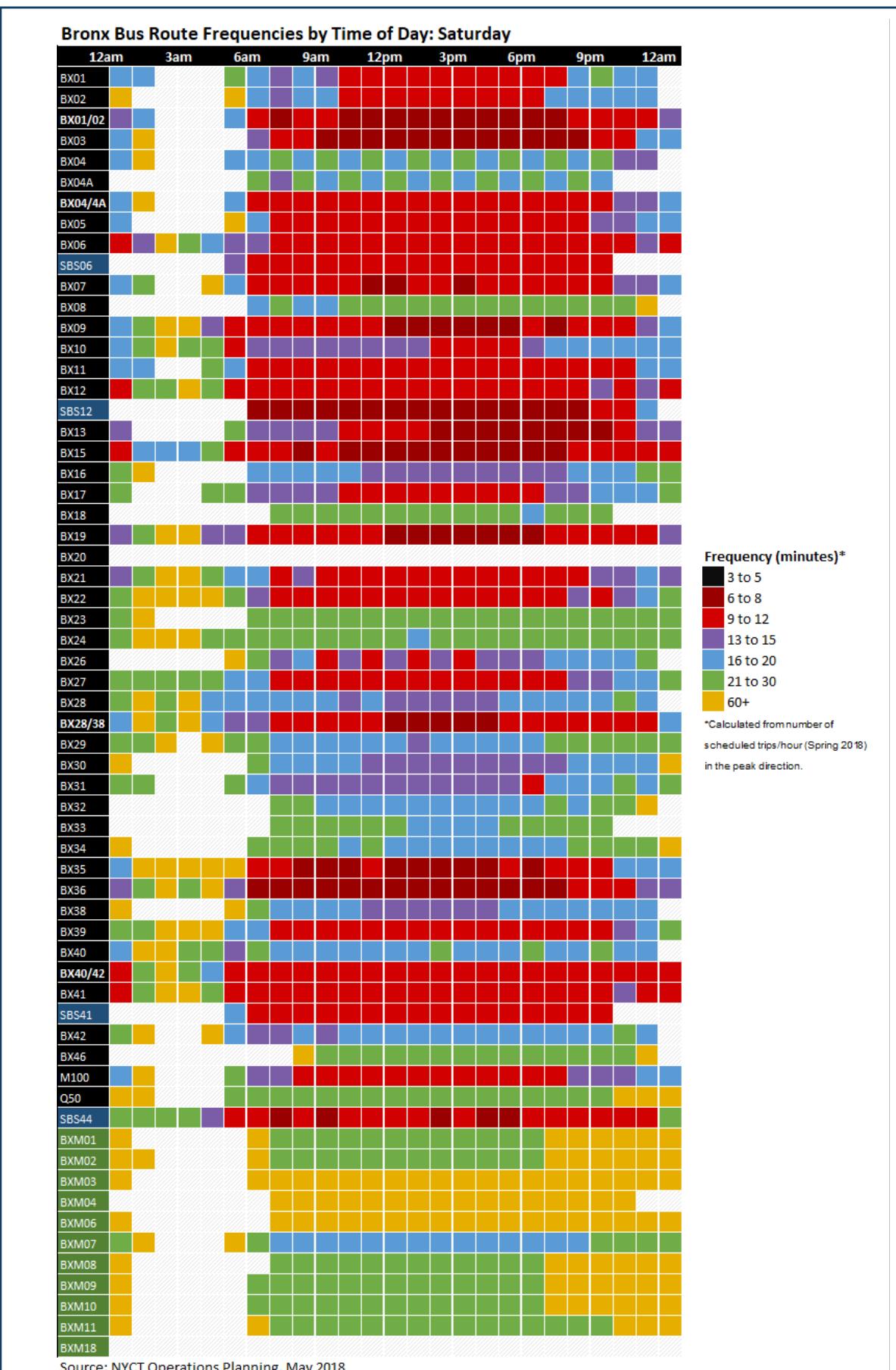
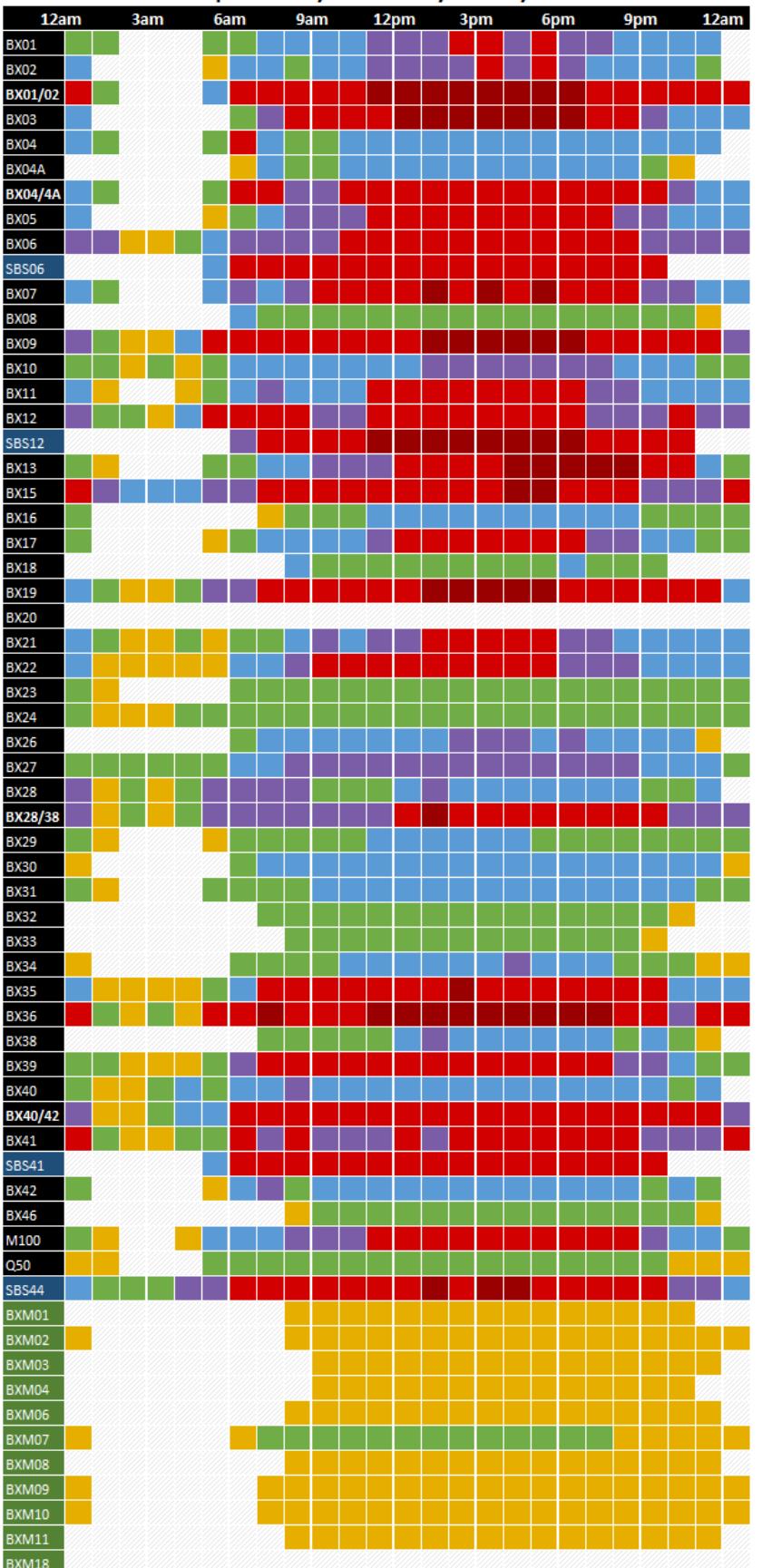


Chart 6. Bronx Bus Route Frequencies by Time of Day: Saturday

Bronx Bus Route Frequencies by Time of Day: Sunday



Source: NYCT Operations Planning, May 2018

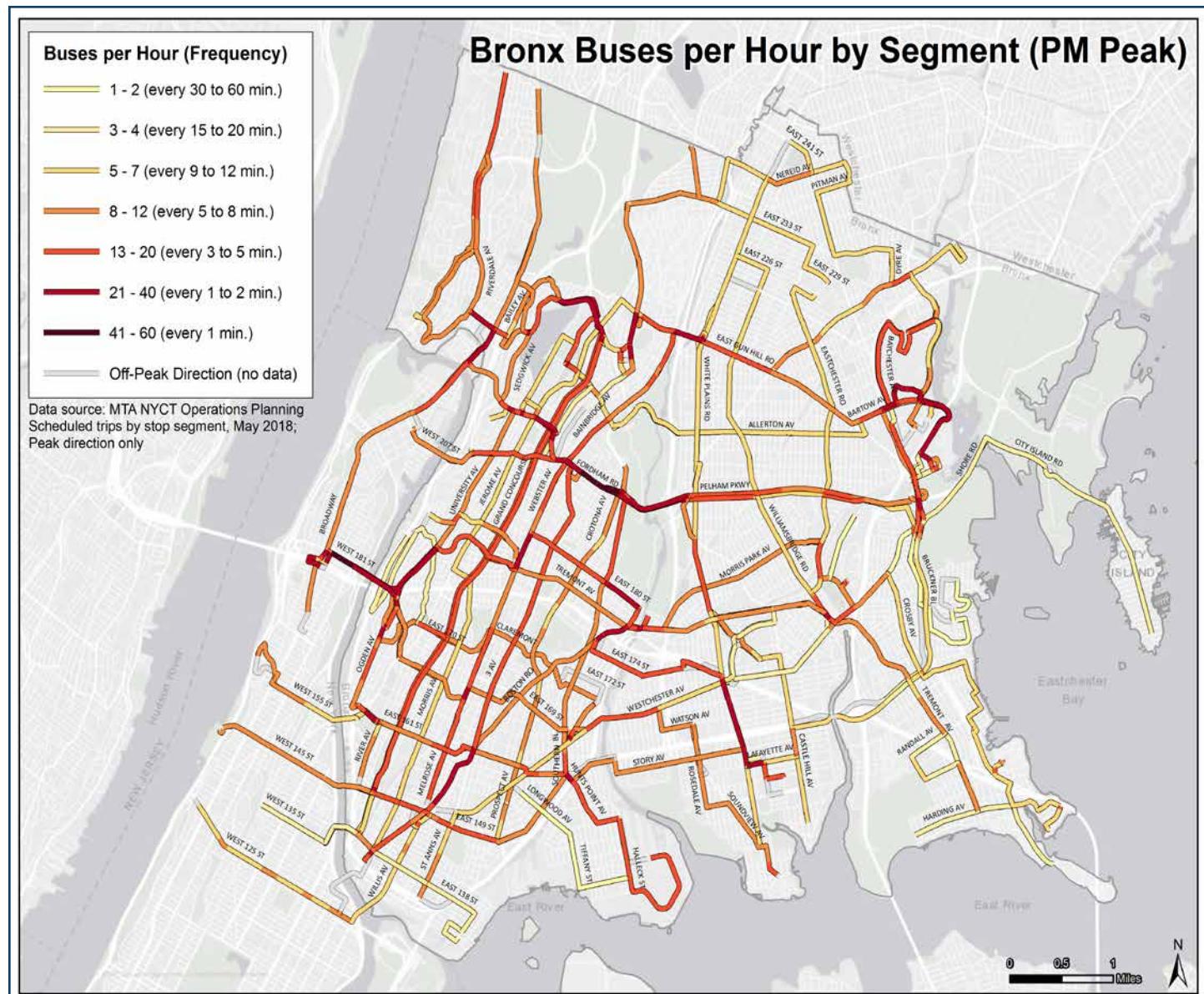
Chart 7. Bronx Bus Route Frequencies by Time of Day: Sunday

Weekday Peak Service

Any shade of black, red, or purple on the chart indicates a frequency of at least 15 minutes during that hour. Most Bronx bus routes are very frequent (i.e. 8 minutes or better) in the peak periods, with the AM peak from 7am to 9am and the PM peak from 4pm to 7pm. Many routes remain frequent throughout most of the day. Apart from five routes, every local and SBS route is running at least a 15-minute frequency by 6am, and over half of all routes operate at least every 8 minutes in the peak times.

The following map provides additional insight regarding service frequency on weekdays. It displays the number of buses per hour by segment during the PM peak period. Segments that are dark red and very dark red indicate buses that are coming every one-minute to every two-minutes. Conversely, segments that are shown as light yellow indicate that buses are coming every 30 to 60 minutes.

Segments that experience the greatest volume of buses within an hour include W 181st Street (University Avenue to Broadway) and Fordham Road (Crotona Avenue to Webster Avenue). Highly frequent segments are found within the central Bronx and Co-op City. Segments with a bus every 30 to 60 minutes are present in the South Bronx along Longwood Avenue and in the eastern quadrant of the Bronx, serving Country Club and Hutchinson Metro Center.



Map 25. Bronx Buses per Hour by Segment (PM Peak)

Weekday Midday Service

While some routes taper off in the midday and are less frequent than every 15 minutes, there are still 34 routes operating at least a 15-minute headway at noon. The most intense frequencies (anything in the 3- to 8-minute range) occur mostly during the AM and PM peak periods. Most service of this caliber starts around 6am and transitions to lower frequencies in the midday and evening. However, the following routes are consistent throughout the peaks and the midday: Bx3, Bx9, Bx12 SBS, Bx15, Bx35, and Bx36 (and the combined Bx1/Bx2 and Bx28/Bx38). These routes are direct, providing key connections to subway stations on main corridors.

There is not as much demand for midday service as there is during peak periods. As a result, the productivity level for most routes decreases during the midday. A consistent, all-day, frequent schedule allows more freedom for a customer to travel and makes service more attractive, especially for those who do not have typical work hours.

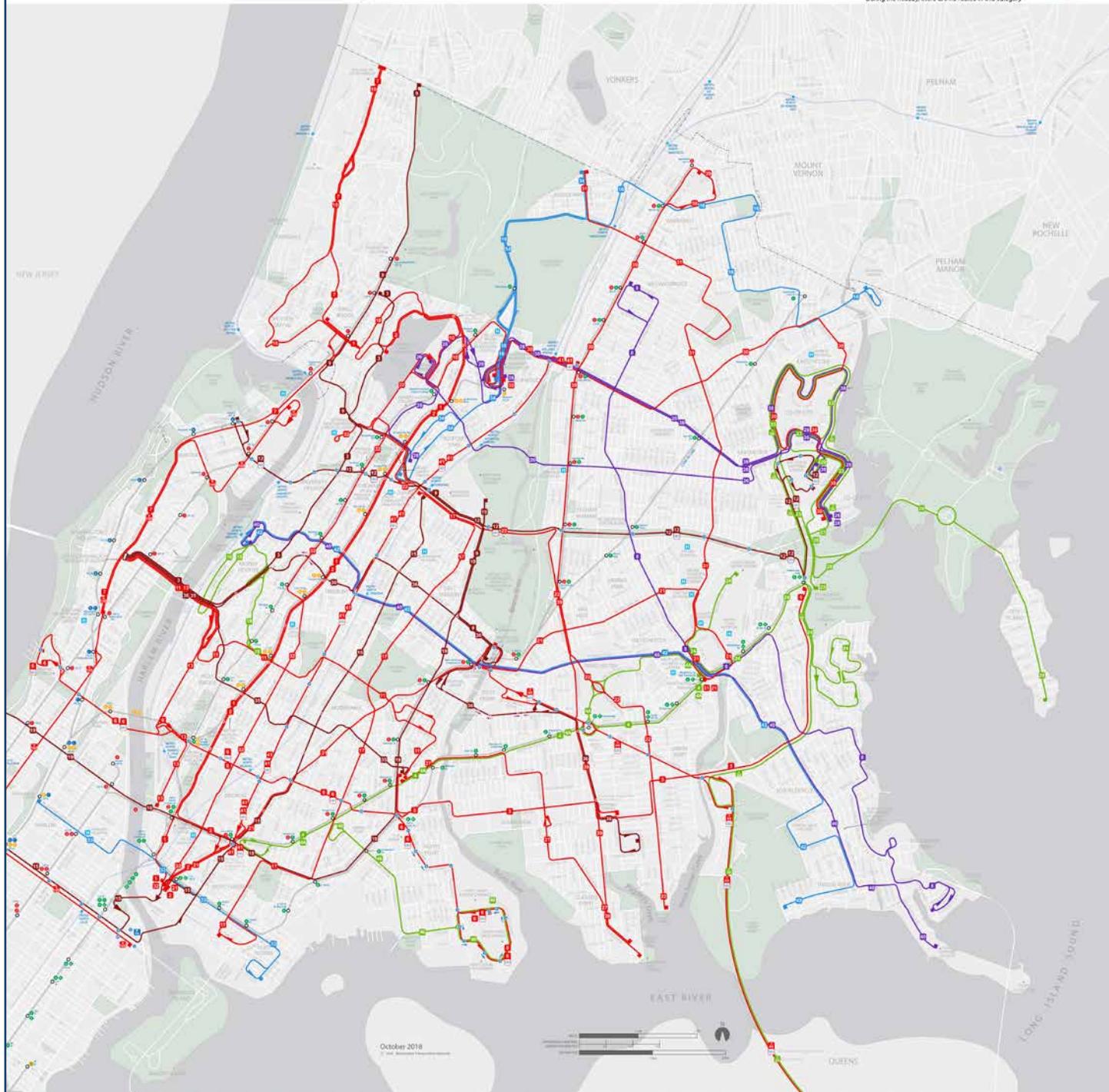
Bronx Bus Map

Weekday Midday Frequency

- Every 6 to 8 minutes
- Every 9 to 12 minutes
- Every 13 to 15 minutes
- Every 16 to 20 minutes
- Every 21 to 30 minutes



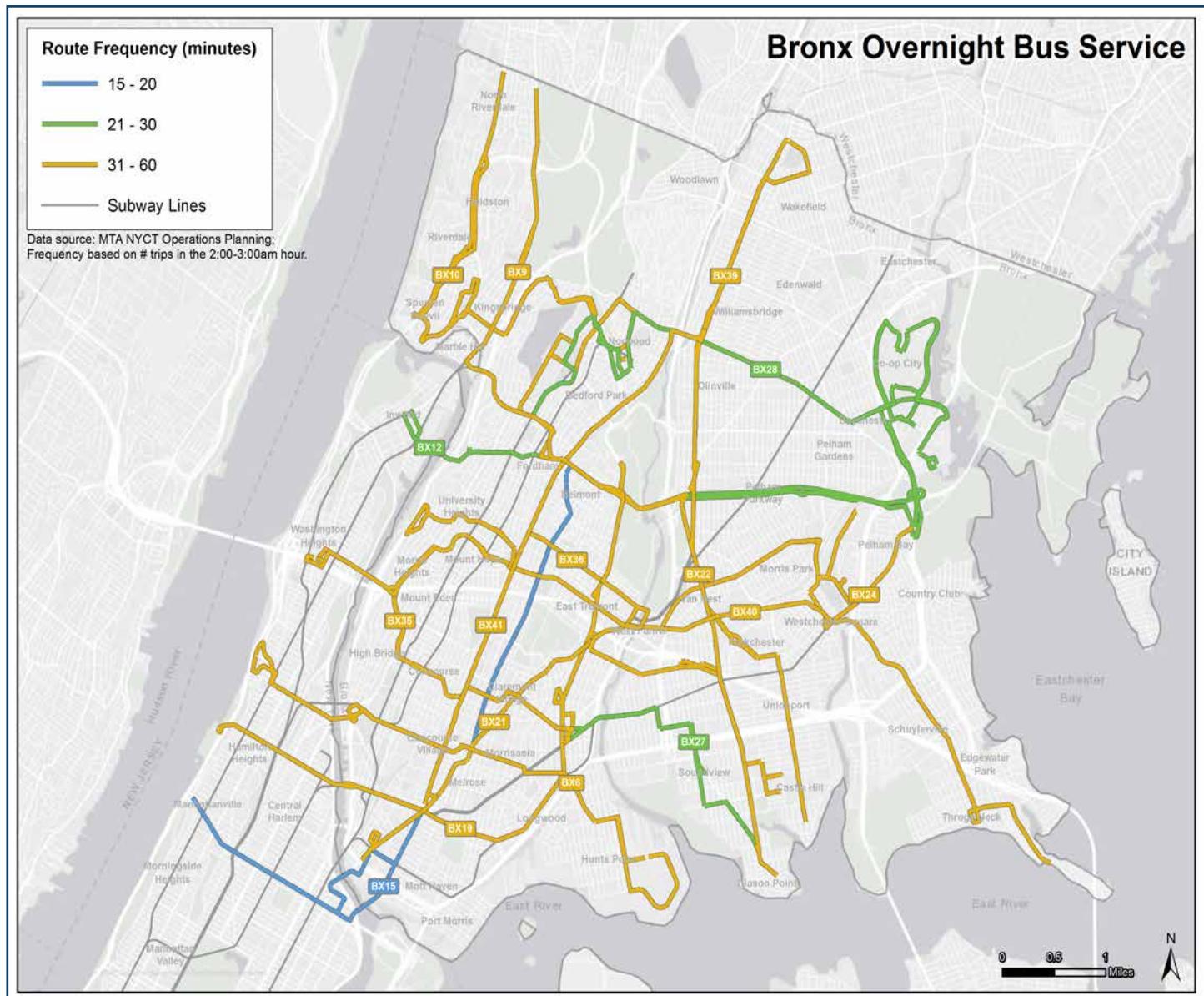
*During the midday, there are no routes in this category.



Map 26. Weekday Midday Frequency by Route

Overnight Service

Sixteen bus routes offer overnight service, though it is typically less frequent. Overnight demand is usually extremely low, and running nearly-empty buses is costly and an inefficient use of limited resources. However, there are still people that need to travel during these hours, such as those who work night shifts. Therefore, less frequent, coverage service is provided.



Map 27. Bronx Weekday Overnight Bus Service

Weekend Service

Weekend service is frequent as well. By noon on Saturdays, 32 routes are running at least every 15 minutes, and on Sundays, 25 routes are running at least every 15 minutes. But as on weekdays, frequent service does not have consistent start and end times throughout the day. This presents an opportunity to evaluate where consistent frequent service should be provided on the weekends.

Ridership

System Ridership

Below is May 2018 ridership for the entire Bronx network by day type:

- ◊ 675,045 boardings on an average weekday
- ◊ 390,831 boardings on an average Saturday
- ◊ 296,619 boardings on an average Sunday

Historical Ridership

The below chart displays Bronx average weekday ridership by year from 2007 to 2018. Ridership grew from 2007 to 2008 and then began to slightly decrease from 2008 to 2009, leveling out until 2016. From 2016 to 2018 there was an 18 percent decrease in ridership.

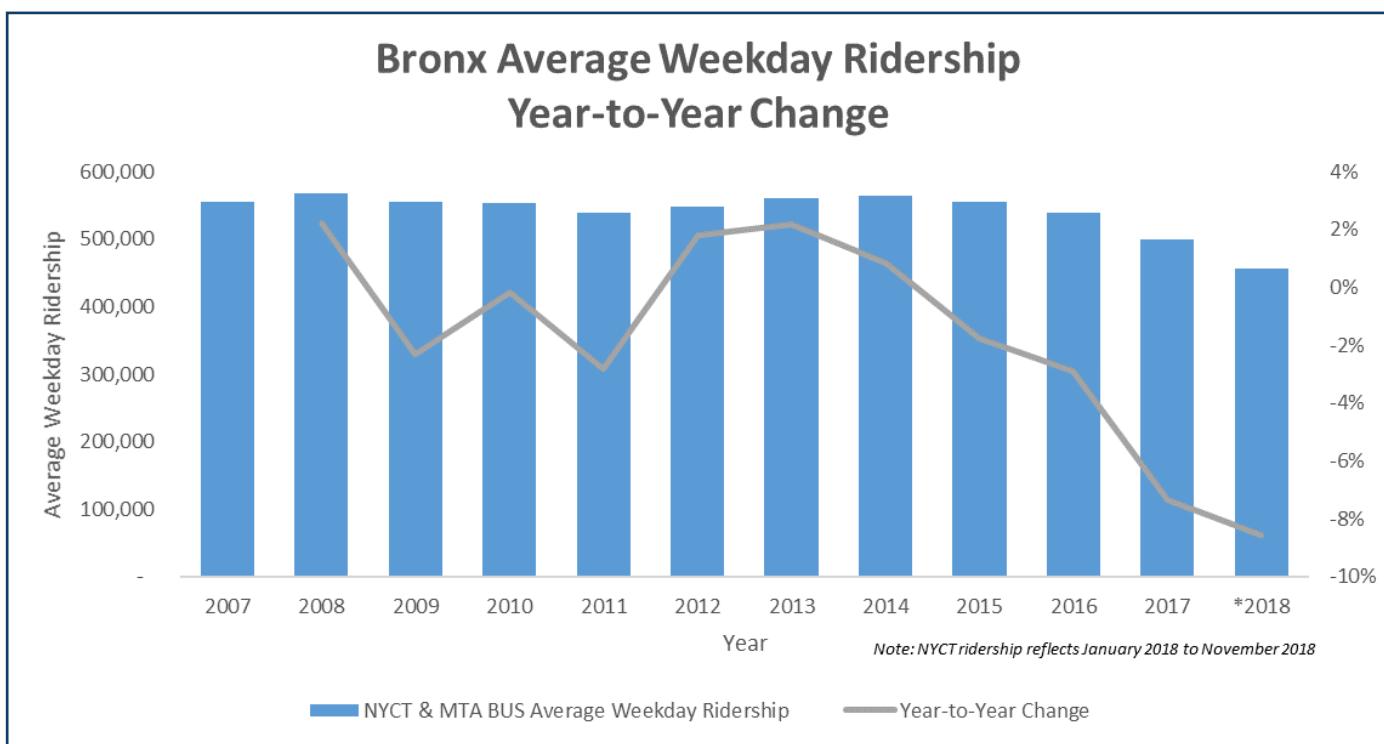


Chart 8. Bronx Ridership Over Time

Ridership by Stop

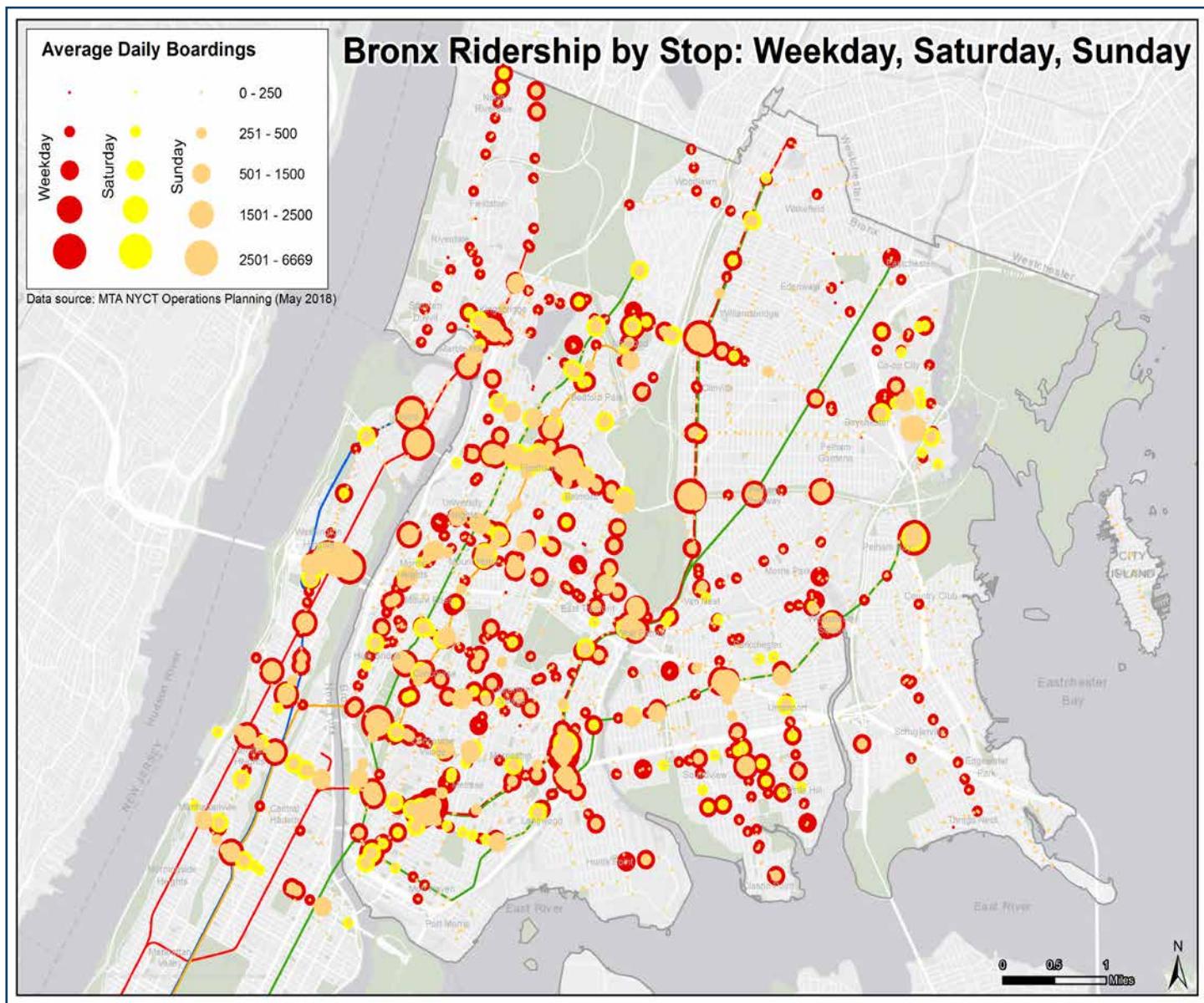
Map 28 shows average weekday boardings by stop in May 2018. Larger, darker dots represent more boardings at a given stop. The locations of the larger dots tend to mirror population density and areas of greater commercial activity.

Map 29 shows the average weekday, Saturday, and Sunday boardings by stop in May 2018, with each day-type distinguished by color. In most cases, weekday ridership is the highest. However, there are many locations in the Bronx where weekend ridership does not differ too dramatically from the weekday.

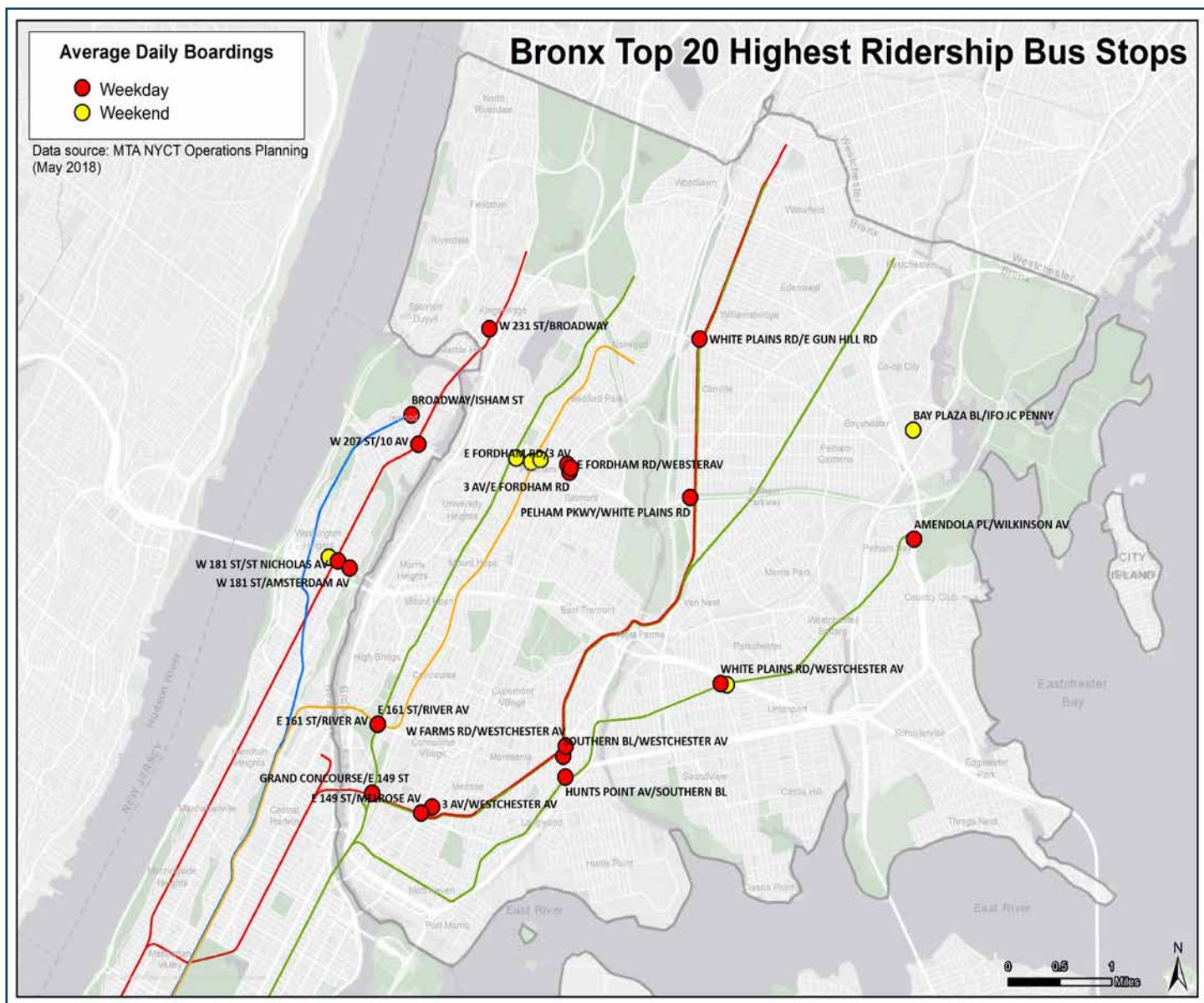
Map 30 shows the 20 stops with the highest boardings for weekdays and weekends. The top 20 stops are the same for both, except for where the yellow dots symbolizing weekend boardings stand alone. These only occur near The Mall at Bay Plaza and near the Fordham Road commercial corridor, indicating more weekend shopping and leisure trips in these locations.



Map 28. Bronx Average Weekday Boardings



Map 29. Bronx Ridership by Stop: Weekday, Saturday, Sunday



Map 30. Top 20 Highest Ridership Stops

Ridership by Route

Weekday

The following chart displays ridership by route for an average weekday in May 2018. The routes with bolded text are those that share the same corridor for large portions of the route; their ridership is combined as well as shown individually, since many customers can take either route.

The top five highest weekday ridership routes are the Bx12 SBS, Bx19, Bx36, Bx15, and Bx9, respectively. These routes generally serve the highest-density, highest-activity areas and connect with multiple subway lines. They are also among the most frequent routes in the Bronx. The five lowest ridership local routes are the Bx46, Bx24, Bx20, Bx18, and Bx29, respectively. These routes are considered coverage routes that provide access to lower-density, lower-activity areas, or areas with higher car ownership and more residential land uses; most of them are on the periphery of the borough. These routes are also among the most infrequent in the Bronx.

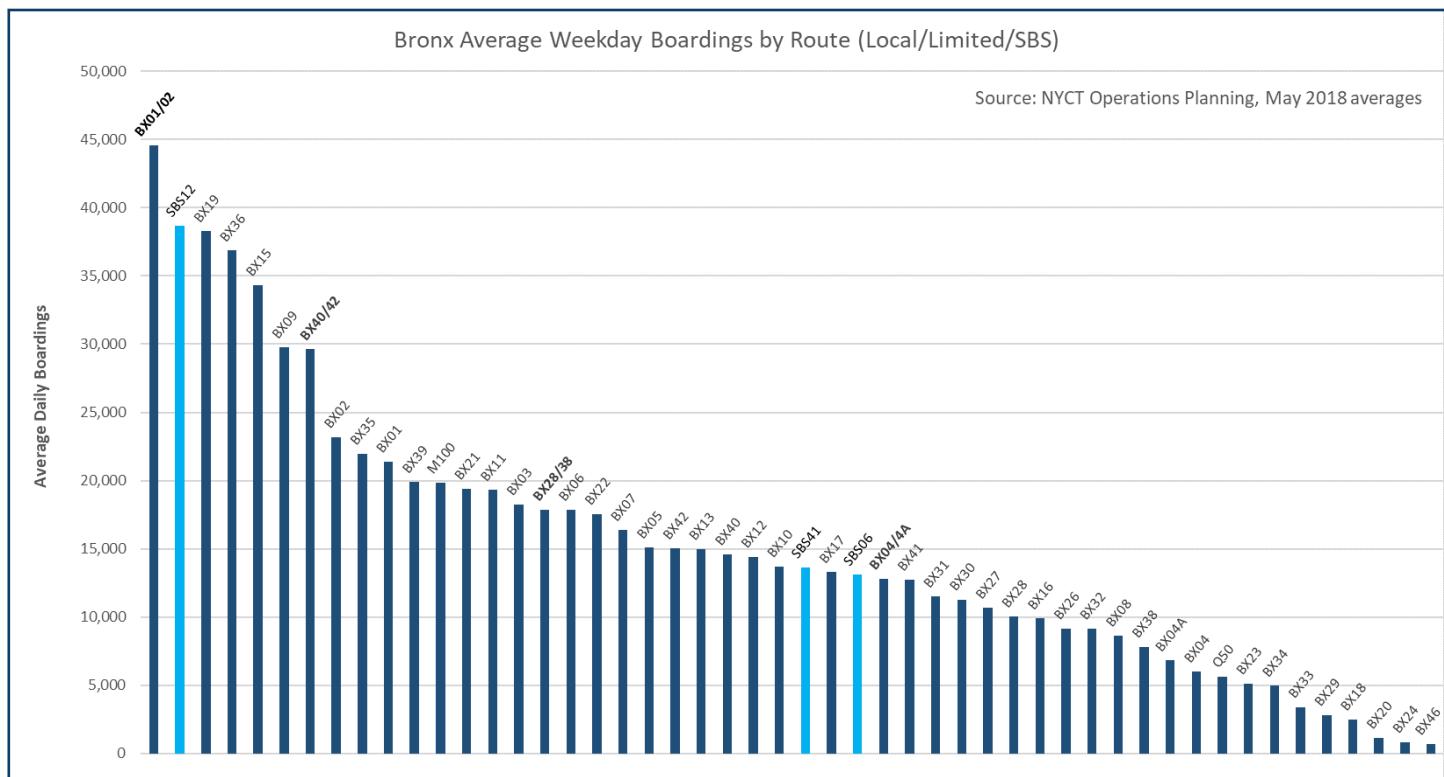


Chart 9. Bronx Average Weekday Boardings by Route

The following chart displays ridership by express route for an average weekday in May 2018. The top ridership routes for express service are the BxM7, BxM9, BxM8, and BxM10, respectively. Each of these routes has more than 1,500 average weekday boardings and serves the eastern region of the Bronx, particularly in neighborhoods that are not near the subway.

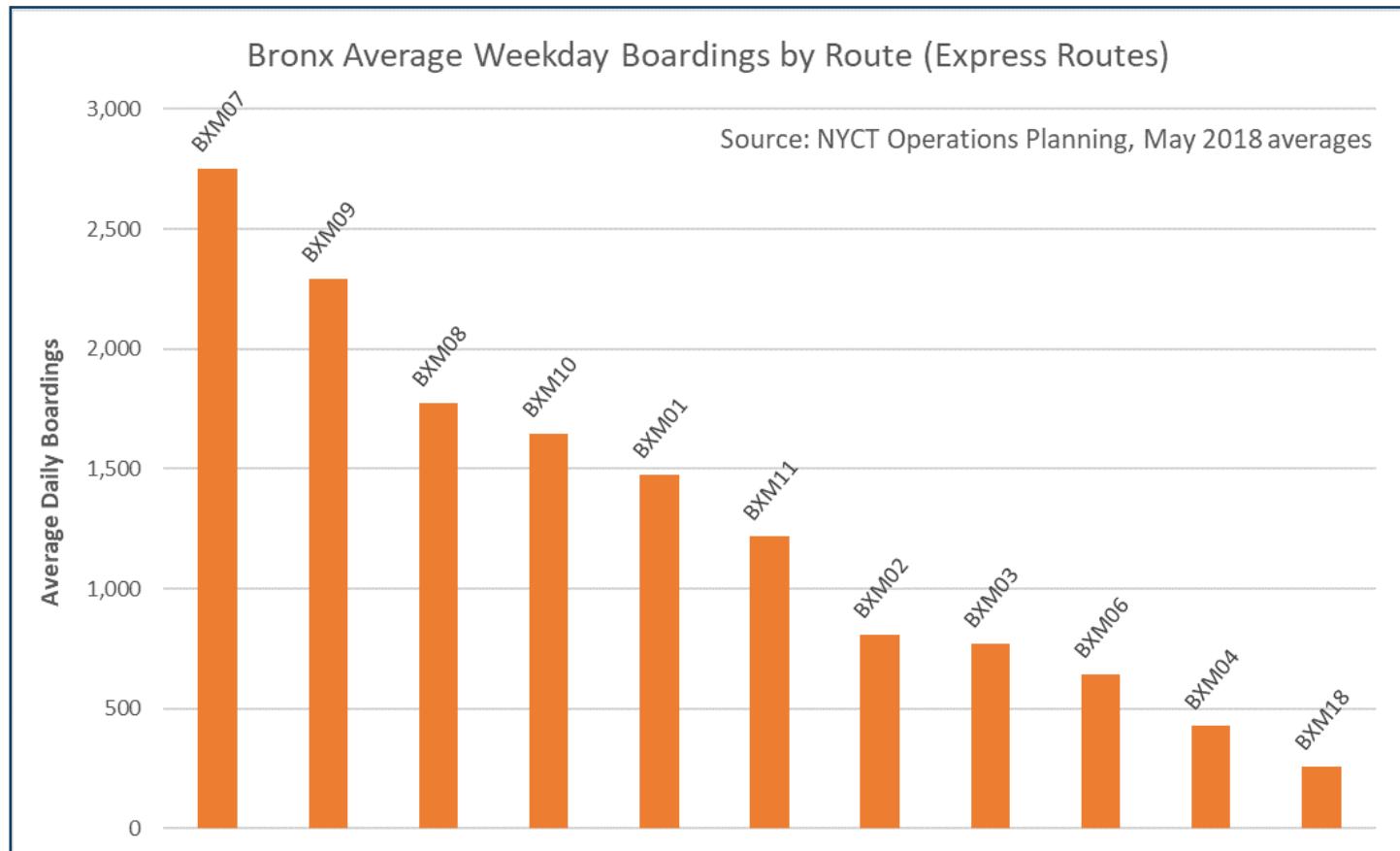


Chart 10. Bronx Average Weekday Boardings by Route (Express Routes)

The following map displays average weekday ridership by route. As discussed earlier, the busiest routes on weekdays are the Bx12 SBS, Bx19, Bx36, Bx15, and Bx9. If Bx12 and Bx12 SBS ridership is combined, as the routes share most of the Fordham Road/Pelham Parkway trunk, and if Bx1 and Bx2 ridership is combined, as those routes share most of the Grand Concourse trunk, then they are the busiest and second-busiest bus routes in the borough.

From this list of the busiest routes, the following corridors can be categorized as crucial trunks within the Bronx bus network: 3rd Avenue, East 149th Street, Fordham Road/Pelham Parkway, Grand Concourse, and Tremont Avenue. These corridors form a strong grid pattern, primarily focused in the southwest quadrant of the Bronx.



Map 31. Bronx Weekday Route Ridership

Weekend

The following chart displays ridership by route for an average Saturday in May 2018. The top five highest Saturday ridership routes are the same as on weekdays: Bx19, Bx12 SBS, Bx15, Bx36, and Bx9, respectively. The five lowest ridership local routes are the Bx46, Bx24, Bx18, Bx33, and Bx23, respectively, with the Bx24 and Bx46 carrying less than 400 people each on an average Saturday.

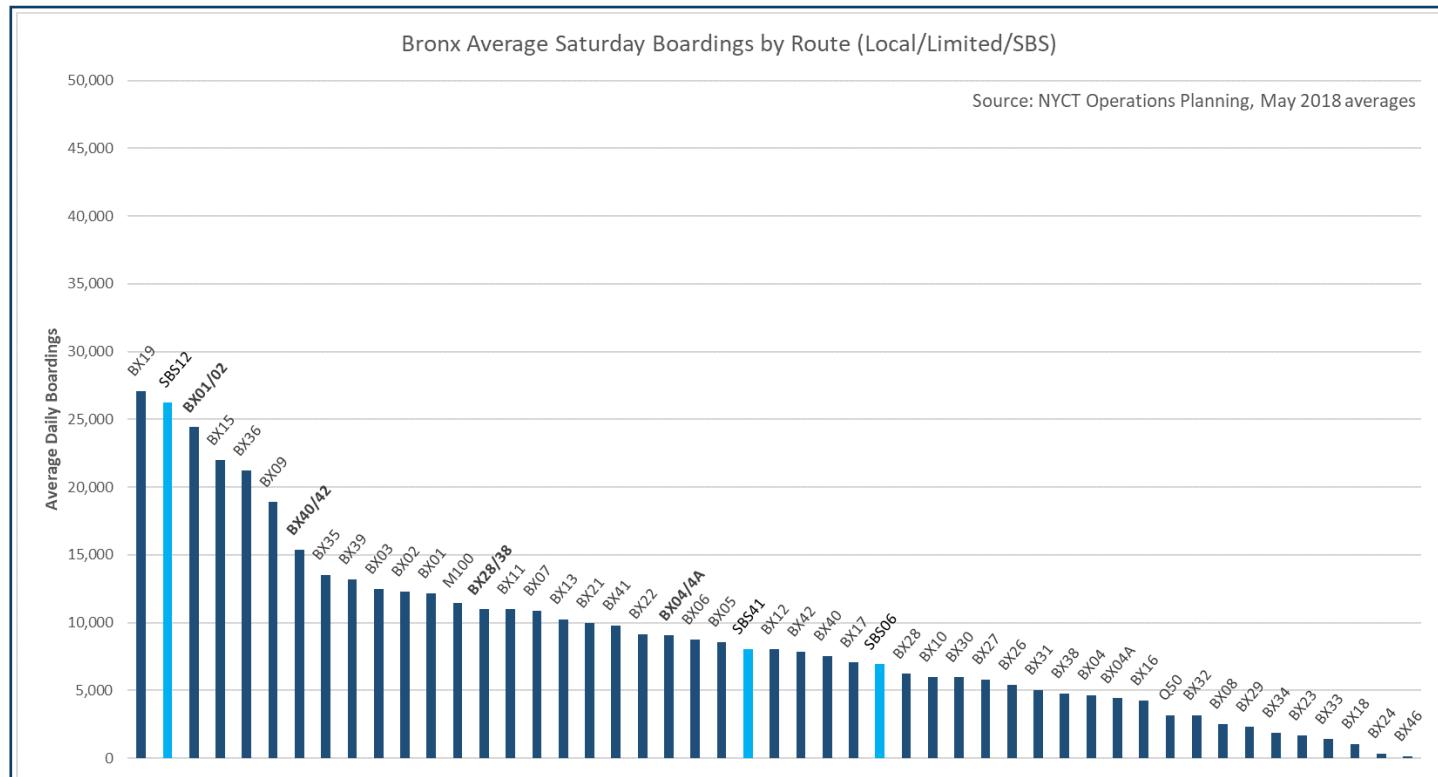


Chart 11. Bronx Average Saturday Boardings by Route

On an average Saturday, the BxM7 shows the greatest ridership among the express routes with just under 1,500 boardings. Conversely, the BxM4 shows the lowest ridership and carries less than 200 passengers on an average Saturday.

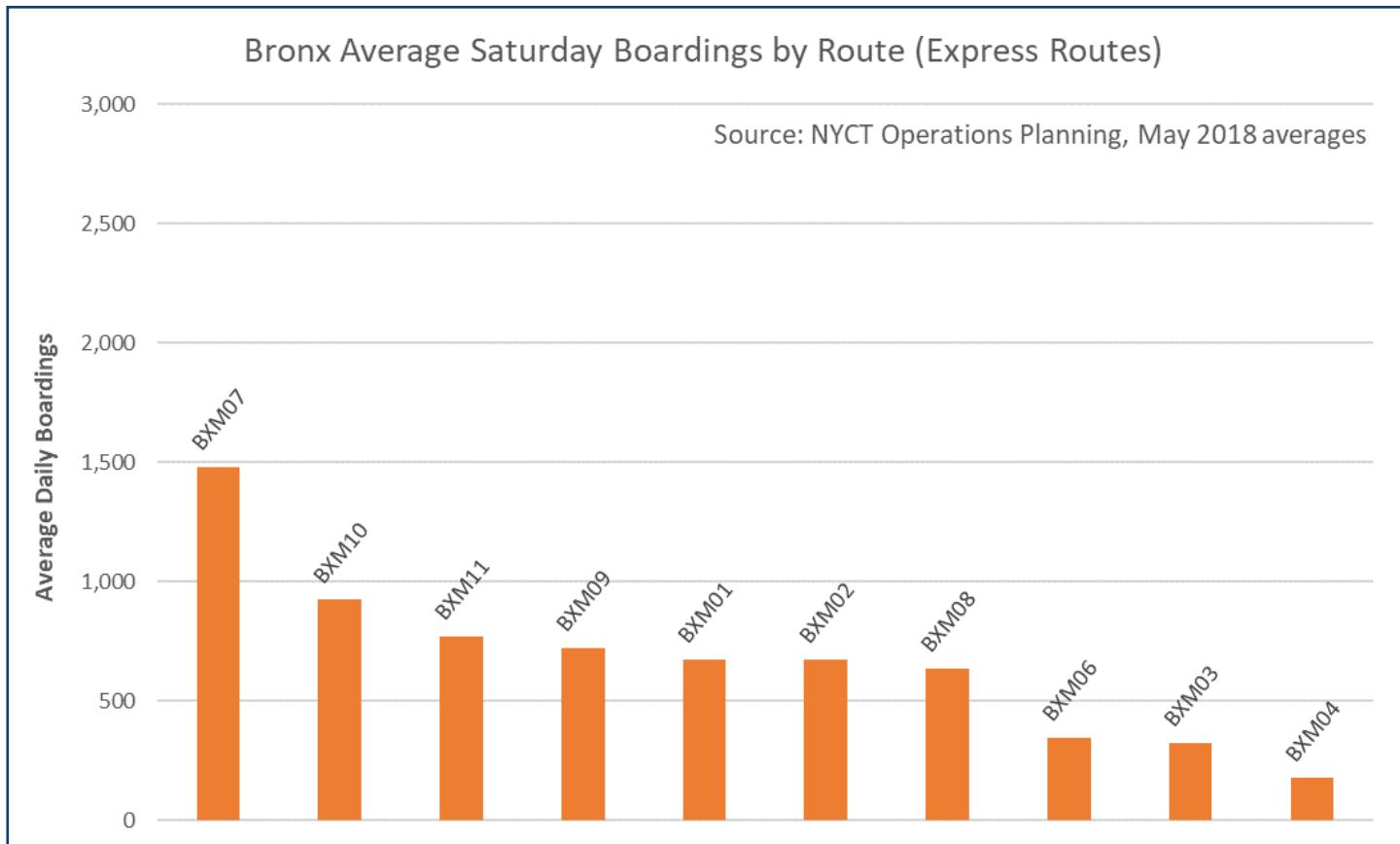


Chart 12. Bronx Average Saturday Boardings by Route (Express Routes)

The following chart displays average Sunday ridership for local routes in the Bronx. Like Saturdays, the top five highest Sunday ridership routes are the same as on weekdays: Bx19, Bx12 SBS, Bx15, Bx36, and Bx9, respectively. The five local routes with the lowest ridership are the Bx46, Bx24, Bx33, Bx18, and Bx23, respectively, with the Bx24 and Bx46 carrying less than 400 people each on an average Sunday.

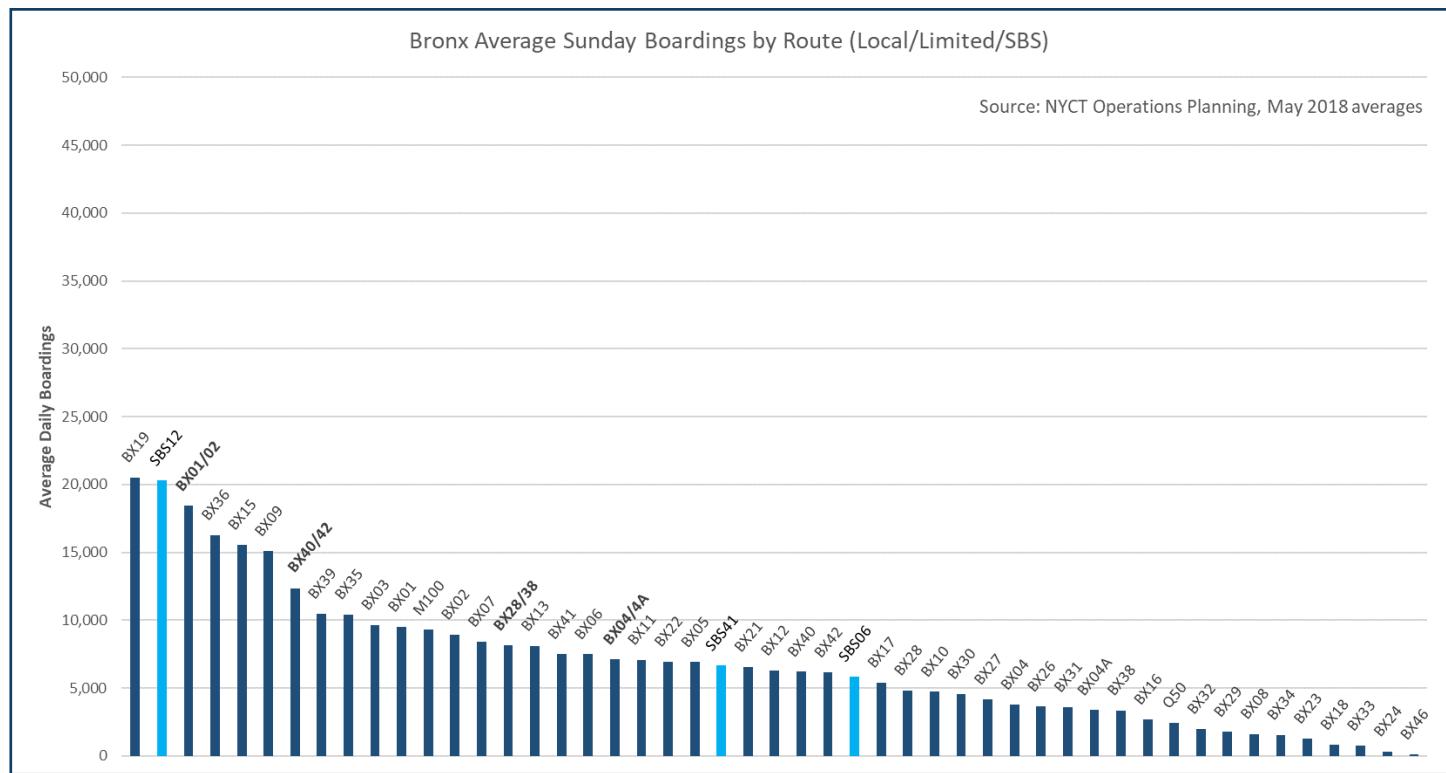


Chart 13. Bronx Average Sunday Boardings by Route

Like Saturdays, on an average Sunday, the BxM7 shows the greatest ridership among express routes with just over 1,000 boardings. Conversely, the BxM4 shows the lowest ridership and carries less than 200 passengers on an average Sunday.

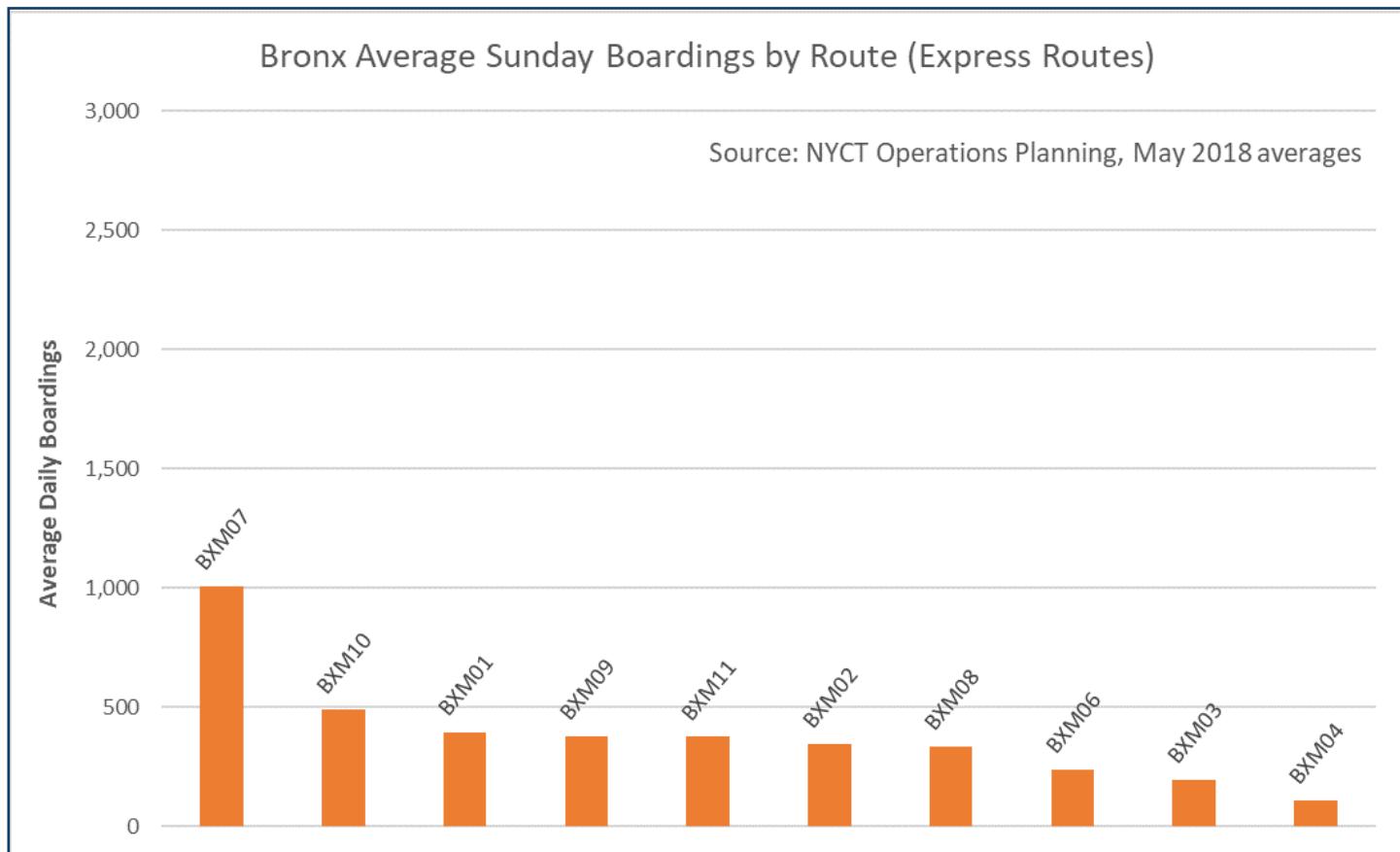


Chart 14. Bronx Average Sunday Boardings by Route (Express Routes)

Senior/Disabled and Student Ridership

The following chart displays ridership by route for an average weekday in May 2018 for senior/disabled and student customers. The top five highest ridership routes for senior/disabled customers in the Bronx are the Bx1/2, Bx19, Bx12 SBS, Bx7, Bx9, and Bx15, each carrying 1,700 senior and/or disabled customers on an average weekday. The top five highest ridership routes for students in the Bronx are the Bx1/2, Bx36, Bx9, Bx12 SBS, and Bx40/42.

Bronx Senior/Disabled and Student Ridership - NYCT & MTA Bus					
Route	Senior/Disabled Ridership		Student Ridership		Avg Overall Ridership
	Average Weekday	% of Avg Weekday	Average Weekday	% of Avg Weekday	Avg Weekday
BX1/2	2,875	9.0%	3,214	10.1%	31,773
BX3	920	6.7%	1,260	9.2%	13,648
BX4	1,069	11.0%	1,127	11.6%	9,744
BX5	735	7.3%	1,467	14.6%	10,034
BX6	842	6.8%	992	8.0%	12,353
BX6SBS	661	5.5%	851	7.1%	11,931
BX7	1,893	13.2%	1,826	7.2%	14,312
BX8	639	9.2%	1,486	21.3%	6,980
BX9	1,805	7.4%	2,778	11.4%	24,272
BX10	1,427	12.8%	1,654	14.8%	11,161
BX11	773	6.1%	1,671	13.2%	12,676
BX12	830	7.6%	1,023	9.4%	10,877
BX12SBS	2,154	6.2%	2,367	6.8%	34,757
BX13	780	7.2%	1,046	9.7%	10,792
BX15	1,732	7.4%	2,165	9.2%	23,423
BX16	485	6.5%	1,089	14.6%	7,477
BX17	544	6.1%	1,566	17.6%	8,914
BX18	166	9.4%	226	12.7%	1,775
BX19	2,162	8.7%	2,318	9.4%	24,774
BX20	112	11.8%	114	12.1%	946
BX21	932	7.3%	1,370	10.7%	12,762
BX22	1,052	7.8%	1,905	14.2%	13,432
BX24	104	13.1%	77	9.7%	797
BX26	721	9.7%	1,180	15.9%	7,407
BX27	436	6.6%	952	14.3%	6,654
BX28/38	1,544	11.0%	1,896	13.5%	14,056
BX29	229	9.1%	182	7.2%	2,519
BX30	930	10.9%	1,380	16.2%	8,513
BX31	912	10.4%	1,128	12.8%	8,787
BX32	625	10.1%	773	12.5%	6,171
BX33	275	11.3%	221	9.1%	2,424
BX34	363	9.8%	304	8.2%	3,699
BX35	896	5.8%	1,606	10.4%	15,393
BX36	1,625	6.1%	3,197	12.0%	26,744
BX39	1,363	9.6%	1,793	12.6%	14,217
BX40/42	1,620	7.5%	2,326	10.8%	21,499
BX41	507	6.2%	815	10.0%	8,114
BX41SBS	718	5.9%	964	7.9%	12,159
BX46	22	3.7%	15	2.5%	595
Bx23	439	10.7%	636	15.4%	4,117
BxM1	228	16.6%			1,376
BxM10	69	4.5%			1,532
BxM11	60	5.1%			1,180
BxM18	11	4.3%			255
BxM2	168	22.6%			744
BxM3	50	7.1%			704
BxM4	34	8.5%			398
BxM6	38	6.2%			615
BxM7	212	8.4%			2,528
BxM8	65	4.1%			1,598
BxM9	65	3.0%			2,136

Source: NYCT OMB, May 2018

Chart 15. Bronx Senior/Disabled and Student Ridership (May 2018)

Average Trip Length

Local bus trips in the Bronx tend to be between one and two miles in length, with the Q50 Limited having the longest trip length of five miles.

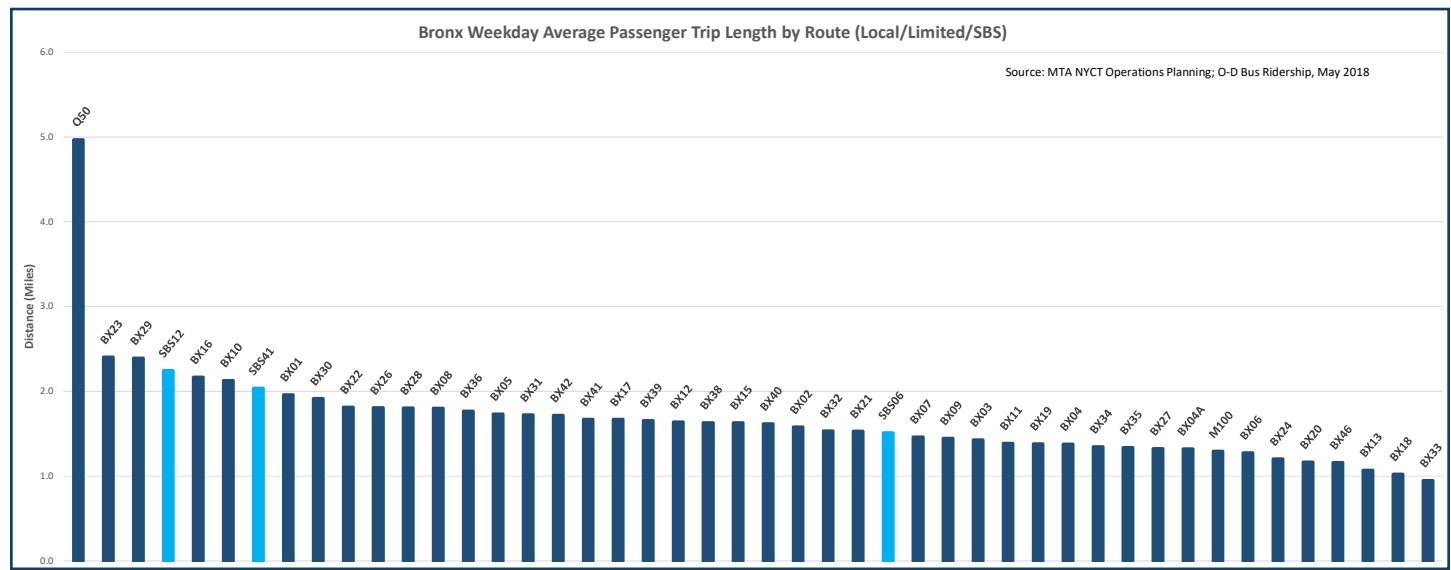


Chart 16. Bronx Weekday Average Passenger Trip Length by Route

The average trip length on express bus routes range from eight miles to 14 miles, with the BxM7 having the longest trip length. Longer trip lengths are expected with express bus service, when customers typically travel longer distances from an outer borough to reach employment in the central business district of Manhattan, particularly Midtown and Lower Manhattan.

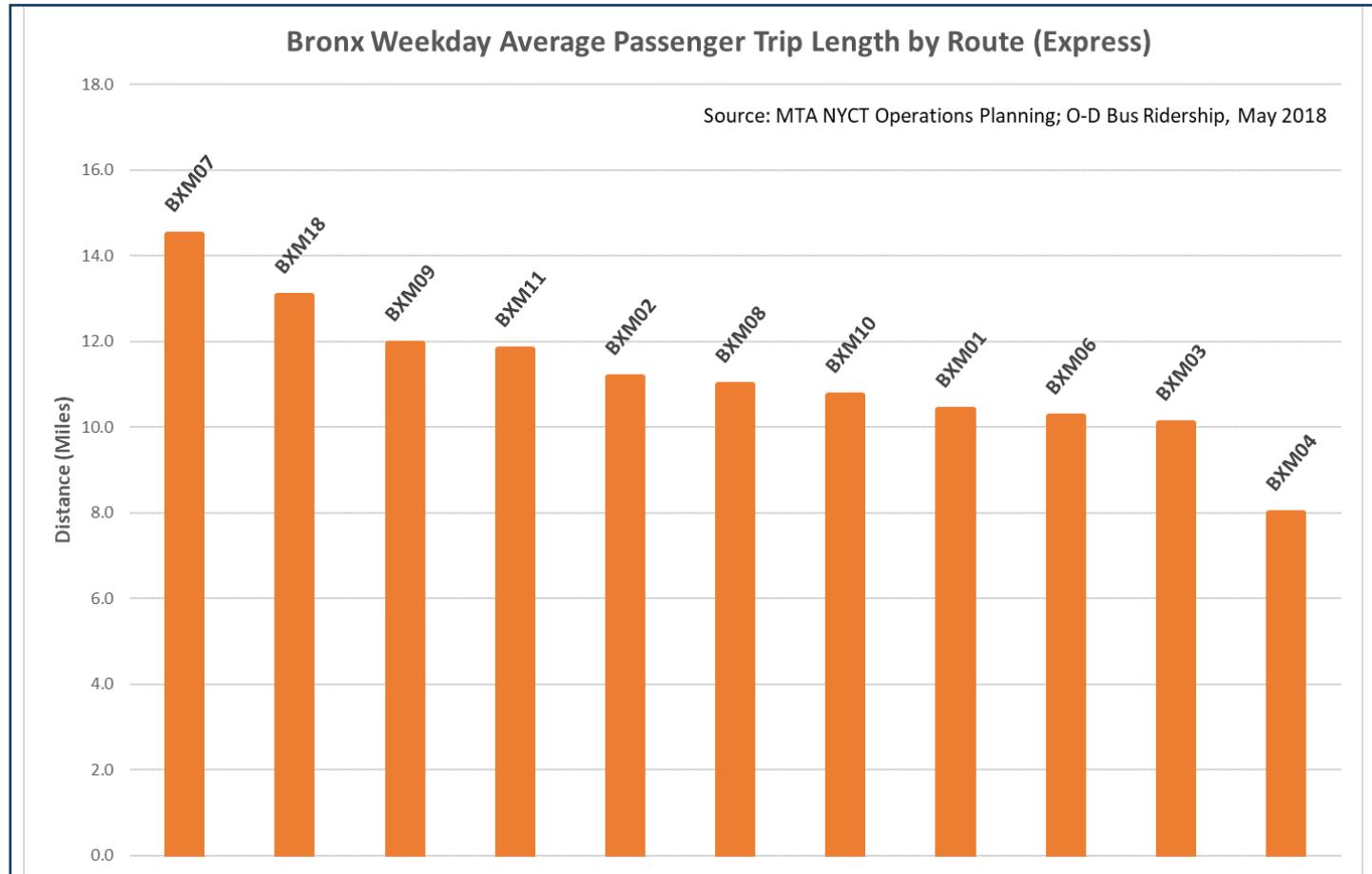


Chart 17. Bronx Weekday Average Passenger Trip Length by Route (Express)

Transfers

The majority of Bronx bus customers make a transfer as part of their journey – only 26 percent use a single bus to get to their destination. Roughly 39 percent transfer to another bus route, and 35 percent transfer to the subway.

The following table displays weekday transfers in the Bronx by route, with each route broken down by the percent of bus-to-bus transfers, the percent of bus-to-subway transfers, and percent of no transfers.

Bronx Weekday Transfers by Route

■ % Bus-to-bus Xfer ■ % Bus-to-Subway Xfer ■ % No Transfer

Source: MTA Operations Planning; Transfer data from Metrocard swipes, Oct

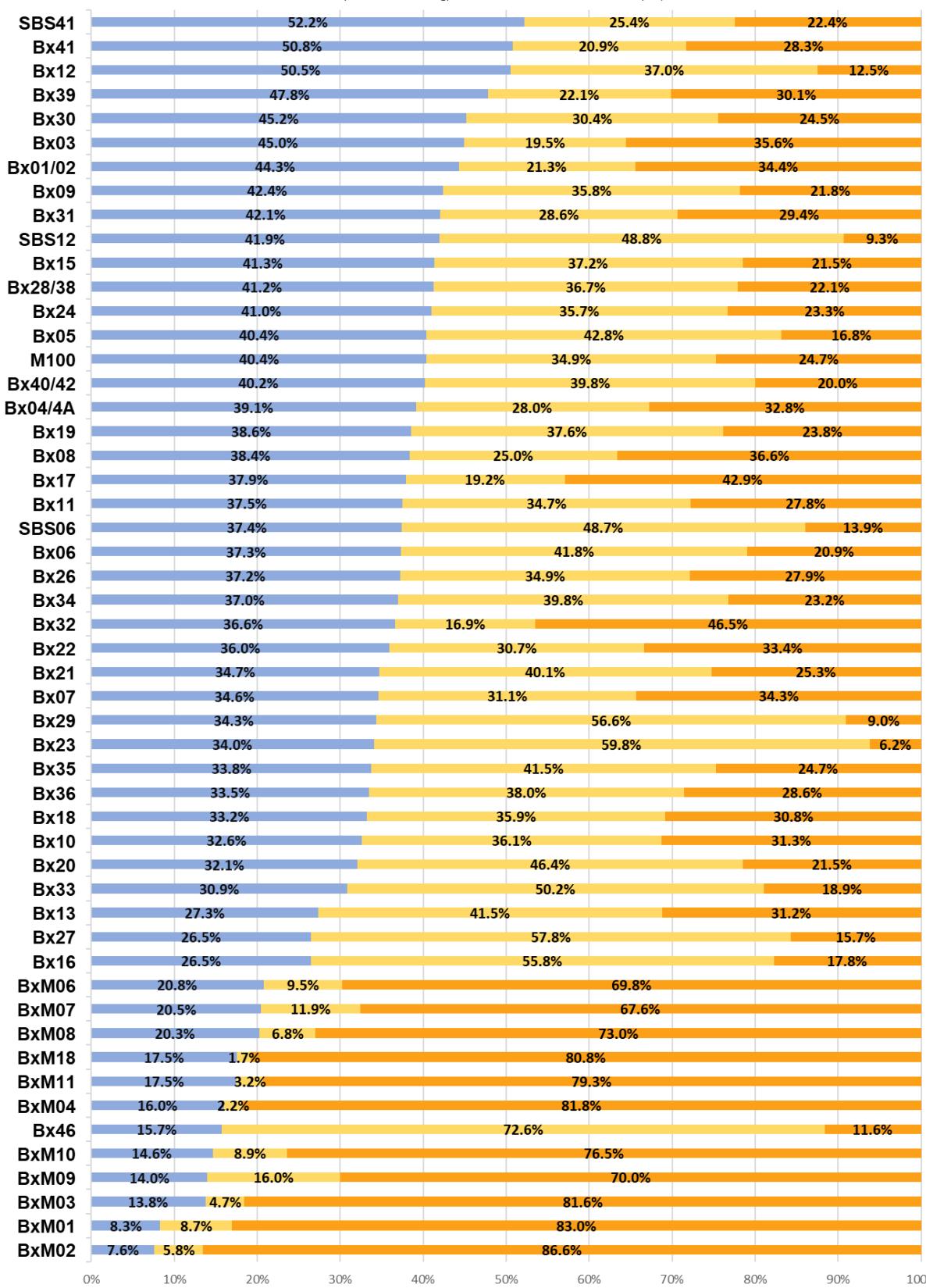


Chart 18. Bronx Weekday Transfer by Route

Most express bus customers have door-to-door service, without the need to transfer. Meanwhile, on the Bx23, Bx29, and Bx12 SBS, more than 90 percent of customers transfer to another bus or to the subway.

The bus routes with the highest percentage of bus-to-bus transfers are the Bx41 Local, Bx41 SBS, and the Bx12 Local, where more than half of all customers transfer to another bus. These straight grid routes cross many other routes, allowing for convenient L-shaped trips to many other destinations in the borough.

The bus routes with the highest percentage of bus-to-subway transfers are the Bx46, Bx23, Bx27, Bx29, Bx16, and Bx33. Other than the Bx33, these routes traverse neighborhoods far from the subway, and subway stations are the primary destination along the route path. The Bx33 is a short crosstown route that connects to nearly all Bronx and Upper Manhattan subway lines, allowing for convenient transfers to many subway destinations across the city.

Bus-to-Bus Transfers

The following chart shows the top 25 bus route-to-bus route transfers in the Bronx. Some of these transfer pairs likely include customers using quirks in MetroCard fare policy to pay one fare for a round-trip taken within two hours. For instance, under current policy, customers can take the Bx1 north, run a short errand, then take the Bx2 back south on the Grand Concourse, all for one fare. MTA wants to allow transfers from, say, the Bx1 southbound to the Bx2 southbound to reach the Hub, but MetroCard technology does not let the MTA allow one version of a Bx1-to-Bx2 transfer but not the other one.

Ignoring this type of one-fare round-trip transfer, the top “true” bus-to-bus transfers in the Bronx are the following: between the Bx12 SBS and the Bx3 at West Fordham Road and University Avenue, between the Bx9 and the Bx3 at West Kingsbridge Road and University Avenue or at Broadway and West 238th Street, and between the Bx12 SBS and the Bx39 at Pelham Parkway and White Plains Road.

These locations, as shown in Map 21, can be considered important nodes in the existing bus network.

Top 25 Bronx Bus-to-Bus Transfers by Route		
From/To Route	To/From Route	Average Weekday Transfers
SBSBx12	Bx3	1,651
Bx1	Bx2	1,210
Bx9	Bx3	1,144
SBSBx12	Bx12	1,143
SBSBx12	Bx39	1,107
SBSBx6	Bx6	1,099
SBSBx41	Bx41	975
Bx9	Bx7	907
SBSBx12	Bx15	900
SBSBx12	Bx31	896
SBSBx12	Bx9	870
Bx40	Bx42	790
Bx7	SBSBx12	744
Bx36	Bx9	706
M100	Bx7	704
SBSBx12	SBSBx41	691
SBSBx12	Bx2	653
Bx19	Bx2	645
SBSBx12	Bx1	640
Bx22	SBSBx12	638
SBSBx12	Bx8	636
Bx19	Bx9	633
Bx3	Bx12	631
Bx7	Bx10	620
Bx9	Bx15	599
Bx1	Bx9	599

Source: NYCT Operations Planning, May 2018

Chart 19. Top 25 Bronx Bus-to-Bus Transfers by Route



Map 32. Top Bronx Bus-to-Bus Transfer Locations

Bus-to-Subway Transfers

The following chart and map show the top 25 bus route-to-subway line transfers in the Bronx. Though overall more Bronx bus customers transfer to another bus than to the subway, subway transfers are concentrated in fewer locations, so the number of transfers occurring at these top 25 subway stations dwarf the numbers at the top bus-to-bus locations. At 3 Av-149 St (2,5), for instance, the busiest bus-to-subway transfer location and a subway station fed directly by eight bus routes, 13,324 customers transfer between the bus network and the subway system on an average weekday. The following subway stations are other particularly busy transfer nodes: 161 St-Yankee Stadium (B,D,4), Pelham Bay Park (6), Hunts Point Av (6), Simpson St (2,5), and 181 St (1).

Top 25 Bus-to-Subway Transfers by Route		
From Route	To Station	Average Daily Transfers*
Bx15	3 Av-149 St (2,5)	5,526
SBSBx12	207 St (1)	4,518
Bx13	161 St-Yankee Stadium (B,D,4)	3,644
SBSBx12	Fordham Rd (4)	3,116
Bx36	Tremont Av (B,D)	2,722
SBSBx12	Pelham Pkwy (2,5)	2,664
Bx22	Castle Hill Av (6)	2,624
SBSBx6	161 St-Yankee Stadium (B,D,4)	2,598
Bx6	161 St-Yankee Stadium (B,D,4)	2,580
Bx10	231 St (1)	2,580
Bx9	Kingsbridge Rd (4)	2,476
SBSBx41	3 Av-149 St (2,5)	2,460
Bx35	167 St (4)	2,426
Bx35	167 St (B,D)	2,422
SBSBx12	Pelham Bay Park (6)	2,414
Bx023	Pelham Bay Park (6)	2,410
Bx27	Morrison Av-Soundview (6)	2,380
Bx36	Parkchester (6)	2,356
Bx5	Hunts Point Av (6)	2,266
SBSBx12	Fordham Rd (B,D)	2,244
Bx21	East 180 St (2,5)	2,160
Bx19	149 St-Grand Concourse (2,4,5)	2,154
Bx5	Simpson St (2,5)	2,146
Bx39	Parkchester (6)	2,140
Bx21	3 Av-149 St (2,5)	2,126

**Inferred by doubling transfers from bus to subway*

Source: NYCT Operations Planning, May 2018

Chart 20. Top 25 Bus-to-Subway Transfers by Station



Map 33. Top Bronx Bus-to-Subway Transfer Locations

Productivity

Passengers Boardings per In-Service Hour

Passengers per In-Service Hour provides an accurate look at how much customers use the amount of service provided. For example, if a route has a high number of boardings per service hour, this indicates that the frequency and span of service provided (measured as the sum of time that buses are in service) more closely reflects the ridership, which likely involves a high rate of customer turnover throughout the route. This typically indicates that the route serves high activity areas that generate a consistent flow of boardings and alightings (i.e. “grid” routes), as opposed to a route that slowly fills up and does not empty out for most of the route (i.e. “feeder” routes). In other words, by this measure, the route is productive. Since all routes are unique, with different schedules, serving different areas with diverse demographics, land use, and street networks, this is a more relative way to compare routes than by using sheer ridership numbers.

Citywide Comparison

The following chart displays boardings per in-service hour by borough for local, limited and SBS routes. By this measure, Bronx bus routes are the most productive in the city; Manhattan, Brooklyn, and Queens are relatively even; and Staten Island has the least productive service (though still high relative to other US agencies). Weekend boardings per in-service hour for the Bronx, Brooklyn, Manhattan, and Queens drops down anywhere from 12-20 boardings per in-service hour.

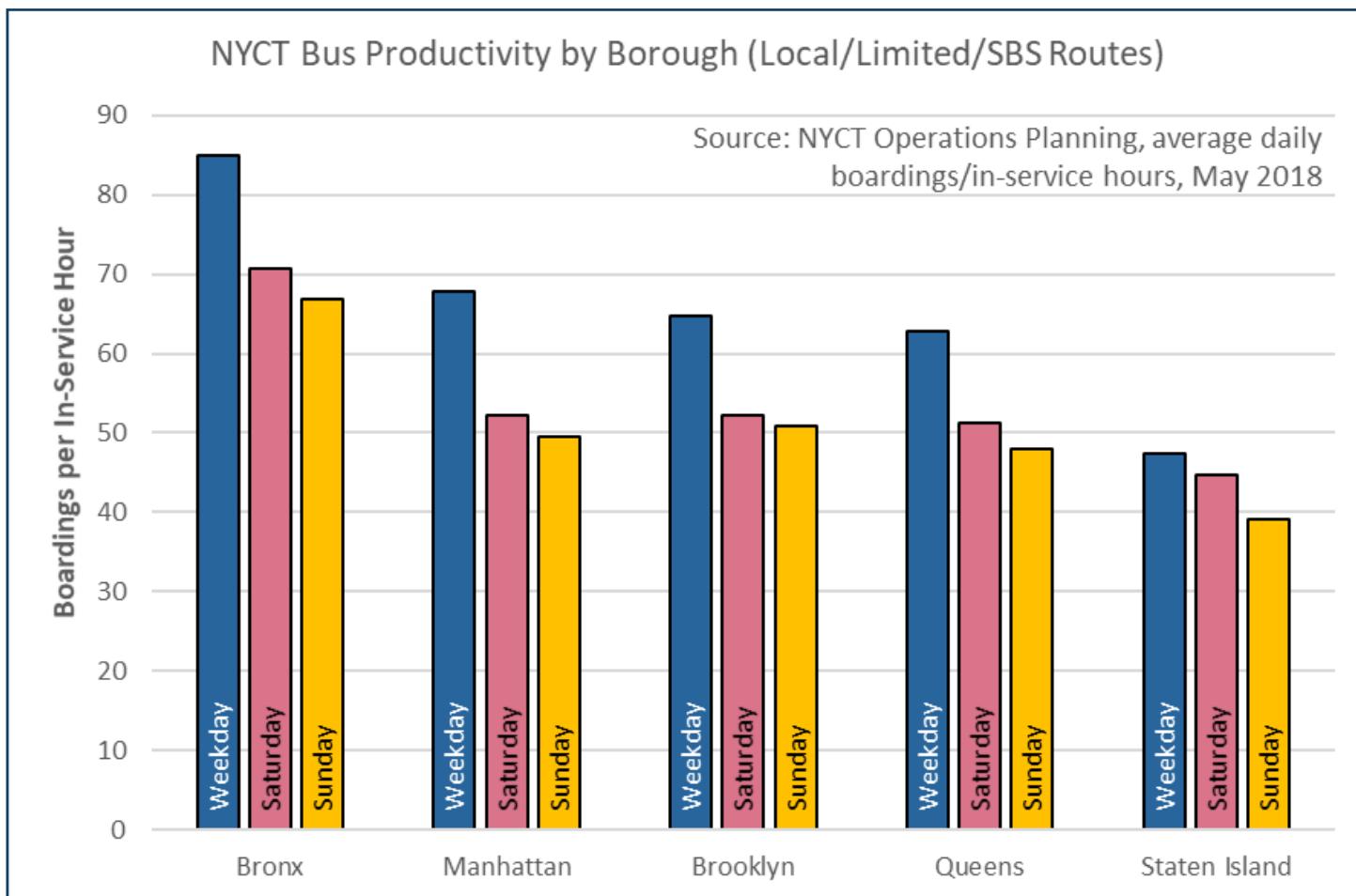


Chart 21. Bus Productivity by Borough (May 2018)

A likely explanation for the Bronx's productivity could be the high number of "grid" routes versus the "feeder" routes in other boroughs. This is influenced by the land use, density, and geography of the Bronx, as well as how the bus network interacts with the vertical, Manhattan-centric subway system. Because of these factors, many people riding buses stay in the Bronx for work or other trips, and therefore, generate a consistent flow of boardings and alightings on bus routes (this would affect the numerator in the boardings/in-service hour equation).

Another explanation for the increased productivity could be the high number of articulated bus routes in the Bronx. Articulated buses hold more people per bus than a standard bus does, reducing the number of buses required to match ridership. When more customers can be served with fewer buses, productivity, by this measure, increases. This would affect the denominator in the boardings/in-service hour equation.

Additionally, budgetary constraints sometimes prevent schedule adjustments on routes. This could also lead to a discrepancy between service supply and service demand.

By Hour

The following chart displays boardings per in-service hour by hour for weekdays, Saturdays, and Sundays. Weekday boardings per in-service hour peak between 7:00am and 9:00am. Productivity drops quickly after 9:00am, but then stabilizes and gradually climbs as the day progresses. The evening peak is visible, but never reaches the level of productivity of the morning

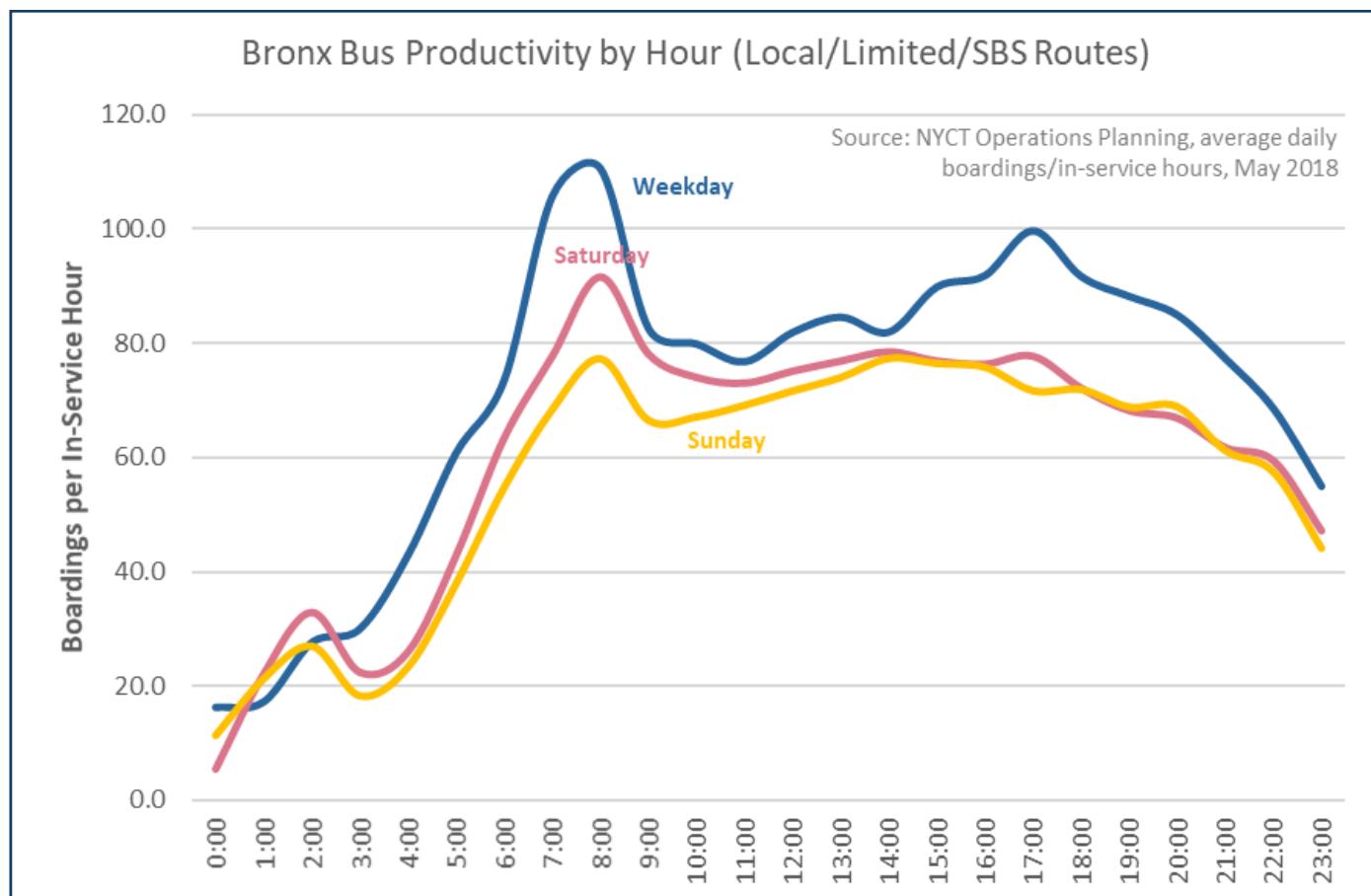


Chart 22. Bronx Bus Productivity by Hour

Route-Level

Weekday

The following chart display boardings per in-service hour by route for an average weekday. The five most productive non-express routes are the Bx12 SBS, Bx19, Bx27, Bx12 Local, and Bx5, respectively. While this changes slightly on the weekends, these routes remain among the highest. The five least productive non-express Bronx routes are the Bx24, Bx46, Bx8, Q50, and Bx28.

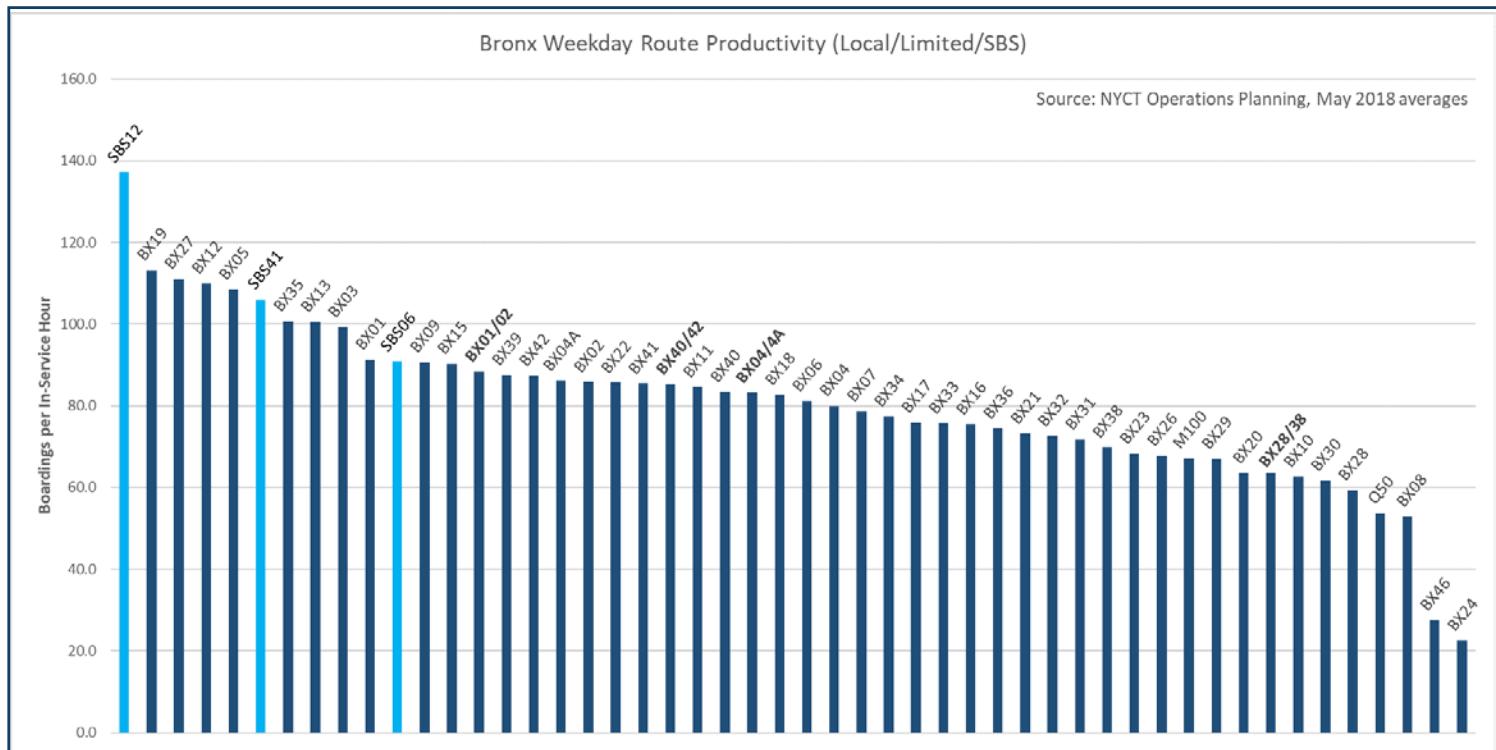


Chart 23. Weekday Route Productivity

The following chart displays average weekday boardings per in-service hour for express routes. This metric is not typically used with express bus service given the nature of express service. However, we included the metric to provide a full analysis of the productivity of express routes. Like express bus weekday ridership, the top performing express routes are the BxM9, BxM7, BxM8, and BxM10, respectively, with the BxM9 being the only express route to have 20 boardings per in-service hour. The BxM4 is the worst performing express route and carries approximately seven passengers per in-service hour.

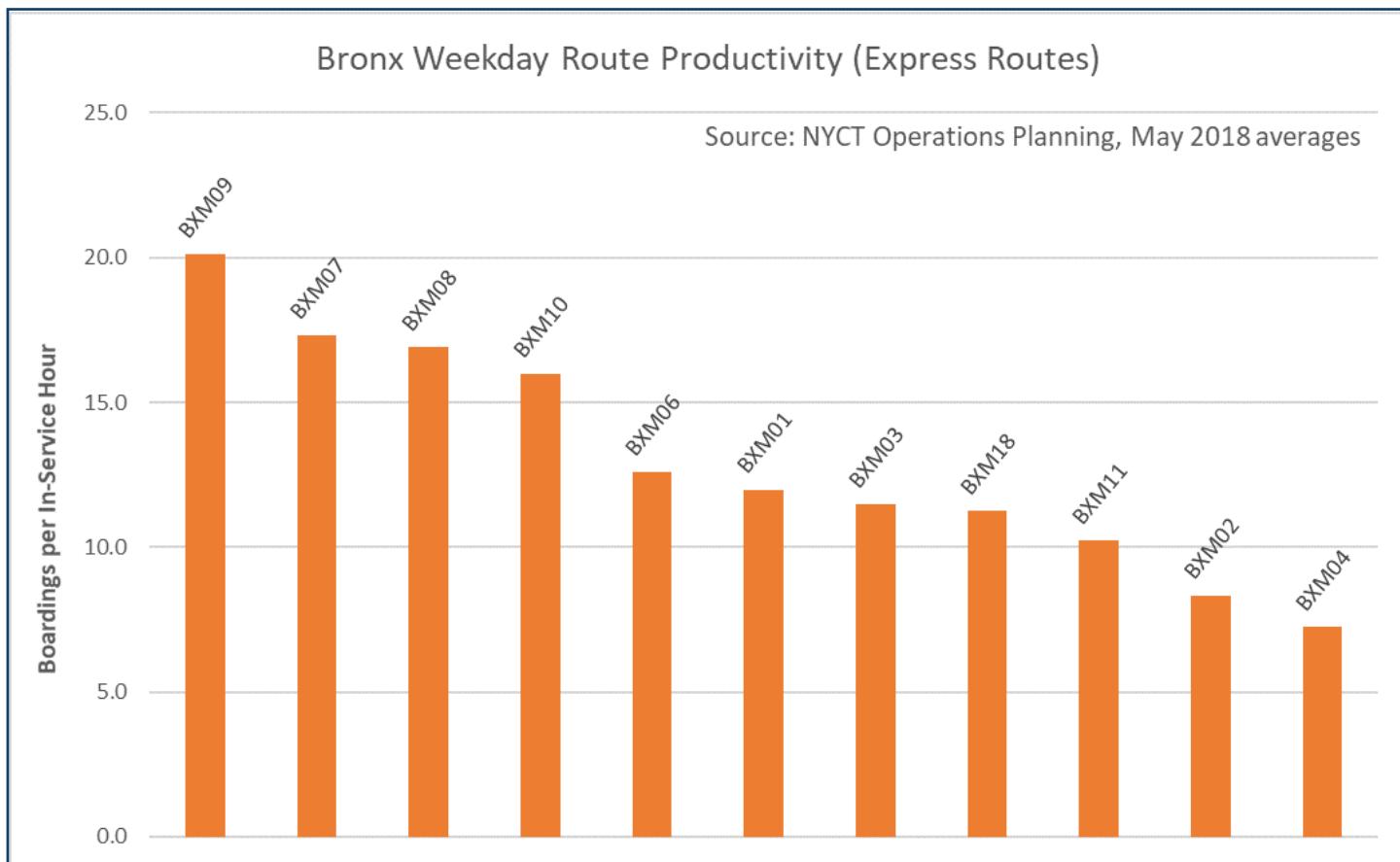
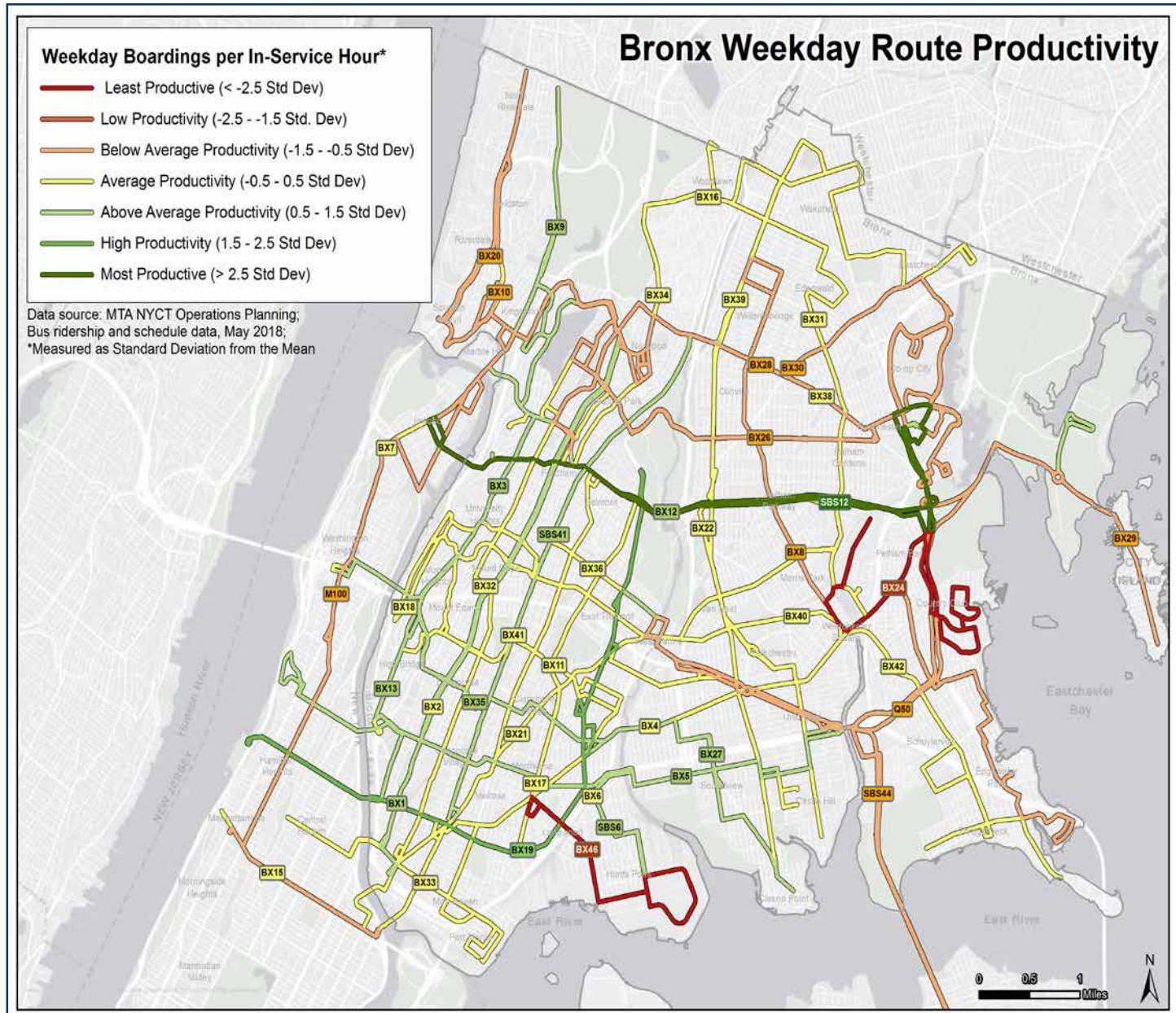


Chart 24. Bronx Weekday Route Productivity (Express Routes)

The following map displays passenger boardings per in-service hour for an average weekday. Those local, limited, and SBS routes ranking above average tend to have one or more of the following characteristics: they are simple, straight, and direct, make connections with key bus routes and subway lines, and traverse through high-density, high-activity corridors throughout most of the route, where demand is the greatest. These types of routes are designed to maximize ridership. Conversely, those ranking below average have one or more of the following characteristics: they are more complex, circuitous, and indirect, traversing through lower-density, limited-activity areas, where there is less demand for travel. These types of routes are designed to provide basic transit coverage to these areas.



Map 34. Bronx Weekday Route Productivity

For example, the Bx12 SBS is the most productive route in the Bronx. This route mostly travels along one main corridor. This corridor is dense with mixed activity, including schools, colleges, shopping centers, and hospitals. Almost every stop is well-utilized because there are so many trip generators.

It also connects with every subway line in the Bronx. Additionally, its simplicity, directness, limited stops, off-board fare collection, and other Select Bus Service features make it a fast and attractive service.

By contrast, the least productive route, the Bx24 serves a low-density residential neighborhood and the Hutchinson Metro Center (911 Call Center), via a complex, circuitous route with low stop activity.

This is a coverage route, intended to provide basic transit access to a limited number of people who would otherwise not have it.

Weekend

The following chart displays boardings per in-service hour by route for an average Saturday.

The five most productive non-express routes are the Bx12 SBS, Bx19, Bx35, Bx31, and the Bx27, respectively. The five least productive non-express routes are the Bx46, Bx24, Bx23, Bx8, and Bx34, respectively, with the Bx46 experiencing seven boardings per in-service hour.

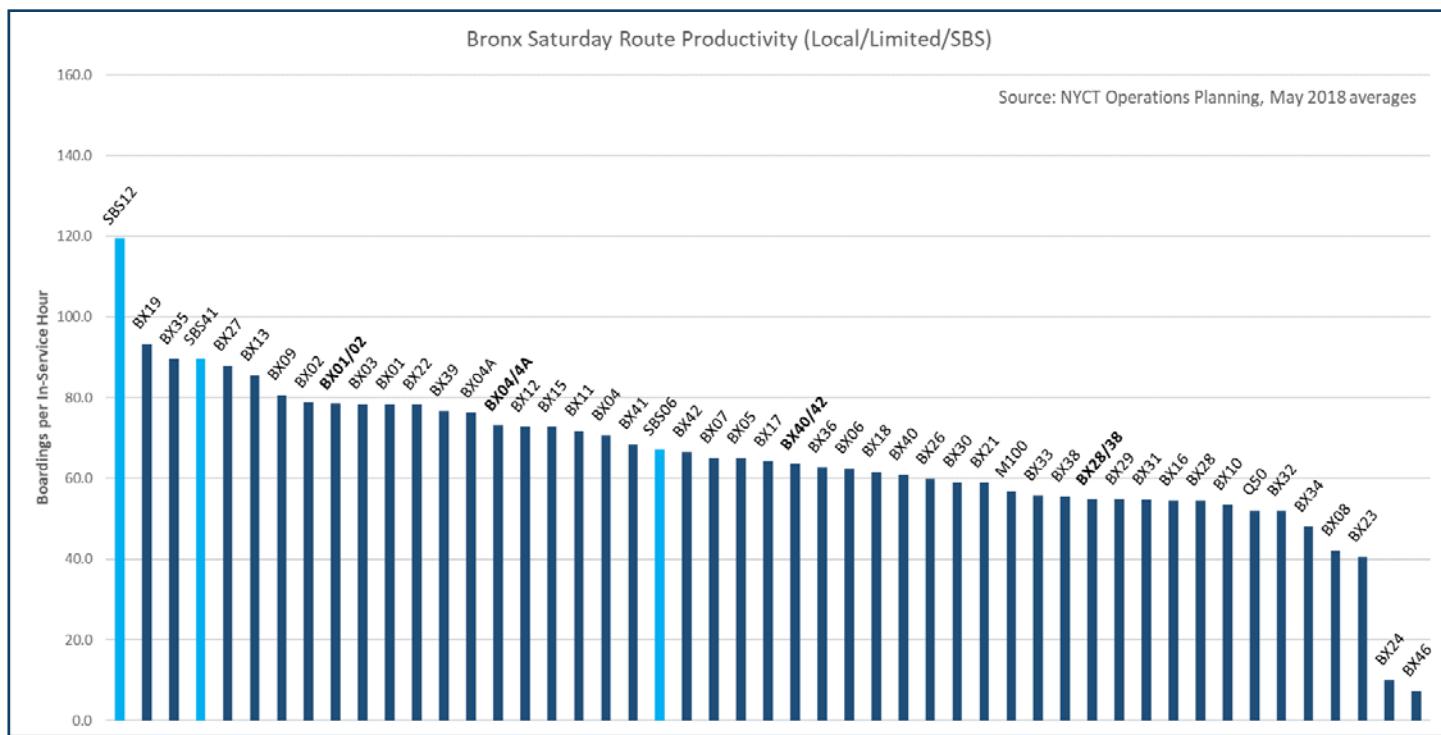


Chart 25. Bronx Saturday Route Productivity

The following chart displays average Saturday boardings per in-service hour for express routes. Like express bus weekday productivity, the top performing express routes on an average Saturday are the BxM10 and BxM7, respectively. The BxM4 is the worst performing express route and carries approximately five passengers per in-service hour.

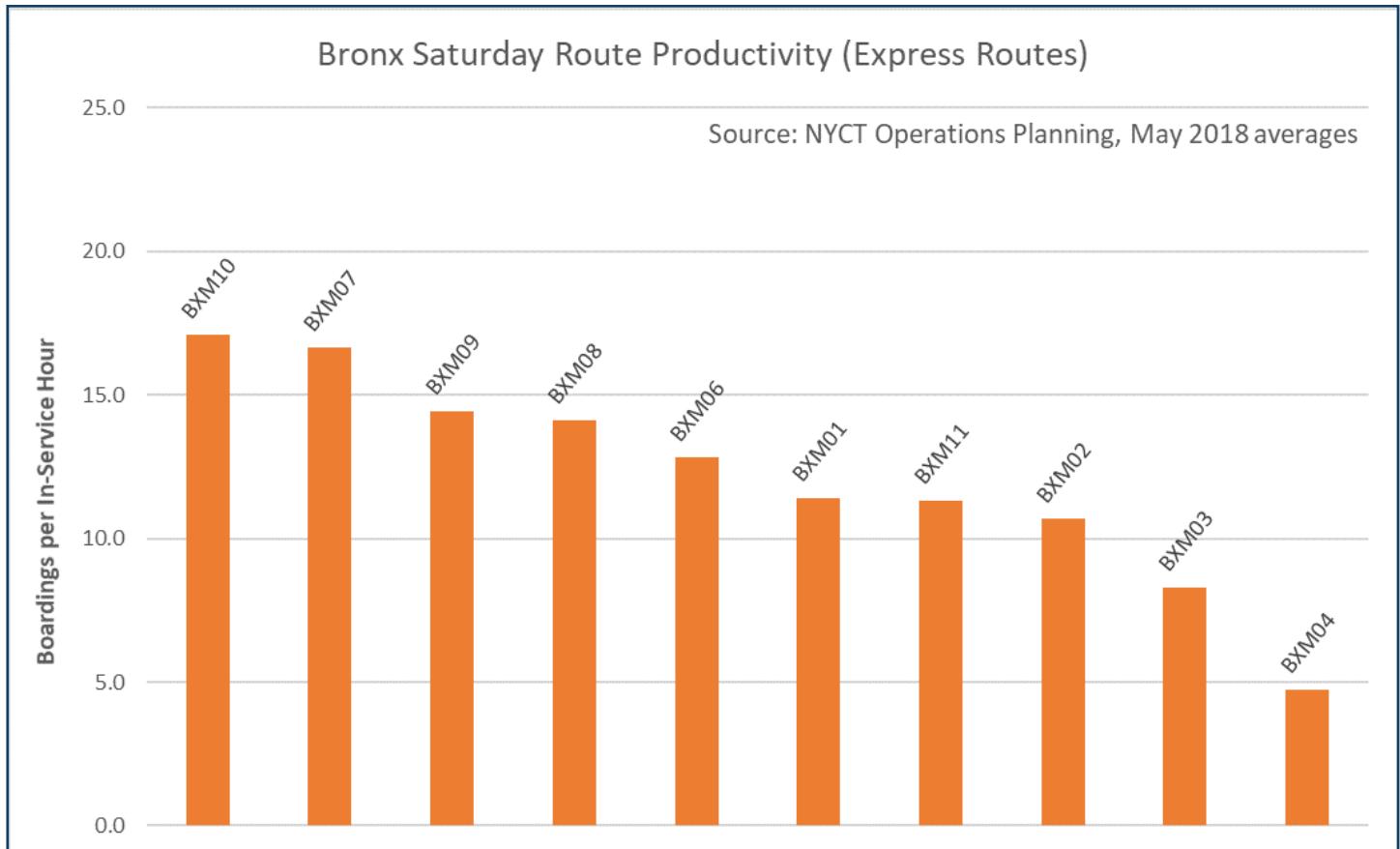


Chart 26. Bronx Saturday Route Productivity (Express Routes)

The following chart display boardings per in-service hour by route for an average Sunday. The five most productive non-express routes are the Bx12 SBS, Bx13, Bx19, Bx35, Bx27, and Bx3, respectively.

The five least productive non-express routes are the Bx46, Bx24, Bx8, Bx23, and Bx34, respectively, with the Bx46 experiencing five boardings per in-service hour.

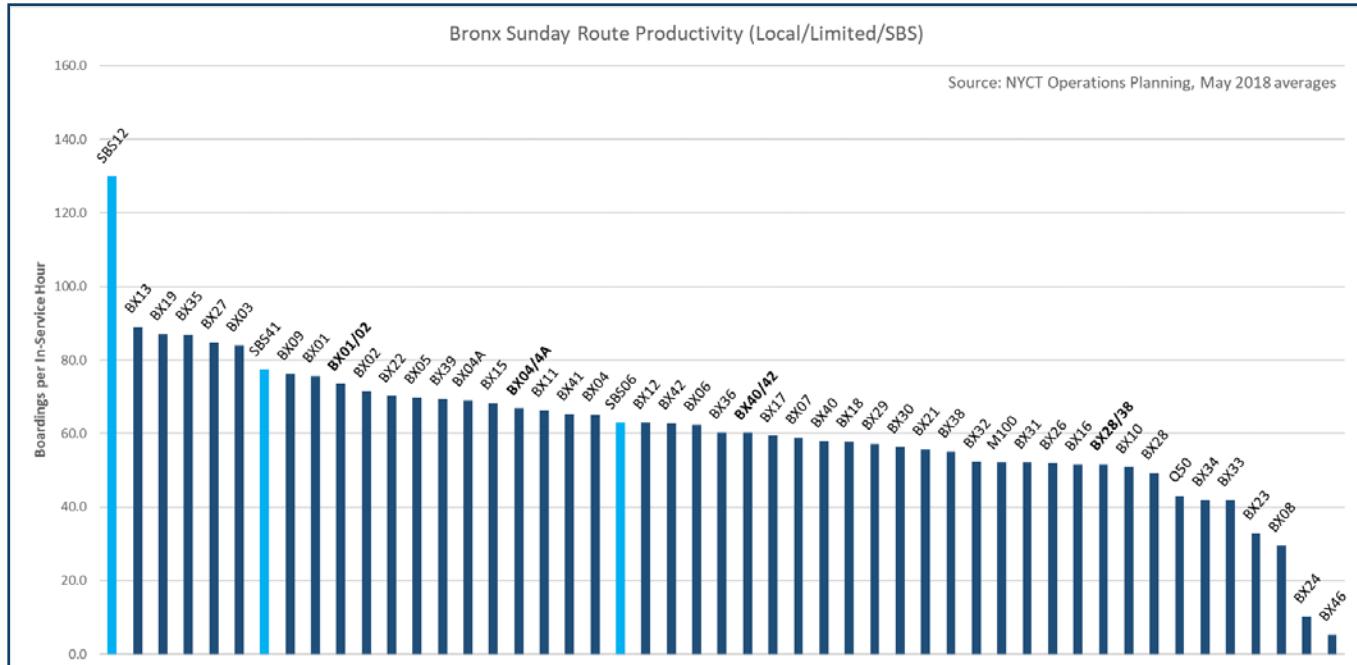


Chart 27. Bronx Sunday Route Productivity

The following chart displays average Sunday boardings per in-service hour for express routes. The top performing express routes on an average Sunday are the BxM7 and BxM10, respectively. The BxM4 is the worst performing express route and carries approximately four passengers per in-service hour.

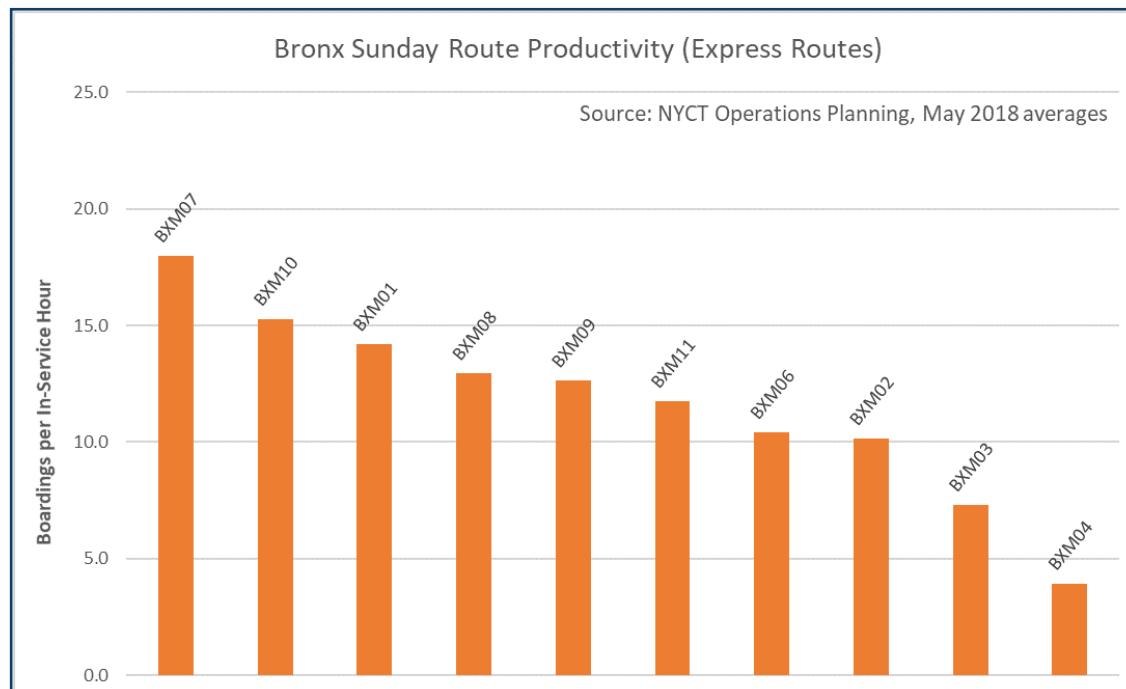


Chart 28. Bronx Sunday Route Productivity (Express Routes)

Productivity by Measure

While boardings per in-service hour is the most commonly used productivity measure among transit agencies, it has limitations. For example, it does not consider the size of the vehicle and tends to favor articulated bus routes, since they can carry more people per bus. To make up for limitations like this, other measures of productivity can be analyzed together to provide a better picture of a route's productivity. The following measures examine ridership in relation to miles, trips, and capacity:

Passenger boardings per in-service mile measures the number of unlinked passenger boardings generated for each mile operated in service. This measure usually correlates with boardings per in-service hour but can differ based on the length and speed of a route.

Passenger boardings per trip measures the number of unlinked passenger boardings generated for each trip operated in service. This measure is easier to understand on routes that do not generate much passenger turnover (e.g. express routes), since the boardings will not usually exceed the number of seats and standing space. For routes with significant passenger turnover, this measure will surpass the combined seating and standing space. This measure does not consider the size of the vehicle.

Capacity utilization measures the number of unlinked passenger boardings compared to the total number of seating and standing spaces that are scheduled on a route. This measure considers vehicle size and capacity (e.g. standard versus articulated) and is shown as the percentage of total scheduled spaces that are used by customers. Routes with significant passenger turnover may have a capacity utilization over 100 percent. A limitation of this measure is that it does not consider the length of time a vehicle is on the road. As a result, it favors longer routes that generate more opportunities for customers to board and alight.

The following chart shows the combined overall productivity of each Bronx local, limited, and SBS route using boardings per in-service hour and the three additional productivity measures just discussed. Since each measure has a different unit and scale, a methodology using z-scores was used to compare them. For each route and each measure, the z-score was calculated to determine its standard deviation from the mean. The z-scores for all four measures were then summed together to create a cumulative z-score for every route. Routes with positive z-scores are more productive, routes with negative z-scores are less productive, and routes with z-scores closer to zero perform near the average.

The Bx19 and Bx12 SBS are the most productive routes in the Bronx, with very strong z-scores in all measures. These routes are constantly occupied with passengers for their entirety, serving high-density, high-activity areas that generate significant passenger turnover. Conversely, the worst performing routes in all measures are the Bx24 and the Bx46. Some routes perform positively in certain measures, and negatively in others. For example, the Bx27 performs relatively well in both boardings per in-service hour and mile, yet it performs below average in boardings per trip and capacity utilization. This is likely because the Bx27 is a short route that acts as a feeder to the subway for a densely populated area. A feeder route gradually fills up to its standing capacity until it reaches the subway where it unloads. These buses are not running empty, and scheduled service is well-utilized. However, because the route is generally feeding residents to the subway, there is likely not as much passenger turnover. Once buses fill up, they stay full until the end of the route, thus the lower boardings per trip and capacity utilization. It should also be noted that the data used is from May 2018 and is prior to the newly introduced Soundview ferry service.

Bronx Weekday Route Productivity by Measure

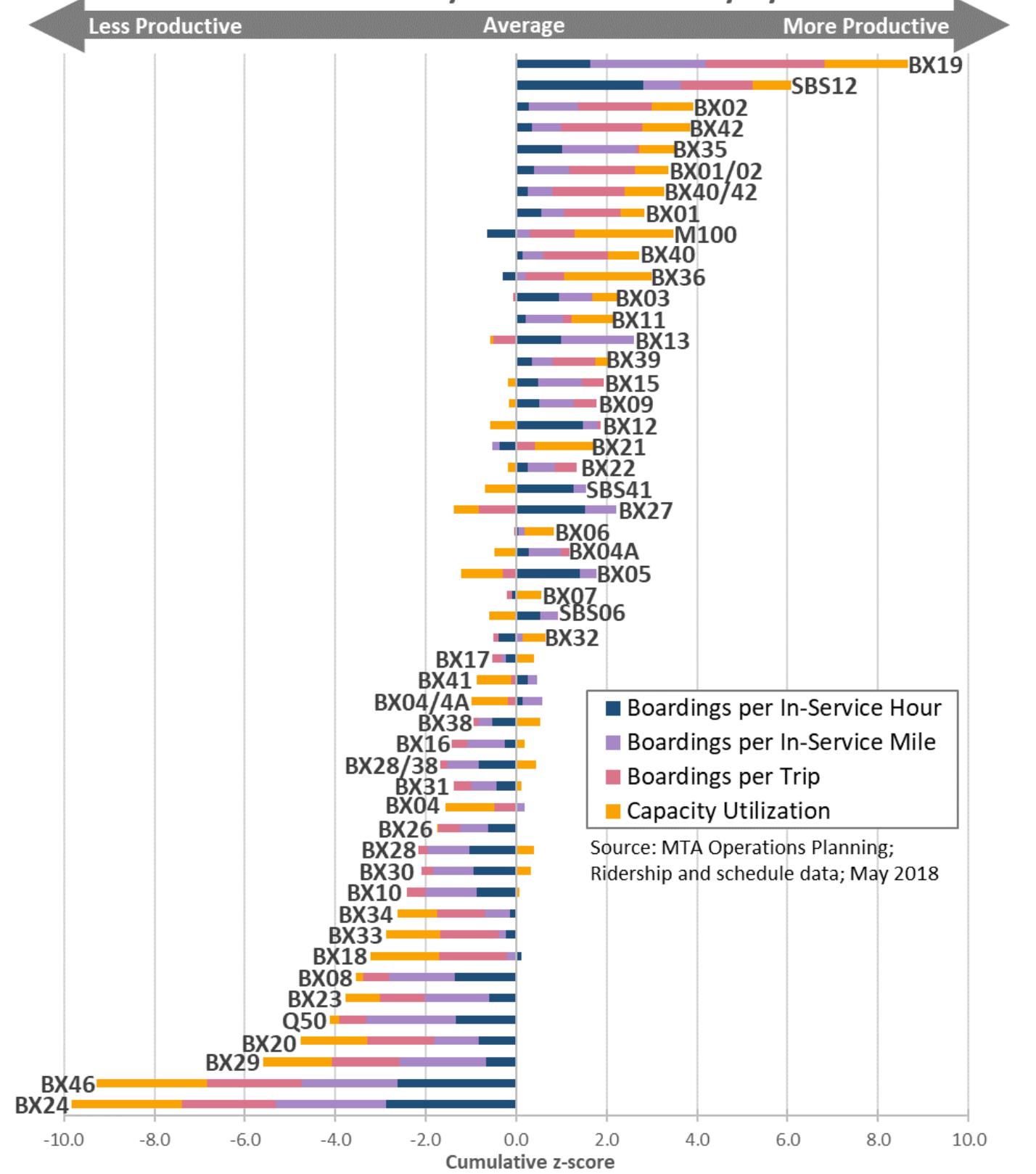


Chart 29. Bronx Weekday Route Productivity by Measure

Stop Spacing

Stop spacing is the distance between stops on a given route. Routes with closely spaced stops are convenient for riders who prefer a shorter trip to their bus stop. However, the trade-off is that routes with closely-spaced stops have more stops, which can lead to the bus stopping more frequently along the route. This frequent stopping can slow travel times for customers.

The existing MTA New York City Transit Service Guidelines Manual (2010) recommends the following stop spacing for local, limited-stop, and express bus routes:

- ◊ **Local:** For local bus routes in areas with grades that are generally less than six percent, the desired average spacing interval between bus stops is three blocks or 750 feet.
- ◊ **Limited-stop:** For limited-stop bus routes, the desired average spacing interval between stops is ten blocks or 0.5 miles (2,640 feet).
- ◊ **Express:** For express bus routes, the desired average spacing interval between bus stops is seven blocks or 1,750 feet outside Manhattan, and five blocks or 1,250 feet within Manhattan.

The following chart shows the average stop spacing for each bus route in the Bronx. Most routes fall within the range of 750 to 1,000 feet between stops, with the limited-stop routes averaging closer to 1,500 feet between stops. The SBS routes have stops that are spaced at far greater intervals than those of the local and limited-stop routes, with the Bx41 SBS and the Bx12 SBS routes averaging close to 2,500 feet between stops.

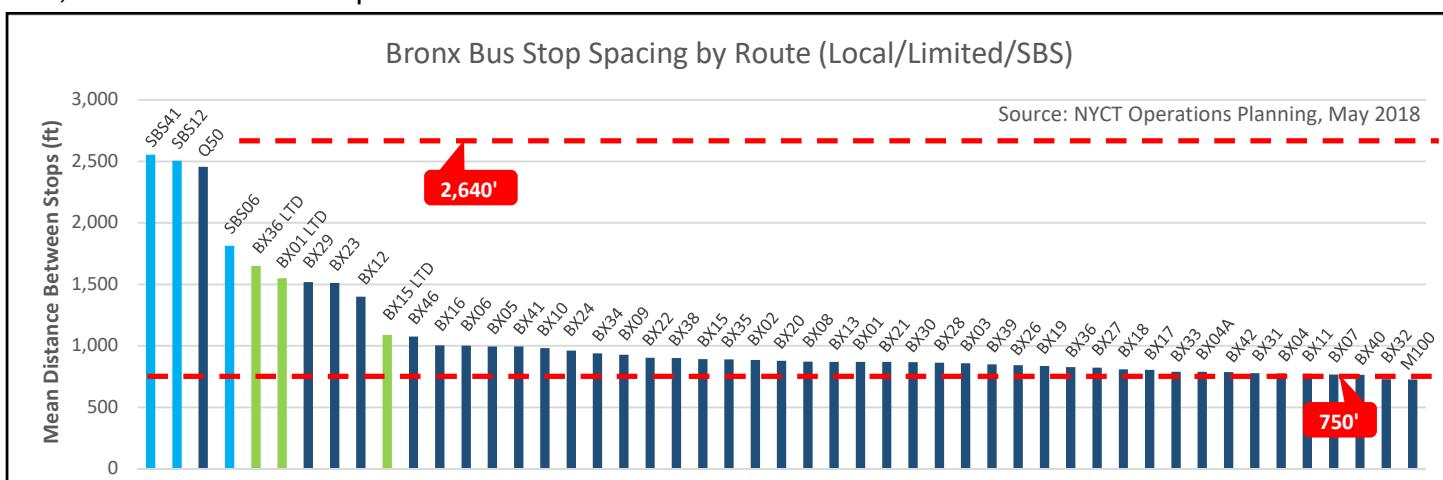


Chart 30. Stop Spacing by Route

Geographic constraints can cause certain segments of a route to have stops spaced extremely far apart. The average stop spacing for a route that traverses a long bridge or a large cemetery, for example, will be skewed higher because there is no stop on the bridge or in the cemetery. In other words, the distance between the last stop before the bridge and the first stop after the bridge is greater than the distance between most other stops on the route.

The following chart attempts to account for some of these particularities by showing the distance between each stop for all bus routes in the Bronx. The largest category is the range of distances from 500 to 750 feet, which would be on the low end of the 750-foot recommended stop spacing for local bus routes.

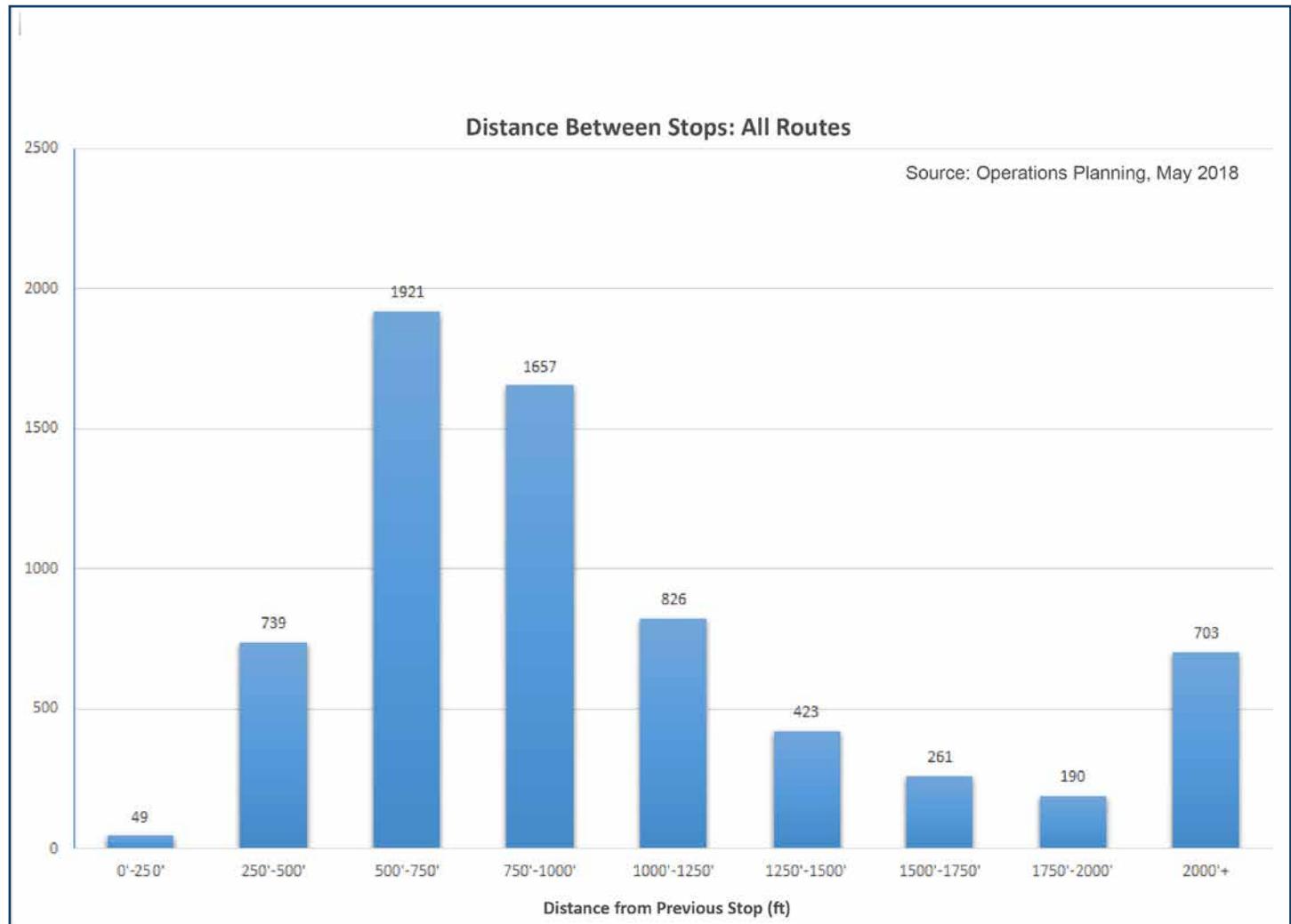


Chart 31. Distance Between Stops for All Routes

Bus Stop Inventory

Bus Shelters

Providing an inventory of bus stop amenities provides a snapshot of where infrastructure is concentrated and can help when reimagining a bus network.

There are approximately 454 bus stop shelters in the Bronx. The following chart shows bus routes with 10 or more shelters along the route. The 17 routes listed have approximately 64 percent of all bus shelters in the Bronx.

Route	Total Number of Shelters
Bx1/2	39
Bx22	26
Bx5	22
Bx28	20
Bx31	20
Bx10	18
Bx19	18
Bx36	18
Bx21	17
Bx9	16
Bx12 SBS	12
Bx17	12
Bx32	11
Bx12	11
Bx40	10
Bx26	10
Bx8	10

Source: NYC DOT Bus Shelter Inventory, 2019

Chart 32. Bronx Routes with 10 or More Bus Shelters

Bus Time (RTPI) Pole Signs

Another useful bus stop amenity are the Bus Time pole signs, referred to as Real Time Passenger Information (RTPI) pole signs. These signs resemble a standard bus stop lollipop; however, they are digitized and provide real-time information regarding bus arrivals (see image below).



Presently, there are 17 RTPI pole signs in The Bronx. They are placed at high ridership bus stops that are served by multiple routes. The following table displays the routes and location of each of these stops.

Route(s) Serving Stop	Stop Location
Bx1 Ltd, Bx7, Bx10, Bx20	W 231 ST/BROADWAY
Bx1 Ltd, Bx7, Bx10, Bx20	W 231 ST/BROADWAY
Bx3	UNIVERSITY AV/W FORDHAM RD
Bx9	BROADWAY/W 231 ST
Bx9, Bx22, Bx28	E KINGSBRIDGE RD/GRAND CONCOURSE
Bx10, Bx26, Bx28	BEDFORD PK BL/JEROME AV
Bx31	E 233 ST/WHITE PLAINS RD
Bx15, Bx15 Ltd	3 AV/E TREMONT AV
Bx1, Bx1 Ltd, Bx2, Bx28	E MOSHOLU PKY S/JEROME AV
Bx15, Bx15 Ltd	3 AV/E 180 ST
Bx1, Bx1 Ltd, Bx2	W MOSHOLU PKY S/JEROME AV
Bx1, Bx1 Ltd, Bx2, BxM4	GRAND CONCOURSE/E 170 ST
Bx22, Bx34	VALENTINE AV/E FORDHAM RD
Bx3, Bx18	UNIVERSITY AV/W TREMONT AV
Bx1, Bx1 Ltd, Bx2	GRAND CONCOURSE/ECHO PL
Bx3, Bx40, Bx42	UNIVERSITY AV/W BURNSIDE AV #2
Bx40, Bx42	E BURNSIDE AV/JEROME AV

Source: NYC DOT Bronx RTPI Pole Sign Inventory, 2019

Chart 33. Bronx Bus Stops with RTPI Pole Signs

SBS Wayfinding Panels

Similar yet physically different are SBS wayfinding panels. These resemble a totem pole design, are digitized, and provide real-time information regarding bus arrivals (see image below), and provide a map for customers to reference where they are.



There are approximately 17 SBS wayfinding panels in The Bronx, with the majority located along the Bx6 SBS route. The following chart displays the route and stop of each SBS wayfinding panel.

Route	On Street	At Street
Q44 SBS	Hugh J. Grant Circle	Virginia Avenue
Q44 SBS	Cross Bronx Expressway	Beach Avenue
Q44 SBS	Westchester Avenue	Virginia Avenue
Bx12 SBS	E Fordham Road	Webster Avenue
Bx6 SBS	E 161 Street	River Avenue
Bx6 SBS	E 161 Street	Sherman Avenue
Bx6 SBS	E 161 Street	Melrose Avenue
Bx6 SBS	E 163 Street	3 Avenue
Bx6 SBS	E 163 Street	Prospect Avenue
Bx6 SBS	E 163 Street	Intervale Avenue
Bx6 SBS	Hunts Point Avenue	Bruckner Boulevard
Bx6 SBS	Hunts Point Avenue	Spofford Avenue
Bx6 SBS	Hunts Point Avenue	Seneca Avenue
Bx6 SBS	E 163 Street	Kelly Street
Bx6 SBS	E 163 Street	Prospect Avenue
Bx6 SBS	E 161 Street	Melrose Avenue
Bx6 SBS	E 161 Street	Sherman Avenue

Source: NYCDOT Bronx SBS Wayfinding Panels Inventory, 2019

Chart 34. Bronx Bus Stops with SBS Wayfinding Panels

Slow Bus Speeds

Slow bus speeds are an ongoing challenge to fast and reliable bus service to Bronx residents and employees. As congestion continues to worsen, it is crucial that the MTA and NYC DOT collaborate to improve bus speeds and move New Yorkers to their destinations as quickly and safely as possible.

The following charts display bus speeds by route for NYCT and MTA Bus Company local, limited, and SBS service in the Bronx. The bus speeds displayed were determined by using the Bus Time GPS system. Analyzed data corresponds to routes that originate in Bronx depots. Data includes bus speeds recorded during May 2014, May 2017 and May 2018.

Bronx bus speeds during May 2018 averaged 6.58 mph, 12 percent below the average system-wide speed of 7.50 mph for May 2018. The slowest Bronx bus routes, operating at speeds below five miles per hour, include the Bx19, M100, Bx35, Bx13, Bx11, and Bx15 Limited. Approximately one-third of Bronx bus routes operate at a speed higher than the Bronx average, with SBS routes operating close to or above the average. The fastest Bronx bus routes (operating at speeds greater than nine miles per hour) include the Bx18, Bx46, Bx23, Q50 Limited, and Bx29. The two fastest routes, the Bx29 and Q50 limited, include route segments that traverse bridges and provide connections for Bronx residents to get to/from City Island and Queens, which means they have long non-stop sections.

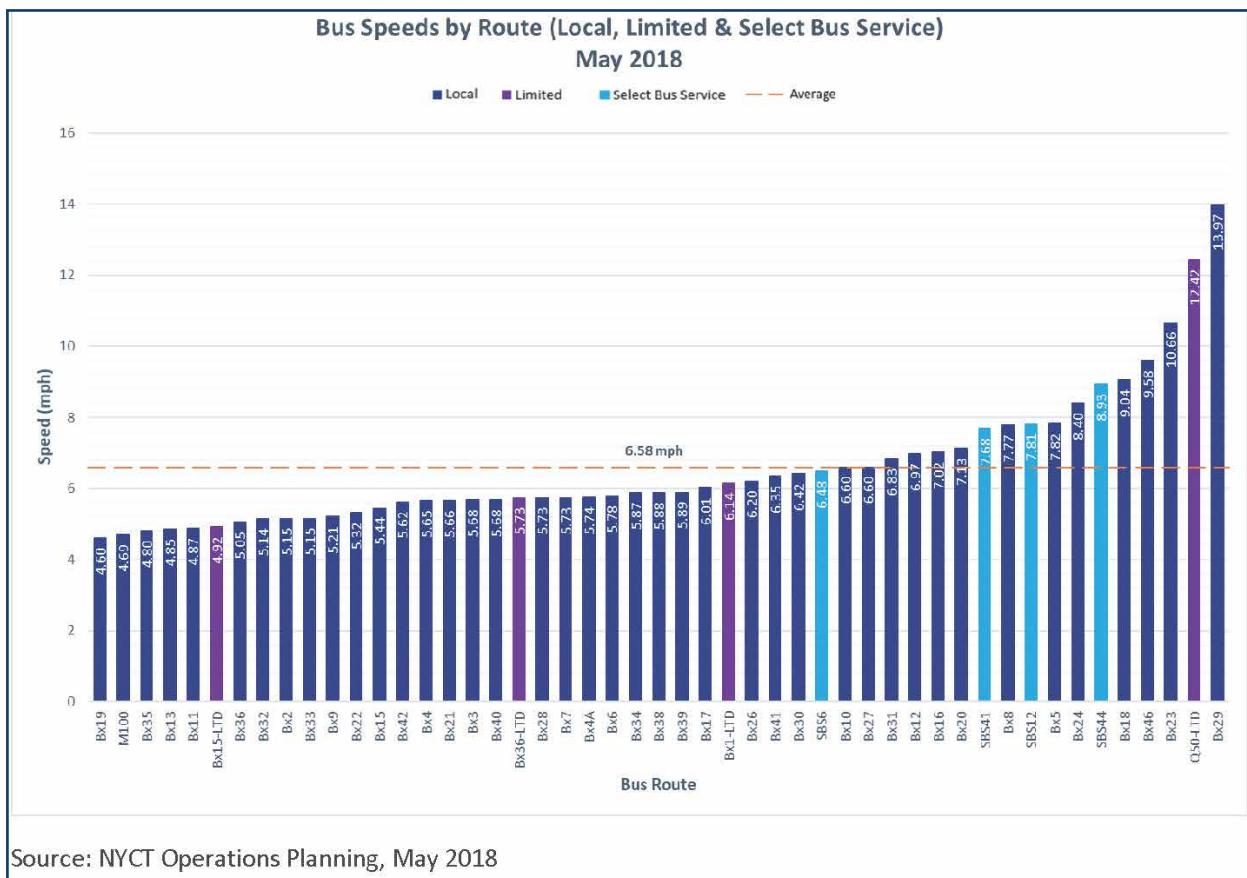


Chart 35. Bronx Bus Speeds by Route (May 2018)

Since May 2014, there has been an overall decrease in Bronx bus speeds. Apart from four bus routes, every bus route has slowed. This trend is systemwide and nationwide, and continues to worsen.

The routes that decreased in speed by 15 percent or greater are the Bx19, M100, and Bx35.

These routes traverse high traffic areas that often connect to or parallel a segment of a subway line and are high ridership routes, each carrying greater than 20,000 customers on an average weekday.

The four routes that have seen a speed increase are the Bx46, Bx23, Q50 Limited, and Bx29.

These routes largely provide coverage and/or connections to other boroughs, and each have less than 6,000 average weekday boardings.

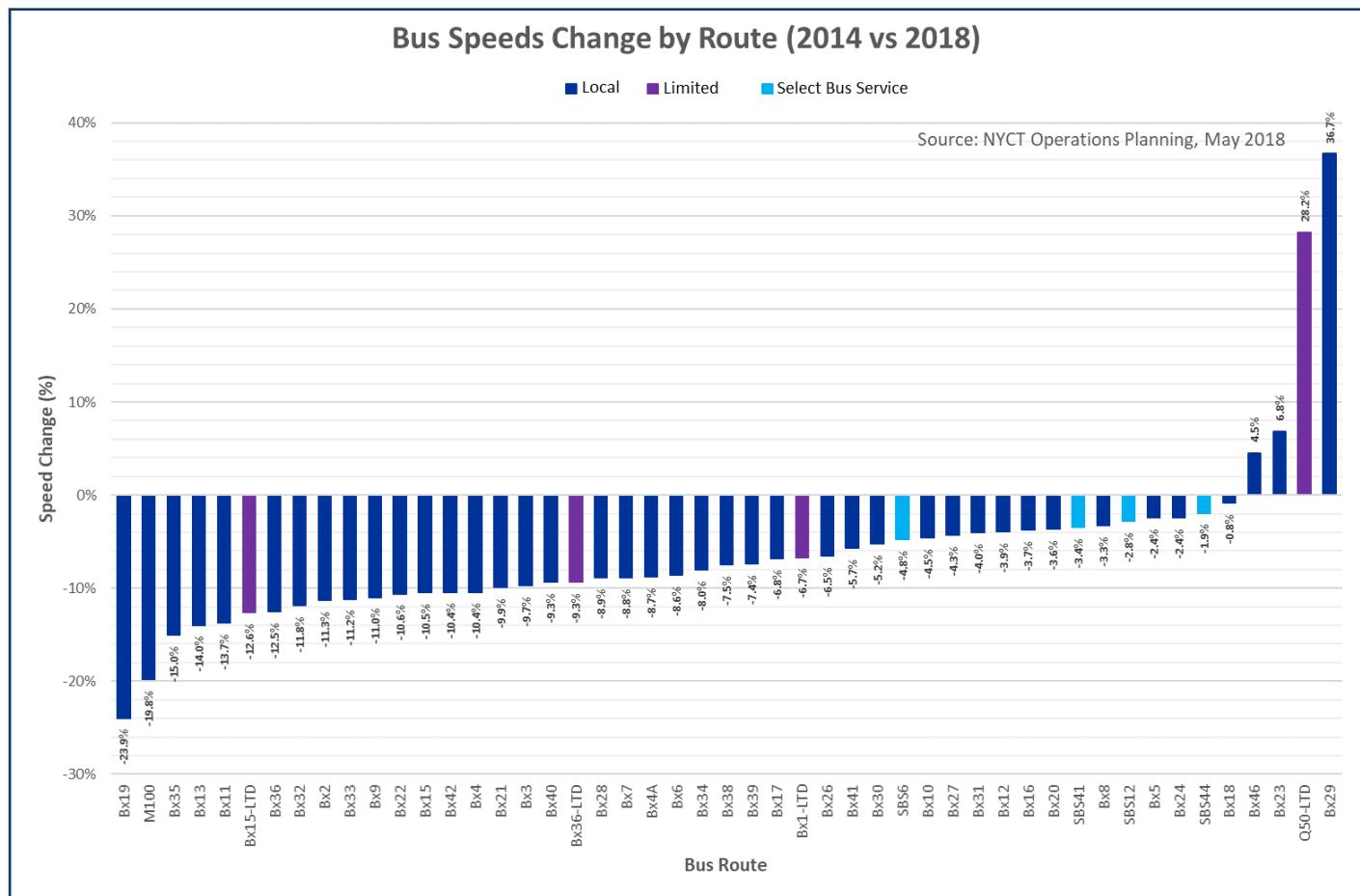
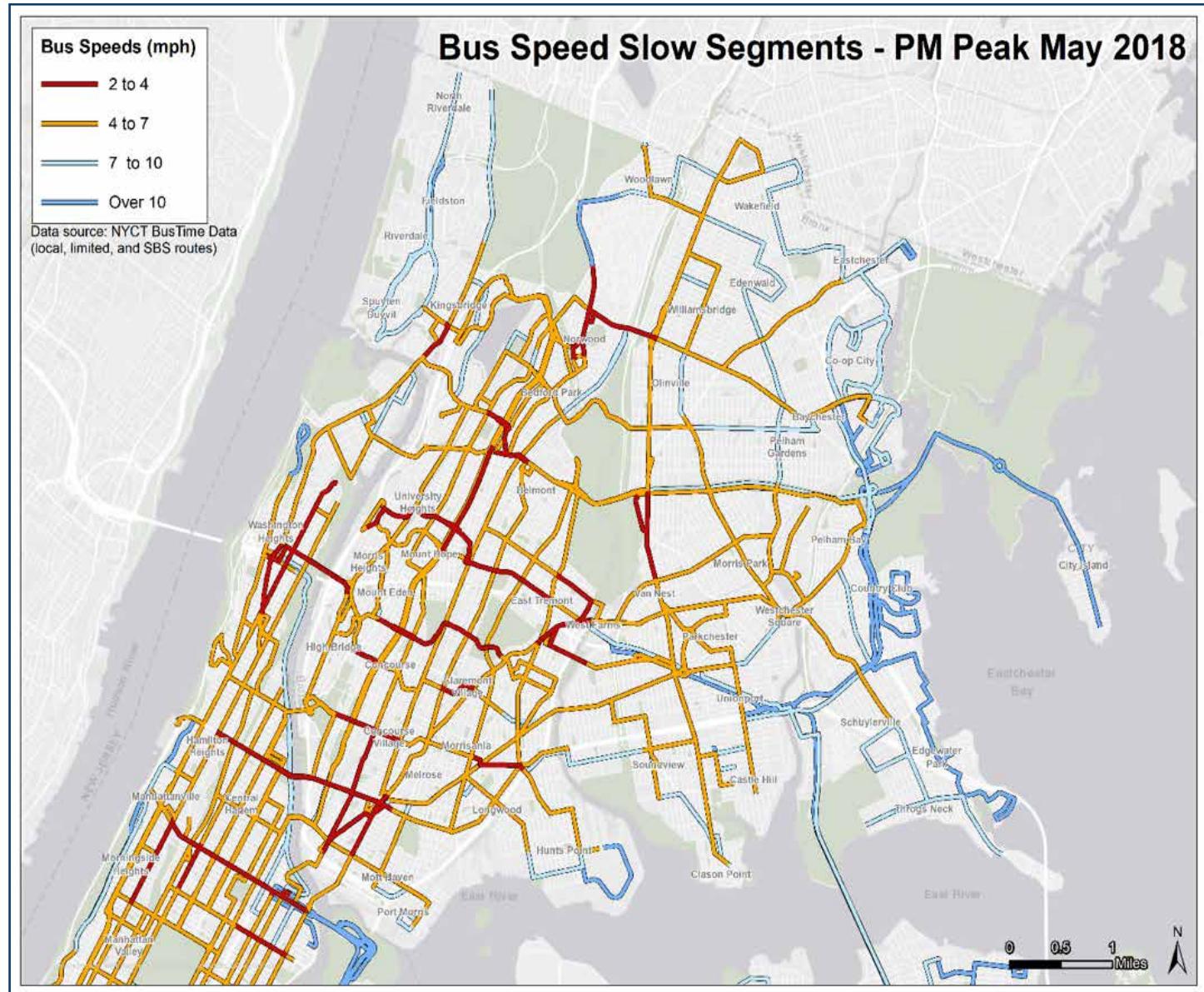


Chart 36. Change in Bronx Bus Speeds by Route (May 2014 – 2018)

The following map displays Bronx bus speeds by segment for the May 2018 PM Peak period. The slowest segments (2-4 mph) are highlighted in red, while most of the network is highlighted in orange (4-7 mph). Most of these segments are concentrated near the highest combined activity core of the Bronx (as previously shown in the Market Analysis). Segment speeds over 7 mph are observed in less dense neighborhoods, such as Co-Op City, City Island, Country Club, Throgs Neck, Riverdale and Wakefield.

Most of the slow bus speed segments correspond to east-west streets. However, north-south portions of Morris Avenue and Willis Avenue in the southern Bronx, plus Grand Concourse and Bainbridge Avenue in the northern Bronx, are also identified among the slowest.



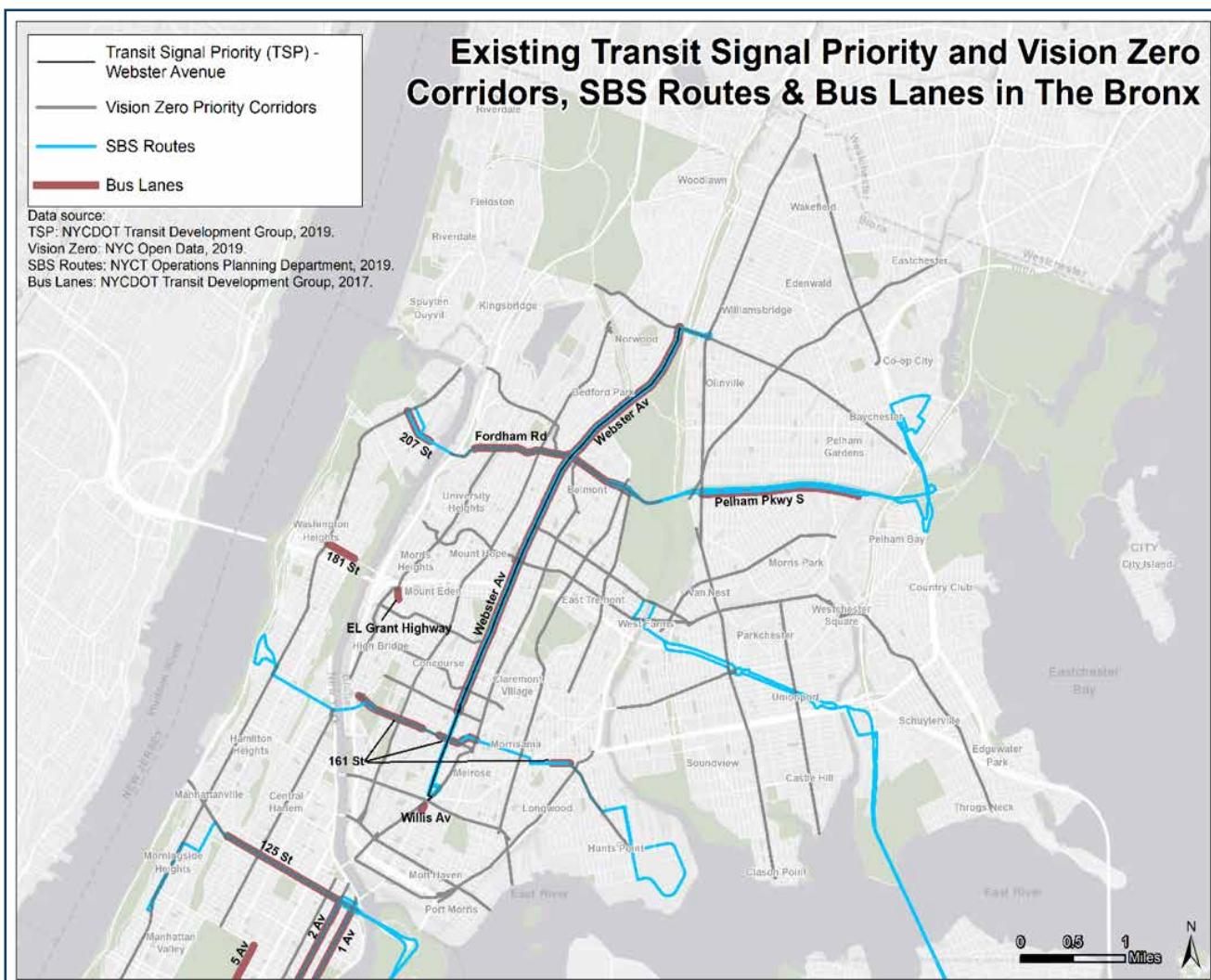
Map 35. Bus Speed Slow Segments (May 2018 PM Peak)

Bus Priority

NYC DOT controls street infrastructure and is a partner with the MTA. They oversee all bus related infrastructure, and build and maintain bus priority lanes and technology on the street.

Through the SBS program, the MTA and NYC DOT offer BRT features, such as dedicated bus lanes, off-board fare collection, and transit signal priority (TSP) to offer faster and more reliable service on high-ridership bus routes. SBS projects are also designed to make bus service easier to use, through features like bus bulbs, high-quality passenger information, and overall attention to pedestrian and vehicular safety. Moreover, SBS features can also be applied individually in locations not appropriate for the full SBS treatment.

The following map displays existing SBS routes, bus lanes, NYC Vision Zero priority corridors, and a TSP corridor in the Bronx. The map shows that there is an opportunity to build a network of bus lanes that would prioritize bus flows in the Bronx, instead of the current unconnected bus lane segments throughout the borough. The strongest corridors with consistent bus priority are Fordham Road and Webster Avenue. Building out this network would help to improve bus speeds and get Bronx customers to their destinations quickly and efficiently.



Map 36. Existing Transit Signal Priority and Vision Zero Corridors, SBS Routes & Bus Lanes in the Bronx

Financial Efficiency

Providing public transportation is expensive and rarely turns a profit. In the United States, most public transit services are subsidized, meaning their fare revenue does not cover the cost of operating the service. Financial efficiency measures typically correlate with productivity measures, and bring cost and revenue into the conversation to provide more insight into a route's performance. We considered the following measures when analyzing the financial efficiency of routes:

Farebox recovery ratio is the ratio of operating revenue to operating cost. Subsidized routes have a farebox recovery ratio below 100 percent, while profitable routes have a farebox recovery ratio over 100 percent.

Cost per boarding measures the cost of providing bus service relative to the number of customers using that service (annual service cost divided by annual boardings). The measure, as shown in the following chart, is broken down to show how much of the total cost per passenger is recovered from fare revenue (shown as fare revenue per boarding), and how much is subsidized by the agency (shown as net cost per boarding). This measure is related to farebox recovery, but adds ridership into the equation, and is shown as a dollar figure.

The following chart displays the weekday farebox recovery of each route. The five most financially efficient routes are the Bx12 SBS, Bx41 SBS, Bx19, Bx9, and Bx12 Local. Each of these routes has a farebox recovery ratio of 100 percent or greater, with the Bx12 SBS having a ratio of 153 percent. It is important to note that the operating cost of the SBS routes does not include the cost of the Eagle Team for fare enforcement, nor the cost of fare machine maintenance. Therefore, these routes do not run a profit. The least financially efficient routes are the BxM4, Bx24, Bx46, BxM2, and BxM11. Each of these routes have ratios of 30 percent or less, indicating that they are highly subsidized and costly to operate.

Bronx Weekday Farebox Recovery by Route

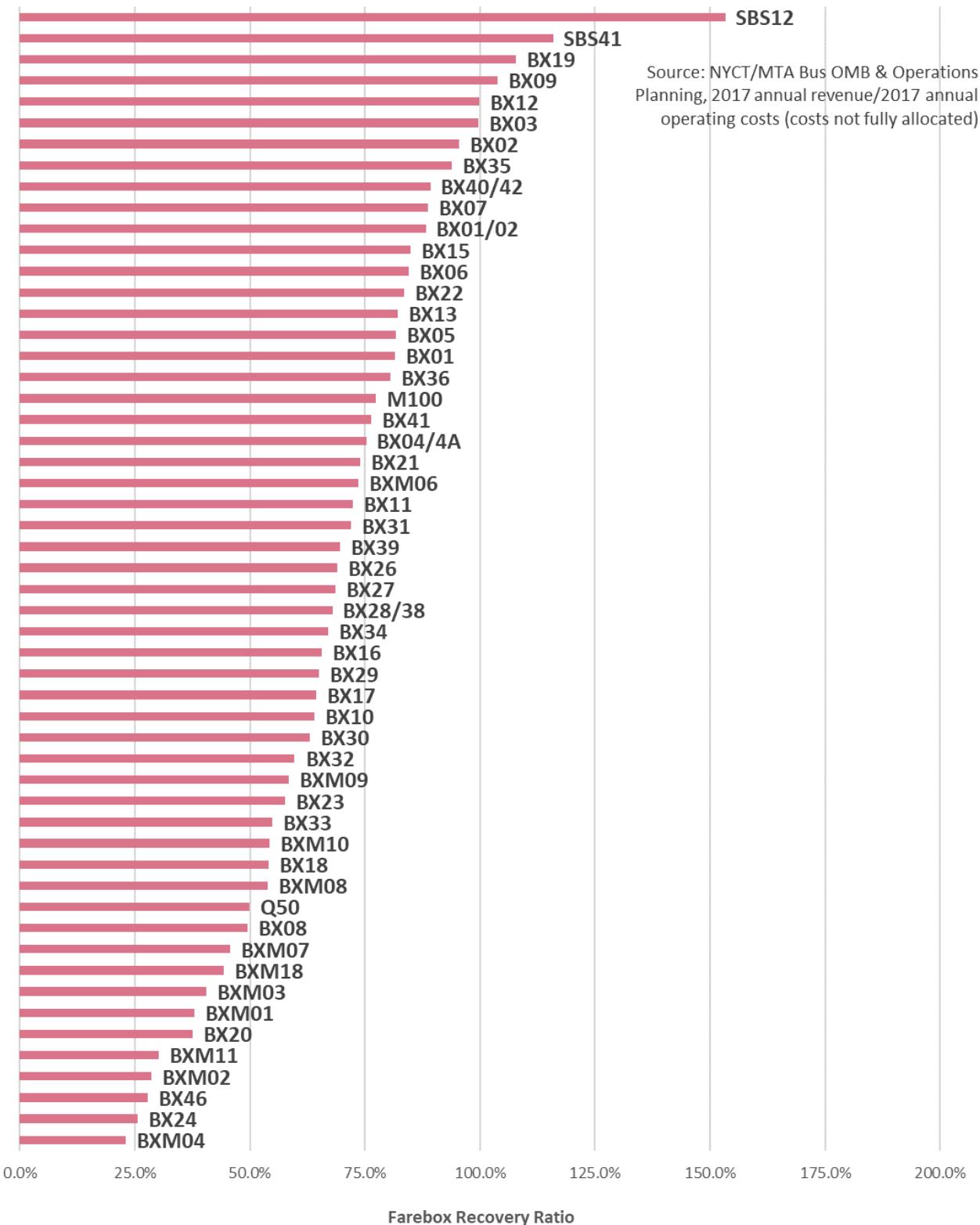


Chart 37. Farebox Recovery Ratio

The following chart displays the weekday cost per boarding of each route. It is broken down to show the fare revenue per passenger and the subsidy per passenger. The lower the operating cost per passenger, the more financially efficient the route. The greater the operating cost per passenger, the more subsidized the route and greater cost to provide service.

The top five routes with the lowest cost per passenger are the Bx12 SBS, Bx41 SBS, Bx19, Bx9, and Bx12 local. Each of these routes has an operating cost per passenger less than \$1.60, with the Bx12 SBS having a cost per passenger of approximately \$1.00. Conversely, the least financially efficient routes are the BxM4, BxM2, BxM11, BxM1, and BxM3. Each of these routes have a cost per passenger of \$12.85 or greater, with the BxM4 having a cost per passenger of approximately \$22.15. Express routes typically cost more to operate as they are a peaked, directional service and travel longer distances with less passenger turnover. In addition, express routes that overlap subway service for a significant portion of their route, such as the BxM4, may not have very high ridership due to customers more often choosing the faster subway service. As such, they operate with very low capacity utilization.

Bronx Weekday Cost Efficiency by Route

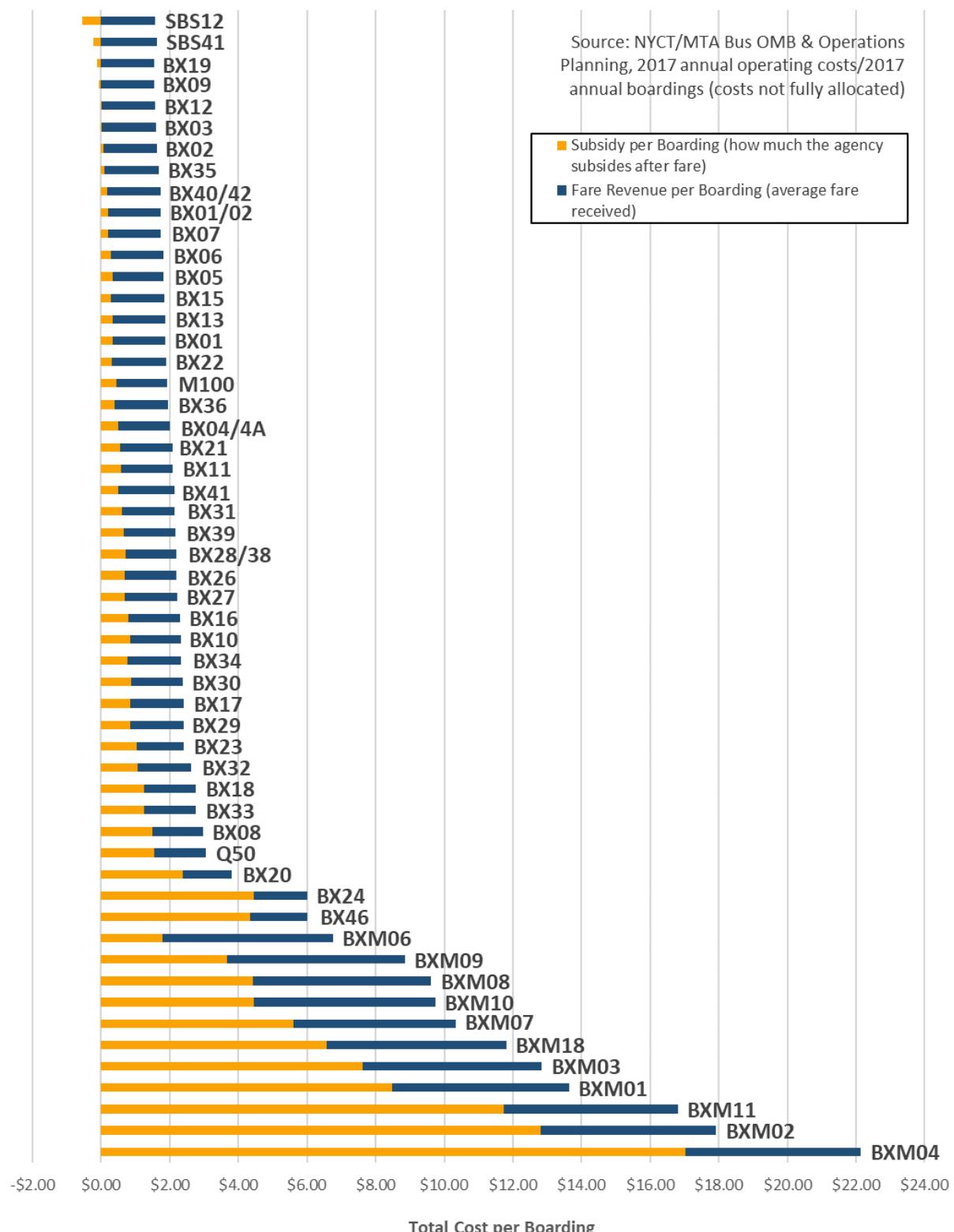


Chart 38. Total Cost per Boarding

Service Reliability

Wait Assessment

Wait Assessment measures how evenly buses are spaced. It is defined as the percentage of actual intervals between buses that are no more than three minutes over the scheduled interval for the morning (6am-9am) and afternoon (4pm-7pm) peak periods, and no more than five minutes over the scheduled interval for all other times.

Weekday

The following chart displays average weekday wait assessment by borough and systemwide. The average wait assessment for the Bronx is 75 percent, quite close to the citywide average of 76 percent, and the same level as Manhattan and Brooklyn. Staten Island showed the greatest wait assessment at 79 percent.

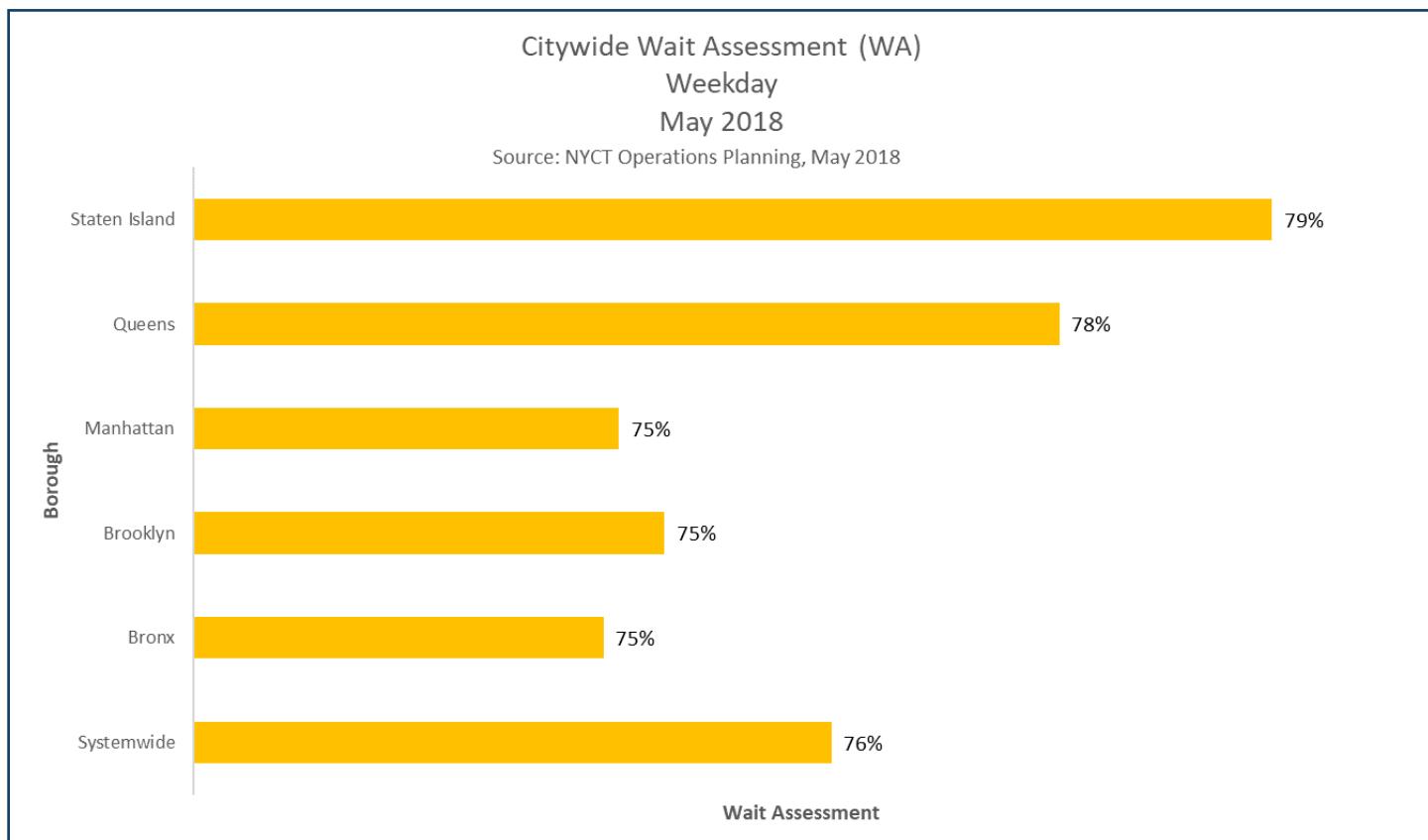


Chart 39. Citywide Wait Assessment

Wait Assessment in the Bronx decreased significantly in recent years. The following chart shows the average weekday change (decline) the Bronx experienced, decreasing seven percent since 2014 (as compared to a citywide decrease of two percent since 2014).

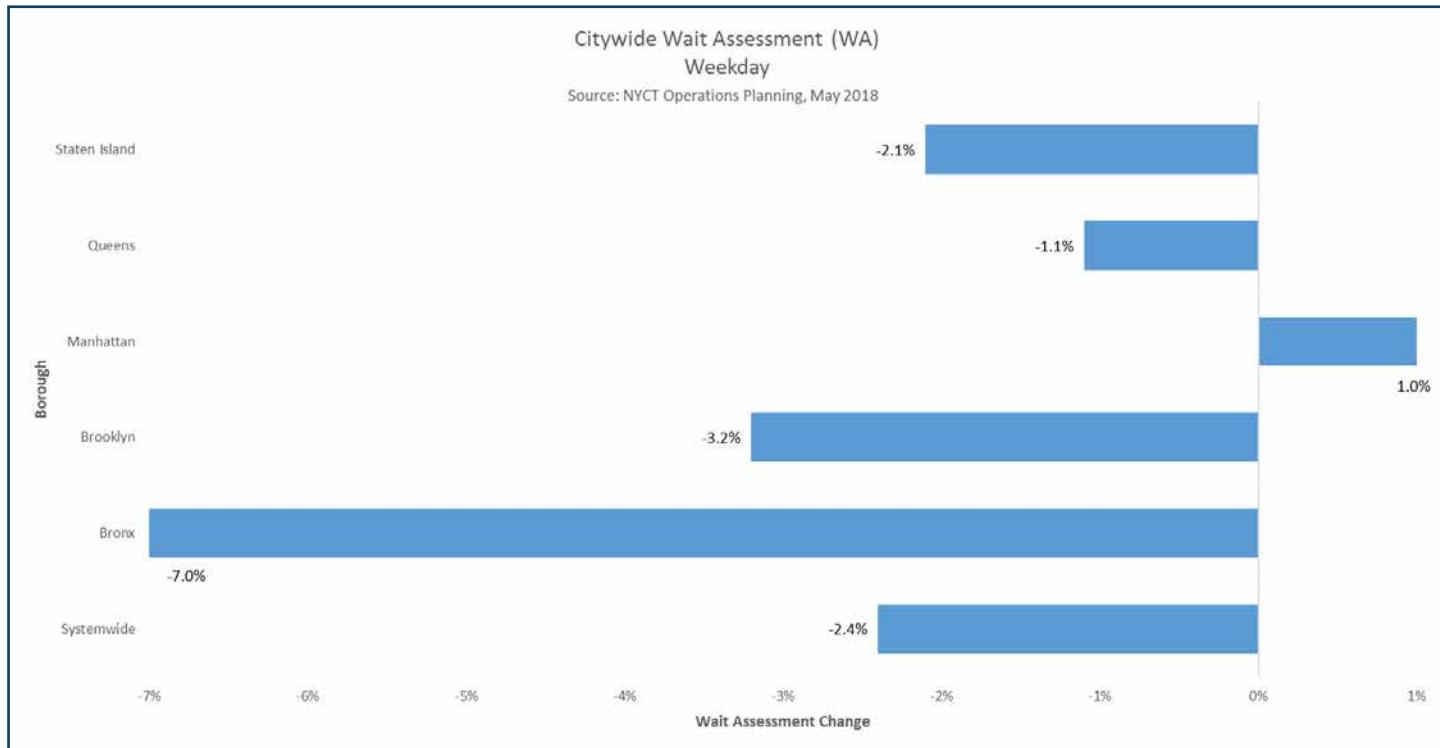


Chart 40. Citywide Wait Assessment 2014 – 2018 Change

Among local, limited, and SBS routes, the top five routes on the Wait Assessment metric in May 2018 were the Bx24, Bx46, Bx6 SBS, Bx29, and Bx23, as shown in the following chart. Aside from the Bx6 SBS, these are some of the least-frequent routes in the borough that tend to travel through less-congested areas.

The worst five routes were the Bx36 Limited, Bx15 Limited, Bx15 Local, Bx32, and Bx17. The Bx15 Limited and Bx36 are long interborough routes with high ridership that travel on congested streets, which tends

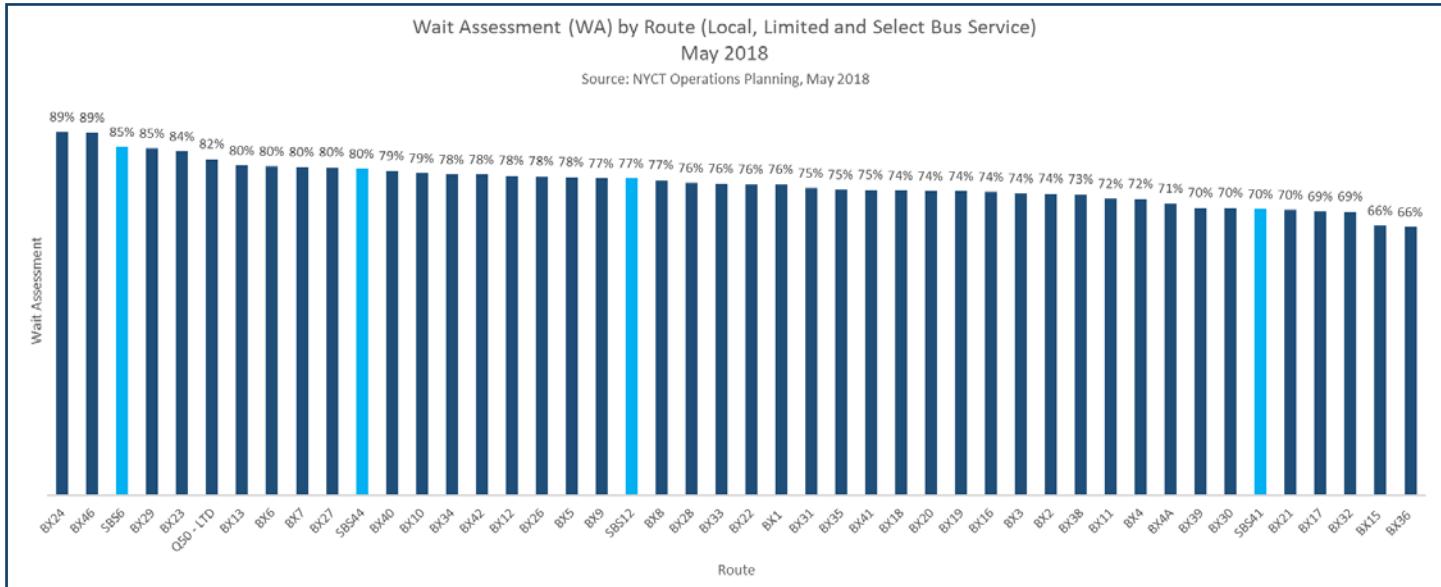


Chart 41. Weekday Wait Assessment by Route

Some routes have seen a notable drop in reliability since 2014: the Bx36 Local and Limited, Bx41 SBS, Bx35, and Bx21. Four of these routes are busy crosstown routes. Significant construction along Webster Avenue in 2018, partially to build bus bulbs for the Bx41 SBS likely led to poor Wait Assessment during this time. Meanwhile, the Bx23 has seen a notable increase since 2014.

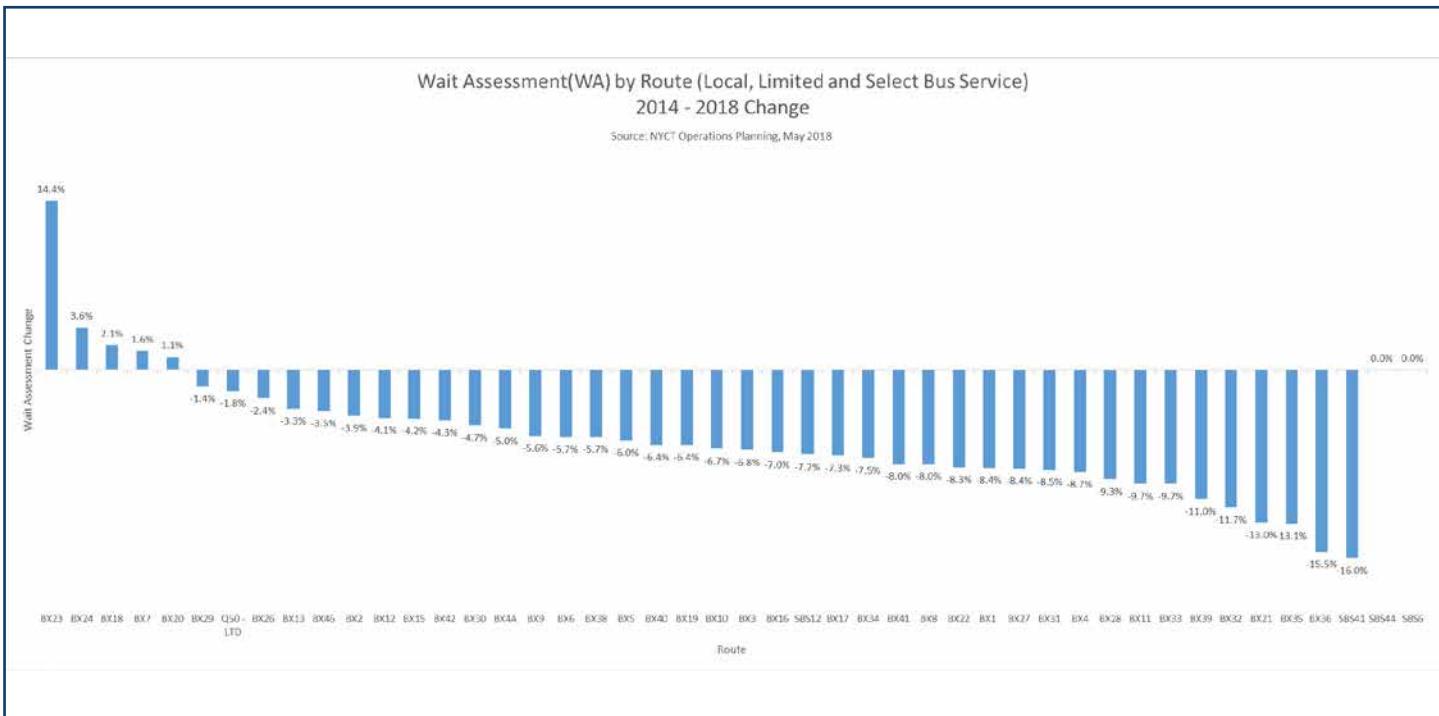


Chart 42. Wait Assessment by Route 2014 – 2018 Change

Average Wait Assessment for Bronx express routes was 80 percent in May 2018, and has generally remained constant over the past few years.

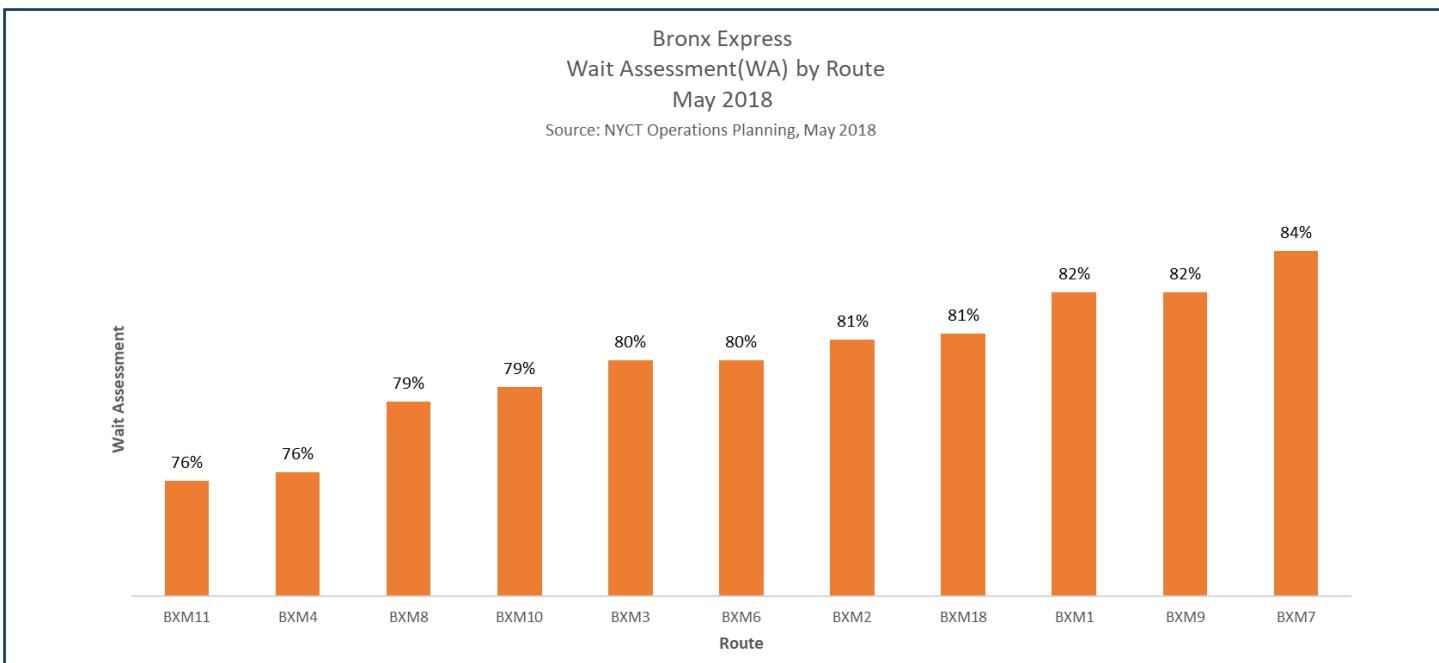


Chart 43. Weekday Wait Assessment by Route - Express

Weekend

The following chart displays average Saturday Wait Assessment by route. Among local, limited, and SBS routes, the top five routes on the Wait Assessment metric in May 2018 were the Bx24, Bx23, Bx29, Bx27, and Bx46. Like weekdays, these are some of the least-frequent routes in the borough that tend to travel through less-congested areas. The worst five routes were the Bx15, Bx39, Bx18, Bx19, and Bx36. The Bx15 Limited and Bx36 are long interborough routes with high ridership that travel on congested streets, which tends to lead to bus bunching.

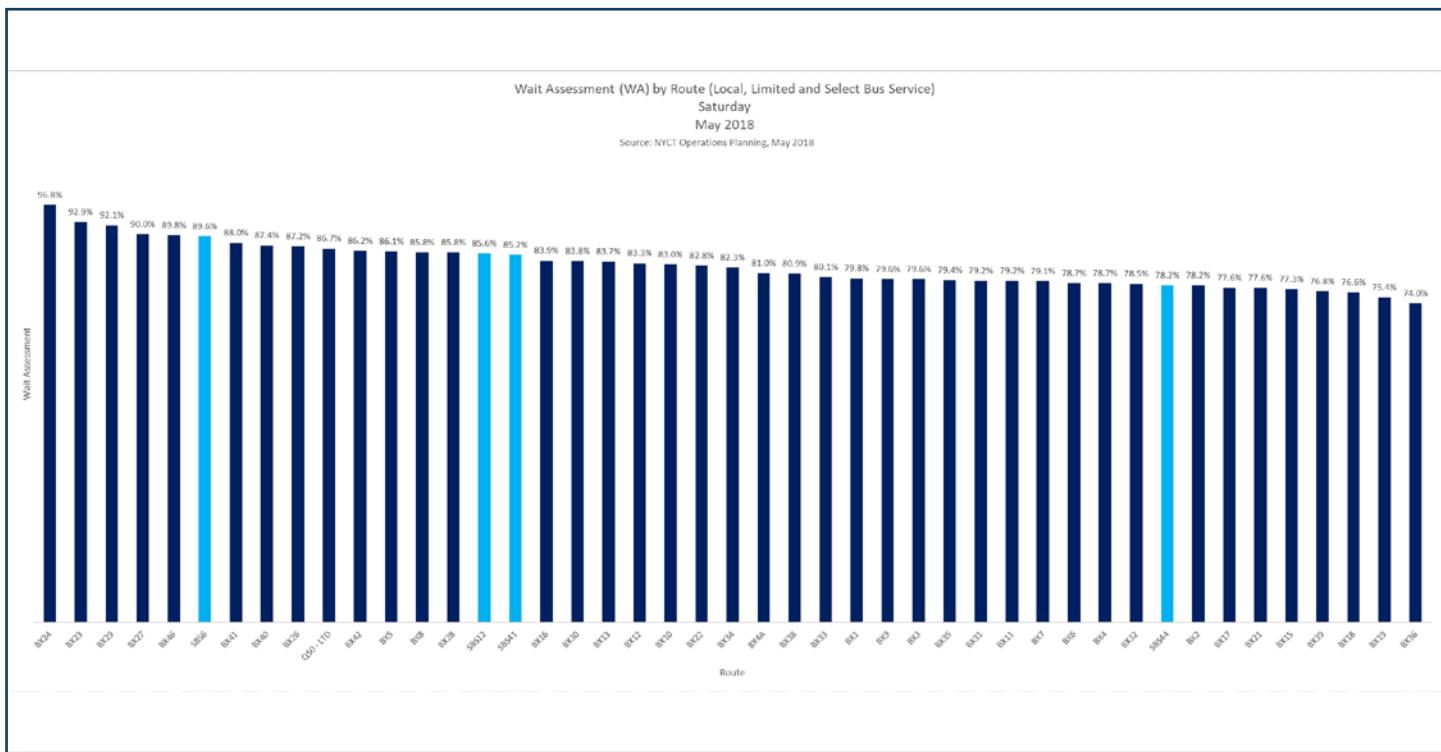


Chart 44. Saturday Wait Assessment by Route

Average Saturday Wait Assessment for Bronx express routes was roughly 89 percent in May 2018. Only one express route has a wait assessment of less than 85 percent, the BxM4 at 82.9 percent.

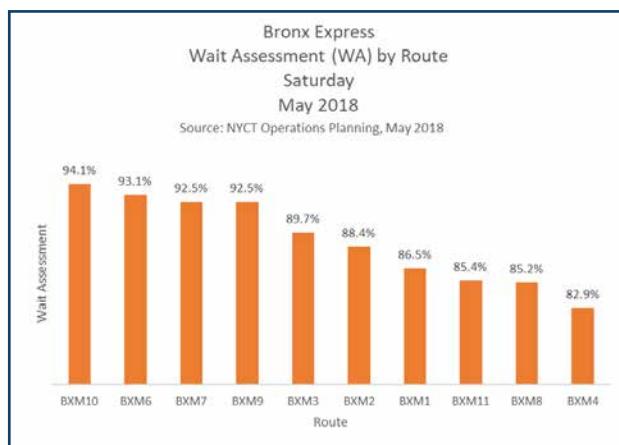


Chart 45. Saturday Wait Assessment by Route (Express)

The following chart displays average Sunday Wait Assessment by route. The top five routes in May 2018 were the Bx24, Bx23, Bx41 SBS, Bx26, and Bx12 Local. Except for the Bx41 SBS and Bx12, these are some of the least-frequent routes in the borough and travel through less-congested areas. Like Saturdays,

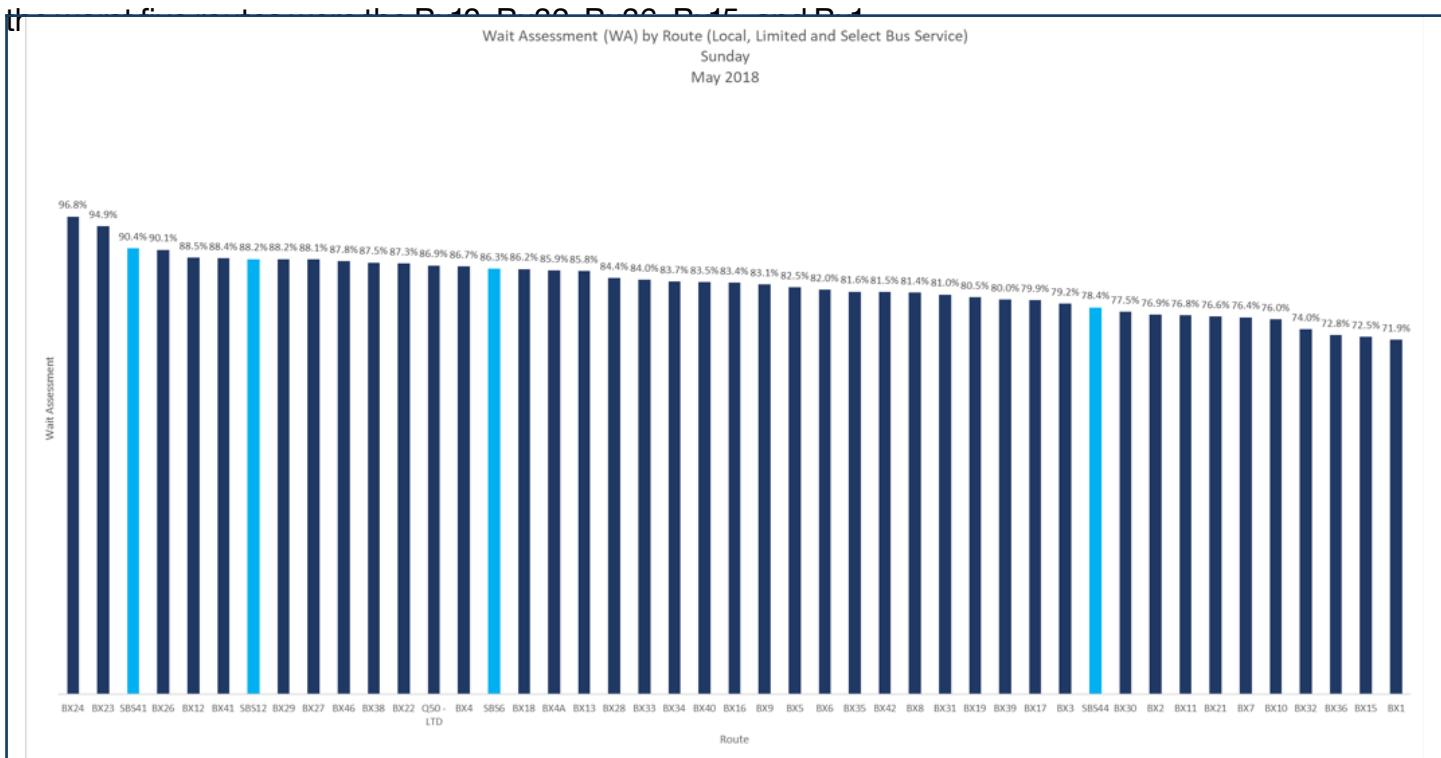


Chart 46. Sunday Wait Assessment by Route

Average Sunday Wait Assessment for Bronx express routes was roughly 90 percent in May 2018. Not a single express route has a wait assessment less than 85 percent on Sundays.

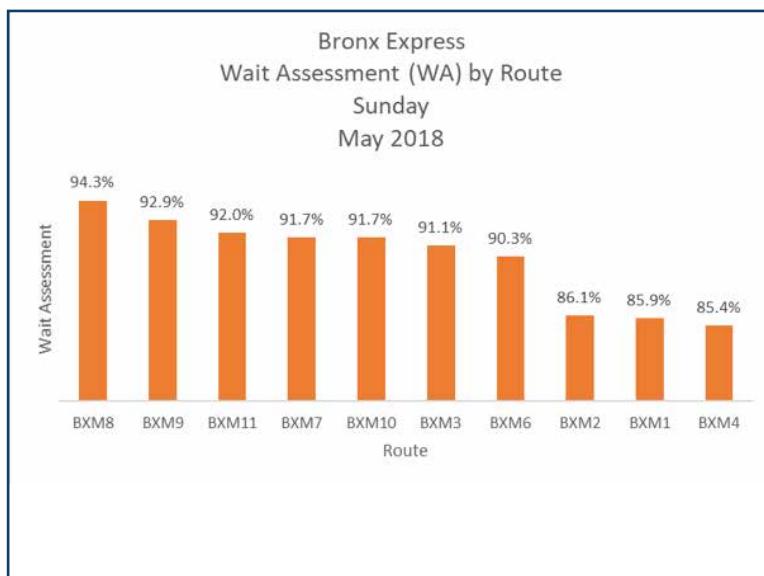


Chart 47. Sunday Wait Assessment by Route (Express)

On-Time Performance (OTP)

On-time performance measures how well a bus route performs compared to its schedule. It is defined as the percentage of buses that are between one minute early and five minutes late as compared to the schedule at each official timepoint along the route.

Citywide

The following chart displays average weekday on-time performance by borough and systemwide. The average on-time performance for the Bronx is 55 percent, just two percent less than the citywide average of 57 percent. Staten Island and Queens showed the greatest on-time performance at 63 and 62 percent, respectively.

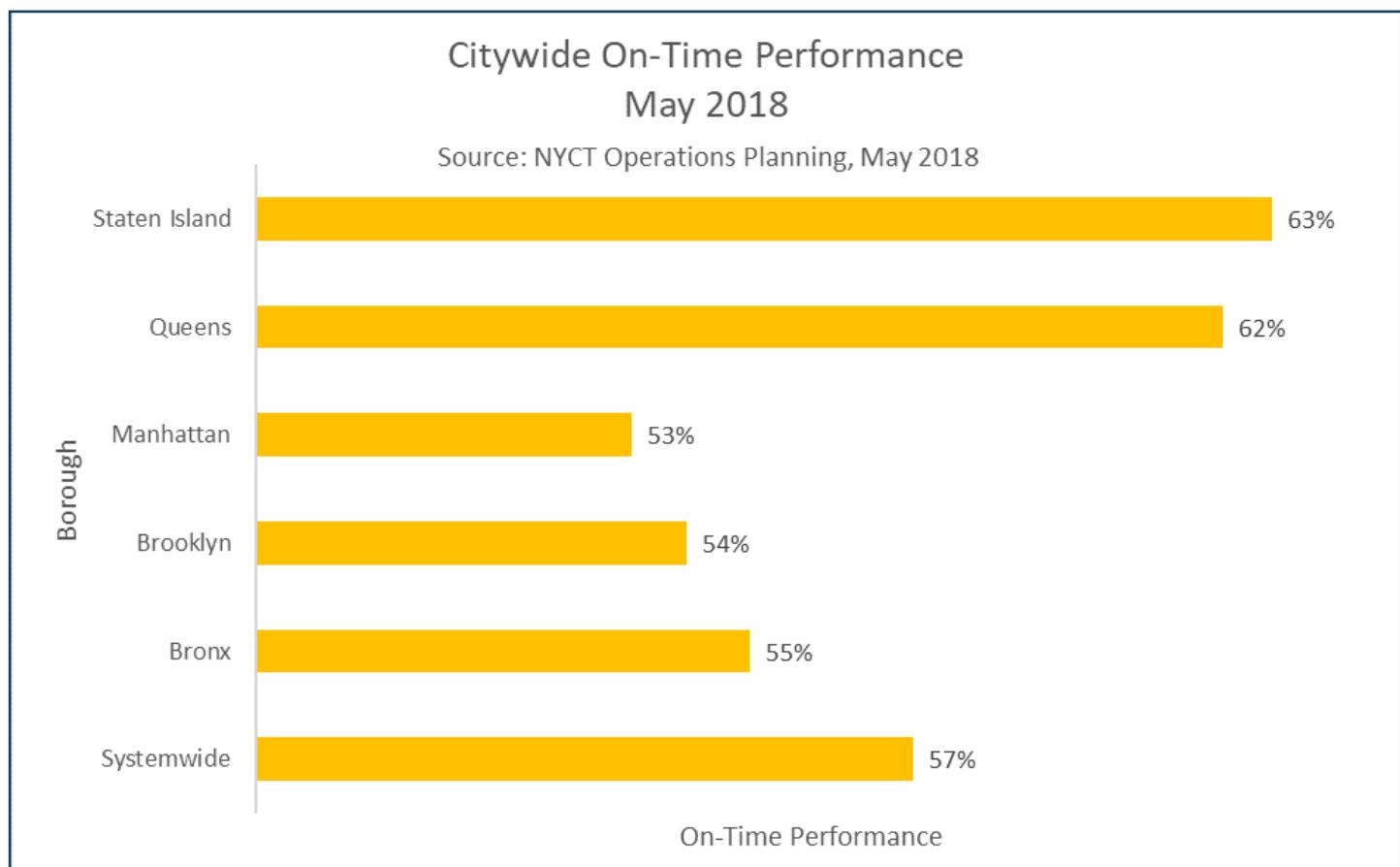


Chart 48. Citywide On-Time Performance

On-time performance in the Bronx decreased substantially since 2014. The following chart shows the decline the Bronx experienced, decreasing nearly 17 percent since 2014 (as compared to a citywide decrease of eight percent since 2014).

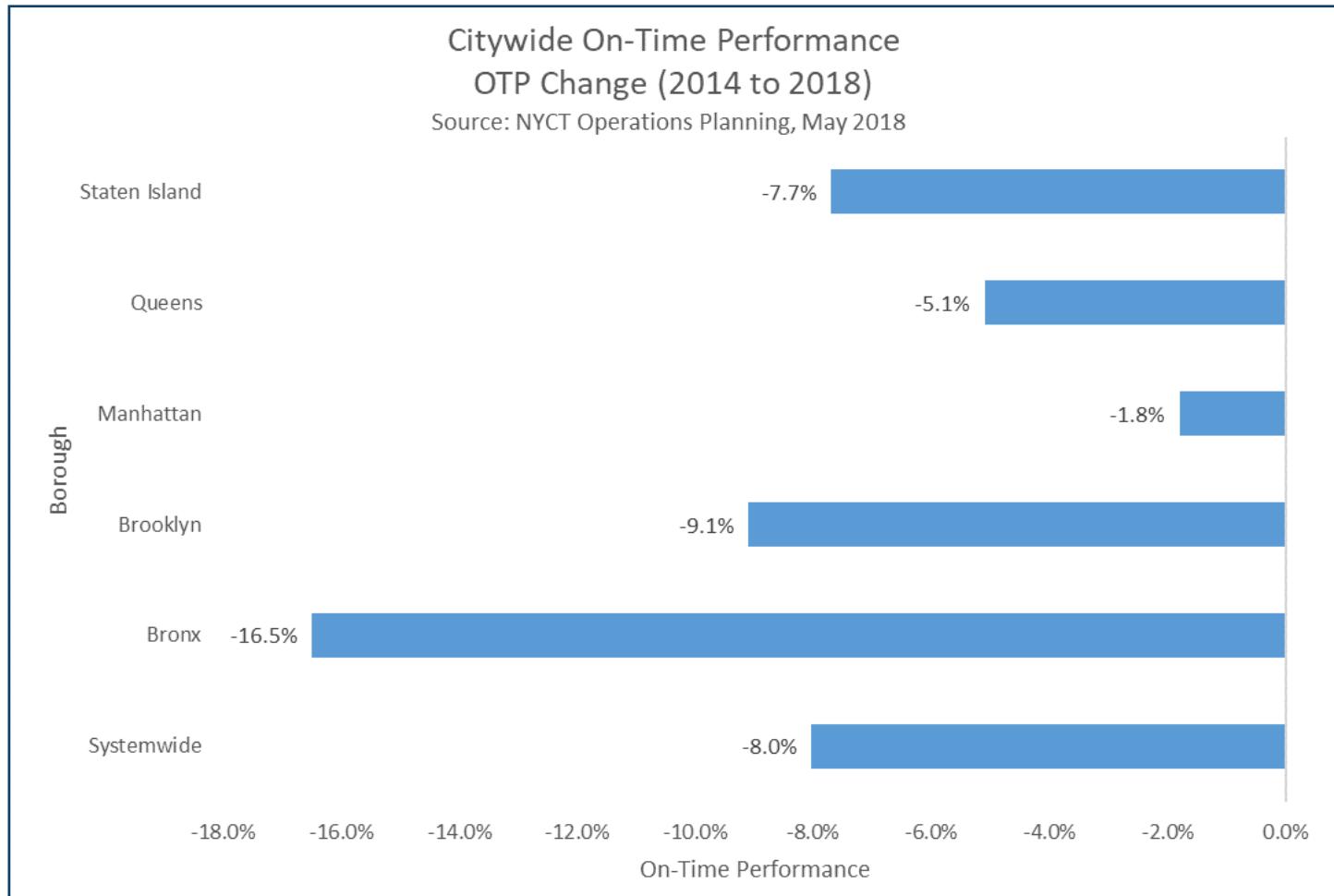


Chart 49. Citywide On-Time Performance 2014 – 2018 Change

Weekday

Among local, limited, and SBS routes, the top five routes on the on-time performance metric in May 2018 were the Bx46, Bx24, Bx23, Bx29, and Bx6 SBS. The worst five routes were the Bx36 Limited, Bx15 Local, Bx15 Limited, Bx41 SBS, and Bx21.

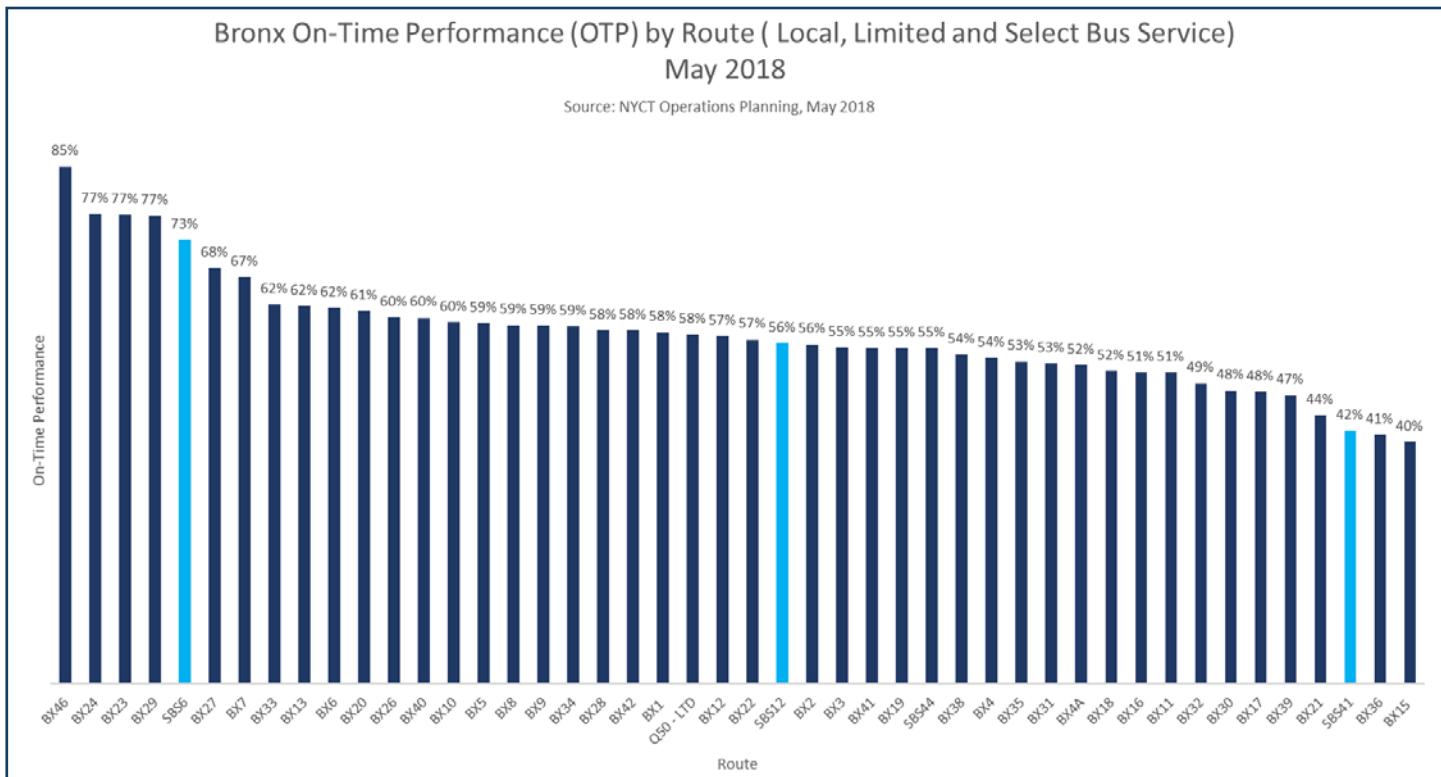


Chart 50. Bronx On-Time Performance by Route

Most routes have seen a notable drop in on-time performance since 2014, particularly the Bx41 SBS, Bx36 Limited, Bx21, Bx36 Local, and Bx39. Only one route, the Bx23, has seen an increase.

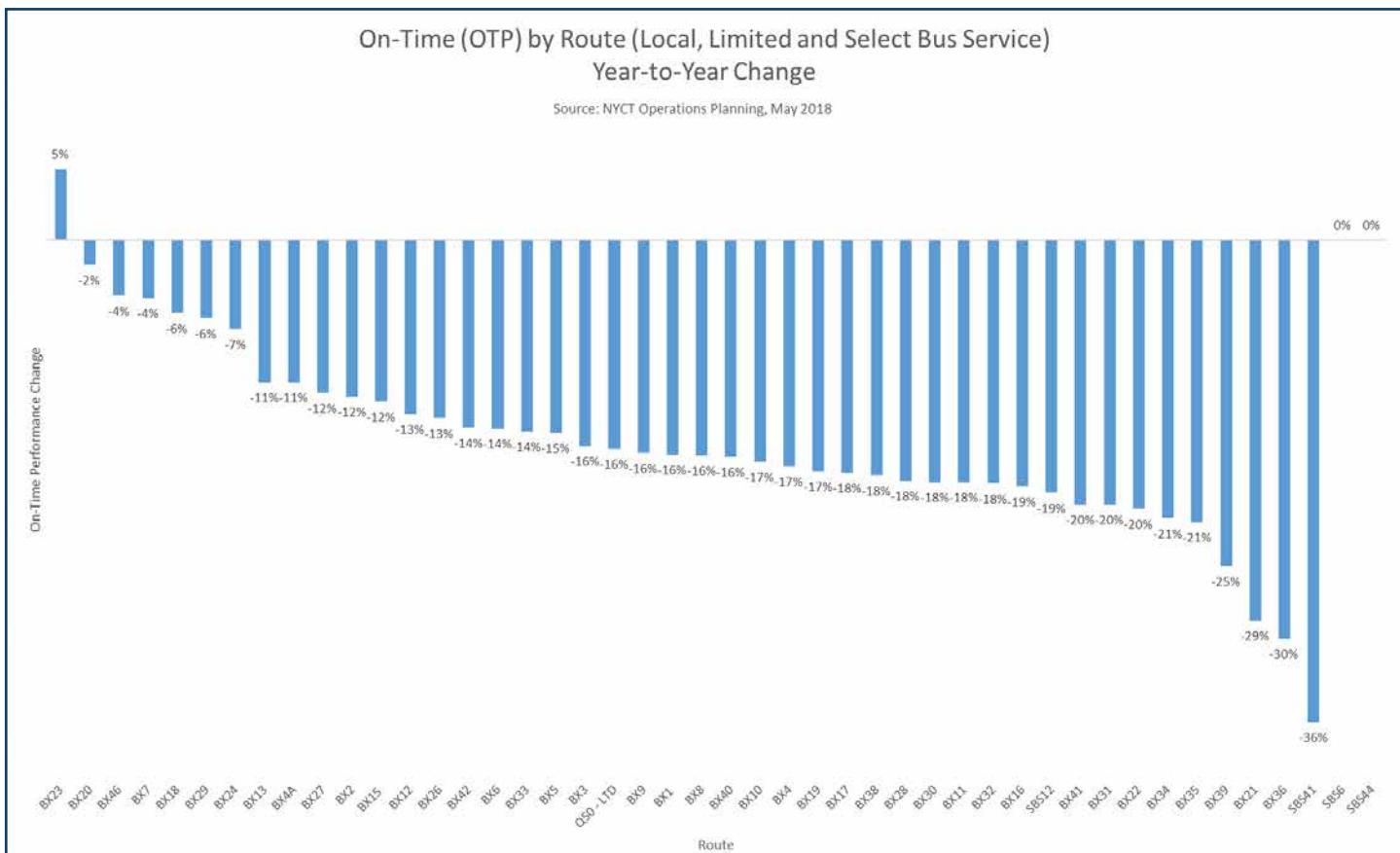


Chart 51. On-Time Performance by Route 2014 – 2018 Change

Average on-time performance on Bronx express routes was 66 percent in May 2018. Five of the 11 express routes had an on-time performance of 70 percent or greater; the BxM4 and BxM11 had the lowest at 55 and 58 percent, respectively.

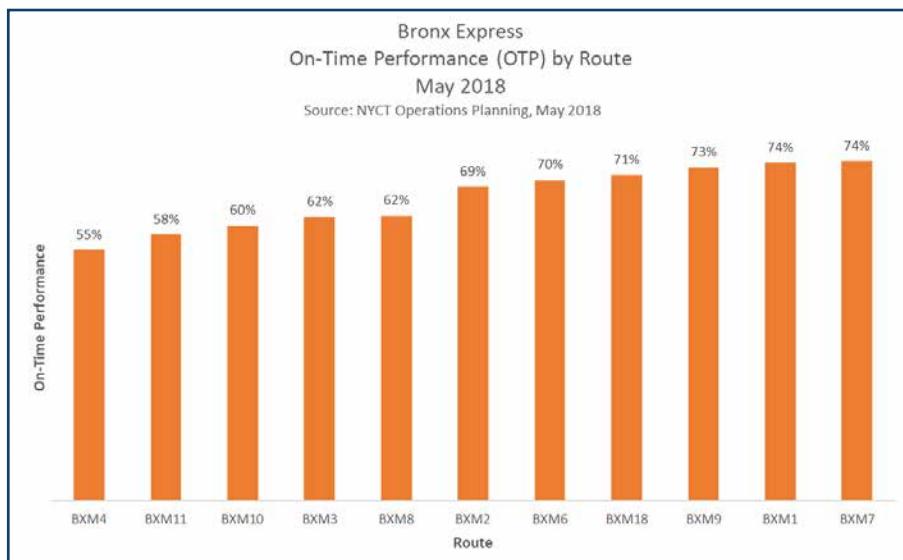


Chart 52. Bronx On-Time Performance by Route (Express)

Weekend

Among local, limited, and SBS routes, the top five routes on the on-time performance metric for an average Saturday in May 2018 were the Bx24, Bx46, Bx27, Bx23, Bx29, and Bx6 SBS. Each route in the top five had an on-time performance of greater than 76 percent. The worst five routes were the Bx32, Bx15, Bx19, Bx36, and Bx18, each less than 54 percent.

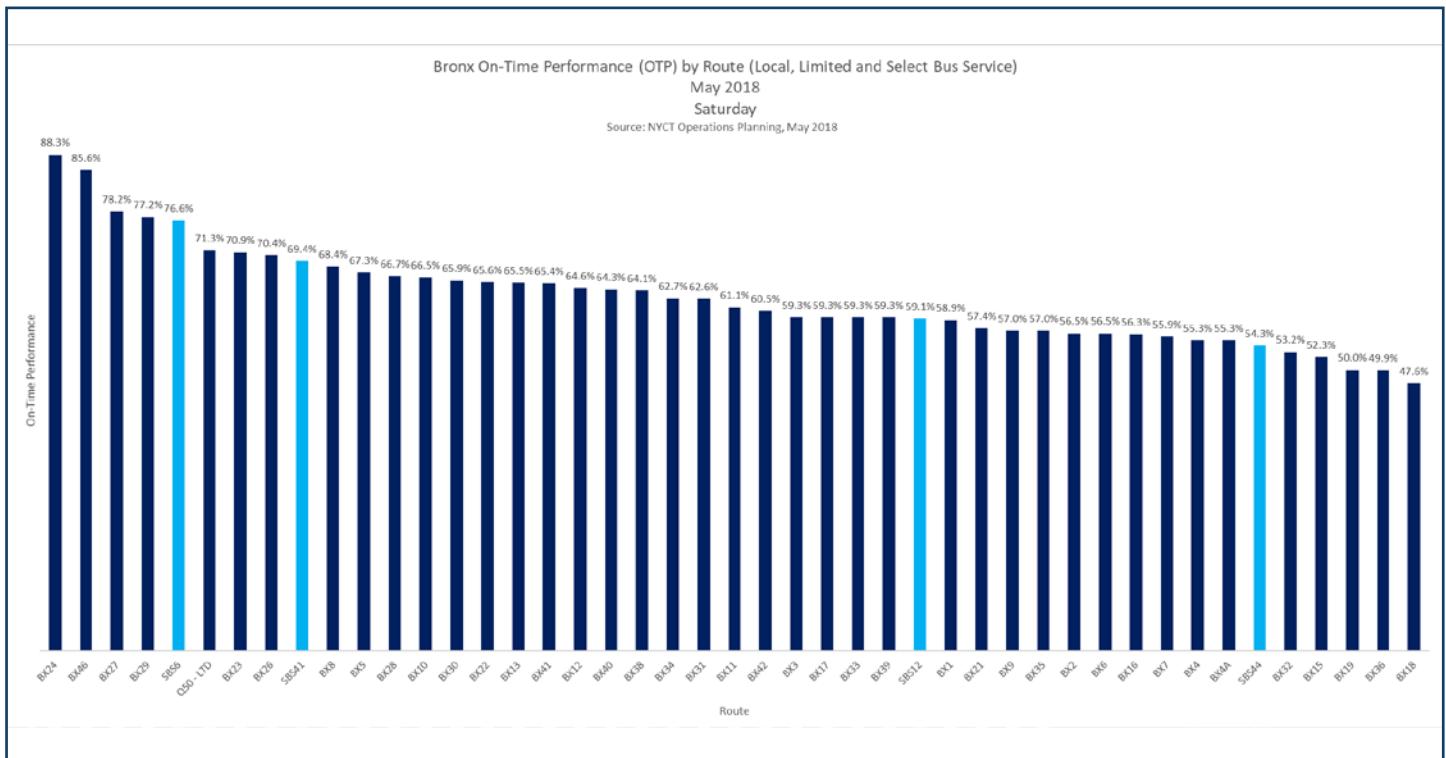


Chart 53. Bronx Saturday On-Time Performance by Route

Average Saturday on-time performance on Bronx express routes was 74 percent in May 2018. Seven of the express routes had an on-time performance of 70 percent or greater; the BxM2 and BxM4 had the lowest at 64.5 percent and 61.7 percent, respectively.

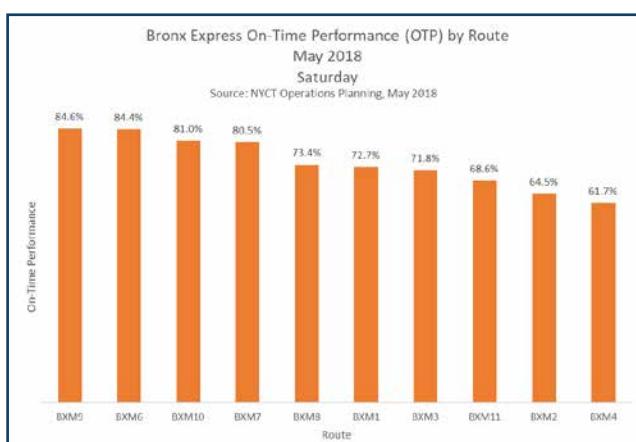


Chart 54. Bronx Saturday On-Time Performance by Route (Express)

The top five routes on the on-time performance metric for an average Sunday in May 2018 were the Bx24, Bx23, Bx29, Bx27, and Bx46. Each route in the top five had an on-time performance of greater than 77 percent. The worst five routes were the Bx32, Bx2, Bx15, Bx36, and Bx1, each less than 52 percent.

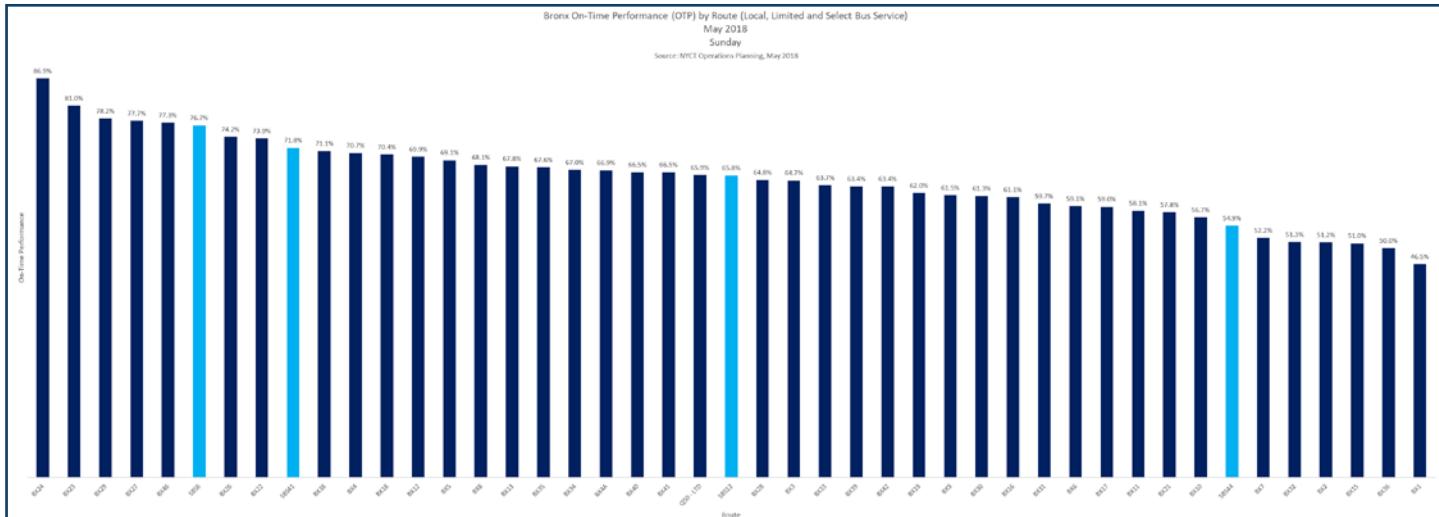


Chart 55. Bronx Sunday On-Time Performance by Route

Average Sunday on-time performance on Bronx express routes was 78 percent in May 2018. All express routes except one had an on-time performance of 70 percent or greater; the BxM4 and BxM4 had the lowest at 66.4 percent.

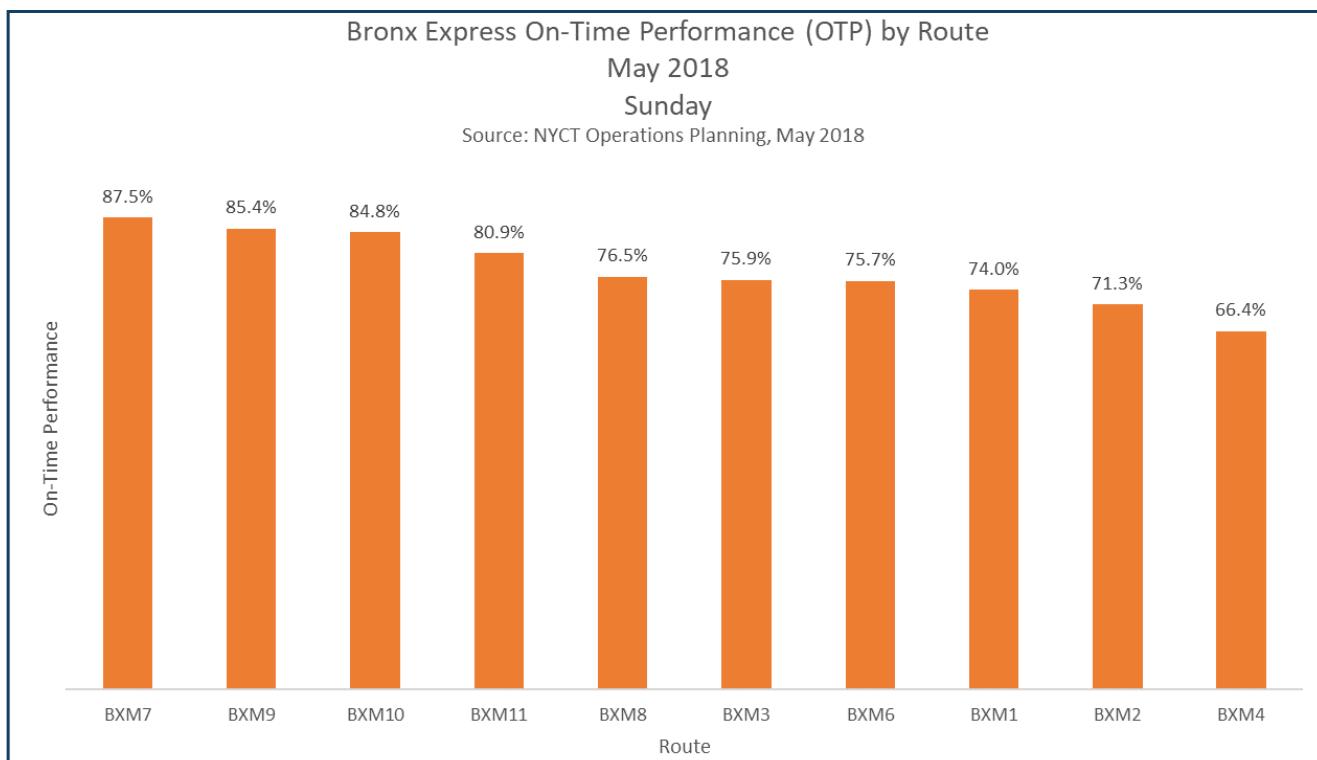


Chart 56. Bronx Sunday On-Time Performance by Route (Express)

Customer Journey Time Performance

Customer Journey Time Performance (CJTP) is a customer-focused metric. It is the percentage of customers whose journeys are completed within five minutes of the scheduled time. This is a new indicator for the MTA, but it is used by other transit agencies to measure service. CJTP is measured using customers' MetroCard swipes on buses combined with GPS tracking data from Bus Time. CJTP is measured from 4 am to 11 pm on weekdays only.

There are two components of CJTP:

- ◇ Additional Bus Stop Time is the average added time that customers wait at a stop for a bus, compared with their scheduled wait time. The measure assumes customers arrive at the bus stop uniformly, except for routes with longer headways, where customers arrive more closely aligned to the schedule.
- ◇ Additional Travel Time is the average additional time customers spend onboard the bus compared to the schedule.

In May 2018, in peak hours (7am-9am, 4pm-7pm), CJTP for the Bronx was 60 percent. For local and limited routes, it was 67 percent, for SBS routes 66 percent, and for express routes 28 percent.

In off-peak hours, CJTP for the Bronx was 66 percent. For local and limited routes, it was 71 percent, for SBS routes 69 percent, and for express routes 47 percent.

Among local, limited, and SBS routes in peak hours, the top five routes on the CJTP metric in May 2018 were the Bx46, Bx29, Bx13, Bx23, and M100. The worst five routes were the Bx28, Bx30, Bx12 SBS, Bx32, and Bx16.

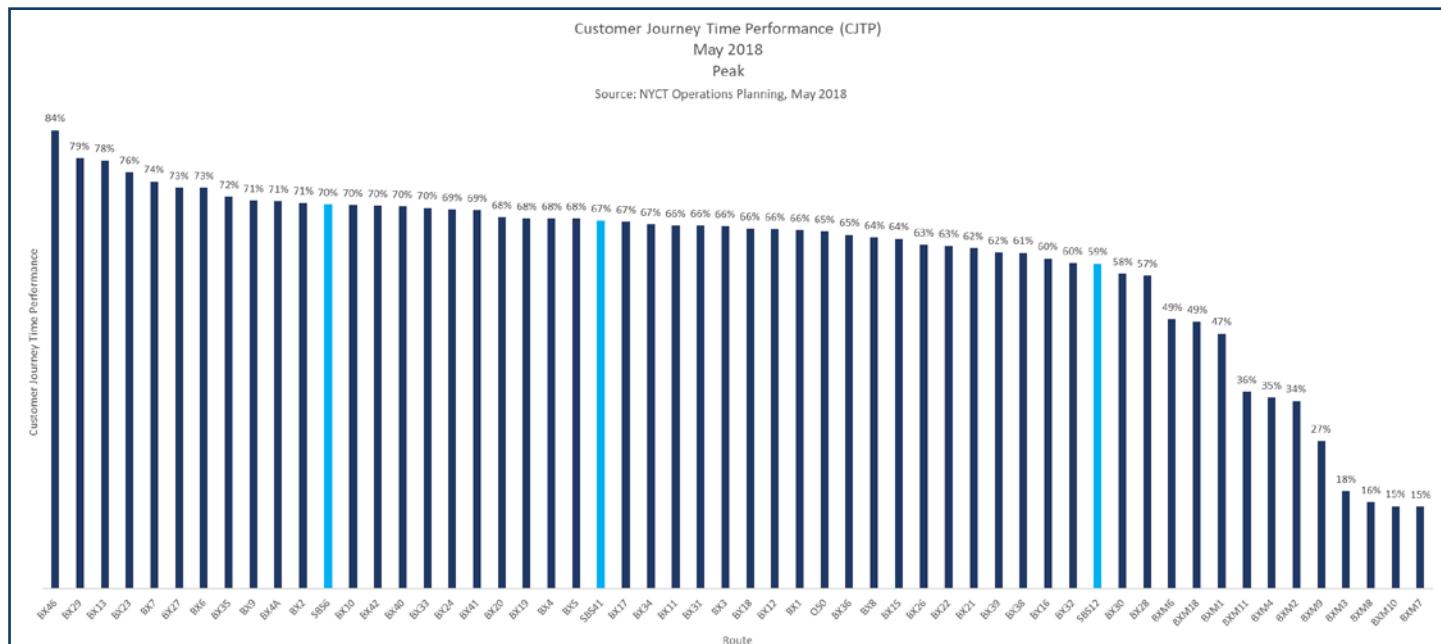


Chart 57. Customer Journey Time Performance – Peak

Customer journey time performance of Bronx express routes ranged from 15 percent to 49 percent during the peak periods for May 2018. The BxM18 and BxM6 showed greatest CJTP at 49 percent and the BxM7 and BxM10 show the worst at 15 percent.

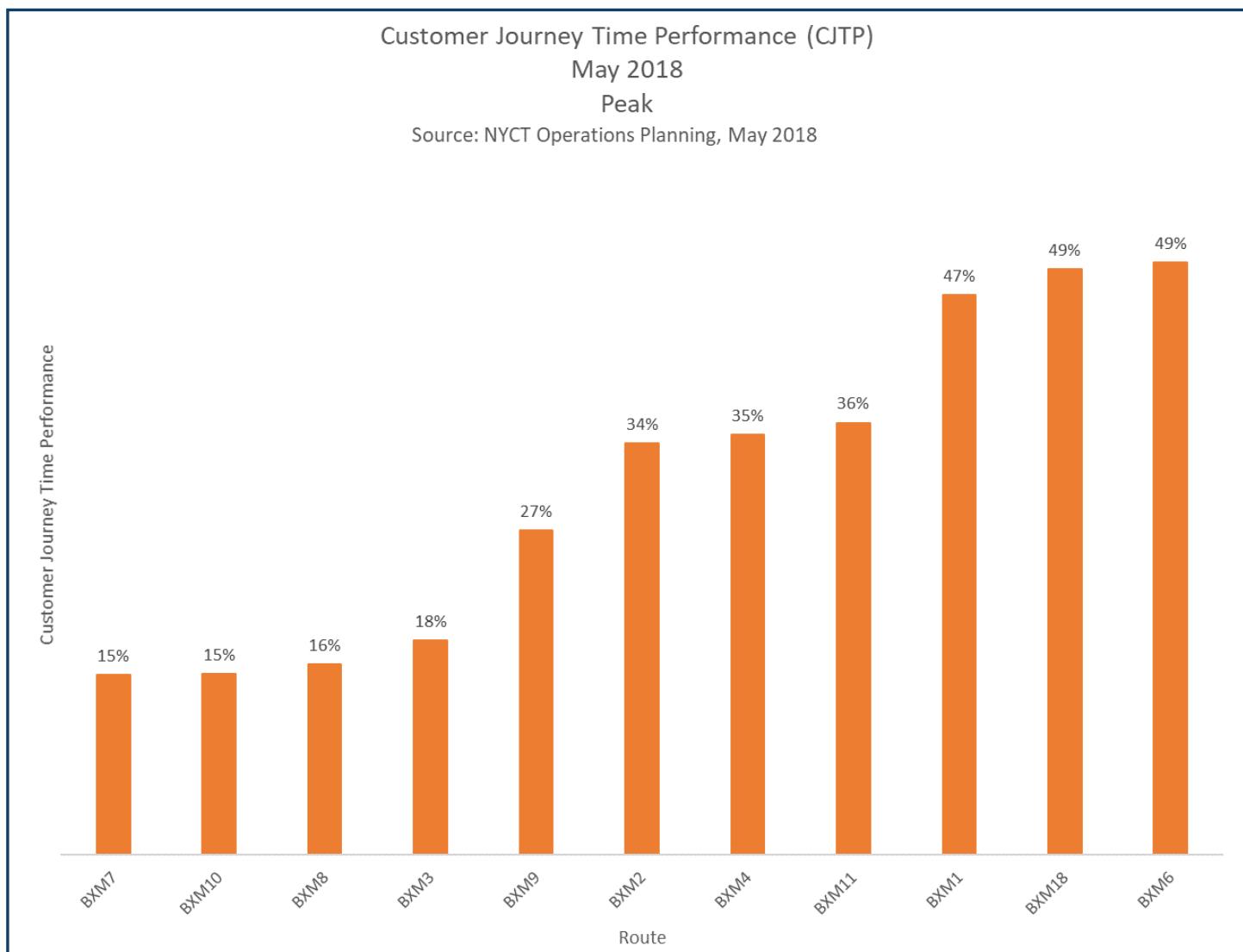


Chart 58. Customer Journey Time Performance – Peak – Express Routes

NEXT STEPS

This report provides an assessment of current market trends in the Bronx and analyzes the current state of Bronx bus service, including the operational success and challenges we experience today. This report will act as a building block to assist us as we begin to draw the new network and develop the Draft Plan.

In addition to an assessment of existing conditions within the Bronx, it is equally important to properly educate customers and stakeholders alike on the key components of providing bus service and how each building block will contribute to a successful, 21st century bus network for the Bronx.

Next steps focus on outreach efforts to share the public workshops' findings, intercept survey findings, online survey findings, and this Existing Conditions report with Bronx elected officials, community boards, and the public. This report will be released on the Bronx Bus Network Redesign webpage and will be made accessible to all.

Following these outreach efforts, we will start drawing the new Bronx bus network. This will be a collaborative effort between MTA NYCT, MTA Bus Company, and NYC DOT. Once the draft network has been drawn, a Draft Plan will be developed that details the proposed changes.

Prior to development of this report, a series of public workshops were held in Fall 2018. These workshops provided Bronx residents and employees with the opportunity to offer their insight and expertise to help identify ways in which the bus network can be improved. The workshops also introduced basic elements of a bus network redesign, specifically, priorities and trade-offs and the choices that must be made when redesigning a bus network. A summary of the public workshops and the materials used can be found in Appendix 3 of this report.



Appendices

APPENDIX 1 - GLOSSARY OF TERMS

Accessibility - a service, vehicle, or facility is accessible if it is in compliance with the ADA, or in general (nonlegal) terms, if it is readily usable by persons with disabilities.

Alighting - exiting or getting off a bus, train, or other mode of transit. See: **boarding**

ACS - American Community Survey. An ongoing, nationwide survey conducted by the U.S. Census Bureau from which data on employment, demographics, commuting behavior, and other subjects are gathered and distributed.

ADA - the American with Disabilities Act of 1990, which applied to public transit requires that transit providers must follow regulations ensuring that services, vehicles, and facilities are accessible to and usable by individuals with disabilities. See: **accessibility**

Articulated bus - a bus with “two connected passenger compartments that bend at the connecting point when the bus turns a corner.” From the APTA Glossary of Transit Terminology.

BRT - Bus Rapid Transit. BRT systems strive to bring faster, more reliable, and quality bus service to high ridership corridors by combining amenities of rail-based rapid transit systems with the flexibility of buses. New York City Transit’s implementation of BRT is Select Bus Service, which improves speed and reliability through dedicated bus lanes, off-board fare payment, **stop spacing**, and **transit signal priority**.

Boarding - entering or getting onto a bus, train, or other mode of transit. See: **alighting**

Bus bulb - a sidewalk platform extending from the sidewalk that enables easier boarding for bus passengers. Bus bulbs are as close to level with the floor of the bus as feasible.

Bus lane - a lane of the roadway dedicated exclusively to bus movement.

Bus network - a collection of bus routes, including the physical paths they take as well as their scheduled frequencies and spans of service. In essence, where buses travel, when buses travel, and how often buses travel.

Bus priority - any number of techniques or tools that enable bus transit to take precedence over other modes of surface transportation in traffic. With **transit signal priority (TSP)**, traffic lights can change more quickly from red to green or a green light can be held longer if a bus is approaching.

Bus Time - Also, MTA Bus Time. A GPS-tracking system that tracks the real-time location of buses and communicates that information to customers via desktop and mobile websites, smartphone applications, and SMS text messaging.

Bus Time Pole Signs - real-time passenger information (RTPI) signs resembling standard bus stop lollipops but that are digitized and provide bus arrival time information.

Capacity Utilization - the number of unlinked passenger boardings compared to the total number of seating and standing spaces that are scheduled on a route.

CJTP - Customer Journey Time Performance. The percentage of customers whose journeys (trips) are completed within five minutes of the scheduled time. CJTP considers both how long customers wait at the bus stop beyond what they would have if their bus arrived on time, as well as how long customers spend on the bus beyond what they would have if the bus completed its trip in the time allotted in the schedule.

Cost per boarding - the ratio of the cost of bus service provision to the number of passengers that use this service. In this report, the cost per boarding is calculated by dividing the annual service cost by annual boardings.

DCP - the City of New York's Department of City Planning

Express bus service - bus service focused specifically on transporting commuters between Manhattan and the outer boroughs. Express bus routes typically have a series of pick-up locations in one borough and a series of drop-off locations in the other, between which is an express segment. The bus does not stop throughout the express segment, which is generally on a highway.

Farebox recovery ratio - the ratio of operating revenue to operating cost. A route with a farebox recovery ratio greater than 100% indicates that the route is profitable, while a farebox recovery ratio less than 100% indicates that the route is subsidized.

Fast Forward Plan - New York City Transit's 2018 strategic plan to modernize transit in New York City.

Feeder route - routes primarily carrying customers from outlying areas to a subway station or major terminal, with most customers having a common destination.

Frequency - the rate at which buses run along a specific route. See: **headway**

Grid route - routes that operate through multiple neighborhoods with customers boarding and alighting throughout the length of the route. Grid routes constitute more than eighty percent of New York City Transit's local bus routes.

Headway - the scheduled interval of time between buses running along a specific route. See: **frequency**

Hudson Rail Link - bus routes operating between the Riverdale and Spuyten Duyvil neighborhoods in the Bronx and Metro-North train stations.

In-service hour - the unit of time during which a bus route is in operation. This measure is especially helpful for an understanding efficiency when comparing different routes across the system. For example, one route may have many more riders than another, but is aided by being in service for much longer throughout the day.

Limited bus service - operates on the same routes served by local bus service, but makes fewer stops to travel the length of the route more quickly.

Local bus service - the most commonly provided bus service. Local bus service—in contrast to **limited bus service**—makes all stops along a route.

MetroCard - the Metropolitan Transit Authority's predominant fare payment method.

NYC DOT - New York City Department of Transportation

NYMTC - New York Metropolitan Transportation Council. A regional council of governments that is the Metropolitan Planning Organization (MPO) for New York City, Long Island, and the lower Hudson Valley.

OTP - On-Time Performance. The percentage of buses that arrive at their stops between one minute early and five minutes late when compared to their scheduled arrival time.

Peak - the times during which commuter demand is heaviest and typically when the most service is provided. The morning peak period is weekdays between 7:00 A.M. and 9:00 A.M. The afternoon peak period is weekdays between 4:00 P.M. and 7:00 P.M.

Productivity - the measure of ridership given the level of service provided. Bus routes are more productive when they attract more riders per unit of time that they are in service. See: **in-service hour**

Ridership - the total number of customers using a specific route or the bus system generally.

SBS - Select Bus Service. New York City Transit's branded implementation of **BRT** (Bus Rapid Transit).

Span - the time period throughout the day that a route is in service.

Stop spacing - the average traveled distance between bus stops along a route.

TAZ - Traffic Analysis Zone. A geographic unit used for transportation analysis.

TSP - Traffic signal priority. See: **bus priority**

Wait assessment - a measure of how evenly buses are spaced. It is defined as the percentage of actual intervals between buses that are no more than three minutes over the scheduled interval for the morning (6am-9am) and afternoon (4pm-7pm) peak periods, and no more than five minutes over the scheduled interval for the rest of the day.

Westchester Bee-Line - Westchester County's bus system. Several Bee-Line bus routes travel and stop in the Bronx.

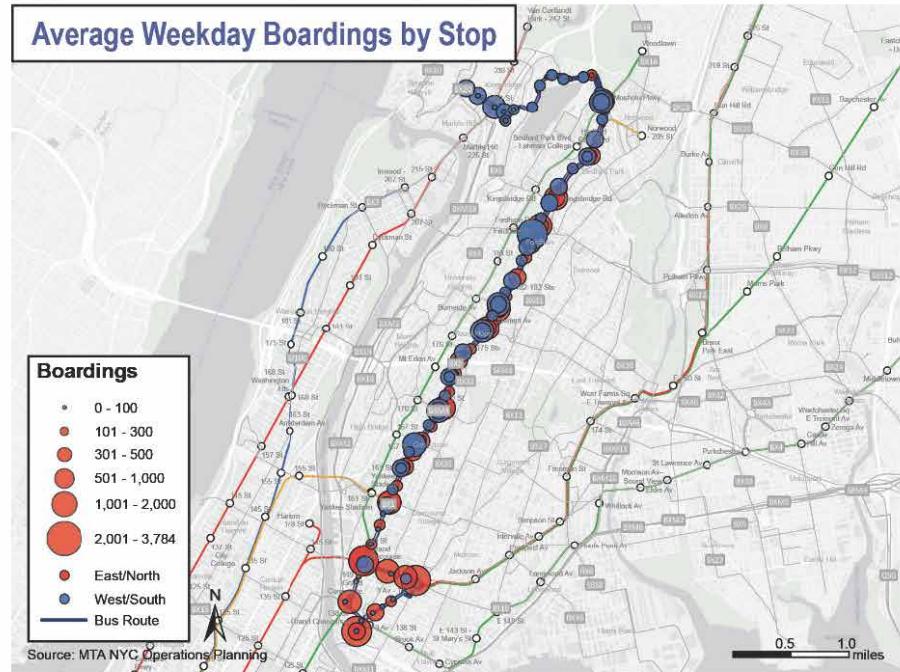
Vision Zero - the City of New York's plan to end traffic fatalities and injuries in New York City.

Z-score - for a specific data point's value, the number of standard deviations from the mean (average) value of the dataset. Simply, compared to the group as a whole, how much does a specific instance or example differ from what is normal.

APPENDIX 2 - ROUTE PROFILES

Bx1/2 Grand Concourse/East 149th Street

Average Weekday Boardings by Stop

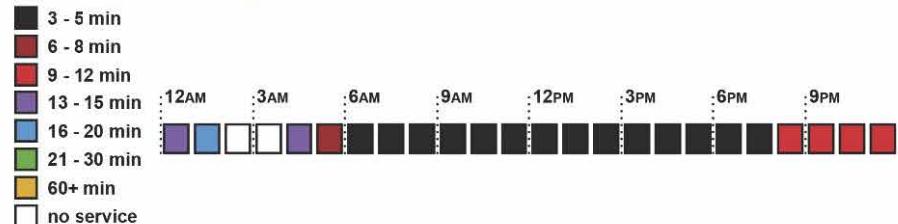


Route Type: Local/Limited

Avg. Stop Spacing: 1,068.1 ft (9th)

Description: Bx1 service operates between Riverdale Av/231 St and East 136 St/Lincoln Av. Bx2 service operates between Fort Independence St/Sedgwick Av and East 136 St/Lincoln Av. See Bx1 service and Bx2 service for more details.

Weekday Frequency



Statistics

	Weekday Value	Weekday Rank	Saturday Value	Saturday Rank	Sunday Value	Sunday Rank
Ridership & Productivity						
Daily Ridership	44,581	1st	24,444	3rd	18,467	3rd
Riders per Revenue Hour	88.5	13th	78.6	8th	73.6	9th
Riders per Trip	99.3	4th	83.1	3rd	75.1	3rd
Reliability						
On-Time Perf. (%)	56.3	24th	57.9	28th	48.6	41st
Wait Assessment* (%)	--	--	--	--	--	--
CJTP (%)	peak: 68.0	18th	--	--	--	--
	off-peak: 71.8	20th	--	--	--	--

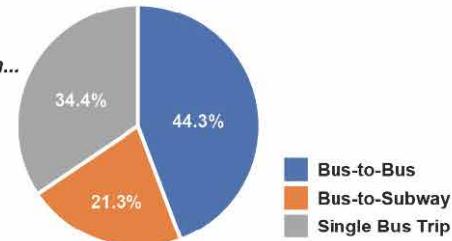
*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

Bx1/2 to... to Bx1/2 from...

1. Bx2	1. Bx12SBS
2. Bx1	2. Bx1
3. Bx36	3. Bx19
4. Bx12SBS	4. Bx36
5. Bx9	5. Bx9



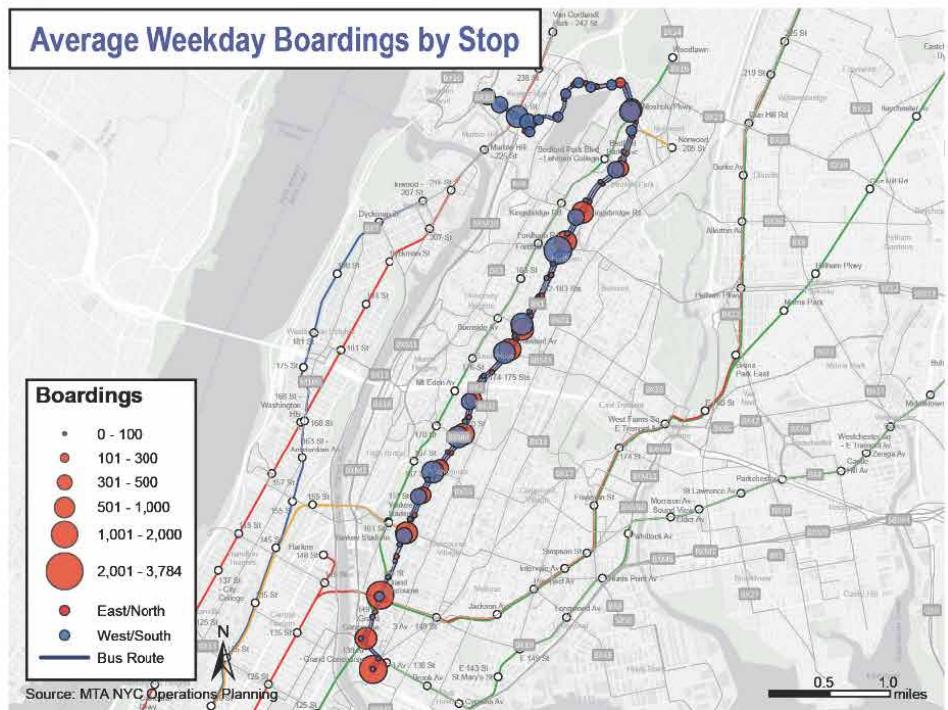
Span of Service

	RIVERDALE AV / FT INDEPENDENCE DR	LINCOLN AVENUE	AVG. FREQUENCY (MIN.)			
	WEEKDAYS	SATURDAYS	AM	NOON	PM	EVE
WEEKDAYS:	--:--AM--:--AM	--:--AM--:--AM	--	--	--	--
SATURDAYS:	--:--AM--:--AM	--:--AM--:--AM	--	--	--	--
SUNDAYS:	--:--AM--:--AM	--:--AM--:--AM	--	--	--	--

*See Span of Service information for Bx1 service and Bx2 service.

Bx1 Grand Concourse

Average Weekday Boardings by Stop

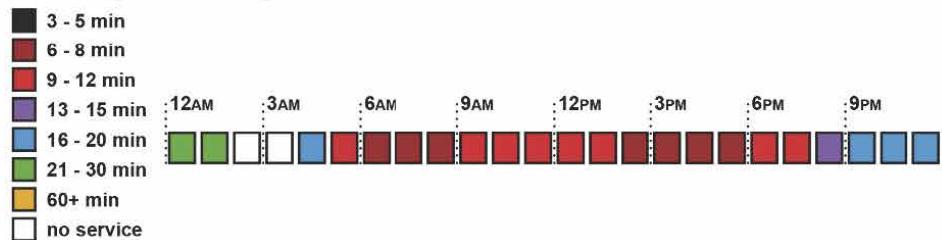


Route Type: Local/Limited

Avg. Stop Spacing: 1,324.7 ft

Description: Operates between Riverdale Av/231 St, Riverdale, and East 136 St/Lincoln Av (3 Av-138 St **6** subway station), Mott Haven, early mornings, evenings, Saturdays, and all day on Sunday.

Weekday Frequency



Statistics

	Weekday Value	Weekday Rank	Saturday Value	Saturday Rank	Sunday Value	Sunday Rank
Ridership & Productivity						
Daily Ridership	21,392	--	12,153	--	9,523	--
Riders per Revenue Hour	91.4	--	78.4	--	75.6	--
Riders per Trip	94.2	--	77.9	--	76.8	--
Reliability						
On-Time Perf. (%)	56.6	--	58.9	--	46.5	--
Wait Assessment* (%)	79.0	12th	77.2	40th	71.9	45th
CJTP (%)	peak: 65.6 off-peak: 70.0	--	--	--	--	--

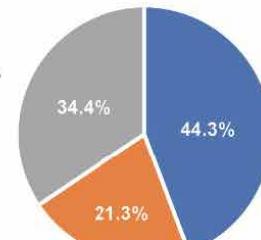
*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

Bx1 to... **to Bx1 from...**

1. Bx2	1. Bx2
2. Bx9	2. Bx12SBS
3. Bx12SBS	3. Bx9
4. Bx36	4. Bx19
5. Bx19	5. Bx36



*Transfer mode share shown represents Bx1/Bx2 combined service.

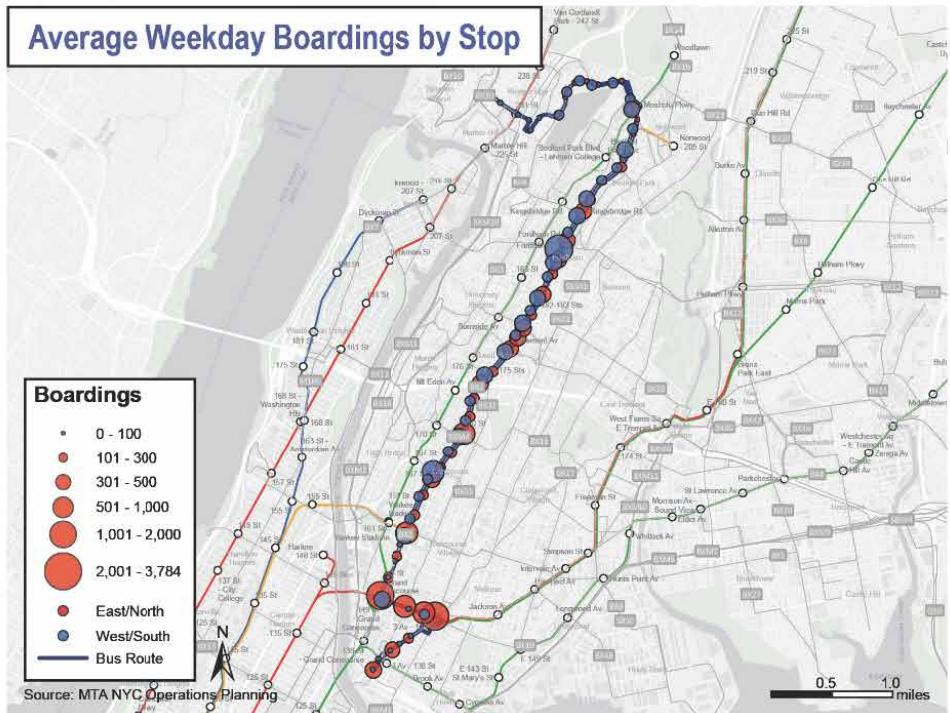
Span of Service

	TOWARD RIVERDALE AV	TOWARD LINCOLN AV	AVG. FREQUENCY (MIN.)				
			AM	NOON	PM	EVE	NITE
WEEKDAYS:	5:12AM-6:47AM	4:12AM-12:41AM	10	8	10	13	--
SATURDAYS:	6:23AM-7:38AM	5:25AM-12:33AM	12	12	12	12	--
SUNDAYS:	6:52AM-1:28AM	5:35AM-12:30AM	20	10	10	20	--

*Frequency shown represents Bx1/LCL service only.

Bx2 Grand Concourse/ East 149th Street

Average Weekday Boardings by Stop

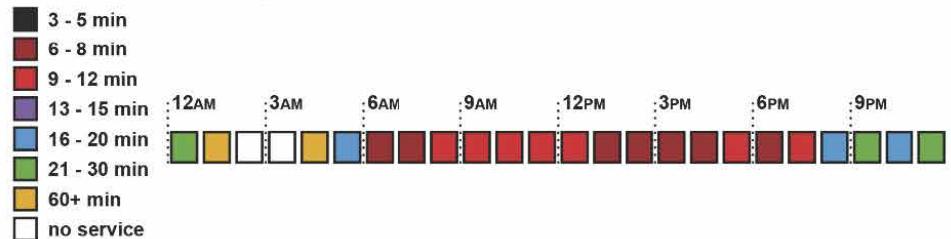


Route Type: Local

Avg. Stop Spacing: 884.4 ft

Description: Operates between Fort Independence St/Sedgwick Av and East 136 St/ Lincoln Av (3 Av-138 St **6** subway station), Mott Haven, daily.

Weekday Frequency



Statistics

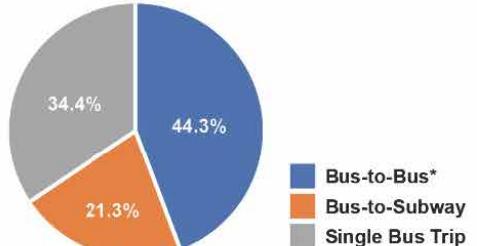
Ridership & Productivity			Reliability			
	Value	Rank		Value	Rank	
Daily Ridership	23,188	--	On-Time Perf. (%)	55.8	--	56.5
Riders per Revenue Hour	85.9	--	Wait Assessment* (%)	73.6	34th	77.5
Riders per Trip	104.5	--	CJTP (%)	peak: 70.6	--	--
			off-peak: 73.6	--	--	--

*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

Bx2 to...	to Bx2 from...
1. Bx1	1. Bx1
2. Bx19	2. Bx12SBS
3. Bx36	3. Bx19
4. Bx12SBS	4. Bx36
5. Bx9	5. Bx35



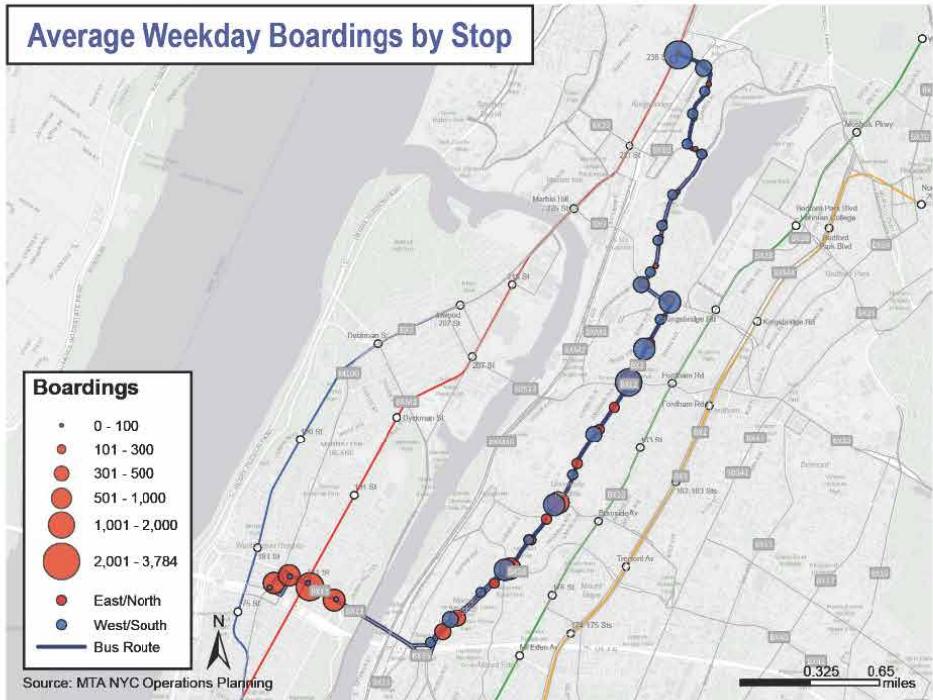
*Transfer mode share shown represents Bx1/Bx2 combined service.

Span of Service

	TOWARD		AVG. FREQUENCY (MIN.)				
	FT INDEPENDENCE	TOWARD LINCOLN AV	AM	NOON	PM	EVE	NITE
WEEKDAYS:	5:56AM-1:03AM	4:55AM-11:32AM	10	8	10	10	--
SATURDAYS:	6:30AM-12:21AM	5:42AM-11:58AM	12	12	12	17	--
SUNDAYS:	6:30AM-12:53AM	5:47AM-12:20AM	20	10	10	20	--

Bx3 University Avenue/West 181st Street

Average Weekday Boardings by Stop

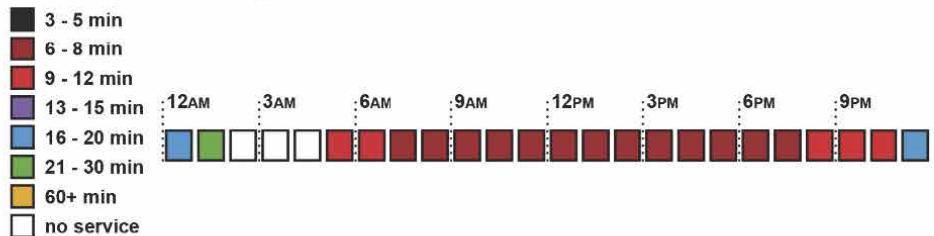


Route Type: Local

Avg. Stop Spacing: 856.3 ft (28th)

Description: Operates between West 238 St/Broadway (238 St ① subway station), Riverdale, and George Washington Bridge Bus Station, Washington Heights, Manhattan, daily.

Weekday Frequency



Statistics

	Weekday		Saturday		Sunday	
	Value	Rank	Value	Rank	Value	Rank
Ridership & Productivity						
Daily Ridership	18,263	13th	12,477	10th	9,659	10th
Riders per Revenue Hour	99.3	9th	78.5	9th	84.0	6th
Riders per Trip	61.1	18th	46.4	19th	46.7	19th
Reliability						
On-Time Perf. (%)	55.3	26th	59.3	23rd	64.7	23rd
Wait Assessment* (%)	73.7	33rd	85.4	29th	79.2	34th
CJTP (%)	<i>peak:</i>	66.3	27th	--	--	--
	<i>off-peak:</i>	73.3	13th	--	--	--

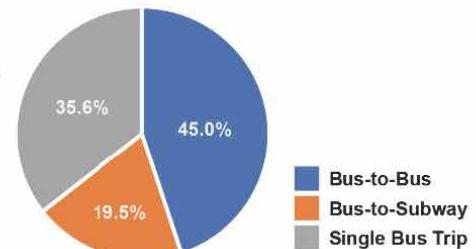
*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

Bx3 to... to Bx3 from...

1. Bx12SBS	1. Bx12SBS
2. Bx9	2. Bx9
3. Bx12	3. Bx36
4. Bx36	4. Bx12
5. Bx13	5. M100

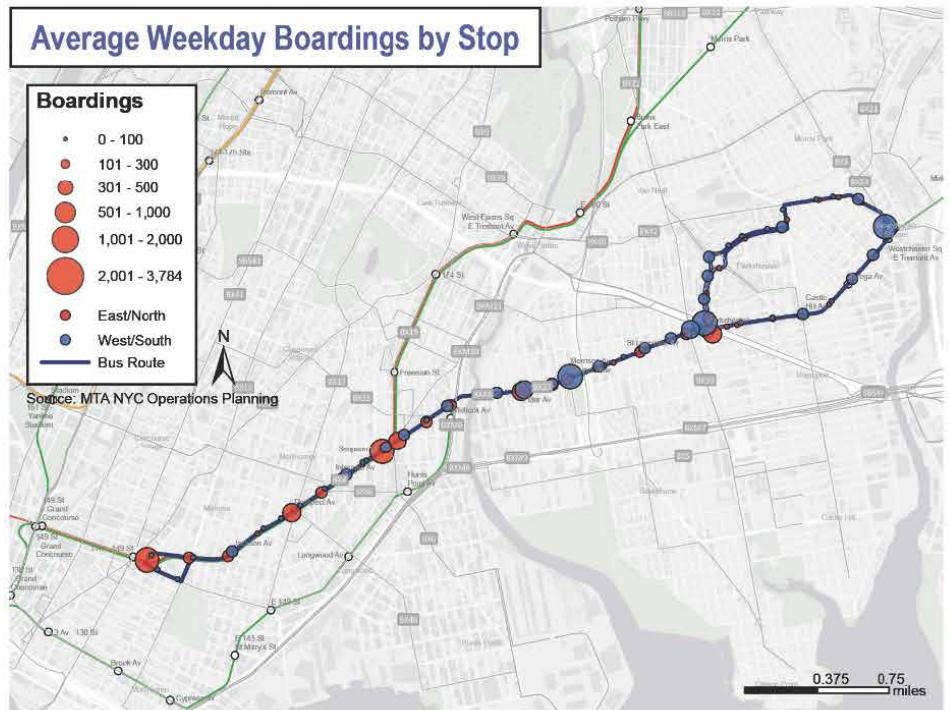


Span of Service

	TOWARD RIVERDALE	TOWARD GW BRIDGE	AVG. FREQUENCY (MIN.)				
			AM	NOON	PM	EVE	NITE
WEEKDAYS:	5:36AM-1:25AM	5:45AM-12:50AM	5	7	6	8	--
SATURDAYS:	6:21AM-1:21AM	6:10AM-12:50AM	10	6	7	7	--
SUNDAYS:	6:30AM-12:50AM	6:25AM-12:40AM	12	8	8	10	--

Bx4/4A Westchester Avenue

Average Weekday Boardings by Stop

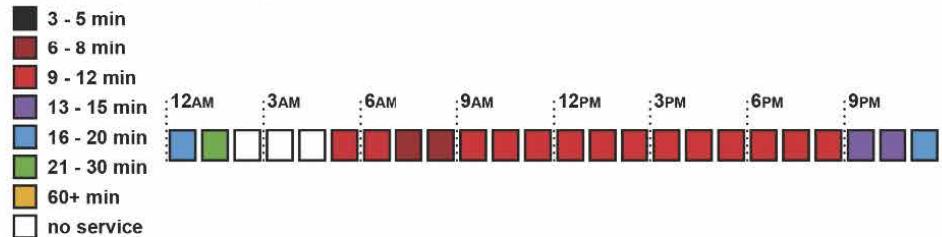


Route Type: Local

Avg. Stop Spacing: 780.4 ft (36th)

Description: Operates between Westchester Sq (E Tremont Av **6** subway station), and Bergen Av/East 150 St–The Hub (3 Av-149 St **2** **5** subway station), daily. Bx4A trips travel via Metropolitan Av between Westchester Square and Hugh Grant Circle.

Weekday Frequency



Statistics

	Weekday		Saturday		Sunday	
	Value	Rank	Value	Rank	Value	Rank
Ridership & Productivity						
Daily Ridership	12,814	25th	9,084	19th	7,157	17th
Riders per Revenue Hour	83.2	19th	73.3	12th	66.9	14th
Riders per Trip	58.2	23rd	49.4	16th	40.4	16th
Reliability						
On-Time Perf. (%)	53.1	29th	55.3	35th	69.1	13th
Wait Assessment* (%)	--	--	--	--	--	--
CJTP (%)	peak: 69.5	15th	--	--	--	--
	off-peak: 68.1	30th	--	--	--	--

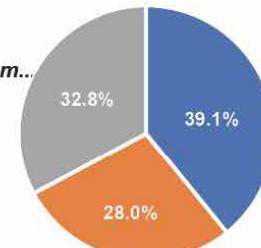
*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

Bx4/4A to... to Bx4/4A from...

1. Bx27	1. Bx27
2. Bx19	2. Bx19
3. Bx35	3. Q44SBS
4. Bx36	4. Bx39
5. Bx39	5. Bx36



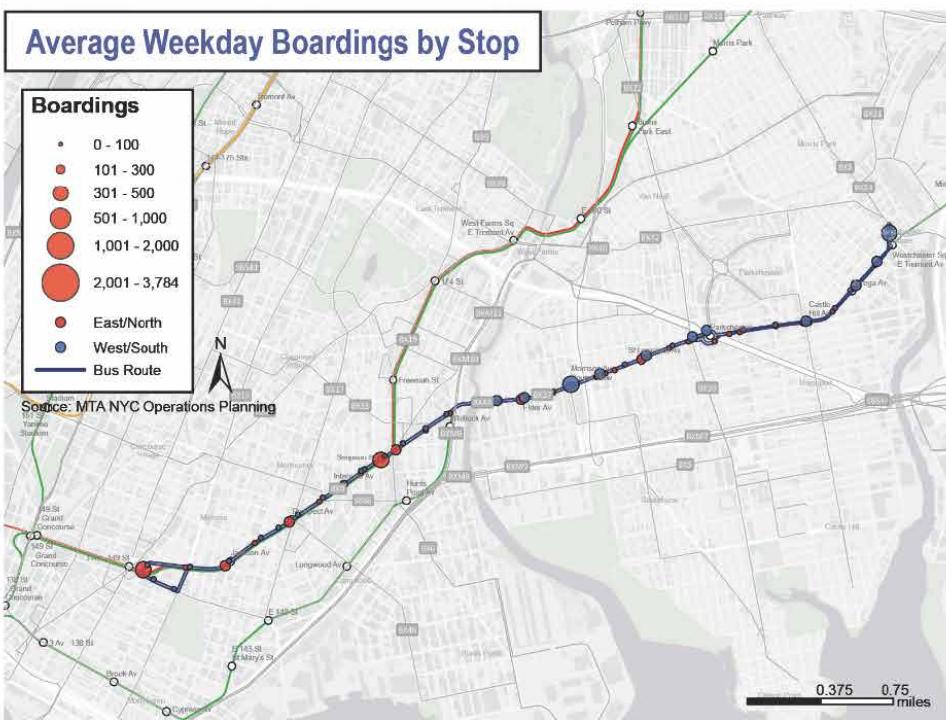
Bus-to-Bus
Bus-to-Subway
Single Bus Trip

Span of Service

	TOWARD WESTCHESTER RD	TOWARD THE HUB	AVG. FREQUENCY (MIN.)				
			AM	NOON	PM	EVE	NITE
WEEKDAYS:	5:35AM-1:25AM	5:00AM-12:45AM	6	12	8	10	--
SATURDAYS:	5:50AM-1:20AM	5:15AM-12:40AM	12	12	12	12	--
SUNDAYS:	6:05AM-1:20AM	5:30AM-12:40AM	15	12	12	12	--

Bx4 Westchester Sq/The Hub

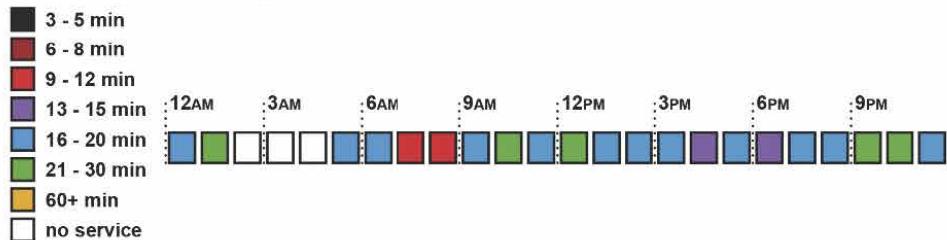
Average Weekday Boardings by Stop



Route Type: Local

Description: Operates between Westchester Sq (E Tremont Av **6** subway station), and Bergen Av/East 150 St--The Hub (3 Av-149 St **2** **5** subway station), daily.

Weekday Frequency



Statistics

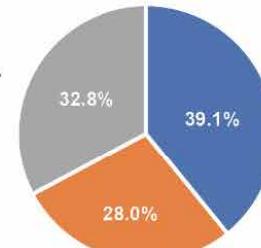
	Weekday Value	Weekday Rank	Saturday Value	Saturday Rank	Sunday Value	Sunday Rank
Ridership & Productivity						
Daily Ridership	6,001	--	4,661	--	3,774	--
Riders per Revenue Hour	80.0	--	70.6	--	65.1	--
Riders per Trip	50.9	--	44.8	--	37.0	--
Reliability						
On-Time Perf. (%)	53.6	--	55.3	--	70.7	--
Wait Assessment* (%)	72.3	37th	88.9	16th	86.7	14th
CJTP (%)	peak: 67.7	--	--	--	--	--
	off-peak: 65.5	--	--	--	--	--

*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

Bx4 to...	to Bx4 from...
1. Bx27	1. Bx27
2. Bx19	2. Bx19
3. Bx35	3. Q44SBS
4. Bx36	4. Bx39
5. Bx39	5. Bx36



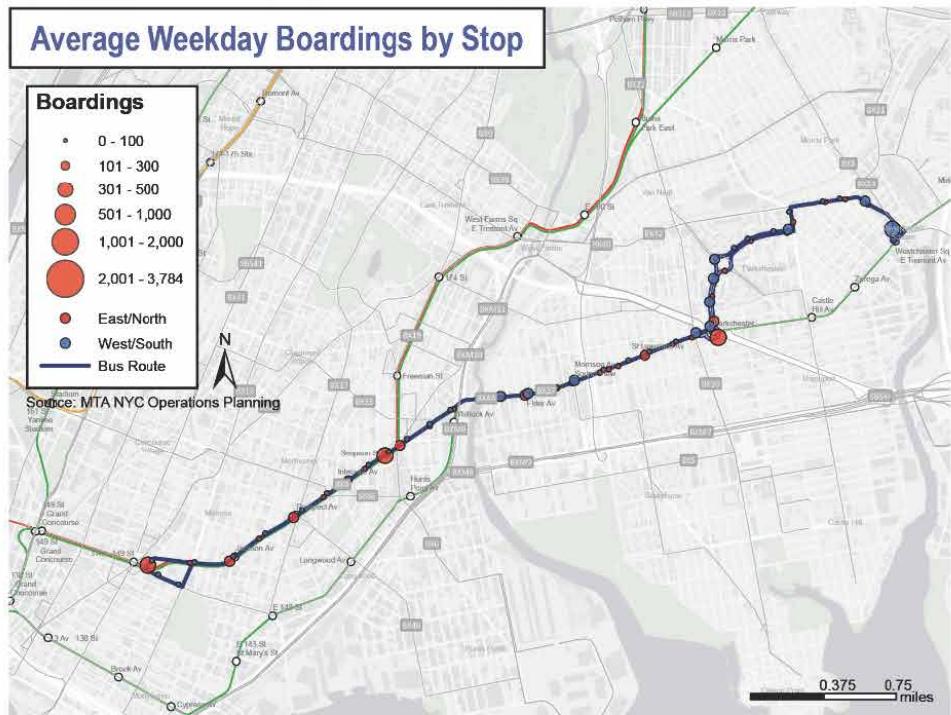
*Transfer mode share shown represents Bx4/4A combined service.

Span of Service

	TOWARD WESTCHESTER RD	TOWARD THE HUB	Avg. Frequency (min.)
	WEEKDAYS:	SATURDAYS:	SUNDAYS:
	5:35AM-1:25AM	5:15AM-12:40AM	6:05AM-1:20AM
AM	5:35AM-1:25AM	5:15AM-12:40AM	6:05AM-1:20AM
NOON			
PM			
EVE			
NITE			

Bx4A Westchester Sq/The Hub

Average Weekday Boardings by Stop

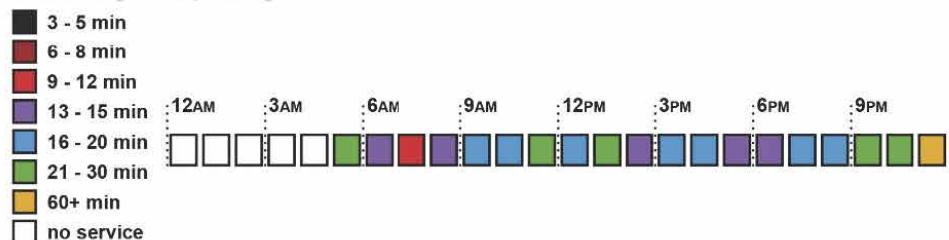


Route Type: Local

Avg. Stop Spacing: 787.4 ft

Description: Alternate trips called *Bx4A* travel via Metropolitan Av between Westchester Square and Hugh Grant Circle.

Weekday Frequency



Statistics

	Weekday		Saturday		Sunday	
	Value	Rank	Value	Rank	Value	Rank
Ridership & Productivity						
Daily Ridership	6,812	--	4,422	--	3,382	--
Riders per Revenue Hour	86.2	--	76.2	--	69.0	--
Riders per Trip	66.8	--	55.3	--	45.1	--
Reliability						
On-Time Perf. (%)	52.4	--	55.3	--	66.9	--
Wait Assessment* (%)	71.2	38th	84.3	32nd	85.9	17th
CJTP (%)	peak:	70.9	--	--	--	--
	off-peak:	70.5	--	--	--	--

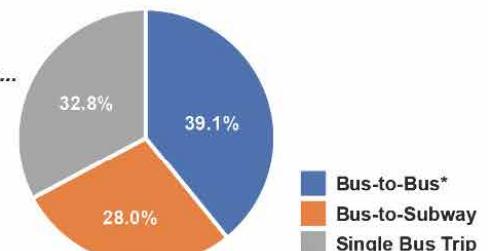
*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

Bx4A to... to Bx4A from...

1. Bx27	1. Bx27
2. Bx19	2. Bx19
3. Bx35	3. Q44SBS
4. Bx36	4. Bx39
5. Bx39	5. Bx36



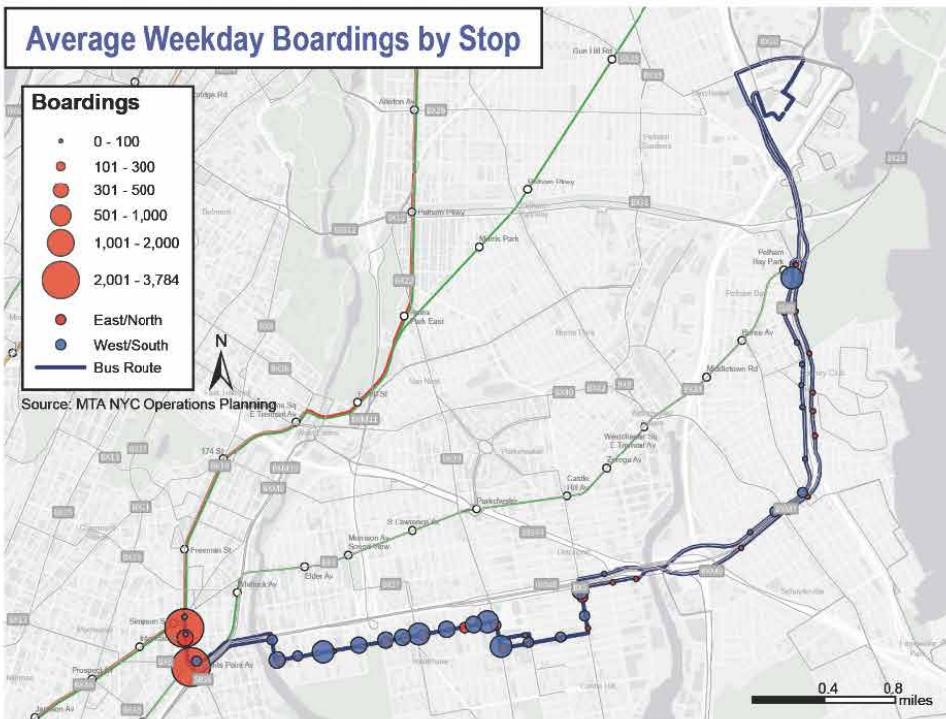
*Transfer mode share shown represents Rx4/4A combined service.

Span of Service

	TOWARD WESTCHESTER RD	TOWARD THE HUB	AVG. FREQUENCY (MIN.)				
			AM	NOON	PM	EVE	NITE
WEEKDAYS:	5:35AM-1:25AM	5:00AM-12:45AM	6	12	8	10	--
SATURDAYS:	5:50AM-1:20AM	5:15AM-12:40AM	12	12	12	12	--
SUNDAYS:	6:05AM-1:20AM	5:30AM-12:40AM	15	12	12	12	--

Bx5 Bruckner Boulevard/Story Avenue

Average Weekday Boardings by Stop

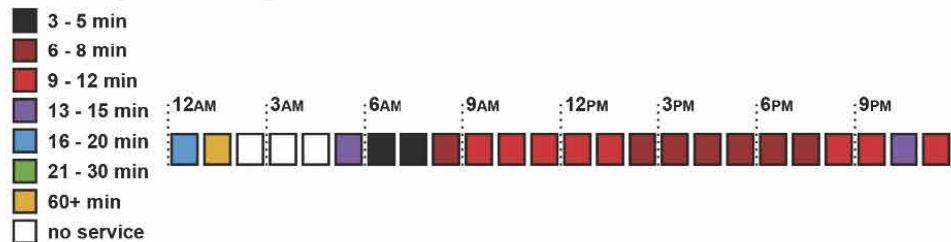


Route Type: Local

Avg. Stop Spacing: 994.6 ft (12th)

Description: Operates between Simpson St (2, 5) and Pelham Bay Park (6) subway stations. After 10:30 p.m., all buses terminate at Turnbull Av. On weekends, service is extended to Bay Plaza.

Weekday Frequency



Statistics

Ridership & Productivity			Reliability			
	Value	Rank				
Daily Ridership	15,089	18th	On-Time Perf. (%)	59.3	14th	67.3
Riders per Revenue Hour	108.6	5th	Wait Assessment* (%)	77.6	18th	85.4
Riders per Trip	55.1	26th	CJTP (%)	peak: 67.7	21st	--
			off-peak: 72.0	18th	--	--

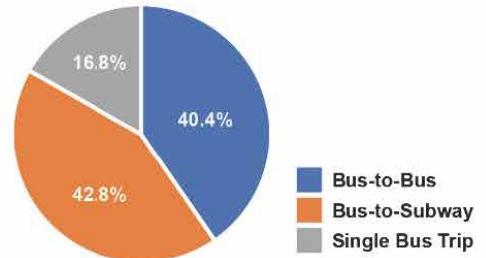
*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

Bx5 to... to Bx5 from...

1. Bx19	1. Bx19
2. Bx6SBS	2. Bx6SBS
3. Bx12SBS	3. Bx12SBS
4. Bx6	4. Bx6
5. Bx35	5. Bx35

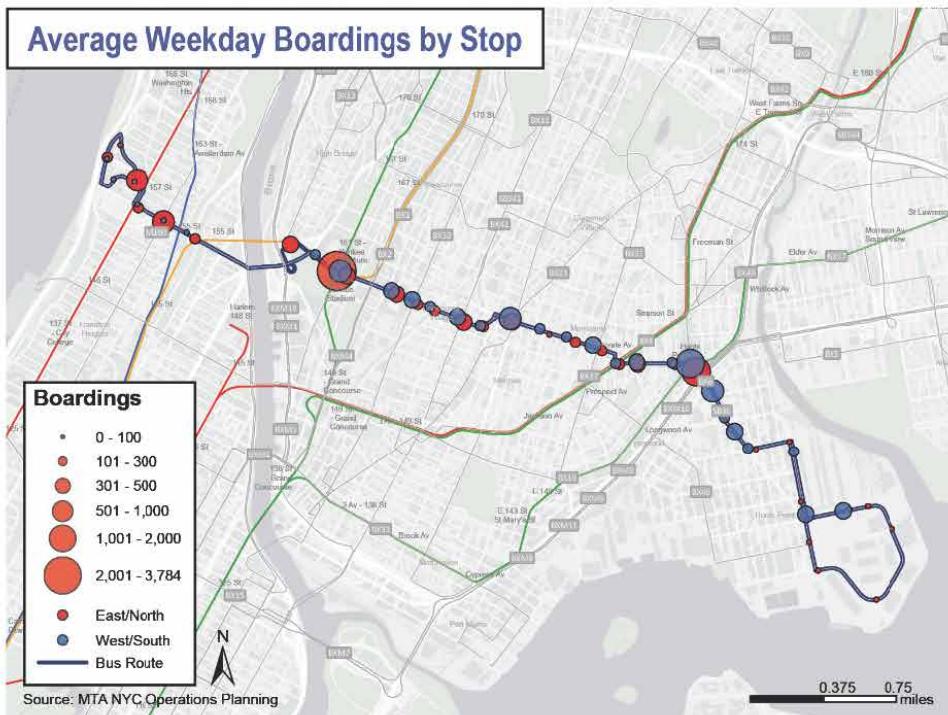


Span of Service

	TOWARD WEST FARMS RD	TOWARD PELHAM BAY	AVG. FREQUENCY (MIN.)				
			AM	NOON	PM	EVE	NITE
WEEKDAYS:	5:07AM-10:22PM	5:20AM-10:11AM	5	10	9	9	--
SATURDAYS:	5:43AM-11:58PM	5:55AM-10:50PM	12	9	12	12	--
SUNDAYS:	5:50AM-11:55PM	6:00AM-10:50PM	20	15	12	15	--

Bx6 155th/161st/163rd Sts/Hunts Point Avenue

Average Weekday Boardings by Stop

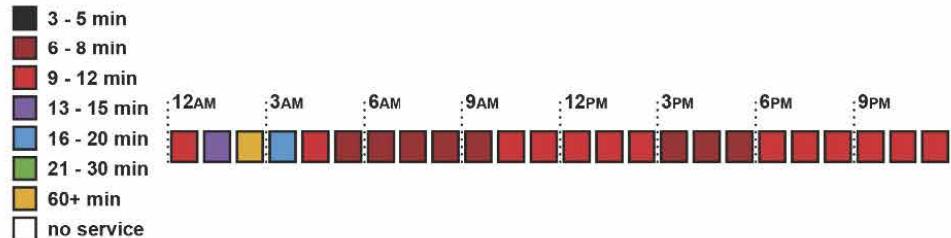


Route Type: Local

Avg. Stop Spacing: 1,001.2 ft (11th)

Description: Daytime and evening service between Hunts Point Food Distribution Center, and Riverside Dr West (Manhattan), daily. Late night service between Hunts Point Food Distribution Center and W 155 St/Amsterdam Av (Manhattan), daily.

Weekday Frequency



Statistics

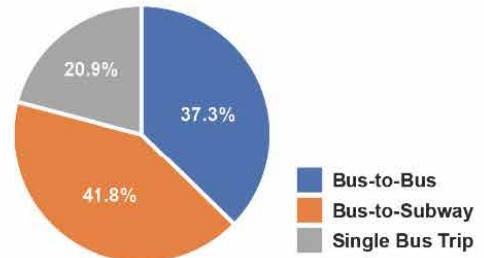
	Weekday Value	Weekday Rank	Saturday Value	Saturday Rank	Sunday Value	Sunday Rank
Ridership & Productivity						
Daily Ridership	17,852	15th	8,740	20th	7,486	16th
Riders per Revenue Hour	81.1	21st	62.4	23rd	62.4	19th
Riders per Trip	61.6	17th	41.8	27th	39.4	27th
Reliability						
On-Time Perf. (%)	61.9	10th	56.5	32nd	59.1	31st
Wait Assessment* (%)	80.3	8th	80.0	38th	82.0	26th
CJTP (%)	peak: 73.3	8th	--	--	--	--
	off-peak: 73.0	16th	--	--	--	--

*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

Bx6 to...	to Bx6 from...
1. Bx6SBS	1. Bx6SBS
2. Bx13	2. Bx13
3. Bx15	3. Bx15
4. Bx5	4. Bx5
5. Bx19	5. Bx19

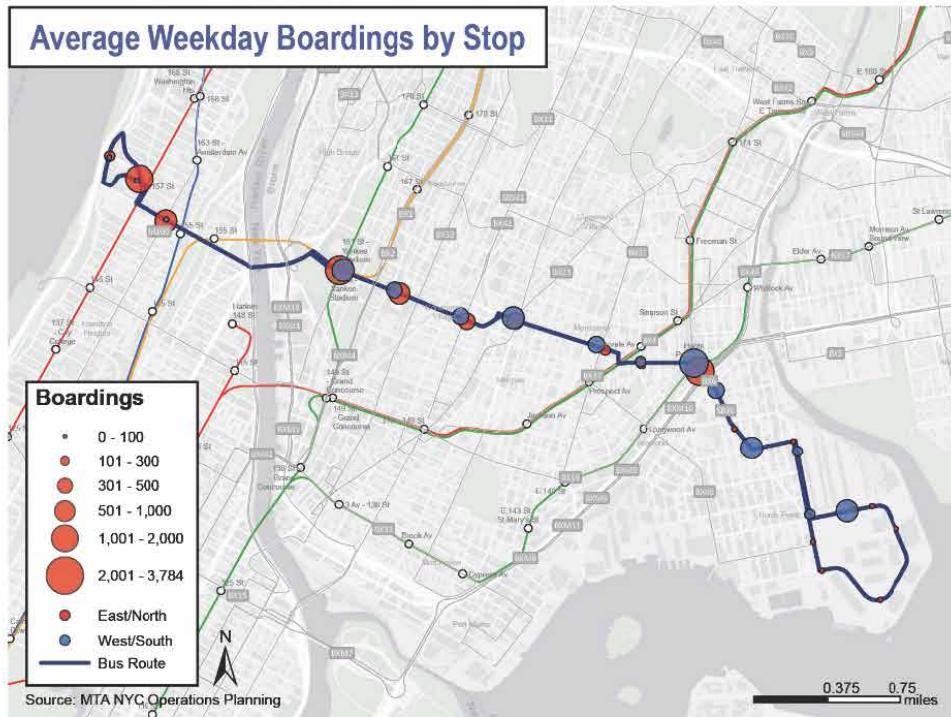


Span of Service

	TOWARD HUNTS POINT	RIVERSIDE DR W / AMSTERDAM AV	Avg. Frequency (min.)
	WEEKDAYS:	SATURDAYS:	SUNDAYS:
WEEKDAYS:	5:14AM-5:11AM	4:32AM-4:20AM	6 10 8 8 60
SATURDAYS:	6:00AM-5:48AM	5:16AM-4:54AM	12 12 12 10 60
SUNDAYS:	5:52AM-5:26AM	5:29AM-4:54AM	15 12 12 11 60

Bx6SBS 155th/161st/163rd/Hunts Point Avenue

Average Weekday Boardings by Stop

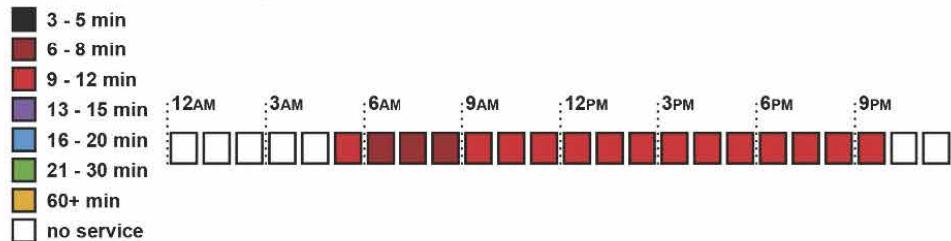


Route Type: Select Bus Service

Avg. Stop Spacing: 1,813.5 (4th)

Description: Daytime and evening service operates between Hunts Point Food Distribution Center and Riverside Dr West (Manhattan), daily.

Weekday Frequency



Statistics

	Weekday		Saturday		Sunday	
	Value	Rank	Value	Rank	Value	Rank
Ridership & Productivity						
Daily Ridership	13,107	24th	6,917	25th	5,864	24th
Riders per Revenue Hour	91.0	10th	67.2	17th	63.1	17th
Riders per Trip	63.6	15th	42.4	26th	36.6	26th
Reliability						
On-Time Perf. (%)	73.1	5th	76.6	5th	76.7	6th
Wait Assessment* (%)	85.1	3rd	89.6	12th	86.3	15th
CJTP (%)	peak: 70.2	11th	--	--	--	--
	off-peak: 71.7	21st	--	--	--	--

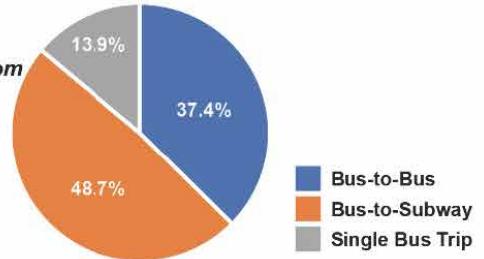
*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

Bx6SBS to to Bx6SBS from

1. Bx6	1. Bx6
2. Bx13	2. Bx5
3. Bx5	3. Bx15
4. Bx15	4. Bx13
5. M100	5. Bx19

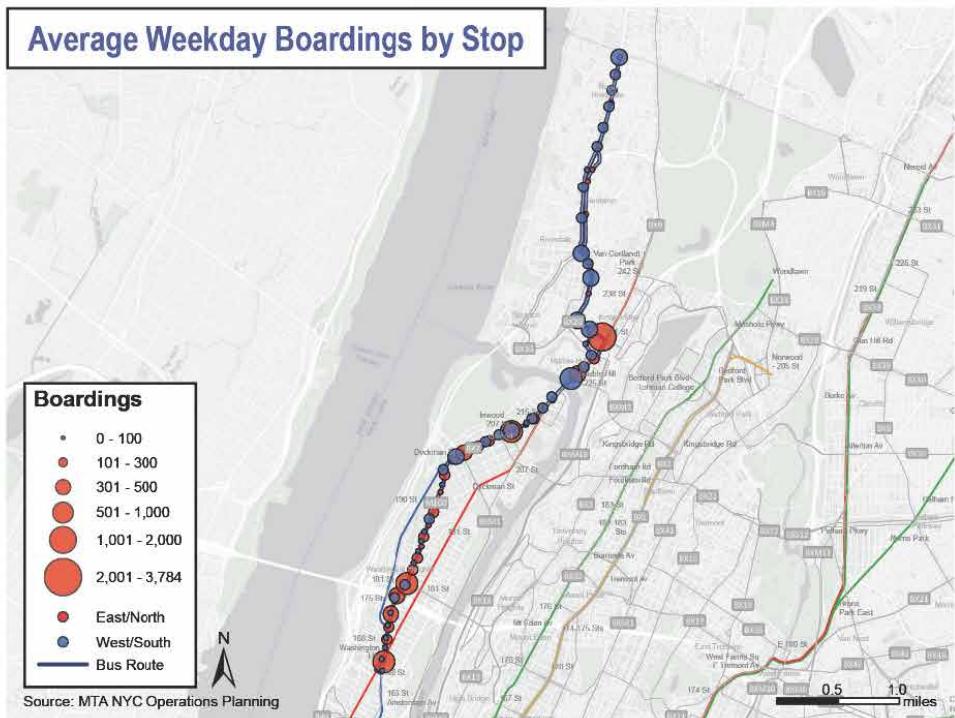


Span of Service

	TOWARD HUNTS PT	TOWARD RIVERSIDE DR W	AVG. FREQUENCY (MIN.)			
			AM	NOON	PM	EVE
WEEKDAYS:	5:22AM-10:17AM	5:29AM-9:43PM	9	12	10	10
SATURDAYS:	6:00AM-10:16PM	5:30AM-9:36PM	12	12	12	12
SUNDAYS:	6:00AM-10:14PM	5:31AM-9:32PM	12	12	12	12

Bx7 Riverdale Avenue/Broadway

Average Weekday Boardings by Stop

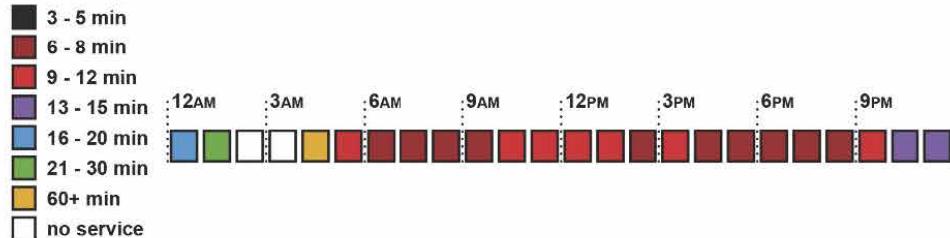


Route Type: Local

Avg. Stop Spacing: 765.2 ft (40th)

Description: Daytime and evening service between W 263 St/Riverdale Av and W 167 St/St. Nicholas Av daily. Early morning and late night service between W 263 St/Riverdale Av and Broadway/W 207 St (Inwood-207 A subway station) daily.

Weekday Frequency



Statistics

	Weekday	Saturday	Sunday			
	Value	Rank	Value	Rank	Value	Rank
Ridership & Productivity						
Daily Ridership	16,367	17th	10,866	14th	8,405	12th
Riders per Revenue Hour	78.7	22nd	65.1	18th	58.8	23rd
Riders per Trip	59.5	20th	48.5	17th	40.4	17th
Reliability						
On-Time Perf. (%)	66.9	7th	55.9	34th	52.2	37th
Wait Assessment* (%)	80.1	9th	74.7	43rd	76.4	39th
CJTP (%)	peak: 74.4	6th	--	--	--	--
	off-peak: 73.1	15th	--	--	--	--

*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

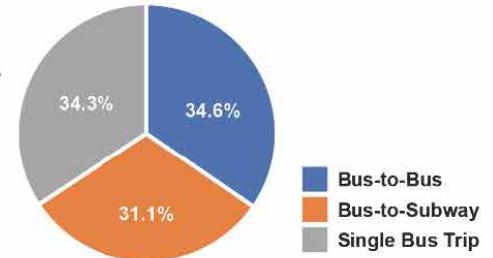
Transfers

Top Bus-to-Bus Transfers

Bx7 to... **to Bx7 from...**

1. Bx12SBS
2. Bx9
3. M100
4. Bx10
5. Bx36

1. Bx9
2. M100
3. Bx12SBS
4. Bx10
5. Bx36



Span of Service

	TOWARD WEST 263 ST	WEST 167 ST / WEST 207 ST	AVG. FREQUENCY (MIN.)				
			AM	NOON	PM	EVE	NITE
WEEKDAYS:	4:47AM-12:50AM	5:15AM-1:35AM	7	12	5	10	20
SATURDAYS:	5:30AM-12:50AM	6:00AM-1:30AM	15	10	9	12	20
SUNDAYS:	5:24AM-5:44AM	5:55AM-1:40AM	20	10	9	15	30

Bx8 Bronxwood Avenue/Williamsbridge Road

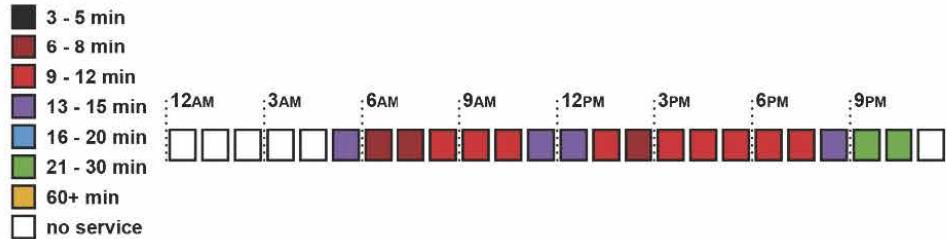


Route Type: Local

Avg. Stop Spacing: 870.9 ft (24th)

Description: Operates between White Plains Rd/East 226 St (2 5 subway station), Williamsbridge, and Tierney Pl/Longstreet Av, Locust Point, daily.

Weekday Frequency



Statistics

	Weekday		Saturday		Sunday	
	Value	Rank	Value	Rank	Value	Rank
Ridership & Productivity						
Daily Ridership	8,631	33rd	2,527	34th	15,088	35th
Riders per Revenue Hour	52.9	40th	42.1	38th	29.5	39th
Riders per Trip	47.9	32nd	36.1	32nd	23.9	32nd
Reliability						
On-Time Perf. (%)	59.0	16th	68.4	10th	68.1	14th
Wait Assessment* (%)	76.9	21st	91.1	8th	81.4	29th
CJTP (%)	peak:	64.2	32nd	--	--	--
	off-peak:	70.7	23rd	--	--	--

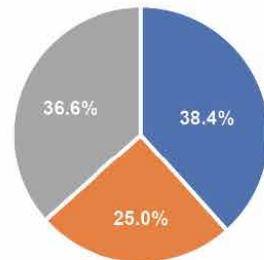
*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

Bx8 to... to **Bx8 from...**

1. Bx12SBS	1. Bx12SBS
2. Bx26	2. Bx26
3. Bx30	3. Bx30
4. Bx12	4. Bx28
5. Bx40	5. Bx12



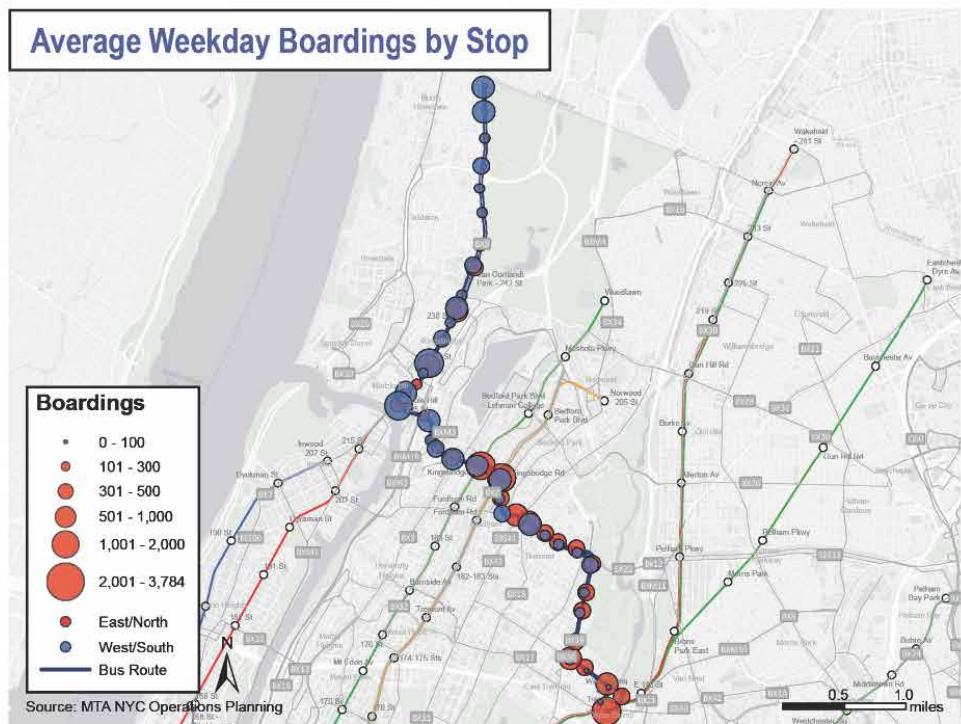
- Bus-to-Bus
- Bus-to-Subway
- Single Bus Trip

Span of Service

	TOWARD WHITE PLAINS RD	TOWARD TIERNEY PL	AVG. FREQUENCY (MIN.)			
	WEEKDAYS:	SATURDAYS:	8	15	12	24
WEEKDAYS:	5:33AM-9:38PM	6:00AM-10:08PM	8	15	12	24
SATURDAYS:	6:30AM-10:00PM	6:30AM-9:00PM	30	30	30	30
SUNDAYS:	6:30AM-10:00PM	6:30AM-9:00PM	30	30	30	30

Bx9 Broadway/Kingsbridge Road

Average Weekday Boardings by Stop

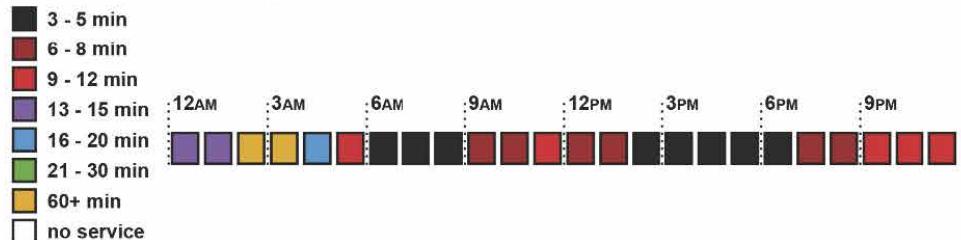


Route Type: Local

Avg. Stop Spacing: 926.8 ft (19th)

Description: Operates between Broadway/West 262 St, Riverdale, and West Farms Square (East Tremont Av-West Farms Sq ② ⑤ subway station), daily.

Weekday Frequency



Statistics

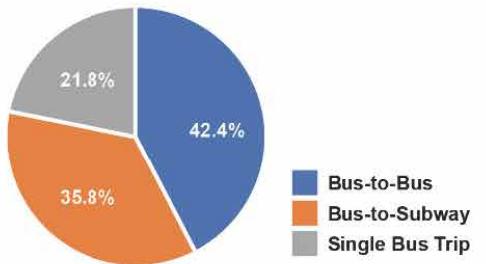
Ridership & Productivity			Saturday			Sunday		
	Value	Rank	Value	Rank	Value	Rank		
Ridership & Productivity								
Daily Ridership	29,758	6th	18,884	6th	15,088	6th		
Riders per Revenue Hour	90.7	11th	80.7	7th	76.2	8th		
Riders per Trip	75.3	8th	67.7	8th	59.6	8th		
Reliability								
On-Time Perf. (%)	58.9	17th	57.0	30th	61.5	27th		
Wait Assessment* (%)	77.4	19th	80.8	37th	83.1	24th		
CJTP (%)	peak: 71.0	10th	--	--	--	--		
	off-peak: 74.6	8th	--	--	--	--		

*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

Bx9 to...	to Bx9 from...
1. Bx3	1. Bx3
2. Bx7	2. Bx7
3. Bx12SBS	3. Bx12SBS
4. Q44SBS	4. Q44SBS
5. Bx36	5. Bx36

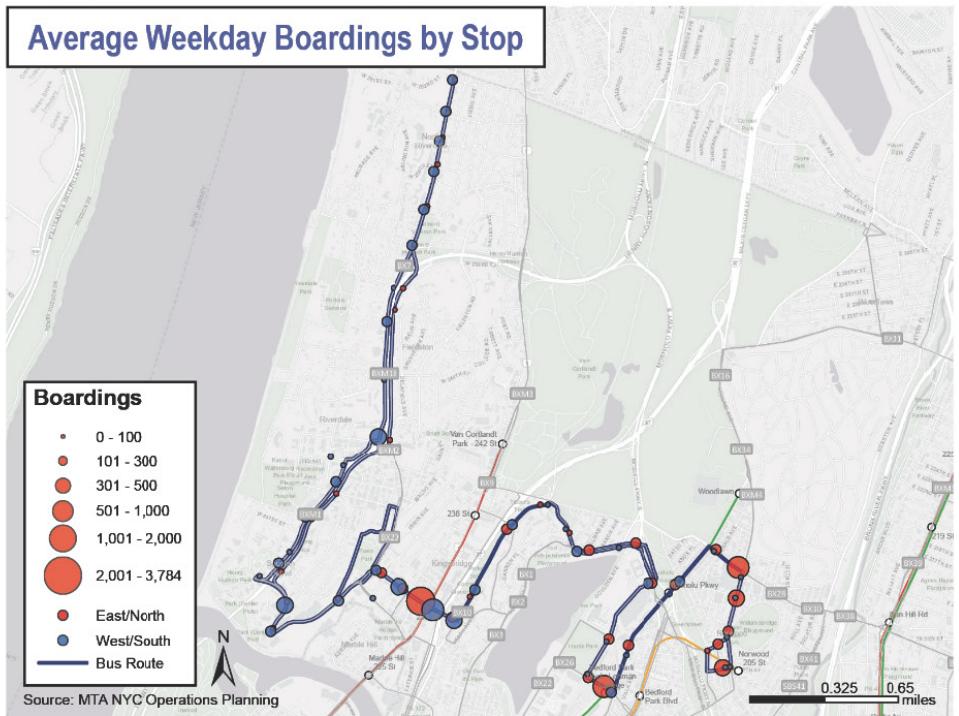


Span of Service

	Avg. Frequency (min.)			
	All times	All times	4 9 5 10 45	
WEEKDAYS:	All times			9 10 9 9 80
SATURDAYS:	All times			12 10 9 10 80
SUNDAYS:	All times			12 10 9 10 80

Bx10 Riverdale Avenue/Norwood

Average Weekday Boardings by Stop

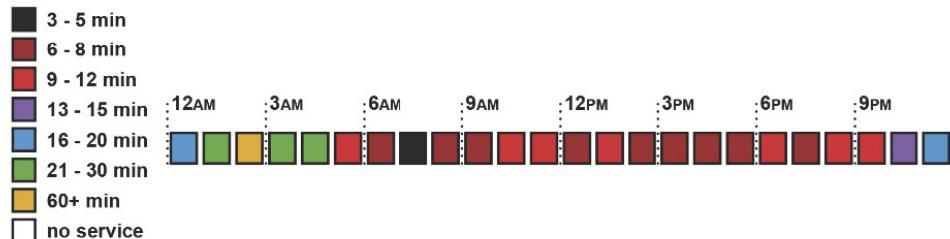


Route Type: Local

Avg. Stop Spacing: 979.4 ft (39th)

Description: Operates between Riverdale Av/West 263 St and East 206 St/Bainbridge Av (Norwood-205 St **D** subway station), daily.

Weekday Frequency



Statistics

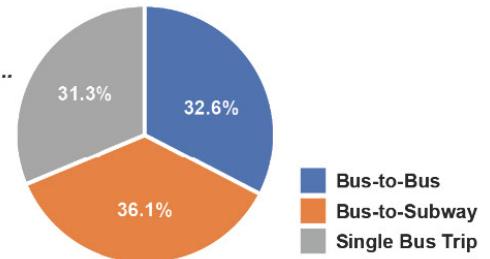
	Weekday		Saturday		Sunday	
	Value	Rank	Value	Rank	Value	Rank
Ridership & Productivity						
Daily Ridership	13,722	21st	5,989	26th	4,727	26th
Riders per Revenue Hour	62.7	37th	53.5	34th	50.8	34th
Riders per Trip	51.8	29th	37.9	30th	35.3	30th
Reliability						
On-Time Perf. (%)	59.5	13th	66.5	12th	56.7	35th
Wait Assessment* (%)	78.6	13th	91.2	7th	76.0	40th
CJTP (%)	peak: 70.1		12th	--	--	--
	off-peak: 73.7		12th	--	--	--

*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

Bx10 to...	to Bx10 from...
1. Bx7	1. Bx7
2. Bx9	2. Bx9
3. Bx1	3. Bx30
4. Bx30	4. Bx1
5. Bx26	5. Bx28

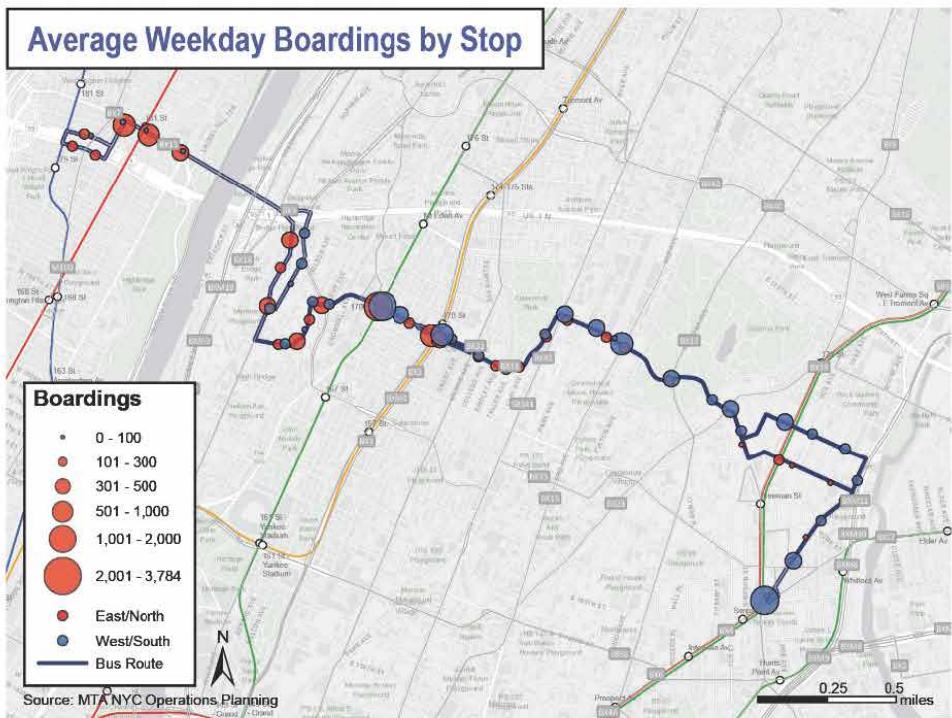


Span of Service

	TOWARD WEST 263 ST		TOWARD EAST 206 ST		AVG. FREQUENCY (MIN.)				
	WEEKDAYS:	SATURDAYS:	SUNDAYS:	AM	NOON	PM	EVE	NITE	
WEEKDAYS:	All times	All times	All times	5	10	8	10	60	
SATURDAYS:	All times	All times	All times	15	15	12	20	40	
SUNDAYS:	All times	All times	All times	20	15	15	17	40	

Bx11 West Farms Rd - Southern Blvd/GW Bridge

Average Weekday Boardings by Stop

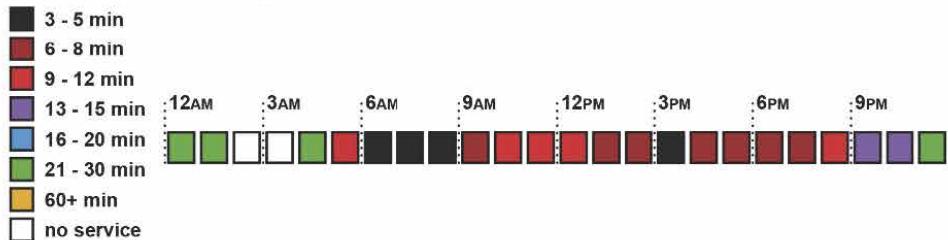


Route Type: Local

Avg. Stop Spacing: 772.3 ft (39th)

Description: Operates between Southern Blvd/West Farms Rd (Simpson St **2 5** subway station) and George Washington Bridge Bus Station, Washington Heights, Manhattan, daily.

Weekday Frequency



Statistics

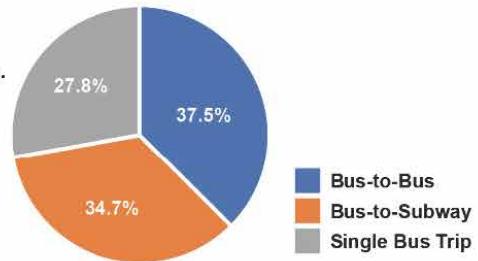
	Weekday		Saturday		Sunday	
	Value	Rank	Value	Rank	Value	Rank
Ridership & Productivity						
Daily Ridership	19,302	12th	10,980	13th	7,088	18th
Riders per Revenue Hour	84.7	18th	71.8	15th	66.2	15th
Riders per Trip	67.3	12th	51.3	13th	44.9	13th
Reliability						
On-Time Perf. (%)	51.2	33rd	61.1	22nd	58.1	33rd
Wait Assessment* (%)	72.4	36th	85.5	27th	76.8	37th
CJTP (%)	peak: 66.4	25th				
	off-peak: 70.5	24th				

*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

Bx11 to...	to Bx11 from...
1. Bx2	1. Bx2
2. Bx1	2. Bx15
3. Bx15	3. Bx1
4. Bx13	4. Bx13
5. Bx17	5. Bx27

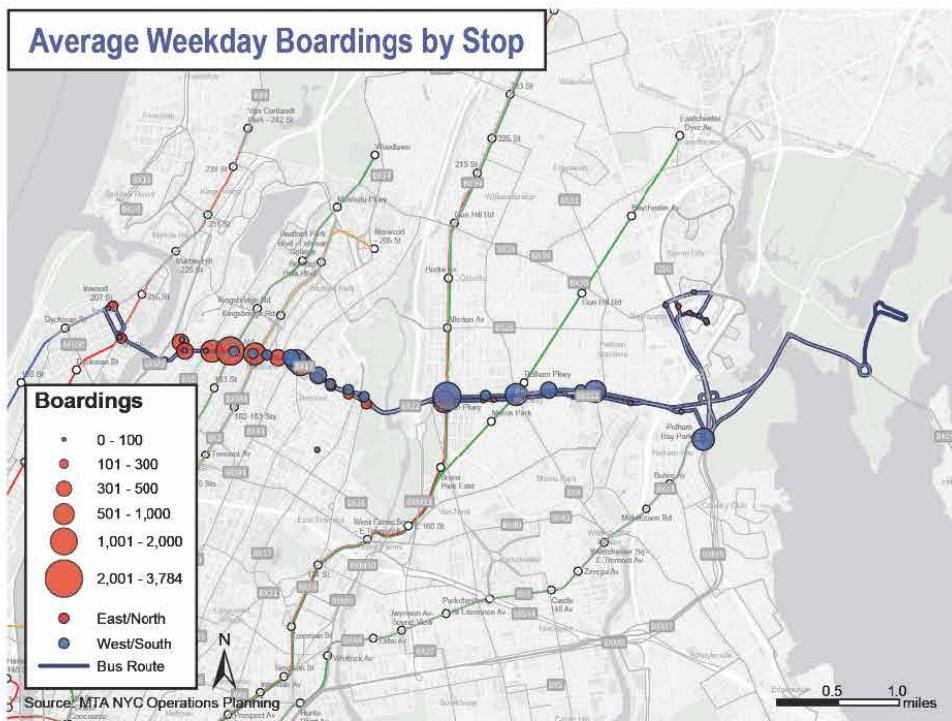


Span of Service

	TOWARD SOUTHERN BLVD		Avg. Frequency (min.)	
	5:00AM-1:55AM	4:20AM-1:10AM	5 10 6 8 --	
WEEKDAYS:	5:00AM-1:55AM	4:20AM-1:10AM	5 10 6 8 --	
SATURDAYS:	5:00AM-1:45AM	4:24AM-1:00AM	12 10 9 12 --	
SUNDAYS:	5:30AM-1:20AM	4:58AM-12:40AM	15 12 10 15 --	

Bx12 Pelham Parkway/Fordham Road

Average Weekday Boardings by Stop

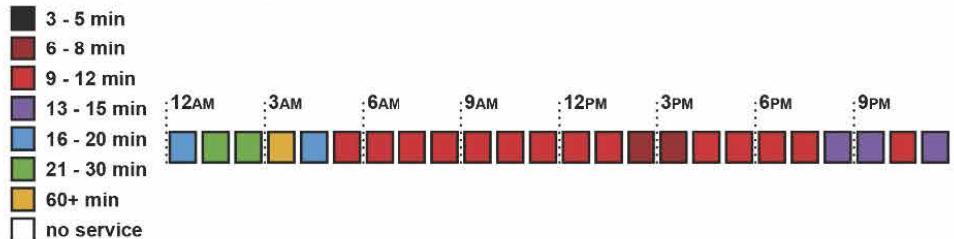


Route Type: Local

Avg. Stop Spacing: 1,399.2 ft (7th)

Description: Bx12 local service operates between Pelham Bay Park **6** subway station and Sedgwick Av/West Fordham Rd, daily.

Weekday Frequency



Statistics

	Weekday Value	Weekday Rank	Saturday Value	Saturday Rank	Sunday Value	Sunday Rank
Ridership & Productivity						
Daily Ridership	14,413	20th	8,009	23rd	6,293	23rd
Riders per Revenue Hour	110.0	4th	72.8	13th	62.9	18th
Riders per Trip	64.6	13th	64.6	28th	33.1	28th
Reliability						
On-Time Perf. (%)	57.2	20th	64.6	18th	69.9	11th
Wait Assessment* (%)	78.0	16th	90.8	9th	88.5	5th
CJTP (%)	peak: 65.7	29th	--	--	--	--
	off-peak: 76.2	5th	--	--	--	--

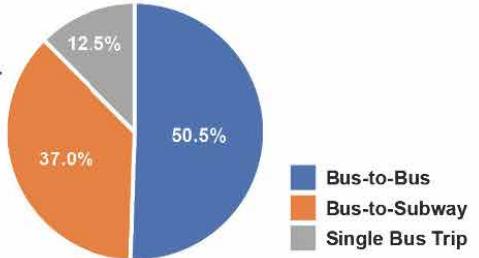
*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

Bx12 to... to Bx12 from...

1. Bx12SBS	1. Bx12SBS
2. Bx39	2. Bx3
3. Bx3	3. Bx39
4. Bx9	4. Bx9
5. Bx2	5. Bx15

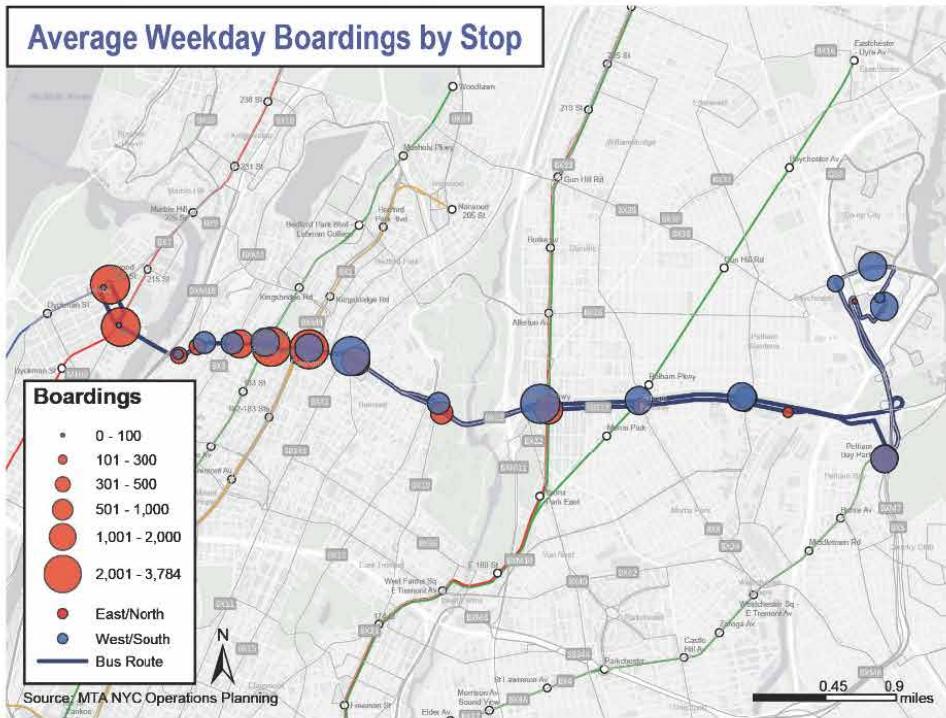


Span of Service

	TOWARD PELHAM BAY	TOWARD SEDGWICK AV	Avg. Frequency (min.)				
	WEEKDAYS:	SATURDAYS:	AM	NOON	PM	EVE	NITE
WEEKDAYS:	All times	All times	10	12	8	15	40
SATURDAYS:	All times	All times	12	12	12	12	40
SUNDAYS:	All times	All times	12	12	12	15	40

Bx12SBS 207th Street/Fordham Road

Average Weekday Boardings by Stop

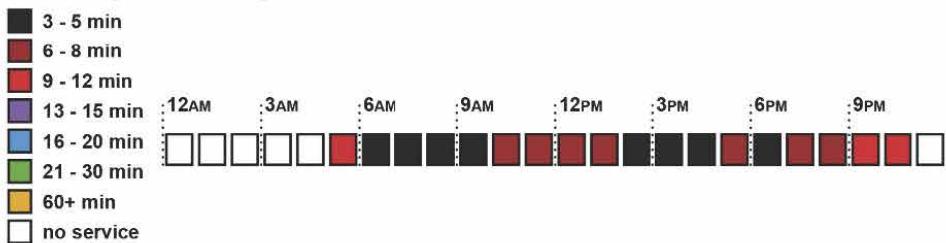


Route Type: Select Bus Service

Avg. Stop Spacing: 2,503.8 ft (2nd)

Description: Operates between Bay Plaza, Co-op City, and Broadway/West 207 St (Inwood-207 St **A** subway station), Inwood, Manhattan, daily.

Weekday Frequency



Statistics

	Weekday		Saturday		Sunday	
	Value	Rank	Value	Rank	Value	Rank
Ridership & Productivity						
Daily Ridership	38,688	2nd	26,269	2nd	20,292	2nd
Riders per Revenue Hour	137.2	1st	119.4	1st	130.1	1st
Riders per Trip	102.6	3rd	87.9	2nd	90.2	2nd
Reliability						
On-Time Perf. (%)	56.0	25th	59.1	27th	65.8	21st
Wait Assessment* (%)	77.4	20th	85.6	26th	88.2	8th
CJTP (%)	peak:	59.4	40th	--	--	--
	off-peak:	64.1	38th	--	--	--

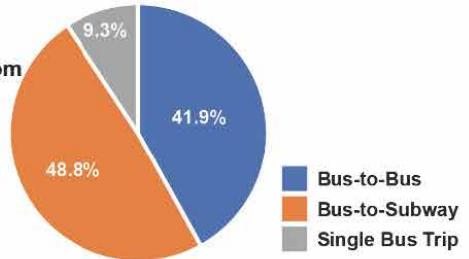
*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

Bx12SBS to Bx12SBS from

1. Bx3	1. Bx3
2. Bx12	2. Bx12
3. Bx39	3. Bx39
4. Bx15	4. Bx15
5. Bx9	5. Bx9

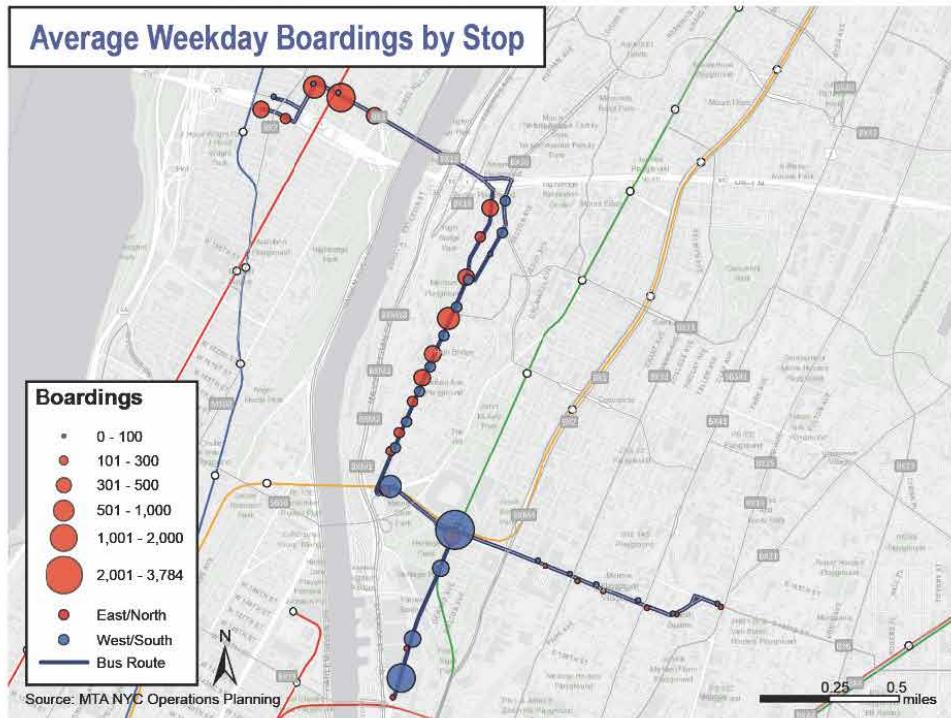


Span of Service

	TOWARD BAY PLAZA	TOWARD BROADWAY	AVG. FREQUENCY (MIN.)				
			AM	NOON	PM	EVE	NITE
WEEKDAYS:	6:00AM-10:53PM	5:09AM-10:00PM	4	6	5	6	--
SATURDAYS:	6:45AM-11:25PM	6:00AM-10:25PM	7	6	6	8	--
SUNDAYS:	6:00AM-10:55PM	6:09AM-10:00PM	10	9	8	10	--

Bx13 Ogden Avenue/West 181st Street

Average Weekday Boardings by Stop

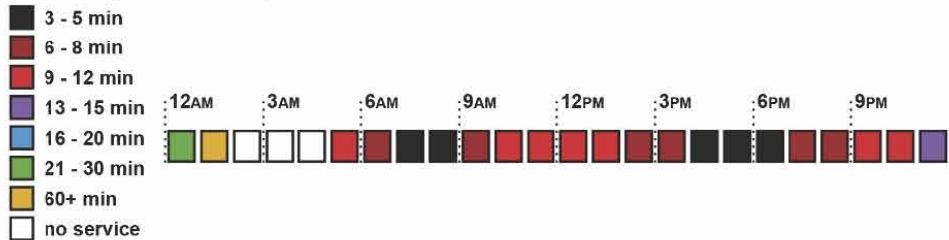


Route Type: Local

Avg. Stop Spacing: 868.5 ft (25th)

Description: Operates between George Washington Bridge Bus Station, Washington Heights, Manhattan, and Gateway Mall/149th St or between East 161 St/River Av and E.L. Grant Hwy/University Av, daily.

Weekday Frequency



Statistics

	Weekday		Saturday		Sunday	
	Value	Rank	Value	Rank	Value	Rank
Ridership & Productivity						
Daily Ridership	14,986	19th	10,253	15th	8,101	14th
Riders per Revenue Hour	100.6	8th	85.4	6th	89.0	2nd
Riders per Trip	49.8	31st	44.2	23rd	41.8	23rd
Reliability						
On-Time Perf. (%)	62.1	9th	65.5	16th	67.8	15th
Wait Assessment* (%)	80.4	7th	88.1	18th	85.8	18th
CJTP (%)	<i>peak:</i>	78.3	3rd	--	--	--
	<i>off-peak:</i>	78.1	4th	--	--	--

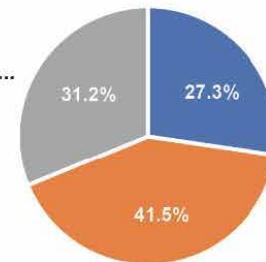
*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

Bx13 to... **to Bx13 from...**

1. Bx6	1. Bx6
2. Bx6SBS	2. Bx6SBS
3. Bx19	3. Bx19
4. Bx11	4. Bx11
5. Bx3	5. Bx3



█ Bus-to-Bus
█ Bus-to-Subway
█ Single Bus Trip

Span of Service

	TOWARD GW BRIDGE		TOWARD GATEWAY MALL		AVG. FREQUENCY (MIN.)				
	WEEKDAYS:	SATURDAYS:	SUNDAYS:	AM	NOON	PM	EVE	NITE	
	5:30AM-1:00AM	5:32AM-12:57AM	5:40AM-1:02AM	4	9	4	6	--	
				5:00AM-12:30AM	5:00AM-12:25AM	5:00AM-12:30AM	15	9	8
							8	8	--

Bx15 3rd Avenue/125th Street

Average Weekday Boardings by Stop

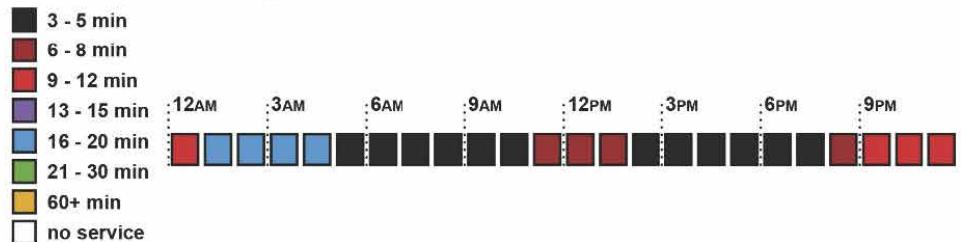


Route Type: Local/Limited

Avg. Stop Spacing: 983.8 ft (14th)

Description: Operates between 3 Av/Fordham Rd-Fordham Plaza and West 125 St/12 Av, Harlem, Manhattan. Local service between 3 Av/Fordham Rd-Fordham Plaza and 3 Av-E 149 St 25 subway station-The Hub, weekdays. Full route other times.

Weekday Frequency



Statistics

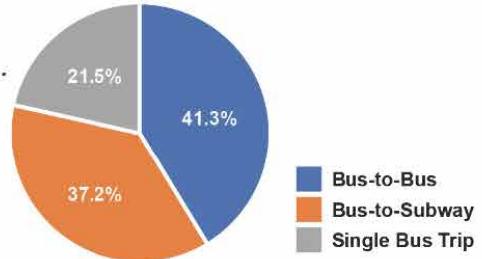
	Weekday		Saturday		Sunday	
	Value	Rank	Value	Rank	Value	Rank
Ridership & Productivity						
Daily Ridership	34,339	5th	21,977	4th	15,559	5th
Riders per Revenue Hour	90.4	12th	72.8	14th	68.2	13th
Riders per Trip	74.8	9th	76.3	4th	64.3	4th
Reliability						
On-Time Perf. (%)	39.7	42nd	52.3	37th	51.0	39th
Wait Assessment* (%)	67.3	46th	70.5	45th	72.5	44th
CJTP (%)	peak: 64.0		--	--	--	--
	off-peak: 63.9		--	--	--	--

*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

Bx15 to...	to Bx15 from...
1. Bx12SBS	1. Bx12SBS
2. Bx9	2. Bx9
3. Bx19	3. Bx19
4. Bx21	4. Bx41SBS
5. Bx36	5. Bx36



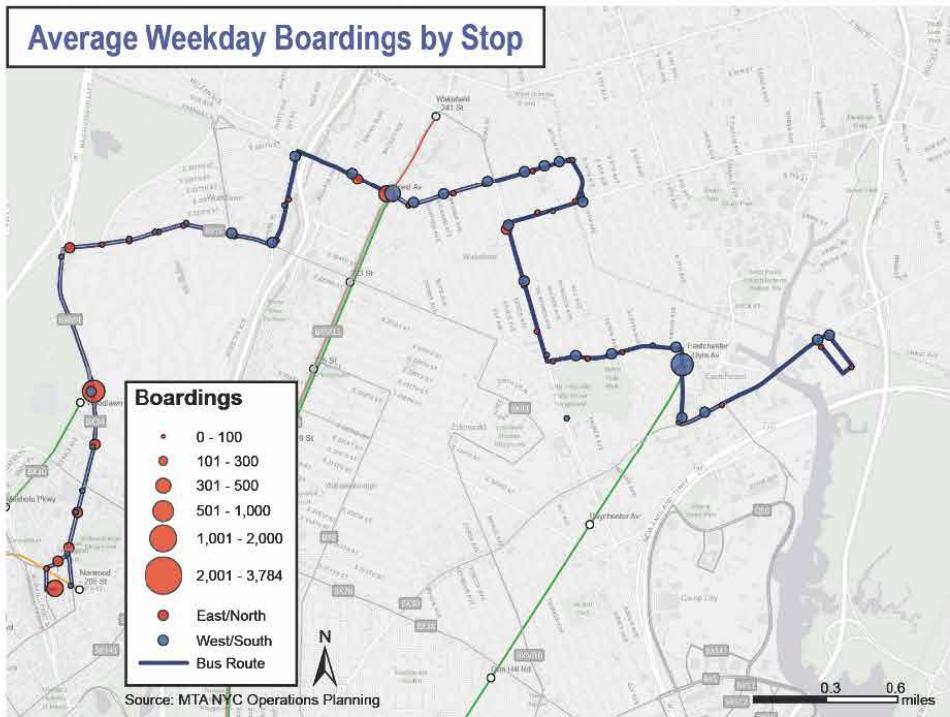
Span of Service

	TOWARD 3 AV-FORDHAM PLZ	TOWARD E 149 ST / 12 AV	AVG. FREQUENCY (MIN.)					
	WEEKDAYS:	SATURDAYS:	SUNDAYS:	9	12	9	10	60
	All times	All times	All times	8	8	7	8	60
				12	10	9	9	60

*Frequency shown represents Bx15 LCL service only.

Bx16 East 233rd Street/Nereid Avenue

Average Weekday Boardings by Stop

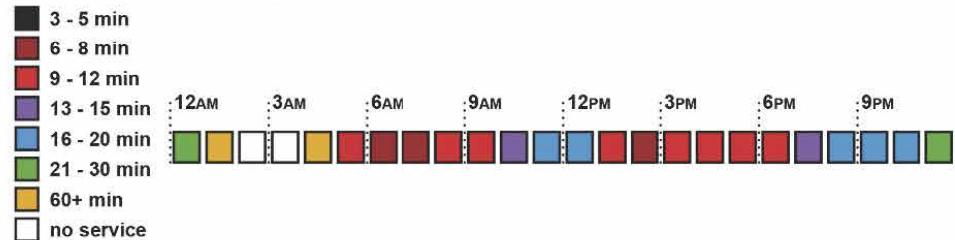


Route Type: Local

Avg. Stop Spacing: 1,003.2 ft (10th)

Description: Operates between Ropes Av/Boston Post Rd and East 206 St/Bainbridge Av (Norwood-205 St **D** subway station), daily.

Weekday Frequency



Statistics

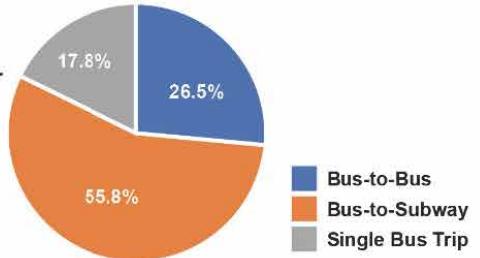
	Weekday	Value	Rank	Saturday	Value	Rank	Sunday	Value	Rank
Ridership & Productivity									
Daily Ridership		9,887	30th		4,249	31st		2,683	31st
Riders per Revenue Hour		75.5	26th		54.5	33rd		51.6	32nd
Riders per Trip		54.0	27th		34.8	33rd		31.2	33rd
Reliability									
On-Time Perf. (%)		51.2	34th		56.3	33rd		61.1	29th
Wait Assessment* (%)		74.1	32nd		88.0	19th		83.4	23rd
CJTP (%)	peak:	60.4	38th		--	--		--	--
	off-peak:	67.5	32nd		--	--		--	--

*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

Bx16 to...	to Bx16 from...
1. Bx30	1. Bx30
2. Bx10	2. Bx10
3. Bx39	3. Bx31
4. Bx31	4. Bx39
5. Bx34	5. Bx34

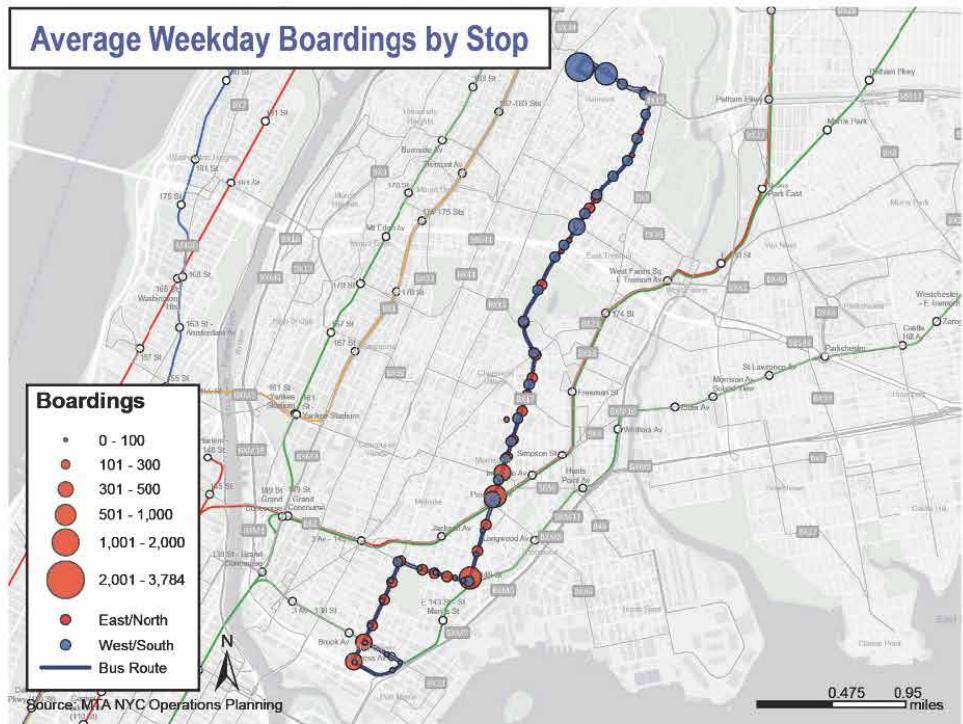


Span of Service

	TOWARD ROPES AV		Avg. Frequency (min.)				
	5:25AM-11:30PM	4:58AM-12:15AM	6	20	10	17	--
WEEKDAYS:	5:25AM-11:30PM	4:58AM-12:15AM	6	20	10	17	--
SATURDAYS:	6:00AM-11:30PM	6:45AM-12:15AM	20	20	15	30	--
SUNDAYS:	7:30AM-11:00PM	8:10AM-11:40PM	30	20	20	30	--

Bx17 Crotona/Prospect Avenues

Average Weekday Boardings by Stop

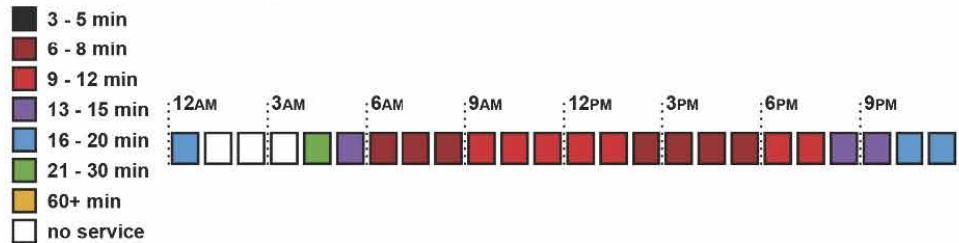


Route Type: Local

Avg. Stop Spacing: 804.5 ft (34th)

Description: Operates between 3 Av/Fordham Rd-Fordham Plaza and St. Ann's Av/East 135 St, Port Morris, daily.

Weekday Frequency



Statistics

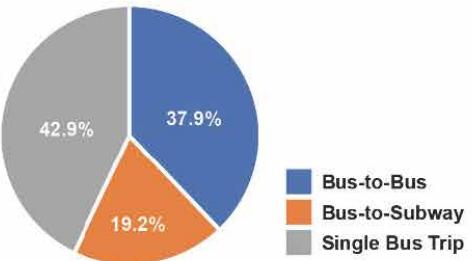
Ridership & Productivity			Saturday			Sunday		
	Value	Rank	Value	Rank	Value	Rank		
Ridership & Productivity								
Daily Ridership	13,290	23rd	7,058	24th	5,400	25th		
Riders per Revenue Hour	75.9	24th	64.2	20th	59.3	22nd		
Riders per Trip	57.5	24th	44.4	22nd	40.0	22nd		
Reliability								
On-Time Perf. (%)	48.0	37th	59.3	24th	59.0	32nd		
Wait Assessment* (%)	69.3	44th	84.1	33rd	79.9	33rd		
CJTP (%)	peak: 67.1	23rd	--	--	--	--		
	off-peak: 66.5	36th	--	--	--	--		

*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

Bx17 to...	to Bx17 from...
1. Bx19	1. Bx19
2. Bx9	2. Bx12SBS
3. Bx11	3. Bx9
4. Bx36	4. Bx11
5. Bx12SBS	5. Bx36

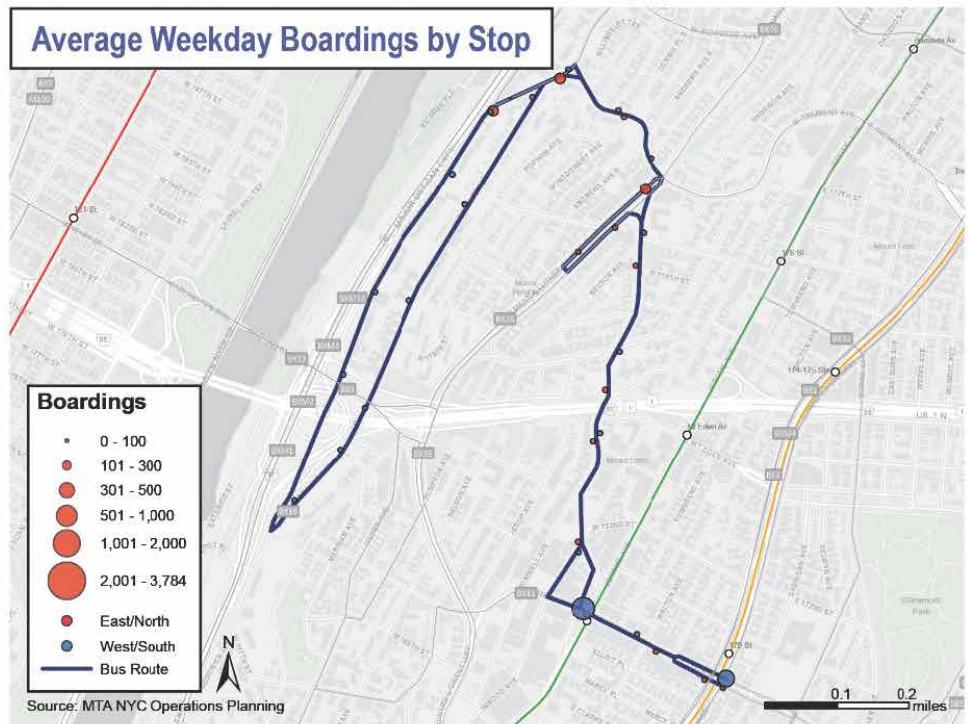


Span of Service

TOWARD			Avg. Frequency (min.)					
	TOWARD 3 AV - FORDHAM PLZ	TOWARD EAST 135 ST	WEEKDAYS:	SATURDAYS:	SUNDAYS:	AM	NOON	PM
WEEKDAYS:	4:20AM-12:00MID	5:00AM-12:40AM	6	12	8	12	--	--
SATURDAYS:	5:00AM-12:05AM	4:25AM-12:40AM	15	12	10	12	--	--
SUNDAYS:	6:27AM-12:00MID	5:45AM-12:40AM	20	15	12	15	--	--

Bx18 Macombs Road

Average Weekday Boardings by Stop

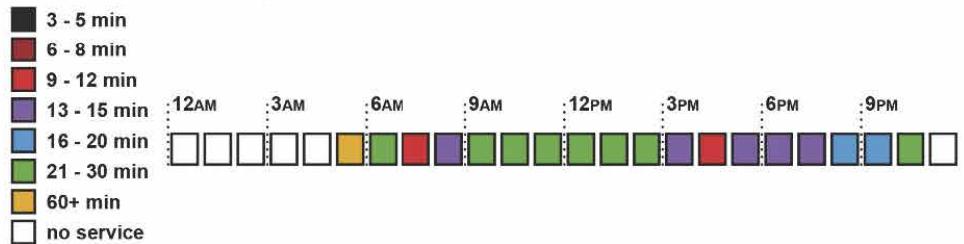


Route Type: Local

Avg. Stop Spacing: 808.6 ft (33rd)

Description: Operates between Undercliff Av/Sedgwick Av and Grand Concourse/East 170 St (170 St **B** **D** subway station), daily.

Weekday Frequency



Statistics

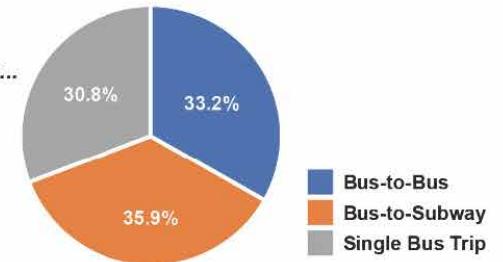
Ridership & Productivity			Reliability			
	Value	Rank		Value	Rank	
Daily Ridership						
Daily Ridership	2,481	39th	On-Time Perf. (%)	51.5	32nd	47.6
Riders per Revenue Hour	82.7	20th	Wait Assessment* (%)	74.4	29th	86.0
Riders per Trip	57.5	24th	CJTP (%)	peak: 65.9	28th	--
			off-peak: 66.6	35th	--	--

*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

Bx18 to...	to Bx18 from...
1. Bx36	1. Bx11
2. Bx3	2. Bx3
3. Bx11	3. Bx2
4. Bx1	4. Bx36
5. Bx2	5. Bx1

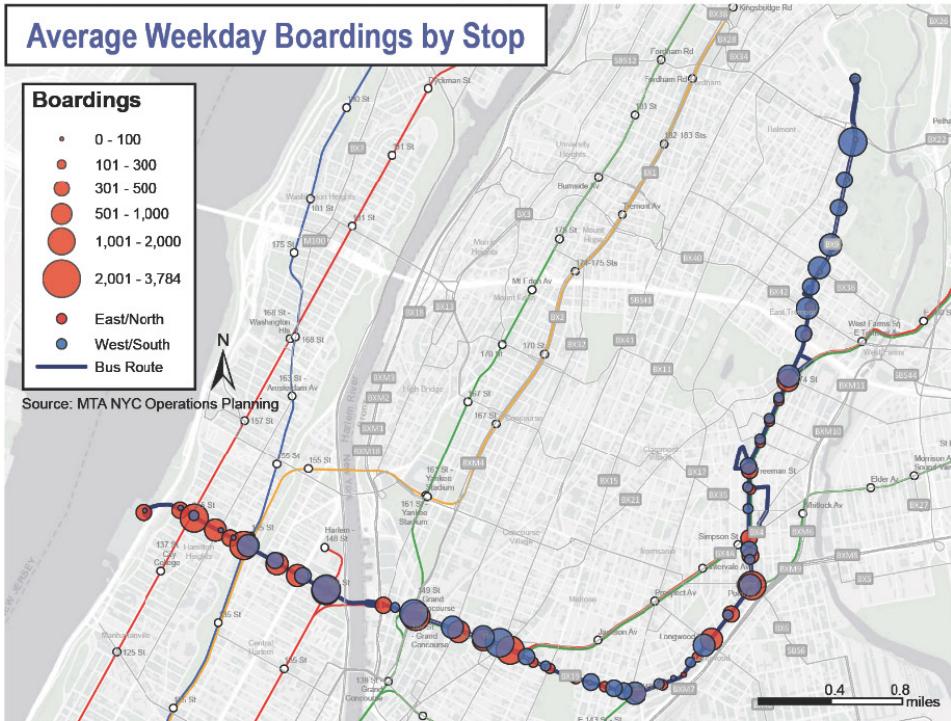
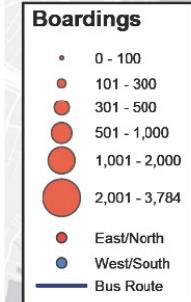


Span of Service

	TOWARD UNDERCLIFF AV		TOWARD GND CONCOURSE		AVG. FREQUENCY (MIN.)				
	WEEKDAYS:	SATURDAYS:	SUNDAYS:	AM	NOON	PM	EVE	NITE	
WEEKDAYS:	6:15AM-10:37PM	7:30AM-9:30PM	8:29AM-9:30PM	15	30	12	20	--	--
SATURDAYS:	6:05AM-10:15PM	7:35AM-9:54PM	8:24AM-9:49PM	30	30	30	30	--	--
SUNDAYS:				30	30	30	30	--	--

Bx19 Southern Boulevard/East 149th Street

Average Weekday Boardings by Stop

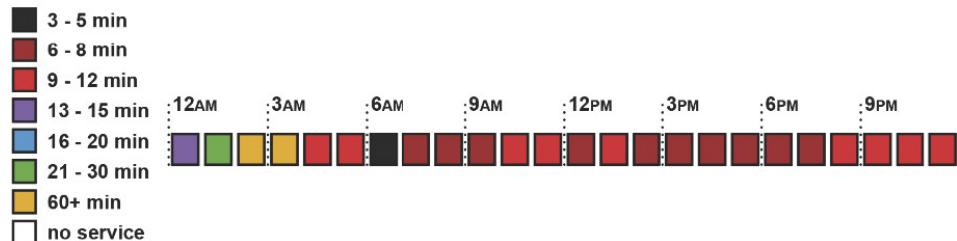


Route Type: Local

Avg. Stop Spacing: 834.0 ft (31st)

Description: Operates between NY Botanical Garden and Riverbank State Park or Broadway/West 145 St, Harlem, Manhattan, daily. Terminates at Broadway in Manhattan when Riverbank State Park is closed.

Weekday Frequency



Statistics

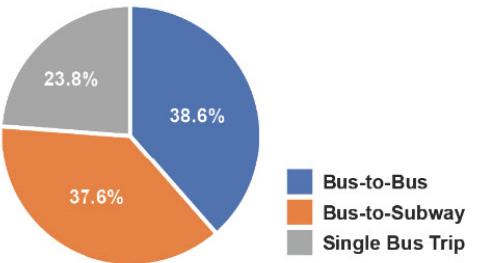
	Weekday	Value	Rank	Saturday	Value	Rank	Sunday	Value	Rank
Ridership & Productivity									
Daily Ridership	38,279	3rd		27,089	1st		20,532	1st	
Riders per Revenue Hour	113.3	2nd		93.4	2nd		87.0	3rd	
Riders per Trip	129.3	1st		101.8	1st		90.1	1st	
Reliability									
On-Time Perf. (%)	55.2	27th		50.0	38th		62.0	26th	
Wait Assessment* (%)	74.2	31st		73.7	44th		80.5	31st	
CJTP (%)	peak: 67.7	20th		--	--		--	--	
off-peak:	70.3	26th		--	--		--	--	

*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

Bx19 to...	to Bx19 from...
1. Bx2	1. Bx9
2. Bx9	2. Bx2
3. Bx1	3. Bx15
4. Bx15	4. Bx5
5. Bx5	5. Bx12SBS

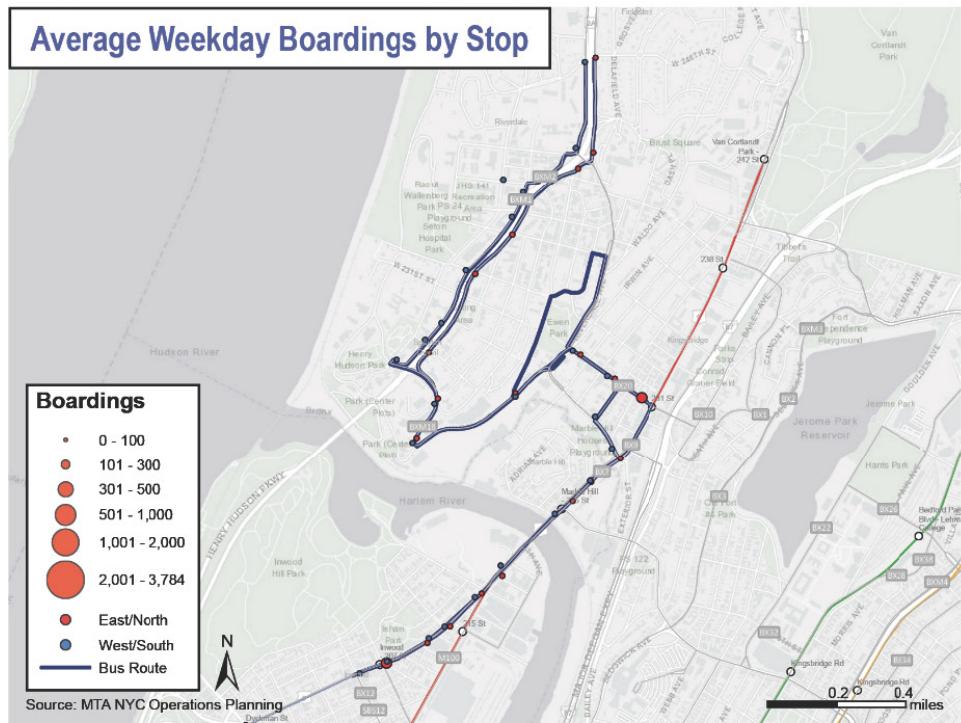


Span of Service

	TOWARD BOTANICAL GARDEN	RIVERBANK PK / BROADWAY	AVG. FREQUENCY (MIN.)					
	WEEKDAYS:	SATURDAYS:	SUNDAYS:	AM	NOON	PM	EVE	NITE
	6:55AM-6:51AM	5:50AM-5:40AM		6	8	6	8	45
	6:57AM-6:42AM	6:01AM-5:51AM		12	8	7	8	45

Bx20 Broadway/Henry Hudson Parkway

Average Weekday Boardings by Stop

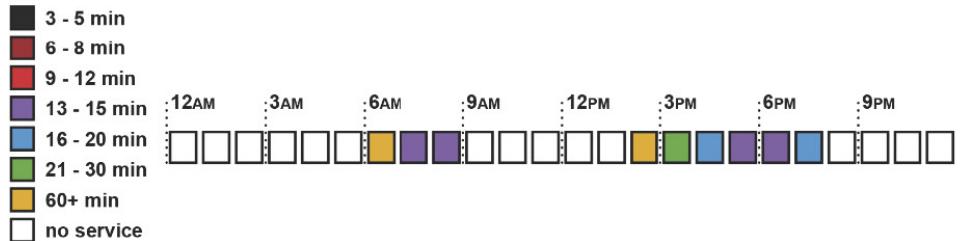


Route Type: Local

Avg. Stop Spacing: 877.4 ft (22nd)

Description: Operates between 207 St/Broadway (Inwood-207 St **A** subway station), Manhattan, and West 246 St/Henry Hudson Pkwy, weekday rush hours.

Weekday Frequency



Statistics

	Weekday Value	Weekday Rank	Saturday Value	Saturday Rank	Sunday Value	Sunday Rank
Ridership & Productivity						
Daily Ridership	1,144	40th	--	--	--	--
Riders per Revenue Hour	63.6	35th	--	--	--	--
Riders per Trip	25.4	38th	--	--	--	--
Reliability						
On-Time Perf. (%)	61.3	11th	--	--	--	--
Wait Assessment* (%)	74.3	30th	--	--	--	--
CJTP (%)	peak: 67.9		19th	--	--	--
	off-peak: 74.1		11th	--	--	--

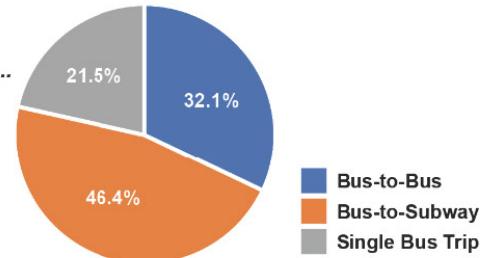
*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

**Bx20 has no weekend service.

Transfers

Top Bus-to-Bus Transfers

Bx20 to...	to Bx20 from...
1. Bx7	1. Bx9
2. Bx10	2. Bx10
3. Bx9	3. Bx7
4. Bx12SBS	4. Bx12SBS
5. Bx1	5. Bx1

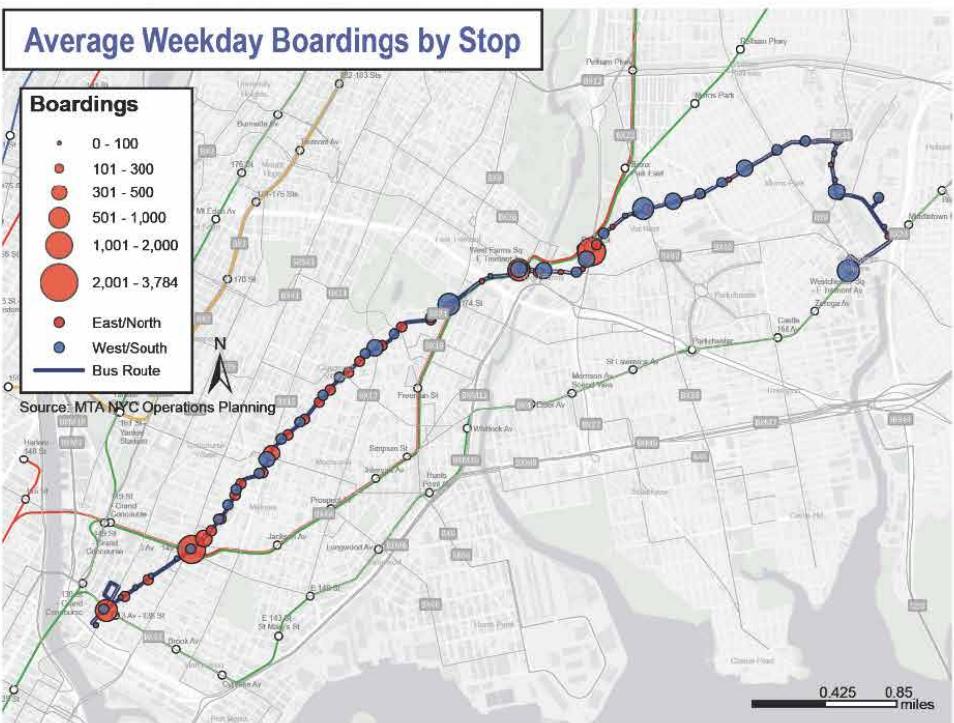


Span of Service

	TOWARD 207 ST	TOWARD WEST 246 ST	Avg. Frequency (min.)
			AM NOON PM EVE NITE
WEEKDAYS:	7:26AM-8:58AM	6:57AM-8:29AM	15 -- 20 -- --
	3:51PM-7:38PM	3:24PM-7:11PM	
WEEKENDS:	--	--	-- -- -- -- --

Bx21 Morris Park Avenue/Boston Road

Average Weekday Boardings by Stop

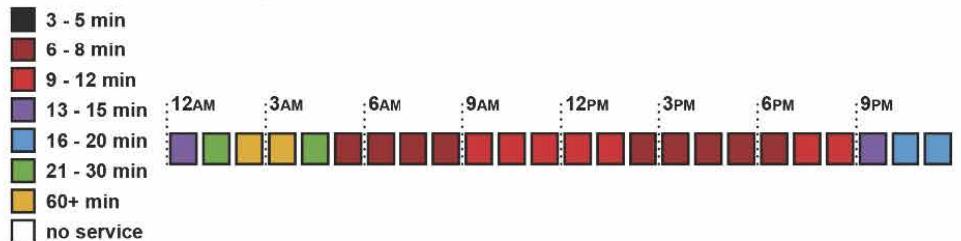


Route Type: Local

Avg. Stop Spacing: 867.5 ft (26th)

Description: Operates between Westchester Square-East Tremont Av (6 subway station and East 136 St/Lincoln Av (3 Av-138 St (6 subway station), Port Morris, daily.

Weekday Frequency



Statistics

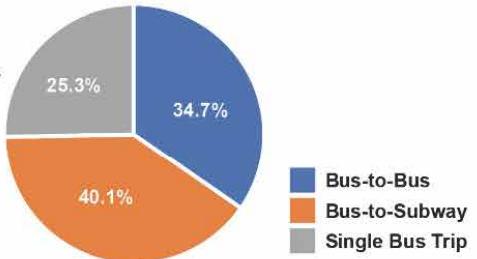
	Weekday		Saturday		Sunday	
	Value	Rank	Value	Rank	Value	Rank
Ridership & Productivity						
Daily Ridership	19,405	11th	9,974	16th	6,565	22nd
Riders per Revenue Hour	73.2	28th	59.0	27th	55.6	27th
Riders per Trip	73.0	11th	51.4	12th	45.0	12th
Reliability						
On-Time Perf. (%)	44.1	39th	57.4	29th	57.8	34th
Wait Assessment* (%)	69.6	43rd	83.2	34th	76.6	38th
CJTP (%)	peak:	62.3	36th	--	--	--
	off-peak:	63.8	40th	--	--	--

*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

Bx21 to...	to Bx21 from...
1. Bx15	1. Bx15
2. Bx36	2. Bx19
3. Bx19	3. Q44SBS
4. Q44SBS	4. Bx36
5. Bx35	5. Bx35

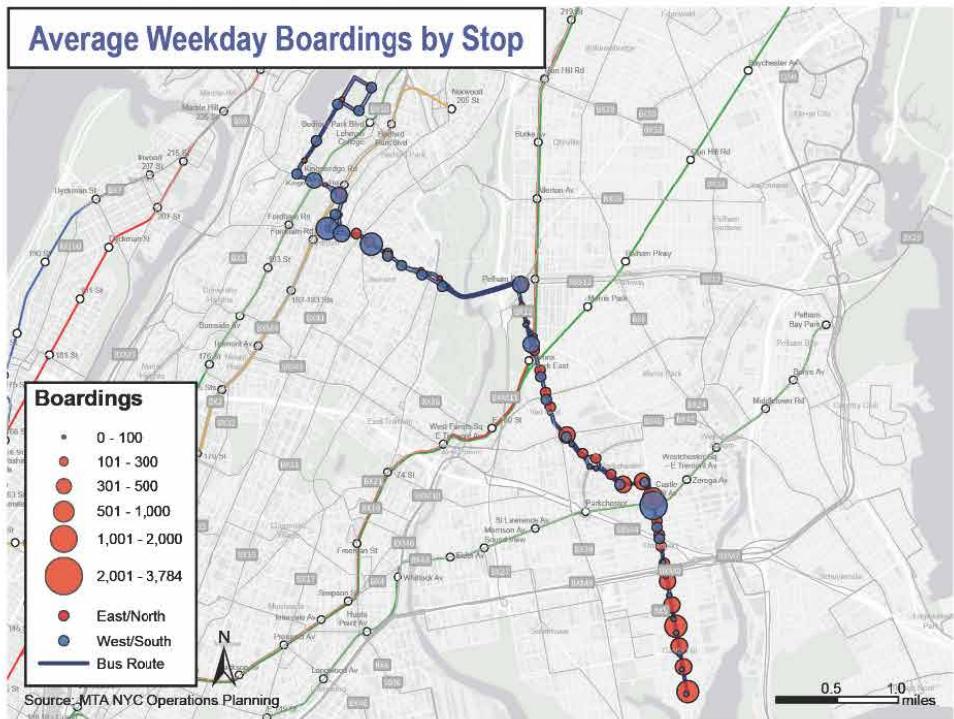


Span of Service

	TOWARD WESTCHESTER SQ	TOWARD EAST 136 ST	AVG. FREQUENCY (MIN.)					
			WEEKDAYS:	SATURDAYS:	SUNDAYS:	AM	NOON	PM
	All times	All times	6	10	7	12	45	
	All times	All times	15	12	9	12	45	
	All times	All times	20	15	12	15	45	

Bx22 Castle Hill Avenue

Average Weekday Boardings by Stop

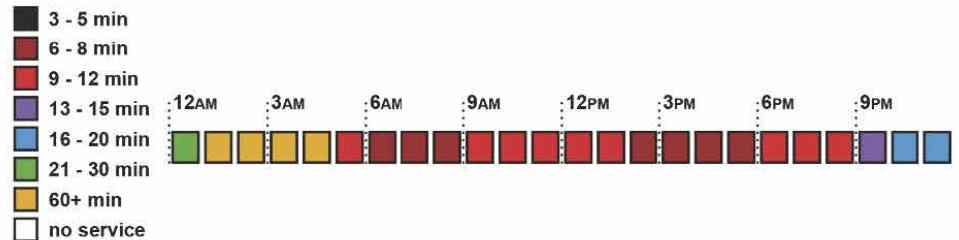


Route Type: Local

Avg. Stop Spacing: 902.0 (20th)

Description: Between Castle Hill Av and Paul Av or Fordham all day on weekdays. Service to Paul Av ends after 9:30 p.m., but service to Fordham continues until midnight. Weekend buses only to Fordham. Late night terminates at Pelham Pkwy.

Weekday Frequency



Statistics

	Weekday	Value	Rank	Saturday	Value	Rank	Sunday	Value	Rank
Ridership & Productivity									
Daily Ridership	17,562	16th		9,160	18th		6,944	19th	
Riders per Revenue Hour	85.7	15th		78.3	10th		70.1	10th	
Riders per Trip	74.7	10th		51.5	11th		43.7	11th	
Reliability									
On-Time Perf. (%)	56.6	21st		65.6	14th		73.9	8th	
Wait Assessment* (%)	75.9	25th		83.0	36th		87.3	12th	
CJTP (%)	peak: 62.7		35th	--		--	--		--
	off-peak: 70.3		25th	--		--	--		--

*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

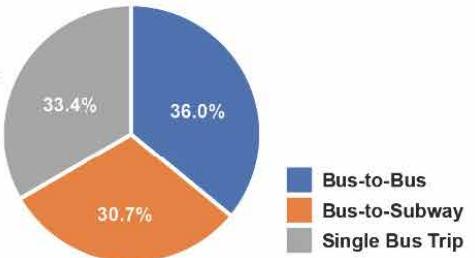
Transfers

Top Bus-to-Bus Transfers

Bx22 to... to **Bx22 from...**

1. Bx12SBS
2. Bx9
3. Bx39
4. Q44SBS
5. Bx12

1. Bx12SBS
2. Bx9
3. Q44SBS
4. Bx39
5. Bx4



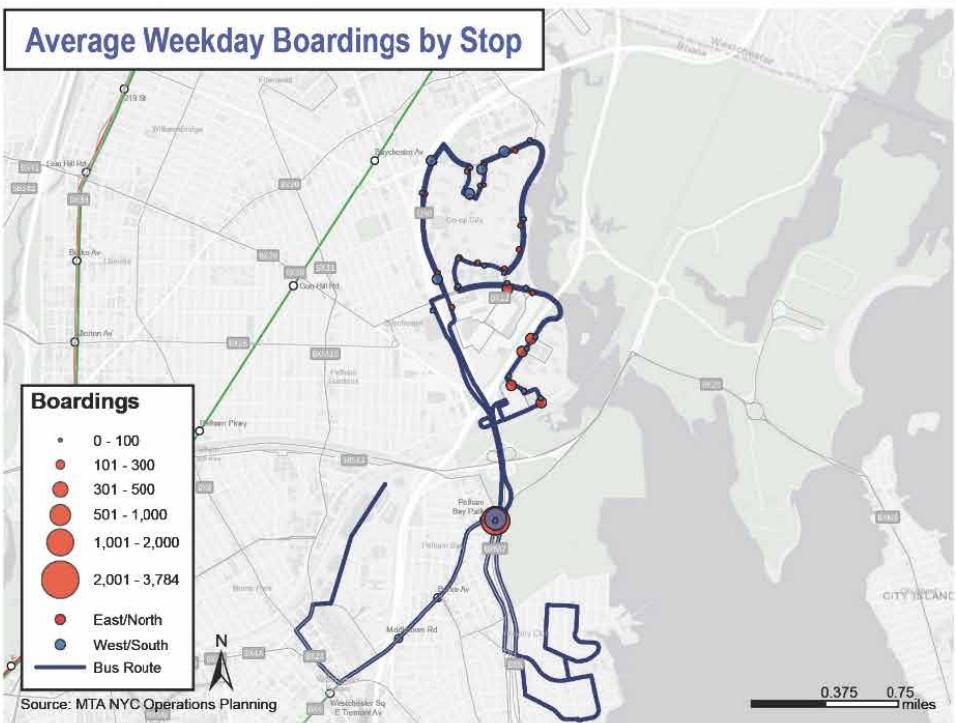
Span of Service

	TOWARD CASTLE HILL	FORDHAM / PAUL AV / PELHAM PKWY	Avg. Frequency (min.)				
	WEEKDAYS:	SATURDAYS:	AM	NOON	PM	EVE	NITE
WEEKDAYS:	6:48AM-12:40AM	5:53AM-12:00MID	6	12	8	11	60
SATURDAYS:	8:18AM-12:37AM	7:23AM-12:00MID	10	12	10	11	60
SUNDAYS:	8:45AM-12:41AM	8:15AM-12:00MID	15	12	15	13	60

*Span of Service information represents daytime and evening service between Castle Hill Av/Zerega Av and Fordham/Valentine Av, and late night service between Castle Hill Av/Zerega Av and Pelham Pkwy, only.

Bx23 Pelham Bay/Co-op City Loop

Average Weekday Boardings by Stop

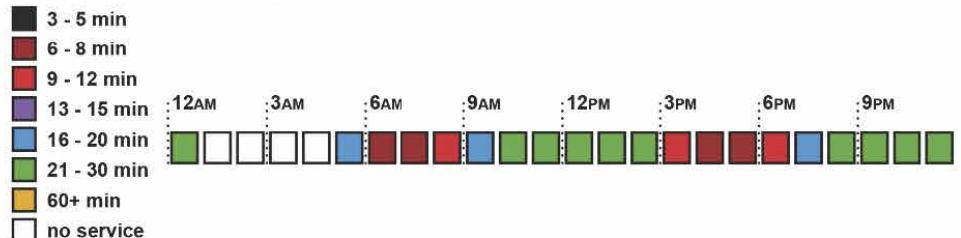


Route Type: Local

Avg. Stop Spacing: 1,509 ft (6th)

Description: Operates in a bi-directional loop between Pelham Bay Park **6** subway station and Co-op City, daily.

Weekday Frequency



Statistics

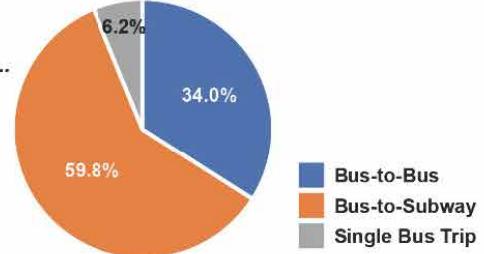
	Weekday	Saturday	Sunday			
	Value	Rank	Value	Rank	Value	Rank
Ridership & Productivity						
Daily Ridership	5,127	35th	1,665	37th	1,280	37th
Riders per Revenue Hour	68.4	31st	40.6	39th	2.8	38th
Riders per Trip	37.7	35th	22.2	35th	17.1	35th
Reliability						
On-Time Perf. (%)	56.6	21st	65.6	14th	73.9	8th
Wait Assessment* (%)	84.0	5th	89.0	14th	94.9	2nd
CJTP (%)	peak: 76.1	4th	--	--	--	--
	off-peak: 78.1	3rd	--	--	--	--

*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

Bx23 to...	to Bx23 from...
1. Bx12	1. Bx12SBS
2. Bx30	2. Bx5
3. Bx5	3. Bx12
4. Q50	4. Bx30
5. Bx12	5. Q50



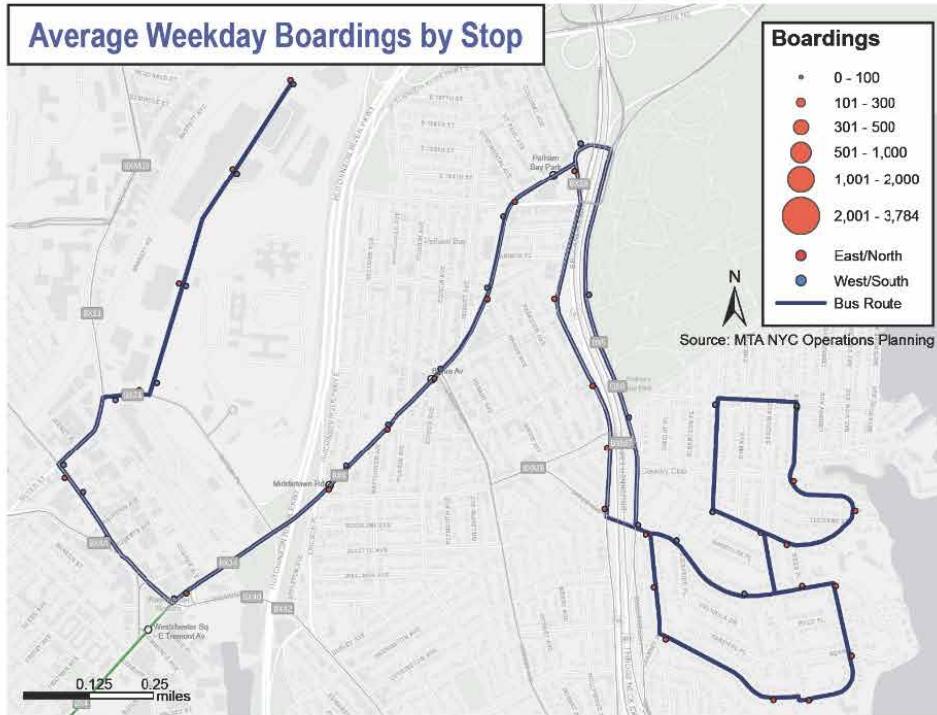
Span of Service

	TOWARD CO-OP CITY SECTIONS 1, 2, 3, 4, 5	TOWARD CO-OP CITY SECTIONS 5, 4, 3, 2, 1	Avg. Frequency (min.)	AM	NOON	PM	EVE	NITE
	WEEKDAYS:	SATURDAYS:		6*	30	15*	30	--
WEEKDAYS:	5:15AM-11:45PM	5:00AM-12:51AM		6*	30	15*	30	--
SATURDAYS:	6:15AM-11:45PM	6:00AM-11:45PM		30	30	30	30	--
SUNDAYS:	6:15AM-11:45PM	6:00AM-1:00AM		30	30	30	30	--

*Frequency shown represents Toward Co-op City Sections 1, 2, 3, 4, 5' direction. For 'Toward Co-op City Sections 5, 4, 3, 2, 1': AM freq. is 14 min.; PM freq. is 8 min. All other frequencies same across both directions.

Bx24 Country Club/Westchester Avenue

Average Weekday Boardings by Stop

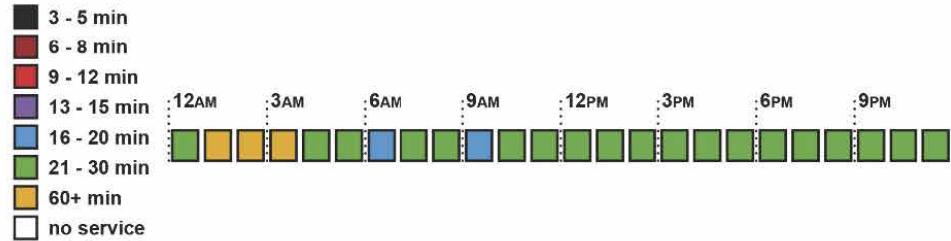


Route Type: Local

Avg. Stop Spacing: 960.6 ft (16th)

Description: Operates between Hutchinson Metro Center and Research Av/Ampere Av, daily.

Weekday Frequency



Statistics

Ridership & Productivity						
	Value	Rank	Value	Rank	Value	Rank
Reliability						
On-Time Perf. (%)	77.3	2nd	88.3	1st	86.9	1st
Wait Assessment* (%)	88.7	1st	97.5	2nd	96.8	1st
CJTP (%)	peak: 69.4	16th	--	--	--	--
	off-peak: 74.4	9th	--	--	--	--

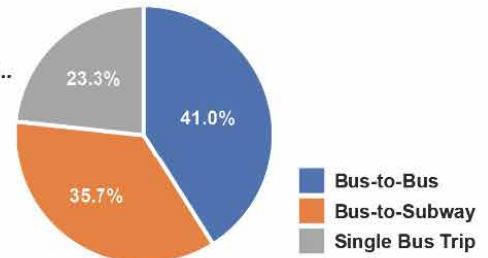
*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

Bx24 to... to Bx24 from...

1. Bx12SBS	1. Bx12SBS
2. Bx12	2. Bx8
3. Bx8	3. Bx12
4. Bx23	4. Bx40
5. Q50	5. Bx42

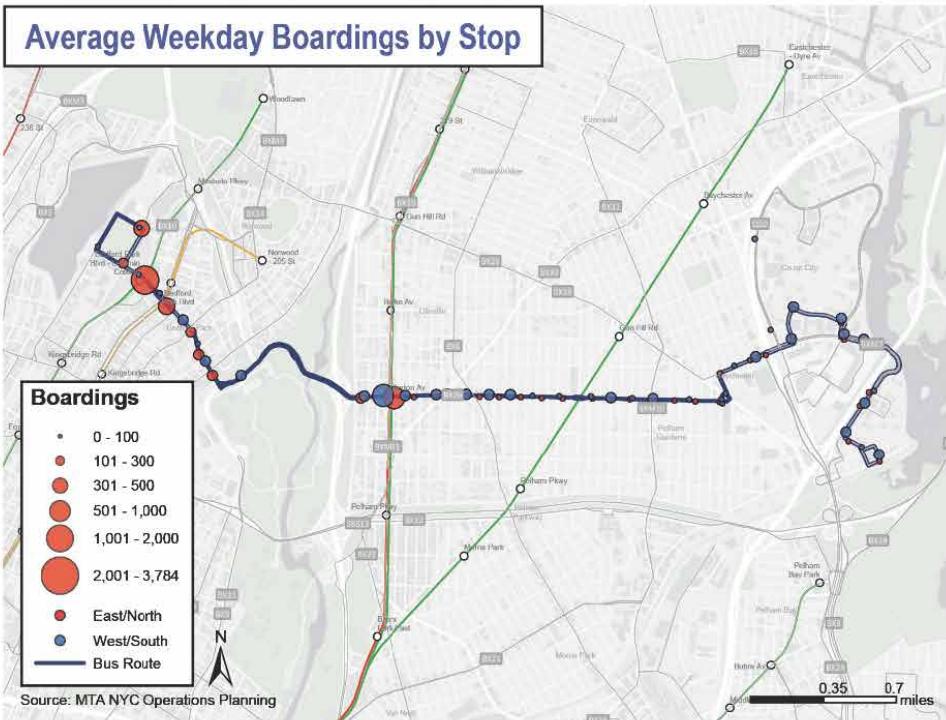


Span of Service

	TOWARD PAUL AV	TOWARD HUTCH METRO CTR	AVG. FREQUENCY (MIN.)				
			AM	NOON	PM	EVE	NITE
WEEKDAYS:	All times	All times	30	30	30	30	60
SATURDAYS:	All times	All times	30	30	30	30	60
SUNDAYS:	All times	All times	30	30	30	30	60

Bx26 Allerton Avenue

Average Weekday Boardings by Stop

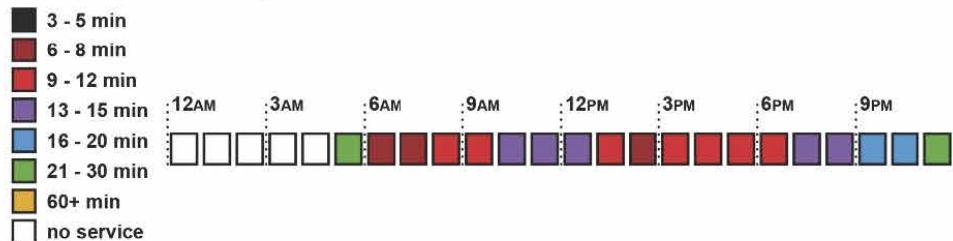


Route Type: Local

Avg. Stop Spacing: 841.2 ft (30th)

Description: Operates between Co-op City/Earhart Lane and Paul Av/West 205 St, daily.

Weekday Frequency



Statistics

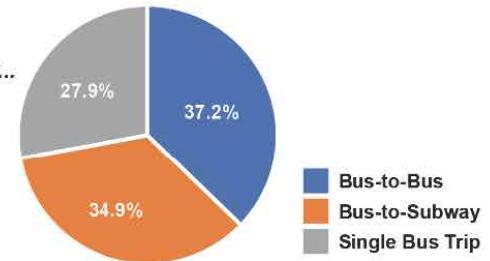
Weekday			Saturday			Sunday		
	Value	Rank	Value	Rank	Value	Rank		
Ridership & Productivity								
Daily Ridership	9,162	31st	5,384	29th	3,631	29th		
Riders per Revenue Hour	67.9	32nd	59.8	25th	51.9	31st		
Riders per Trip	50.3	30th	42.7	25th	35.6	25th		
Reliability								
On-Time Perf. (%)	60.3	12th	70.4	8th	74.2	7th		
Wait Assessment* (%)	77.8	17th	90.1	10th	90.1	4th		
CJTP (%)	peak: 62.9	34th	--	--	--	--		
	off-peak: 69.6	28th	--	--	--	--		

*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

Bx26 to...	to Bx26 from...
1. Bx39	1. Bx39
2. Bx10	2. Bx10
3. Bx31	3. Bx31
4. Bx8	4. Bx8
5. Bx1	5. Bx41SBS

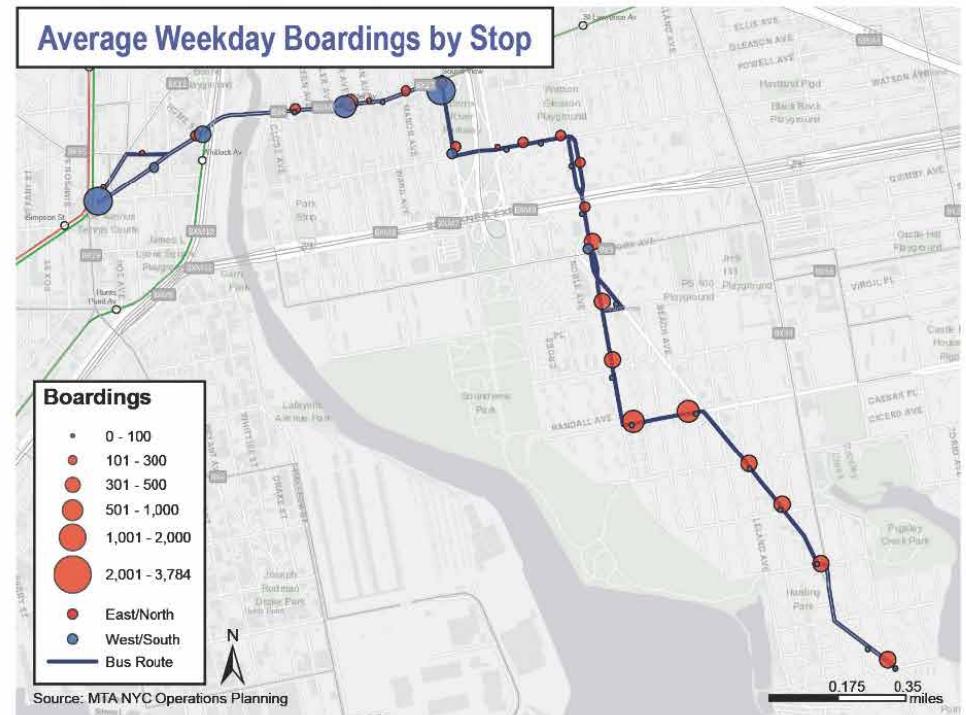


Span of Service

	Avg. Frequency (min.)						
	5:35AM-10:30PM	6:20AM-11:20PM	AM	NOON	PM	EVE	NITE
WEEKDAYS:	5:35AM-10:30PM	6:20AM-11:20PM	6	15	9	15	--
SATURDAYS:	5:50AM-10:38PM	6:40AM-11:28PM	20	12	15	20	--
SUNDAYS:	6:15AM-10:30PM	6:55AM-11:20PM	20	20	15	20	--

Bx27 Westchester/Soundview Avenues

Average Weekday Boardings by Stop

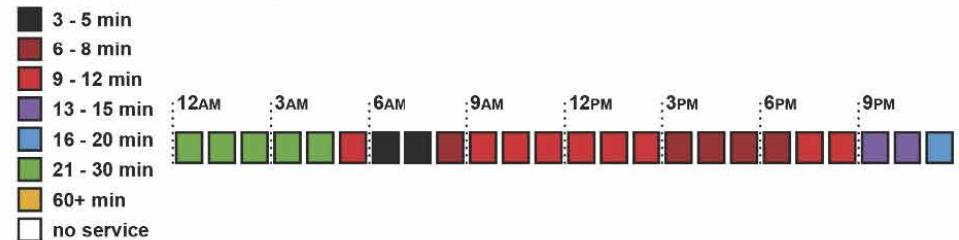


Route Type: Local

Avg. Stop Spacing: 822.1 (32nd)

Description: Operates between Clason Pt/Soundview Av and West Farms Rd/Southern Blvd (Simpson 2/5 subway station), daily. After about 7 p.m. buses terminate at Westchester Av.

Weekday Frequency



Statistics

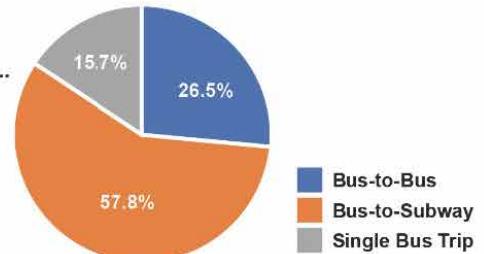
Weekday			Saturday			Sunday		
	Value	Rank	Value	Rank	Value	Rank		
Ridership & Productivity								
Daily Ridership	10,673	29th	5,384	29th	3,631	29th		
Riders per Revenue Hour	111.2	3rd	87.9	5th	84.7	5th		
Riders per Trip	41.4	34th	31.9	34th	27.3	34th		
Reliability								
On-Time Perf. (%)	68.4	6th	78.2	3rd	77.7	4th		
Wait Assessment* (%)	80.0	10th	87.4	21st	88.1	9th		
CJTP (%)	peak: 73.3		7th	--	--	--		
	off-peak: 79.6		2nd	--	--	--		

*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

Bx27 to...	to Bx27 from...
1. Bx35	1. Bx4
2. Bx4	2. Bx35
3. Bx11	3. Bx5
4. Bx5	4. Bx11
5. Bx19	5. Bx19

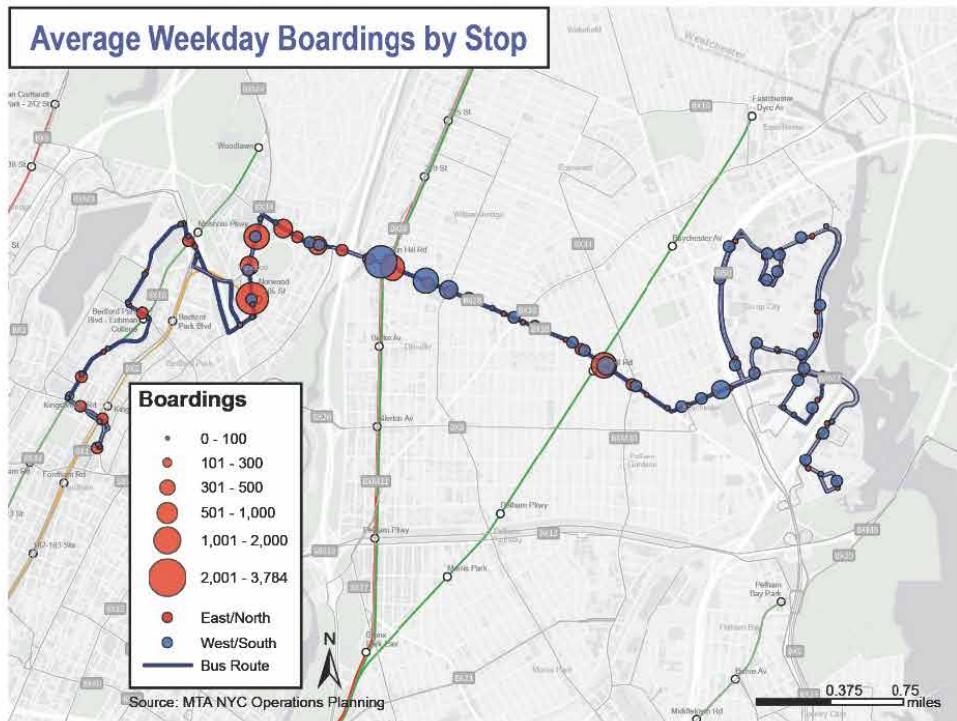


Span of Service

	TOWARD CLASON PT	WEST FARMS RD / WESTCHSTER AV	AVG. FREQUENCY (MIN.)					
			WEEKDAYS:	SATURDAYS:	SUNDAYS:	AM	NOON	PM
	5:54AM-5:45AM	5:00AM-4:20AM	4	12	6	12	40	
	5:57AM-5:35AM	5:00AM-4:20AM	12	12	12	15	40	
	7:10AM-6:59AM	6:40AM-6:10AM	15	15	12	15	40	

Bx28/38 East Gun Hill Road/Co-op City

Average Weekday Boardings by Stop

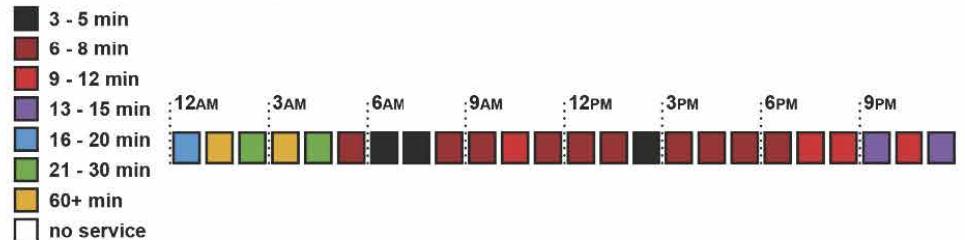


Route Type: Local

Avg. Stop Spacing: 875.6 ft (23rd)

Description: Bx28 service between Co-op City/Earhart Lane and East 206 St/ Bainbridge Av or Kingsbridge Rd/East 192 St. Bx38 service between Bay Plaza, Co-op City and East 206 St/Bainbridge Av. See Bx28 and Bx38 for more details.

Weekday Frequency



Statistics

Weekday			Saturday			Sunday		
	Value	Rank	Value	Rank	Value	Rank		
Ridership & Productivity								
Daily Ridership	17,858	14th	10,982	12th	8,186	13th		
Riders per Revenue Hour	63.6	36th	54.9	30th	51.5	33rd		
Riders per Trip	58.4	22nd	44.6	21st	41.6	21st		
Reliability								
On-Time Perf. (%)	56.5	22nd	65.6	15th	67.2	17th		
Wait Assessment* (%)	--	--	--	--	--	--		
CJTP (%)	peak: 59.2	41st	--	--	--	--		
	off-peak: 69.2	29th	--	--	--	--		

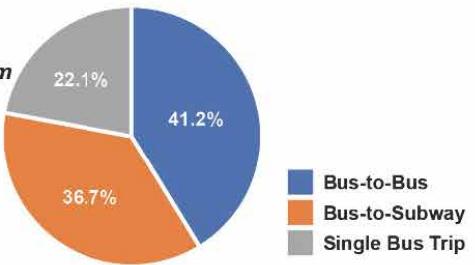
*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

Bx28/38 to... to Bx28/38 from

1. Bx30	1. Bx1
2. Bx39	2. Bx9
3. Bx10	3. Bx19
4. Bx8	4. Bx2
5. Bx31	5. Bx36



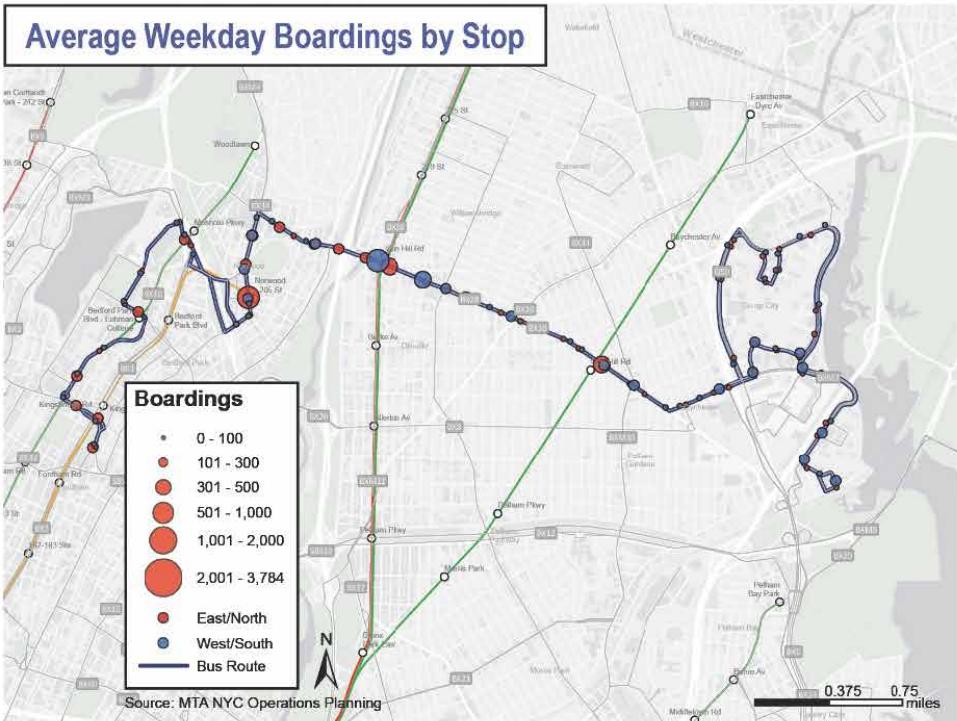
Span of Service

	Avg. Frequency (min.)				
	AM	NOON	PM	EVE	NITE
WEEKDAYS:	--:--AM--:--AM	--:--AM--:--AM	--	--	--
SATURDAYS:	--:--AM--:--AM	--:--AM--:--AM	--	--	--
SUNDAYS:	--:--AM--:--AM	--:--AM--:--AM	--	--	--

*See Span of Service information for Bx28 and Bx38 service.

Bx28 East Gun Hill Road

Average Weekday Boardings by Stop

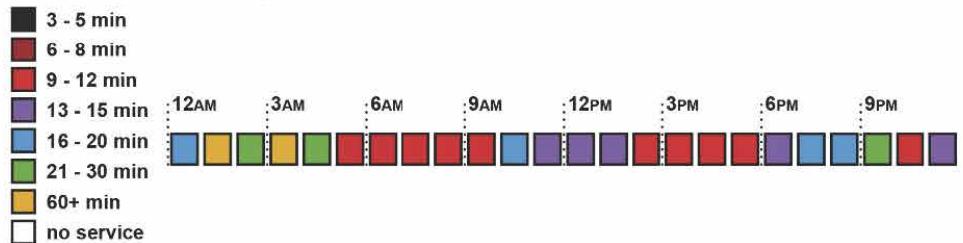


Route Type: Local

Avg. Stop Spacing: 861.3 ft

Description: Operates between Co-op City/Earhart Lane and East 206 St/ Bainbridge Av or Kingsbridge Rd/East 192 St. Late night service terminates at East 206 St/Bainbridge Av.

Weekday Frequency



Statistics

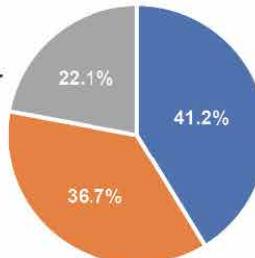
	Weekday Value	Weekday Rank	Saturday Value	Saturday Rank	Sunday Value	Sunday Rank
Ridership & Productivity						
Daily Ridership	10,035	--	6,210	--	8,196	--
Riders per Revenue Hour	59.4	--	54.5	--	49.3	--
Riders per Trip	57.3	--	46.0	--	40.2	--
Reliability						
On-Time Perf. (%)	58.1	--	66.7	--	64.8	--
Wait Assessment* (%)	76.3	22nd	94.1	4th	84.4	19th
CJTP (%)	peak: 57.3	--	--	--	--	--
	off-peak: 68.7	--	--	--	--	--

*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

Bx28 to...	to Bx28 from...
1. Bx39	1. Bx39
2. Bx30	2. Bx38
3. Bx38	3. Bx30
4. Bx10	4. Bx31
5. Bx8	5. Bx10



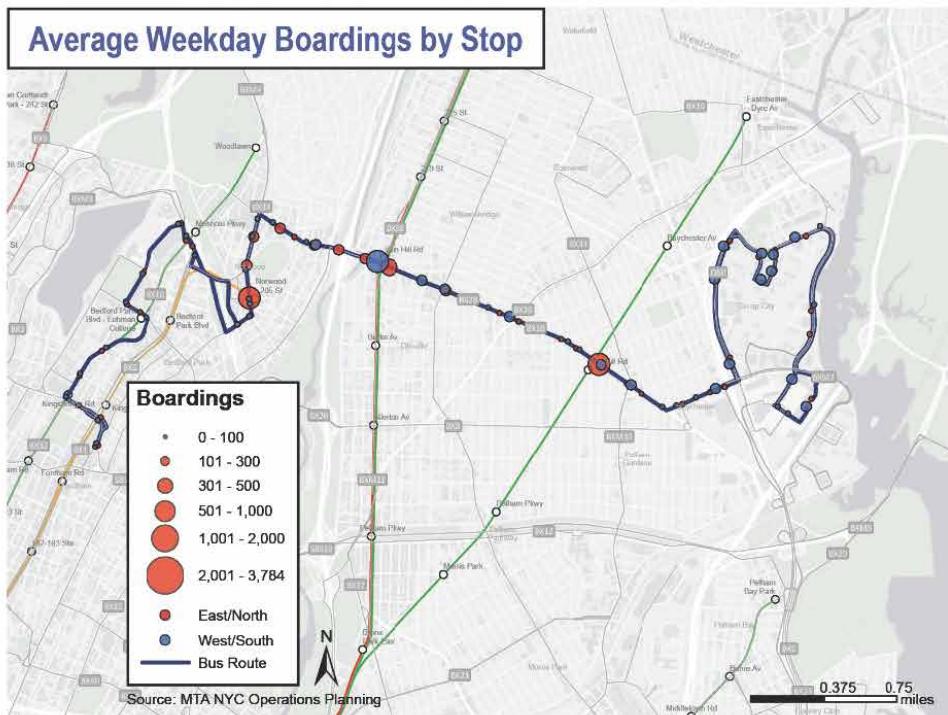
*Transfer mode share shown represents Bx28/Bx38 combined service.

Span of Service

	TOWARD CO-OP CITY	TOWARD FORDHAM	AVG. FREQUENCY (MIN.)				
			AM	NOON	PM	EVE	NITE
WEEKDAYS:	All times	All times	11	17	18	20	40
SATURDAYS:	All times	All times	24	15	16	20	40
SUNDAYS:	All times	All times	20	24	20	20	40

Bx38 East Gun Hill Road/Co-op City

Average Weekday Boardings by Stop

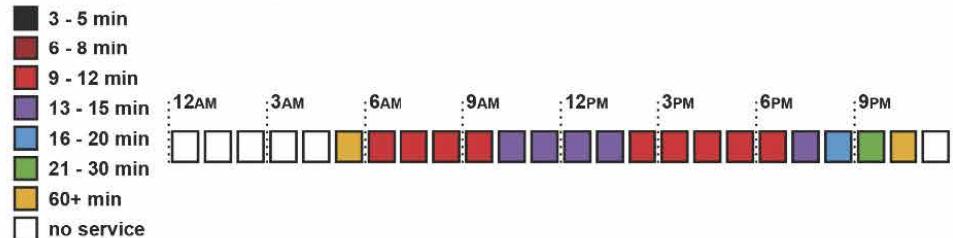


Route Type: Local

Avg. Stop Spacing: 899.6 ft

Description: Operates between Bay Plaza, Co-op City and East 206 St/Bainbridge Av (Norwood-205 St **D** subway station), daytimes and evenings.

Weekday Frequency



Statistics

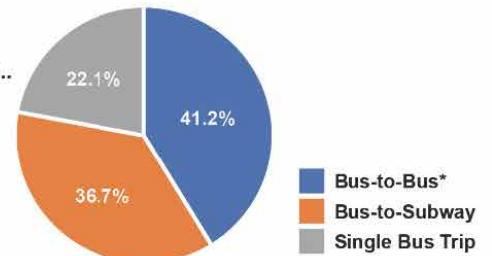
Ridership & Productivity			Weekday			Saturday
	Value	Rank	Value	Rank	Value	Rank
Ridership & Productivity						
Daily Ridership	7,823	--	4,772	--	3,359	--
Riders per Revenue Hour	69.8	--	55.5	--	55.1	--
Riders per Trip	59.7	--	43.0	--	43.6	--
Reliability						
On-Time Perf. (%)	54.1	--	64.1	--	71.1	--
Wait Assessment* (%)	73.4	--	91.8	--	87.5	--
CJTP (%)	peak: 61.5	--	--	--	--	--
	off-peak: 70.0	--	--	--	--	--

*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

Bx38 to...	to Bx38 from...
1. Bx28	1. Bx39
2. Bx30	2. Bx28
3. Bx39	3. Bx30
4. Bx10	4. Bx31
5. Bx31	5. Bx41SBS

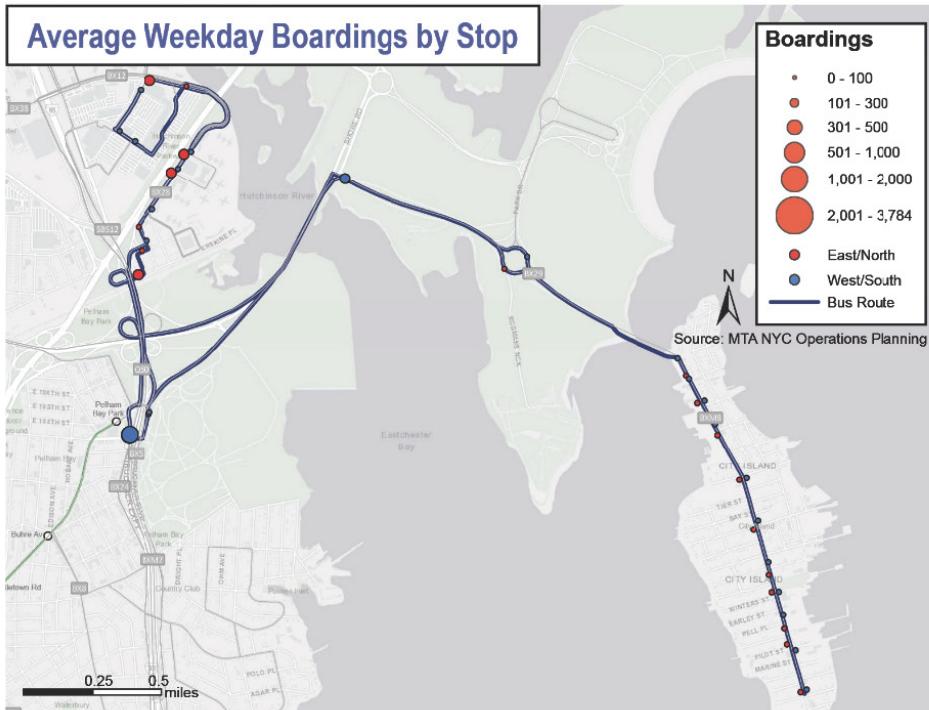


*Transfer mode share shown represents Bx28/Bx38 combined service.

Span of Service

TOWARD BAY PLAZA			TOWARD EAST 206 ST			Avg. Frequency (min.)	
	WEEKDAYS:	SATURDAYS:	AM	NOON	PM	EVE	NITE
	7:09AM-10:07PM	5:39AM-8:58PM	12	17	15	20	--
			20	15	16	20	--
			30	20	20	20	--

Bx29 City Island

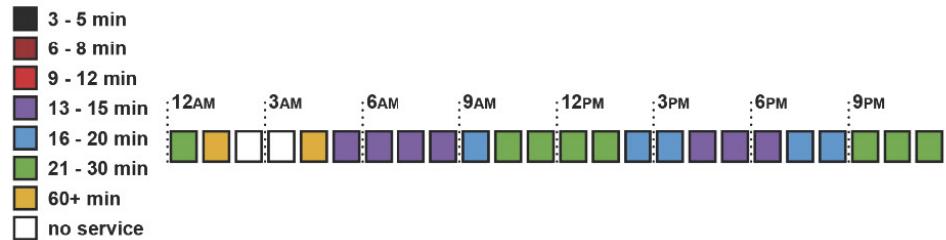


Route Type: Local

Avg. Stop Spacing: 1,516.5 ft (5th)

Description: Operates between City Island and Bay Plaza via Pelham Bay Park [6](#) subway station, daily.

Weekday Frequency



Statistics

Weekday			Saturday			Sunday		
	Value	Rank	Value	Rank	Value	Rank		
Ridership & Productivity								
Daily Ridership	2,819	38th	2,302	35th	1,775	34th		
Riders per Revenue Hour	67.1	34th	54.8	31st	57.3	25th		
Riders per Trip	24.7	40th	20.9	36th	19.7	36th		
Reliability								
On-Time Perf. (%)	77.0	4th	77.2	4th	78.2	3rd		
Wait Assessment* (%)	84.6	4th	89.0	15th	88.2	7th		
CJTP (%)	peak: 78.7	2nd	--	--	--	--		
	off-peak: 75.5	7th	--	--	--	--		

*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

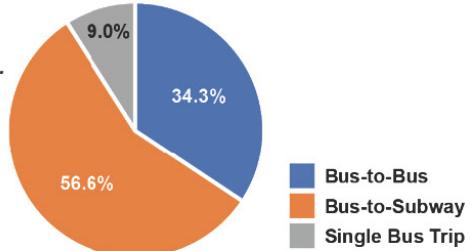
Transfers

Top Bus-to-Bus Transfers

Bx29 to... **to Bx29 from...**

1. Bx12SBS
2. Bx12
3. Q50
4. Bx5
5. Bx23

1. Bx12SBS
2. Bx12
3. Q50
4. Bx5
5. Bx23

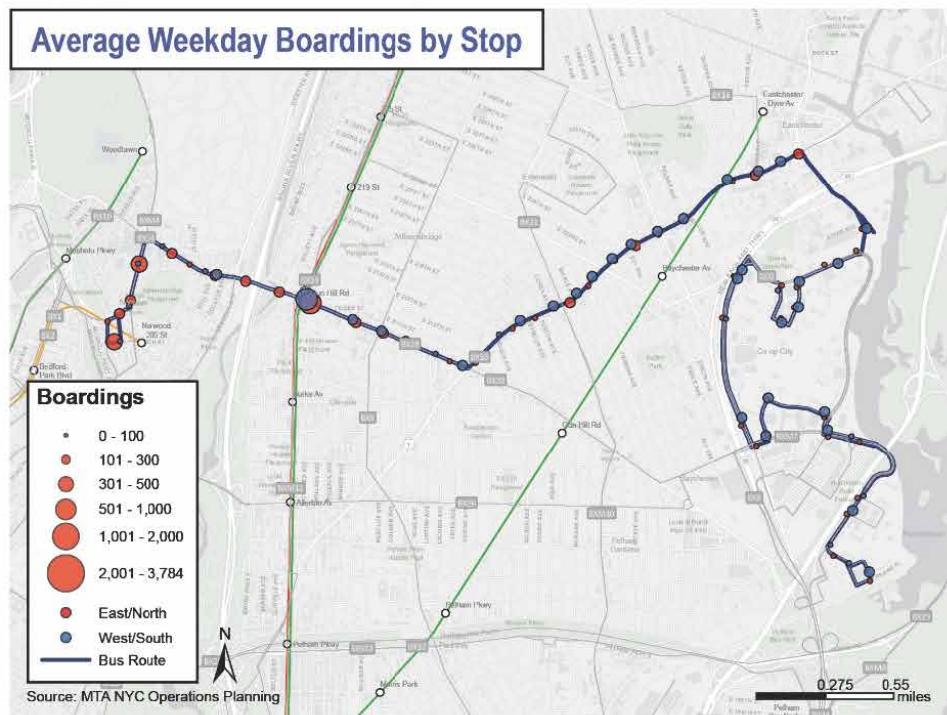


Span of Service

	TOWARD CITY ISLAND	TOWARD BAY PLAZA	AVG. FREQUENCY (MIN.)
	4:30AM-12:45AM	4:58AM-1:10AM	AM 30 PM 15 20 --
WEEKDAYS:	4:30AM-12:45AM	4:58AM-1:10AM	15 30 15 20 --
SATURDAYS:	4:30AM-1:45AM	4:58AM-2:11AM	20 20 20 30 --
SUNDAYS:	5:30AM-12:42AM	5:58AM-1:10AM	30 20 20 30 --

Bx30 Boston/East Gun Hill Roads

Average Weekday Boardings by Stop

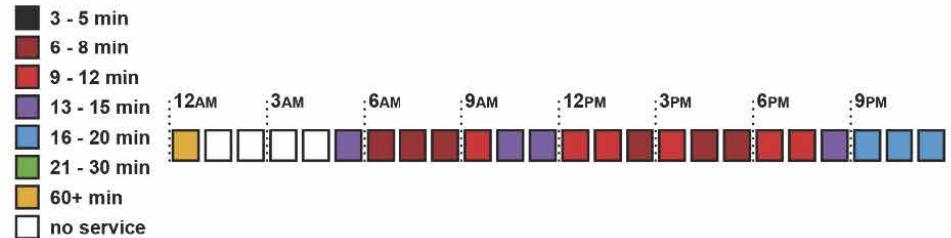


Route Type: Local

Avg. Stop Spacing: 866.3 ft (27th)

Description: Operates between Co-op City/Earhart Lane and East 206 St/Bainbridge Av (Norwood-205 St **D** subway station), daily.

Weekday Frequency



Statistics

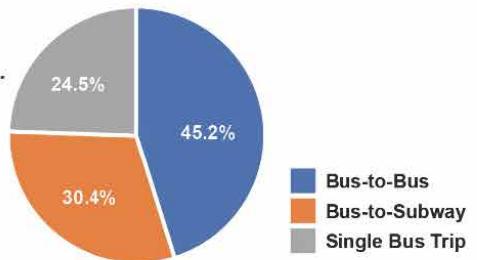
Weekday			Saturday			Sunday		
	Value	Rank	Value	Rank	Value	Rank		
Ridership & Productivity								
Daily Ridership	11,283	28th	5,972	27th	4,561	27th		
Riders per Revenue Hour	61.7	38th	59.1	26th	56.3	26th		
Riders per Trip	56.1	25th	51.0	14th	43.9	14th		
Reliability								
On-Time Perf. (%)	48.2	36th	65.9	13th	61.3	28th		
Wait Assessment* (%)	70.1	40th	87.1	22nd	77.5	35th		
CJTP (%)	peak: 57.6		--	--	--	--		
	off-peak: 62.9		--	--	--	--		

*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

Bx30 to...	to Bx30 from...
1. Bx16	1. Bx16
2. Bx39	2. Bx28
3. Bx10	3. Bx39
4. Bx38	4. Bx38
5. Bx28	5. Bx10

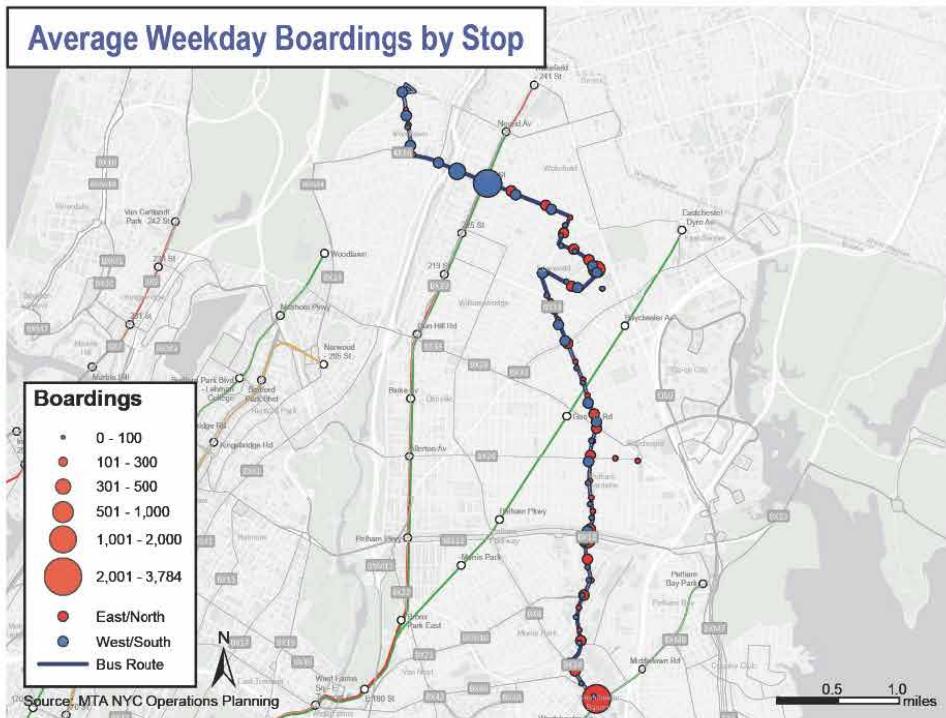


Span of Service

	TOWARD CO-OP CITY	TOWARD EAST 206 ST	AVG. FREQUENCY (MIN.)					--
			WEEKDAYS:	6:00AM-12:10AM	5:15AM-11:30PM	6	15	
SATURDAYS:			7:00AM-12:10AM	6:30AM-11:20PM		20	15	15
SUNDAYS:			6:40AM-12:10AM	6:30AM-11:20PM		20	20	20
								--

Bx31 Eastchester Road

Average Weekday Boardings by Stop

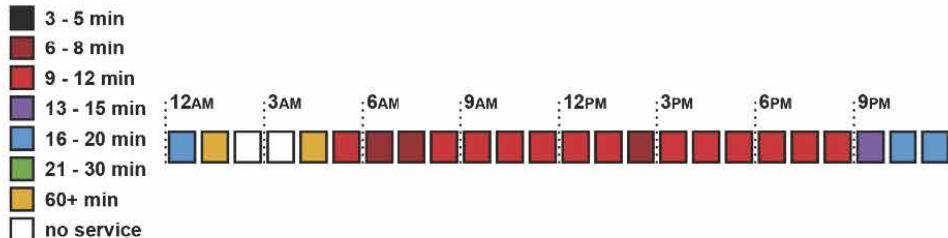


Route Type: Local

Avg. Stop Spacing: 775.9 ft (37th)

Description: Operates between East 241 St/Katonah Av and Westchester Square-East Tremont Av **6** subway station, daily.

Weekday Frequency



Statistics

	Weekday	Saturday	Sunday			
	Value	Rank	Value	Rank	Value	Rank
Ridership & Productivity						
Daily Ridership	11,493	27th	5,039	30th	3,597	30th
Riders per Revenue Hour	71.8	30th	54.8	32nd	52.1	30th
Riders per Trip	52.7	28th	37.1	31st	33.9	31st
Reliability						
On-Time Perf. (%)	52.7	31st	62.6	20th	59.7	30th
Wait Assessment* (%)	75.0	26th	86.8	23rd	81.0	30th
CJTP (%)	peak: 66.4	26th	--	--	--	--
	off-peak: 67.4	33rd	--	--	--	--

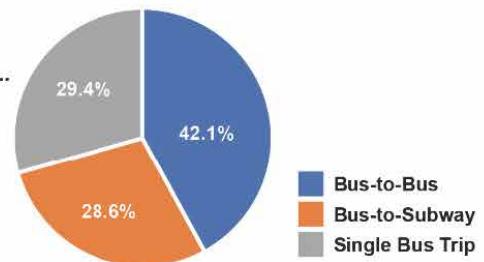
*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

Bx31 to... to Bx31 from...

1. Bx12SBS	1. Bx12SBS
2. Bx30	2. Bx30
3. Bx4	3. Bx26
4. Bx39	4. Bx16
5. Bx26	5. Bx12

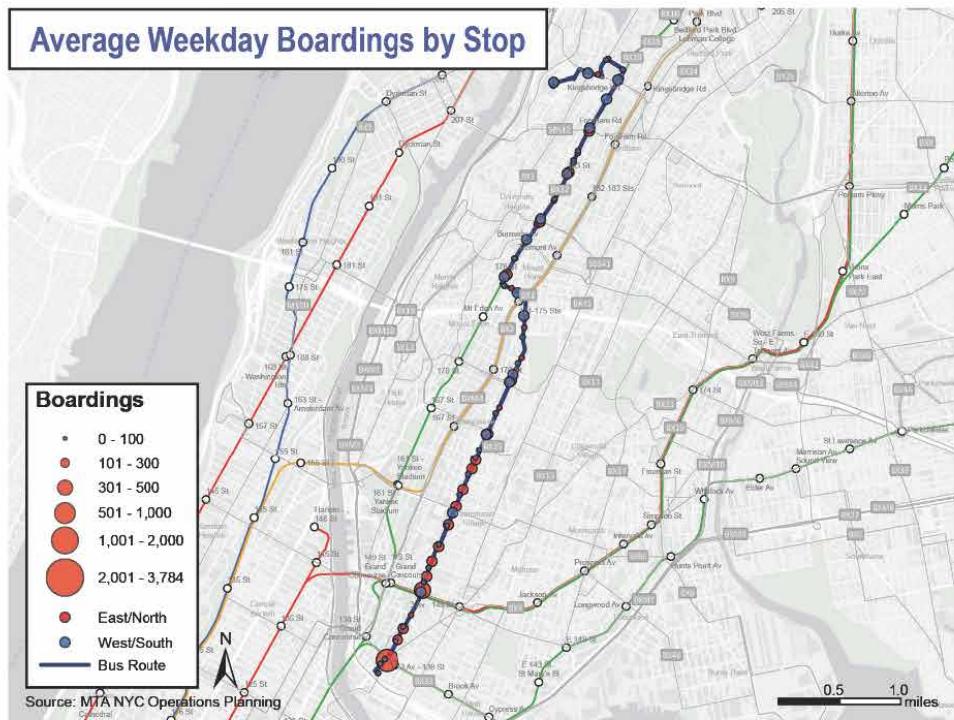


Span of Service

	TOWARD EAST 241 ST	TOWARD WESTCHESTER RD	Avg. Frequency (min.)				
	WEEKDAYS:	SATURDAYS:	AM	NOON	PM	EVE	NITE
WEEKDAYS:	4:40AM-12:45AM	5:20AM-1:20AM	6	10	10	15	--
SATURDAYS:	5:25AM-12:45AM	6:00AM-1:35AM	15	15	15	20	--
SUNDAYS:	5:20AM-12:40AM	6:00AM-1:25AM	30	20	20	20	--

Bx32 Morris/Jerome Avenues

Average Weekday Boardings by Stop

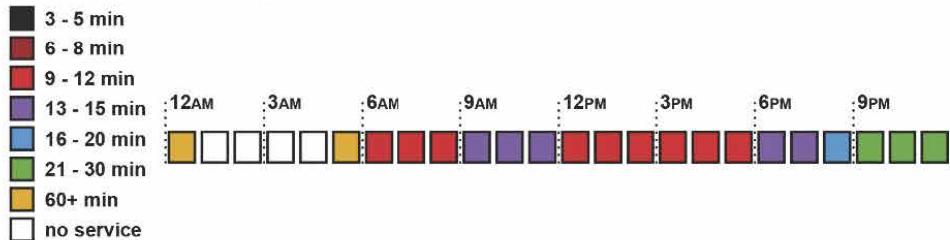


Route Type: Local

Avg. Stop Spacing: 726.6 (32nd)

Description: Operates between the Bronx VA Medical Center and East 138 St/ Lincoln Av (3 Av-138 St **6** subway station), daily.

Weekday Frequency



Statistics

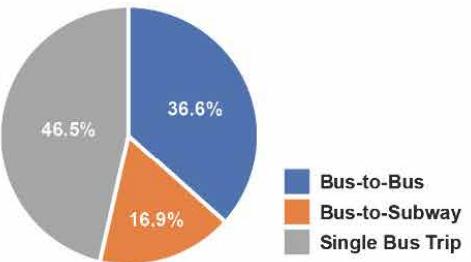
	Weekday Value	Weekday Rank	Saturday Value	Saturday Rank	Sunday Value	Sunday Rank
Ridership & Productivity						
Daily Ridership	9,148	32nd	3,168	33rd	1,988	33rd
Riders per Revenue Hour	72.6	29th	51.9	36th	52.3	28th
Riders per Trip	59.4	21st	38.6	29th	33.1	29th
Reliability						
On-Time Perf. (%)	49.4	35th	53.2	36th	51.3	38th
Wait Assessment* (%)	69.2	45th	88.9	17th	74.0	41st
CJTP (%)	peak: 59.5	39th	--	--	--	--
	off-peak: 57.5	42nd	--	--	--	--

*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

Bx32 to...	to Bx32 from...
1. Bx19	1. Bx2
2. Bx35	2. Bx19
3. Bx2	3. Bx35
4. Bx12SBS	4. Bx12SBS
5. Bx6	5. Bx6

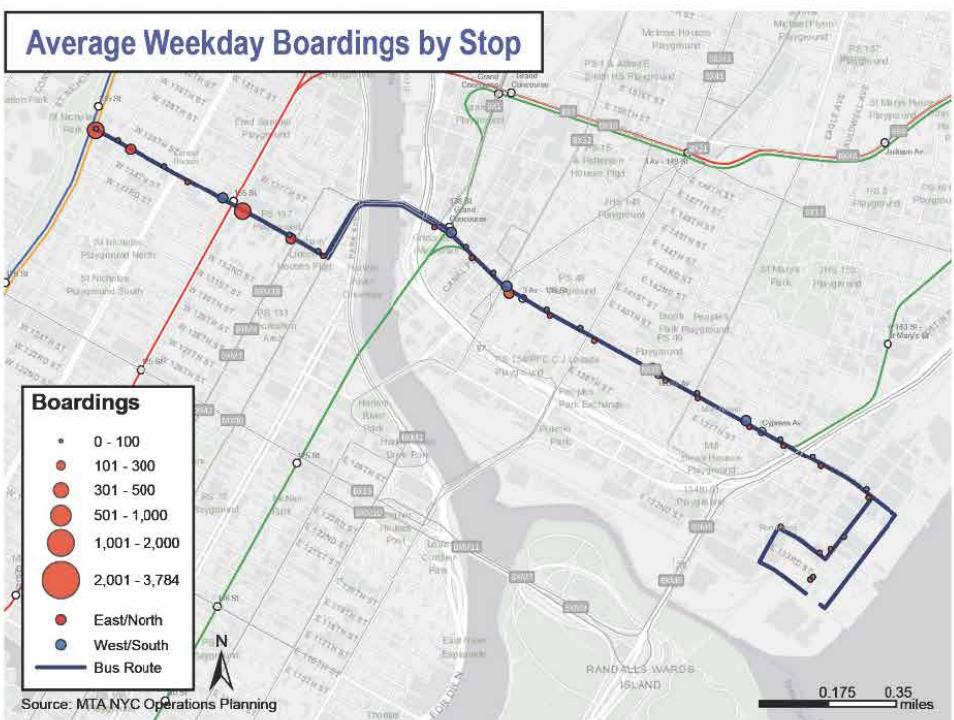


Span of Service

	TOWARD VA HOSPITAL	TOWARD EAST 138 ST	AVG. FREQUENCY (MIN.)					
			WEEKDAYS:	SATURDAYS:	SUNDAYS:	AM	NOON	EVE
	6:15AM-11:30PM	5:54AM-12:05AM	8	12	12	20	--	--
	7:00AM-10:30PM	7:45AM-11:15PM	30	20	20	30	--	--
	7:00AM-9:35PM	7:45AM-10:20PM	30	30	30	30	--	--

Bx33 East 138th/West 135th Streets

Average Weekday Boardings by Stop

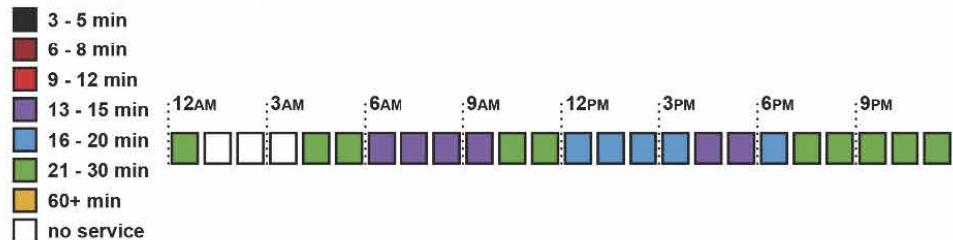


Route Type: Local

Avg. Stop Spacing: 788.8 ft (35th)

Description: Operates between East 132nd St/Walnut Av, Port Morris, and St Nicholas Av/West 135 St (B C subway station), Harlem, Manhattan, daily.

Weekday Frequency



Statistics

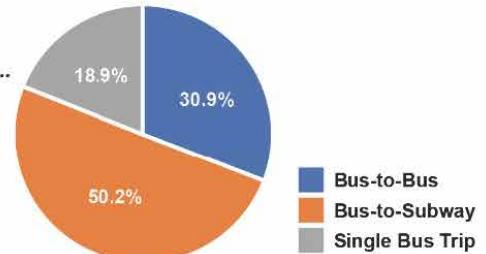
	Weekday Value	Weekday Rank	Saturday Value	Saturday Rank	Sunday Value	Sunday Rank
Ridership & Productivity						
Daily Ridership	3,406	37th	1,392	38th	754	39th
Riders per Revenue Hour	25.7	25th	55.7	29th	41.9	37th
Riders per Trip	30.1	37th	20.5	38th	14.0	38th
Reliability						
On-Time Perf. (%)	62.4	8th	59.3	25th	63.7	24th
Wait Assessment* (%)	76.1	23rd	89.3	13th	84.0	20th
CJTP (%)	peak: 69.6	14th	--	--	--	--
	off-peak: 68.0	31st	--	--	--	--

*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

Bx33 to...	to Bx33 from...
1. Bx1	1. Bx1
2. Bx32	2. Bx15
3. Bx21	3. Bx32
4. Bx15	4. Bx17
5. Bx2	5. Bx2

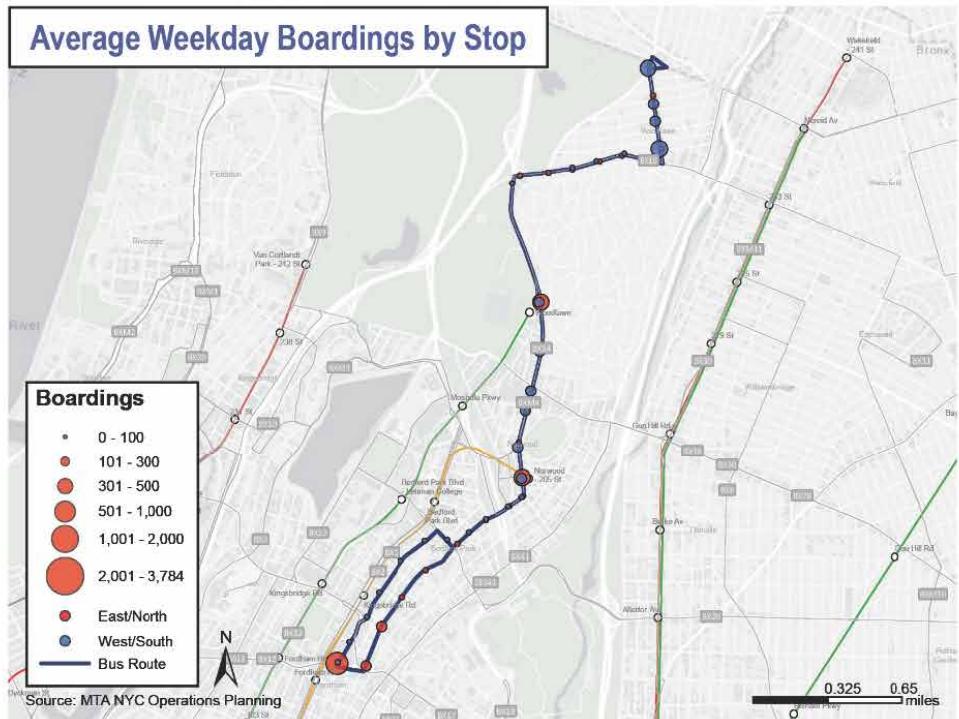


Span of Service

	TOWARD PORT MORRIS	TOWARD ST NICHOLAS AV	AVG. FREQUENCY (MIN.)			
	4:30AM-12:00MID	5:00AM-12:30AM	AM	NOON	PM	EVE NITE
WEEKDAYS:	4:30AM-12:00MID	5:00AM-12:30AM	15	20	15	20
SATURDAYS:	7:00AM-9:30PM	7:00AM-9:30PM	30	20	20	30
SUNDAYS:	8:00AM-9:00PM	8:00AM-9:00PM	30	30	30	30

Bx34 Bainbridge Avenue

Average Weekday Boardings by Stop

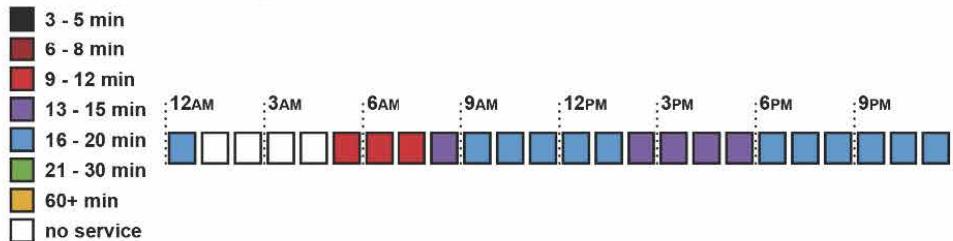


Route Type: Local

Avg. Stop Spacing: 937.1 ft (18th)

Description: Operates between Katonah Av/East 242 St and Fordham Rd/Valentine Av, daily.

Weekday Frequency



Statistics

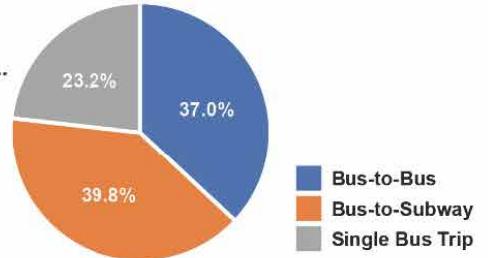
	Weekday Value	Weekday Rank	Saturday Value	Saturday Rank	Sunday Value	Sunday Rank
Ridership & Productivity						
Daily Ridership	4,957	36th	1,874	36th	1,550	36th
Riders per Revenue Hour	77.4	23rd	48.1	37th	41.9	36th
Riders per Trip	35.9	36th	20.8	37th	17.2	37th
Reliability						
On-Time Perf. (%)	58.8	18th	62.7	19th	67.0	18th
Wait Assessment* (%)	78.2	15th	95.3	3rd	83.7	21st
CJTP (%)	peak: 66.6	--	--	--	--	--
	off-peak: 70.2	--	--	--	--	--

*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

Bx34 to...	to Bx34 from...
1. Bx31	1. Bx12SBS
2. Bx22	2. Bx31
3. Bx12SBS	3. Bx22
4. Bx9	4. Bx9
5. Bx16	5. Bx16

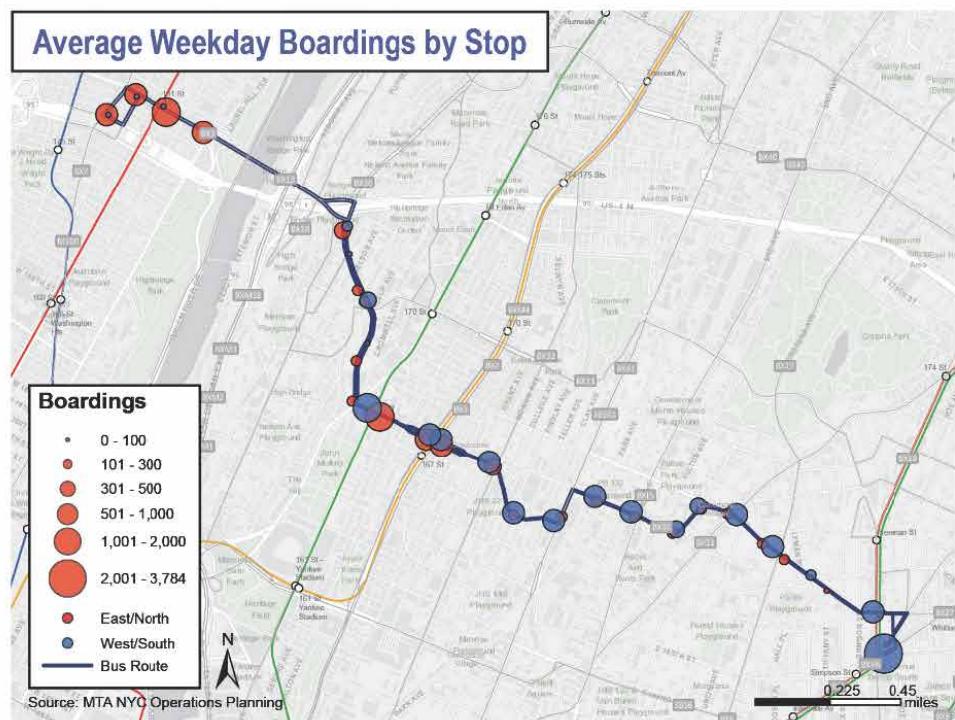


Span of Service

	TOWARD KATONAH AV		TOWARD FORDHAM		AVG. FREQUENCY (MIN.)			
	WEEKDAYS:	SATURDAYS:	SUNDAYS:	AM	NOON	PM	EVE	NITE
WEEKDAYS:	5:07AM-12:30AM	6:00AM-12:00MID	6:00AM-12:00MID	10	15	15	20	--
SATURDAYS:	5:00AM-12:55AM	6:00AM-12:00MID	6:00AM-12:00MID	30	20	20	30	--
SUNDAYS:	5:00AM-12:30AM	6:00AM-12:00MID	6:00AM-12:00MID	30	20	20	30	--

Bx35 East 167th/West 181st Streets

Average Weekday Boardings by Stop

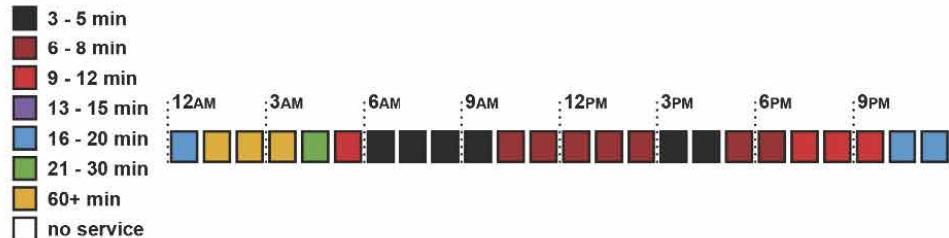


Route Type: Local

Avg. Stop Spacing: 888.2 ft (21st)

Description: Operates between West Farms Rd/Southern Blvd (Simpson St 2, 5 subway station) and West 181 St/Broadway, Washington Heights, Manhattan, daily.

Weekday Frequency



Statistics

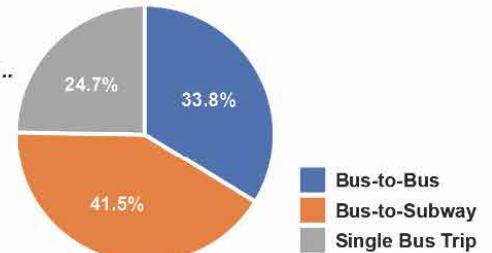
	Weekday Value	Weekday Rank	Saturday Value	Saturday Rank	Sunday Value	Sunday Rank
Ridership & Productivity						
Daily Ridership	21,966	8th	13,525	8th	10,434	9th
Riders per Revenue Hour	100.8	7th	89.6	3rd	87.0	4th
Riders per Trip	64.2	14th	55.9	10th	49.7	10th
Reliability						
On-Time Perf. (%)	43.2	40th	49.9	39th	50.0	40th
Wait Assessment* (%)	74.6	27th	87.8	20th	81.6	27th
CJTP (%)	peak: 71.7		9th	--	--	--
	off-peak: 74.3		10th	--	--	--

*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

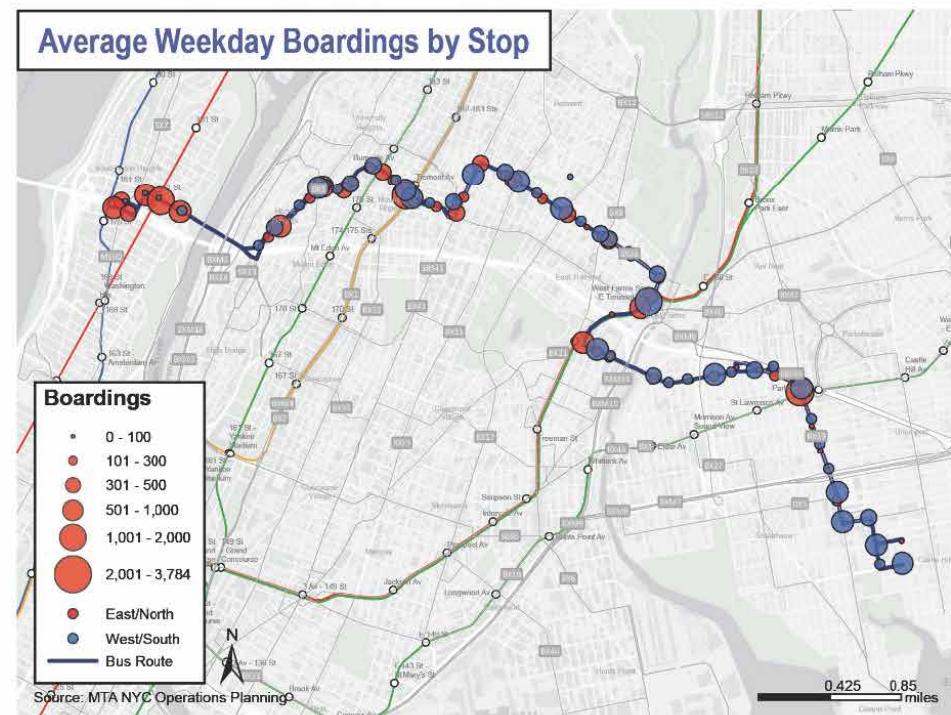
Bx35 to...	to Bx35 from...
1. Bx2	1. Bx27
2. Bx1	2. Bx2
3. Bx27	3. Bx1
4. Bx3	4. Bx4
5. Bx11	5. Bx5



Span of Service

WEEKDAYS:	TOWARD WEST FARMS RD	TOWARD WEST 181 ST	AVG. FREQUENCY (MIN.)			
			AM	NOON	PM	EVE
SATURDAYS:	All times	All times	9	9	9	60
SUNDAYS:	All times	All times	10	9	9	15
						60

Bx36 East 174th/East 180th Streets

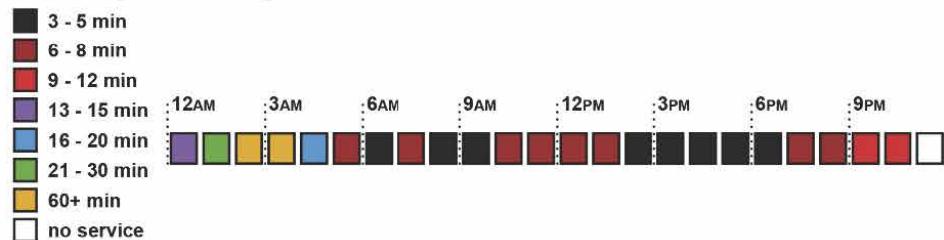


Route Type: Local/Limited

Avg. Stop Spacing: 938.8 ft (17th)

Description: Local service between Olmstead Av/Randall Av and George Washington Bridge Bus Station daily. Limited service between Olmstead Av/Randall Av and George Washington Bridge Bus Station weekdays.

Weekday Frequency



Statistics

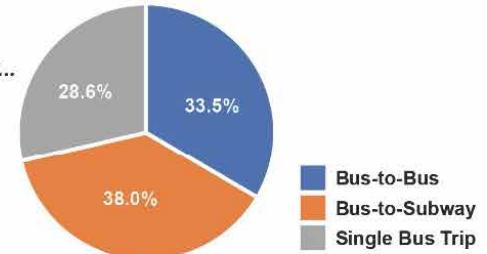
	Weekday Value	Weekday Rank	Saturday Value	Saturday Rank	Sunday Value	Sunday Rank
Ridership & Productivity						
Daily Ridership	36,856	4th	21,193	5th	16,272	4th
Riders per Revenue Hour	74.5	27th	62.7	22nd	60.3	20th
Riders per Trip	84.0	7th	69.7	7th	60.3	7th
Reliability						
On-Time Perf. (%)	43.2	40th	49.9	39th	50.0	40th
Wait Assessment* (%)	69.7	42nd	76.2	41st	72.8	42nd
CJTP (%)	peak: 64.7	31st	--	--	--	--
	off-peak: 67.3	34th	--	--	--	--

*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

Bx36 to...	to Bx36 from...
1. Bx9	1. Bx9
2. Bx2	2. Bx2
3. Q44SBS	3. Q44SBS
4. Bx3	4. Bx3
5. Bx41SBS	5. Bx1

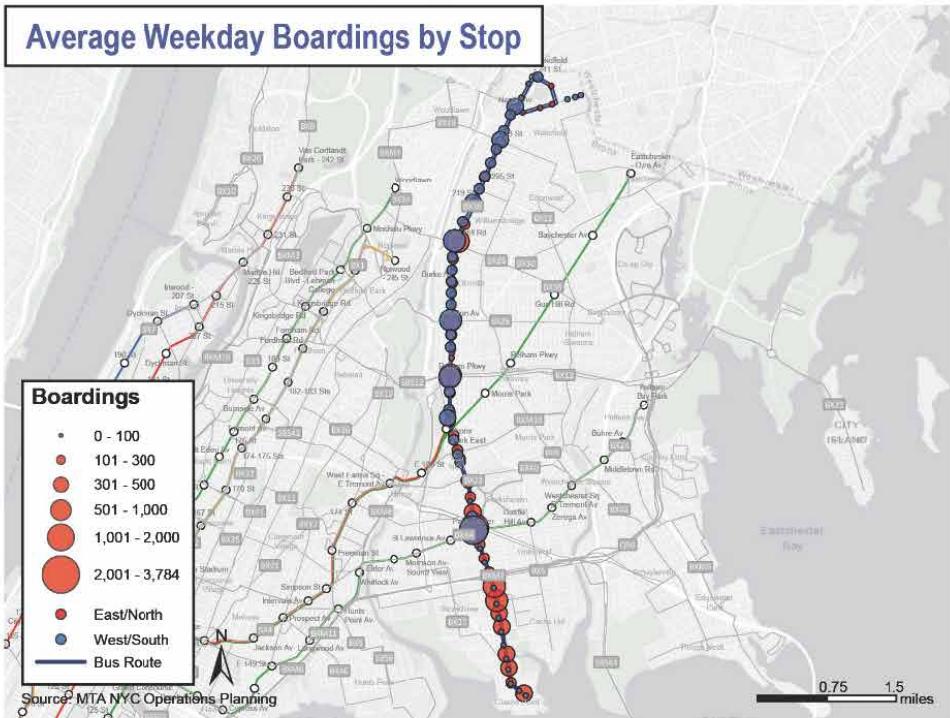


Span of Service

WEEKDAYS:	TOWARD OLMSTEAD AV	TOWARD GW BRIDGE	AVG. FREQUENCY (MIN.)					
	All times	All times	4	8	5	7	50	
SATURDAYS:	All times		All times	7	7	7	9	50
	All times	All times	All times	9	8	7	10	50
SUNDAYS:	All times					9	8	50
	*Frequency shown represents Bx36 LCL service only.							

Bx39 White Plains Road

Average Weekday Boardings by Stop

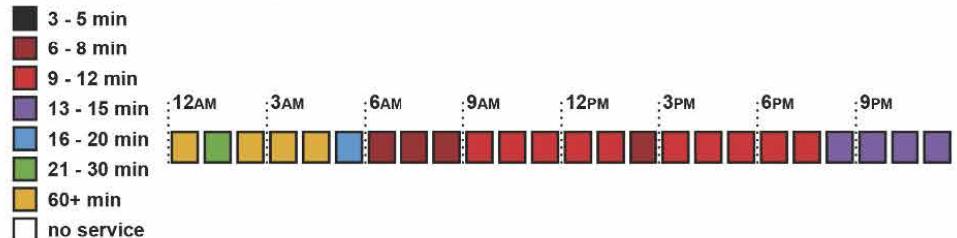


Route Type: Local

Avg. Stop Spacing: 848.1 ft (29th)

Description: Operates between East 241 St/White Plains Rd and Clason Pt/Soundview Av, daily.

Weekday Frequency



Statistics

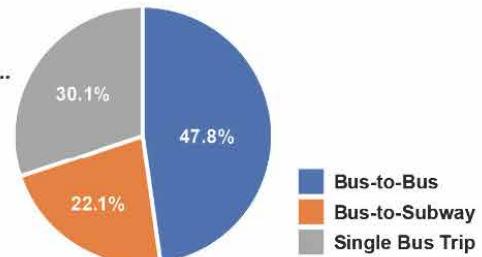
Weekday			Saturday			Sunday		
	Value	Rank	Value	Rank	Value	Rank		
Ridership & Productivity								
Daily Ridership	19,888	9th	13,189	9th	10,475	8th		
Riders per Revenue Hour	87.6	14th	76.7	11th	69.4	12th		
Riders per Trip	86.8	6th	71.3	5th	60.5	5th		
Reliability								
On-Time Perf. (%)	47.4	38th	59.3	26th	63.4	25th		
Wait Assessment* (%)	70.1	39th	83.2	39th	80.0	32nd		
CJTP (%)	peak: 61.5	37th	--	--	--	--		
	off-peak: 65.0	37th	--	--	--	--		

*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

Bx39 to...	to Bx39 from...
1. Bx12SBS	1. Bx12SBS
2. Bx12	2. Bx12
3. Bx36	3. Bx36
4. Bx22	4. Bx22
5. Bx28	5. Bx41SBS

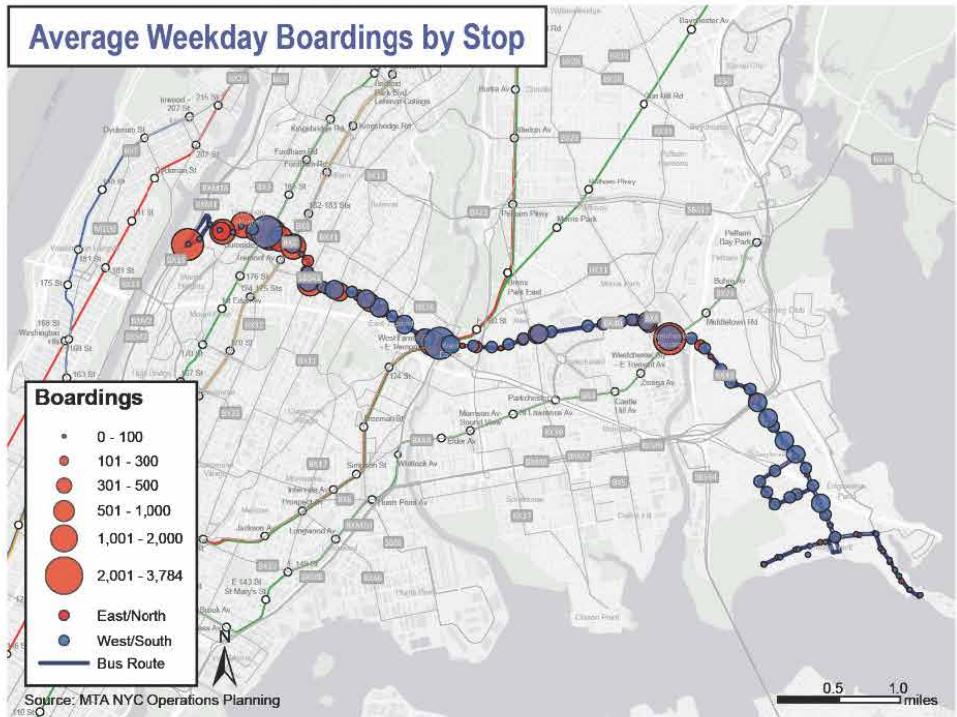


Span of Service

	Avg. Frequency (min.)							
	WEEKDAYS:	SATURDAYS:	SUNDAYS:	AM	NOON	PM	EVE	NITE
	5:45AM-12:15AM	5:00AM-11:25PM	6:00AM-12:05AM	5:00AM-11:25PM	12	12	9	12
					12	12	12	12

Bx40/42 Tremont Avenue Crosstown

Average Weekday Boardings by Stop

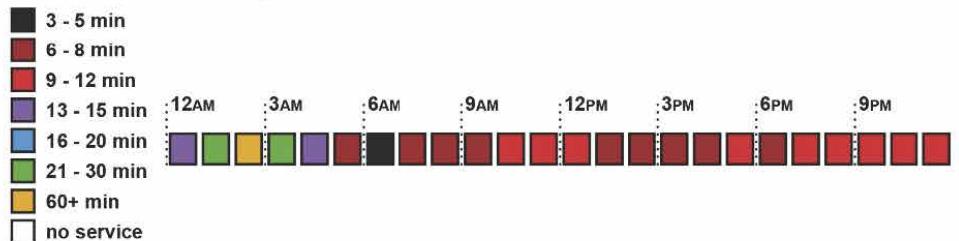


Route Type: Local

Avg. Stop Spacing: 773.9 ft (38th)

Description: Combined Bx40 and Bx42 service operates between River Park Towers and E Tremont Av/Randall Av, daily.

Weekday Frequency



Statistics

	Weekday		Saturday		Sunday	
	Value	Rank	Value	Rank	Value	Rank
Ridership & Productivity						
Daily Ridership	29,626	7th	15,399	7th	12,350	7th
Riders per Revenue Hour	85.4	17th	63.6	21st	60.2	21st
Riders per Trip	103.2	2nd	70.0	6th	61.4	6th
Reliability						
On-Time Perf. (%)	59.0	15th	62.3	21st	64.8	22nd
Wait Assessment* (%)	--	--	--	--	--	--
CJTP (%)	peak: 70.0	13th	--	--	--	--
	off-peak: 73.1	14th	--	--	--	--

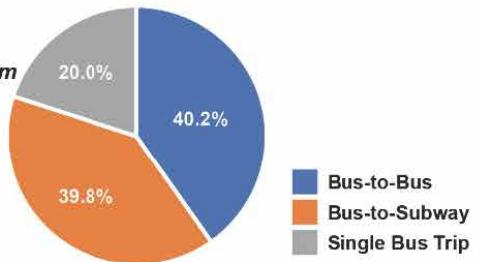
*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

Bx40/42 to... to Bx40/42 from

1. Bx42	1. Bx40
2. Bx40	2. Bx42
3. Bx36	3. Bx36
4. Bx15	4. Bx15
5. Bx2	5. Bx2



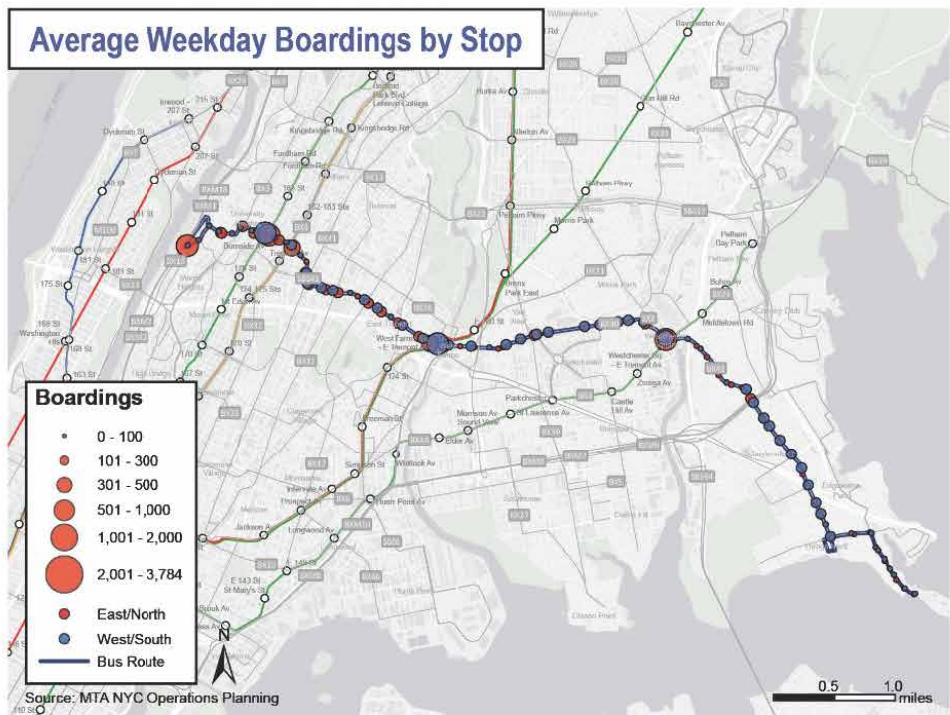
Span of Service

	TOWARD RIVER PK TOWERS		FT SCHUYLER / HARDING AV		Avg. Frequency (min.)
	AM	NOON	PM	EVE	NITE
WEEKDAYS:	--:--AM--	--:--AM--	--	--	--
SATURDAYS:	--:--AM--	--:--AM--	--	--	--
SUNDAYS:	--:--AM--	--:--AM--	--	--	--

*See Span of Service information for Bx40 service and Bx42 service.

Bx40 Tremont Avenue Crosstown

Average Weekday Boardings by Stop

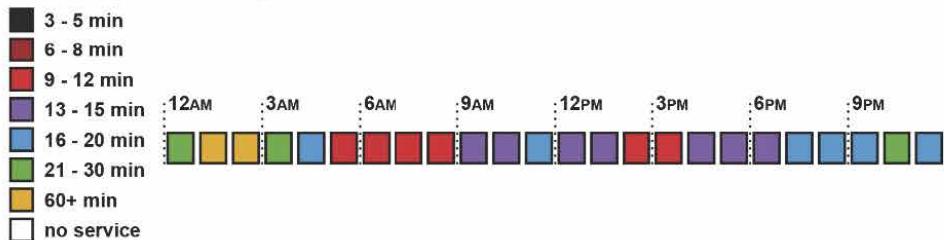


Route Type: Local

Avg. Stop Spacing: 763.5 ft

Description: Operates between River Park Towers and SUNY Maritime College at Fort Schuyler, daily.

Weekday Frequency



Statistics

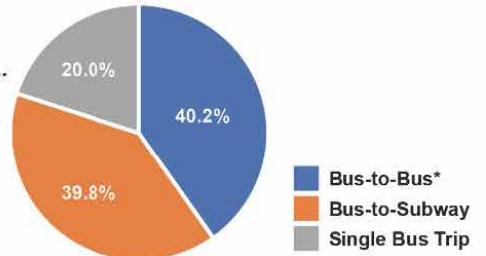
	Weekday Value	Weekday Rank	Saturday Value	Saturday Rank	Sunday Value	Sunday Rank
Ridership & Productivity						
Daily Ridership	14,596	--	7,545	--	6,196	--
Riders per Revenue Hour	83.4	--	60.8	--	57.9	--
Riders per Trip	98.6	--	65.0	--	57.4	--
Reliability						
On-Time Perf. (%)	60.2	--	64.3	--	66.5	--
Wait Assessment* (%)	79.2	11th	92.3	5th	83.5	2nd
CJTP (%)	peak: 69.9	--	--	--	--	--
	off-peak: 73.1	--	--	--	--	--

*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

Bx40 to...	to Bx40 from...
1. Bx42	1. Bx42
2. Bx36	2. Bx36
3. Bx15	3. Bx15
4. Bx2	4. Bx22
5. Bx1	5. Bx2



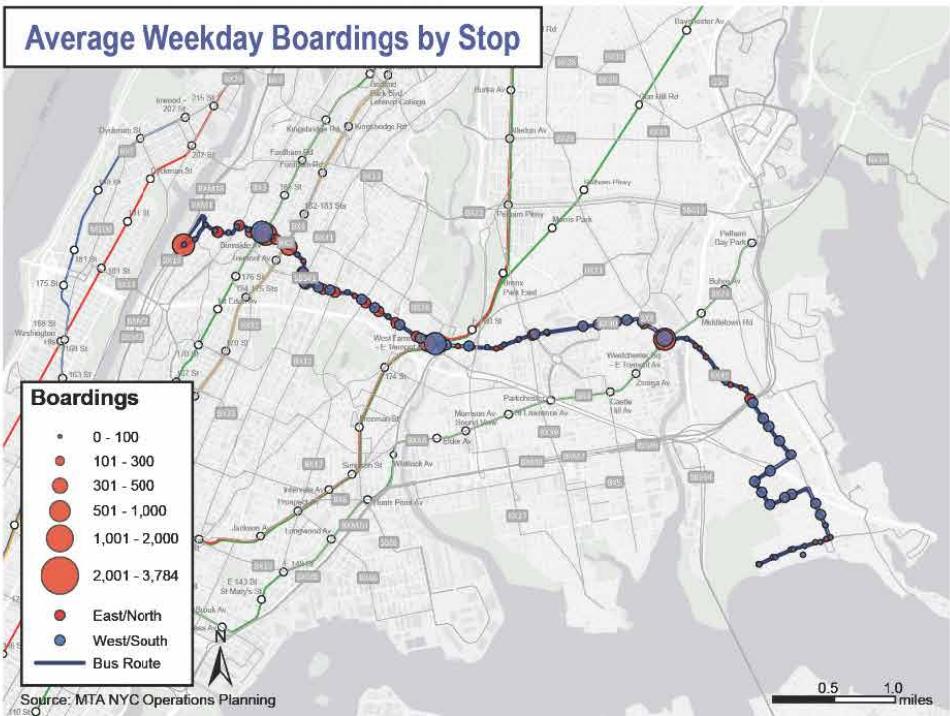
*Transfer mode share shown represents Bx40/Bx42 combined service.

Span of Service

	TOWARD RIVER PK TOWERS	TOWARD FT SCHUYLER	AVG. FREQUENCY (MIN.)					
			WEEKDAYS:	ALL TIMES	AM	NOON	PM	EVE
WEEKDAYS:				12	20	15	20	60
SATURDAYS:				24	20	20	24	60
SUNDAYS:				20	24	24	24	60

Bx42 Tremont Avenue Crosstown

Average Weekday Boardings by Stop

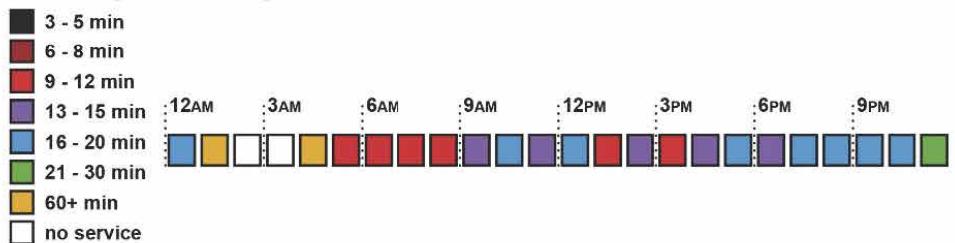


Route Type: Local

Avg. Stop Spacing: 784.9 ft

Description: Operates between River Park Towers and Harding Av/Emerson Av, daily.

Weekday Frequency



Statistics

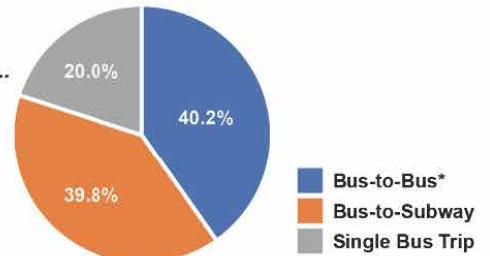
	Weekday		Saturday		Sunday	
	Value	Rank	Value	Rank	Value	Rank
Ridership & Productivity						
Daily Ridership	15,030	--	7,854	--	6,154	--
Riders per Revenue Hour	87.4	--	66.6	--	62.8	--
Riders per Trip	108.1	--	75.5	--	66.2	--
Reliability						
On-Time Perf. (%)	58.1	--	60.5	--	63.4	--
Wait Assessment* (%)	78.2	14th	85.5	28th	81.5	28th
CJTP (%)	peak: 70.0	--	--	--	--	--
	off-peak: 73.2	--	--	--	--	--

*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

Bx42 to...	to Bx42 from...
1. Bx40	1. Bx40
2. Bx36	2. Bx36
3. Bx15	3. Bx15
4. Bx2	4. Bx2
5. Bx1	5. Bx22



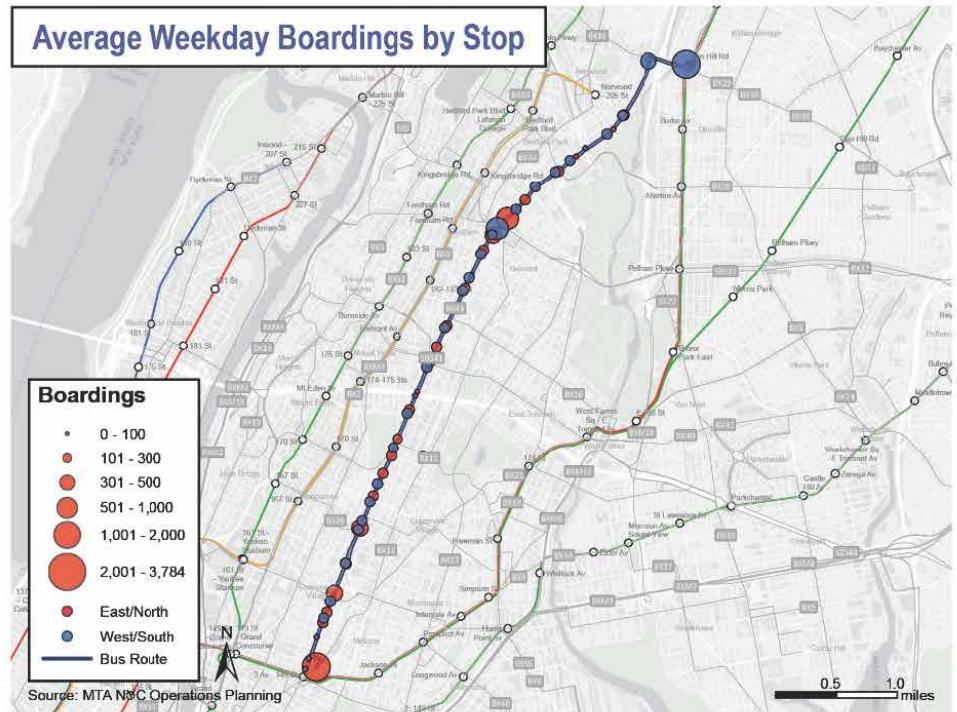
*Transfer mode share shown represents Bx40/Bx42 combined service.

Span of Service

	TOWARD RIVER PK TOWERS	TOWARD HARDING AV	Avg. Frequency (min.)
	4:30AM-1:30AM	4:06AM-12:45AM	AM NOON PM EVE NITE
WEEKDAYS:	4:30AM-1:30AM	4:06AM-12:45AM	15 20 15 17 --
SATURDAYS:	5:33AM-11:21PM	4:30AM-12:30AM	20 20 18 24 --
SUNDAYS:	6:00AM-11:06PM	6:00AM-12:06AM	20 24 24 24 --

Bx41 Webster Avenue/East Gun Hill Road

Average Weekday Boardings by Stop

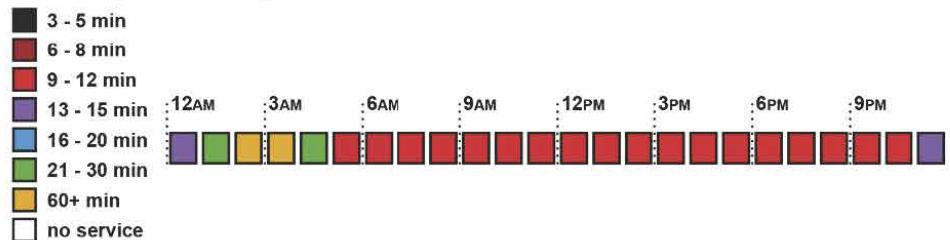


Route Type: Local

Avg. Stop Spacing: 993.4 ft (13th)

Description: Operates between East Gun Hill Rd/White Plains Rd (Gun Hill Rd 2 5 subway station) and East 149 St/Melrose Av-The Hub (3 Av-149 St 2 5 subway station), daily.

Weekday Frequency



Statistics

	Weekday		Saturday		Sunday	
	Value	Rank	Value	Rank	Value	Rank
Ridership & Productivity						
Daily Ridership	12,731	26th	9,795	17th	7,503	15th
Riders per Revenue Hour	85.4	16th	68.5	16th	65.2	16th
Riders per Trip	59.8	19th	47.8	18th	40.6	18th
Reliability						
On-Time Perf. (%)	55.2	28th	65.4	17th	66.5	19th
Wait Assessment* (%)	74.5	28th	90.0	11th	88.4	6th
CJTP (%)	peak: 69.3 17th		-- --		-- --	
	off-peak: 76.0 6th		-- --		-- --	

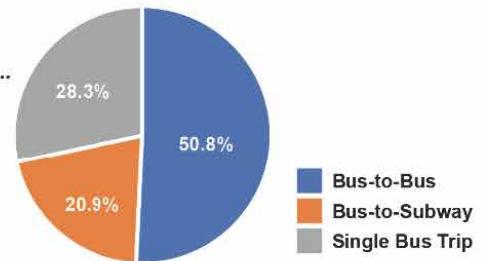
*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

Bx41 to... **to Bx41 from...**

1. Bx41SBS	1. Bx41SBS
2. Bx36	2. Bx12SBS
3. Bx12SBS	3. Bx36
4. Bx15	4. Bx15
5. Bx39	5. Bx39

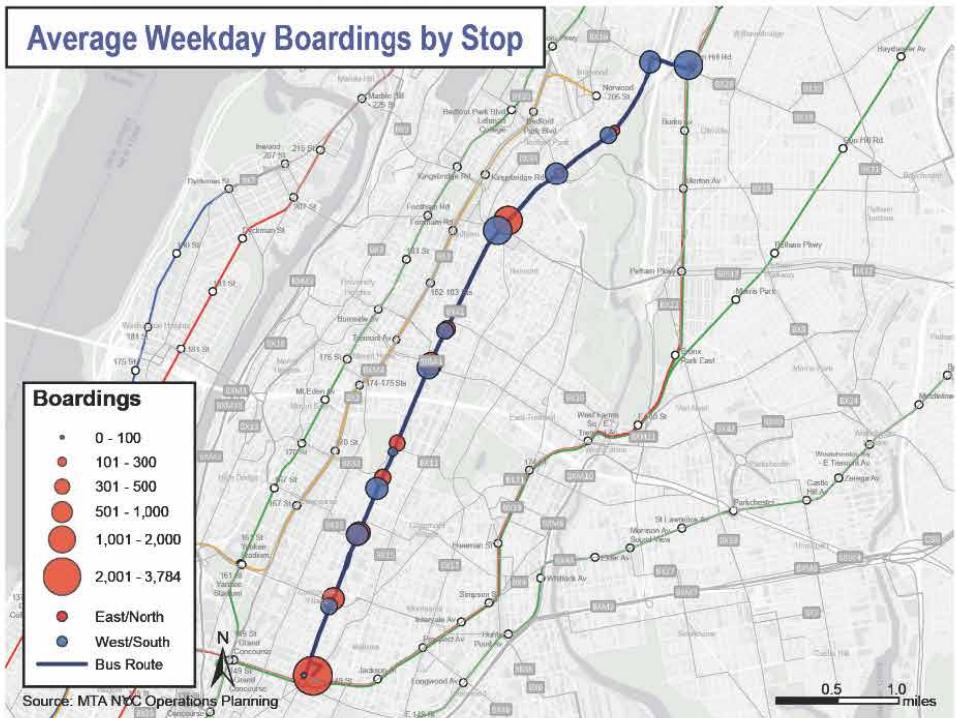


Span of Service

	TOWARD EAST GUN HILL RD		TOWARD THE HUB		AVG. FREQUENCY (MIN.)				
	WEEKDAYS:	SATURDAYS:	SUNDAYS:	AM	NOON	PM	EVE	NITE	
WEEKDAYS:	All times	All times	All times	12	12	10	12	60	
SATURDAYS:	All times	All times	All times	12	15	12	12	60	
SUNDAYS:	All times	All times	All times	15	15	12	15	60	

Bx41SBS Webster Av/E Gun Hill Rd

Average Weekday Boardings by Stop

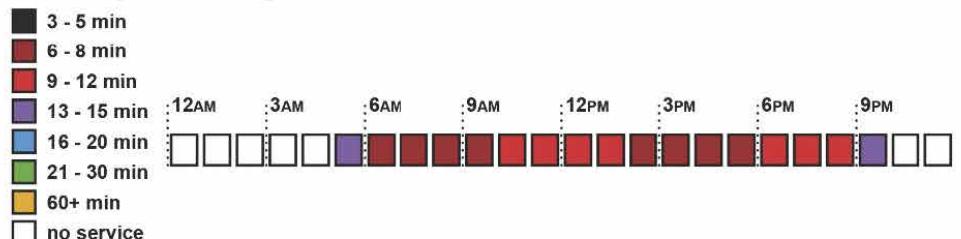


Route Type: Select Bus Service

Avg. Stop Spacing: 2,554.7 ft (1st)

Description: Operates between East Gun Hill Rd/White Plains Rd (Gun Hill Rd **2 5** subway station) and East 149 St/Melrose Av-The Hub (3 Av-149 St **2 3** subway station), daily.

Weekday Frequency



Statistics

	Weekday	Saturday	Sunday			
	Value	Rank	Value	Rank	Value	Rank
Ridership & Productivity						
Daily Ridership	13,653	22nd	8,058	22nd	6,662	21st
Riders per Revenue Hour	105.8	6th	89.5	4th	77.5	7th
Riders per Trip	62.1	16th	50.4	15th	41.6	15th
Reliability						
On-Time Perf. (%)	41.6	41st	69.4	9th	71.8	9th
Wait Assessment* (%)	69.8	41st	85.2	31st	90.4	3rd
CJTP (%)	peak: 67.3	22nd	--	--	--	--
	off-peak: 71.8	19th	--	--	--	--

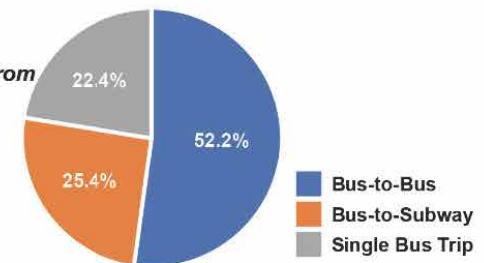
*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

Bx41SBS to to Bx41SBS from

1. Bx41
2. Bx12SBS
3. Bx36
4. Bx15
5. Bx39
1. Bx41
2. Bx12SBS
3. Bx36
4. Bx15
5. Bx39

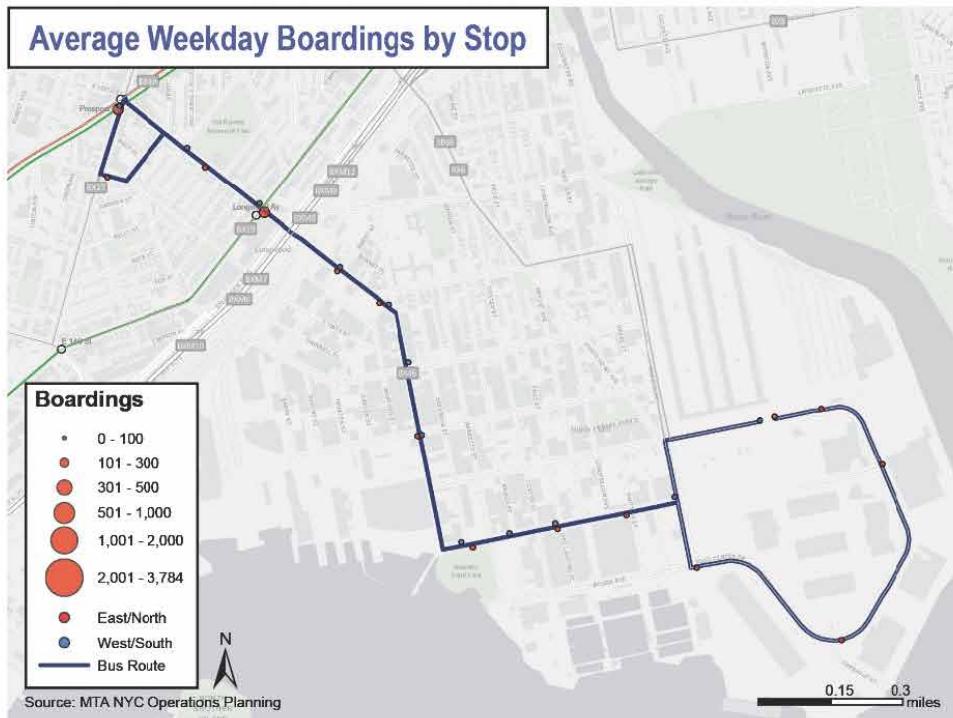


Span of Service

	Avg. Frequency (min.)						
	TOWARD BAY PLAZA	TOWARD BROADWAY	AM	NOON	PM	EVE	NITE
WEEKDAYS:	6:00AM-10:53PM	5:09AM-10:00PM	4	6	5	6	--
SATURDAYS:	6:45AM-11:25PM	6:00AM-10:25PM	7	6	6	8	--
SUNDAYS:	6:00AM-10:55PM	6:09AM-10:00AM	10	9	8	10	--

Bx46 Longwood Avenue/Hunts Point

Average Weekday Boardings by Stop

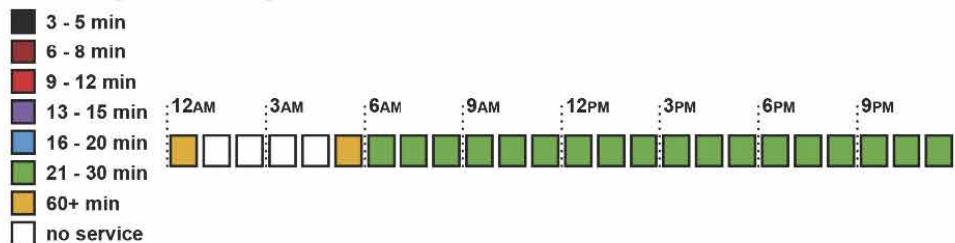


Route Type: Local

Avg. Stop Spacing: 1,075.3 ft (8th)

Description: Operates between the Hunts Point Food Center, and Prospect Av ② ⑤ subway station, daily.

Weekday Frequency



Statistics

	Weekday	Saturday	Sunday			
	Value	Rank	Value	Rank	Value	Rank
Ridership & Productivity						
Daily Ridership	689	42nd	138	41st	101	41st
Riders per Revenue Hour	27.6	41st	7.3	41st	5.3	41st
Riders per Trip	9.3	42nd	2.4	41st	1.7	41st
Reliability						
On-Time Perf. (%)	85.1	1st	85.6	2nd	77.3	5th
Wait Assessment* (%)	88.5	2nd	97.8	1st	87.8	10th
CJTP (%)	peak:		83.8	1st	--	--
	off-peak:		82.2	1st	--	--

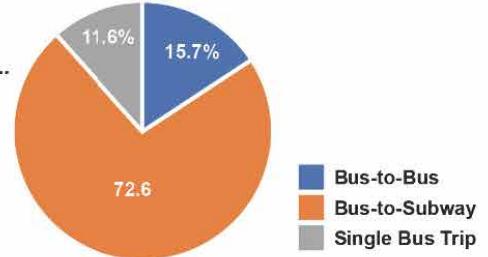
*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

Bx46 to... to Bx46 from...

1. Bx19	1. Bx19
2. Bx17	2. Bx17
3. Bx6SBS	3. Bx6SBS
4. Bx6	4. Bx4
5. Bx4	5. Bx6

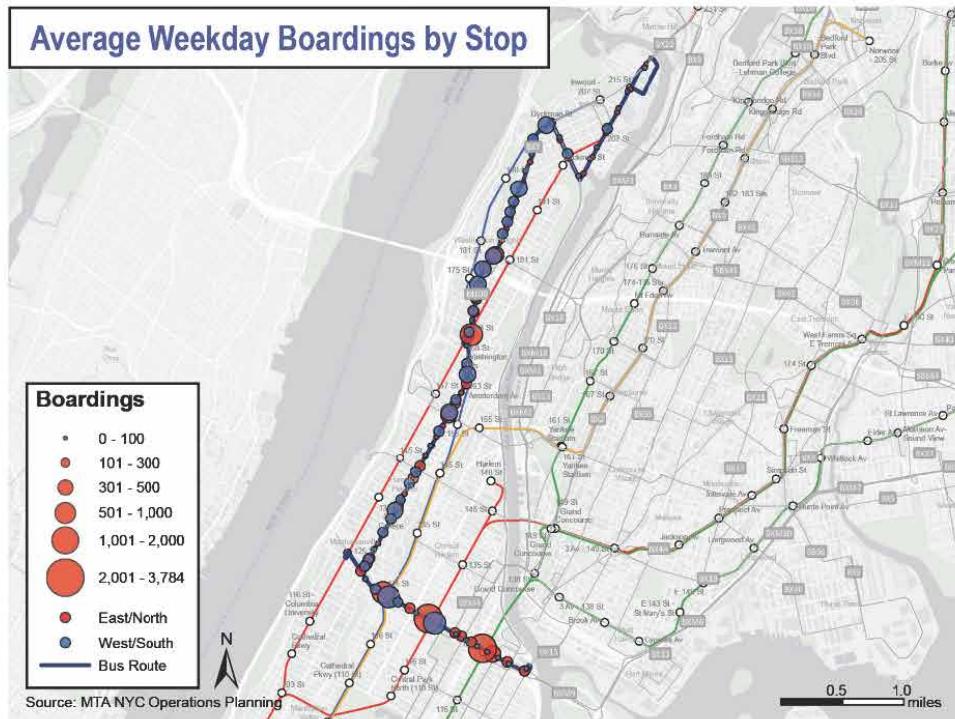


Span of Service

	TOWARD HUNTS PT	TOWARD PROSPECT AV	Avg. Frequency (min.)
			AM NOON PM EVE NITE
WEEKDAYS:	5:30AM-11:30PM	6:00AM-12:00MID	30 30 30 30 --
SATURDAYS:	8:30AM-10:30PM	9:00AM-11:05PM	30 30 30 30 --
SUNDAYS:	8:30AM-10:30PM	9:05AM-11:05PM	30 30 30 30 --

M100 Amsterdam Avenue/Broadway/125th Street

Average Weekday Boardings by Stop

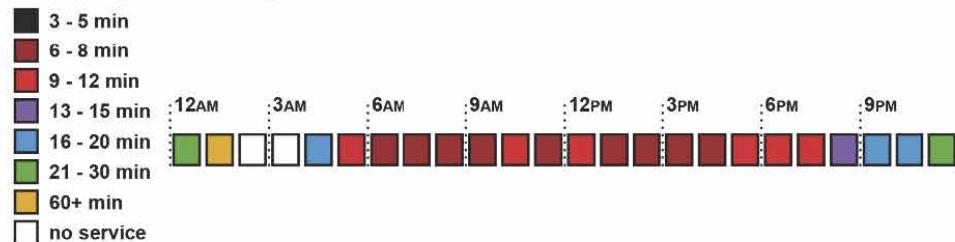


Route Type: Local

Avg. Stop Spacing: 724.7 ft (42nd)

Description: Operates between West 220 St/Broadway and East 127 St/2 Av, daily.

Weekday Frequency



Statistics

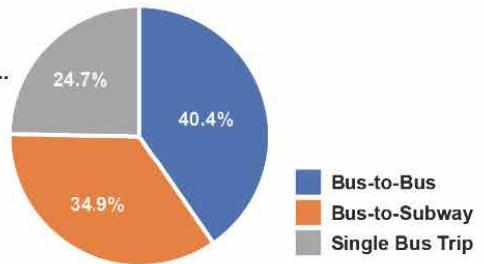
	Weekday	Saturday	Sunday			
	Value	Rank	Value	Rank	Value	Rank
Ridership & Productivity						
Daily Ridership	19,856	10th	11,477	11th	9,282	11th
Riders per Revenue Hour	67.3	33rd	56.8	28th	52.1	29th
Riders per Trip	87.9	5th	67.5	9th	58.7	9th
Reliability						
On-Time Perf. (%)	56.4	23rd	46.0	41st	52.7	36th
Wait Assessment* (%)	76.0	24th	75.1	42nd	72.7	43rd
CJTP (%)	peak: 75.7	5th	--	--	--	--
	off-peak: 72.2	17th	--	--	--	--

*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

M100 to...	to M100 from...
1. Bx7	1. Bx7
2. Bx3	2. Bx19
3. Bx15	3. Bx15
4. Bx19	4. Bx36
5. Bx36	5. Bx6SBS



Span of Service

	TOWARD W 220 ST	TOWARD 2 AV	Avg. Frequency (min.)	AM	NOON	PM	EVE	NITE
WEEKDAYS:	5:12AM-1:10AM	4:10AM-12:08AM	7	8	9	12	--	
SATURDAYS:	6:27AM-1:02AM	5:30AM-12:04AM	15	12	12	15	--	
SUNDAYS:	6:05AM-1:00AM	4:55AM-12:05AM	15	12	12	20	--	

Q50 Main St/Cross Bronx Expwy

Average Weekday Boardings by Stop

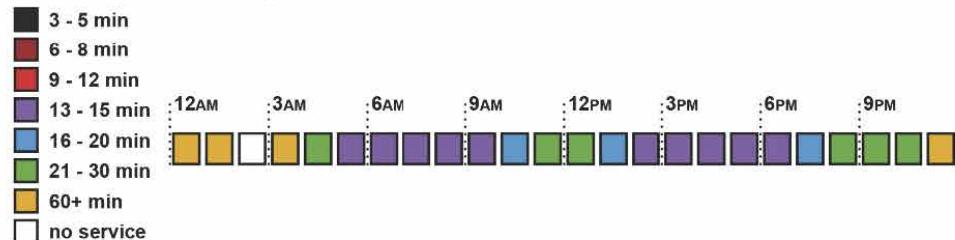


Route Type: Limited

Avg. Stop Spacing: 2,453.9 ft (3rd)

Description: Operates between Main St/Roosevelt Av (Flushing/Main St **7** subway station), Flushing, Queens, and Co-op City/Earhart Lane, daily.

Weekday Frequency



Statistics

	Weekday Value	Weekday Rank	Saturday Value	Saturday Rank	Sunday Value	Sunday Rank
Ridership & Productivity						
Daily Ridership	5,641	34th	3,177	32nd	2,451	32nd
Riders per Revenue Hour	53.7	39th	52.1	35th	43.0	35th
Riders per Trip	47.4	33rd	44.1	24th	34.0	24th
Reliability						
On-Time Perf. (%)	57.5	19th	71.3	6th	65.9	20th
Wait Assessment* (%)	82.0	6th	86.7	24th	86.9	13th
CJTP (%)	peak: 65.3	30th	--	--	--	--
	off-peak: 71.1	22nd	--	--	--	--

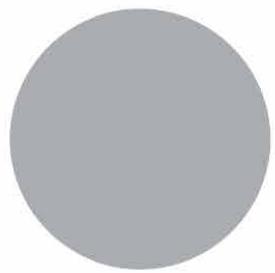
*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

Q50 to... **to Q50 from...**

1. Bx12SBS
2. Q44SBS
3. Bx12
4. Bx40
5. Bx30
1. Bx12SBS
2. Q44SBS
3. Bx12
4. Bx40
5. Bx42



- Bus-to-Bus
- Bus-to-Subway
- Single Bus Trip

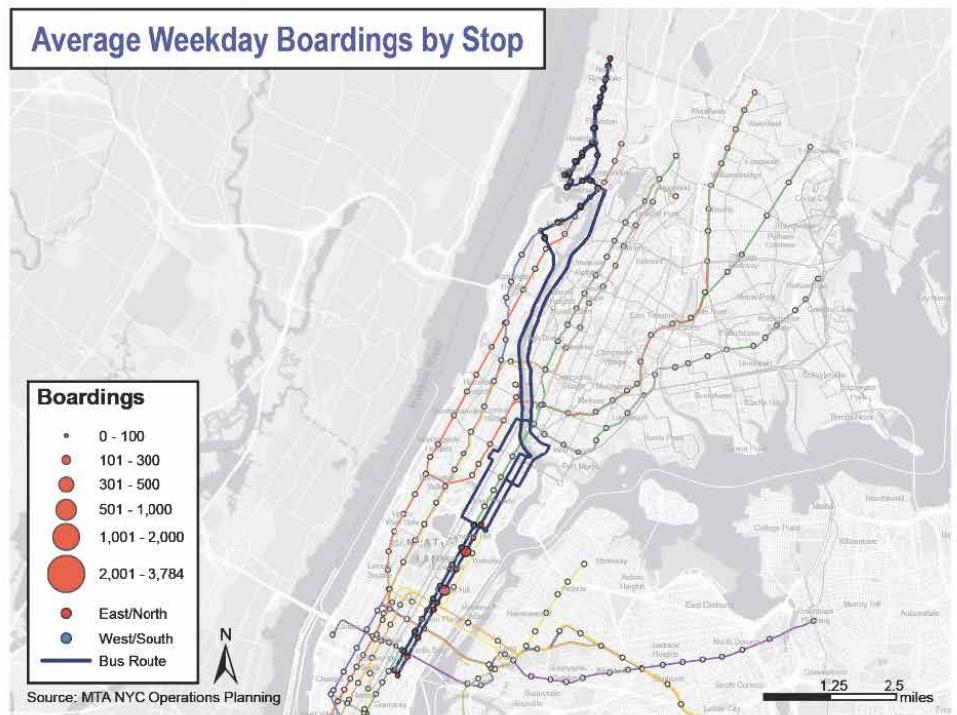
*Transfer mode analysis for Q50 not included.

Span of Service

	TOWARD CO-OP CITY	TOWARD FLUSHING	Avg. Frequency (min.)
	4:25AM-1:15AM	3:30AM-12:00MID	AM 30 15 30 --
WEEKDAYS:	4:25AM-1:15AM	3:30AM-12:00MID	15 30 15 30 --
SATURDAYS:	6:05AM-1:05AM	5:05AM-12:05AM	30 30 30 30 --
SUNDAYS:	6:05AM-1:05AM	5:05AM-12:05AM	30 30 30 30 --

BxM1 Riverdale/East Midtown

Average Weekday Boardings by Stop

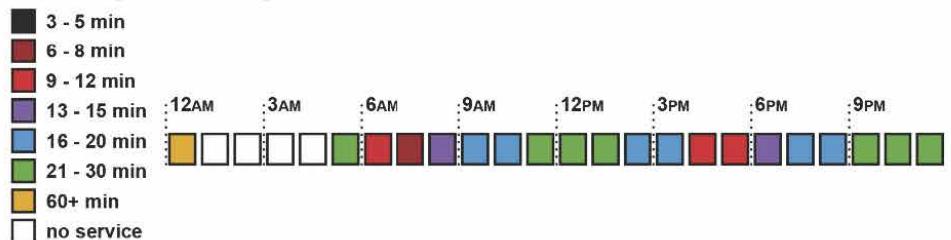


Route Type: Express

Avg. Stop Spacing: 2,891.6 ft

Description: Operates between Riverdale Av/261 St, Riverdale, and East 34 St/ Lexington Av, Manhattan, daily.

Weekday Frequency



Statistics

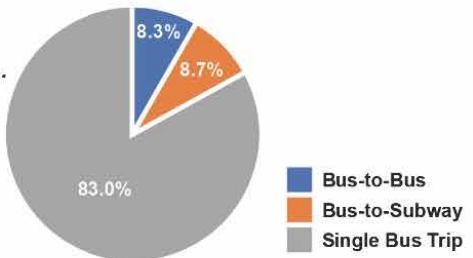
	Weekday		Saturday		Sunday	
	Value	Rank	Value	Rank	Value	Rank
Ridership & Productivity						
Daily Ridership	1,475	--	674	--	397	--
Riders per Revenue Hour	12.0	--	11.4	--	14.2	--
Riders per Trip	15.7	--	11.6	--	14.2	--
Reliability						
On-Time Perf. (%)	74.0	--	72.7	--	74.0	--
Wait Assessment* (%)	82.3	--	95.4	--	85.9	--
CJTP (%)	peak: 46.6		--		--	
	off-peak: 46.1		--		--	

*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

BxM1 to...	to BxM1 from...
1. Bx7	1. Bx7
2. Bx10	2. Bx10
3. Bx9	3. BxM18
4. BxM2	4. Bx9
5. M100	5. BxM2

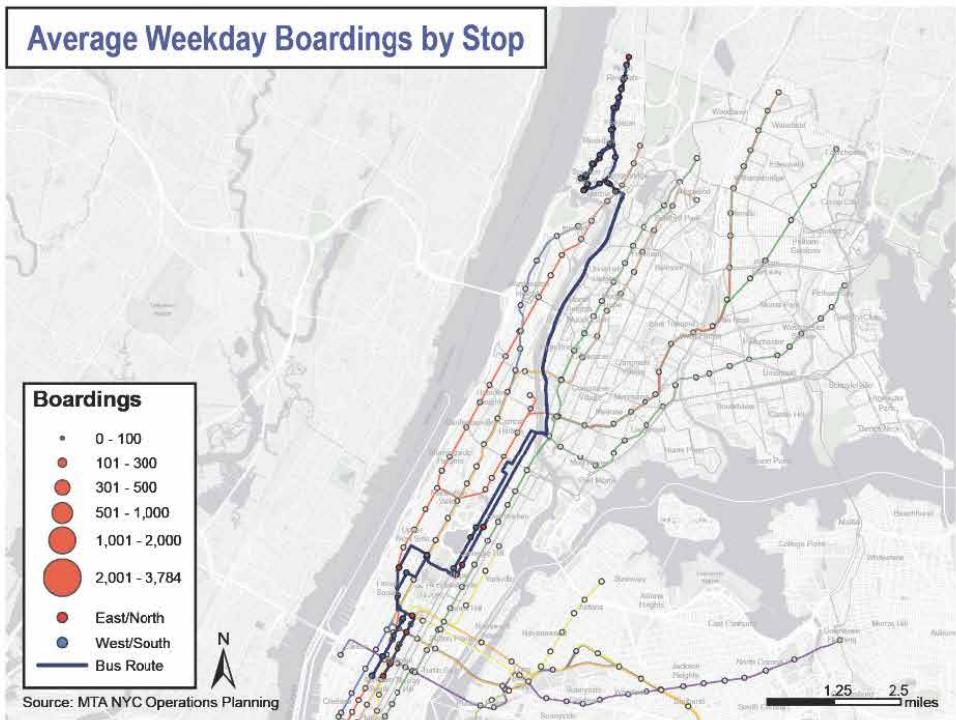


Span of Service

	TOWARD EAST 34 ST		TOWARD 261 ST		Avg. Frequency (min.)
	AM	NOON	PM	EVE	NITE
WEEKDAYS:	5:30AM-11:15PM	6:45AM-12:40AM	9	30	13 20
SATURDAYS:	6:45AM-11:15PM	7:55AM-12:25AM	30	30	30 60
SUNDAYS:	8:30AM-9:30PM	9:50AM-10:50PM	60	60	60 60

BxM2 Riverdale/West Midtown

Average Weekday Boardings by Stop

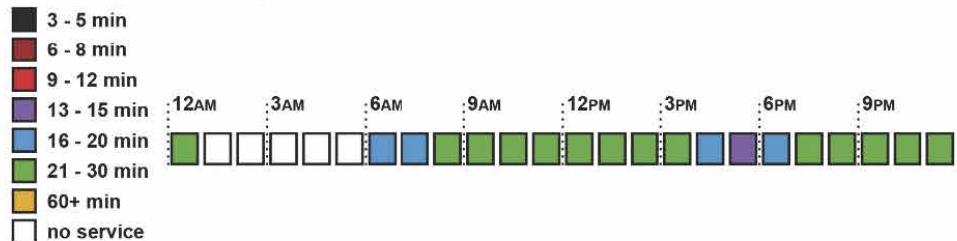


Route Type: Express

Avg. Stop Spacing: 3,174.5 ft

Description: Operates between Riverdale Av/261 St, Riverdale, and West 34 St/ Lexington Av, Manhattan, daily.

Weekday Frequency



Statistics

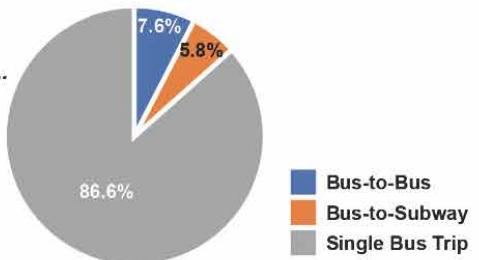
	Weekday Value	Weekday Rank	Saturday Value	Saturday Rank	Sunday Value	Sunday Rank
Ridership & Productivity						
Daily Ridership	809	--	672	--	245	--
Riders per Revenue Hour	8.3	--	10.7	--	10.1	--
Riders per Trip	10.6	--	11.4	--	11.1	--
Reliability						
On-Time Perf. (%)	68.7	--	64.5	--	71.3	--
Wait Assessment* (%)	80.7	--	77.6	--	86.1	--
CJTP (%)	peak: 34.7	--	--	--	--	--
	off-peak: 40.2	--	--	--	--	--

*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

BxM2 to...	to BxM2 from...
1. Bx10	1. Bx10
2. Bx7	2. Bx7
3. Bx9	3. BxM1
4. Bx20	
5. BxM1	

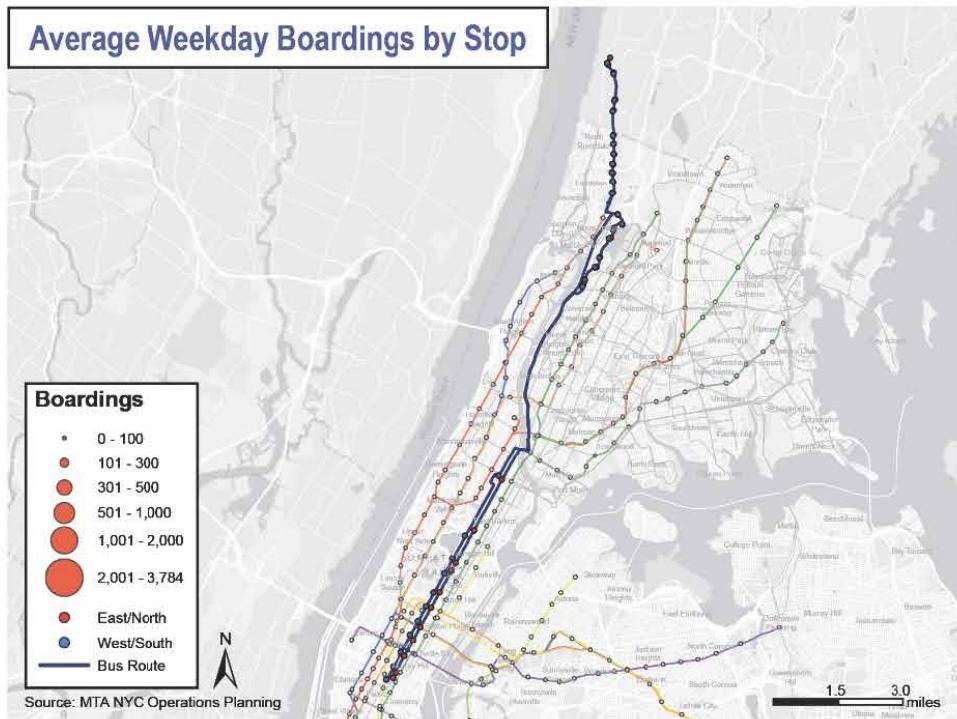


Span of Service

	TOWARD WEST 34 ST	TOWARD 261 ST	Avg. Frequency (min.)				
	6:00AM-11:00PM	7:20AM-12:30AM	AM	NOON	PM	EVE	NITE
WEEKDAYS:	6:00AM-11:00PM	7:20AM-12:30AM	24	30	18	30	--
SATURDAYS:	6:30AM-11:00PM	7:45AM-1:15AM	30	30	30	60	--
SUNDAYS:	8:00AM-10:00PM	9:30AM-12:30AM	60	60	60	60	--

BxM3 Yonkers/Midtown

Average Weekday Boardings by Stop

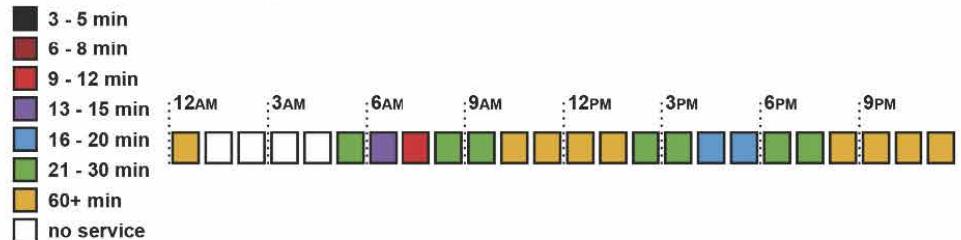


Route Type: Express

Avg. Stop Spacing: 2,799.0 ft

Description: Operates between Getty Square (Prospect St/South Broadway), Yonkers, and 26 St/5 Av, Manhattan, daily.

Weekday Frequency



Statistics

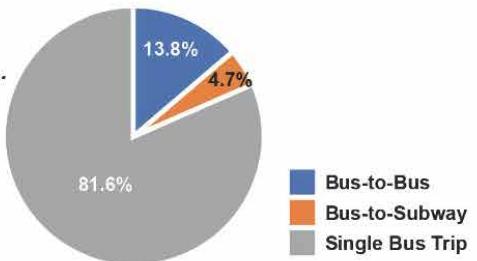
	Weekday Value	Weekday Rank	Saturday Value	Saturday Rank	Sunday Value	Sunday Rank
Ridership & Productivity						
Daily Ridership	769	--	324	--	197	--
Riders per Revenue Hour	11.5	--	8.3	--	7.3	--
Riders per Trip	14.2	--	9.2	--	7.6	--
Reliability						
On-Time Perf. (%)	62.2	--	71.8	--	75.9	--
Wait Assessment* (%)	80.0	--	87.4	--	91.1	--
CJTP (%)	peak: 17.9	--	--	--	--	--
	off-peak: 32.7	--	--	--	--	--

*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

BxM3 to...	to BxM3 from...
1. Bx3	1. Bx3
2. BxM18	2. BxM18
3. Bx10	3. Bx9
4. Bx9	4. Bx12SBS
5. Bx2	

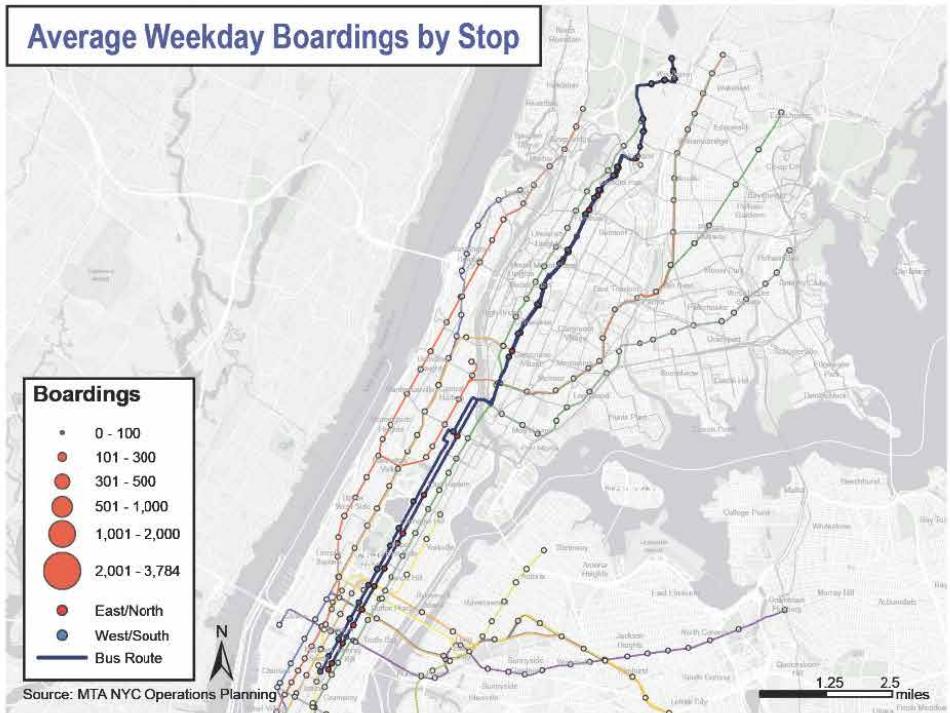


Span of Service

	TOWARD 26 ST	TOWARD GETTY SQ	AVG. FREQUENCY (MIN.)			
			AM	NOON	PM	EVE
WEEKDAYS:	5:30AM-10:35PM	7:35AM-12:05PM	24	60	24	40
SATURDAYS:	6:35AM-11:00PM	8:15AM-12:15AM	60	60	60	60
SUNDAYS:	9:30AM-9:30PM	11:00AM-11:00PM	60	60	60	60

BxM4 Woodlawn/Midtown

Average Weekday Boardings by Stop

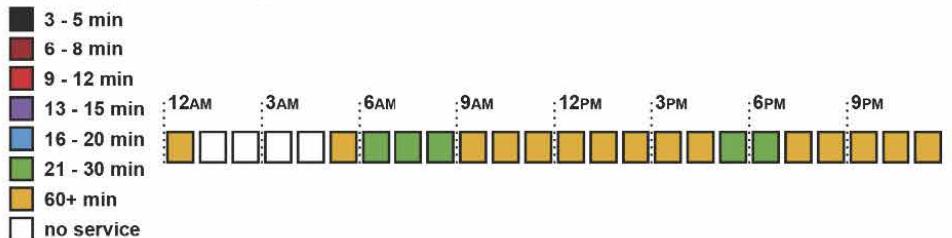


Route Type: Express

Avg. Stop Spacing: 2,436.0 ft

Description: Operates between Katonah Av/242 St, Woodlawn, and 26 St/5 Av, Manhattan, daily.

Weekday Frequency



Statistics

	Weekday Value	Weekday Rank	Saturday Value	Saturday Rank	Sunday Value	Sunday Rank
Ridership & Productivity						
Daily Ridership	427	--	176	--	110	--
Riders per Revenue Hour	7.2	--	4.7	--	3.9	--
Riders per Trip	10.4	--	5.5	--	4.2	--
Reliability						
On-Time Perf. (%)	54.8	--	61.7	--	66.4	--
Wait Assessment* (%)	76.2	--	86.2	--	85.4	--
CJTP (%)	peak: 35.0	--	--	--	--	--
	off-peak: 52.2	--	--	--	--	--

*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

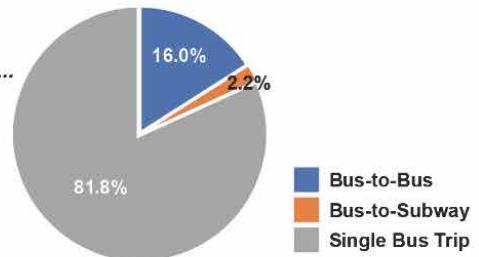
Transfers

Top Bus-to-Bus Transfers

BxM4 to... to BxM4 from...

1. Bx2
2. Bx11
3. Bx40
4. BxM18
5. Bx10

1. BxM18
2. Bx36
3. Bx40
4. Bx35

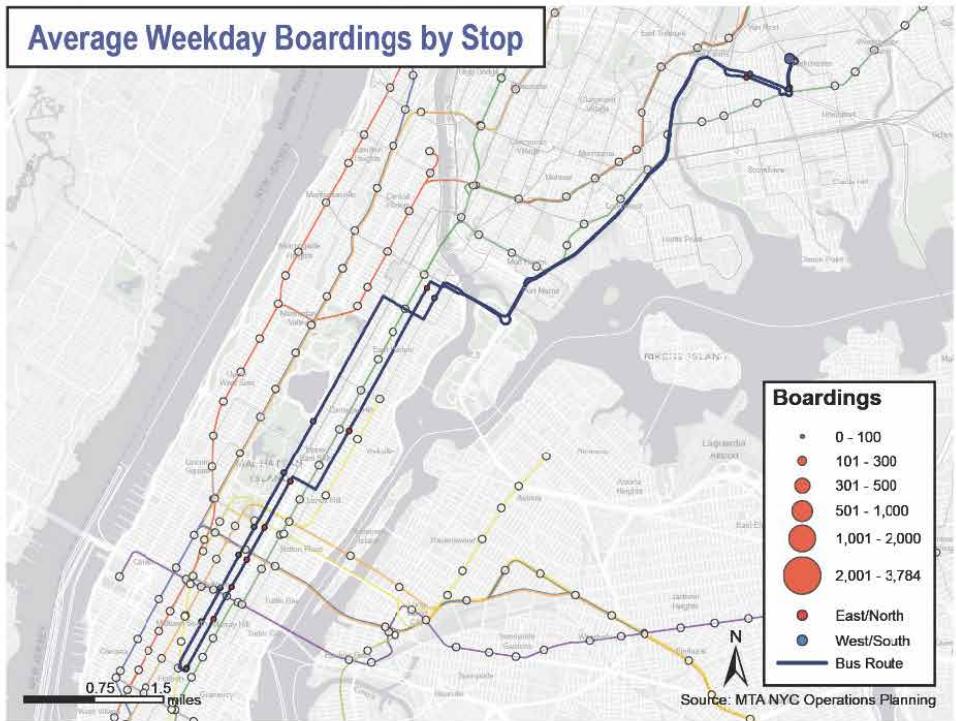


Span of Service

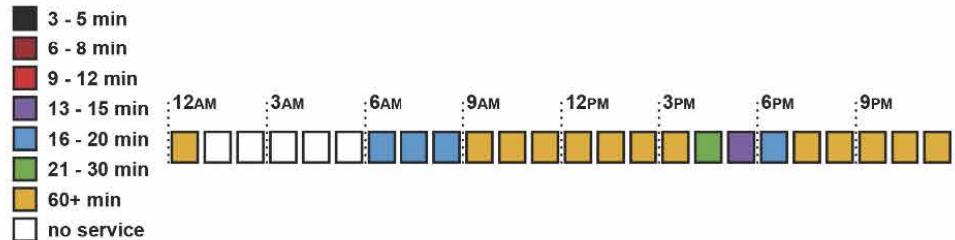
	TOWARD 26 ST	TOWARD 242 ST	AVG. FREQUENCY (MIN.)			
			AM	NOON	PM	EVE
WEEKDAYS:	5:40AM-10:40PM	7:35AM-12:05PM	30	60	30	60
SATURDAYS:	7:00AM-10:00PM	7:45AM-10:45PM	60	60	60	60
SUNDAYS:	9:00AM-9:00PM	10:30AM-10:30PM	60	60	60	60

BxM6 Parkchester/Midtown

Average Weekday Boardings by Stop



Weekday Frequency



Statistics

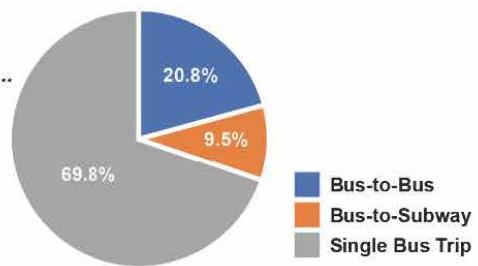
	Weekday		Saturday		Sunday	
	Value	Rank	Value	Rank	Value	Rank
Ridership & Productivity						
Daily Ridership	642	--	346	--	240	--
Riders per Revenue Hour	12.6	--	12.8	--	10.4	--
Riders per Trip	13.4	--	10.2	--	8.0	--
Reliability						
On-Time Perf. (%)	70.2	--	84.4	--	75.7	--
Wait Assessment* (%)	80.0	--	98.6	--	90.3	--
CJTP (%)	peak: 49.3	--	--	--	--	--
	off-peak: 70.4	--	--	--	--	--

*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

BxM6 to...	to BxM6 from...
1. Bx4	1. Bx4
2. Bx36	2. Bx36
3. Bx39	3. Bx22
4. Bx22	4. Bx39
5. BxM18	5. BxM18

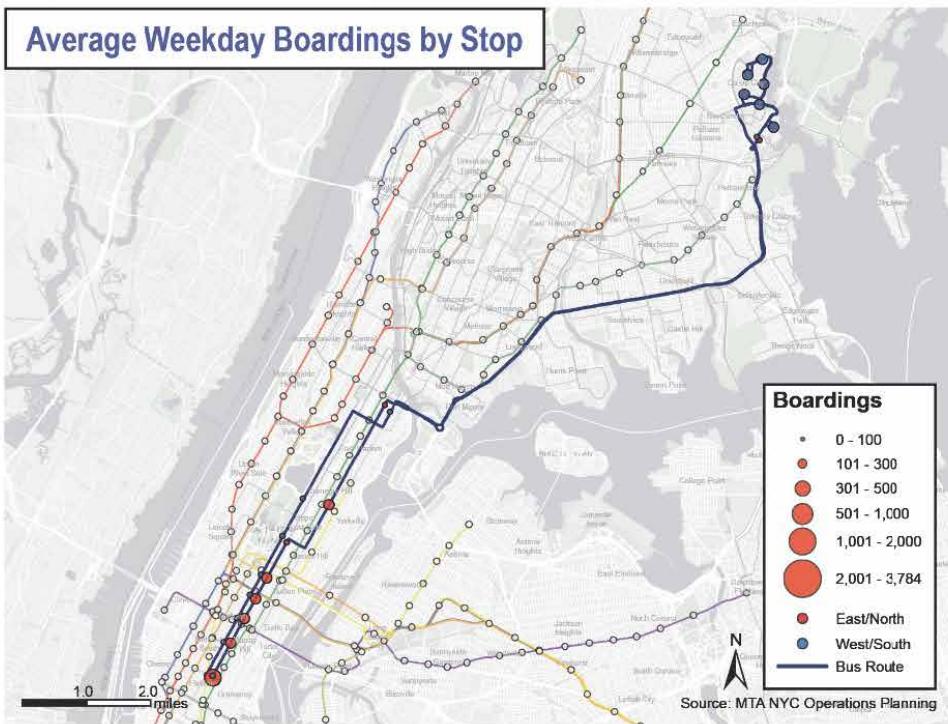


Span of Service

	TOWARD 23 ST	TOWARD CO-OP CITY	AVG. FREQUENCY (MIN.)			
			AM	NOON	PM	EVE
WEEKDAYS:	6:00AM-11:00PM	8:15AM-12:15AM	20	60	20	60
SATURDAYS:	7:00AM-11:00PM	8:15AM-12:15AM	60	60	60	60
SUNDAYS:	8:00AM-10:00PM	9:15AM-11:15PM	60	60	60	60

BxM7 Co-op City/Midtown

Average Weekday Boardings by Stop

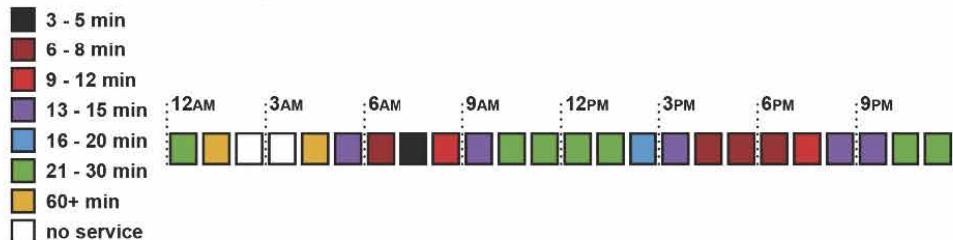


Route Type: Express

Avg. Stop Spacing: 6,804.5 ft

Description: Operates between Dreiser Loop, Co-op City, and 23 St/Broadway, Manhattan, daily.

Weekday Frequency



Statistics

	Weekday Value	Weekday Rank	Saturday Value	Saturday Rank	Sunday Value	Sunday Rank
Ridership & Productivity						
Daily Ridership	2,753	--	1,481	--	1,007	--
Riders per Revenue Hour	17.3	--	16.6	--	18.0	--
Riders per Trip	20.2	--	16.6	--	17.4	--
Reliability						
On-Time Perf. (%)	74.3	--	80.5	--	87.5	--
Wait Assessment* (%)	83.7	--	97.9	--	91.7	--
CJTP (%)	<i>peak:</i> 15.0	--	--	--	--	--
	<i>off-peak:</i> 44.6	--	--	--	--	--

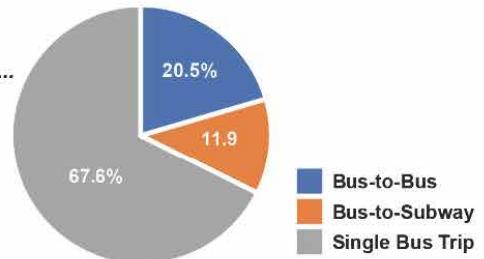
*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

BxM7 to... to BxM7 from...

1. Bx30	1. M100
2. M100	2. Bx23
3. Bx23	3. Bx30
4. BxM18	4. Bx15
5. Bx15	5. Bx12SBS

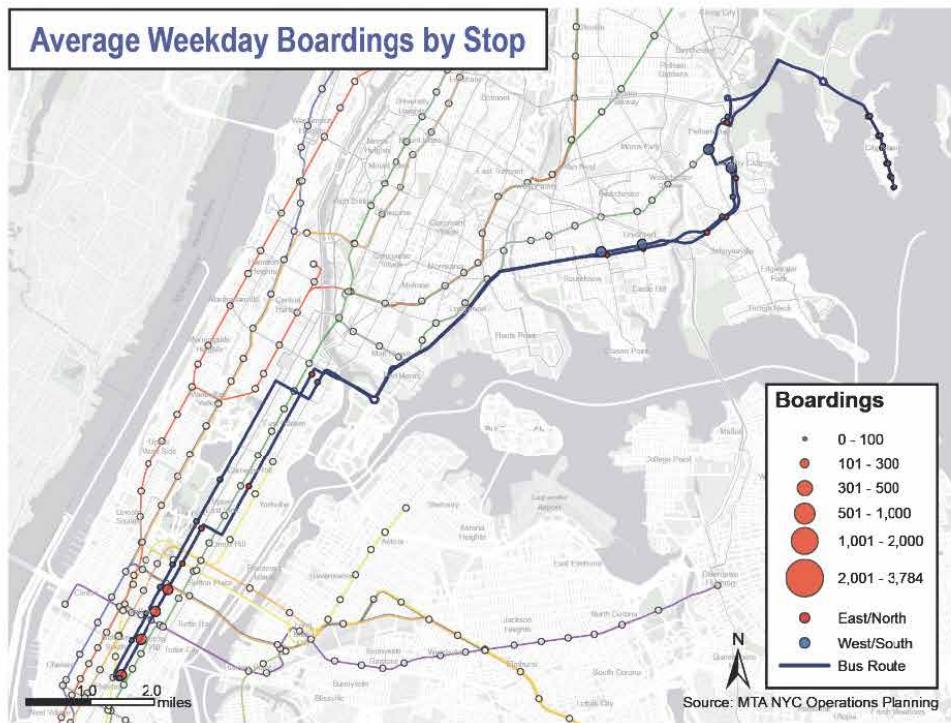


Span of Service

	TOWARD 23 ST	TOWARD CO-OP CITY	Avg. Frequency (min.)	AM	NOON	PM	EVE	NITE
WEEKDAYS:	5:00AM-12:30AM	6:00AM-1:30AM	10	30	6	15	--	
SATURDAYS:	5:00AM-12:00MID	6:10AM-1:30AM	20	20	20	30	--	
SUNDAYS:	6:00AM-11:00PM	7:10AM-12:10AM	30	30	30	60	--	

BxM8 Pelham Bay/Midtown

Average Weekday Boardings by Stop

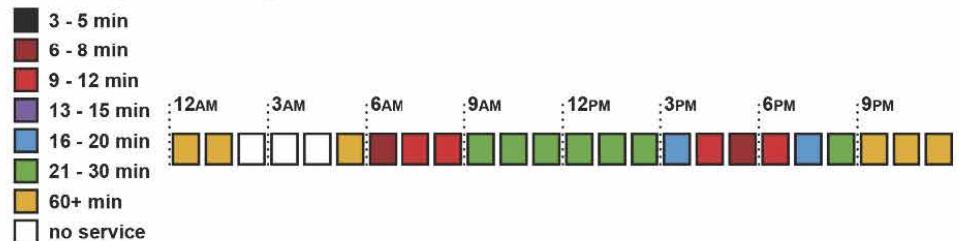


Route Type: Express

Avg. Stop Spacing: 5,096.9 ft

Description: Operates between Pelham Bay Park (6th Avenue) subway station, Pelham Bay, and 23 St/Broadway, Manhattan, daily.

Weekday Frequency



Statistics

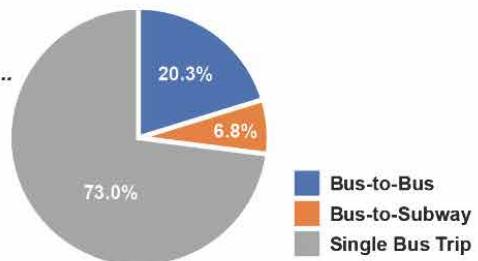
	Weekday	Saturday	Sunday			
	Value	Rank	Value	Rank	Value	Rank
Ridership & Productivity						
Daily Ridership	1,774	--	636	--	336	--
Riders per Revenue Hour	16.9	--	14.1	--	12.9	--
Riders per Trip	19.1	--	12.7	--	11.2	--
Reliability						
On-Time Perf. (%)	62.4	--	73.4	--	76.5	--
Wait Assessment* (%)	78.6	--	95.4	--	94.3	--
CJTP (%)	peak: 15.8	--	--	--	--	--
	off-peak: 37.0	--	--	--	--	--

*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

BxM8 to...	to BxM8 from...
1. Bx22	1. Bx22
2. Bx5	2. Bx39
3. Bx39	3. Bx5
4. Bx29	4. Bx36
5. Bx36	5. Bx29

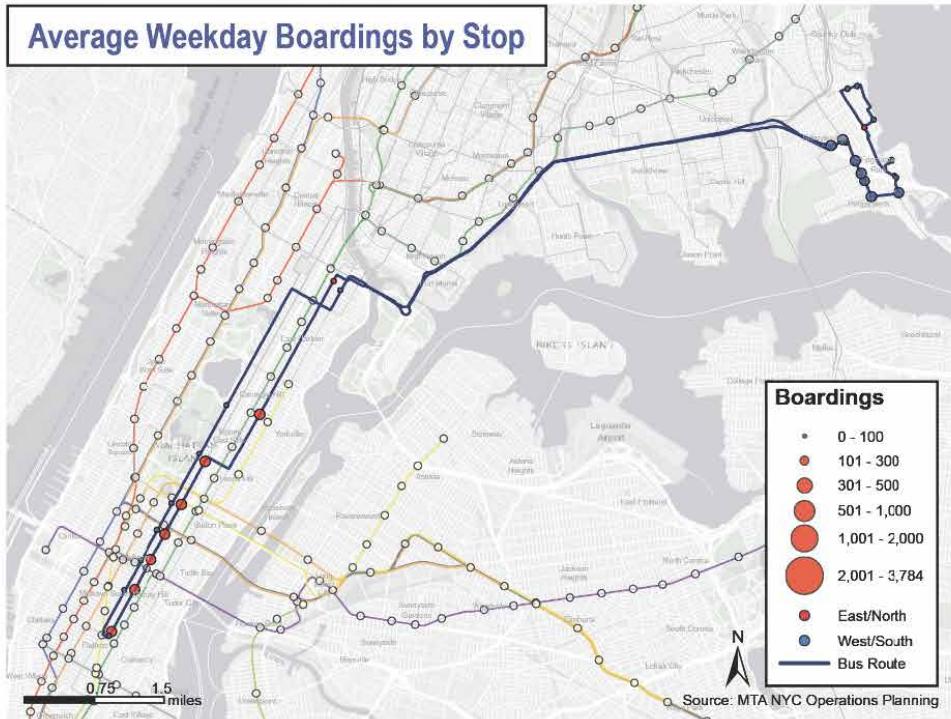


Span of Service

	TOWARD 23 ST	TOWARD PELHAM BAY	AVG. FREQUENCY (MIN.)				
			AM	NOON	PM	EVE	NITE
WEEKDAYS:	5:45AM-12:00MID	7:00AM-1:10AM	10	30	9	24	--
SATURDAYS:	7:00AM-11:00PM	8:20AM-12:20AM	30	30	30	60	--
SUNDAYS:	8:00AM-10:00PM	9:20AM-11:20PM	60	60	60	60	--

BxM9 Throgs Neck/Midtown

Average Weekday Boardings by Stop

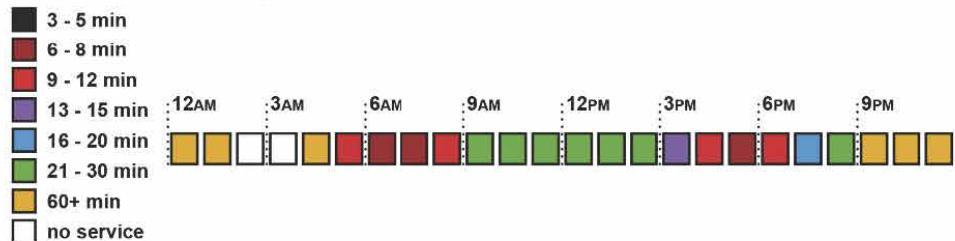


Route Type: Express

Avg. Stop Spacing: 4,467.7 ft

Description: Operates between Layton Av/Vincent Av, Throgs Neck, and 23 St/Broadway, Manhattan, daily.

Weekday Frequency



Statistics

Ridership & Productivity			Reliability						
	Value	Rank		Value	Rank				
Daily Ridership	2,292	--	On-Time Perf. (%)	72.9	--	84.6	--	85.4	--
Riders per Revenue Hour	20.1	--	Wait Assessment* (%)	82.3	--	88.2	--	92.9	--
Riders per Trip	23.2	--	CJTP (%)	peak: 27.0	--	--	--	--	--
			off-peak: 38.1	--	--	--	--	--	--

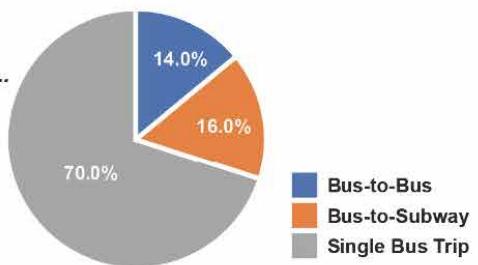
*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

Transfers

Top Bus-to-Bus Transfers

BxM9 to... to BxM9 from...

1. Bx42	1. Bx42
2. Bx40	2. Bx40
3. M100	3. Bx8
4. Bx15	4. M100
5. Bx8	5. Bx15

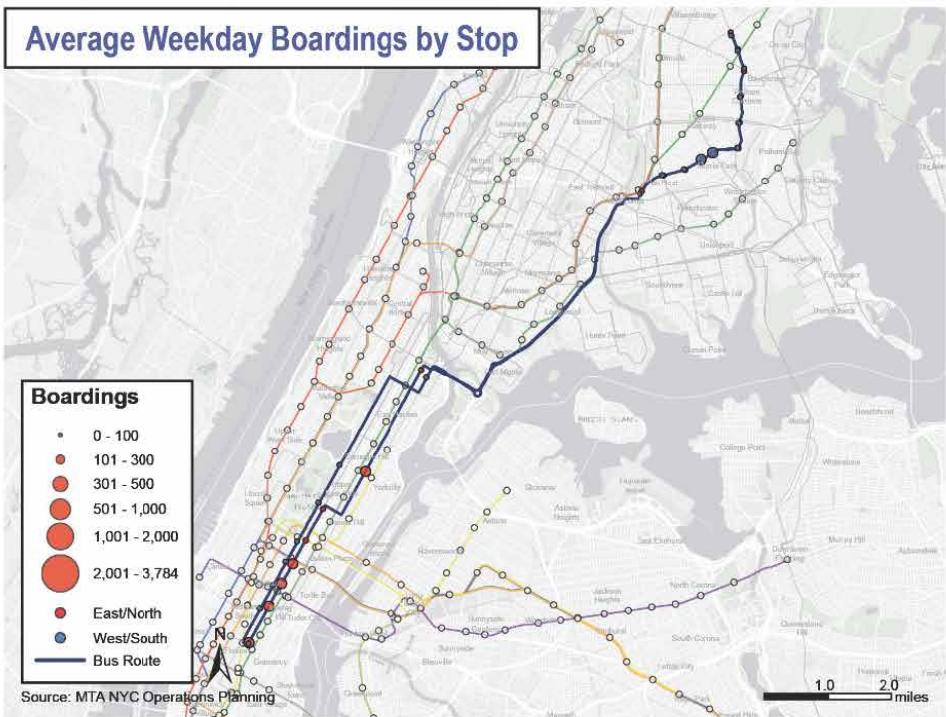


Span of Service

	Avg. Frequency (min.)							
	WEEKDAYS:	SATURDAYS:	SUNDAYS:	AM	NOON	PM	EVE	NITE
TOWARD 23 ST	5:00AM-11:00PM	6:15AM-10:15PM	7:15AM-10:15PM	9	30	9	24	--
TOWARD THROGS NECK	7:00AM-1:10AM	8:00AM-12:00MID	9:30AM-12:30AM	30	30	30	60	--
AM				60	60	60	60	--
NOON								
PM								
EVE								
NITE								

BxM10 Williamsbridge/Midtown

Average Weekday Boardings by Stop

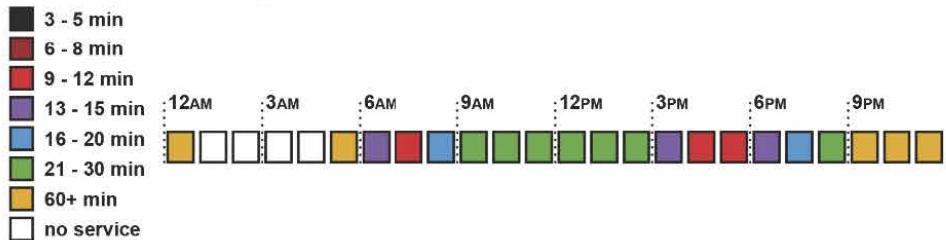


Route Type: Express

Avg. Stop Spacing: 4,156.6 ft

Description: Operates between Layton Eastchester Rd/Boston Rd, Williamsbridge, and 23 St/Broadway, Manhattan, daily.

Weekday Frequency



Statistics

	Weekday	Saturday	Sunday			
	Value	Rank	Value	Rank	Value	Rank
Ridership & Productivity						
Daily Ridership	1,646	--	923	--	489	--
Riders per Revenue Hour	16.0	--	17.1	--	15.3	--
Riders per Trip	18.9	--	17.4	--	14.4	--
Reliability						
On-Time Perf. (%)	60.2	--	81.0	--	84.8	--
Wait Assessment* (%)	79.1	--	98.1	--	91.7	--
CJTP (%)	<i>peak:</i> 15.1	--	--	--	--	--
	<i>off-peak:</i> 33.1	--	--	--	--	--

*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

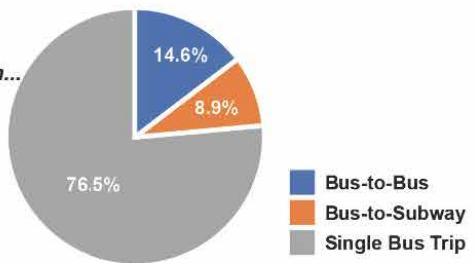
Transfers

Top Bus-to-Bus Transfers

BxM10 to... to BxM10 from...

1. Bx22
2. Bx31
3. Bx8
4. BxM18
5. Bx21

1. Bx31
2. Bx21
3. BxM18
4. Bx30
5. Bx28

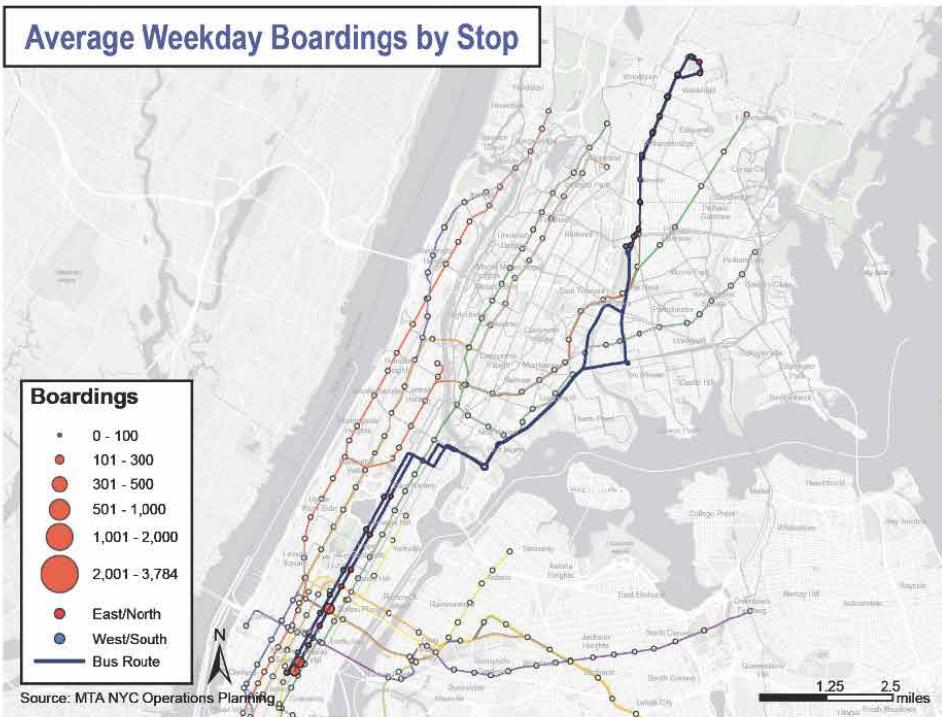


Span of Service

	TOWARD 23 ST	TOWARD EASTCHESTER RD	AVG. FREQUENCY (MIN.)			
			AM	NOON	PM	EVE
WEEKDAYS:	5:45AM-11:00PM	7:05AM-12:15AM	13	30	11	24
SATURDAYS:	6:00AM-11:00PM	8:20AM-12:20AM	30	30	30	60
SUNDAYS:	7:00AM-11:00PM	8:20AM-12:20AM	60	60	60	60

BxM11 Wakefield/Midtown

Average Weekday Boardings by Stop

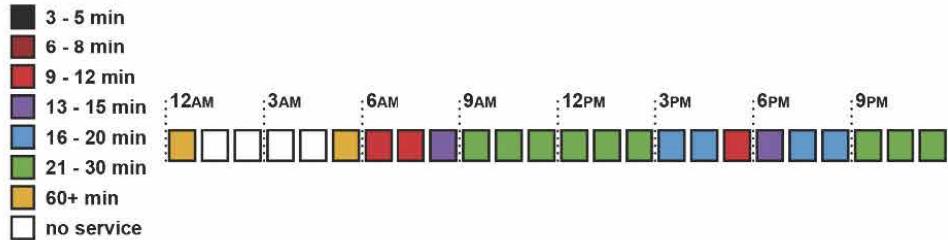


Route Type: Express

Avg. Stop Spacing: 4,181.9 ft

Description: Operates between Eastchester Rd/Boston Rd, Williamsbridge, and 23 St/Broadway, Manhattan, daily.

Weekday Frequency



Statistics

	Weekday Value	Weekday Rank	Saturday Value	Saturday Rank	Sunday Value	Sunday Rank
Ridership & Productivity						
Daily Ridership	1,217	--	770	--	376	--
Riders per Revenue Hour	10.2	--	11.3	--	11.7	--
Riders per Trip	14.0	--	12.6	--	12.5	--
Reliability						
On-Time Perf. (%)	58.3	--	68.6	--	80.9	--
Wait Assessment* (%)	75.9	--	93.0	--	92.0	--
CJTP (%)	peak: 36.0	--	--	--	--	--
	off-peak: 50.3	--	--	--	--	--

*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

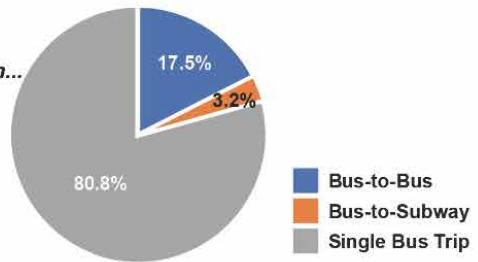
Transfers

Top Bus-to-Bus Transfers

BxM11 to... to BxM11 from...

1. Bx26
2. Bx30
3. Bx31
4. Bx39
5. Bx22

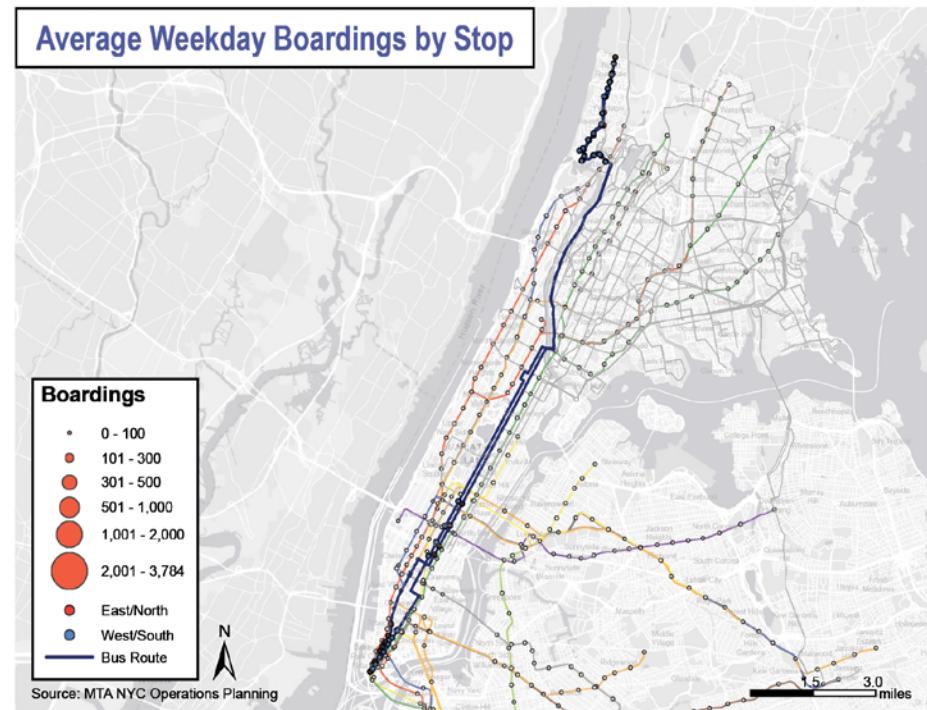
1. Bx26
2. Bx39
3. Bx16
4. Bx31
5. BxM18



Span of Service

	TOWARD 23 ST		TOWARD 241 ST		AVG. FREQUENCY (MIN.)			
	WEEKDAYS:	SATURDAYS:	SUNDAYS:	AM	NOON	PM	EVE	NITE
	5:30AM-11:00PM	6:45AM-12:20AM	8:00AM-10:00PM	12	30	12	24	--
				30	30	30	30	--
				60	60	60	60	--

BxM18 Riverdale/Downtown

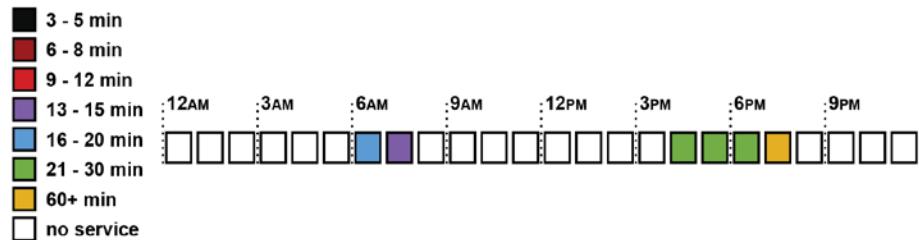


Route Type: Express

Avg. Stop Spacing: 3,565.1 ft

Description: Operates between White Plains Rd/241 St, Wakefield, and 23 St/Broadway, Manhattan, daily.

Weekday Frequency



Statistics

	Weekday	Saturday	Sunday			
	Value	Rank	Value	Rank	Value	Rank
Ridership & Productivity						
Daily Ridership	259	--	--	--	--	--
Riders per Revenue Hour	11.2	--	--	--	--	--
Riders per Trip	18.5	--	--	--	--	--
Reliability						
On-Time Perf. (%)	71.3	--	--	--	--	--
Wait Assessment* (%)	80.9	--	--	--	--	--
CJTP (%)	peak: 48.8	--	--	--	--	--
	off-peak: 71.6	--	--	--	--	--

*Ranking out of 46 bus routes. All other rankings out of 42 bus routes.

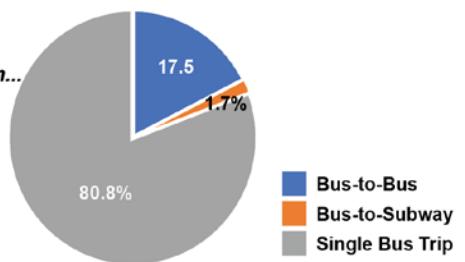
Transfers

Top Bus-to-Bus Transfers

BxM18 to... to BxM18 from...

1. Bx10
2. BxM11
3. BxM10
4. Bx7
5. BxM1

1. BxM7
2. BxM10
3. BxM3
4. Bx7
5. Bx10



Span of Service

	TOWARD BATTERY PL	TOWARD 261 ST	Avg. Frequency (min.)			
	AM	NOON	PM	EVE	NITE	
WEEKDAYS:	6:15AM-7:45AM	4:15AM-7:15PM	15	--	30	--
SATURDAYS:	--	--	--	--	--	--
SUNDAYS:	--	--	--	--	--	--

APPENDIX 3 – FALL PUBLIC WORKSHOPS SUMMARY

Bronx Bus Network Redesign Fall Public Workshops Summary (12/11/2018)

In April 2018, MTA New York City Transit (MTA) released The Bus Plan, detailing strategies to improve existing bus service and laying the foundation for borough-wide bus network redesigns. This message was expanded on in Fast Forward: The Plan to Modernize New York City Transit, released in May 2018. Together, these plans formed the framework for the Bronx Bus Network Redesign.

On August 15, 2018, Bronx Borough President Ruben Diaz, Jr. hosted a briefing for all Bronx elected officials. At this briefing, MTA NYCT President Andy Byford and MTA Bus Company President Darryl Irick, with support from MTA staff, presented the Bronx Bus Network Redesign project to the borough's elected representatives and fielded questions. The presentation was welcomed by the elected officials who attended and laid the foundation of our outreach strategy.

On September 6, 2018, MTA staff presented the Bronx Bus Network Redesign to a joint meeting of the Bronx Borough Board and District Service Cabinet. All Bronx Community Board Chairs and District Managers, as well as City Council staff in attendance received several posters of the workshops. A press release announcing the project and the workshops to the public was issued later that same day. Many tactics were used to promote the workshops, including:

- ◊ Emailing all Bronx elected officials and Community Boards an invitation to the workshops, the workshop poster in English and Spanish, and a request to share the workshops with their networks. Multiple emails were sent.
- ◊ Calling all Bronx elected officials and Community Boards to make sure the invitation to the workshop was received. Multiple calls were made to each office.
- ◊ Emailing the five leading transit advocacy groups in NYC, including all members of the Bus Turnaround Coalition, an invitation to the workshops, the workshop poster in English and Spanish, and a request to share the workshops with their networks.
- ◊ 3,000 posters were produced in English and an additional 3,000 in Spanish. 500 posters of each language were distributed to every bus depot in the Bronx to be posted inside buses.
- ◊ MTA social media shared the workshops information multiple times.
- ◊ The workshops were also shared across MTA digital assets, such as On the Go! Kiosks and other display panels.

The goal of the workshops was to provide Bronx residents and employees with the opportunity to offer their insight and expertise to help identify ways in which the bus network can be improved.

The workshops also introduced priorities and trade-offs and the choices that must be made when redesigning a bus network.

A total of six public workshops were held at the following locations with respective dates listed:

- ◊ Community Board 12 (9/20/18)
- ◊ Metropolitan College of New York (9/27/18)
- ◊ Monroe College – Kings Hall (10/3/18)
- ◊ RiverBay Corporation Co-Op City (10/9/18)
- ◊ NYC Health + Hospitals/Jacobi (10/15/18)
- ◊ Christ Church Riverdale (10/18/18)

There were roughly 450 total attendees and various elected officials and media outlets were present and observed at the workshops. The workshops were covered by several media outlets, including City Lab, Streetsblog NYC, New York State News, Mott Haven Herald, the Bronx Chronicle, and This is the Bronx.

Each workshop was two hours long, beginning at 6 PM and ending at 8 PM. They each started on a rolling arrival basis, with participants being assigned to a table as they arrived. Once a table was filled with six to eight participants, the exercises began.

Each table had an MTA facilitator and MTA or NYC DOT notetaker present. Facilitators were responsible for walking participants through each step of the workshop: greetings, origin and destinations blank map exercise, priorities exercise, and trade-offs exercise. Notetakers were responsible for recording responses from participants and noting important observations made. Each exercise provided space for participants to share their experiences with one another, personally prioritize what bus elements are most important to them, and decide between trade-offs.

For those participants that had more to say, they were directed to our survey table and provided with a tablet to immediately take our online survey. If they preferred, they were provided with a comment card which was collected and logged.

The following document provides a qualitative summary of what participants did during the workshops. Exercise 1 highlights travel patterns made by participants, the bus routes they regularly take, new routes they would like to see, and issues the experience on a regular basis. Exercises 2 and 3 highlight the top priorities shared by participants as well as how participants weighed in on key trade-offs they were asked to make.

Concurrently, MTA conducted an intercept and online survey in English and Spanish. 500 cards with the survey link were printed and distributed at meetings in the Bronx during September, October, November, and December, giving Bronxites another opportunity to weight in and share their opinions about Bronx bus service. The survey has also been shared by MTA social media. Survey results will be shared when available and be used to inform the new network.

Exercise 1 – Travel Patterns

Origins, Transfer & Destinations

The following tables show those origins, transfers, and destinations most commonly made among participants. Only those origins, transfers, and destinations with five or more trips being made are shown. The top origins were found in Co-Op City, followed by City Island and Hutchinson River Parkway. The top transfer was at the Pelham Bay Park 6 station and the Gun Hill Rd 5 station. The top destinations were the Pelham Bay Park 6 station, 23rd Street in Manhattan, Bay Plaza Shopping Center in Co-Op City, and Lower Manhattan

Origins	Trips
Dreiser Loop (Co-Op City)	60
Asch Loop (Co-Op City)	33
Bellamy Loop (Co-Op City)	25
City Island	24
Einstein Loop (Co-Op City)	20
Bay Plaza Shopping Center	10
Hutchinson River Pky	10
Carver Loop (Co-Op City)	9
Henry Hudson Pky (W 230 St - W 237 St)	9
The Hub (2, 5)	9
Metropolitan Av/Castle Hill Av	8
St Ann's Av (E 156 St - E 161 St)	8
182-183 Sts (B, D)	7
Baychester Av/Bartow Av	7
Erskine Pl/Earhart Ln	7
Fordham Rd (4)	7
Baychester Av/Donizetti Pl	6
Pelham Pky (2, 5)	6
Baychester Av (5)	5
E 143 St - St Mary's St (6)	5
E 149 St (6)	5
E 233 St & White Plains Rd	5
Fort Washington Av/Haven Av	5
Major Deegan Expy (Bruckner Expy - St Ann's Av)	5
S Broadway/Caryl Av (Yonkers)	5
White Plains Rd/E Tremont Av	5

Source: NYCT Operations Planning, November 2018

Table 1. Origins

Transfers	Trips
Pelham Bay Park (6)	59
Gun Hill Rd (5)	12
Gun Hill Rd (2, 5)	9
125 St (4, 5, 6)	7
231 St (1)	6
Pelham Pky (2, 5)	6
149 St - Grand Concourse (2, 4, 5)	5
The Hub (2, 5)	5

Source: NYCT Operations Planning, November 2018

Table 2. Transfers

Destinations	Trips
Pelham Bay Park (6)	22
23 St (Manhattan)	14
Bay Plaza Shopping Center	12
Lower Manhattan	12
125 St (4, 5, 6)	9
161 St Yankee Stadium (4, B, D)	9
The Hub (2, 5)	9
96 St (Q)	9
Fordham Plaza	9
Gunhill Rd (5)	9
Midtown Manhattan	8
Broadway (W 225 St - W 246 St)	7
Fordham Rd (B, D)	6
Norwood - 205 St (D)	6
149 St - Grand Concourse (2, 4, 5)	5
Bedford Park Blvd Lehman College (4)	5
Brooklyn	5

Source: NYCT Operations Planning, November 2018

Table 3. Destinations

Frequently Used Routes

The following tables show those routes identified by workshop participants as routes they frequently use for their daily commute. Some routes are accompanied by requests participants made to improve the service of a route.

Frequently Used Routes	Respective Requests
Bx1	Increase service, introduce articulated buses
Bx2	
Bx3	
Bx5	Increase service, extend service span
Bx6 SBS	
Bx7	
Bx8	
Bx9	Increase service, consider SBS conversion
Bx10	Increase service
Bx11	
Bx12 SBS	
Bx13	
Bx14	Restore service
Bx15	
Bx16	
Bx17	
Bx18	
Bx19	
Bx20	Increase service
Bx21	Increase service, improve stop spacing
Bx22	
Bx23	Increase service
Bx25	
Bx26	Improve speed, extend service span, increase service, restore previous routing
Bx27	Increase service
Bx28	Increase service, introduce Limited-Stop service
Bx29	Increase service, extend service span

Source: NYCT Operations Planning, November 2018

Frequently Used Routes	Respective Requests
Bx30	Improve speed, increase service
Bx31	Increase service
Bx32	
Bx35	
Bx36	
Bx38	
Bx39	Increase service, provide overnight service
Bx41 SBS	
Bx40/42	
BxM4	
BxM6	
BxM7	Extend service span, increase service
BxM9	
BxM10	
BxM11	
M3	
M15	
M23	
M60 SBS	
M100	
M101	
M116	
BL60	
BL61	
Q44 SBS	
Q50 Ltd	Increase service

Source: NYCT Operations Planning, November 2018

Table 4. Frequently Used Routes & Requests

New Route Suggestions

The following table lists suggestions participants shared for new routes and extensions of existing routes. In certain instances, a route suggestion may indicate a preference among participants to have a one-seat ride. Other suggestions indicate a possible need for more regional bus service between the Bronx and Queens, particularly to La Guardia and JFK airports.

New Route Suggestions	
From	To
233 St 2 5 Station (Wakefield)	Bay Plaza Shopping Center (Baychester)
W 231 St/Riverdale Ave (Kingsbridge)	Henry Hudson Pkwy/ W 246 St (Fieldston)
Broadway/W 262 St (North Riverdale)	Empire City Casino (Yonkers)
Randall Ave/Olmstead Ave (Castle Hill)	Soundview Ferry (Shorehaven)
Bailey Ave	
Boston Rd	
Bronx	Astoria (Queens)
Bronx	LaGuardia Airport
Bronx	Jamaica (Queens)
Bronx	JFK Airport
Bruckner Bl	
Co-Op City Shuttle	
Co-Op City	241 St 2 Station (Wakefield)
Co-Opy City	Brooklyn
Co-Opy City	Yonkers
East Bronx	West Bronx
South Bronx	Van Cortlandt Park (Woodlawn)
Throgs Neck	Harlem
Webster Av/Gun Hill Rd (Olinville)	Webster Av/233 St (Wakefield)

Source: NYCT Operations Planning, November 2018

Table 5. New Route Suggestions

Reoccurring Issues

Participants shared reoccurring issues that they experience during their daily commutes. Issue ranged from the passenger environment to service reliability to bus priority needs. Such issues offer insight when reimagining the bus network and prioritizing where investments should be made. The following table highlights the issues.

Reoccurring Issues	
Passenger environment	Unclean bus seats Improved lighting at stop Automated announcements on the bus
Reliability issues	Congestion Bus bunching Slow bus speeds Overcrowding More frequent service needed (all days) Real-time information displayed at bus stops
Enforcement/accountability	Fare evasion Bus lane enforcement (illegal double parking)
Bus priority needed (dedicated lanes, signal priority, boarding islands)	149 St Broadway Bruckner Expwy E Tremont Rd Grand Concourse Gun Hill Rd I-95 Pelham Pkwy (Stillwell Av - White Plains Rd) Westchester Square to Castle Hill White Plains Rd
Improved Connections	Improved connections to Soundview ferry service Better integration/coordination with Westchester BeeLine Improved east-west connections (more crosstown routes)
Transfers	Allow three-legged transfers

Source: NYCT Operations Planning, November 2018

Table 6. Reoccurring Issues

Exercise 2 - Priorities

In this exercise, participants were asked to imagine that they have a limited amount of resources to make improvements to their bus riding experience. They were asked to choose the top three elements that they wanted to invest resources in. Of the priorities presented to participants, frequent service, bus priority, real-time information, and bus stop amenities were the top categories.

Category	Total	Total (%)
Frequent Service	267	24%
Real-Time Information	144	13%
Bus Priority	140	13%
Bus Stop Amenities	132	12%
Service After 9 PM	98	9%
Weekend Service	92	8%
Rush-Hour Service	85	8%
Midday Service	54	5%
Comfort	47	4%
Technology Features	34	3%
	1,093	100%

Source: NYCT Operations Planning, November 2018

Table 7. Priorities

Exercise 3 - Trade-Offs

In this exercise, participants were asked to consider each element and choose one of the two. Each category was described to the participants and they were encouraged to choose that which was most important to them. With trade-offs, there was a nearly even split between coverage and frequency, as many participants stressed that frequency is preferred but that coverage provides a service for those traveling to/from less accessible areas. Most participants chose simple, direct routes over complex, indirect routes and chose fewer stops over more closely spaced stops. The table below shows the results.

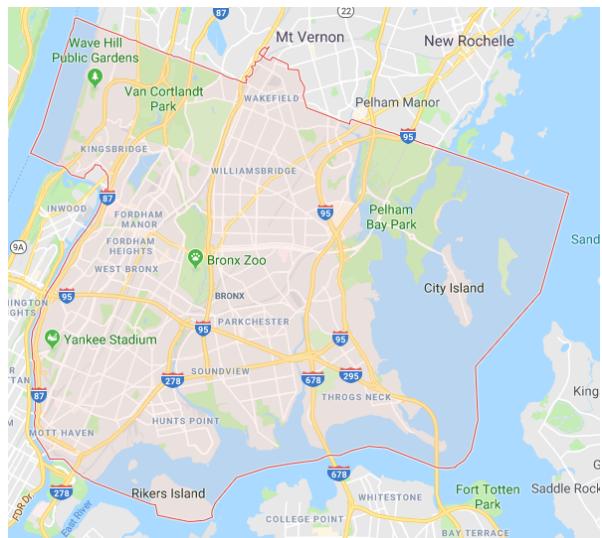
Category	Total	Total (%)
Frequency	188	55%
Coverage	153	45%
	341	100%
Simple, Direct	246	70%
Complex, Indirect	104	30%
	350	100%
Fewer Stops	222	63%
More Stops	130	37%
	352	100%

Source: NYCT Operations Planning, November 2018

Table 8. Trade-Offs

BRONX LOCAL TRAVEL INTERCEPT SURVEY

BRONX LOCAL TRAVEL INTERCEPT SURVEY



MARKET RESEARCH

PURPOSE

- ◊ New York City Transit Operations Planning seeks to learn about the perceptions of Bronx travelers regarding travel around the Bronx, with an emphasis on local public transit
- ◊ This survey's topics of interest include:
 - ◊ Disposition of Bronx residents towards public transit such as
 - ◊ Frequency of use of different travel modes, including local bus service, subway and express bus service
 - ◊ Likelihood of using public transit, for non-users
 - ◊ The value of different potential improvements in bus service in the Bronx
 - ◊ Identification of “difficult trips” by bus, avoided by Bronx travelers
 - ◊ Trip purpose and trip planning
 - ◊ Household size, automobile access and use
 - ◊ Where respondents live, by home zip code

METHODOLOGY

- ◊ Professional interviewers, under the supervision of NYC Transit Market Research, conducted face-to-face interviews in twelve (12) Bronx neighborhoods in fall, 2018, listed on the table on the following page. The questionnaire is included in the report appendix
 - ◊ All 12 areas were surveyed one weekday, from 7AM to 1PM
 - ◊ Fordham and Co-Op City/Baychester were also surveyed one Saturday, from 10AM to 4PM
- ◊ The interviewers completed nearly 2,000 surveys across the zones
 - ◊ Partial data was collected in over 2,900 interviews
- ◊ Overall results are statistically valid for each survey in each zone
 - ◊ Some specific questions which applied only to small subsets of the survey population had a small base size
 - ◊ These exceptions are noted in the charts, or have been consolidated into borough-wide results in the Overview
- ◊ This report summarizes the survey results

		Customer Surveys	
Neighborhood	Location	Partial Data	Completed
Co-Op City/Baychester	Bartow Av/Co-Op City Blvd.; Bay Plaza Shopping Center	379	297
Fordham Plaza	Fordham Plaza/3rd Av/Fordham Road	387	276
Gun Hill	Gun Hill Rd/White Plains Rd	212	144
Hudson Heights	W 181st St/Broadway - Wadsworth Av	174	86
Kingsbridge	Broadway/ W 231st St	241	161
Melrose	E 149th St/3rd Av	223	142
Pelham Bay	Pelham Bay Station/Westchester Av; Pelham Bay Park	235	136
Mott Haven	E 138th St/Lincoln Av	229	158
Norwood	W 206th St/Bainbridge Av	235	161
Riverdale	W 242nd St/Manhattan College Pky; Manhattan College	197	149
West Farms	West Farms Square	244	151
Westchester Square	Westchester Av/E Tremont Av	165	136

OVERVIEW OF FINDINGS

- ◊ Use of public transit
 - ◊ In terms of frequency of use, Bronx intercept respondents most often choose transit
 - ◊ Consistently, local bus service is the leading mode of transportation for travel within the Bronx, used more than three days per week
 - ◊ For trips ending outside the Bronx, bus and subway service are the most frequently used modes, with subway occasionally leading local bus, used for at least part of trips out of the Bronx
 - ◊ While the proportion of local bus users connecting to another mode to leave the Bronx varies by location, the top destination is Manhattan

OVERVIEW OF FINDINGS

- ◊ Disposition towards public transit by non-users
- ◊ Only a small minority of respondents at each location “never” use local bus service to travel around the Bronx
 - ◊ Consolidated data across all Bronx locations indicate a majority would, with improvements, consider taking local bus service at least occasionally
- ◊ Similarly aggregated results show a majority of respondents that “never” use local bus service to travel outside the Bronx would, with improvements, consider taking local bus service
 - ◊ This is also true for respondents who “never” use express bus service to leave the Bronx
- ◊ These results are detailed in the following three charts

OVERVIEW OF FINDINGS

Which of the following statements best captures how you feel about taking local buses in the Bronx?

Asked of respondents who "never" take local bus around the Bronx

All locations combined - 221 respondents

I will never consider taking local bus in the Bronx, no matter what improvements are made.

30%

With improvements I would consider taking local bus in the Bronx at least occasionally.

70%

Percentage of respondents

OVERVIEW OF FINDINGS

Which of the following statements best captures how you feel about taking local bus to destinations outside the Bronx?

Asked of respondents who "never" take local bus outside the Bronx

All locations combined - 1154 respondents

I will never consider taking local buses to reach destinations outside the Bronx, no matter what improvements are made.

45%

With improvements I would consider taking local buses to reach destinations outside the Bronx at least occasionally.

55%

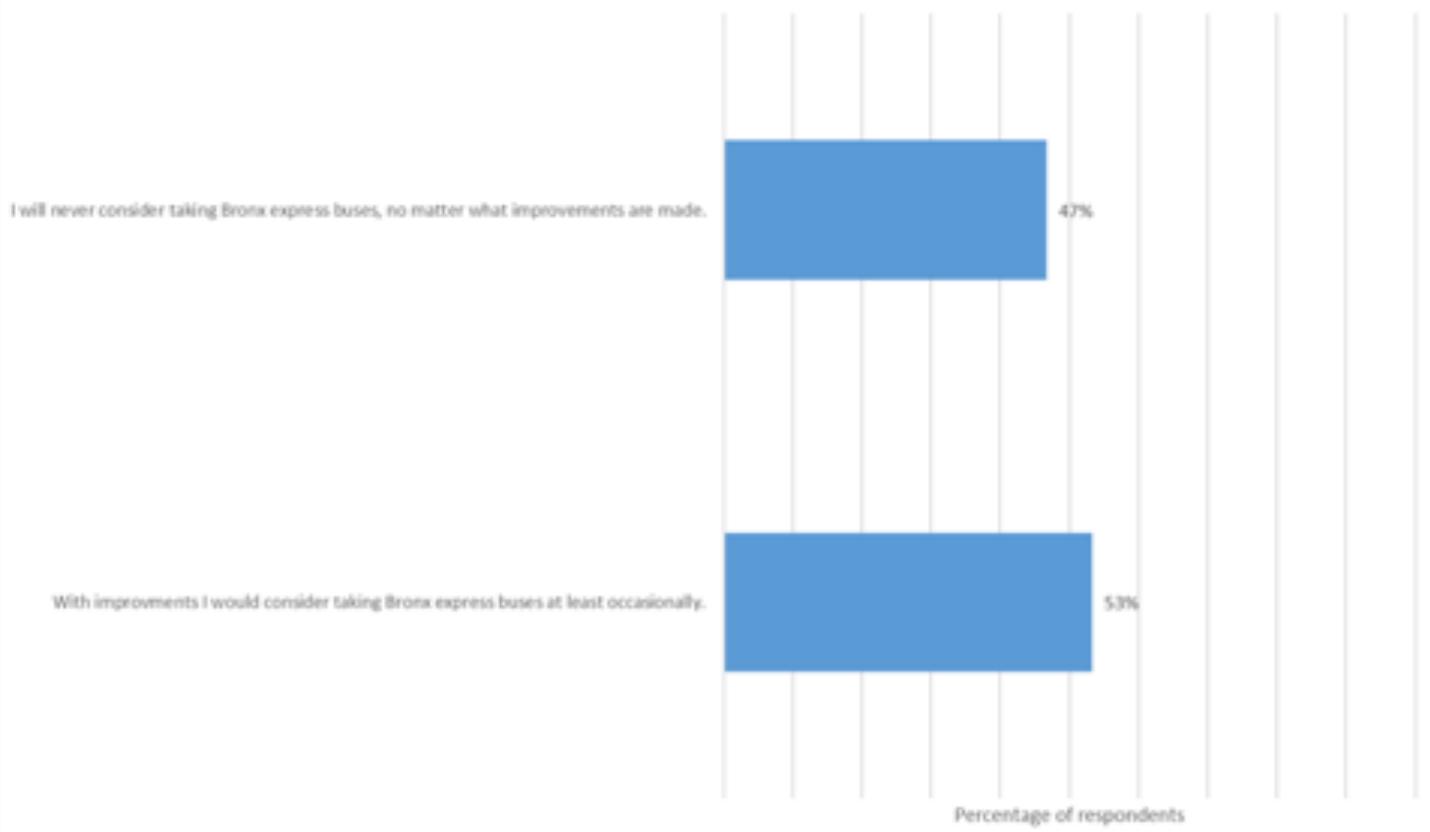
Percentage of respondents

OVERVIEW OF FINDINGS

Which of the following statements best captures how you feel about taking express buses to destinations outside the Bronx?

Asked of respondents who "never" take express bus to destinations outside the Bronx

All locations combined - 1779 respondents



OVERVIEW OF FINDINGS

- ◊ Across all locations, the top three aspects of bus travel most important to the respondents' experience were:
 - ◊ Arriving on-time
 - ◊ Getting to my destination quickly
 - ◊ Knowing when the bus is coming
- ◊ When asked for additional ideas to improve bus service in the Bronx, three ideas were uniformly mentioned:
 - ◊ Better on-time performance at bus stops
 - ◊ Better on-time performance at bus stops
 - ◊ More Frequent service

OVERVIEW OF FINDINGS

- ◊ Identification of “difficult trips” by bus avoided by Bronx travelers:
 - ◊ Respondents described close to 300 specific itineraries that they consider “difficult” to make by bus service; each of these is itemized in this report. As for why they are difficult, the leading reasons were:
 - ◊ Takes too much time -- too slow
 - ◊ Service is unreliable
 - ◊ Too many transfers
 - ◊ Not enough service
 - ◊ An interesting side note: 40 respondents mentioned difficulty traveling to or from the different campuses of Montefiore Hospital, and another 10 cited difficulty travelling between Montefiore facilities, particularly the Hutchinson Metro Center.

OVERVIEW OF FINDINGS

◊ Trip purpose

◊ On weekdays, the top three trip purposes are:

- ◊ Going to or from work
- ◊ Shopping or dining
- ◊ Personal or business errands

◊ On weekends, the top three purposes are:

- ◊ Shopping or dining
- ◊ Personal or business errands
- ◊ Going to or from work

◊ Trip planning

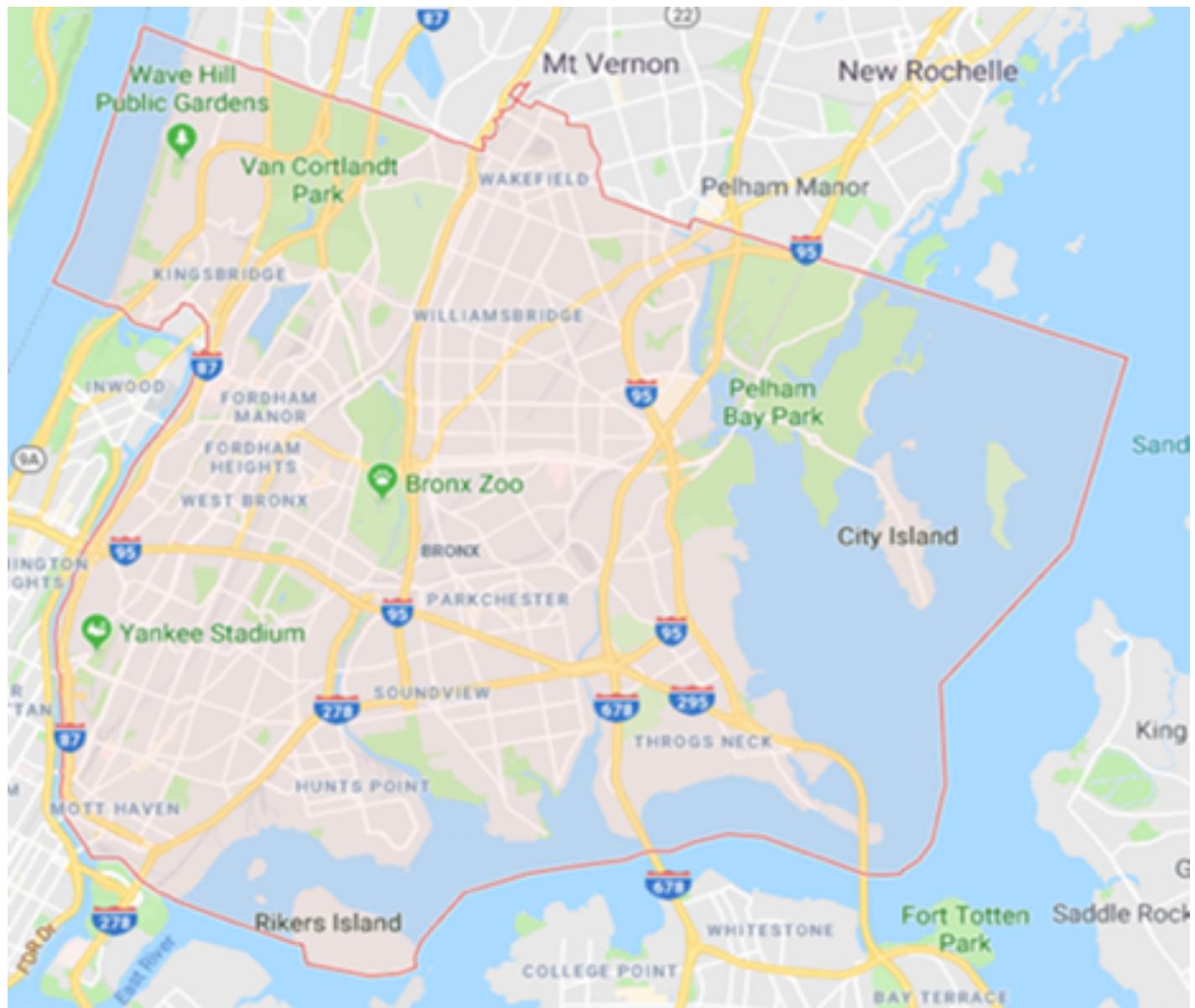
◊ Excluding memory (i.e., previous knowledge) the three most popular trip planning tools are:

- ◊ Google Maps or other third party app
- ◊ MYmta app
- ◊ BusTime

OVERVIEW OF FINDINGS

- ◊ Household size is predominantly the two-adult household
- ◊ Automobile access and use:
 - ◊ At 10 of 12 locations, a minority of respondents own, or have access to, an automobile
 - ◊ The exceptions were Co-Op City/Baychester (55% of weekend respondents) and Riverdale (59%)
 - ◊ For those that do, the leading trip purpose is recreation
- ◊ Where respondents live:
 - ◊ Most respondents live nearby the survey locations; often a majority of respondents live in the zip codes in which the survey is conducted, or in immediately adjacent zip codes)
- ◊ Detailed findings for each of the 12 zones are contained in individual sections of this report

BRONX INTERCEPT FINDINGS



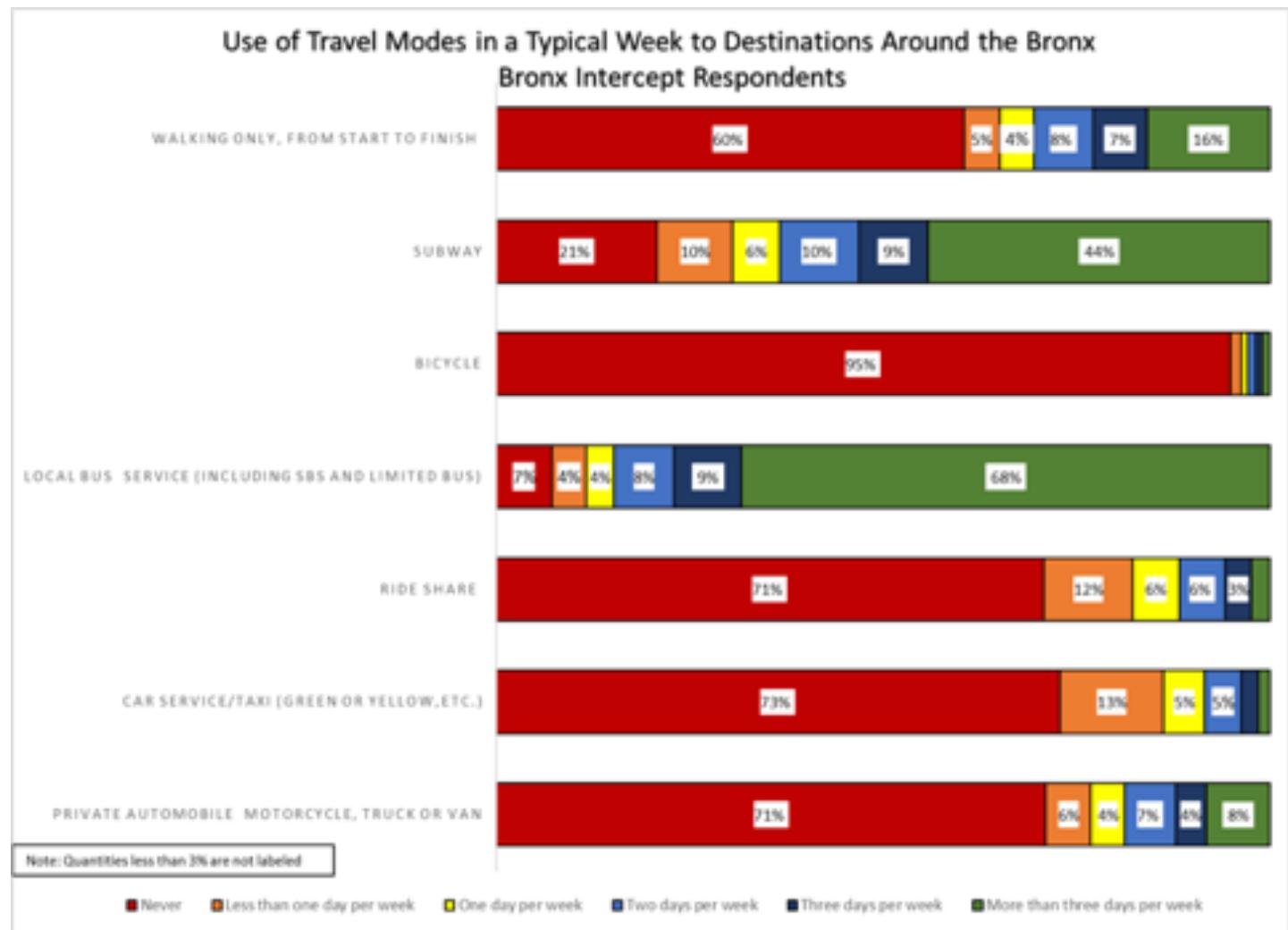
BRONX INTERCEPT FINDINGS

- ◊ The findings in this section describe consolidated weekday data from all 12 Bronx intercept locations
- ◊ At Weekend findings are shown in the two locations surveyed on a Saturday: Co-Op City/Baychester, and Fordham Plaza
 - ◊ The exceptions were Co-Op City/Baychester (55% of weekend respondents) and Riverdale (59%)

◊ **Use of public transit**

- ◊ The leading travel mode among Bronx intercept respondents to travel around the Bronx is local bus service, used more than three days per week by 68% of those surveyed
 - ◊ A small minority say they “never” use local bus service: 7% of respondents
- ◊ 21% of Bronx intercept respondents “never” use the subway. 44% of the respondents use the subway more than three days per week for travel around the Bronx

BRONX INTERCEPT FINDINGS



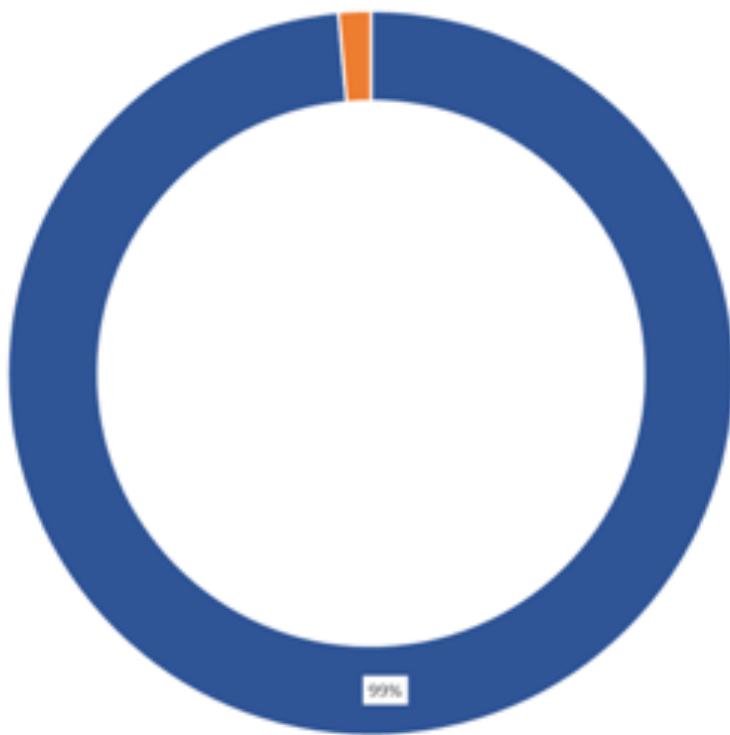
BRONX INTERCEPT FINDINGS

◊ Use of public transit (continued)

- ◊ When traveling by bus around the Bronx, nearly all intercept respondents use NYC Transit local bus; just 1% mention Bee Line, which permits intra-Bronx travel in a very few instances
- ◊ The top local bus routes cited by Bronx intercept respondents for travel around the Bronx are: Bx12 (12%), Bx9 and Bx21 (7% each), Bx41 (6%)

BRONX INTERCEPT FINDINGS

Types of Bus Service Used to Travel Around the Bronx
Bronx Intercept Respondents



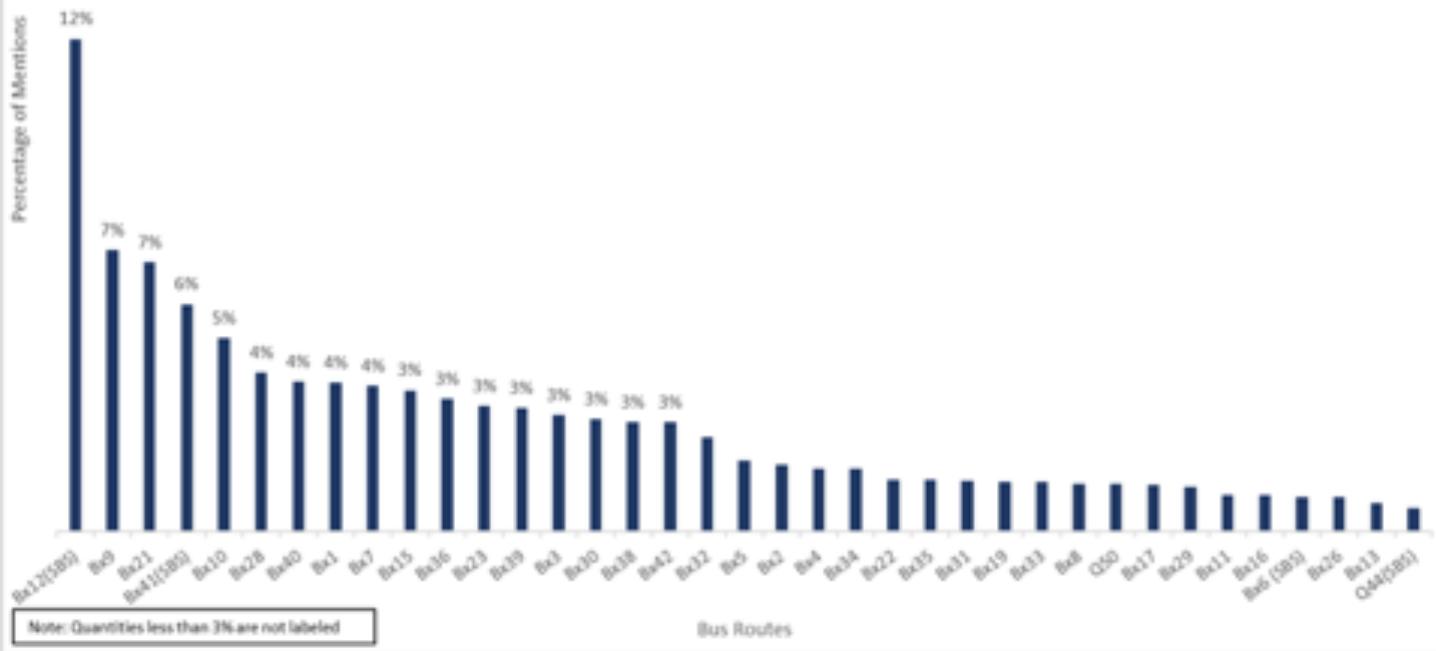
Note: Quantities less than 1% are not labeled

■ Local Bus ■ Bee Line

BRONX INTERCEPT FINDINGS

Bus Routes Used to Travel Around the Bronx

Bronx Intercept Respondents: 2,827 Mentions



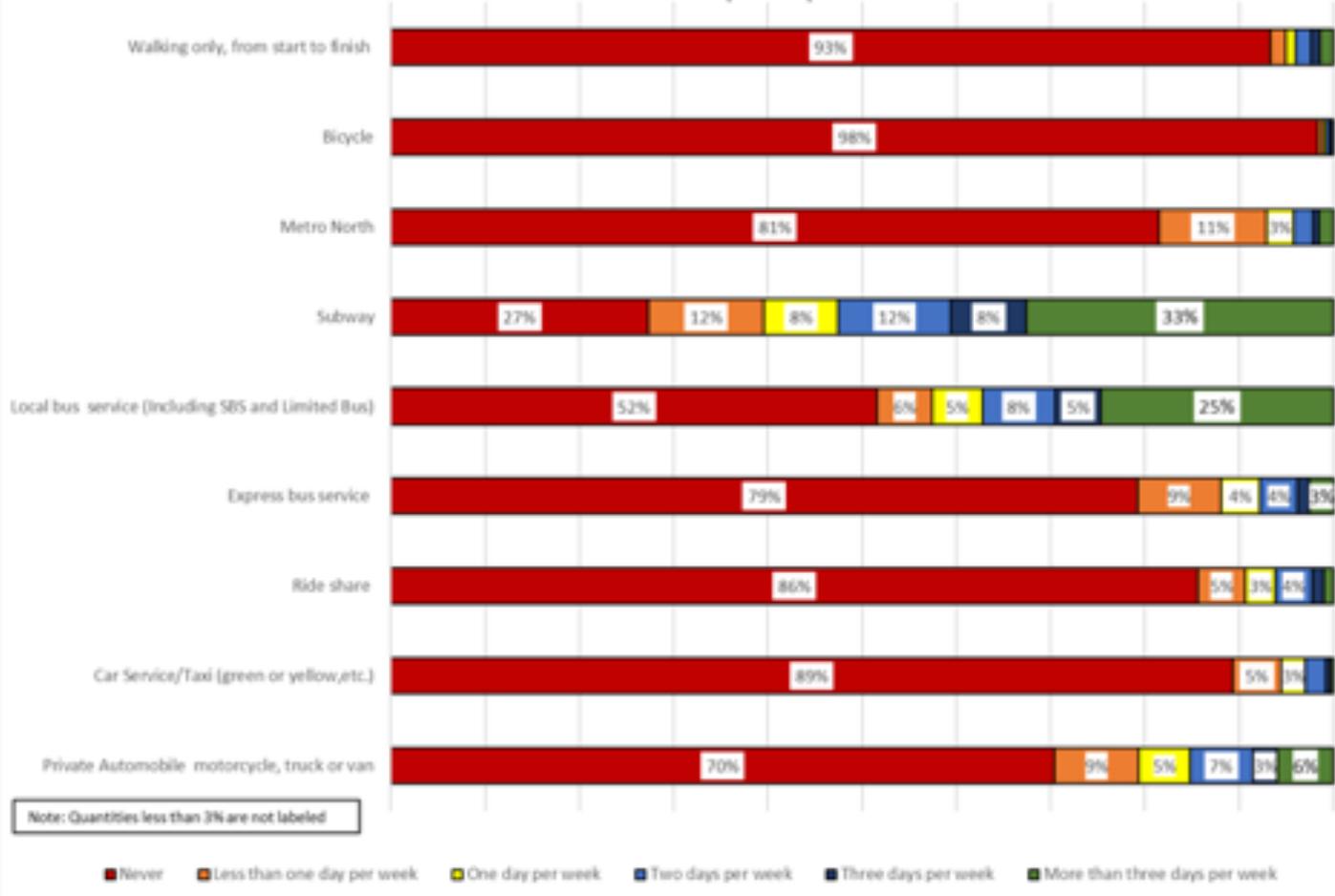
BRONX INTERCEPT FINDINGS

◇ Use of public transit (continued)

- ◇ When traveling outside the Bronx, the leading travel mode among Bronx intercept respondents is the subway, used more than three days per week by a plurality (33%) of those surveyed
- ◇ 25% of intercept respondents use local bus service for at least part of a trip to leave the Bronx more than three days per week
- ◇ Under 3% of Bronx intercept respondents use express bus or Metro North service to travel to destinations outside the Bronx more than three days per week

BRONX INTERCEPT FINDINGS

Use Of Travel Modes In a Typical Week to Destinations Outside the Bronx
Bronx Intercept Respondents



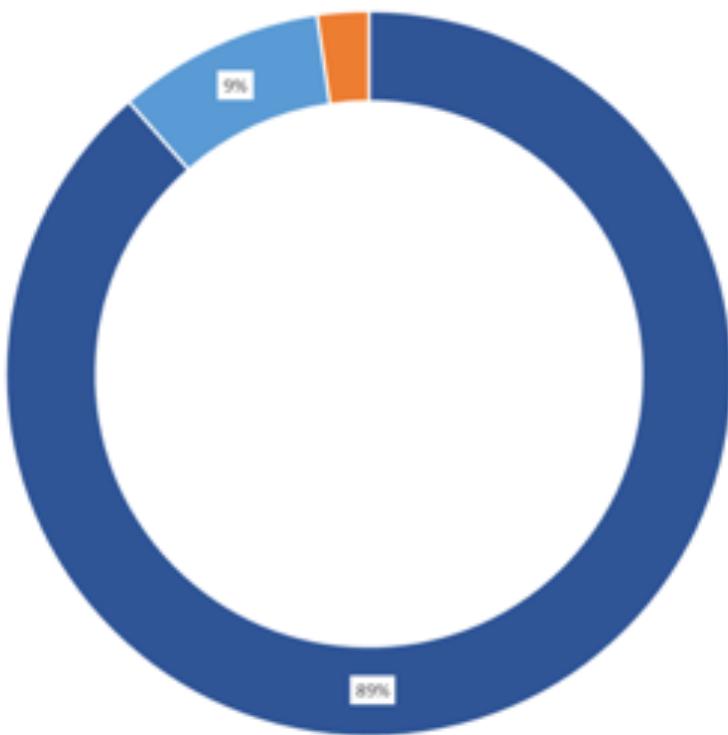
BRONX INTERCEPT FINDINGS

◇ Use of public transit (continued)

- ◇ When traveling by bus to destinations outside the Bronx, the majority of Bronx intercept respondents (89%) use NYC Transit local bus service for at least part of the trip; 9% use express bus service; 2% mention Bee Line
- ◇ The top bus routes for intercept respondents for at least part of travel ending outside the Bronx are: Bx12 (11%), Bx21 (7%), Bx15 (6%), Bx9 (5%) and Bx 38 (4%)

BRONX INTERCEPT FINDINGS

Types of Bus Service Used to Travel Outside the Bronx
Bronx Intercept Respondents

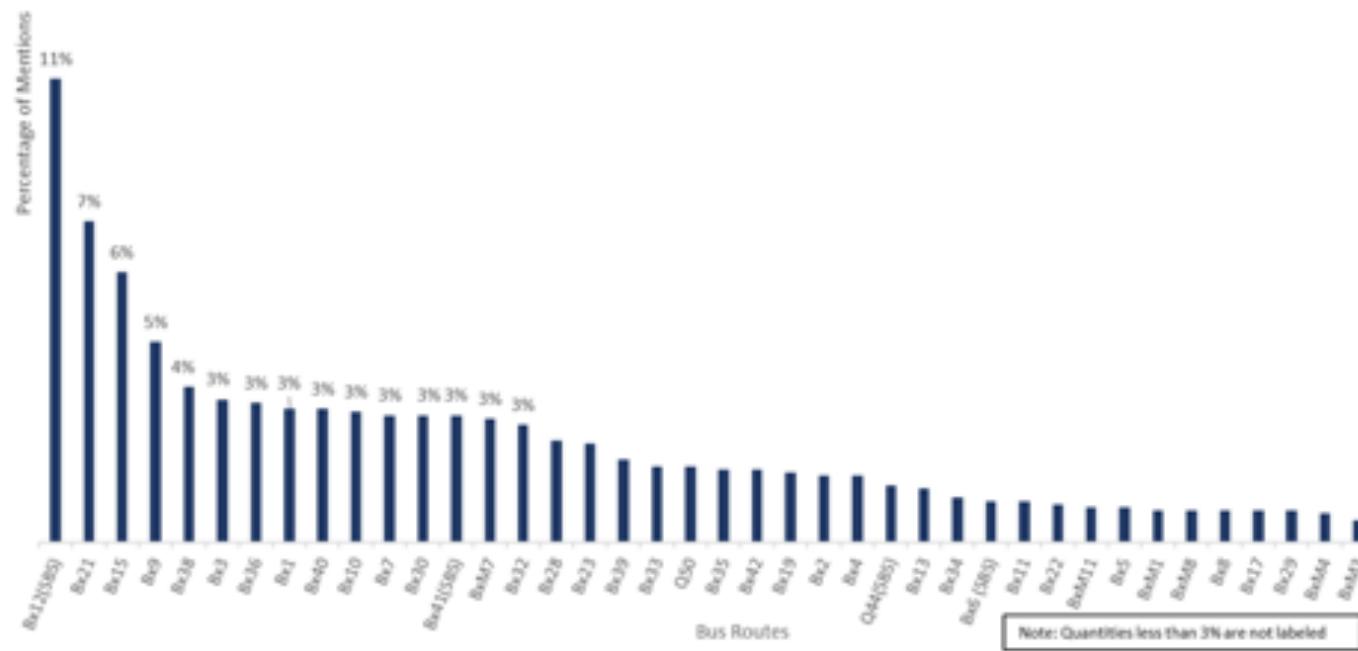


Note: Quantities less than 3% are not labeled

■ Local Bus ■ Express Bus ■ Bee Line

BRONX INTERCEPT FINDINGS

Bus Routes Used for At Least Part of Trips Ending Outside the Bronx
Bronx Intercept Respondents: 1,350 Mentions



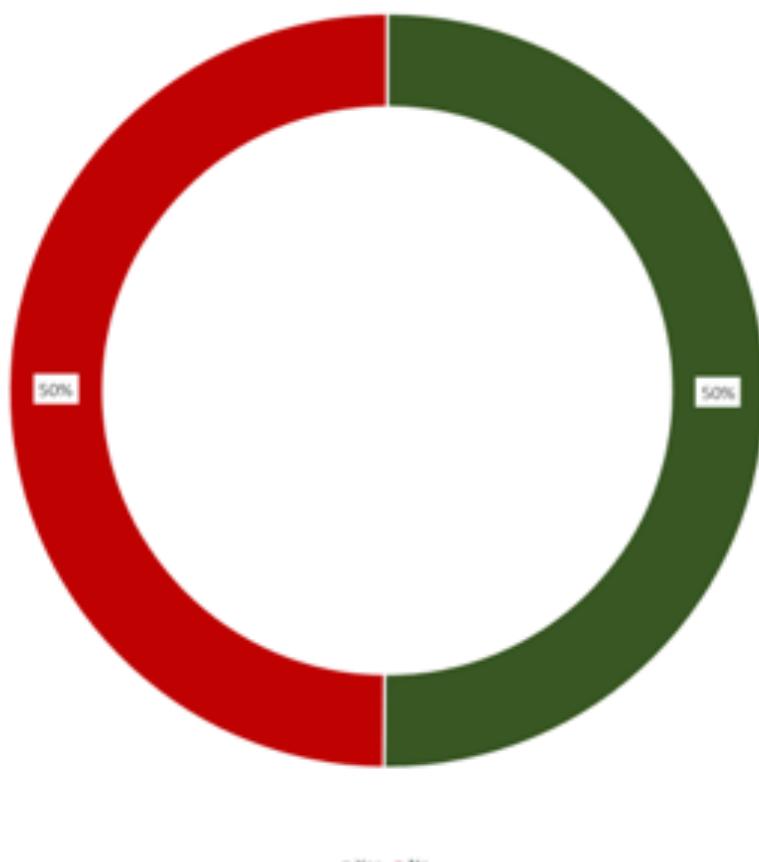
BRONX INTERCEPT FINDINGS

◊ Use of public transit (continued)

- ◊ When traveling by bus to destinations outside the Bronx, 50% of intercept respondents connect to another travel mode
 - ◊ The leading connecting mode is subway (82%)
- ◊ The most frequently cited final destination outside the Bronx is Manhattan

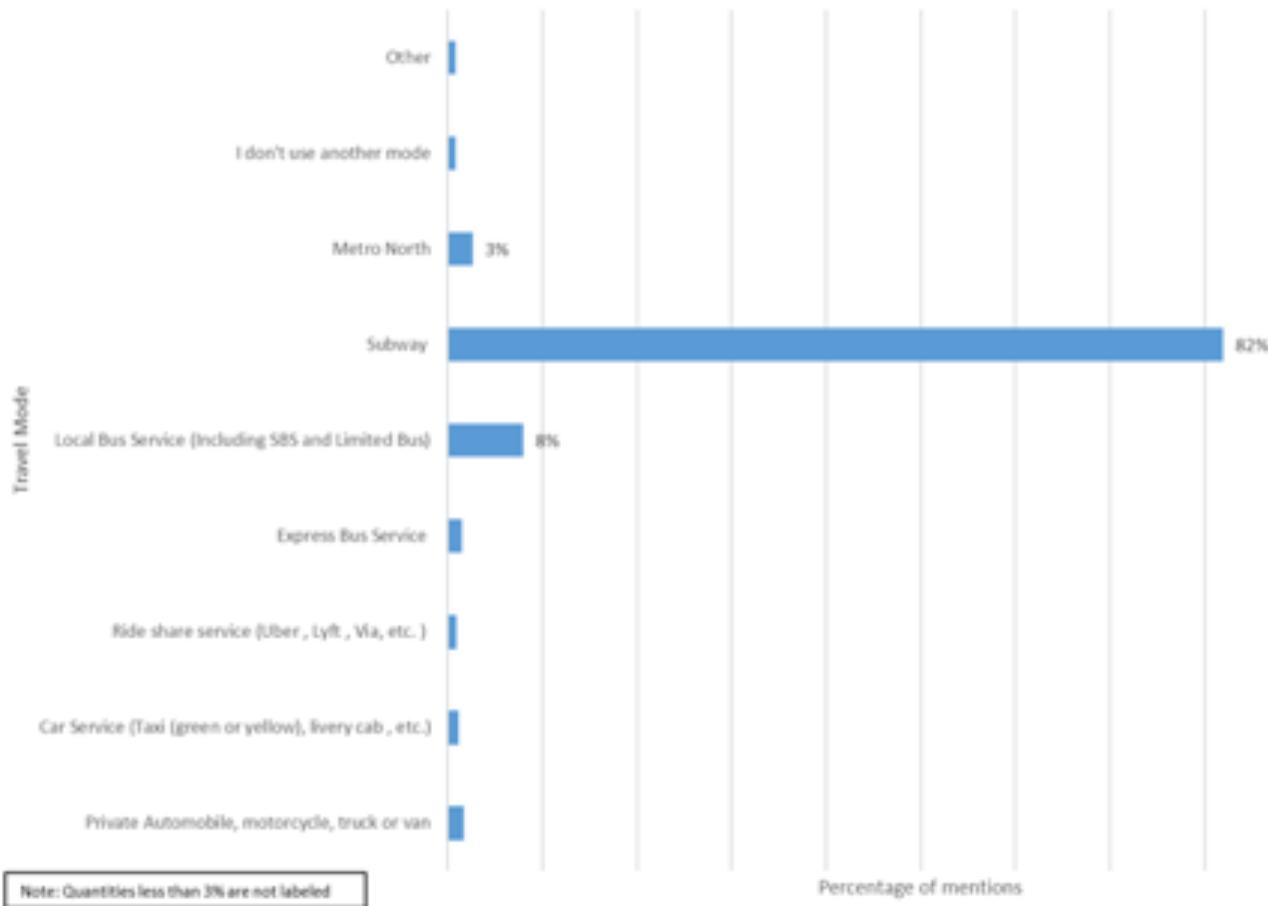
BRONX INTERCEPT FINDINGS

Use of the Bus in Combination with Some Other Mode to Leave the Bronx
Bronx Intercept Respondents



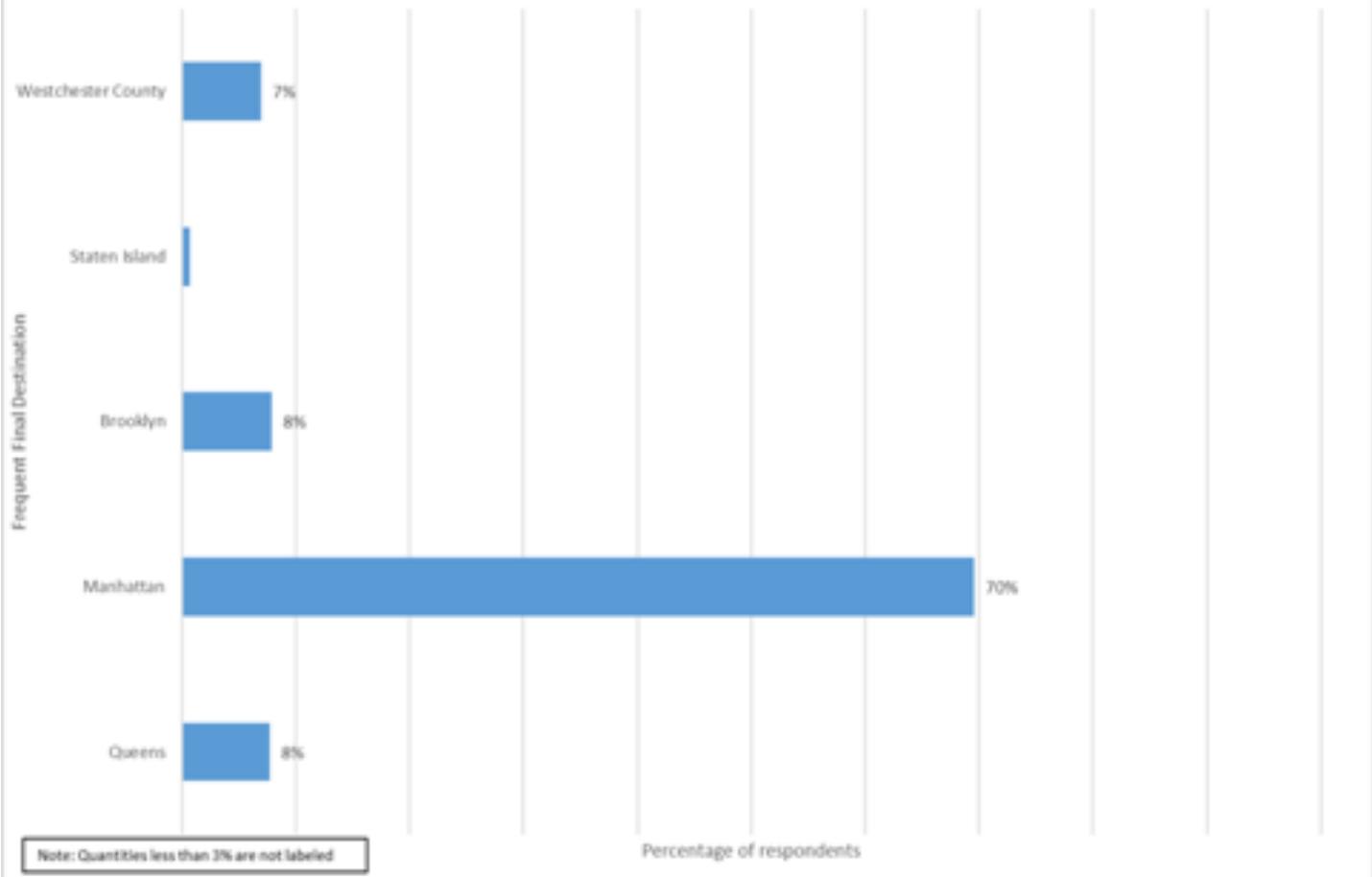
BRONX INTERCEPT FINDINGS

Other Travel Mode in Combination with the Bus Used to Leave the Bronx
Bronx Intercept Respondents: 643 Mentions



BRONX INTERCEPT FINDINGS

Most Frequent Final Destination When Traveling Outside the Bronx
Bronx Intercept Respondents: 1,905 respondents



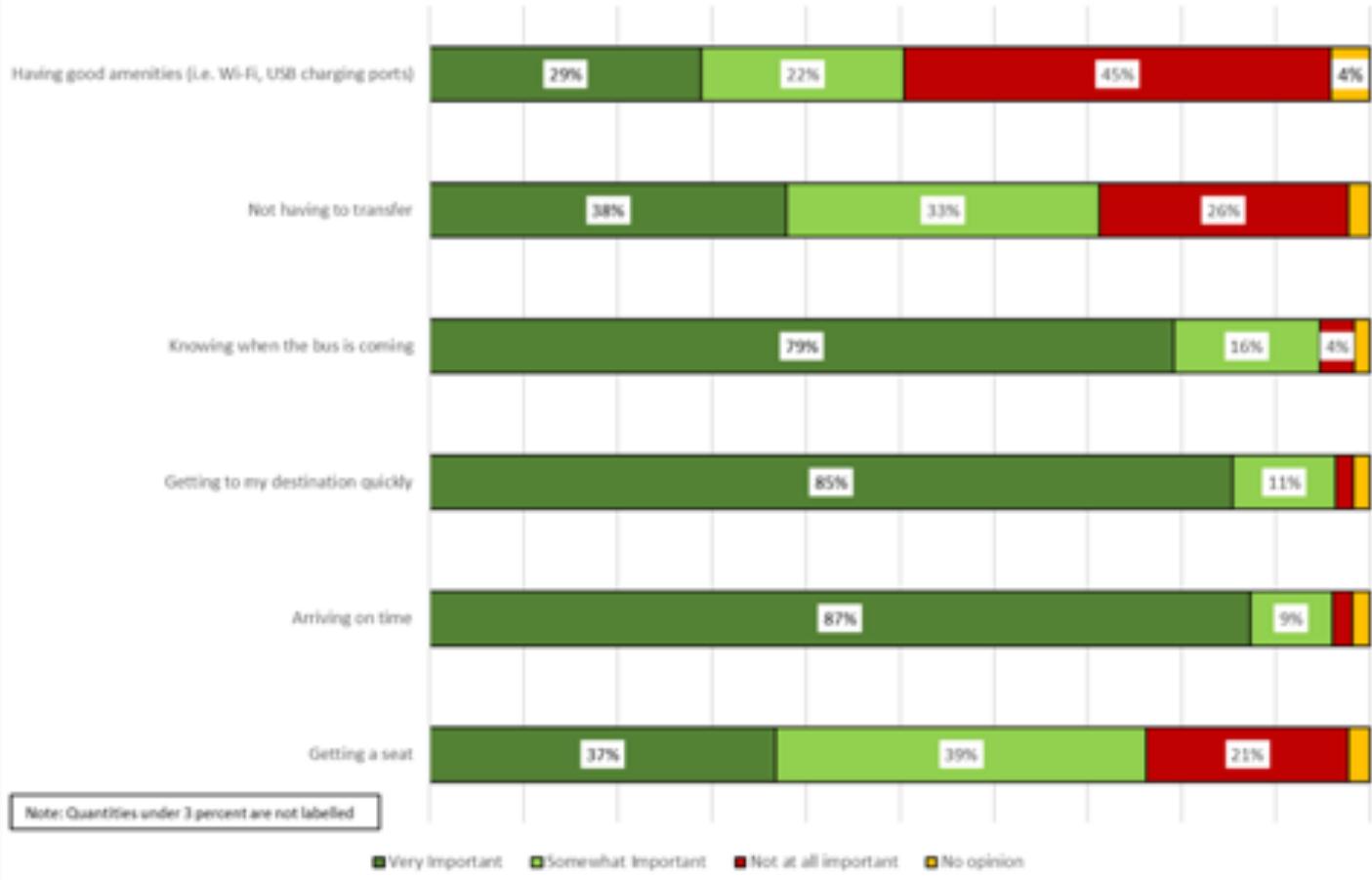
BRONX INTERCEPT FINDINGS

◇ Disposition towards public transit

- ◇ When asked which aspects of bus travel were most important to the experience, the top three were:
 - ◇ Getting to my destination quickly
 - ◇ Arriving on-time
 - ◇ Knowing when the bus is coming

BRONX INTERCEPT FINDINGS

Importance to Experience of Traveling by Bus
Bronx Intercept Respondents



BRONX INTERCEPT FINDINGS

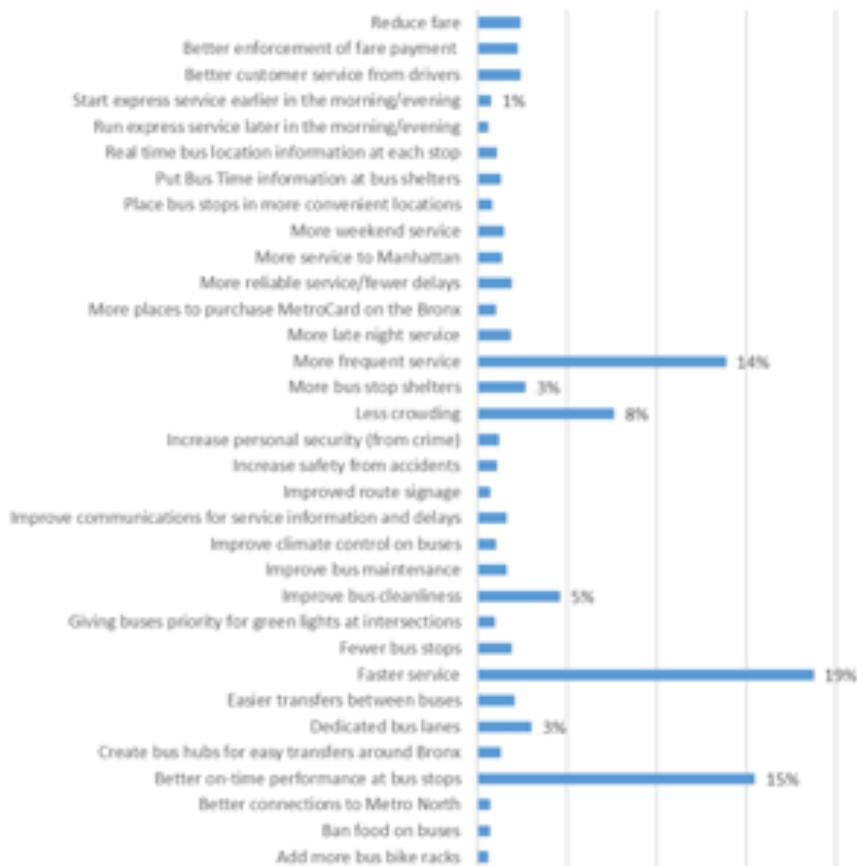
◊ Disposition towards public transit (continued)

- ◊ When asked to volunteer additional ideas to improve bus service in the Bronx, the top three mentions were:
 - ◊ Faster service
 - ◊ Better on-time performance at bus stops
 - ◊ More frequent service
- ◊ The full roster of other ideas to improve Bronx bus service and their response rates is contained in the following chart

BRONX INTERCEPT FINDINGS

Ideas for Improving Bus Service in The Bronx

Bronx Intercept Responses: 2,455 mentions



Note: Quantities under 3 percent are not labelled

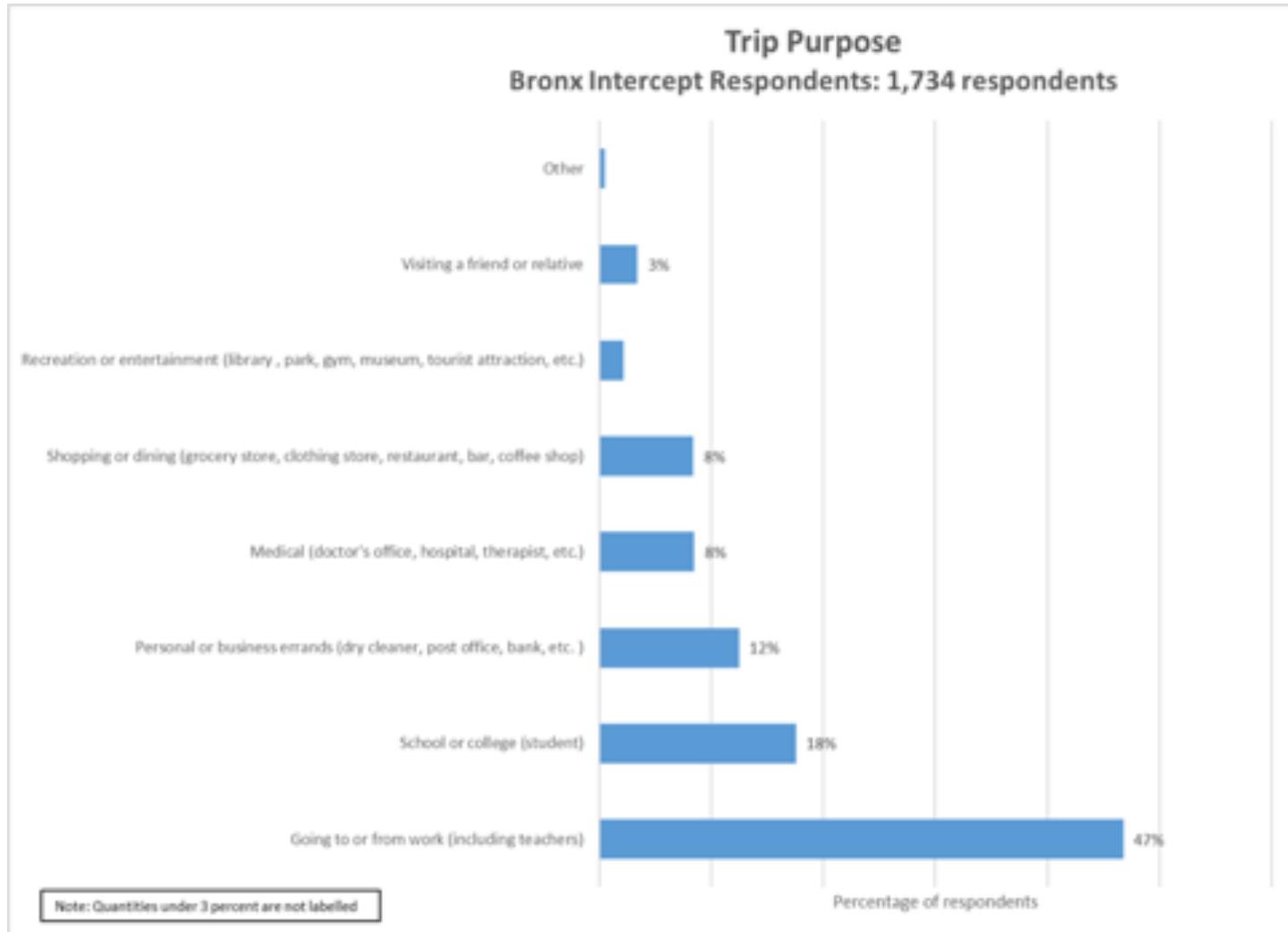
BRONX INTERCEPT FINDINGS

◊ Trip purpose

◊ The top three trip purposes are:

- ◊ Work
- ◊ School or college
- ◊ Personal or business errands

BRONX INTERCEPT FINDINGS

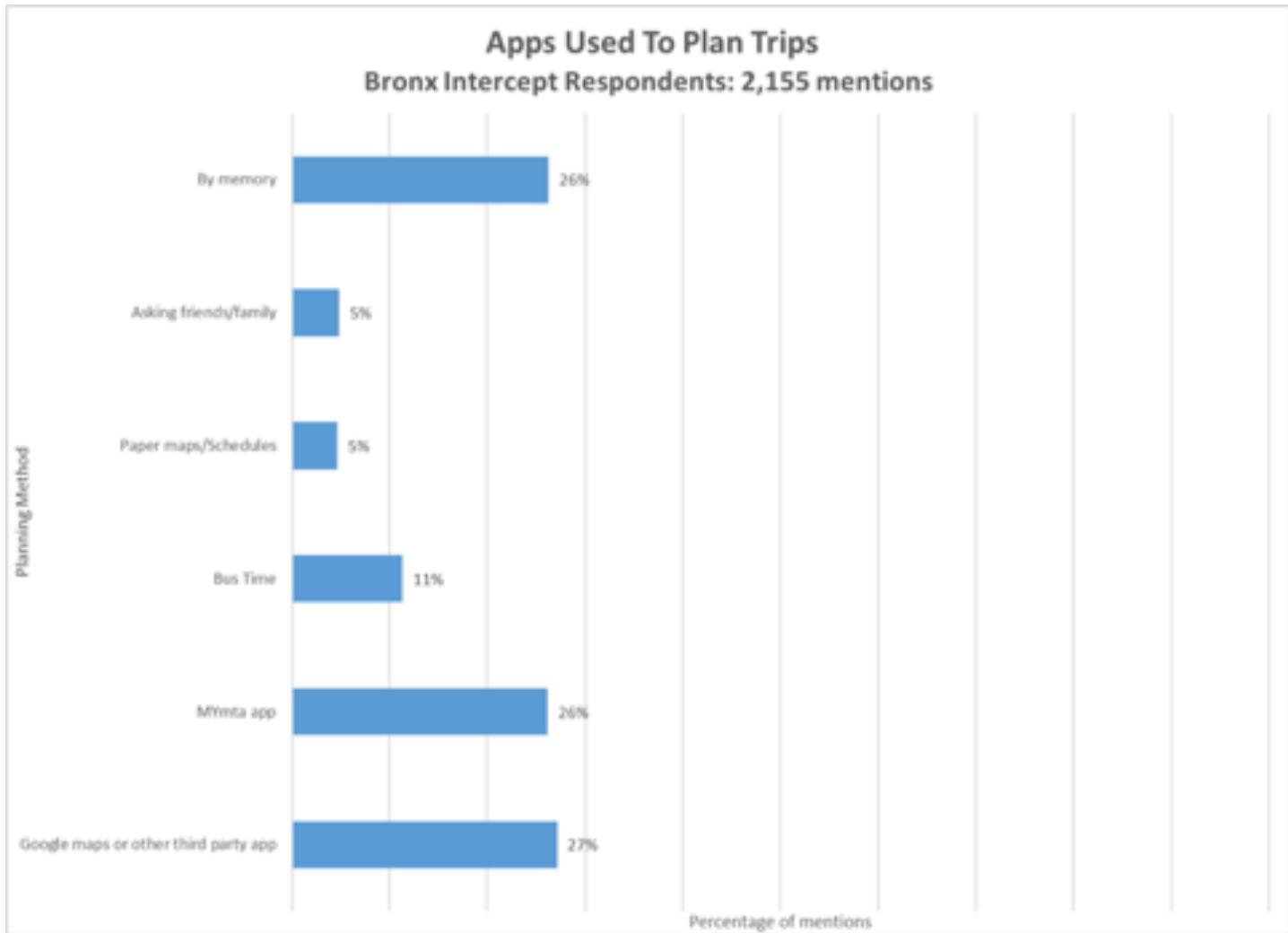


BRONX INTERCEPT FINDINGS

◊ Trip planning

- ◊ Excluding memory (i.e., previous knowledge) the three most popular trip planning tools are:
 - ◊ Google Maps or other third party apps
 - ◊ MYmta app
 - ◊ Bus Time

BRONX INTERCEPT FINDINGS



BRONX INTERCEPT FINDINGS

◇ Automobile access and use

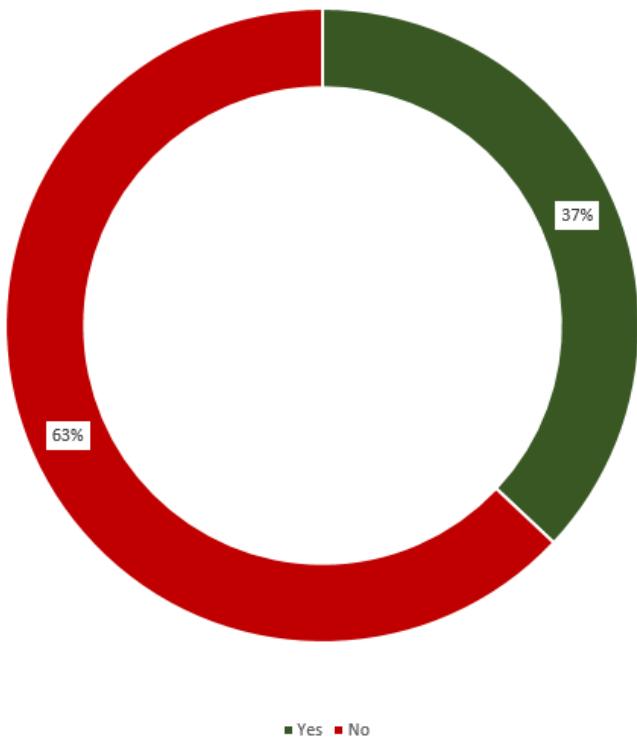
- ◇ 37% of intercept respondents either own or have access to an automobile
- ◇ For these respondents, the leading purpose to use an automobile is recreation
 - ◇ Trips with large or heavy items is the second most frequently cited purpose
 - ◇ Remaining trips were evenly distributed
 - ◇ Work trips
 - ◇ Accompanying individuals who are less able to use public transit
 - ◇ Trips not easily transit-accessible

BRONX INTERCEPT FINDINGS

Access to an Automobile

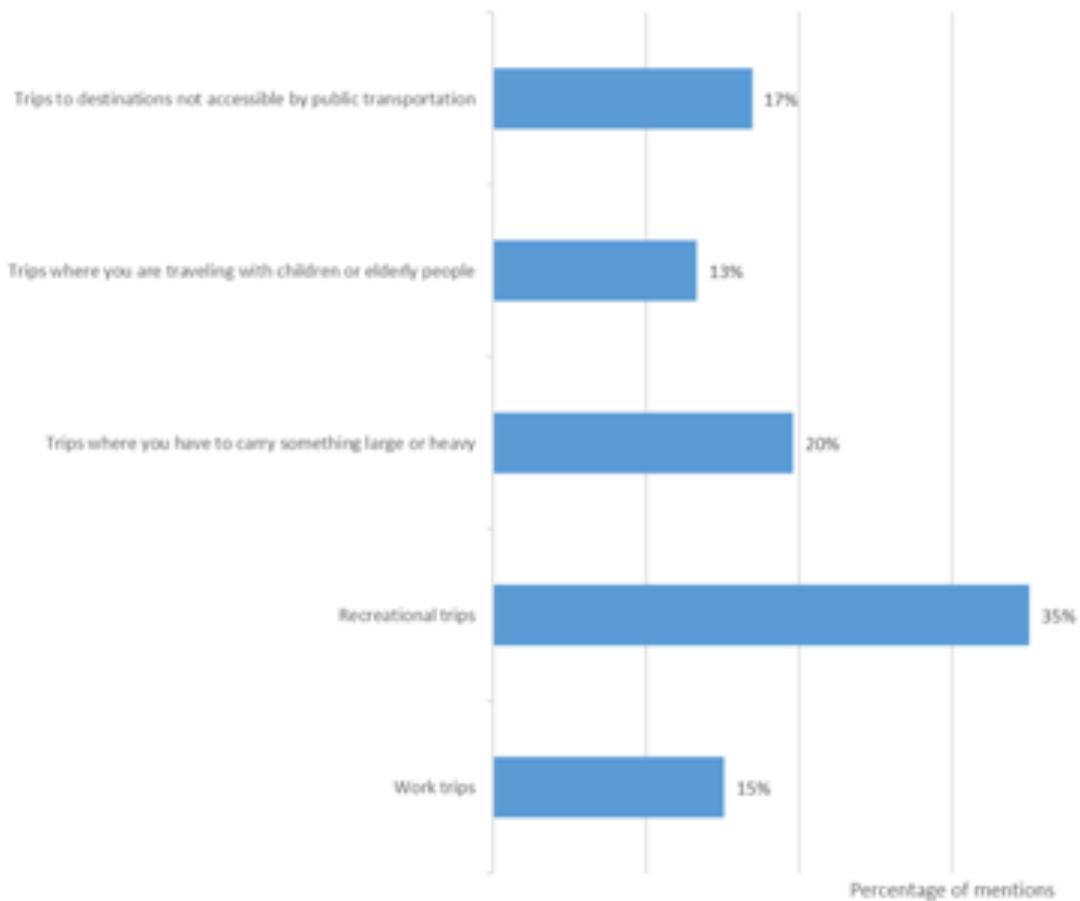
Do you or someone in your household own a car or have access to a car that you can use for trips (personal car, car share membership, etc.)?

Bronx Intercept Respondents



BRONX INTERCEPT FINDINGS

Automobile Trip Purpose Bronx Intercept Respondents: 1,560 mentions

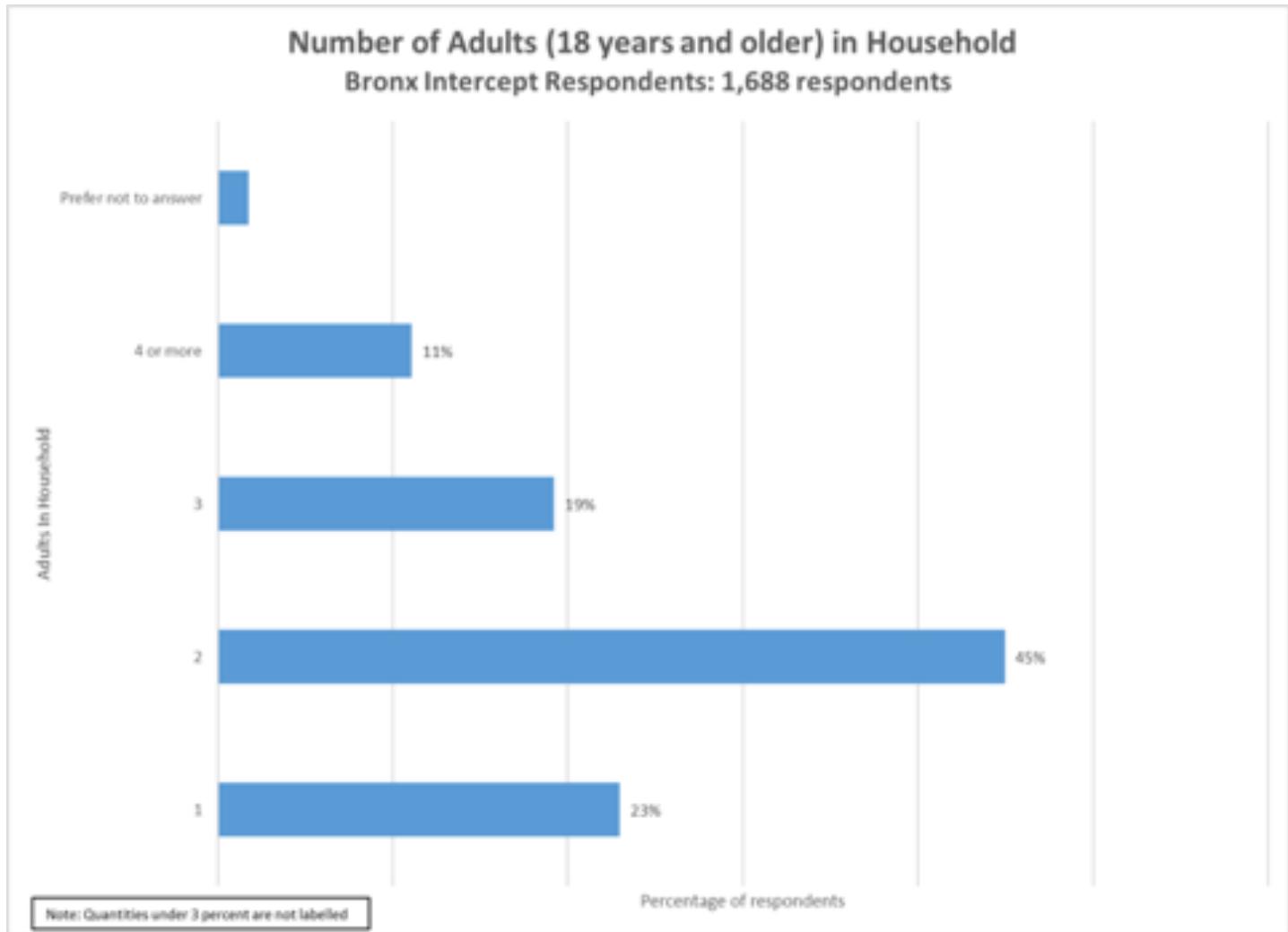


BRONX INTERCEPT FINDINGS

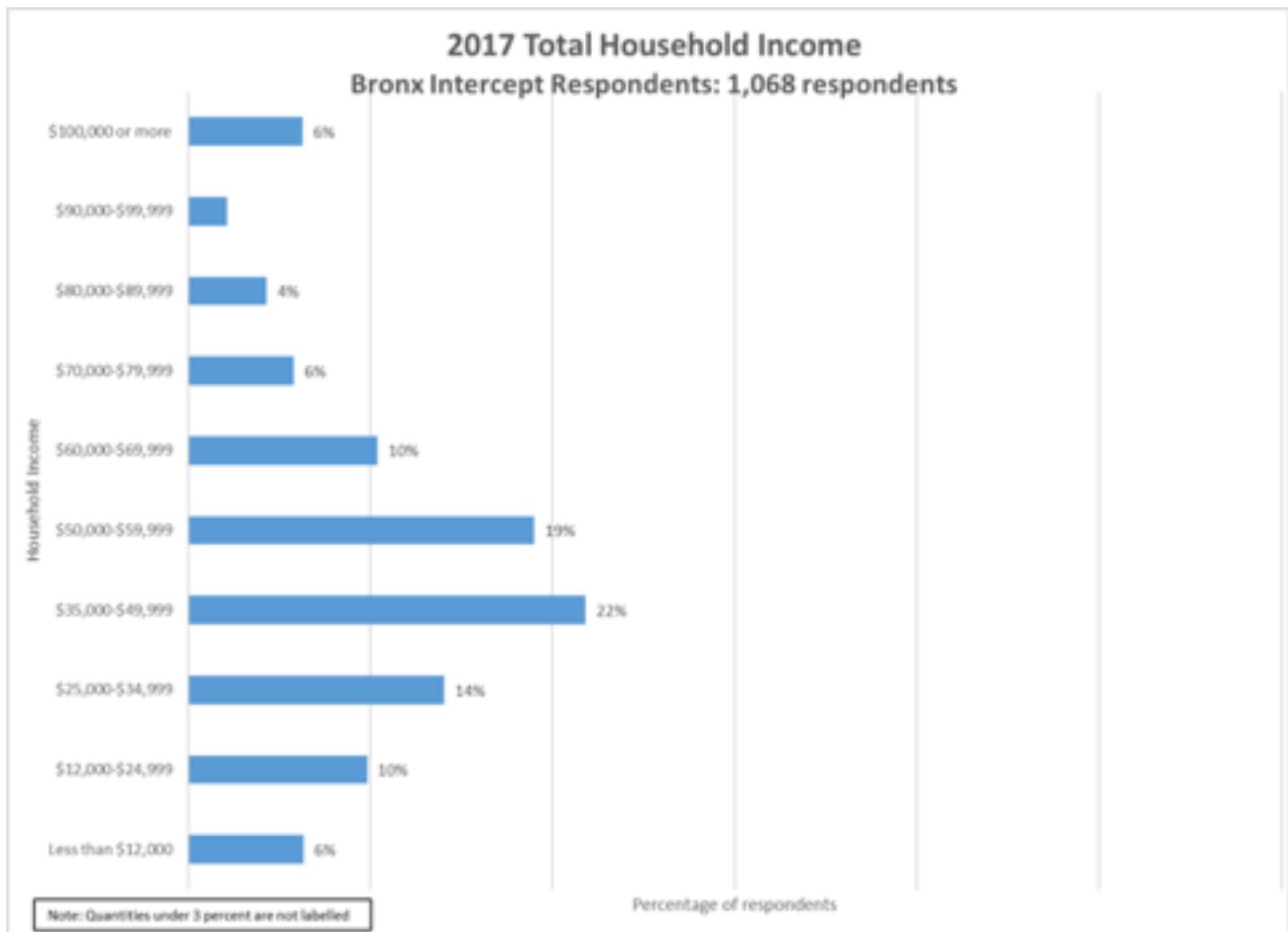
◇ Demographics

- ◇ The leading cohort is the 2-adult household, with 45% among Bronx intercept respondents
- ◇ The top three household income cohorts:
 - ◇ \$35,000 to \$49,999 (22%)
 - ◇ \$50,000 to \$59,999 (19%)
 - ◇ \$50,000 to \$59,999 (19%)

BRONX INTERCEPT FINDINGS



BRONX INTERCEPT FINDINGS



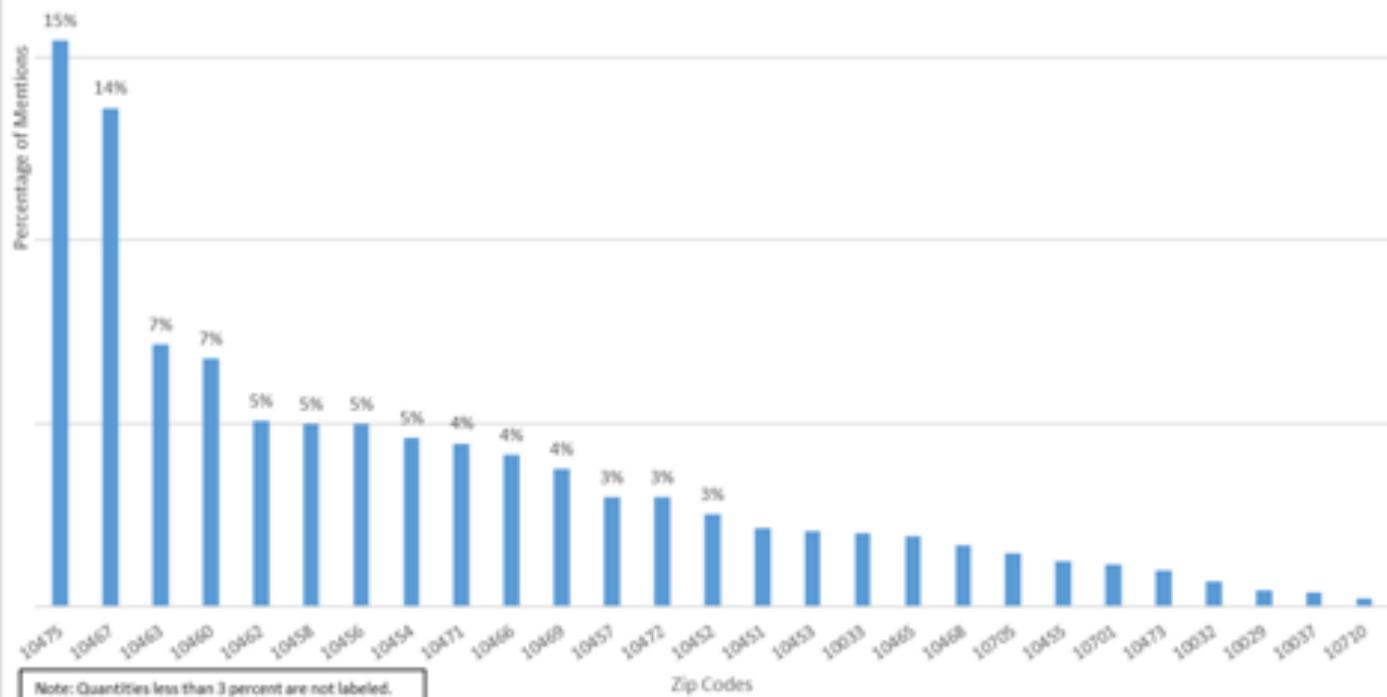
BRONX INTERCEPT FINDINGS

◇ Home Zip Codes

- ◇ The leading zip code for Bronx intercept respondents is 10475 (15% -neighborhoods of Northeast Bronx including Co-Op City, Baychester, and Eastchester Square)
- ◇ The second most frequent zip code is 10467 (14% -neighborhoods of Bronx Park, Fordham, Norwood, and Olinville)
- ◇ For the third most frequent zip there is tie amongst 10463 and 10460 (7% - neighborhoods of, Kingsbridge, Riverdale, and Central Bronx)
- ◇ The remaining zips at 3% or more:
 - ◇ 5%: 10462, 10458, 10456, 10454
 - ◇ 4%: 10471, 10466, 10469
 - ◇ 3%: 10457, 10472, 10452

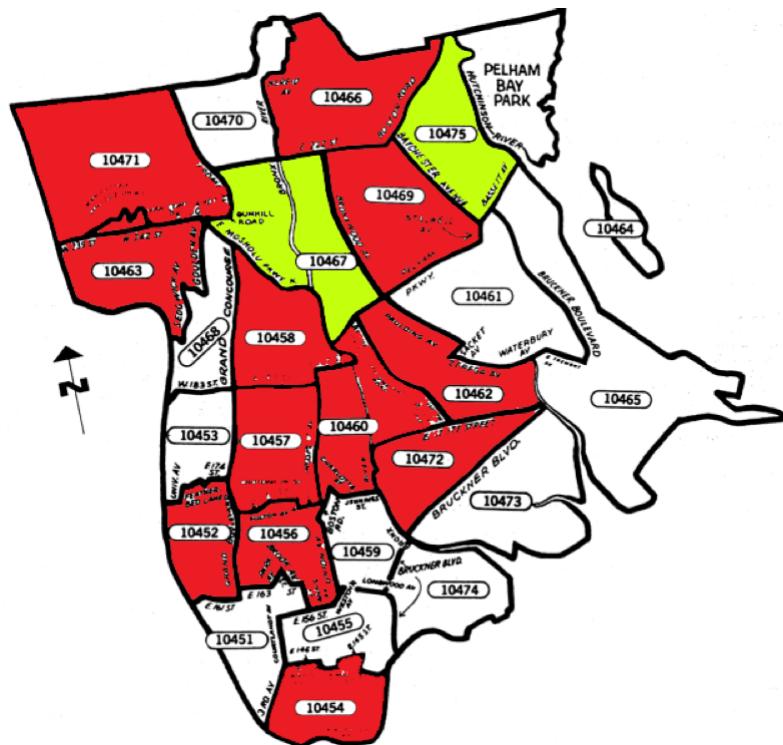
BRONX INTERCEPT FINDINGS

Respondent Home Zip for Bronx, with Other Areas
Bronx Intercept Respondents: 1,301 Mentions



BRONX INTERCEPT FINDINGS

Zip Code	Percentage
10475	15 %
10467	14%
10463	7%
10460	7%
10462	5%
10458	5%
10456	5%
10454	5%
10471	4%
10466	4%
10469	4%
10457	3%
10472	3%
10452	3%



Note: Quantities less than 3 percent are not labeled.



BRONX LOCAL TRAVEL ONLINE SURVEY

DRAFT FINAL REPORT - FEBRUARY,



MARKET RESEARCH

PURPOSE

- ◊ New York City Transit Operations Planning seeks to learn about the perceptions of Bronx travelers regarding travel around the Bronx, with an emphasis on local public transit
- ◊ This survey's topics of interest include:
 - ◊ Disposition of Bronx residents towards public transit such as:
 - ◊ Frequency of use of different travel modes, including local bus, subway and express bus service
 - ◊ Likelihood of using public transit, for non-users
 - ◊ The value of different potential improvements in bus service in the Bronx
 - ◊ Identification of “difficult trips” on bus transit avoided by Bronx travelers
 - ◊ Trip purpose and trip planning
 - ◊ Household size, automobile access and use
 - ◊ Where respondents live, by home zip code

METHODOLOGY

- ◊ NYC Transit Market Research prepared an online self-administered customer survey for use by any current customer or non-customer who wanted to provide input regarding current Bronx bus service, and for use by participants who attended workshops held in Fall 2018 aimed at obtaining information on travel patterns and preferences when using bus service
- ◊ Survey promotion included:
 - ◊ Notification to elected officials and advocacy groups
 - ◊ Distribution of cards with the survey link at Bronx district service cabinet meetings
 - ◊ Notice of the survey on social media
 - ◊ Availability of the survey at the workshops
 - ◊ A link to the survey on the Bronx Bus Redesign webpage

METHODOLOGY

- ◊ Respondents completed nearly 750 surveys while it was open, from September 19, 2018 to January 2, 2019
 - ◊ At least partial data was collected from 1,600
- ◊ Market Research designed the online survey to resemble as much as possible the intercept questionnaire used at 12 Bronx locations; nonetheless, some caveats apply
 - ◊ The online survey participants are “self-selected”; the intercept participants were randomly selected at 12 geographically dispersed Bronx locations
 - ◊ This sample may be biased towards those people with the time, resources and ability to participate in an online survey
 - ◊ Consequently, some profiles, such as the selection of local bus routes used, income, and automobile access, may reflect more the patterns of these self-selected respondents than a random sample of Bronx travelers

OVERVIEW OF FINDINGS

- ◊ Use of public transit
 - ◊ In terms of frequency of use, Bronx online respondents most often choose transit
 - ◊ When traveling around the Bronx, there is a tie between local bus and subway service for the leading travel mode. The same proportions of Bronx online respondents use the subway and local bus service (53%, respectively) more than three days per week
 - ◊ When traveling outside the Bronx, the leading travel mode among Bronx online respondents is the subway, used more than three days per week by a majority (53%) of those surveyed
 - ◊ The most frequently cited final destination outside the Bronx is Manhattan

OVERVIEW OF FINDINGS

- ❖ Disposition towards public transit
 - ❖ While only a small minority “never” use local bus service, a majority of these say, with improvements, they would consider taking local bus service to travel around the Bronx, at least occasionally
 - ❖ This also holds true for travel to destinations outside the Bronx using either local bus or express bus service for at least part of the trip
- ❖ When asked which aspects of bus travel were most important to the experience, the top three were:
 - ❖ Arriving on time
 - ❖ Getting to my destination quickly
 - ❖ Knowing when the bus is coming

OVERVIEW OF FINDINGS

- ◊ Disposition towards public transit (continued)
 - ◊ When asked to volunteer additional ideas to improve bus service in the Bronx, the top two online mentions were:
 - ◊ More frequent service
 - ◊ Faster service

OVERVIEW OF FINDINGS

- ◊ Avoidance of “Difficult Trips” Around the Bronx Using Bus
 - ◊ The Bronx online respondents identify 739 local Bronx itineraries as “difficult” using bus service, and consequently avoid bus service to make them
 - ◊ The top four areas considered difficult for travel are:
 - ◊ Riverdale
 - ◊ Co-Op City
 - ◊ Bay Plaza
 - ◊ Pelham Bay
 - ◊ The top three reasons for considering bus trips difficult are (N.B.: multiple reasons were accepted for each itinerary)
 - ◊ Takes too much time -too slow
 - ◊ Too many transfers
 - ◊ Not enough service

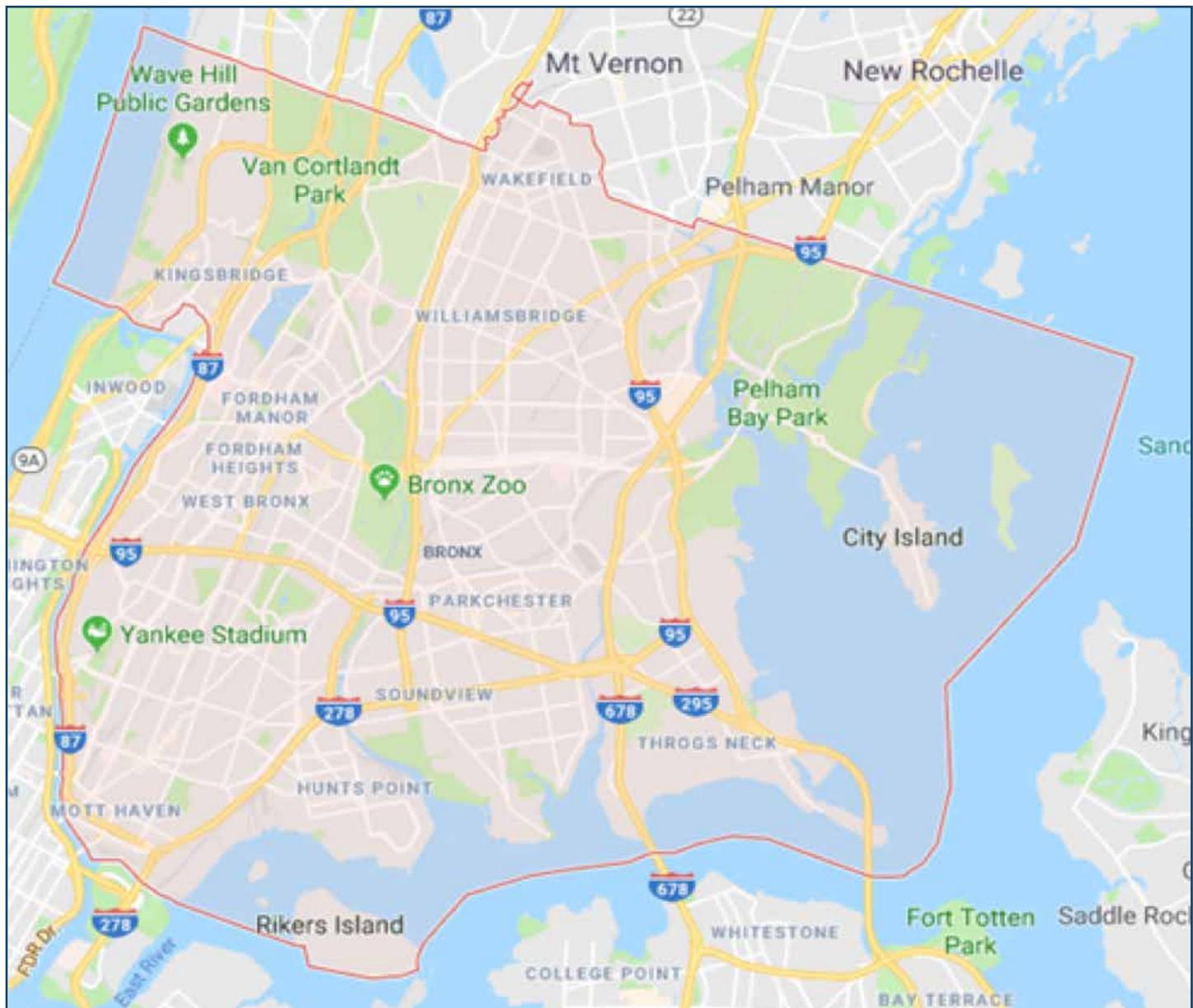
OVERVIEW OF FINDINGS

- ◊ Trip purpose
 - ◊ The top three trip purposes are:
 - ◊ Work
 - ◊ School or college
 - ◊ Personal errands
- ◊ Trip planning
 - ◊ Excluding memory (i.e., previous knowledge) the three most popular trip planning tools are:
 - ◊ Google Maps or other third party apps
 - ◊ BusTime
 - ◊ MYmta app

OVERVIEW OF FINDINGS

- ◊ Household size is predominantly the two-adult household
- ◊ Automobile access and use:
 - ◊ In contrast to the intercept survey, a majority of respondents own, or have access to, an automobile
 - ◊ The leading trip purpose is recreation
- ◊ Where respondents live:
 - ◊ The leading zip codes for Bronx online respondents are:
 - ◊ 10463 – Kingsbridge
 - ◊ 10475 – Co-Op City
 - ◊ 10465 – Throgs Neck
 - ◊ 10471 -- Riverdale
- ◊ Detailed findings are contained in this report

BRONX ONLINE FINDINGS

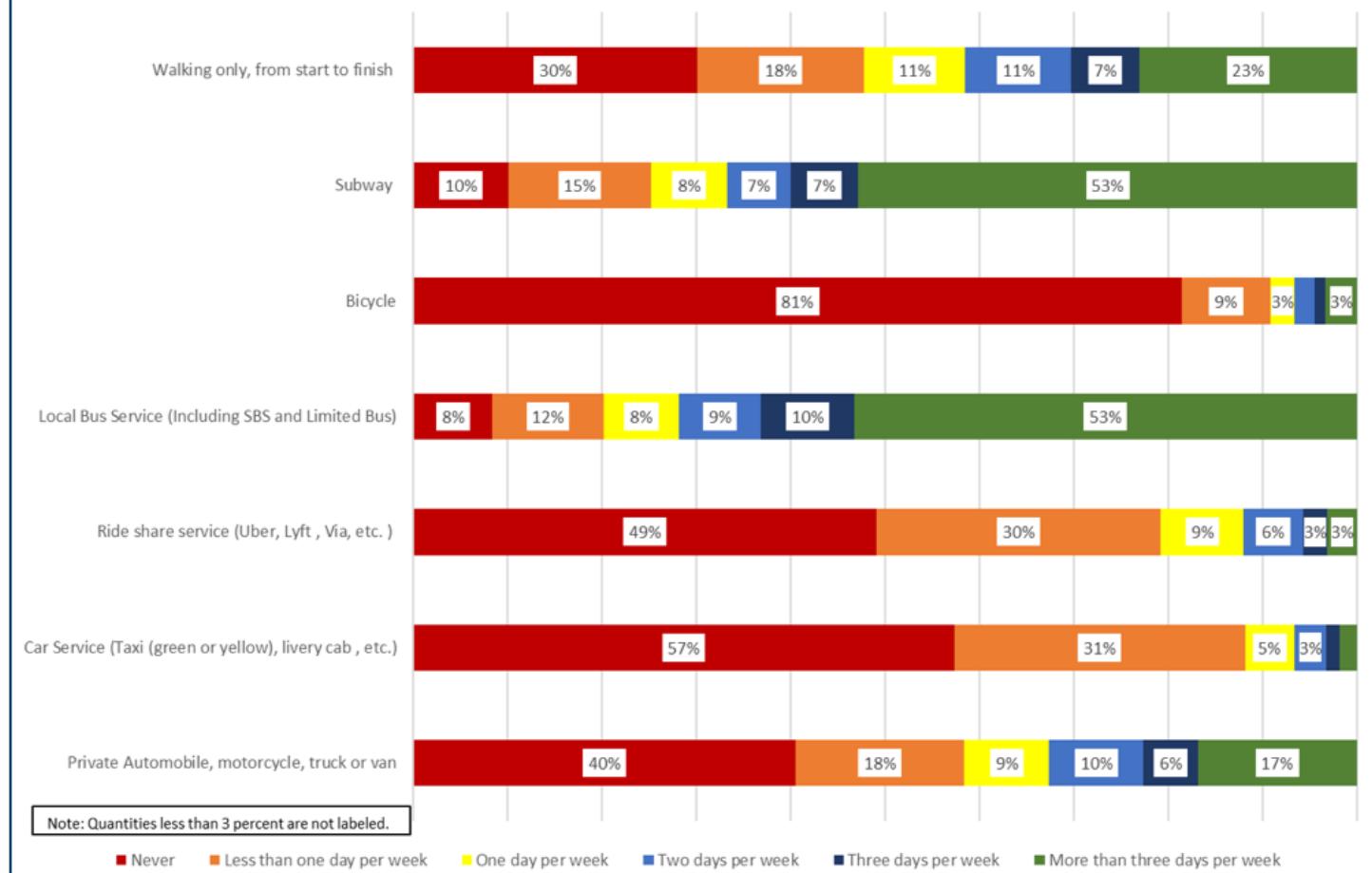


BRONX ONLINE FINDINGS

- ◊ Use of public transport
 - ◊ When traveling around the Bronx, there is a tie between local bus and subway service for the leading travel mode. The same proportions of Bronx online respondents use subway and local bus service (53%, respectively) more than three days per week
 - ◊ A small minority say they “never” use local bus service for intra-Bronx travel: 8% of the online respondents
 - ◊ A similar number, 10% of Bronx online respondents, “never” use the subway

BRONX ONLINE FINDINGS

Use Of Travel Modes In a Typical Week to Destinations Around the Bronx Online Respondents

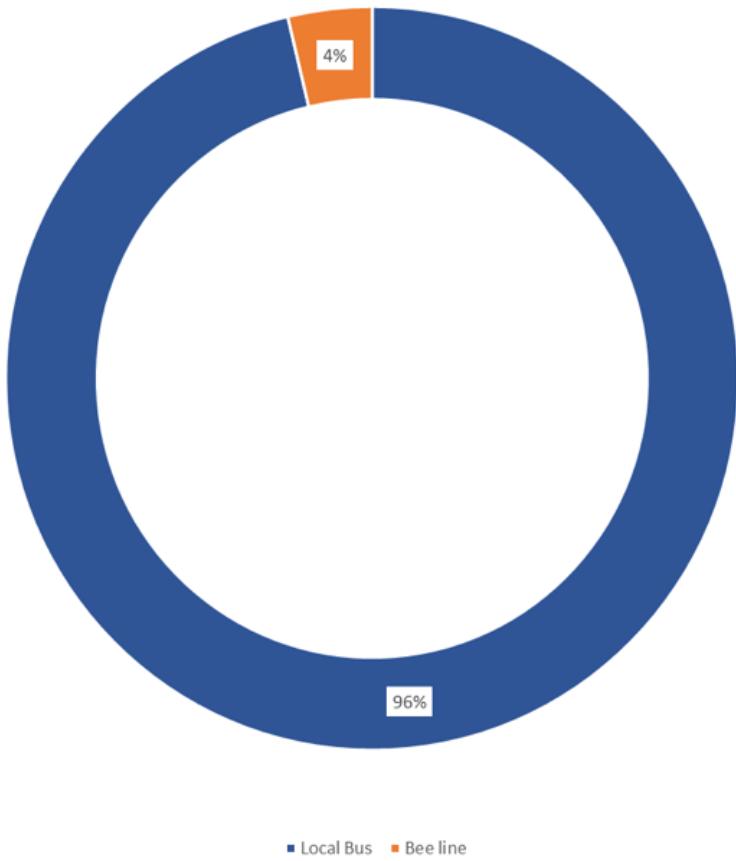


BRONX ONLINE FINDINGS

- ◊ Use of public transport (continued)
 - ◊ When traveling by bus around the Bronx, nearly all online respondents use NYC Transit local bus; just 4% mention Bee Line, which permits intra-Bronx travel in a very few instances
 - ◊ The top local bus routes cited by Bronx online respondents for travel around the Bronx are: Bx12 (10%), Bx10 (7%), Bx7 (7%), Bx1, Bx8, Bx9 and Bx29 (these last four: 4% each)
 - ◊ Note: every Bronx local route was cited at least once in response to this question

BRONX ONLINE FINDINGS

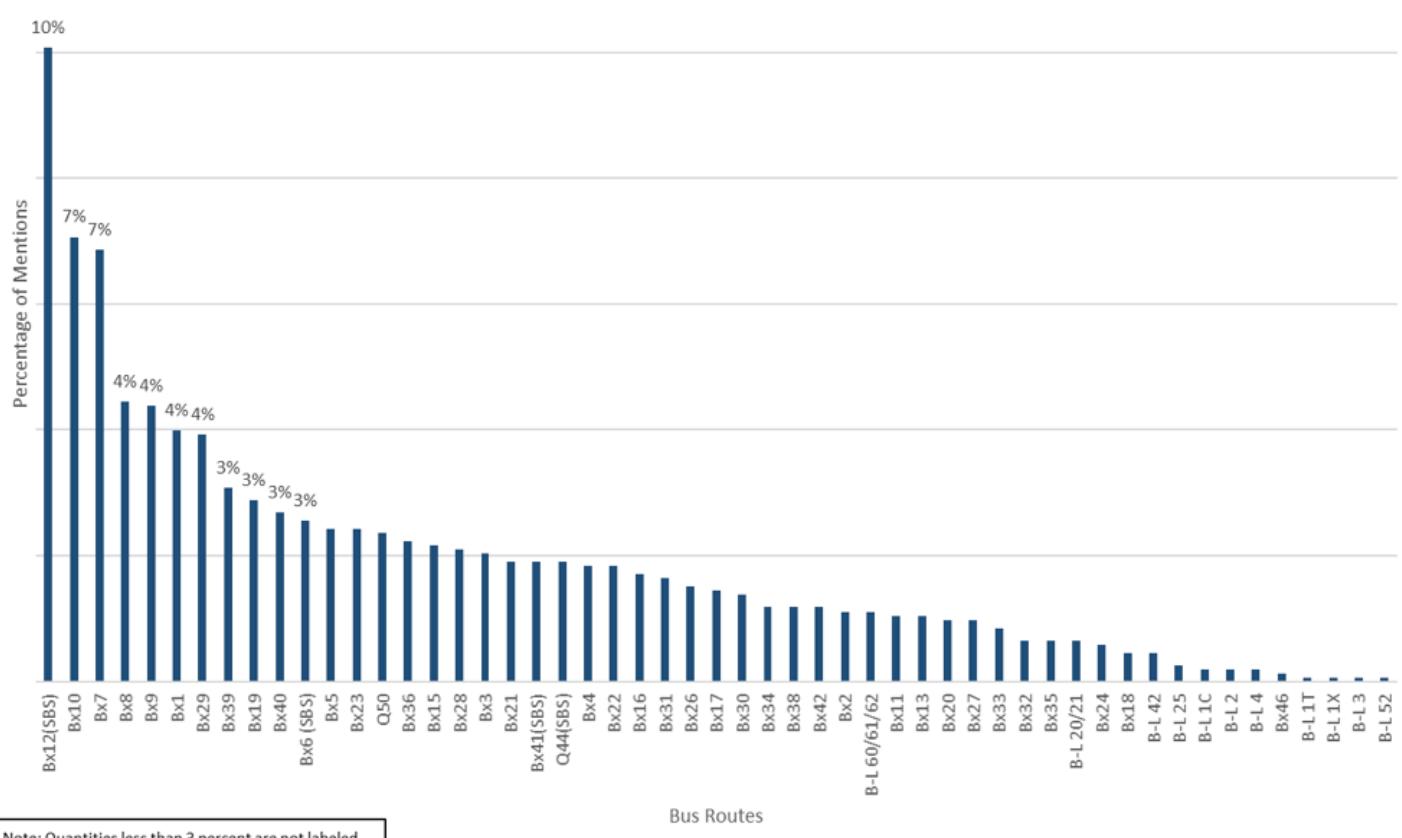
Types of Bus Service Used to Travel Around the Bronx
Online Respondents



BRONX ONLINE FINDINGS

Bus Routes Used to Travel Around the Bronx

Online Survey - 1,529 Mentions

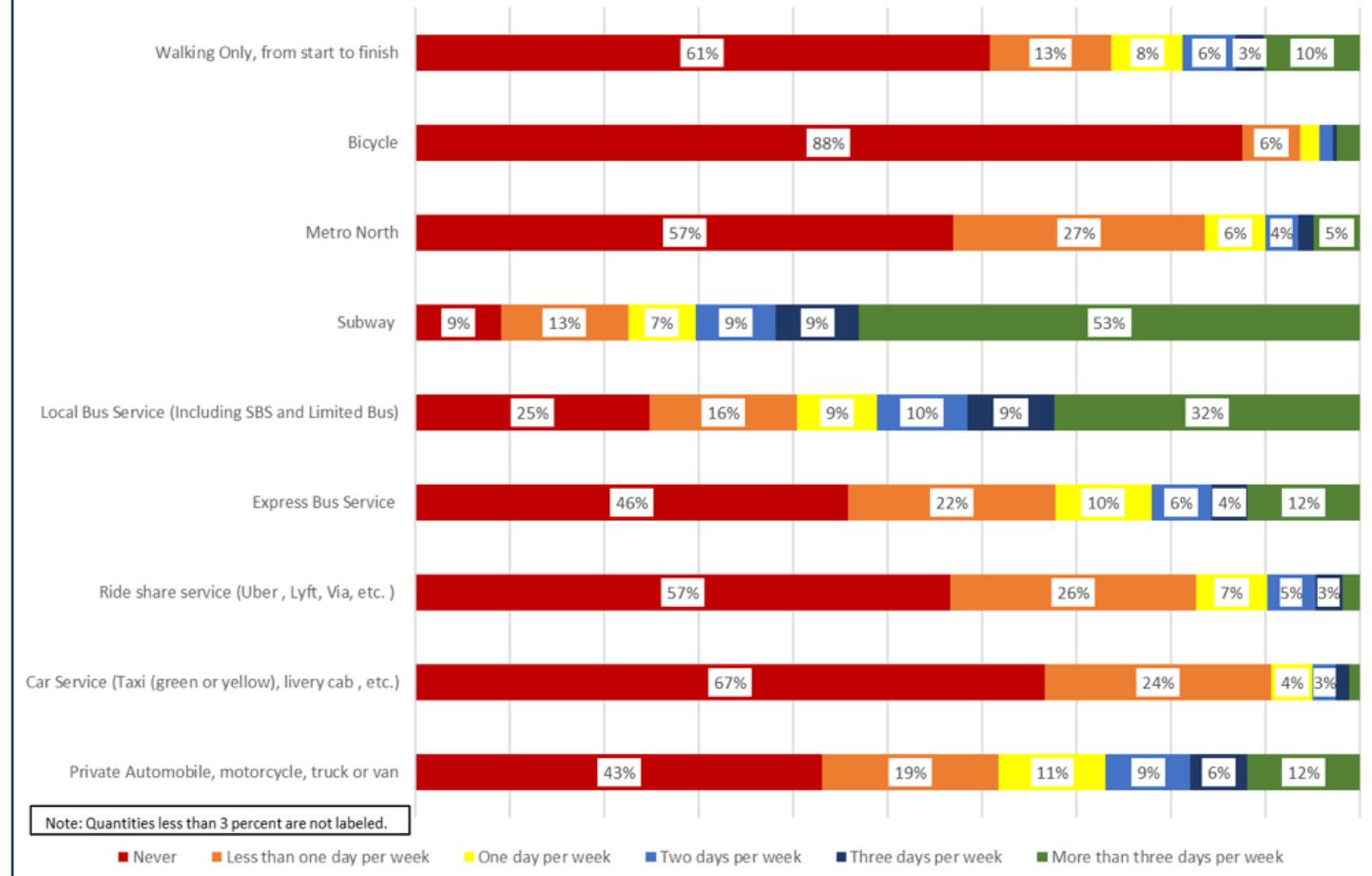


BRONX ONLINE FINDINGS

- ◊ Use of public transport (continued)
 - ◊ When traveling outside the Bronx, the leading travel mode among Bronx online respondents is the subway, used more than three days per week by a majority (53%) of those surveyed
 - ◊ 32% of online respondents use local bus service for at least part of a trip to leave the Bronx more than three days per week
 - ◊ Under 12% of Bronx online respondents use express bus or Metro North service to travel to destinations outside the Bronx more than three days per week

BRONX ONLINE FINDINGS

Use Of Travel Modes In a Typical Week to Destinations Outside the Bronx Online Respondents

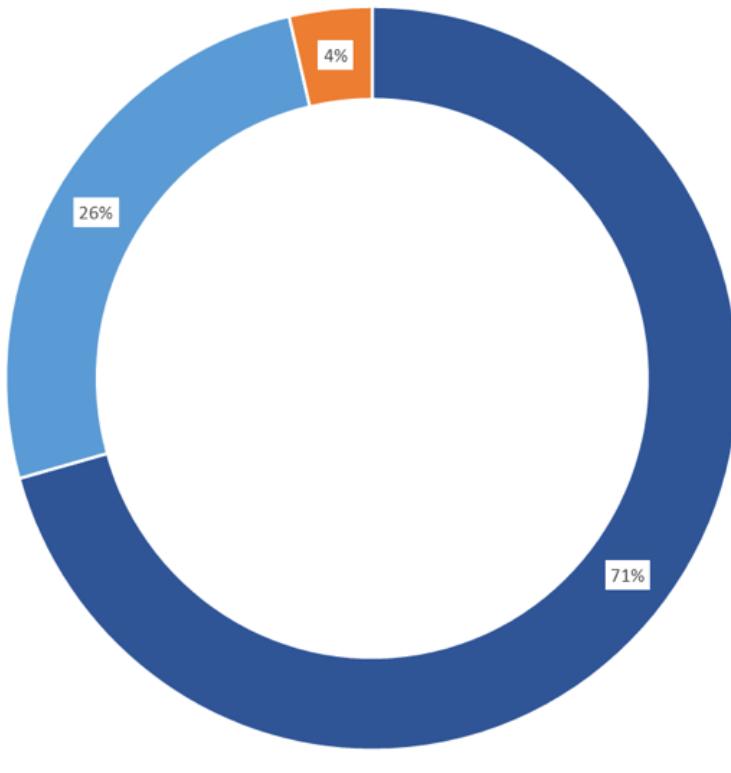


BRONX ONLINE FINDINGS

- ◊ Use of public transport (continued)
 - ◊ When traveling by bus to destinations outside the Bronx, the majority of online respondents (71%) use NYC Transit local bus service for at least part of the trip; 26% use express bus service; 4% mention Bee Line
 - ◊ The top three bus routes for online respondents for at least part of travel ending outside the Bronx are: Bx12 (8%), Bx7 (6%), BxM1 (4%)
 - ◊ Note: all express buses are mentioned at least once
 - ◊ Nearly all local bus routes are cited as well

BRONX ONLINE FINDINGS

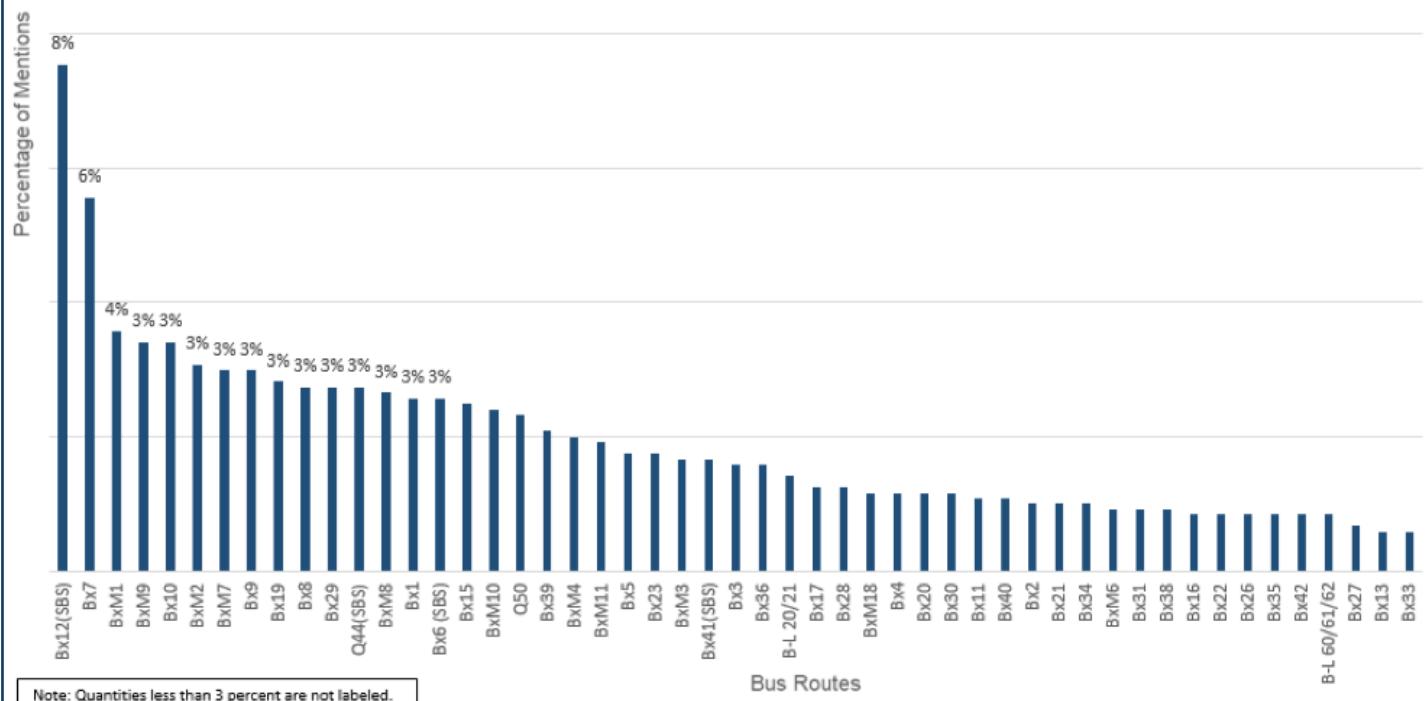
Types of Bus Service Used to Travel Outside the Bronx
Online Respondents



BRONX ONLINE FINDINGS

Bus Routes Used for At Least Part of Trips Ending Outside the Bronx

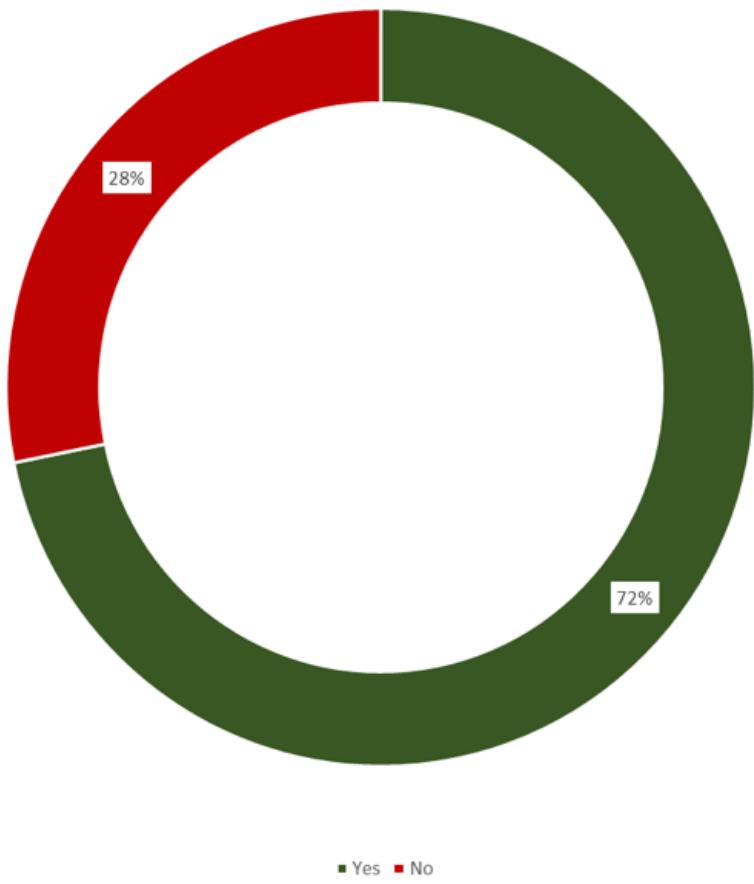
Online Respondents- 1,207 Mentions



BRONX ONLINE FINDINGS

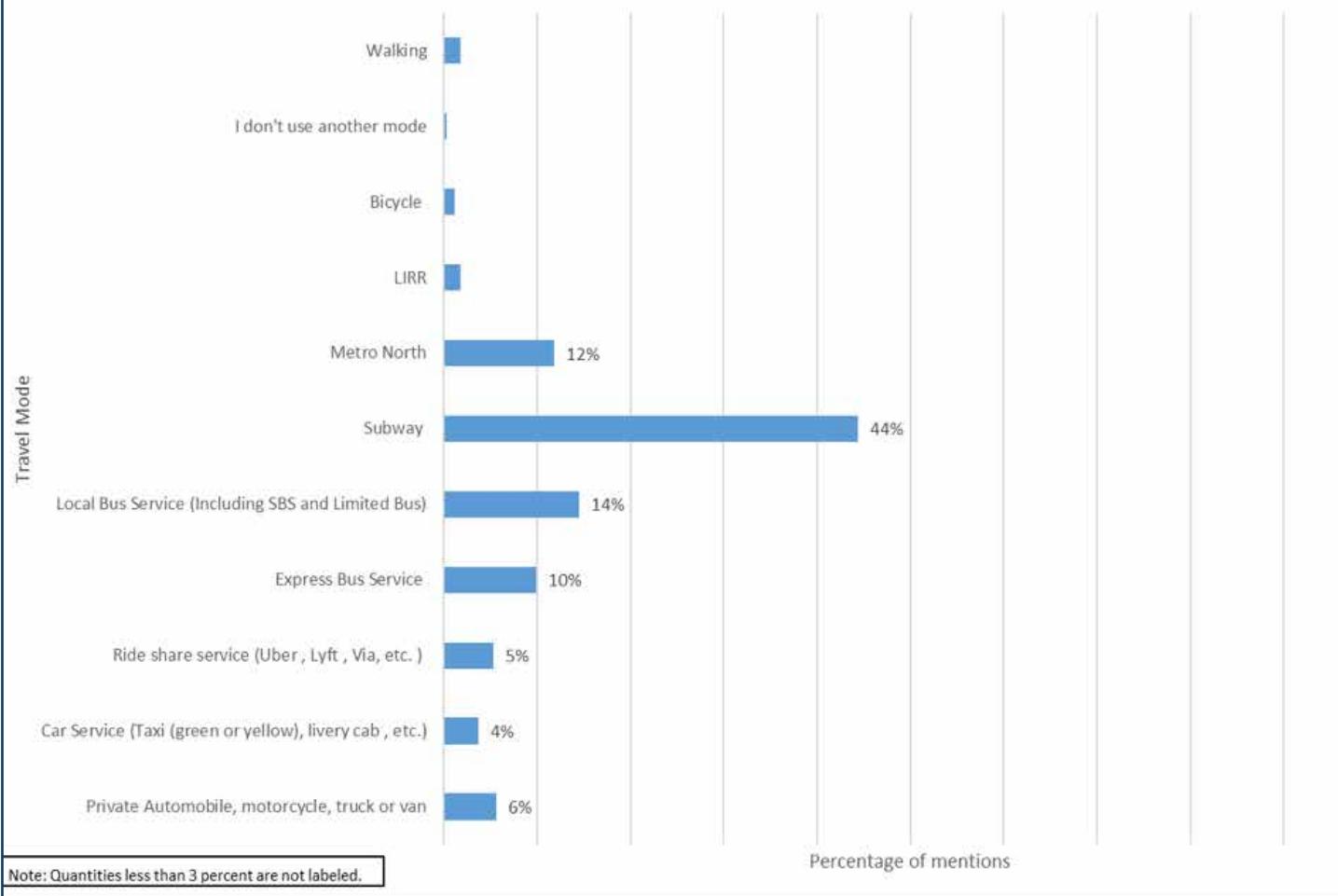
- ◊ Use of public transport (continued)
 - ◊ When traveling by bus to destinations outside the Bronx, 72% of online respondents connect to another travel mode
 - ◊ The leading connecting mode is subway (44%)
 - ◊ The most frequently cited final destination outside the Bronx is Manhattan

Use of the Bus in Combination with Some Other Mode to Leave the Bronx
Online Respondents



BRONX ONLINE FINDINGS

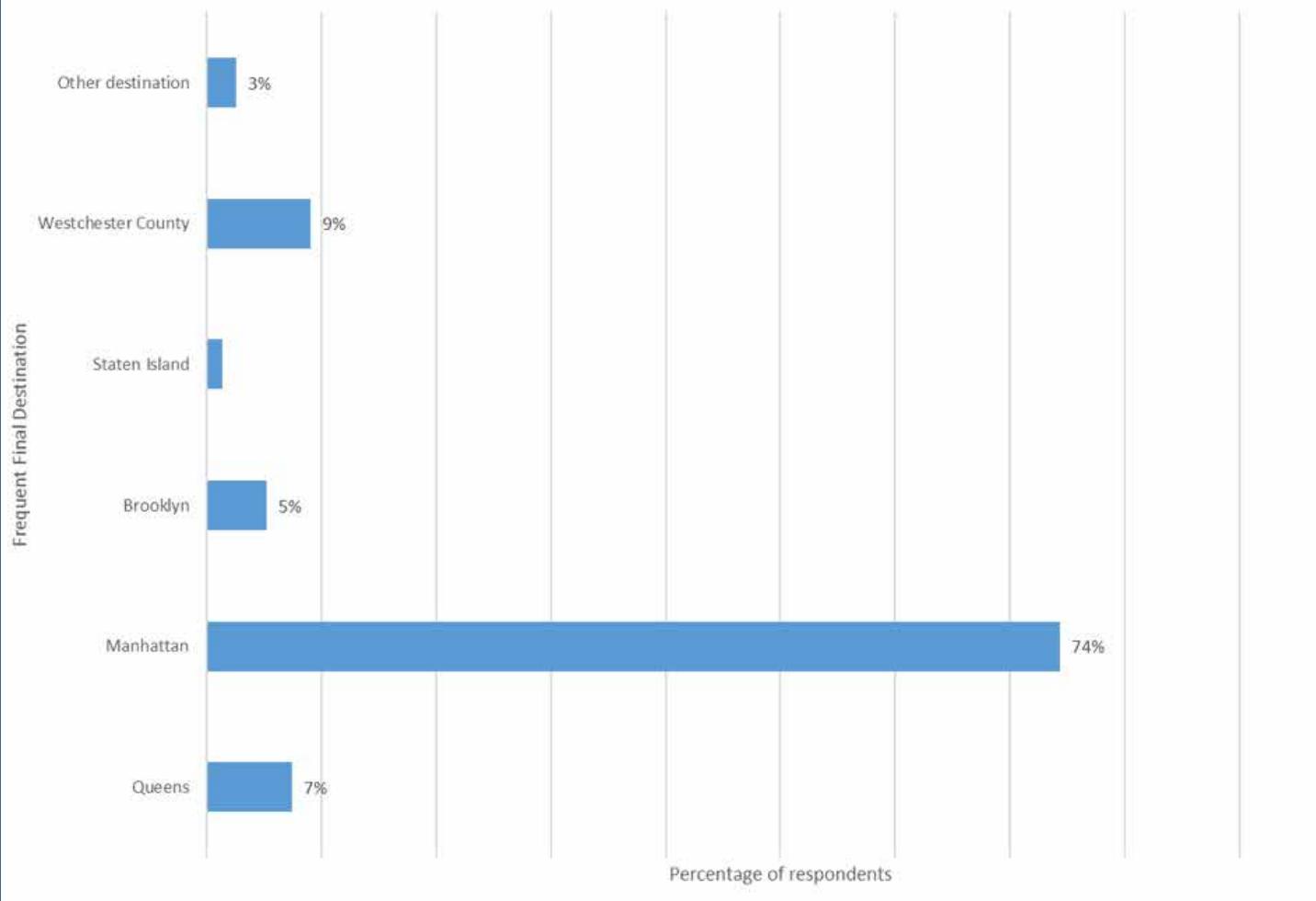
Other Travel Mode in Combination with the Bus Used to Leave the Bronx Online Respondents: 1,106 mentions



BRONX ONLINE FINDINGS

Most Frequent Final Destination When Traveling Outside the Bronx

Online Respondents: 897 respondents



BRONX ONLINE FINDINGS

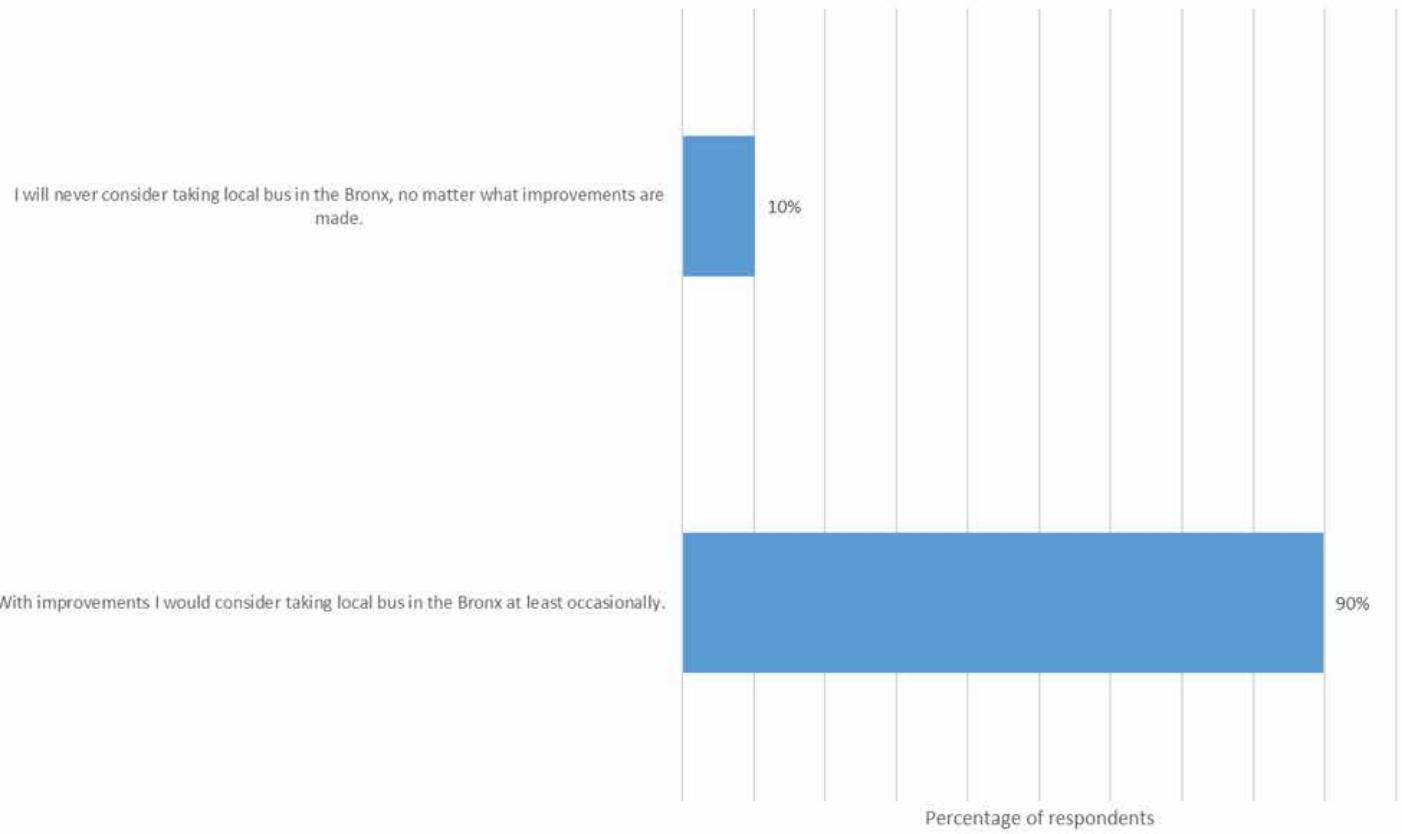
- ◊ Disposition towards public transit
 - ◊ While only a small minority “never” use local bus service, a majority of the group say, with improvements, they would consider taking local bus service to travel around the Bronx, at least occasionally
 - ◊ This also holds true for travel to destinations outside the Bronx using either local bus, for at least part of the trip, or express bus service
- ◊ When asked which aspects of bus travel were most important to the experience, the top three were:
 - ◊ Arriving on time
 - ◊ Getting to my destination quickly
 - ◊ Knowing when the bus is coming

BRONX ONLINE FINDINGS

Which of the following statements best captures how you feel about taking local buses in the Bronx?

Asked of respondents who "never" take local bus around the Bronx.

Online Respondents: 128 respondents

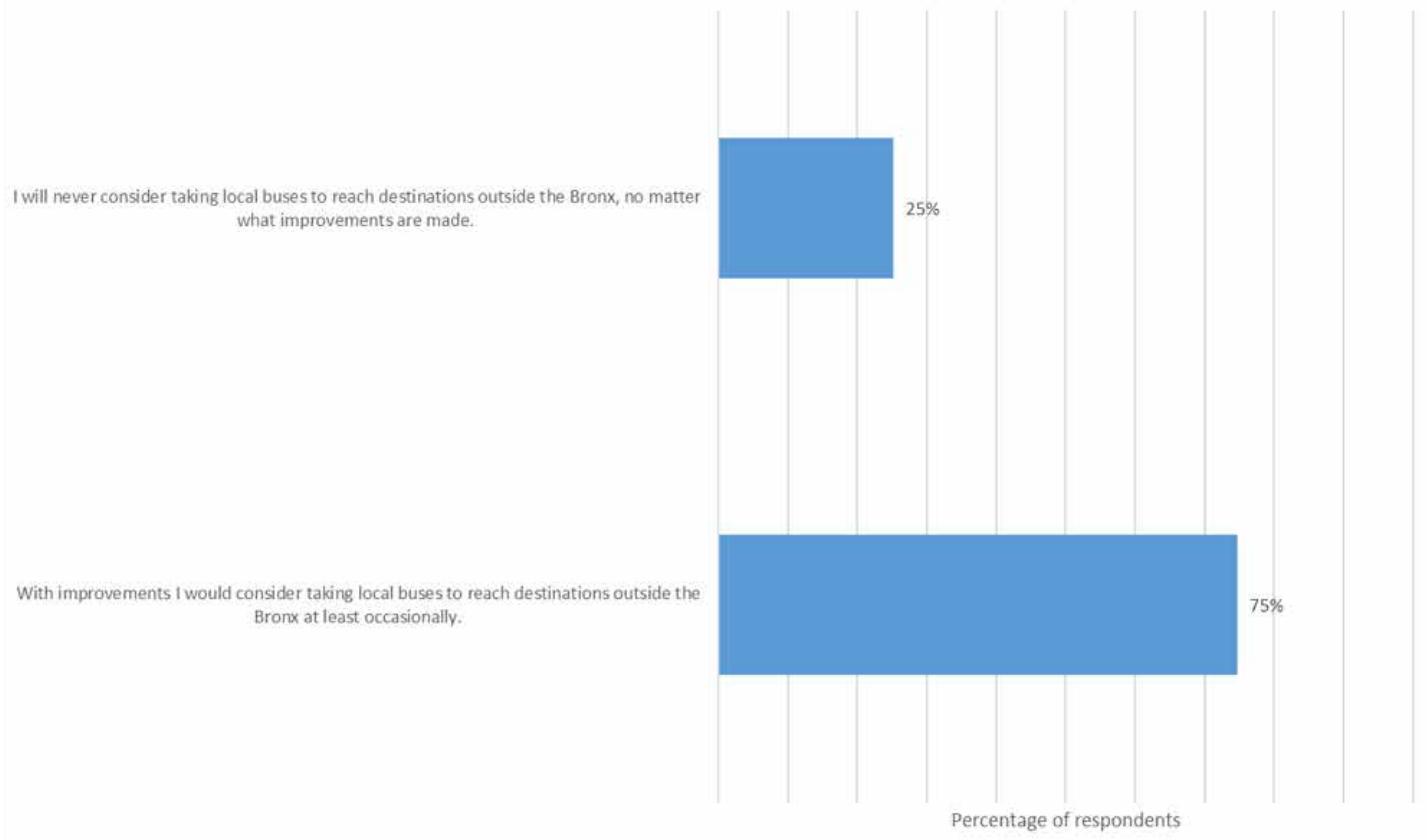


BRONX ONLINE FINDINGS

Which of the following statements best captures how you feel about taking local bus to destinations outside the Bronx?

Asked of respondents who "never" take local bus outside the Bronx.

Online Respondents: 301 respondents

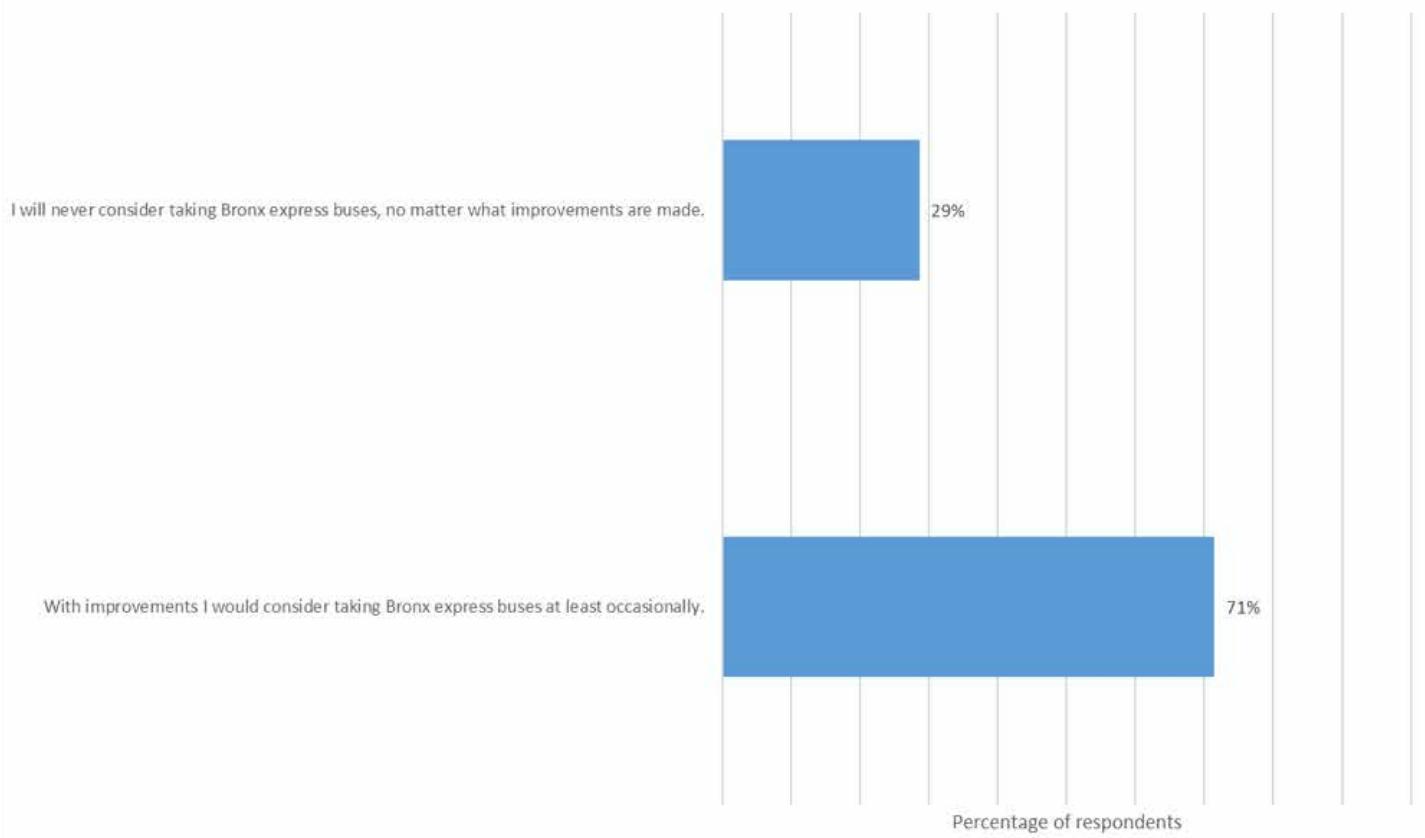


BRONX ONLINE FINDINGS

Which of the following statements best captures how you feel about taking express buses to destinations outside the Bronx?

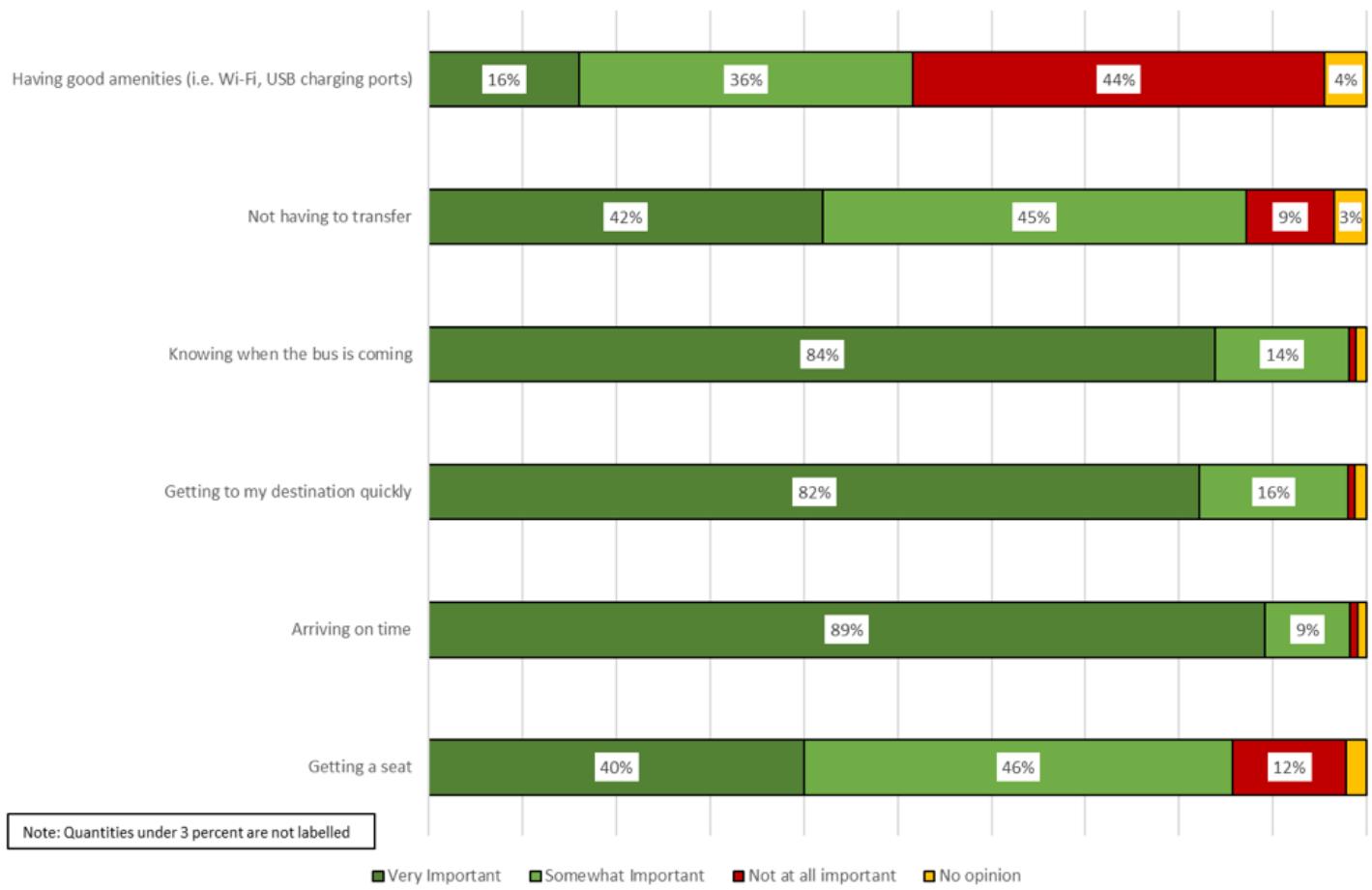
Asked of respondents who "never" take express bus to destinations outside the Bronx.

Online Respondents: 472 respondents



BRONX ONLINE FINDINGS

Importance to Experience of Traveling by Bus Online Respondents

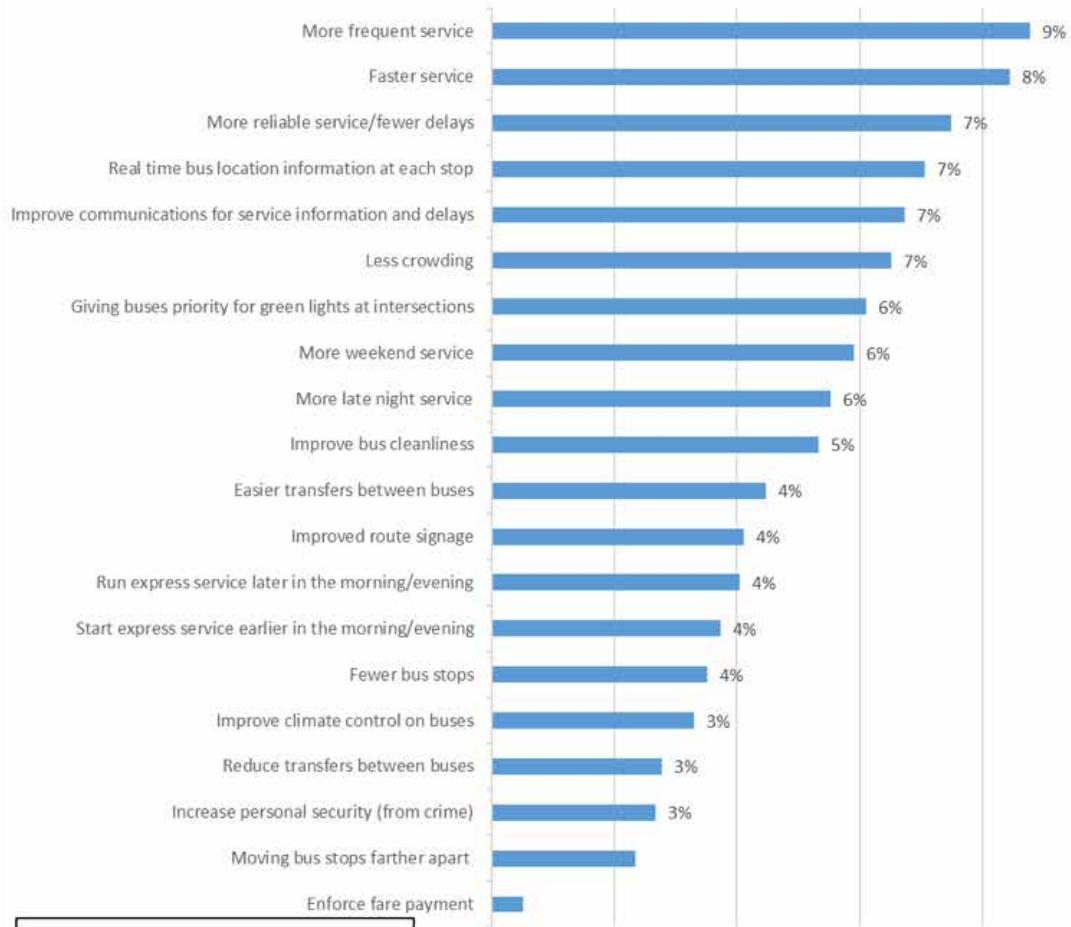


BRONX ONLINE FINDINGS

- ◊ Disposition towards public transit (continued)
 - ◊ When asked to volunteer additional ideas to improve bus service in the Bronx, the top mentions were:
 - ◊ More frequent service
 - ◊ Faster service
 - ◊ And a tie among:
 - ◊ More reliable service/fewer delays
 - ◊ Real time bus location information at each stop
 - ◊ Improve communications for service information/delays
 - ◊ Less crowding
 - ◊ The full roster of other ideas to improve Bronx bus service and their responses is contained in the following chart

BRONX ONLINE FINDINGS

Ideas for Improving Bus Service in The Bronx Online Responses: 6,842 mentions

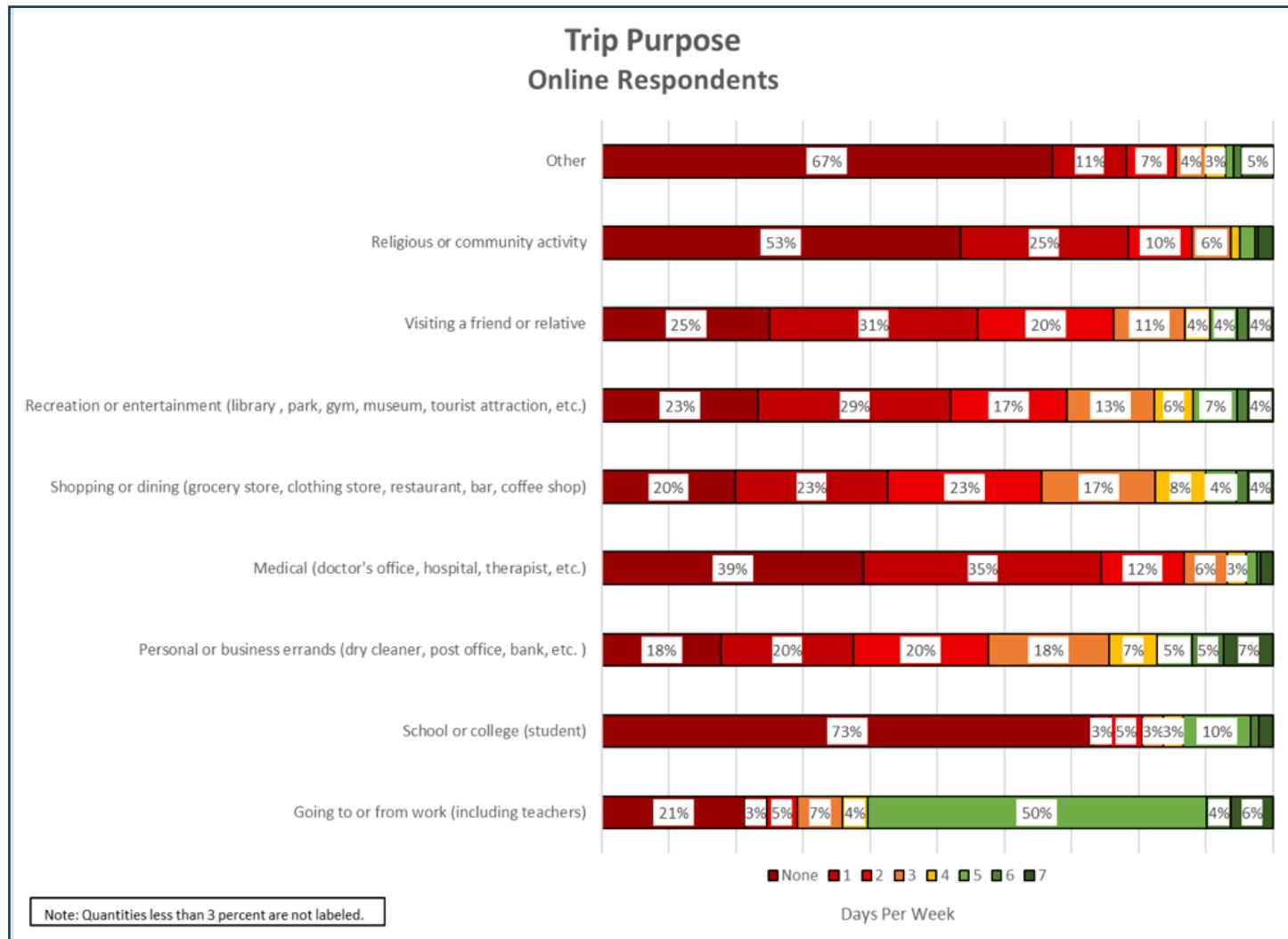


Note: Quantities less than 3 percent are not labeled.

BRONX ONLINE FINDINGS

- ◊ Trip purpose
 - ◊ The top three trip purposes are:
 - ◊ Work
 - ◊ School or college
 - ◊ Personal errands

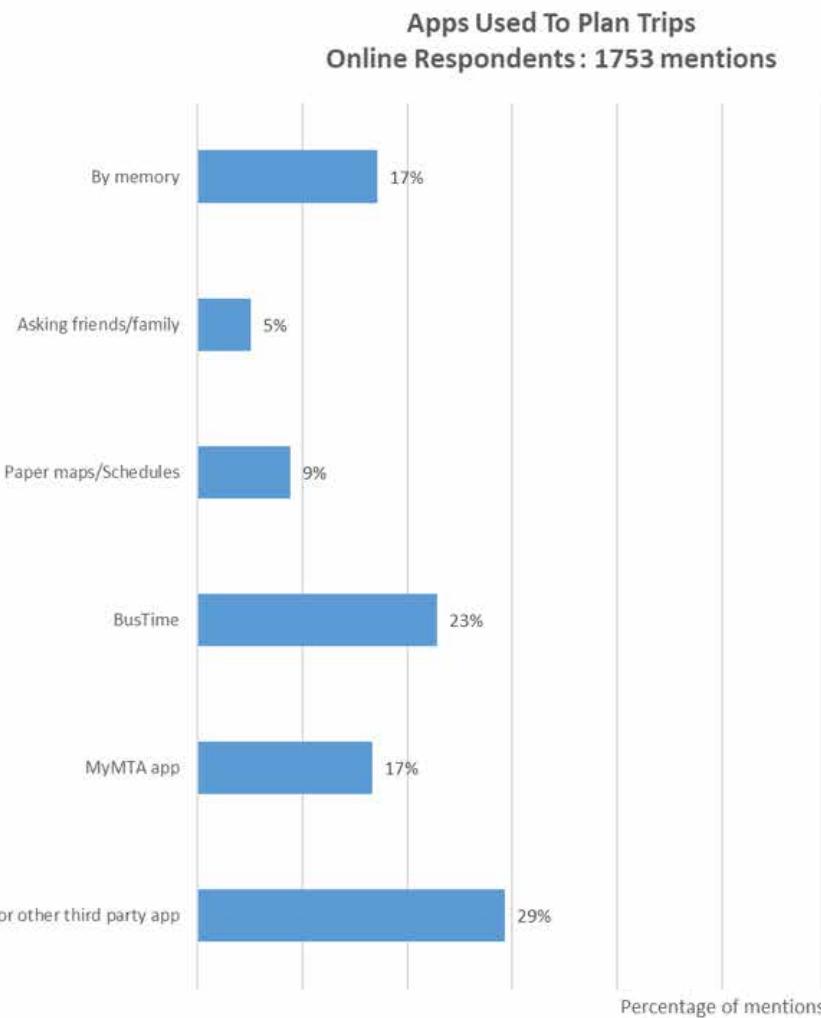
BRONX ONLINE FINDINGS



BRONX ONLINE FINDINGS

- ◊ Trip planning
 - ◊ Excluding memory (i.e., previous knowledge) the three most popular trip planning tools are:
 - ◊ Google Maps or other third party apps
 - ◊ BusTime
 - ◊ MYmta app

BRONX ONLINE FINDINGS



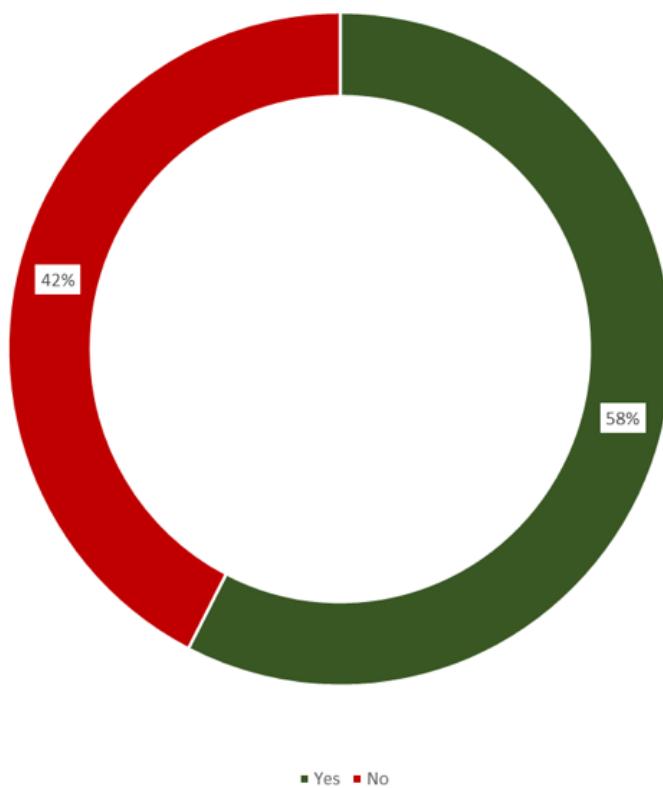
BRONX ONLINE FINDINGS

- ◊ Automobile access and use
 - ◊ 58% of online respondents either own or have access to an automobile
 - ◊ For these respondents, the leading purpose to use an automobile is recreation
 - ◊ Trips with large or heavy items is the second most frequently cited purpose
 - ◊ The third most frequently cited purpose is trips to destinations not easily transit-accessible
 - ◊ The remaining trips were roughly evenly distributed among:
 - ◊ Work trips
 - ◊ Accompanying individuals who are less able to use public transit

Access to an Automobile

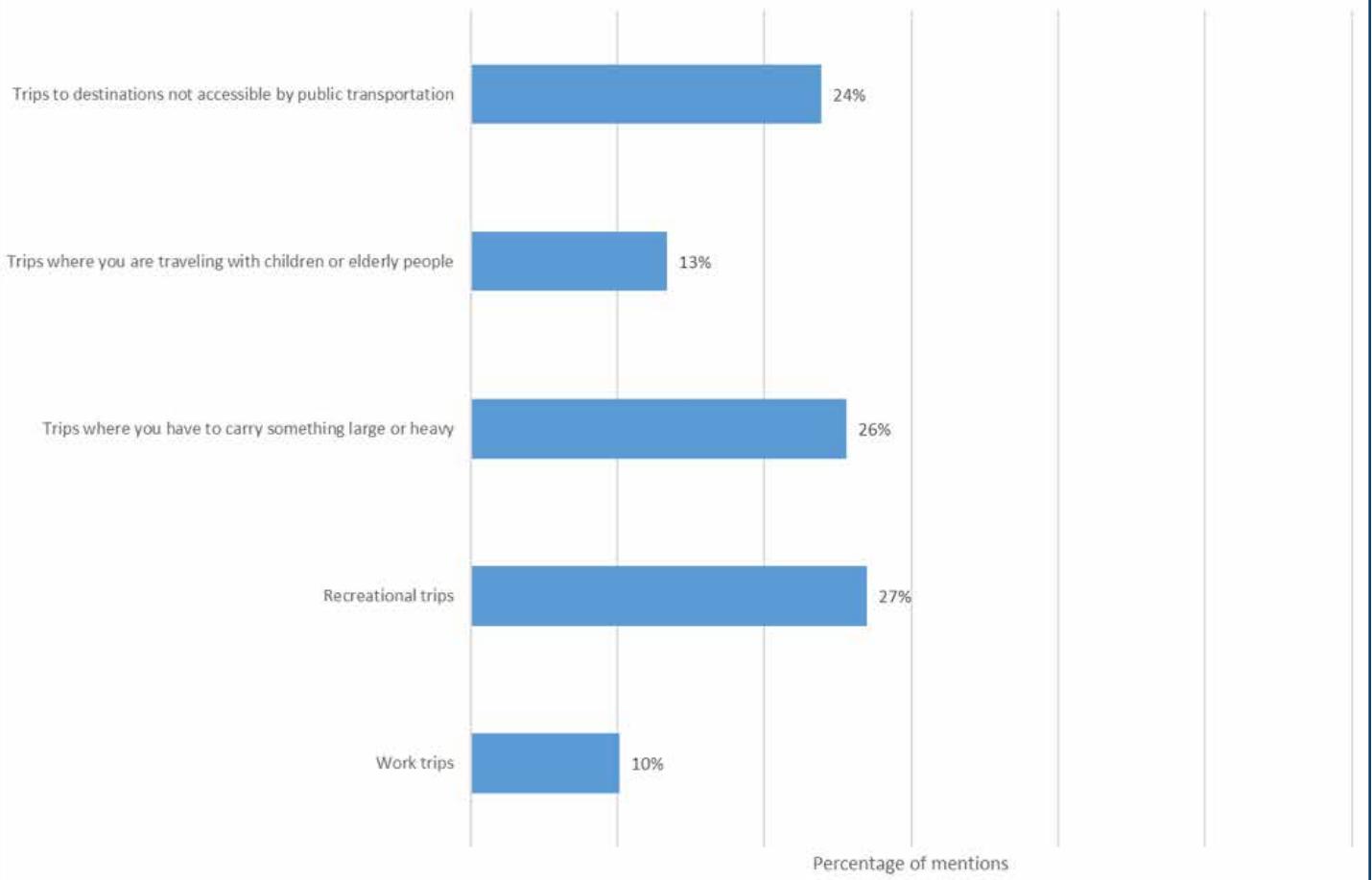
Do you or someone in your household own a car or have access to a car that you can use for trips (personal car, car share membership, etc.)?

Online Respondents



BRONX ONLINE FINDINGS

Automobile Trip Purpose Online Respondents: 1323 mentions



BRONX ONLINE FINDINGS

- ◊ Avoidance of “Difficult Trips” Around the Bronx Using Bus
 - ◊ The Bronx online respondents identify 739 local Bronx itineraries as “difficult” using bus transit, and consequently avoid the bus to make them
 - ◊ There were 147 trips naming “Riverdale” as an origin or destination
 - ◊ The top three areas considered difficult for travel are:
 - ◊ Co-Op City
 - ◊ Bay Plaza
 - ◊ Pelham Bay
 - ◊ The top three reasons for considering bus trips difficult are (N.B.: multiple reasons were accepted for each itinerary)
 - ◊ Takes too much time -too slow
 - ◊ Too many transfers
 - ◊ Not enough service
 - ◊ An itemized list of the difficult trip itineraries is included

BRONX ONLINE FINDINGS

From	To	To many transfers	Bus doesn't go there	Not enough service	No service when I want to go	Takes too much time -- too slow	Service doesn't go straight there -- too indirect	Service is unreliable	Bus stops are lonely -- security concerns	Don't like waiting for buses	Not easy to get MetroCard or coins to pay fare	Metro North doesn't stop there	Subway doesn't stop there	Other
Bay Plaza	Clairemont	x						x						
City Island	Fordham		x	x	x			x						
City Island	Soundview	x	x	x	x	x	x							
City Island	Bronx Borough Hall and Court House	x	x	x	x	x								
Concourse	Mott Haven	x	x	x	x	x		x						
Concourse	Port Morris	x	x	x	x	x								
Concourse	Belmont	x	x	x	x	x		x						
NY PRESBYTERIAN HOSPITAL	NY PRESBYTERIAN HOSPITAL	x	x	x										
Hutchinson Metro Center	Hutchinson Metro Center	x	x				x							
Jacobi Medical Center	Baychester	x	x						x	x				
Mott Haven	Mott Haven					x	x							
Mott Haven	25-26 Humphrey St, Queens NY	x	x	x	x	x					x			
Van Nest	Van Nest		x	x	x				x	x		x		
Soundview	Fordham Plaza	x		x										
Soundview	Riverdale Park	x			x									
Concourse	Kingsbridge	x	x	x	x	x	x		x	x				
Concourse	Bay Plaza	x			x	x			x					
Bronx Supreme Court	Williamsbridge					x								
Hutchinson Metro Center	Hutchinson Metro Center		x		x									
West Farms Shopping Center	Hutchinson Metro Center			x		x		x						
Lehman College	Lehman College													
City Island	Bronx Zoo	x			x									
Country Club	Bartow-Pell Mansion	x	x			x								
Belmont	104th st liberty av								x					

BRONX ONLINE FINDINGS

From	To	Too many transfers	Bus doesn't go there	Not enough service	No service when I want to go	Takes too much time – too slow	Service doesn't go straight there -- too indirect	Service is unreliable	Bus stops are lonely -- security concerns	Don't like waiting for buses	Not easy to get MetroCard or coins to pay fare	Metro North doesn't stop there	Subway doesn't stop there	Other
Co-op City	Wave Hill	X				X		X	X	X				
Fordham Plaza	Morrisania		X					X				X		
Morris Park	Kingsbridge Heights	X	X			X	X	X	X	X		X		
Morris Park	Bay Plaza					X								
Riverdale	Van Cortlandt Park - 242 Street (1)	X	X	X	X	X	X	X		X		X		Always too crowded on bx12
Parkchester	Riverdale	X				X	X							
Parkchester	Yankee Stadium		X			X	X							
Yankee Stadium	Throgs Neck	X				X								
Highbridge	Melrose	X		X	X	X		X			X			
Williamsbridge	Yankee Stadium					X	X							
Riverdale	Bronx Supreme Court	X				X	X							
Fordham Plaza	Bedford Park						X							
Morris Heights	Eastchester	X				X					X			
Pelham Parkway	Fordham		X					X						
Pelham Parkway	Soundview Park		X			X		X						
Pelham Parkway	City Island	X	X			X	X	X			X			
Co-op City	Riverdale	X				X	X	X		X	X	X		
Co-op City	Tremont and Southern Boulevard	X	X			X	X	X		X	X			
Co-op City	Third Avenue at Brook Avenue	X				X				X		X		
Concourse	Bay Plaza					X		X		X				
Yankee Stadium	Bronx wood & 215th street			X		X								Especially when it is in the morning for school or afternoon when students are going home there are not enough buses for the demands. Of students and regular riders sometimes I have to wait for three buses to go by
Co-op City	Concourse			X		X		X						
LaGuardia Airport	Norwood	X												
University Heights	Riverdale	X				X	X	X						
University Heights	Bay Plaza							X						Bx12 buses are too crowded.

BRONX ONLINE FINDINGS

From	To	Too many transfers	Bus doesn't go there	Not enough service	No service when I want to go	Takes too much time - too slow	Service doesn't go straight there - too indirect	Service is unreliable	Bus stops are lonely -- security concerns	Don't like waiting for buses	Not easy to get MetroCard or coins to pay fare	Metro North doesn't stop there	Subway doesn't stop there	Other
Fordham	George Washington Bridge Bus Station					X		X						
Bedford Park	Ferry Point Park		X	X	X	X	X							
Bedford Park	Throgs Neck		X	X	X	X	X							
Southern Boulevard and Freeman	Hunts Point Riverside Park	X		X		X	X	X						
Morrisania	Riverdale	X		X	X	X	X	X				X		
Morrisania	Throgs Neck	X		X		X	X	X						
Fordham	Soundview	X				X							X	
Bay Plaza	Soundview	X	X			X								
Eastchester	Wave Hill	X	X	X	X	X								
Co-op City	Soundview	X		X										
Riverdale	Fulton Fish Market	X				X	X		X	X	X	X	X	
Parkchester	City Island			X		X								
Parkchester	Riverdale			X		X								
Parkchester	Throgs Neck		X											
Jacobi Medical Center	Fordham University												Buses are incredibly overcrowded	
Wakefield	New York Botanical Garden					X	X							
Soundview	Riverdale	X												
Riverdale	City Island	X												
Kingsbridge	Melrose			X		X								
Bay Plaza	Bay Plaza		X											
Edgewater Park	Montefiore Medical Center		X								X			
Calvary Hospital	Calvary Hospital	X	X		X				X	X				
Hutchinson Metro Center	Hutchinson Metro Center		X											
Edgewater Park	Edgewater Park		X	X	X	X		X						
Pelham Bay Park Station	E 188 street and grand concourse					X								

BRONX ONLINE FINDINGS

From	To	Too many transfers	Bus doesn't go there	Not enough service	No service when I want to go	Takes too much time – too slow	Service doesn't go where I want to go	Service is unreliable	Bus stops are lonely – security concerns	Don't like waiting for buses	Necessary to get there/odd or confusing route	Metro North doesn't stop there	Subway doesn't stop there	Other
Pelham Bay Park Station	E 188 street and grand concourse					X								
Throgs Neck	E 86 street and second Ave	X												
Woodlawn	Riverdale	X	X			X	X							
Woodlawn	Bronx Zoo	X	X			X	X							
Mott Haven	161 Street - Yankee Stadium (A/D/B)										X			
Co-op City	Mott Haven	X									X			
Mott Haven	Van Cortlandt Mansion	X				X	X							
Mott Haven	City Island			X	X	X				X				
Mott Haven	Riverdale					X	X				X			
Pelham Bay	Van Cortlandt Village	X	X			X	X							
Mott Haven	Van Cortlandt Village	X	X			X	X							
Mott Haven	Riverdale					X	X				X			
Pelham Bay	Van Cortlandt Village	X	X	X		X	X							
Mott Haven	Van Cortlandt Village	X	X			X	X							
Belmont	City Island	X												
Fordham	Van Cortlandt Park							X			X	X		
Sterling Hill	Manhattan					X								
Castle Hill	Bedford Park	X												
Parkchester	Co-op City	X		X		X	X	X						
New York State DMV	Pelham Bay Park Station	X	X			X	X		X	X	X	X		
Woodlawn	Throgs Neck	X	X	X	X	X	X	X	X	X		X		
Fordham Plaza	Morris Heights							X						
Soundview	Riverdale	X	X											
Bedford Park	Bay Plaza	X				X						X		
Riverdale Kingsbridge Academy	Co-op City	X	X			X				X	X			
Edgewater Park	Bronx Borough Hall and Court House	X		X		X	X	X			X			

BRONX ONLINE FINDINGS

From	To	Issues							Other
		Too many transfers	Bus doesn't go there	Not enough service	Takes too much time -- too slow	Service is unreliable	Bus stops are lonely -- security concerns	Don't like waiting for buses	
Edgewater Park	Van Nest	X	X	X	X	X			
Edgewater Park	Parkchester		X	X		X			
The Hub	Pelham Bay	X	X	X					
Riverdale	Morris Park								It is faster to transfer using the Express buses. Getting from Riverdale to most parts of the Bronx is a very difficult task because of the street layout and the meandering of the local bus routes, so often times it is quicker to take an express bus into Manhattan and transfer to another express bus to finish my trip.
Riverdale	Melrose								It is easier and faster to take the express bus from Riverdale and transfer to another express bus to finish my commute.
Van Cortlandt Park	Van Cortlandt Park		X		X	X			
Spuyten Duyvil	Soundview	X	X	X	X				
Spuyten Duyvil	City Island	X	X	X	X				
Soundview	2752 Iaconia avenue, Bronx	X			X	X	X		
University Heights	Morrisania		X				X		
Calvary Hospital	Bronx State Hospital							X	
Kingsbridge	Hunts Point	X			X	X			
Belmont	Riverdale				X				
238 Street (1)	Norwood		X			X	X		Bx9 would be great for this - if it weren't so slow and crowded
Fordham Plaza	Fordham Plaza		X						These areas are so close together - but to get from Riverdale or Kingsbridge Heights to Bainbridge Ave or the Botanic Gardens the only real option is Bx10, which is infrequent, indirect, and very squiggly
Soundview	West Farms				X	X			
Norwood	1250 Waters place			X	X	X			
Marble Hill	Riverdale		X	X		X			
Soundview	Hunts Point Avenue (6)		X	X		X		X	
Soundview	Parkchester (6)		X	X		X		X	

BRONX ONLINE FINDINGS

From	To	Too many transfers	Bus doesn't go there	Not enough service	Takes too much time – too slow	No service when I want to go	Served doesn't go there – no direct	Service is unreliable	Bus stops are lonely – security concerns	Don't like waiting for buses	Not easy to get MetroCard or cash to pay for a	Metro North doesn't stop there	Subway doesn't stop there	Other
Morris Heights	University Heights	X	X	X				X						
Parkchester	Fordham		X		X			X		X				
Union Port	Fordham Plaza		X		X			X		X				
Union Port	Shops At Bruckner Commons	X	X	X	X	X	X	X	X	X				
Union Port	Birchall Ave. & Sagamore St.		X		X	X	X	X		X				Bus bunching
Riverdale	Concourse				X									
Riverdale	City Island					X								
Woodlawn	Country Club	X				X							X	
Fordham	West Farms Shopping Center						X							
Co-op City	Bronx Zoo	X	X			X	X	X						
Co-op City	Bay Plaza					X								
161 Street - Yankee Stadium (4/D/B)	Highbridge			X					X					Buses are always too crowded.
Kingsbridge Heights	Pelham Parkway					X								
Parkchester	Concourse	X	X	X	X	X	X							
Kingsbridge	Bartow-Pell Mansion	X				X								
Concourse	Lincoln Medical Center					X		X		X				
Highbridge	Bronx Zoo	X				X	X						X	
Highbridge	Belmont	X	X			X								
Highbridge	New York Botanical Garden					X								
Pelham Bay	Herbert H. Lehman High School	X				X	X							
Monsignor Scanlan High School	Bay Plaza					X		X	X					
Pelham Bay	Monsignor Scanlan High School					X								1. Horrible traffic 2. not good get-off place. It's also school bus drop off/pick up area
Pelham Bay	207 st in Manhattan					X	X							Horrible traffic especially in Fordham area and going over the bridge
Kingsbridge Heights	Morris Heights				X	X		X						The Bx3 bunches all day, operators skip stops while displaying not in service signs, and buses sometimes don't travel the whole route despite the schedule implying almost every run is from 238-181. It also stops running southbound at 12:50am which makes it difficult to get home late at night

BRONX ONLINE FINDINGS

From	To	Too many transfers	Bus doesn't go there	Not enough service	No service when I want to go	Takes too much time - too slow	Service doesn't go farther - inconsistent	Service is unavailable	Bus stops are lonely - security concerns	Don't like waiting for buses	Take too many stops or come home late	Metro North doesn't stop there	Subway doesn't stop there	Other
Kingsbridge Heights	Fordham Plaza	X	X				X	X						
Bronx Zoo	Bronx Hall Of Justice					X								
Clason Point	Calvary Hospital					X								
George Washington Bridge Bus Station	Highbridge					X								
Castle Hill	Parkchester	X					X							
Westchester	Parkchester	X												
Bedford Park Boulevard - Lehman College (4)	Co-op City	X	X	X		X	X	X		X				Service stops on the 4A too early. No nighttime buses
George Washington Bridge Bus Station	Co-op City					X	X	X				X		Lack of Limited Stop / SBS service going East and West.
Parkchester (6)	231 Street(1)	X				X	X	X						
New York Botanical Garden	149 Street - Grand Concourse (2/4/5)					X	X	X						
Prospect Avenue (2, 5 trains)	2500 3rd Avenue - 149 st (bus terminal)		X						X					
City Island	Manhattan College	X												
City Island	Harry S Truman High School						X		X					
City Island	Bronx Borough Hall and Court House	X				X	X			X				
Riverdale	Bronx Hall Of Justice	X				X	X							
Riverdale	Fordham Plaza	X		X	X	X	X	X						
Riverdale	Belmont	X	X	X	X	X	X	X						
Baychester	Baychester													
Bedford Park	Belmont													
Riverdale	East Bronx	X	X	X		X			X	X				
Riverdale	Bronx Zoo					X								
East Tremont	Bay Plaza													
Riverdale	Fordham Plaza		X			X	X	X	X					
Riverdale	Bronx Zoo					X		X	X	X				
Hutchinson Metro Center	Riverdale	X		X	X	X	X	X	X	X				
Kingsbridge	Eastchester	X		X		X								
Kingsbridge	Castle Hill													Bus service only on weekdays
Port Morris	Bronx-Lebanon Hospital Center													
Kingsbridge	231 Street(1)													
Riverdale	Bay Plaza							X	X		X			
Riverdale	Trump Golf Links	X						X						
Riverdale	Clason Point	X		X		X	X	X						
Concourse	Belmont		X											
Concourse	Mott Haven					X	X	X						
Fordham	Riverdale					X		X		X				

The bx12 local terminates in an area where it's challenging to walk and there are no other local bus routes. While the last bus stop is at the corner of Fordham Rd and Webster Ave, it is a long walk to Sedgwick (Webb) and stop is skip. It would be better to have a service to provide there. Buses pick up Sedgwick and Bailey Avenues an extra 25-30 mins to make a U turn and return east. It's impossible to track bus service once they pass Webb Avenue so riders often have no idea if a bus is coming. MTA should add a bx12 local stop at Sedgwick/Bailey Av (which is a 8km stop) and Bailey/Heath Av (where the route makes a u turn) so that residents of Bailey Houses and Sedgwick Avenue do not have to walk as far for Fordham rd. service. Additionally people could walk from the new terminal at Bailey/heath avs to river plaza for shopping

Not enough buses running throughout BX4/Bx4A line, the bus terminal at 3rd Ave - 149 st can get REALLY CROWDED. Buses can't turn around in 10-15 mins. People sometimes walking to your destination instead of waiting can be better. In one instance, a bus operator let people on without paying the fare because there was way WAY too much people to account for (caused by the waiting for the buses, or when 2/5 trains decided to go uptown express due to what it seems like never-ending construction). The bus ride itself is fine. Solution: Add more buses running on the line, there are huge caps between bus lines come/terminate. For 2/5 construction, I'd rather have a weekend where 2/5 can close so they can finish their work rather than weeks of a travel inconveniences. If possible, make the BX4/Bx4A a Select Bus Service so passengers can get on the bus quickly, that terminal will definitely benefit from Select Bus Service.

due to knee injury need to avoid using train steps. It would be convenient to take the BX24 bus to connect with the SBS BX12 bus. BX24 bus should run every 20 minutes not every 30 minutes. Also take BX24 to Montefiore hospital.

BRONX ONLINE FINDINGS

From	To	From many transit users	Bus doesn't go there	Not enough service	Not service when I want to go	Takes too much time – too slow	Needs to leave go elsewhere – inconvenient	Service is unreliable	Bus stops are lonely – security/concerns	Don't like waiting for buses	Not many get on/off buses so no one is there	Metro North doesn't stop there	Subway doesn't stop there	Other
Riverdale	Wave Hill		x	x	x	x	x	x	x	x				
University Heights	Riverdale		x		x	x	x	x				x		
University Heights	Hutchinson Metro Center	x	x		x	x								
George Washington Bridge Bus Station	University Heights						x							
Co-op City	Bay Plaza	x	x	x	x	x	x	x	x	x		x		
Co-op City	Soundview	x												
Co-op City	Co-op City											x		
Hutchinson Metro Center	Hutchinson Metro Center	x	x	x		x	x		x	x		x		
Hutchinson Metro Center	Montefiore Medical Center					x	x		x	x		x		
Hunts Point Meat Market	Co-op City	x	x						x	x		x		
Riverdale	Co-op City		x											
Co-op City	Lehman College													
Co-op City	Soundview Ferry	x				x	x							
Bedford Park	Morris Park			x	x			x	x	x	x	x		
Morrisania	Riverdale		x	x		x		x						
Morrisania	City Island	x		x	x	x	x	x						
500 east 165th street	Co-op City	x	x	x										
Morrisania	3 Avenue - 149 Street (2/5)	x	x	x	x	x	x	x	x	x				
Morrisania	161 Street - Yankee Stadium (4/D/B)	x	x	x	x	x	x	x	x	x				
Morrisania	Port Morris	x	x	x	x	x	x	x	x	x				
Co-op City	University Heights		x	x	x	x	x	x	x	x				
Spuiten Duyvil	Doctors in East Bronx	x												
Baychester	Hunts Point Meat Market		x	x	x	x	x							
Baychester	Shops At Bruckner Commons	x	x	x	x	x	x							
Bay Plaza	Fordham University	x	x	x	x	x	x							
Riverdale	DeWitt Clinton High School					x								
Riverdale	New York Botanical Garden			x				x						
Co-op City	Westchester shopping areas	x	x	x	x	x	x	x						
Co-op City	North Wind Undersea Institute	x	x	x	x				x	x				
Concourse	Grand Concourse		x	x	x			x	x	x				
Orchard Beach	Baychester	x												
Co-op City	Wave Hill		x		x	x				x				
Co-op City	Riverdale	x				x	x	x						
Co-op City	Highbridge	x				x	x	x						
Bartow-Pell Mansion	New Rochelle		x	x	x					x				
Soundview Park	Bartow-Pell Mansion	x	x	x	x									
Bay Plaza	Fordham Plaza	x												
Crotona Park	Bronx Library Center	x				x								
Co-op City	Pelham Bay		x											
Co-op City	Bronx Criminal Court					x								
Co-op City	Botanical Garden				x									
Montefiore Hospital	Montefiore Hospital	x	x			x	x					x		

It is quicker to take the bus OUT of the Bronx into Manhattan to catch the 1 train into Riverdale. The buses are overcrowded and run too slow. The Bronx needs more service!

The buses are SLOWWW and too overcrowded

not feel secure in using it. Also, the language used by many of the patrons was foul. Also, one a.m. 42 people got on at 231 and 8 way and at least half need to have a long conversation with the driver. Many with questions did not have enough English to get an answer that helped them. We sat there for at least 20 mins to 30 mins. I am trying to get to work! I turned the jingle down. The busaison is trying to get to work was impossible. Then, one of the drivers in the bus said they will get off the bus to take the bus due to no translation. She offered me a ride every 10 min! (That offer did not work. What is meant is that after she does her grocery shopping and picking up someone else I have a shot at getting home by 6!). As a short-term solution, please start limited stop buses so that it does not feel like a long wait. We are then off to work. Once I waited one half hour for bus out of MTA, we were then off just after bus made home. I then had to walk home. I waited another half hour for bus to come. There were 3 seats and 10 people, three elderly with canes had to stand for the half hour.

The bus schedules are too unreliable. They are supposed to come at regular intervals and then they don't show up 30-40 mins then all come at once. They come packed. They sometimes don't show up at all. And MTA knows they are behind schedule, they don't care just make us wait. AND expect us to pay for this service!!!

Bainbridge Ave through Gun Hill Rd/Whiteplains Rd need Bus lanes to start from Bainbridge Ave 205th St to Gun Hill Rd and Whiteplains Rd

BRONX ONLINE FINDINGS

From	To	Too many transfers	Bus doesn't go there	Not enough service	No service when I want to go	Takes too much time – too slow	Service doesn't go straight there – no direct	Service is unreliable	Bus stops are lonely – safety concerns	Don't like waiting for buses	There are no other cars on the route	Metro North doesn't stop there	Subway doesn't stop there	Other
Jacobi Medical Center	Jacobi Medical Center	X				X			X					
3600 Hillman Avenue	Fordham Plaza					X			X					
Woodlawn	Van Cortlandt Park	X					X							
Co-op City	Montefiore Medical Center			X		X		X						
Co-op City	Bronx Borough Hall and Court House	X				X								
Co-op City	Bronx Zoo			X		X								
Bay Plaza	Pelham Bay Park Station		X		X					X				
Co-op City	Bruckner									X				
Mott Haven	Belmont	X									X			
Riverdale	Bronx Zoo	X	X											
Riverdale	Van Cortlandt Park	X												
Co-op City	Co-op City	X		X	X	X	X							
Williamsbridge	Evander Childs Educational Campus					X								
Co-op City	Eulton Fish Market	X						X						
Co-op City	Montefiore Medical Center					X				X				
Norwood	Soundview	X		X	X		X				X			
Norwood	West Farms	X		X	X									
Woodlawn	Riverdale	X	X				X							
Morris Heights	Riverdale Kingsbridge Academy	X	X	X		X								
Melrose	Bronx High School of Science													
Van Nest	Bronx Borough Hall and Court House													
Riverdale	New York Botanical Garden	X												
Riverdale	Bronx Zoo	X												
Co-op City	Bronx Housing Civil Court	X												
Co-op City	Riverdale	X												
Bronx Municipal Hospital Center	Westchester Sq. Medical Center	X												
Westchester Sq. Medical Center	600 Baychester Avenue	X												
Co-op City	Woodlawn	X				X		X			X			
Co-op City	The Bronx YMCA	X												
Kingbridge	Melrose	X				X	X			X	X			
Pelham Bay	Riverdale	X	X	X	X	X	X	X						
Pelham Bay	Yankee Stadium	X	X	X	X	X	X	X						
Pelham Bay	Port Morris	X	X	X	X	X	X	X	X		X			
Fulton Fish Market	Hunts Point Produce Market	X	X	X	X	X	X	X	X	X			X	
Fordham Plaza	Jacobi Medical Center	X												
Randall's Island	New York State Department Of Motor Vehicles	X												
Soundview	Montefiore Medical Center	X												
1104 elder avenue	Value Veterinarian at 2041 Cross Bronx Expwy													
Marble Hill	Morris Heights	X				X	X							
Parkchester	West Bronx Academy for the Future													
Fordham	Transit Center, White Plains, NY			X	X									
Pelham Bay Park Station	Co-op City					X		X		X				
Eastchester - Dyre Avenue (5)	Co-op City		X	X		X	X							
Woodlawn	Riverdale	X	X			X	X					X		
Woodlawn	Schuylerville	X	X									X		
University Heights	Hutchinson Metro Center	X			X	X		X			X			
East 180 Street (2/5)	Calvary Hospital			X		X		X						
University Heights	Morris Park													
The Hub	Concourse													
Melrose	Port Morris	X		X	X	X		X		X				
Fordham Plaza	Hutchinson Metro Center	X		X	X	X	X	X		X				
Pelham Bay Park Station	Fordham			X		X		X		X				
Throgs Neck	Bay Plaza			X		X		X				X		
Concourse	Soundview Park				X		X		X					

BRONX ONLINE FINDINGS

From	To	Too many transfers	Bus doesn't go there	Not enough service	Service when I want to go	Takes too much time - too slow	Service doesn't go right there - too direct	Service is unreliable	Bus stops are lonely - security concerns	Don't like waiting for buses	Not easy to get around or can't get to it	Metro North doesn't stop there	Subway doesn't stop there	Other
Norwood	Bay Plaza					X	X	X						
Baychester	Webster ave and gun hill road		X						X					
Co-op City	West Farms Shopping Center	X	X	X	X	X	X	X		X				
Parkchester	Van Cortlandt Village	X	X	X	X	X	X	X		X				
Bay Plaza	Parkchester	X											X	
Morris Park	Baychester	X												
Pelham Bay Park Station	Bay Plaza					X								
Pearlree mall	Bay Plaza		X											
City Island	Pelham Bay		X		X									
Kingsbridge Heights	Hunts Point					X								
Kingsbridge Heights	City Island					X								
Pelham Parkway	Soundview		X	X	X	X	X	X		X			X	
Pelham Parkway	Riverdale		X	X	X	X	X	X		X				
Pelham Parkway	Hunts Point Produce Market	X	X	X	X	X	X	X						
Lehman College	Morris Park		X	X	X	X	X	X		X	X			
Soundview	Morris Park	X	X											
Morris Park	Riverdale	X		X		X	X	X						
Morris Park	Fordham	X		X		X	X	X						
Morris Park	Throgs Neck	X	X	X	X	X	X	X		X				
Merrose	City Island	X				X		X		X				
City Island	Pelham Bay Park Station			X										
Soundview	Riverdale	X				X								
Bay Plaza	Morrisania	X					X							X
City Island	Pelham Bay Park Station			X	X	X		X	X	X	X			
Kingsbridge	Throgs Neck		X	X	X									
Morrisania	Bay Plaza	X	X		X			X	X					
Morrisania	Westchester	X	X	X			X							
Baychester	City Island	X				X	X	X						
Riverdale	Woodlawn Cemetery	X	X				X			X	X	X		
Pelham Parkway	Super Stop and Shop, Coop City Blvd	X												
Country Club	Riverdale	X												
Throgs Neck	Lower Manhattan	X				X		X		X	X			
Throgs Neck	Bronx Ferry	X	X			X		X			X			
Bay Plaza	Shops At Bruckner Commons	X				X	X							X
Spuyten Duyvil	Morris Heights		X		X									
Spuyten Duyvil	Concourse		X		X									
555 Kappock St	Concourse		X		X									
City Island	1428 Madison ave	X	X	X	X	X	X	X						
Montefiore Medical Center	Montefiore Medical Center			X										
Co-op City	Bay Plaza	X	X		X	X								
City Island	Bronx Zoo	X	X	X	X	X	X	X	X	X				
City Island	New York Botanical Garden	X	X	X	X	X	X	X	X	X				
City Island	Montefiore Medical Center			X										
City Island	Locust Point	X	X	X	X			X	X					
Pelham Parkway	Tremont	X	X		X	X	X	X		X		X		
Pelham Parkway	City Island	X	X	X	X	X	X	X	X	X				
Riverdale	Greystone Avenue	X		X										
Pelham Parkway	Soundview		X											
Throgs Neck	Hutchinson Metro Center	X												
Port Morris	Riverdale	X				X	X			X				
Pelham Parkway	Bronx Academy of Health Careers		X		X			X		X				
Pelham Parkway	1894 Walton Avenue	X	X	X	X			X		X	X			
Pelham Parkway	Co-op City	X	X	X	X	X	X	X		X	X			
Bedford Park	Harriiman State Park, 145th Street					X	X							
Riverdale	Montefiore Medical Center	X					X	X						
Riverdale	Jacobi Medical Center	X					X	X						
Riverdale	Lincoln Medical Center	X					X	X						
City Island	Riverdale	X		X		X	X	X	X					
Montefiore Medical Center	Pelham Bay	X		X		X	X	X	X				X	

BRONX ONLINE FINDINGS

From	To	Too many transfers	Bus doesn't go there	Not enough service	No service when I want to go	Service doesn't get there -- too indirect	Service is unreliable	Bus stops are lonely – security concerns	Don't like waiting for buses	Not easy to get MetroCard or coins to pay for e	Metro North doesn't stop there	Subway doesn't stop there	Other
Suytlen Duyvil	Suytlen Duyvil			X	X	X	X		X				
Suytlen Duyvil	Concourse	X	X		X	X	X		X				
Suytlen Duyvil	Bedford Park Boulevard - Lehman College (4)			X	X	X	X		X				
Riverdale	Bronx Zoo	X			X								
Riverdale	Randall's Island	X	X		X	X							
Fordham	2 Broadway ny,ny		X						X		X		
Riverdale	New York Botanical Garden		X			X							
Suytlen Duyvil	Belmont	X			X								
Eastchester	Riverdale			X	X				X				
Suytlen Duyvil	Pelham Bay	X	X		X	X							
Suytlen Duyvil	Wakefield	X	X		X	X							
Woodlawn	Kingsbridge depot	X											
Riverdale	1200 Waters Place, 10461		X										
Riverdale	Riverdale 254st		X										
Riverdale	1200 Waters Place, 10461		X										
Riverdale	Norwood				X	X			X				
Parkchester	Riverdale	X			X	X					X		
Throgs Neck	Riverdale	X			X	X	X				X		
Hutchinson Metro Center	Riverdale	X	X		X	X		X			X		
West Farms	170 Street (B/D)			X		X							Buses too small and not enough people squeeze in back doors everyday argue push very uncomfortable
Hunts Point Avenue (6)	Clarendon						X						Next bus will frequently still be coming down 145 in Manhattan. Meanwhile large crowds of rude upset people form. Forcing me to either walk the 10 or so blocks or stand by and let several bus collect the angry masses before I can catch one peacefully. I do this because once the buses come they come up to six at a time. I have video proof of this. Also not enough service weekend nights.
Riverdale	Eastchester-Dyre Av	X	X	X		X	X	X					
Concourse	Co-op City	X									X		
Kingsbridge Road (4)	Riverdale					X		X					
Riverdale	Montefiore Medical Center	X				X	X	X					
Soundview	Riverdale					X							
Riverdale	Co-op City	X				X	X	X			X		
Riverdale	City Island	X				X	X	X			X		
Riverdale	Bronx Zoo	X	X	X		X	X	X			X		
Kingsbridge	Bronx Borough Hall and Court House	X				X	X						
Kingsbridge	Soundview	X				X	X						
Washington Heights	New York Botanical Garden	X				X	X						
Williamsbridge	US Social Security Administration	X			X	X	X	X			X		
Williamsbridge	Orchard Beach				X		X						

BRONX ONLINE FINDINGS

From	To	Too many transfers	Bus doesn't go there	Not enough service	No service when I want to go	Takes too much time -- too slow	Service doesn't stop there -- insufficient	Service unreliable	Don't like waiting for buses	Not enough stops at a bus stop -- security/concerns	Metro North doesn't stop there	Subway doesn't stop there	Other
Williamsbridge	Stop & Shop on Broadway near the 1 Train		X	X	X	X	X						
Fordham Plaza	Fordham Plaza					X		X					
Riverdale	5540 Mosholu Avenue, 10471	X											
Van Nest	University Heights		X	X	X				X			X	
Parkchester	University Heights		X		X					X			
Bronx Zoo	Riverdale						X	X					
Riverdale	Baychester					X	X	X					
Morris Park	Riverdale	X					X						
Bay Plaza	Bay Plaza												Buses too crowded. Too slow. Too much traffic congestion.
West Farms	Kingsbridge	X			X	X	X	X	X				
Matt Haven	Riverdale	X	X		X	X							
Co-op City	west 23 street	X							X				the 38 bus service is unreliable and the subway connection is bad.
Co-op City	Bronx Supreme Court	X				X							
Co-op City	Pelham Bay				X			X					
Riverdale	City Island	X											
Riverdale	Throgs Neck	X											
Riverdale	Schuylerville		X										
Riverdale	Kingsbridge Heights					X	X						
Bay Plaza	US Social Security Administration	X			X	X		X	X				
Montefiore Medical Center	Montefiore Medical Center	X		X		X		X					
Kingsbridge	New York State Department Of Motor Vehicles					X							
Kingsbridge	West Farms					X							
Riverdale	Bronx Supreme Court	X			X	X			X				#1 bus is much too congested, dirty and noisy
Woodlawn	Spuyten Duyvil	X		X		X		X					
Woodlawn	Bronx Zoo	X		X	X	X		X					
Woodlawn	katonah ave	X	X			X	X	X					
Woodlawn	Pelham Bay Park Station				X								
Co-op City	Soundview	X				X	X						
Co-op City	Riverdale						X	X	X				
Riverdale	Kingsbridge		X	X					X				
Hunts Point	Riverdale												
Hunts Point	Clason Point												
Morrisania	Riverdale	X				X	X	X					
West Farms	Bay Plaza	X				X	X	X					
Soundview	Bay Plaza				X			X				X	
Riverdale	Riverdale Park	X											
Williamsbridge	Riverdale	X				X				X		X	
Van Cortlandt Village	Horace Mann private school	X	X			X							
231 Street(1)	Marble Hill			X				X					
Van Cortlandt Village	Shops At Bruckner Commons	X				X	X	X	X	X			
Van Cortlandt Village	West Farms Shopping Center			X		X			X	X			
Fordham	Fordham University	X	X	X		X		X					
Spuyten Duyvil	Wakefield	X	X			X		X					
Spuyten Duyvil	Bronx Borough Hall and Court House	X				X		X					
Riverdale	Kingsbridge Road (4)					X							
Wave Hill	Clason Point	X	X			X				X			
Soundview Park	Kingsbridge	X				X	X			X			
Bay Plaza	College of Mount Saint Vincent					X					X		
Riverdale	Lehman College					X	X	X			X		
Riverdale	St. Raymond Cemetery	X				X		X	X				

BRONX ONLINE FINDINGS

from	to	To many transfers	Bus doesn't go there	Not enough service	Not service when want to go	Takes too much time - too slow	Service even in an image there - too many	Service is terrible	It's difficult to get to or from there	Don't like waiting for buses	Metro North doesn't stop there	Subway doesn't stop there	Other
Woodlawn	E 235th st & Katonah Avenue					x							
1200 Waters Place	US Social Security Administration	x	x	x	x			x					over two hours to go 7 miles
Pelham Parkway	Van Cortlandt Village	x	x			x							
Bay Plaza	Bay Plaza					x							
Spuyten Duyvil	Kingston Gate			x	x	x	x	x	x	x			
Norwood	Riversdale					x							
Norwood	Pelham Bay			x	x	x							
Mott Haven	Bay Plaza					x							
Mott Haven	City Island	x	x	x	x			x		x			
Co-op City	100 Alcott place			x	x	x							x
Co-op City	Bronx Supreme Court	x	x										
Hutchinson Metro Center	Hutchinson Metro Center					x							
Crown Hill	Bronx High School of Science	x				x		x					
City Island	Pelham Bay Park Station			x									
City Island	Any neighborhood or location other than Pelham Bay	x	x	x	x	x	x	x					
Belmont	New York Botanical Garden					x							
Van Cortlandt Village	Bay Plaza	x	x	x	x	x		x					
Van Cortlandt Village	Wave Hill		x										
Van Cortlandt Village	George Washington Bridge Bus Station					x							
Wakefield	Bathgate	x	x	x	x	x	x	x	x	x	x	x	
City Island	Pelham Bay			x	x	x		x					
Kingsbridge	Manhattan			x		x							
Soundview (Clason Point)	East 34th Street	x				x							
Co-op City	John F. Kennedy International Airport					x							
Co-op City	LaGuardia Airport					x							
Co-op City	Jamaica, NY					x							
Parkchester	Melrose		x										
Morrisania	Van Cortlandt Village	x											
Lehman College	Bedford Park					x	x						
Pelham Bay	Co-op City												
Gun Hill Road - Esplanade (5)	Co-op City					x							
Morris Park	Bronx High School of Science		x										
The Bronx Museum of the Arts	Morris Park		x	x	x	x	x	x					
Eastchester	Eastchester - Dyre Avenue (5)		x	x	x	x	x	x					
Wave Hill	St. Barnabas Hospital	x	x	x	x	x	x	x	x				
Shops At Bruckner Commons	Morris Heights	x	x			x		x	x	x			
Concourse	Bay Plaza	x				x							
Concourse	LaGuardia Airport	x											
Wakefield	The SOUTH BRONX	x				x	x	x	x	x	x	x	
Wakefield	Co-Op City	x				x	x	x		x	x		
Wakefield	Queens			x	x	x	x		x				
Woodlawn	Fordham Plaza			x	x								
Norwood	Throgs Neck	x											
Norwood	Melrose												
Parkchester	East 180 Street (2/5)		x										
Parkchester	2316 Brumer Avenue	x				x							
Riversdale	242 St. and Broadway (or some other entrance to Van Cortland Park)	x					x						
Concourse	Eastchester					x							
Yankee Stadium	University Heights	x											
Yankee Stadium	Port Morris	x											
George Washington Bridge Bus Station	Yankee Stadium	x											
Marble Hill	Soundview	x				x		x		x			
Riversdale	East 12th Street between 1st Ave. and 2nd Ave.	x		x	x	x	x	x					Buses are very unreliable on the weekends when I need to go to this location

BRONX ONLINE FINDINGS

From	To	Too many transfers	Bus doesn't go there	Not enough service	No service when I want to go	Takes too much time – too slow	Service doesn't go straight there – too indirect	Service is unreliable	Bus stops are unsafe – security concerns	Don't like waiting for buses	Not easy to get a MetroCard or access to any bus	Metro North doesn't stop there	Subway doesn't stop there	Other
East Tremont	Eastchester		X		X				X					
Hunts Point Produce Market	Yankee Stadium	X	X						X					
Riverdale	Bronx High School of Science					X								
Riverdale	Bay Plaza	X	X	X	X	X								
Fordham Plaza	Throgs Neck			X	X	X								
Kingsbridge	Norwood	X				X	X		X					
Kingsbridge	Co-op City	X		X		X	X		X					
Montefiore Medical Center	Morris Heights					X				X		X		
Günther and Boston Rd	Bay Plaza			X	X									
Baychester	Hutchinson Metro Center					X		X	X					
Eastchester	Lehman College Art Gallery	X				X	X		X					
Morris Park	Riverdale	X		X	X	X	X	X	X	X				
Wakefield	Shops At Bruckner Commons	X				X			X					
Hill Avenue & Nerlid Ave	Dyer Avenue & 233 Street				X	X	X	X						Bus rarely comes on schedule, then two and three buses show up
Hill Avenue & 241 St	Dyre Avenue & 233 Street				X	X	X	X						
Airport (LaGuardia)	Queens, NY	X				X								
Morris Heights	Montefiore Medical Center	X												
Morris Heights	Bay Plaza	X												
Morris Heights	Hunts Point Produce Market	X	X	X				X	X					
Schuylerville	Yankee Stadium					X	X							
Eastchester	Westchester Square - East Tremont Avenue (6)								X					
Westchester Square - East Tremont Avenue (6)	Eastchester					X			X	X				The buses are never on time. There are often empty buses at the stops but the drivers come very late or sometimes even leave early. It's hard to know when to arrive because they don't follow the schedule at all! Also, the drivers are very rude to customers.
Morris Heights	Lehman College								X					
George Washington Bridge Bus Station	Morris Heights		X						X					
Parkchester	2760 Matthews Avenue		X		X		X			X				
161st and River Ave	161st st and Melrose ave		X		X		X				X			
Riverdale	Broadway and W231st													the bx7 is always too crowded and the bx10 has unnecessary stops in south Riverdale that no one gets off at. These stops on the bx10 should be removed.
Riverdale	577 E 179 st						X				X			the bx9 is five blocks too walk, but I can also take the bx3 to the 1 train, but that is always too crowded. I also have to get up very early just to make it to my school on time. My student MetroCard has not even arrived because the government didn't provide enough this year to my school.
Pelham Parkway	Jacobi Medical Center		X		X		X							
Riverdale	Metro North-Riverdale	X	X	X	X									East (Broadway) to west service (Riverdale shopping district) in Riverdale is difficult, Raillink operates M-F only from North Riverdale to Metro North. To connect with Raillink I have to take bx9 first. To go from Broadway (Riverdale) to other locations in Riverdale I have to take bx9 south and transfer at W 231st to BX 7 or BX 10 to go west. For a 1.5 mile trip (east to west) the bus takes 45 minutes to an hour
Riverdale	Ethical Culture Building					X								

BRONX ONLINE FINDINGS

From	To	Trajectory transfers	Bus doesn't go there	Not enough service	No service when I want to go	Takes too much time - too slow	Service is erratic - stops - too slow	Service is unreliable	Don't like waiting for buses	Bus service is sketchy - safety concern	Not enough to demand service to be there	Metro North doesn't stop there	Subway doesn't stop there	Other
Crotona ave & Claremont pkwy	Marble Hill-225 St (1)		X					X		X				
Co-op City	Jacobi Medical Center					X				X				
Parkchester	Throgs Neck						X							
Fordham	Fordham Plaza	X	X	X										
Wakefield	Bronx Lebanon Hospital Center	X					X							
Wakefield	New York State Department Of Motor Vehicles (Fordham)	X					X							
Belmont	Wave Hill		X											
Bronxchester	Bay Plaza		X	X	X								X	
Bronxchester	Montefiore Medical Center	X	X	X	X	X				X				
Bronxchester	New York Botanical Garden	X	X	X	X									
Montefiore Medical Center	Montefiore Medical Center	X		X		X		X		X				
Pelham Bay	Bronx Criminal Court	X												
Co-op City	Montefiore Medical Center													
VA Medical Center	Bronx Lebanon Hospital Center		X	X	X									
Orchard Beach	Hunts Point Produce Market				X									
Bronx Community College	Port Authority Bus Terminal	X	X						X		X			
Spuylten Duyvill	Kingsbridge			X										
Concourse	Jacobi Medical Center	X	X	X	X	X				X				
Concourse	Bay Plaza	X				X								
Concourse	Montefiore Medical Center			X	X	X			X					
Morris Park	Parkchester		X						X					
Morris Park	Riverdale	X				X	X							
Pelham Parkway	Riverdale	X				X								
Pelham Parkway	The Bronx Museum of the Arts					X	X							
Pelham Parkway	Orchard Beach			X	X									
Parkchester	Fordham					X								
Barnes Ave & Mace Ave	Parkchester	X				X								
Parkchester	Riverdale	X				X	X							
Morris Heights	170 Street (B/D)				X		X							Long wait for buses
Morris Heights	E 151st St and River Ave						X	X						
Williamsbridge	Hutchinson Metro Center	X	X	X	X	X	X	X	X	X	X			
Williamsbridge	West Farms Shopping Center	X	X	X	X	X				X				
Parkchester	Riverdale	X	X	X	X									
Parkchester	Mott Haven	X	X	X	X	X		X	X					X
Riverdale	Parkchester	X	X	X	X	X	X	X	X	X	X			
Riverdale	Hunts Point	X	X	X	X	X	X	X	X	X	X			There are some rather unusual people who 'camp' out at bus stops in the East Bronx. They usually beg for money or try to yell at you.
Riverdale	Bronx Zoo	X												
Bay Plaza	2819 Schley Ave			X										
Norwood	Hunts Point							X						
Norwood	Fordham					X								Train is more reliable and faster, bus is more convenient but traffic sucks.
Van Cortlandt Park - 242 Street (1)	Riverdale	X					X	X	X					
Bay Plaza	Schuylererville	X	X	X	X	X	X	X	X					X
Prospect Avenue (2/5)	Hunts Point Produce Market			X	X									
Schuylererville	Riverdale			X			X	X						
Fordham	Riverdale	X						X						
Fordham Plaza	Jerome Park Reservoir			X			X	X						
Highbridge	Throgs Neck		X		X									Buses are always crowded
Highbridge	Yankee Stadium			X		X		X						Over half of customers do not pay and it is always crowded
St. Barnabas Hospital	West Farms Shopping Center	X												
West Bronx Academy for the Future	Hunts Point Produce Market							X						
Pelham Parkway	Bay Plaza			X		X	X	X	X					X

BRONX ONLINE FINDINGS

From	To	Too many transfers	Bus doesn't go there	Not enough service	No service when I want to go	Takes too much time – too slow	Service doesn't go straight there – no route	Service is unreliable	Bus stops are lonely – safety concerns	Don't like waiting for buses	Not easy to get transportation or cars to park there	Metro North doesn't stop there	Subway doesn't stop there	Other
Bathgate	East Tremont							X						
Parkchester	Norwood					X	X							
Parkchester	Co-op City	X	X											
Concourse	Fordham Plaza		X	X	X			X						
Riverdale	Belmont		X	X				X				X		
Parkchester	University Heights	X				X				X				
Bedford Park	Hunts Point Meat Market			X								X		
Bronx High School of Science	Co-op City	X	X			X				X		X		
Sputzen Duyvil	Bay Plaza					X								
Norwood	212 street bainbridge ave	X				X	X							
Clason Point	The Hub	X												
Van Cortlandt Village	Co-op City	X	X			X	X							
Throgs Neck	Co-op City	X				X	X	X	X		X	X		
Throgs Neck	Bronx Zoo	X	X			X	X	X	X		X			
Throgs Neck	Hutchinson Metro Center	X				X	X	X	X		X			
Throgs Neck	Bay Plaza	X				X		X	X		X			
Lehman College	Riverdale					X								
Fordham	Bronx Zoo	X	X			X	X	X	X		X			
West Farms	southern Blvd										X			
Bronx High School of Science	Bruckner	X	X	X	X	X	X	X		X		X		
West Farms	Hostos Community College					X								
Highbridge	LGA	X				X				X				
Morrisania	Yankee Stadium					X		X		X				
Fordham University	Bay Plaza			X		X		X						
Bronx High School of Science	41-17 Main Street, Flushing, NY, 11355			X		X		X		X				
Bronx High School of Science	Harry S Truman High School			X		X		X		X				
Castle Hill	Jacobi Medical Center	X	X	X		X	X	X	X	X	X	X		
Concourse	Castle Hill	X	X			X	X			X	X			
Castle Hill	Concourse	X	X	X	X		X	X	X	X				
Castle Hill	Woodlawn	X	X			X	X	X						
Soundview	Bedford Park		X	X		X			X			X		
Soundview	Bay Plaza							X				X		
Soundview	Riverdale	X	X			X								
Mott Haven	Montefiore Medical Center	X				X	X		X			X		
Mott Haven	Wakefield	X				X								
Mott Haven	Montefiore Medical Center	X				X	X		X			X		
Mott Haven	Wakefield	X				X								
Belmont	New York State Department Of Motor Vehicles	X				X					X			
Kingsbridge	Morris Park	X		X	X	X						X		
Kingsbridge	Riverdale													

BRONX ONLINE FINDINGS

From	To	Too many transfers	Bus doesn't go there	Not enough service	No service when want to go	Takes too much time - too slow	Service doesn't go straight there - too weird	Service is unreliable	Bus stops are lonely - security concerns	Don't like waiting for buses	Not easy to get to/odd or confusing day	Metro North doesn't stop there	Subway doesn't stop there	Other
Riverdale	New York Botanical Garden	x						x	x	x			x	
Claremont	Castle Hill	x			x	x				x	x			
Claremont	Bay Plaza	x				x	x							
Claremont	Fordham Plaza	x	x								x			
Orchard Beach	Bronx Zoo		x	x	x									
Fordham	University Heights	x						x						
Riverdale	Baychester	x			x	x								
Co-op City	Co-op City	x			x						x			
Co-op City	167 and Grand Concourse				x									
St Raymond cemetery	167 st and Grand Concourse				x			x						
Port Morris	Fordham Plaza				x		x							
Port Morris	Highbridge				x									
Port Morris	Throgs Neck	x	x	x										
Hunts Point	Fordham	x	x	x	x				x					
Pelham Bay	Orchard Beach	x	x	x	x	x	x	x	x	x				
Morrisania	The Hub		x	x	x	x	x	x	x	x				
525 West 230th Street	Albert Einstein College of Medicine 1300 Morris Park Avenue			x	x	x	x			x	x			
526 West 230th Street	Montefiore Medical Center			x		x								
Hutchinson Metro Center	Hutchinson Metro Center	x	x		x	x	x	x						
4052 Harper Ave Bronx NY 10466	Hutchinson Metro Center	x	x		x	x	x	x						
Kingsbridge Heights	Highbridge				x		x	x			x			
Grand Concourse and 161st street	Health Opportunities High School		x								x			
Williamsbridge	Parkchester	x												
Baychester	Riverdale					x								
International Community High School	Pelham Parkway				x		x	x	x	x				
Pelham Parkway	Fordham		x		x									
Soundview	Fordham Plaza	x	x			x								
City Island	City island avenue			x	x	x		x						
Pelham Bay Park Station	City Island			x	x	x	x	x	x					
City Island	Bronx Zoo	x	x	x			x							
City Island	New York Botanical Garden	x	x	x			x	x						
Woodlawn	Riverdale	x	x	x		x	x							
1550 Dyre ave	Tremont	x												
New York Botanical Garden	George Washington Bridge Bus Station						x	x	x					
Highbridge	1133 Ogden Avenue	x	x	x					x	x				
George Washington Bridge Bus Station	161 Street - Yankee Stadium (4/D/B)	x							x	x				
Fordham Plaza	Morrisania	x												
Spuiten Duyvil	City Island				x									
Spuiten Duyvil	Belmont				x	x								
Spuiten Duyvil	Hunts Point Meat Market			x	x		x		x					
Westchester	Baychester			x	x	x								

Buses are too crowded as most routes I use are on those heavily populated by schools (Bx11, Bx41). There doesn't seem to be any increased service during the hours students are required to get to school. Once I had to wait 8+ hours for a bus to get to school. I have to take the bus to get to school as there is no subway.

Bus stops aren't built on a grid like Manhattan. It often seems to still be an 'island' time' like the routes are following cow paths. There are some areas in the Bronx, you just can't seem to get to directly without making transfers and using a lot of time (especially if going from South to North). It can be exhausting!

I have to walk over 20 minutes just to get to the bus stop that will take me into the neighborhood. I also have to walk over 20 minutes to get the bx19 to get out of my neighborhood to get there.

Not enough buses on the bx31 during evening rush, when the buses do come, there isn't enough room for all the passengers waiting to board, and the buses become packed like sardine cans, and I am sure this is not good for the buses either.

BRONX ONLINE FINDINGS

From	To	Too many transfers	Bus doesn't go there	Not enough service	No service when I want to go	Takes too much time – too slow	Service doesn't get there – inconsistent	Service is unreliable	Bus stops are briefly – security concerns	Don't like waiting for buses	Not easy to get there/need to walk	Metro North doesn't stop there	Subway doesn't stop there	Other
Eastchester	Bay Plaza	X	X	X	X									
Hutchinson Metro Center	Hutchinson Metro Center		X	X	X				X					
Throgs Neck	Yankee Stadium	X		X	X	X			X					
City Island	Montefiore Medical Center	X				X	X	X	X	X				
City Island	Bronx Community College	X	X	X	X	X	X	X	X			X		
Wakefield	Bronx Community College	X												
Pelham Parkway	Co-op City		X	X	X	X	X	X						
Spuyten Duyvil	Belmont					X						X		
Riverdale	Montefiore Medical Center	X												
Bay Plaza	Hunts Point		X		X	X			X	X	X			
Jacobi Medical Center	Co-op City	X	X	X	X	X	X	X	X	X	X	X		
Bay Plaza	Hunts Point		X			X				X	X	X		
Jacobi Medical Center	Co-op City	X	X	X	X	X	X	X	X	X	X	X		
Riverdale Park	Bronx Zoo		X	X		X	X							
Pelham Parkway	Port Morris													
Pelham Parkway	Bay Plaza					X								
Pelham Parkway	Van Cortlandt Park	X												
Fordham	Riverdale					X		X						
Riverdale	Bay Plaza	X	X	X	X	X	X	X				X		
Fordham	Soundview Park		X	X	X	X	X	X						
Fordham	New York State Department Of Motor Vehicles		X	X	X	X	X	X						
Kingsbridge	Bay Plaza					X	X	X						
Concourse	Williamsbridge	X	X	X	X	X	X	X						
Fordham Road (B/D)	University Heights					X		X		X				
Bay Plaza	Pelham Parkway		X											
Pelham Parkway	Throgs Neck	X												
University Heights	Tremont	X	X	X	X	X	X							
Tremont	Parkchester	X	X	X	X	X		X				X		
Throgs Neck	York Avenue Manhattan						X							
Bronx Zoo	Bruckner		X			X			X		X			
Spuyten Duyvil	New York Botanical Garden	X				X								
Spuyten Duyvil	Spring and 6 ave, Manhattan	X		X	X									

Bx10 does not go to the A train. I need to transfer to bus 7 and then pay an additional fare to ride the A train, years ago I could take the bx20 to the A train. I don't ride often enough to buy a monthly and I take the bus M5 to the express bus to come home

BRONX ONLINE FINDINGS

From	To	Too many transfers	Bus doesn't go there	Not enough service	No service when I want to go	Takes too much time – too slow	Service/demand for transit there – too violent	Service is unreliable	Bus stops are lonely – security concerns	Don't like waiting for buses	Use area is not accessible or costs to pay fare	Metro North doesn't stop there	Subway doesn't stop there	Other
Riverdale	270 Park Ave.					X								
Riverdale	Montefiore Medical Center					X	X							
Riverdale	New York Botanical Garden	X	X	X	X	X		X						
Throgs Neck	Shops At Bruckner Commons	X	X	X	X	X								
Throgs Neck	Soundview	X	X			X	X	X	X	X				
Riverdale	Bay Plaza	X				X				X				
Edgewater Park	Bay Plaza	X		X		X				X				
Edgewater Park	Burke Avenue (6)			X		X				X				
Throgs Neck	Montefiore Medical Center	X												Too many stops, too long of walk. Would take 1.5 hours
Pelham Bay	Van Cortlandt Village					X	X							
Bruckner Blvd & Baisley Ave	Rockefeller center									X				deserted bus stop, no canopy, and the return trip you have to walk over the deserted dangerous overpass a lot of transient people around
Co-op City	Bronx Borough Hall and Court House	X			X	X								
Co-op City	Marble Hill	X			X	X								
Co-op City	West Farms Shopping Center	X				X	X							Too expensive to take taxi and too slow with bus transfers
Edgewater Park	New York Botanical Garden	X				X								
Edgewater Park	Bartow-Pell Mansion			X										
Country Club	Pelham Bay		X					X		X		X		
Riverdale	Fordham	X				X	X	X						
Riverdale	610 Exterior Street	X	X	X	X	X	X	X	X			X		
Fordham	Riverdale		X		X	X	X	X	X					
2411 webb avenue	40 W 225th St, Bronx, New York							X	X					
Bay Plaza	Castle Hill			X	X					X				
Jacobi Medical Center	University Heights					X			X					
Pelham Bay	Bay Plaza				X									
Montefiore Medical Center	Riverdale	X												
Country Club	Ferry Point Park	X												
Spuyten Duyvil	Throgs Neck	X	X	X	X	X	X	X	X	X		X		
Riverdale	Throgs Neck	X	X	X	X	X	X	X	X			X		
Throgs Neck	Bay Plaza	X	X			X								
Throgs Neck	Bronx Criminal Court	X				X				X	X			
Edgewater Park	Riverdale	X				X	X		X	X				

BRONX ONLINE FINDINGS

From	To	Too many transfers	Bus doesn't go there	Not enough service	No service when I want to go	Takes too much time – too slow	Service doesn't go straight there – too indirect	Service is unreliable	Bus stops are lonely – security concerns	Don't like waiting for buses	New entry to get MetroCard or come to my fare	Metro North doesn't stop there	Subway doesn't stop there	Other
Edgewater Park	Woodlawn					X	X	X	X	X	X			
Edgewater Park	Lehman College		X X	X X					X X					
University Heights	Bruckner		X	X X										
University Heights	Jacobi Medical Center	X			X X					X				
University Heights	Bay Plaza					X				X				
Riverdale	Belmont					X X	X X			X			X	
Bronx Zoo	Riverdale	X												
Bedford Park	Montefiore Medical Center	X X	X			X X	X X	X X	X X	X X	X			
Bedford Park	Pelham Parkway	X	X			X X	X X			X X				
Bedford Park	Port Morris	X				X		X X	X X	X X	X			
Marble Hill	Wakefield													
University Heights	Bay Plaza			X									X	
University Heights	Riverdale	X				X X	X X							
George Washington Bridge Bus Station	Pelham Parkway					X X	X X							Too many people make the same transfer between the Bx3 and Bx12, making both buses overcrowded.
All Bronx	LaGuardia Airport	X												
Kingsbridge	Riverdale				X			X						
Riverdale	Yankee Stadium					X X								
Morris Heights	Bay Plaza					X X						X		
Morris Heights	Montefiore Medical Center	X				X						X		
Bedford Park	Jacobi Medical Center	X X				X X	X X	X X		X X	X X			
Bedford Park	Fresh Direct Campus (12 St Ann's Place)	X X	X X	X X	X X	X X		X			X X			
Lehman College	Bay Plaza			X X	X X			X			X			
Clason Point	Riverdale						X X							
Riverdale	Montefiore Medical Center	X	X	X		X X		X						
Co-op City	Montefiore Medical Center													Bus is always too crowded select service #12
Lower Manhattan	25 Broadway					X								
Spyuyten Duyvil	Arthur Avenue Between East Tremont & East 176th Street	X				X		X						
Hutchinson Metro Center	Hutchinson Metro Center				X			X				X		

BRONX ONLINE FINDINGS

◊ Demographics

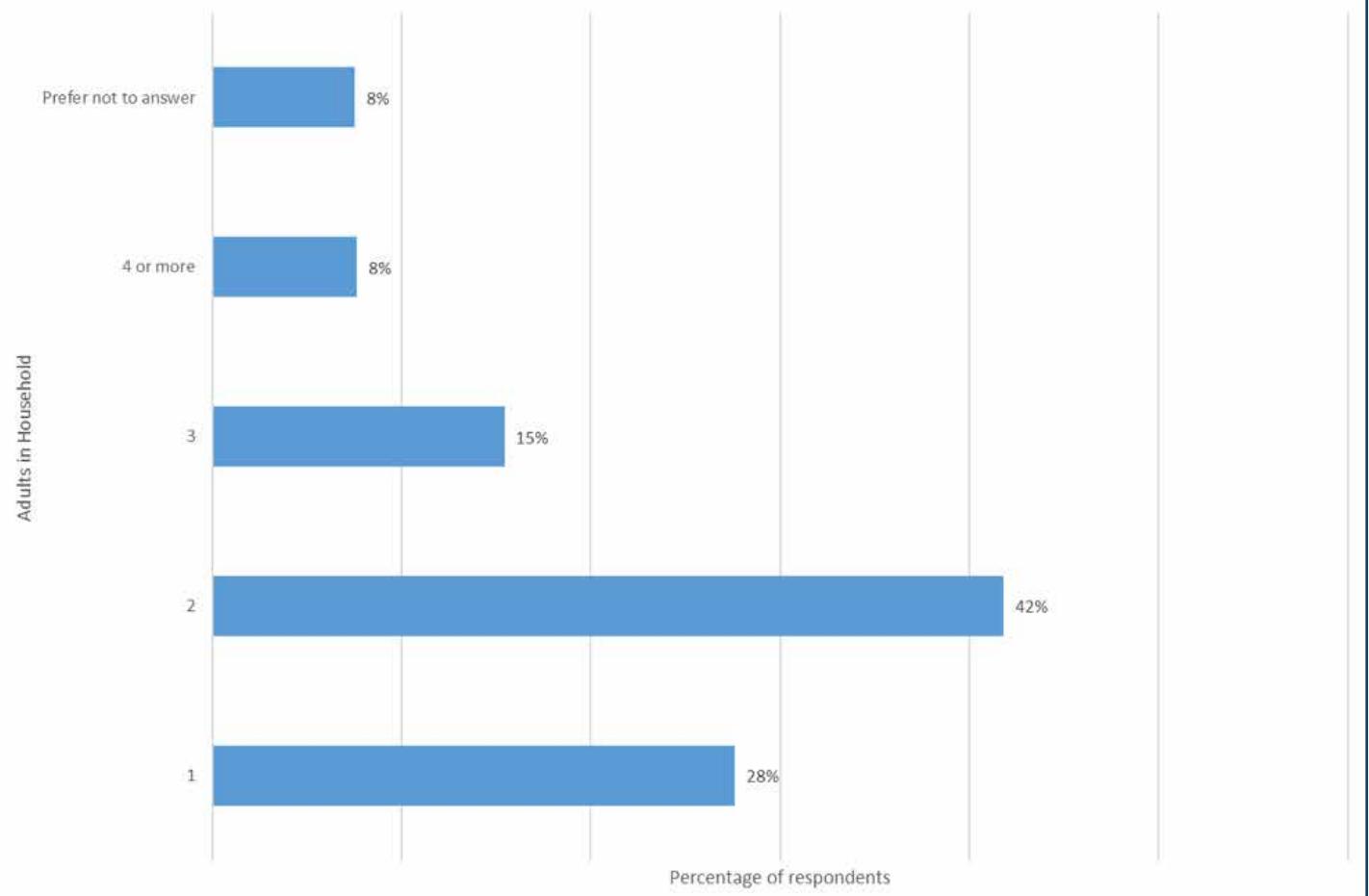
◊ The leading cohort is the 2-adult household, with 42% among Bronx online respondents

◊ The top three household income cohorts:

- ◊ \$100,000 or more (27%)
- ◊ \$50,000 to \$59,999 (11%)
- ◊ \$80,000 to \$89,999 (9%; tie)
- ◊ \$60,000 to \$69,999 (9%; tie)
- ◊ \$35,000 to \$49,999 (9%; tie)

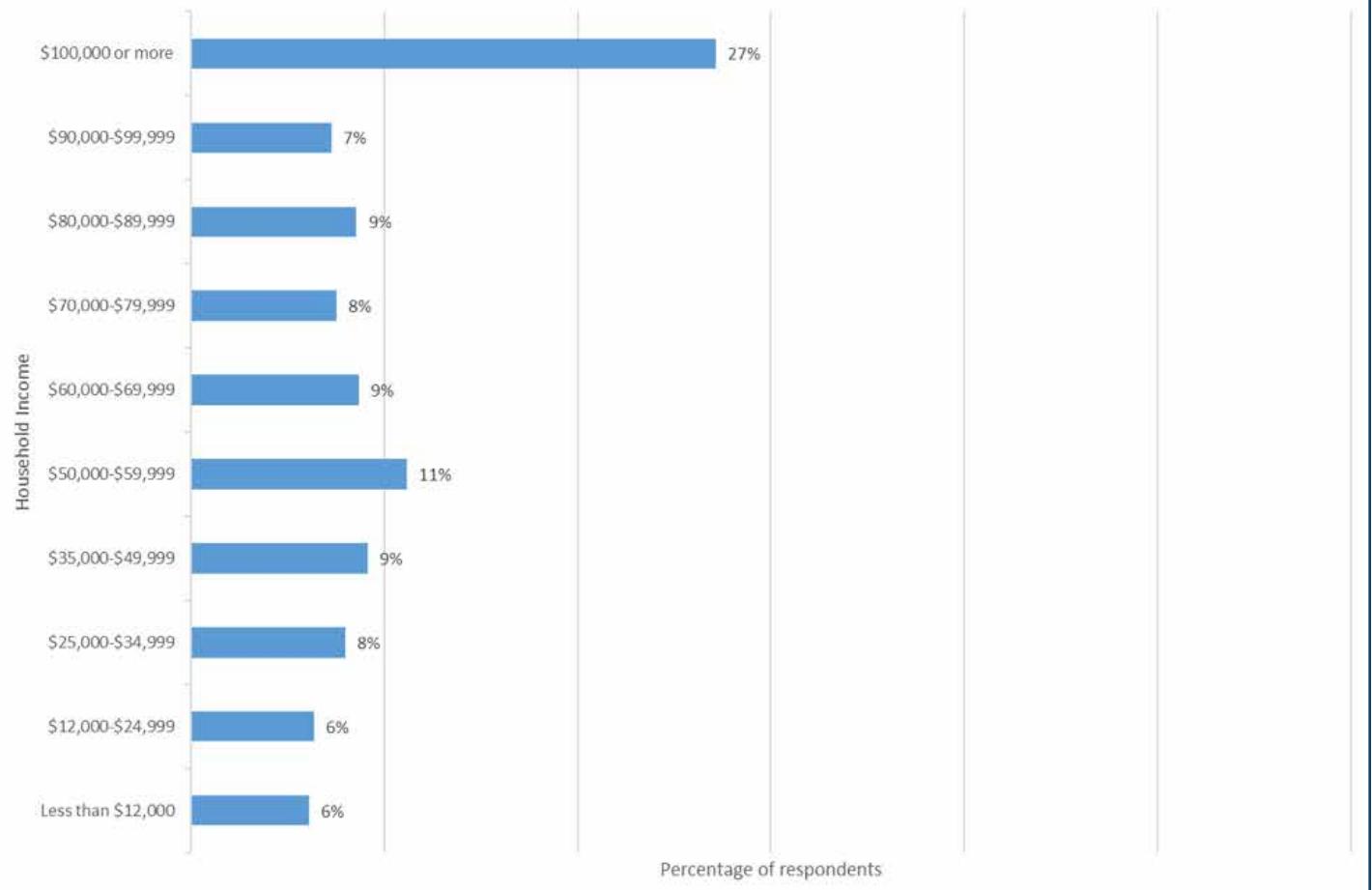
BRONX ONLINE FINDINGS

Number of Adults (18 years and older) in Household
Online Respondents: 732 respondents



BRONX ONLINE FINDINGS

2017 Total Household Income
Online Respondents: 689 respondents



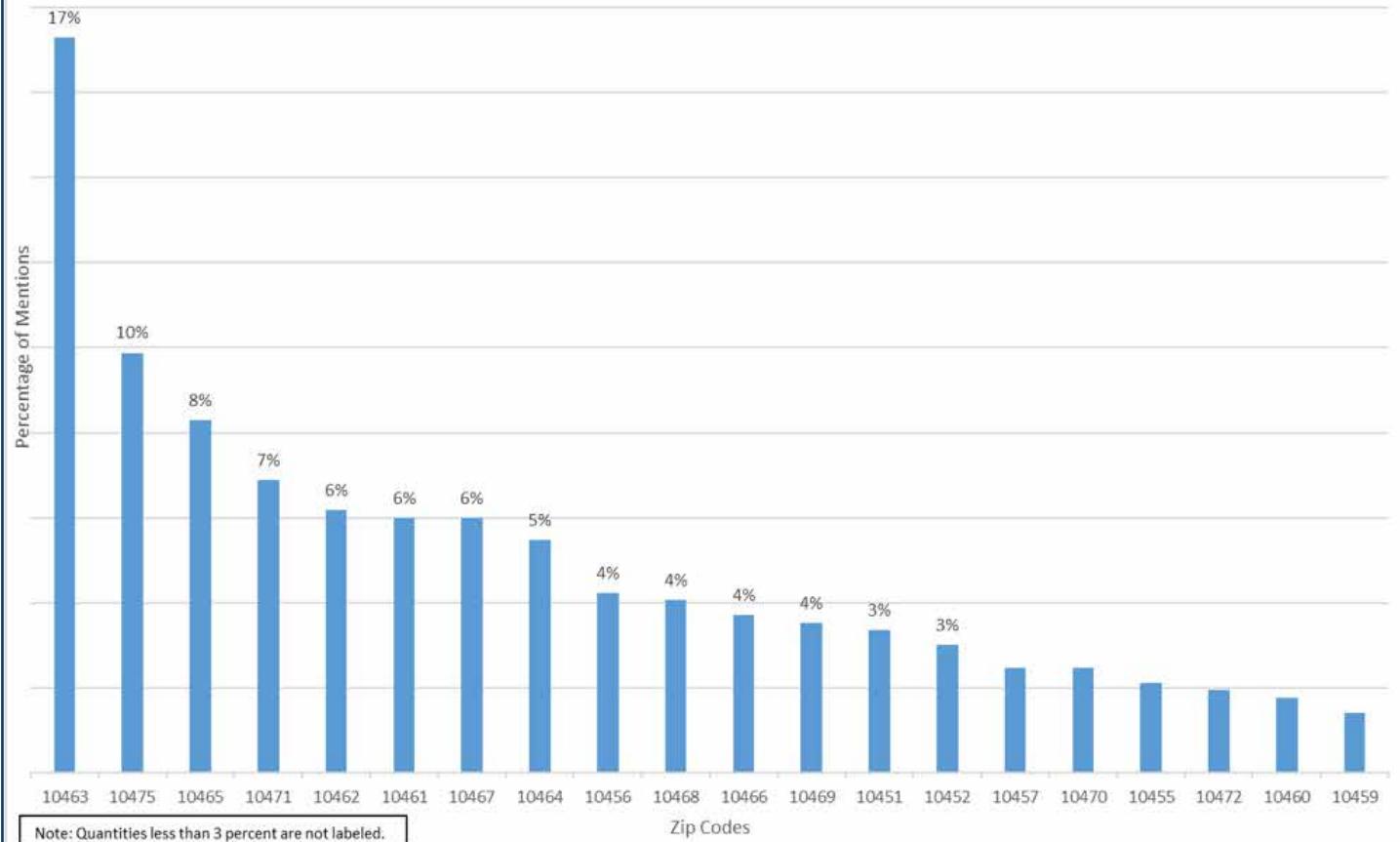
BRONX ONLINE FINDINGS

◊ Home Zip Codes

- ◊ The leading zip code for Bronx online respondents is 10463 (17% - neighborhoods of Kingsbridge, Spuyten Duyvil, and Marble Hill)
- ◊ The second most frequent zip code is 10475 (10% - neighborhoods of Northeast Bronx including Co-Op City, Baychester, and Eastchester Square)
- ◊ The third most frequent zip is 10465 (8% - neighborhoods of Southeast Bronx, including Throgs Neck, and Schuylerville)
- ◊ Fourth, is zip 10471 (7% - neighborhoods of Riverdale, Fieldston, and Hudson Hill)

BRONX ONLINE FINDINGS

Respondent Home Zip for Bronx, with Other Areas Online Respondents: 567 Mentions



BRONX ONLINE FINDINGS

