2014

A Community Impact Study of Proposed Uses of the Rockaway Beach Branch Right of Way

A report prepared by the Queens College Urban Studies Department Office of Community Studies for the Office of State Assemblyman Phillip Goldfeder

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The Office of Community Studies is an academic and applied research center affiliated with the Department of Urban Studies at Queens College. We provide technical assistance to community organizations seeking to gain a deeper understanding about the borough of Queens and its many diverse neighborhoods. We team with public and private entities to conduct applied, participatory research that encourages positive change in the communities we serve.

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Executive Summary

The abandoned Rockaway Beach Branch line of the Long Island Railroad represents an important, and in many ways unique, redevelopment opportunity in the heart of Queens. Decisions to be made regarding what that redevelopment entails will reverberate for decades with potentially far-reaching ramifications for residents of nearby neighborhoods and the borough as a whole.

Among the current redevelopment options are:

- a proposal to turn the northernmost section of the Rockaway Beach Branch right of way into a 3.5-mile destination linear park to be called the QueensWay
- reactivating the line in some form for public transportation
- leaving it as it is, and
- a combination plan that features a park and transportation reactivation elements while leaving a central section of the right of way unchanged.

This study, conducted by the Queens College Urban Studies Department's Office of Community Studies at the request of New York State Assemblyman Phillip Goldfeder, examines the potential community impacts of these redevelopment options.

Our study focuses on two potential impacts in particular – resident transportation patterns and trends and nearby property values. We also conducted resident and business community surveys in order to gauge the attitudes of various stakeholders in Queens on those issues, as well as their opinions on the best potential use of the abandoned rail line.

Transportation patterns and trends

The Rockaway Beach Branch line presents a unique opportunity as a potential transportation improvement. As an existing right-of-way that had historically supported passenger rail service, it is naturally a target for future passenger service in response to changing population needs. The communities that it would most affect are those that immediately surround it and those to the south. This is because a reactivated RBB would connect northern and southern Queens in a way that is not currently possible via existing rapid transit, closing

a large and circuitous gap between northern and southern portions of the rail system. The effect would be faster travel between southern Queens, including the Rockaways, and northern/western Queens, Midtown Manhattan, and points north.

While ridership in this area is low in comparison to denser parts of the city, the commutes are long, which could lead to appreciable savings in aggregate commute times. Furthermore, such a move would address the lack of transportation equity as other, more distant communities in Nassau County have shorter commutes to Midtown than many Rockaway residents. Current travel patterns between the Rockaways, southern Queens, and areas adjacent to the RBB to other transit-accessible areas in northern/western Queens, Midtown, and Upper Manhattan suggest that more than half a million trips every day could utilize a reactivated RBB to meet their travel needs.

Community impact surveys

Printed resident and business surveys in both Spanish and English were hand-delivered to 5,000 residents and 800 businesses along the Rockaway Beach Branch right of way. A total of 363 valid resident responses, including a representative sample of racial/ethnic groups, income levels, and neighborhoods, was received, yielding data having a standard error of +-5.2%; 44 businesses responses were received as well. Surveys were delivered to census tracts that lie completely or mostly within a 1⁄2-mile distance from the RBB right of way and all of the census tracts on the Rockaway Peninsula – a total of 71 census tracts with a combined population of 245,418. Surveys were delivered to each census tract in proportion to the area population and the number of housing units in each census tract.

Among the residential survey's main findings were:

- Residents of Richmond Hill-Woodhaven produced 34.2 percent of the total survey responses, while 22.9 percent of responses came from the Rockaways. Rego Park-Forest Hills-Glendale generated 16.3 percent of the surveys, and Ozone Park-South Ozone Park-Lindenwood-Howard Beach 17.4 percent.

- Slightly more than two thirds of all respondents said they were either "somewhat" or "very" familiar with the abandoned Rockaway Beach Branch right of way.

- Nearly 60 percent of all survey respondents said they were "somewhat" or "very" familiar with the QueensWay proposal while 52.4 percent said they were "somewhat" or "very" familiar with efforts to reactivate it for transportation.

- When asked to rank the various redevelopment options based on what they knew or had heard, 33.9 percent of all survey respondents said reactivation of the right of way for transportation was their first choice,

while 28.1 listed redevelopment as the QueensWay and 18.2 percent said some combination. Another 10.2 percent said they preferred the line be left as it is.

• Somewhat surprisingly, a higher percentage of the respondents from Forest Hills-Rego Park-Glendale (39 percent) favored reactivation of the right of way for public transportation than did respondents from the Rockaways (31.3 percent), Richmond Hill-Woodhaven (31.5 percent) or Ozone Park-South Ozone Park-Lindenwood-Howard Beach (34.9 percent).

• Conversely, a higher percentage of respondents from the Rockaways (36.1 percent) said they preferred the QueensWay option than did respondents from the Forest Hills-Rego Park-Glendale (20.3 percent), Richmond Hill-Woodhaven (28.2 percent) or Ozone Park-South Ozone Park-Lindenwood-Howard Beach (27.0 percent).

• While these results demonstrate a preference for the transportation option, they are within the margin of error of the survey and so cannot be taken as statistically significant.

• When asked what the main factors were in determining their preference, nearly one third of all survey respondents said a lack of existing transportation options, while one fifth said access to parks and open space. Quality of life concerns were cited by 15.7 percent and crime and safety by 14.6 percent, while potential impact on home or property values was mentioned by just 6.3 percent of respondents and privacy by just 2.5 percent.

• Three out of five respondents said they would be “somewhat” or “very” likely to use the line if it was reactivated for transportation, with 16 percent saying they would use it daily and 12.4 percent saying they would ride it at least once a week.

• In general, a slightly higher percentage of respondents felt that reactivating the right of way for transportation would have the strongest positive impact on neighborhood property values and business activity. A slightly higher percentage of respondents felt that converting the right of way into a park would lead to an increase in neighborhood crime.

• Among businesses, 36.4 percent of respondents preferred reactivation for transportation while 27.3 chose the QueensWay option. When asked what factors determined that preference, nearly one third identified “potential impact on business” while one quarter said “lack of existing transportation options.”

• Nearly one half of all business respondents believed reactivation for public transport would have a “significant positive” impact on their business while slightly less than one third said the QueensWay would have a similar impact.

Property values

Both reactivation of rail service and the building of a linear park would almost certainly impact nearby property values. Our review of studies that have been conducted on the impact of rail and parks on property/house values and land use suggests that proximity alone is the central factor in determining whether those impacts would be positive or negative, as well as their magnitude. In general, no other factor has a significant impact.

For instance, were the QueensWay to be built, residential properties that abut it would likely see a negative impact on property values. However, plans to incorporate buffers and other design features could help lessen those negative impacts. Properties farther from the park – perhaps as little as 200 feet or as much as three blocks up to ¼-mile – could enjoy relatively large increases in value. Any proximity benefit would then likely taper off, and properties more than ¼ mile from the park would likely experience relatively little impact on values.

If the right of way were reactivated for rail service, similar impacts could be expected based on proximity. The literature suggests that properties within ½ mile of a rail station on the reactivated line would likely see property values increase due to increased accessibility, while properties closest to the right of way – as opposed to a station – would likely suffer a smaller negative effect due to the noise and "visual intrusion" of passing trains.

The literature also suggests that commercial properties would likely benefit more from closer proximity to a rail station than residential properties.

Further Research

This study, although limited in scope, attempts to contribute to conversations about the potential benefits and potential negative impacts of the redevelopment options for the Rockaway Beach Branch right of way. A complete understanding of the often-complex conditions related to any of these options requires additional study. Among the questions left unanswered by our research are the costs and technical requirements associated with each particular option.

Introduction

For more than 50 years the northernmost 3.5 miles of the former Rockaway Beach Branch of the Long Island Railroad has sat abandoned, its tracks overtaken by weeds and trees and its rails broken and rusting. Recently, however, a proposal to convert that portion of the rail right of way into a 47-acre linear park has generated renewed interest in the derelict spur, as well as competing visions for its best potential use.

In January 2013, the Trust for Public Land (TPL), a national nonprofit organization devoted to the development and preservation of public space, received a $467,000 environmental protection grant from the State of New York to look into the feasibility of transforming the right of way into a recreational and "cultural greenway" to be called the QueensWay.

Pointing to the potential of such an amenity to contribute to the economic development of surrounding communities, the TPL and the Friends of the QueensWay, a privately funded organization founded to increase awareness and support for the park, spent the next 14 months working with a team of landscape architects, urban designers and development consultants to prepare preliminary plans, which were made public in March 2014. The group anticipates releasing its final plans some time in the early fall of 2014.

At the same time, several groups representing commuters from the Rockaways and other parts of southern Queens responded to the idea of park with calls for the right of way – which once connected Ozone Park to the LIRR's Main Line in Rego Park and on to Penn Station in Manhattan – to be restored as a much-needed transportation link. Noting that limited available transportation options had contributed to the geographic and economic isolation of the Rockaways, Howard Beach and Ozone Park, they argued that the best use of the right of way would be re-establishing some form of transit service. Among the main voices for rail restoration has been New York State Assemblyman Phillip Goldfeder (D-Rockaway/Ozone Park). Since being elected in a special election in 2011, Goldfeder has regularly called on Gov. Andrew Cuomo and area transportation officials to restore the line to service. He has since been joined by other local elected officials, including Congressmen Gregory Meeks (D-NY), whose 5th District includes the Rockways, South Ozone Park and Richmond Hill, and Hakeem Jefferies (D-NY), whose 8th District includes Ozone Park and Howard Beach as well as parts of Brooklyn.

Soon, homeowners and business owners along the right of way raised concerns about crime and quality-of-life issues related to both the park and transportation reactivation schemes. These groups, many of whose members own houses or businesses adjacent to and in some cases directly under the unused right of way, argued for a third option: leaving the right of way as it is.

Their concerns prompted State Assemblyman Michael Miller, whose district includes many of those home and business owners, to propose a combination plan that features a park and transportation reactivation elements while leaving a central section of the right of way unchanged.

The present study, conducted by the Office of Community Studies in the Department of Urban Studies at Queens College, aims to assess the community impacts of these proposed uses for the Rockaway Beach Branch right of way.

The intent of this study is not to determine a best use or advocate for any particular option or use. Rather, our purpose is to contribute to a more complete understanding of the various options in relation to community needs.

Our study focuses on the communities likely to be most affected by redevelopment of the line, and includes assessments of community transportation patterns as well as community attitudes about the impacts, need for and feasibility of the range of proposed uses. Among the issues we seek to explore are what various stakeholders in Queens see as the best use of the abandoned rail line and the potential impact of the various proposed uses on quality of life, home and property values, crime and safety, commercial activity and area economic development.

Multiple research methods were used in conducting primary research and analyzing existing data for answering those questions, depending on the research question at hand. These methodologies are described briefly below, then in more detail in the relevant section of the report.

STUDY DESIGN AND METHODOLOGY

The Rockaway Beach Branch right of way, which is owned by the City of New York, extends from the Long Island Railroad Main Line in Rego Park south through central Queens to Rockaway Boulevard, where it merges with the A line of the New York City Subway and continues across Jamaica Bay to Broad Channel. On Broad Channel service splits, with the A train running east along the right of way to Far Rockaway while Shuttle service runs on the western spur to Rockaway Park **(Figure 1)**. The portion of the right of way north of Rockaway Boulevard has been abandoned since service was halted in 1962.

As the aim of this study is to determine the potential impacts of the various proposed options, we have limited our focus to the communities along the right of way that are most likely to experience those impacts. For purposes of demographic data collection, we determined the most appropriate geographic scale to be at the census tract level.

Existing research on the socio-economic effect of new parks and trails and transit lines on nearby communities suggests that proximity is a clear and important factor. Broadly speaking, the closer a community is to a new park/ trail or transit station or line, the greater the impacts – whether positive or

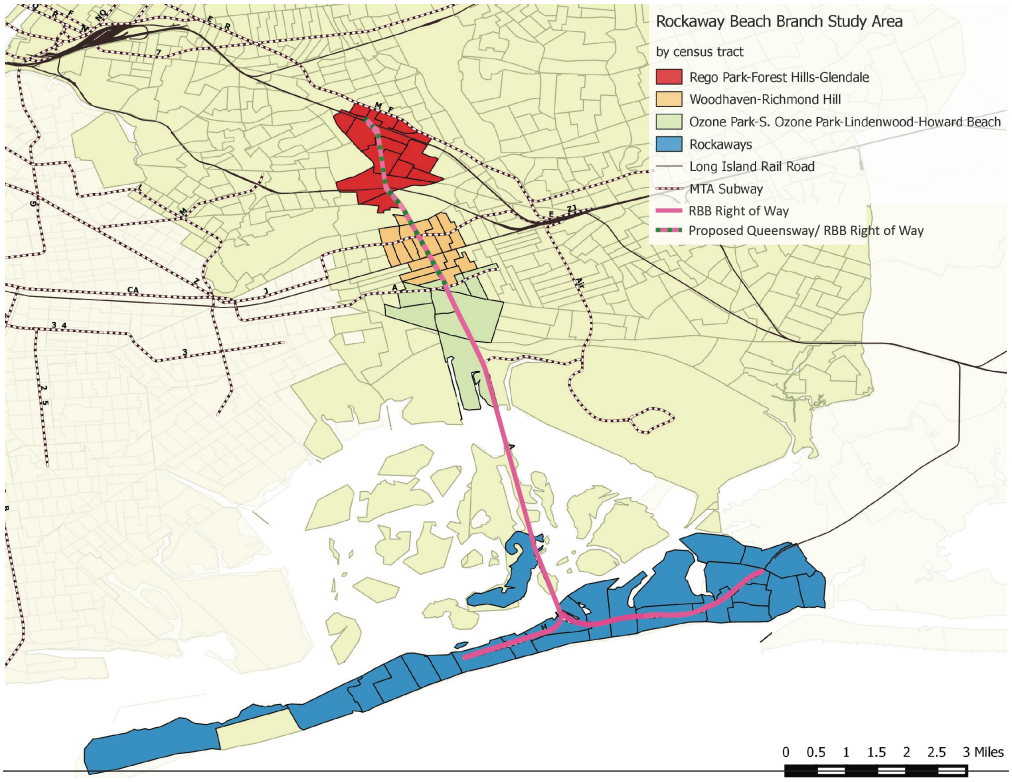

Figure 1: Rockaway Beach Branch right of way study area

negative. Furthermore, that research suggests that in the case of both parks/trails and transit stations/lines, impacts – both positive and negative – are the greatest within a ½-mile distance.

As a result, our analysis of the potential socio-economic impacts of the various options on nearby communities focuses on the areas within ½ mile of the Rockaway Beach Branch right of way and all of the Rockaway Peninsula, which would feel the effects, both direct and indirect, of any redevelopment activity. In total, we examine all census tracts that lie completely or mostly within a ½-mile distance from the right of way and all of the census tracts on the Rockaway Peninsula – a total of 71 census tracts stretching across 18 Queens neighborhoods and five Queens community districts. This study area has a combined population of 245,418.

Existing transportation research, meanwhile, has established the Traffic Analysis Zone (TAZ) as the standard geography for transportation modeling. Typically, these are sub-census tract units of geography. But as small geographic areas can suffer from low sample size, which in turn translates to higher margins of error, we have chosen to expand our analysis to all zones within one mile of a subway or railroad station. This one-mile buffer also allows us to capture much of the public transit market in areas – like the Rockaways – where few transit options exist, and to include areas where alternative modes complement train service.

Our report is organized into the following sections:

Section 1: Rockaway Beach Branch History

This section provides a brief historical account of the line, its sale to New York City by the Long Island Railroad and the events and issues that led to the suspension of service between Rockaway Boulevard and Rego Park. It also gives a general overview of existing physical conditions along the unused portion of the right of way.

Section 2: Proposed Uses

This section offers summaries of each of the four proposed development options for the unused portion of the right of way. These options include the proposal to turn it into a linear park called the QueensWay, various ideas for its reactivation as a rail or transit line, leaving it as it is, and the proposal by State Assemblyman Michael Miller for a combination of all three options.

Section 3: Existing Community Conditions

In order to answer questions about the potential impacts of proposed development options it is important to first understand existing conditions in communities along the right of way. For this purpose, Section 2 of this study is devoted to providing descriptions of the demographic, socioeconomic, transportation and land-use environments in the communities within ½ mile of the right of way.

Community profiles

Included are detailed demographic and socioeconomic profiles of residents, households and businesses along the length of right of the right of way. Resident profiles include census tract-level information, drawn from the U.S. Census, on the current ethnic and racial composition, household income, home ownership, and poverty rates in communities along the right of way. Community profiles also include analysis of existing land use and building characteristics. Community business profiles provide a description of local businesses by industry sector, average number of employees and average wages by industry sector.

Existing and comparative historical transportation conditions

In order to better understand existing transportation options, patterns and needs, this portion of Section 3 includes a summary of existing transportation options for people in communities along the right of way, as well as analysis – based on data from the US Census – about travel characteristics such as time to work, means of transportation and household access to a vehicle. Where applicable, data from the 1960 Census and other historical sources has been analyzed as a means of comparing conditions during the RBB's final years of operation and the present.

Existing access to parkland and open space

Given that one of the main arguments by proponents of the QueensWay is that a linear park would provide quality outdoor recreation/park space in neighborhoods where that is currently lacking, this section analyzes existing access parkland and open space. Two measures – both commonly cited in New York City parks literature – are used to determine level of access: whether every resident is within a 10-minute walk of a park or public open space; and whether a particular area has at least 2.5 acres of public space or parkland per 1,000 residents.

Section 4: Community Impacts

Any redevelopment of the abandoned Rockaway Beach Branch right of way, regardless of its form, has the potential to significantly impact the communities through which it runs. This section of the study focuses on two potential impacts in particular: nearby property values and transportation patterns and trends. Also included are the results of a community impact survey that sought to gauge the opinion of various stakeholders in Queens on those issues as well as the best potential use of the abandoned rail line.

Property values

A chief argument by both QueensWay and rail reactivation supporters is the impact – both positive and negative – that parks and transit services can have on are property and house values. This portion of the study provides an annotated review of studies that have been conducted on the impact of rail and parks on property/house values and land use.

Transportation community impact analysis

In order to understand the potential impact various options for reactivating the line might have on nearby residents, we offer a detailed analysis of current resident travel patterns for the communities within one mile of the RBB right of way. Data for this analysis was drawn from a New York Metropolitan Transportation Council (NYMTC) Household Survey collected in late 2010 and early 2011. This data includes current number of trips and average travel times for commuters in areas potentially affected by reactivation. It describes possible impacts of the applicable rail options.

Community impact and needs assessment survey

Among the issues this study seeks to examine is what various stakeholders in Queens see as the best use of the abandoned rail line. To that end, surveys of area households, residents and businesses were conducted to gather basic data, including existing transportation conditions and needs, views about the various proposed options for the right of way and the impact of those options on quality of life, house and property values, safety, commercial activity and area economic development.

Section 1: Rockaway Beach Branch History

Service on the Rockaway Beach Branch of the Long Island Railroad was initiated in the 1880s. In its earliest configuration, the RBB split from the LIRR Main Line at what was called White Pot Junction in Rego Park and served the communities of Forest Hills, Glendale, Richmond Hill, Ozone Park and the Rockaways. In the Rockaways the line split, with a western spur that terminated in Rockaway Park and an eastern spur that passed through Far Rockaway and the Five Towns section of Nassau County before reconnecting to the Main Line in Jamaica. The RBB also offered connections to the LIRR's Montauk and Atlantic branches.

Originally the full line was built at grade. In the 1940s, however, the tracks were elevated in some areas in anticipation of it becoming part of the New York City subway system. For years, the financially strapped LIRR had tried to transfer control of the line to the NYC Board of Transportation. "The people of the Rockaways need and should have the direct benefit of the rapid transit system they have been helping to support as taxpayers of New York City," David Smucker, the LIRR's chief executive officer wrote in 1949. "It's hardly necessary to point out that extension of rapid transit to the Rockaways would make this community more accessible to visitors and also would make the Rockaways a more desirable year-round residential area."[1]

In 1955, following a series of trestle fires that caused significant damage and added to the already high cost of operating the line, the LIRR sold the RBB to the New York City Transit Authority. At that time, the section of the RBB that ran south from Liberty Avenue to the Rockaways was integrated into the IND subway system, and loop service beyond Far Rockaway ceased. The Transit Authority intended to eventually integrate the northern portion of the branch into the subway system as well, but initially it leased the track and stations at Metropolitan Avenue (called "Parkside"), Jamaica Avenue ("Brooklyn Manor"), Woodhaven ("Woodhaven Junction") and Ozone Park to the LIRR, which continued to operate single and evening trains, five days a week, between White Pot Junction and Ozone Park until 1962. During that time there was no

[1] Raskin, Joseph. 2013. The Routes Not Taken: A Trip Through New York City's Unbuilt Subway System. New York: Fordham University Press. P. 235

direct connection between LIRR service on the right of way and subway service to the Rockaways.

The Transit Authority cited low ridership – a daily average of 184 passengers – and available transportation alternatives as the reason for shuttering service on the "forgotten spur." In a newspaper account at the time, a Transit Authority spokesperson noted that, "Investigation by the authority has shown that there's no necessity for continued operation of the line for either public convenience or community development. It has been well established that ample alternate facilities are available to and from Manhattan." Still, then-Queens Borough President John Clancy argued for saving the spur for eventual transportation purposes, and the original indenture transferring ownership of the right of way from the Long Island Rail Road to New York City allows for that possibility. Also, in the five decades since service was suspended, the population of all neighborhoods along the right of way has grown from 174,470 in 1960 to 245,428 in 2010. The population of the Rockaways, meanwhile, has nearly doubled in that time, growing from 59,919 residents in 1960 to 114,978 in 2010 while the rest of the communities along the right of way grew by only 11,039 residents **(Figure 2)**.[2]

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[2] In 1960 CTs 697.01 and 697.02 were one census tract - CT 697. For comparative purposes, population change 1960-2010 = 2010 population CT 697.01 + 2010 population CT 697.02 - 1960 population CT 697 population CT 697.02 - 1960 population CT 697

In 1960 CT 713.05 and 713.06 were one census tract, CT 703.01. 1960 population numbers are for CT 703.01

Prior to 2010 CT 723 was three census tracts - CT725, CT727 and CT 735. For comparative purposes population change 1960-2010 = 2010 population CT 723 -1960 population CT 725 + 1960 population CT 727 + 1960 population CT 735

In 1960 CTs 126.01 and 126.02 were one census tract - CT 126. For comparative purposes, population change 1960-2010 = 2010 population CT 126.01 + 2010 population CT 126.02 - 1960 population CT 126

In 1960 CTs 40.01 and 40.02 were one census tract - CT 40. For comparative purposes, population change 1960-2010 = 2010 population CT 40.01 + 2010 population CT 40.02 - 1960 population CT 40

In 1960 CT 1072.01 was CT 1072

1960 CTs 942.01, 942.02 and 942.03 were one census tract - CT 942. For comparative purposes, population change 1960-2010 = 2010 population CT 942.01 + 2010 population CT 942.02 + 2010 population CT 942.03 - 1960 population CT 942

In 1960 CT 954 was two census tracts, CT 952 and CT

Prior to 2010 CTs 972.02, 972.03 and 972.04 were one census tract - CT 972. For comparative purposes, population change 1960-2010 = 2010 population CT 972.02 + 2010 population CT 972.03 + 2010 population 972.04 - 1960 population CT 972

Prior to 2010 CTs 998.01 and 998.02 were one census tract - CT 998. For comparative purposes, population change 1960-2010 = 2010 population CT 998.01 + 2010 population CT 998.02 - 1960 population CT 998

Prior to 2010 CTs 1008.01 and 1008.02 were one census tract - CT 1008. For comparative purposes, population change 1960-2010 = 2010 population CT 1008.01 + 2010 population CT 1008.02 - 1960 population CT 1008

In 1960 CTs 1010.01 and 1010.02 were one census tract - CT 1010. For comparative purposes, population change 1960-2010 = 2010 population CT 1010.01 + 2010 population CT 1010.02 - 1960 population CT 1010

In 1960 CTs 1032.01 and 1032.02 were one census tract - CT 1032. For comparative purposes, population change 1960-2010 = 2010 population CT 1032.01 + 2010 population CT 1032.02 - 1960 population CT 1032

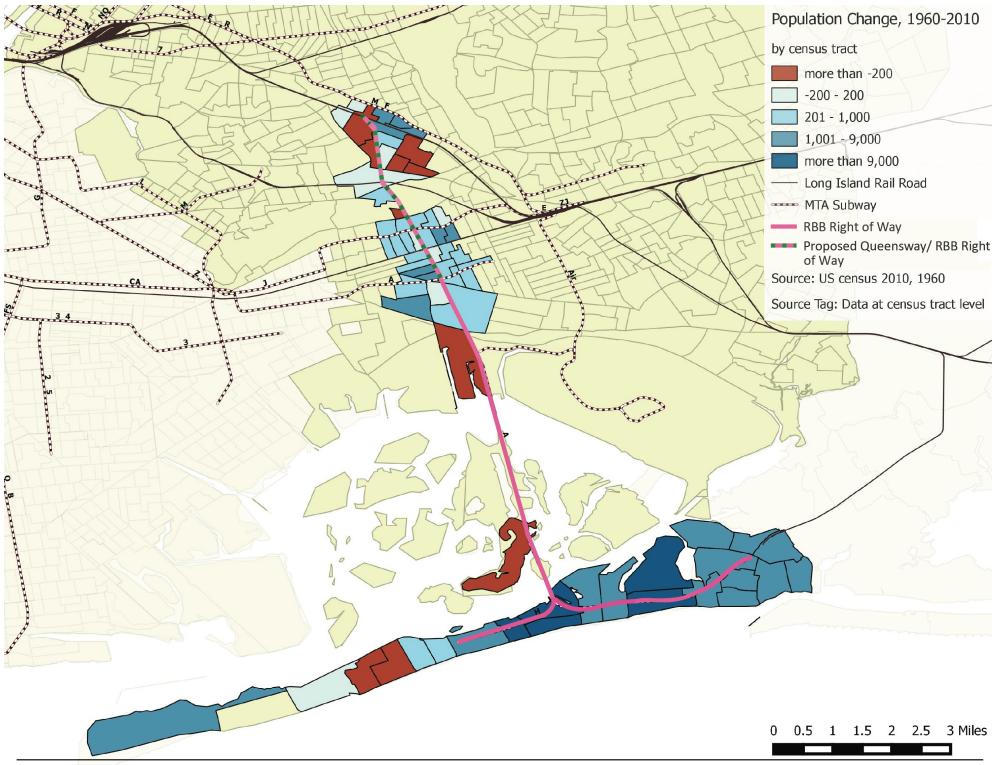

Figure 2: Population Change, 1960-2010

With the passing of time, however, the prospect of trains running on the line again has grown ever more contentious and costly. The right of way is still owned by the City of New York, and it is still zoned industrial. However, a seven-acre section that runs through Forest Park is administered by the New York City Parks Department.

The abandoned portion of the right of way is in a state of extreme disrepair and many sections have been taken over by other uses. North of Fleet Street in Forest Hills, the Forest Hills Little League plays baseball on a series of fields that abut the right of way. Further south, a Home Depot store's parking lot sits where the Metropolitan Avenue station once stood and more ballfields border the right of way just north of Union Turnpike. Just north of Forest Park, a portion of the right of way has been paved for parking for Forest View Crescent, a 240-unit co-op apartment complex.

On the south side of Forest Park, the Logan Bus Company occupies the right of way where the LIRR's Atlantic Branch connected with the RBB. And south of Atlantic Avenue in Ozone Park, where the right of way is elevated, light industrial uses such as auto repair shops, beverage distributors and building materials suppliers have taken up residence. These businesses have month-to-month leases with the City.

Along the course of the right of way, washouts, crumbling trestles, broken and rusted rails, overgrown vegetation and illegal dumping contribute to the line's dilapidated condition.

Along the course of the right of way, washouts, crumbling trestles, broken and rusted rails, overgrown vegetation and illegal dumping contribute to the line's dilapidated condition.

Section 2: Proposed Uses

After more than five decades of inactivity as a functioning rail line, the abandoned Rockaway Beach Branch right of way recently has become a focus of renewed public attention. Viewed by some as a latent community asset, the site has drawn the interest of various groups intent on its redevelopment for transit or recreational use. Others, meanwhile, see the space as a long-standing feature of the local neighborhood and consider any attempt to redevelop it as a threat to their quality of life.

To date four basic options for the right of way's future use have emerged: conversion into a 3.5-mile, 47-acre park to be called the QueensWay; reactivation as a transit corridor with some form of rail or subway service; leaving it the way it is; and a combination of all three. While these options vary in degree of detail and the formality and structure of efforts to bring them about, each has advocates pushing to make them reality. The options, and where applicable specific plans, are summarized below.

THE QUEENSWAY

Citing the success of Manhattan's rail line-turned-linear park/pedestrian promenade, the High Line, in attracting tourists and redevelopment investment to nearby neighborhoods, proponents of the QueensWay aim to create a similar "destination" park in Queens. Their proposal calls for converting the 3.5 miles of the Rockaway Beach Branch right-of-way between LIRR Main Line in Rego Park to Rockaway Boulevard in Ozone Park into "cultural greenway."

In March 2014 the park's chief supporters, the Trust for Public Land and the Friends of the QueensWay, released preliminary plans that promote the proposed park as an engine for local economic development and the celebration of area cultural diversity. The park, they contend, will improve access to other local parks, provide a safer and quicker route for commuting, enhance the value of residents' homes and connect people and local businesses.

Those preliminary plans, informed by a series of community design workshops held in October 2013, are one step in an 18-month feasibility study funded by grants from the New York State Department of Parks, Recreation and Historic Preservation. They were produced by a team that includes design firms WXY Architecture + Urban Design and dlandstudio, as well as economic and community outreach consultants and structural and transportation engineers.

That team conducted a second round of input sessions in conjunction with the plans' March 2014 release.

Preliminary plans for the QueensWay were informed by a series of community design workshops held in October 2013 and were released during a second round of public input sessions in March 2014.

The final design and feasibility study, including cost estimates, is expected in the fall of 2014.

An estimated 123,000 residents live within ½ mile of the proposed QueensWay, 250,000 within one mile. As detailed in the preliminary plans, the proposed park consists of six distinct sections, or zones, each designed to build on and enhance the existing character and conditions in nearby neighborhoods **(Figure 3)**. At the parks' northernmost end, "The Clearing" runs from Austin Street in Rego Park to Fleet Street and serves as the QueensWay's main entrance. Proposed features there include an event space and pavilion, a dog park, playgrounds, and an extension of existing Little League baseball fields with landscaped bleachers. Further along the line, a portion dubbed "The Metropolitan Hub" features a gateway overlooking Metropolitan Avenue, space for farmers' markets and street fairs and an educational trail. In Forest Park, "The Grove" will potentially include nature signage, a vendors' pavilion at Forest Park Drive and 98th Avenue and new park center/café, while at the QueensWay's elevated southern end in Ozone Park, arts and cultural programming is planned at Atlantic Avenue and there is open space for schools, an environmental education trail and a bridge to nearby park space on Liberty Avenue.

In between sections called the North and South Passages feature "iconic" overpasses and bridges that link sections together. Throughout the park are ADA-accessible stairs and ramps, nature learning and exercise activities,

playgrounds and the potential for shared and dedicated bike and pedestrian lanes.

Figure 3: The QueensWay Six Zones (map courtesy of the Trust for Public Land)

In response to community concerns, the proposed design includes security gates at access points and other measures such as planted fences, landscape mounds, large plant buffers and a sunken bike path to provide privacy for adjacent homeowners.

TRANSPORTATION OPTIONS

Almost from the moment service was suspended on the Rockaway Beach Branch line transit advocates have pressed to see it reinstated in one form or another. With the proposal to transform the right of way into the QueensWay linear park, these efforts have taken on renewed urgency. To date, however, none has garnered the attention or political support necessary to emerge as a full-fledged transit proposal, and the Metropolitan Transportation Authority has voiced little interest in making reactivation a priority. Still, within the past two decades a number of proposals have emerged that can be helpful in understanding the evolution of reactivation efforts, as well as for assessing the potential community impacts of various reactivation options.

Apple Corridor Plan (1996)[3]

Released on behalf of a group calling itself the Committee for Better Transit, the Apple Corridor plan called for the restoration of service on the Rockaway Beach Branch as part of an integrated regional LIRR rail network that included a 21-minute link between Grand Central Terminal in Manhattan and John F, Kennedy International Airport.

The plan, which was prepared by transportation consultant George Haikalis, proposed connecting Grand Central to the Long Island Rail Road in Long Island City by way of the 63rd Street tunnel, then on to Woodhaven, where trains would run along the restored RBB to Aqueduct Race Track and a short spur to JFK. The plan called for basic service at first, with additional enhancements to be phased in over time. As envisioned by the CBT, the initial basic service required no new revenue sources, with funding coming from a Passenger Facility Charge, a $3 "tax levied against each enplaning airline passenger" at JFK.

Among the longer-term proposed enhancements was the construction of a "double track connection" at Woodhaven Junction that would have allowed direct service from JFK to the Jamaica LIRR station via the Brooklyn Branch of the LIRR. Also envisioned was construction of a new cross-platform station near the Aqueduct Race Track that would allow Brooklyn- and Lower Manhattan-bound passengers from JFK to switch to the A subway line.

Advocates portrayed the Apple Corridor plan as a less costly alternative to the Port Authority's $1.1 billion elevated AirTrain, which went into service in late 2003 with links to subway service at the Jamaica and Howard Beach stations of the A train. In addition, they argued it would provide the added benefit of improved access to Midtown Manhattan.

Proponents also acknowledged that reactivating service on the RBB would increase "noise levels for an estimated 2,000 nearby dwelling units" (Haikalis, p. 5), and they proposed mitigation measures, including the construction of sound barriers, the use of "quieter rolling stock" along airport lines, and reimbursing homeowners for the cost of installing double-pane windows and air conditioning.

The estimated full cost – including property acquisition, the restoration of 4.2 miles of the Rockaway Beach Branch from Rego Park to the Aqueduct Race Track, the new connection to Grand Central Terminal, mitigation measures and long-term enhancements: $1.585 billion (1991 dollars), to be paid for with the monies set aside for the AirTrain, the existing MTA Capital Program and federal transportation funds.

Using Port Authority air passenger figures and MTA and LIRR ridership numbers, plan advocates estimated the Apple Corridor line could attract a daily ridership

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[3]Haikalis, George. 1996. *Apple Corridor*. Report prepared for The Committee for Better Transit

of as many as 200,000 trips, "making it one of the busiest transit corridors in the U.S."

MTA Rockaway Service Assessment (2001)[4]

In 2000, Queens Borough President Claire Shulman and State Assemblywoman Audrey Pheffer asked the MTA to conduct a feasibility study for improving mass transit service to the Rockaways, including revitalization of the Rockaway Beach Branch line. At that time, according to the MTA, some 3,300 riders boarded the A subway train in the Rockaways during the peak morning hours; 2,500 at six Far Rockaway stations, 800 at four Rockaway Park Branch stations

The MTA's report, which was released in January 2001, concluded that far from improving service, implementation of any of the efforts studied "would result in significant service, operational and cost issues."

In particular, the RBB reactivation scheme called for the introduction of LIRR service at existing Far Rockaways stations. Because Federal Railroad Administration regulations prohibit running commuter rail and subway trains on the same lines, this would have required LIRR trains to run parallel to A-train subway service on a new two-track trestle to be built across Jamaica Bay, then continue on a reactivated RBB to the intersection with the LIRR Main Line at White Pot Junction.

Among the study's chief findings was that more than two-thirds of Rockaways riders at the time were destined for somewhere other than Midtown Manhattan (68 percent of riders during two peak morning hours would be going to Lower Manhattan, Downtown Brooklyn and other parts of Queens). According to the report, any of the proposed improvements would mean these commuters would face significantly longer commutes and have to transfer from the new LIRR service to the subway to complete their journey. In addition, the construction of the new two-track trestle across Jamaica Bay would entail significant environmental impacts. Estimated construction costs for all of the studied proposals were deemed "high," at more than $875 million (1999 dollars), and didn't include the potential cost of new trains and signals for increased service on the LIRR Main Line.

As a result, the report concluded, none of the options provided "a net benefit for Rockaways commuters" and therefore would not be feasible.

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[4] AECOM Consulting Transportation Group. 2001. *Rockaway Service Assessment: Final Technical Memorandum*. Report prepared for the Metropolitan Transportation Authority

GET ME TO THE BEACH! Rockaway Beach Branch Reactivation Study (2010)[5]

In a research paper written in conjunction with his Masters' thesis, transit advocate and Cornell University graduate student David Krulewitch offered six options for improving transportation to and from the Rockaways by reactivating the Rockway Beach Branch.

Arguing that ridership numbers at the time service was suspended in 1962 were reflective of "truncated service" only to Ozone Park instead of all the way to and from the Rockaways, Krulewitch pointed out that "when RBB service ended, many neighborhoods became isolated from transit" with profound negative impacts on residents and businesses alike. Commute times in Glendale, Woodhaven, Ozone Park and the Rockaways "are some of the worst in neighborhoods served by subways," he noted. At the same time, reactivation represented an opportunity to attract "dense, transit-oriented development near stations on the abandoned right of way."

Three of the options Krulewitch analyzed involved reactivating the RBB for rail service. One called for reactivating the LIRR line from Rego Park to Howard Beach, and restoring connections to the LIRR Atlantic and Montauk branch lines. A second LIRR option was to reactivate the RBB from Rego Park through the Rockaways to the Far Rockaway Branch of the LIRR, thereby restoring loop service. In this option service the A subway line would have been eliminated south of Liberty Avenue. The third LIRR option suggested reactivating the RBB from Rego Park to the Aqueduct racecourse and connecting it to the JFK Airtrain near Conduit Boulevard.

Krulewitch also analyzed augmenting A-train service to the Rockaways by routing R or V subway service along the right of way via a new tunnel connection from the Woodhaven stop on the Queens Boulevard Line **(Figure 4)**.

The final option Krulewitch analyzed involved a combination subway-train loop, with LIRR service operating on a revitalized RBB from Rego Park to Howard Beach and on to Far Rockaway while the A train would continue to serve Rockaway Park. This option required the A train and the LIRR to "share trackage" between Aqueduct and Broad Channel.

Krulewitch concluded that each of the options analyzed would improve access and reduce commute times to and from communities in southern Queens and midtown Manhattan. However, each also would have required rehabilitating or rebuilding all four former RBB stations and building a new fifth station, a proposition that Krulewitch acknowledged was costly and potentially could involve the use of eminent domain to insure proper access. In the end Krulewitch called for additional research to assess the full costs of the

[5] Krulewitch, David. 2010. "Get me to the Beach! Rockaway Beach Branch Reactivation Study." Unpublished paper. May 9, 2010

proposals, which was outside the scope of his analysis, as well as to determine their ridership potential.

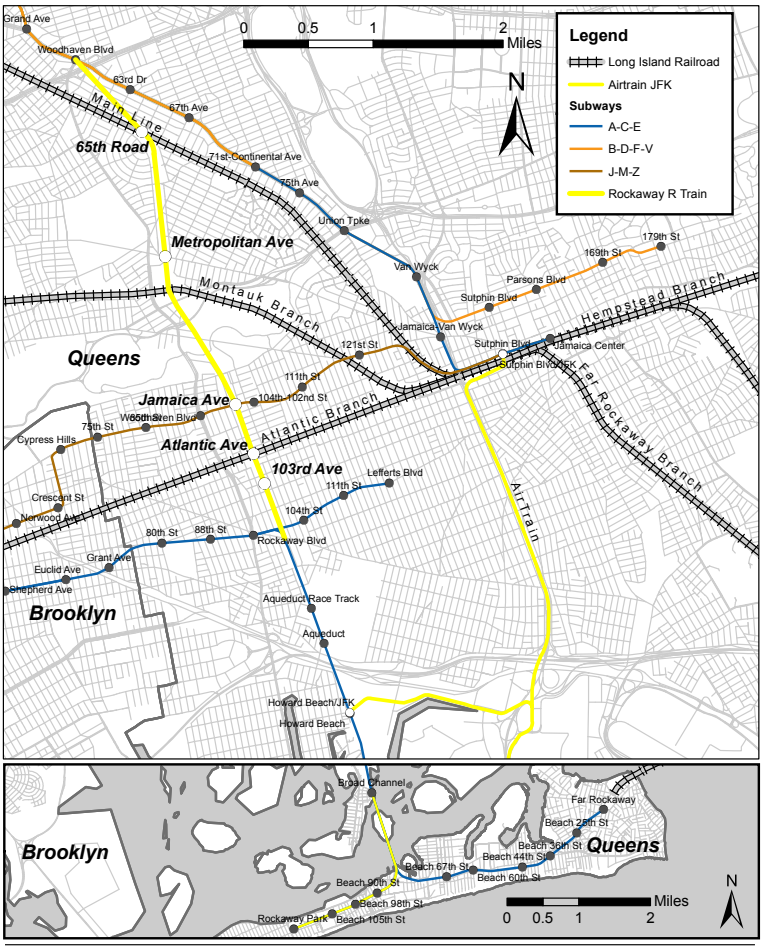

***Figure 4**: Rockaway Beach Branch – R Subway Alignment (map courtesy of David Krulewitch)*

MTA 20-Year Capital Needs Assessment, 2015-2034 (2013)[6]

In a 20-year capital needs assessment published in 2013, the MTA reported that in 2012 overall transit ridership reached its highest level since the late 1960s, and that subway ridership was at its highest since 1950. It also predicted that by 2030, system wide ridership would reach 3.1 billion trips, compared TO 2.7 billion in 2012.

Yet while overall ridership was growing, “less peak- and Manhattan CBD-centric travel” and slow growth in ridership on the LIRR reflected emerging trends in population growth and commuting trends that would put pressure on the existing system. The report identified a northern Queens Corridor

[6] Metropolitan Transportation Authority. 2013. MTA Twenty-Year Capital Needs Assessment 2015-2034

encompassing the Queens Boulevard (E, F, M and R service) and the Northern Boulevard (7 train service) subway lines as a transportation "hot spot" where future demand was expected to outstrip capacity. Already the second most congested line in the subway system in 2012, rezoning to drive business development in Long Island City and Jamaica was expected to add to congestion.

The report suggested the "utilization of abandoned or underutilized Rights of Way," including the Rockaway Beach Branch and the LIRR's Bay Ridge Branch in Brooklyn, as potential means for expanding network capacity by linking existing subway, bus and rail lines. "Conversion of existing ROWs, where a solution to an identified travel need can be defined, could help reduce land acquisition and construction costs, and facilitate construction time in densely developed areas," the report noted (127).

At the same time, however, reactivation of service on the RBB was not included in sections of the report devoted to future strategies for enhancing commuter rail capacities (129-130) and developing a regional rail network (131-133).

Instead, the report focused on other remedies for capacity issues, including "supplementing the reach of the subway network with rapid transit options" such as expansion of Select Bus Service. Expanded Select Bus Service, the report concluded "could provide redundancies to the transit network by offering perpendicular links between multiple subway lines and outer borough business hubs, to address the needs of non-CBD and inter-borough tripmakers" (129).

JFK Airport Express: A Study of the Reactivation of Long Island Railroad Rockaway Beach Branch (2013)[7]

In 2013, four students at New York University's Wagner School of Public Service calling themselves Queens Transit Advocates produced a study for the Institute for Rational Urban Mobility (IRUM), a not-for-profit founded to promote transportation reform, that argued for the feasibility of reactivating the right of way in order to provide "one-seat ride rail service between the Manhattan Central Business District" and JFK Airport. The authors contend that a one-seat ride to JFK, either from Grand Central Terminal or Penn Station, is essential to keeping New York City competitive in the global marketplace.

Drawing from an earlier MTA study[8], the report argued it would be possible to use existing infrastructure and to design rail cars capable of operating on both

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[7] Hobbs, Scott; Hang Hyunh, Gabriel Kleinfeld, and Daniel Simoes. 2013. JFK Airport Express: *A Study of the Reactivation of Long Island Railroad Rockaway Beach Branch*. Report prepared for the Institute of Rational Urban Mobility.

[8] JFK One-Seat Ride Feasibility Study: Final Report. February 2001

AirTrain and LIRR tracks. Using estimates from that 2001 MTA line study, they projected the total cost of reactivation – in 2013 dollars – to be $580 million.

The authors described two design options for their plan, which they called JFK Express. The first featured a 26-minute ride between midtown Manhattan and the airport with only one stop – at a new Aqueduct station – on the reactivated RBB south of the Main Line connection at Rego Park. This new station would feature free cross-platform connections to existing A-train service to the Rockaways. JFK-bound trains would continue on a new rail joining the station with the airport's six terminals.

The second design option offered greater transit access along the RBB with additional stops at new Parkside, Brooklyn Manor and Ozone Park stations, as well as the Aqueduct, and connections to the Montauk and Atlantic branches of the LIRR. The additional stops, however, added 10 minutes to the ride. Still, both plans provided faster access to Rockaways residents travelling to Manhattan and Northern Queens.

Both options proposed the inclusion of cantilevered sound barriers to mitigate nearby residents' concerns about noise, and the report included discussion of a potential greenway/bicycle and pedestrian path alongside the reactivated line from Park Lane South through Forest Park to Fleet Street/66th Avenue just south of the LIRR Main Line.

Metropolitan Transportation Authority: An Overview of Capital Needs (2014)[9]

While the Metropolitan Transportation Authority has no publicly stated plans for reactivating the right of way, high-level voices continue to suggest it be considered.

The latest – and to date strongest – suggestion that reactivation would make sense came in a five-year assessment of the MTA's transit assets by New York State comptroller Thomas DiNapoli. The report was released in late July 2014. As the name suggests, the focus of the report is the authority's capital needs, and in discussing growing transit demand in relation to funding and costs, DiNapoli suggested reactivation of the RBB might be one of the most cost-effective options. Growing transit demand and improved access are currently being addressed in a pair of existing MTA projects – the Second Avenue Subway and East Side Access. According to the report, the cost of the East Side Access project has grown from an initial estimate of $4.3 billion to $10.7 billion, and now will require the MTA to provide $2.7 billion of its own funds to complete. Given the state of the economy and its own fiscal situation, the report noted that the MTA needs new strategies for increasing capacity, including "converting available rights-of-way." "Restoring service on the

[9] DiNapoli, Thomas and Kenneth Bliewas. 2014. Metropolitan Transportation Authority: An Overview of Capital Needs. Office of the State Comptroller

Rockaway Beach Branch would be a less costly way to speed commutes between South Queens and Manhattan, improve travel within the borough and promote economic growth," it concluded.

LEAVE AS IS OPTION

With both transit and QueensWay advocates pushing proposals for the Rockaway Beach Branch right of way, some residents and business owners in adjacent neighborhoods have responded by arguing for a third option – leaving the abandoned rail line as it is.

Citing concerns about quality of life issues including congestion, the costs of operation and maintenance, privacy, safety, noise, litter and graffiti, as well as the potential negative impact on property and home values, they have launched petition drives, attended public input sessions and started Internet campaigns aimed at halting either reactivation or redevelopment of the line as a park. They have also reached out to local elected officials, including State Assemblyman Michael Miller who represents District 38, which stretches from Glendale, southeast through Forest Park and Woodhaven to portions of Richmond Hill and Ozone Park. In a letter dated Nov. 26, he noted community concerns in stating his opposition to both the rail reactivation and QueensWay proposals.

Citing concerns about privacy and the potential negative impact on property values some single-family homeowners on 98th Street between Park Lane South and Atlantic Avenue favor leaving the right of way as is.

Particularly vocal have been residents of 98th Street in Woodhaven whose homes and apartment buildings are adjacent to the right of way. Included are residents of Forest Park Co-op, which overlooks the right of way just south of Victory Field in Forest Park, and an estimated 200 single-family homeowners on 98th Street between Park Lane South and Atlantic Avenue whose backyards abut the abandoned line. In some cases, those homeowners' back yards are less than 50 feet from the center of the right of way.

Also concerned are local businesses, including those on 99th and 100th streets south of Atlantic Avenue. These firms, many of which are located directly under the elevated portion of the right of way, fear displacement should either reactivation of rail service or the QueensWay become proceed.

MILLER COMBINATION PLAN

In 2012 New York State Assemblyman Michael Miller stood with politicians from the Rockaways to announce his support for reactivating rail service along the RBB right of way. But after hearing constituents voice concerns related to both the reactivation option and the proposed QueensWay linear park, Miller, whose 38th district spans the mid portion of the right of way from Ozone Park through Forest Park to Glendale, proposed a "compromise" plan that would allow for multiple uses.

Among the issues Miller cited in opposing the QueensWay were the cost of park upkeep and maintenance as well as privacy, safety and the costs related to them. "I echo the sentiments of residents by asking how can we expect the local [police] precincts to carry the additional responsibility of patrolling and responding to incidents on the proposed QueensWay when our precincts are already being spread too thin within our district as it is?" he wrote in an open letter to area newspapers.

Miller also noted residents' objection to reactivation of the rail line due to its potential impact on "quality of life."

Miller's proposal called for building a linear park on the section of the right of way between Rego Park and Park Lane South, leaving the portion from Park Lane South to Atlantic Avenue "untouched," and allowing the line from Atlantic Avenue to Rockaway Boulevard to be set aside for future use "by the MTA as an express line connection to Manhattan." Restoring service in that capacity would require the eventual rehabilitation of the line south of Atlantic Avenue and building a new connection to the Atlantic branch of the LIRR. While expensive, Miller maintained that would cost far less than the $3 billion the MTA's planners estimated it would cost to reactivate the entire line.

Miller's proposal also would require working out an agreement with the Logan Bus Co., which currently uses the right-of-way immediately south of Atlantic Avenue as a parking area for its buses.

Section 3: Existing Conditions

In order to gauge the potential impacts of rail reactivation or the development of the QueensWay on nearby communities, it is essential to first understand the existing conditions. The following section offers detailed demographic and socio-economic profiles of communities along the right of way, as well as descriptions of existing access to parkland and public transportation.

COMMUNITY PROFILES

Methodology

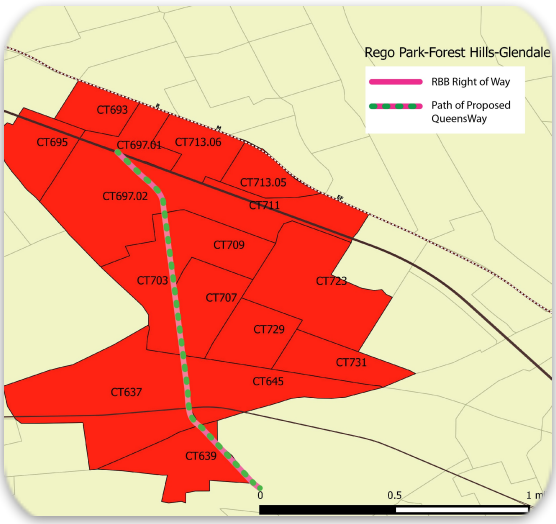
Data for resident profiles was drawn from the 2010 U.S. Census and the 2008-2012 American Community Survey (five year estimates) at the census tract level for census tracts that lie completely or mostly within 1/2-mile of the Rockaway Beach Branch right of way. This data includes ethnic and racial composition, median household income (MHI), unemployment rates, as well as home ownership rates and median house values (MHV). Community profiles also include analysis of existing land use and building characteristics drawn from the City of New York Department of City Planning Primary Land Use Tax Lot Output (PLUTO) data. Data for community business profiles is drawn at the zip code level from the Census Bureau's Economic Census and the New York State Department of Labor Quarterly Census of Employment and Wages. It provides a description of local businesses by industry sector, average number of employees and average wages by industry sector.

For analytical purposes the right of way has been broken into four neighborhood areas, each of which is profiled separately. To define these areas, census tracts have been grouped roughly to correspond to community district boundaries, though some exceptions exist.

Rego Park • Forest Hills • Glendale

LAND USE, 2013

Data at census tract level
Source: US Census 2010



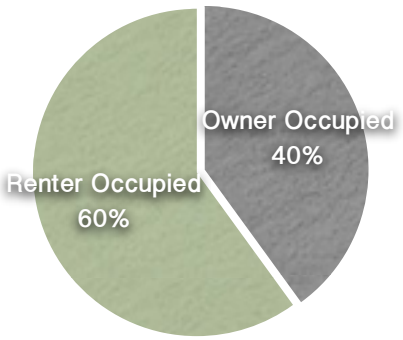
	# Lots	%
1-2 Family Residential	6,591	86.2%
Multi-Family Residential	423	5.5%
Mixed Residential/ Commercial	223	2.9%
Commercial/Office	174	2.3%
Industrial/ Manufacturing	40	0.5%
Transportation/ Utility	30	0.4%
Public Facility/ Institution	46	0.6%
Open Space/ Outdoor Recreation	6	0.1%
Parking Facilities	47	0.6%
Vacant Land	70	0.9%
Miscellaneous	0	0.0%
Total	7,650	100.0%

POPULATION

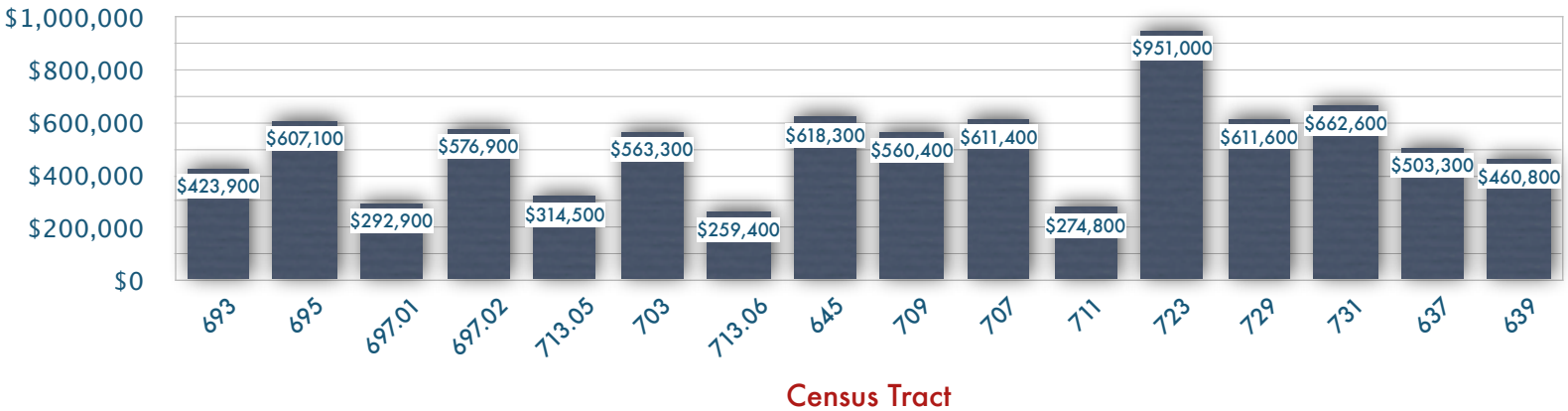
	#	%
Total Population	48,167	
White non- Hispanic	26,043	54.1
Black non- Hispanic	1,024	2.1
South Asian*	2,036	4.2
East Asian^	10,015	20.8
Hispanic	7,302	15.2

*Includes: Asian Indian, Bangladeshi, Bhutanese, Nepalese, Pakistani and Sri Lankan
^Includes: Burmese; Cambodian; Chinese; Filipino; Hmong; Indonesian; Japanese; Korean; Laotian; Malaysian; Taiwanese; Thai and Vietnamese

HOUSING TENURE

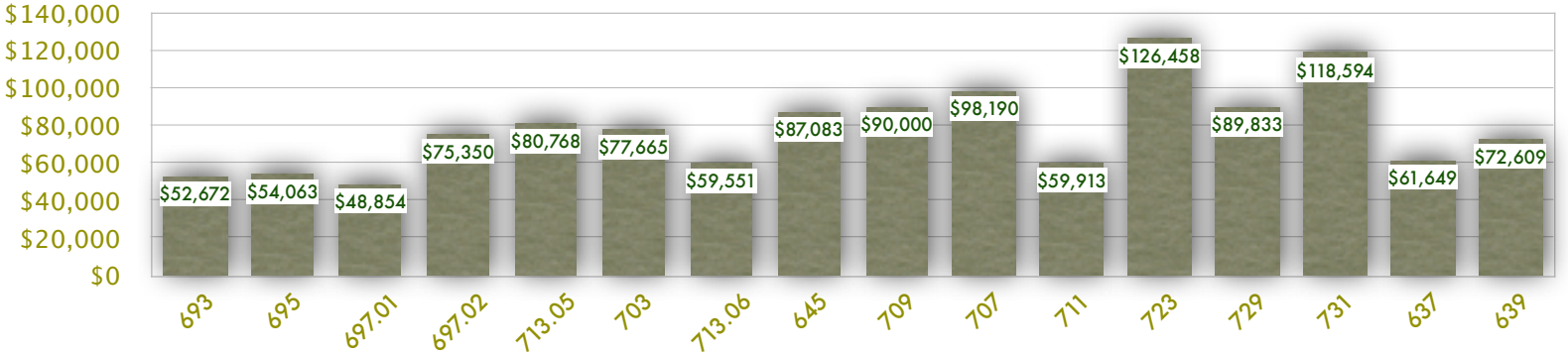


MEDIAN HOUSE VALUE



Census Tract

MEDIAN HOUSEHOLD INCOME



Census Tract

Rego Park- Forest Hills- Glendale

This area straddles the northernmost section of the Rockaway Beach Branch right of way, stretching roughly from Queens Boulevard in the north to Forest Park in the south. It includes portions of the neighborhoods of Rego Park, Forest Hills and Glendale.[10]

Economically, households here are generally better off than those in other areas along the right of way, and substantially better off than those in all of Queens and New York City as a whole. Median household incomes (MHI) range from the highest along the right of way – more than $126,000 in CT 723 – to the more moderate - $48,854 in CT 697.01. Still, only three census tracts in this area had MHI less than that of Queens as a whole ($56,780), and only one less than that of all of New York City ($51,865). Relatively high levels of employment in business, finance and other professional occupations contribute to those high incomes. Similarly, unemployment rates are relatively low – 8.8 percent for the zone as a whole, with the highest occurring in CT 697.01 (13.5 percent) and CT 703 (12.5 percent) and the lowest in CT 723 (3.2 percent) and CT 729 (3.3 percent).

In Forest Hills the RBB right of way occupies an elevated trestle that runs above Yellowstone Boulevard

[10] Portions of CT637 and CT639 are in Community District 5. Data for those entire census tracts is included here.

This relative economic wellbeing is echoed in terms of area housing and property values. The area features a mix of housing types, from mid-rise apartment buildings along Queens Boulevard and the 240-unit Forest View Crescent Cooperative building in Glendale to large single-family homes on detached lots in sections of Rego Park and Forest Hills. Still, the vast majority of the area is zoned one- and two-family residential, and preserving this low-density character has been a community priority.

Of the nearly 15,000 housing units in the area, 60 percent are renter occupied, though in CT 731, CT 729, CT 723 and CT 707 in Forest Hills and CT 637 in Glendale, owners outnumber renters more than three to one. Median house values range from the highest along the right of way – $951,000 in CT 723 and more than $600,000 in CT 729, CT 731, CT 645 and CT 707– to among the lowest - $259,400 in CT 713.06.

While this portion of the right of way is home to people of diverse ethnicities, races and national origins, it has the highest percentage of non-Hispanic whites of the four areas in the study **(Figure 5)**. Non-Hispanic whites make up more than 50 percent of the population in 12 of the zone's 16 census tracts, and more than 65 percent of the population in two tracts, CT637 (71.8 percent)

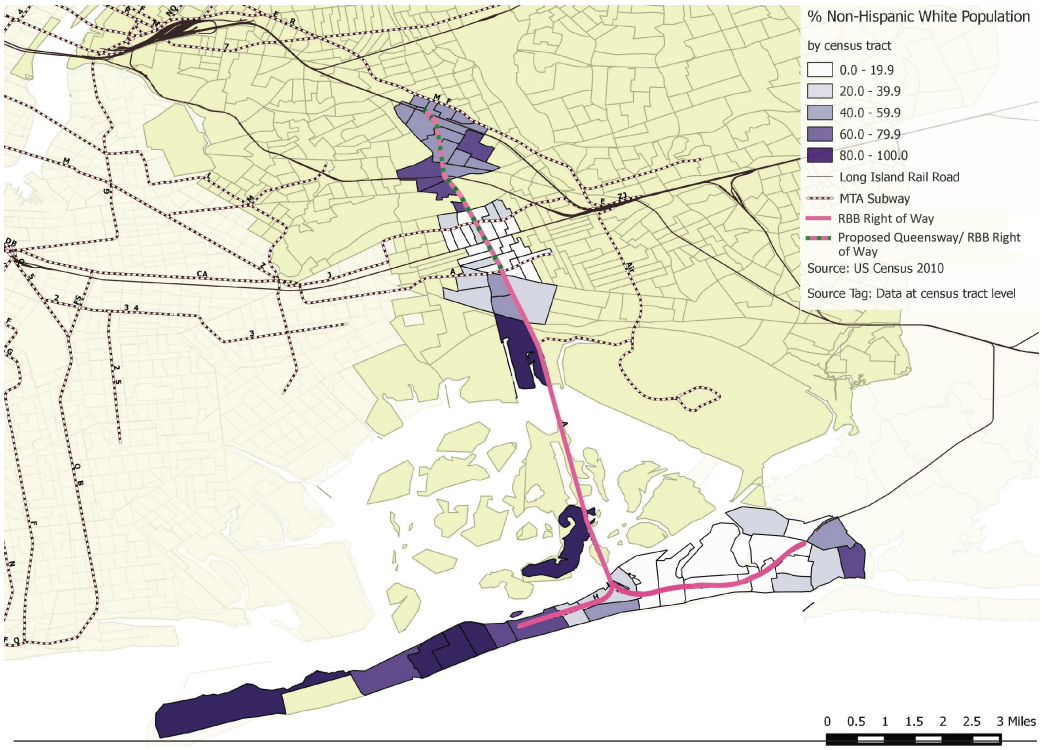


Figure 5: White non-Hispanic population (map shows entire study area)

and CT639 (65.5 percent). It is also home to the largest percentage – 20.8 percent – of East Asians along the right of way. East Asians account for ¼ or more of the population in eight of the area's 16 census tracts, with the largest concentrations in census tracts bordering Queens Boulevard and in Forest Hills

(Figure 6)[11]. Even so, East Asians do not make up a majority group in any census tract.

The overall population decreased by 783 between 2000 and 2010, with moderate growth in 13 of the 16 census tracts offset by greater declines in census tracts CT 695, CT 703 and CT 731 **(Figure 7)**[12]. During the 1990s, however, the area's population grew dramatically with a large influx of immigrants from the former Soviet Union, as well as rising populations from China, India and Pakistan.

Given the residential character of this area, it is no surprise that neighborhood businesses are oriented toward service industries, the majority of which are located on a handful of major commercial streets: Queens Boulevard, where the Rego Center Mall is located; Metropolitan Avenue; Woodhaven Boulevard; Union Turnpike and Yellowstone Boulevard. A second regional shopping destination, the Queens Center Mall, is located nearby, on Queens Boulevard just north of the Long Island Expressway.

Queens Boulevard is also a major transportation corridor, with major intermodal transit hubs – at Union Turnpike, 71st Avenue and 63rd Road – where four subway lines, multiple bus lines and the Long Island Railroad Mainline converge.

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[11] Includes Burmese; Cambodian; Chinese; Filipino; Hmong; Indonesian; Japanese; Korean; Laotian; Malaysian; Taiwanese; Thai and Vietnamese

[12] In 2000, CT 713.05 and CT 713.06 were one census tract, CT 703.02. 2000 population numbers are for CT 703.02.

Prior to 2010 CT 723 was three census tracts - CT725, CT727 and CT 735. For comparative purposes population change 2000-2010 = 2010 population CT 723 - 2000 population CT 725 + 2000 population CT 727 + 2000 population CT 735

Prior to 2010 CTs 972.02, 972.03 and 972.04 were one census tract - CT 972. For comparative purposes, population change 2000-2010 = 2010 population CT 972.02 + 2010 population CT 972.03 + 2010 population 972.04 - 2000 population CT 972

Prior to 2010 CTs 998.01 and 998.02 were one census tract - CT 998. For comparative purposes, population change 2000-2010 = 2010 population CT 998.01 + 2010 population CT 998.02 - 2000 population CT 998

Prior to 2010 CTs 1008.01 and 1008.02 were one census tract - CT 1008. For comparative purposes, population change 2000-2010 = 2010 population CT 1008.01 + 2010 population CT 1008.02 - 2000 population CT 1008

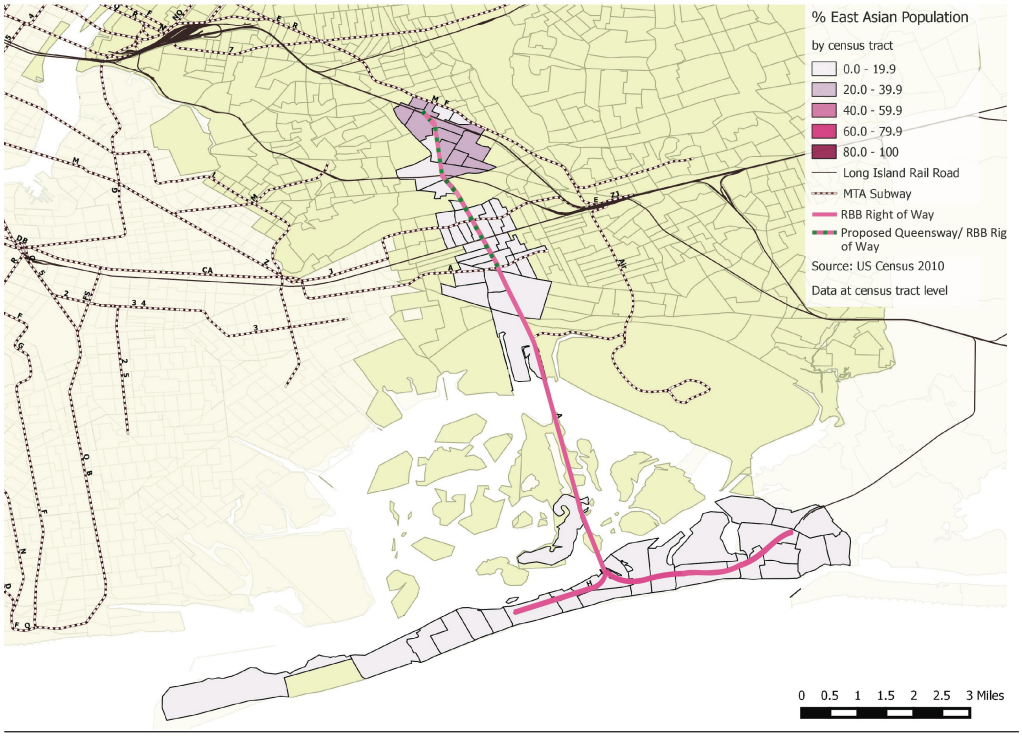


Figure 6: East Asian population (map shows entire study area)

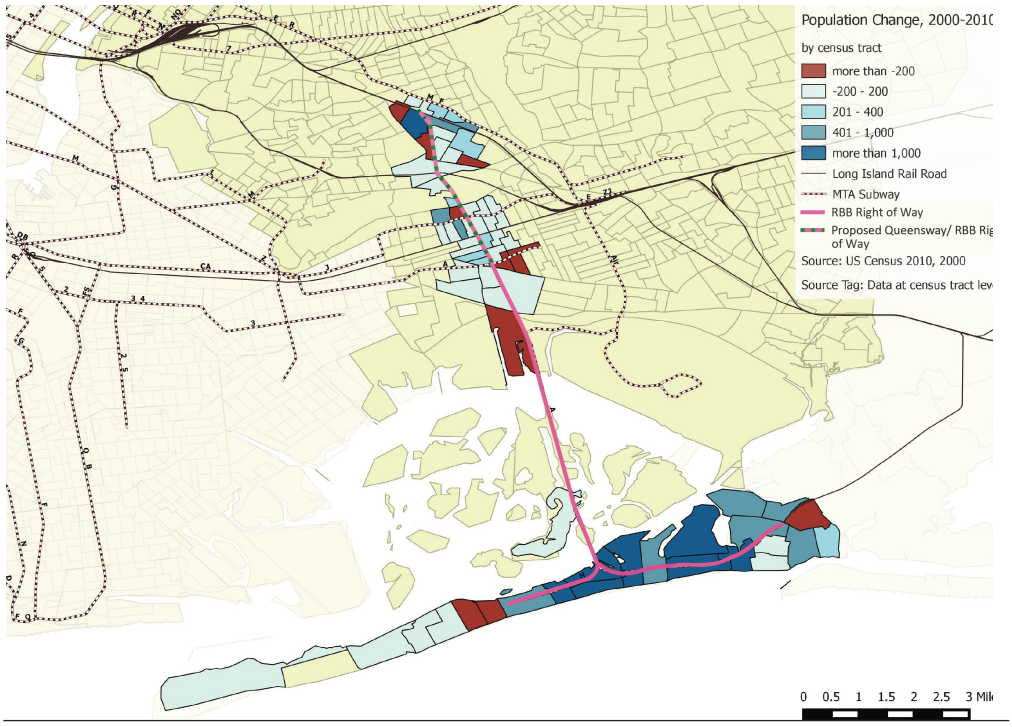
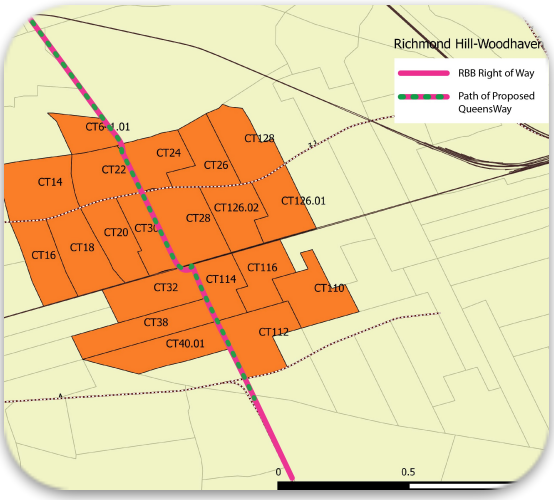


Figure 7: Population change 2000-2010 (map shows entire study area)

Richmond Hill • Woodhaven

LAND USE, 2013

Data at census tract level
Source: US Census 2010



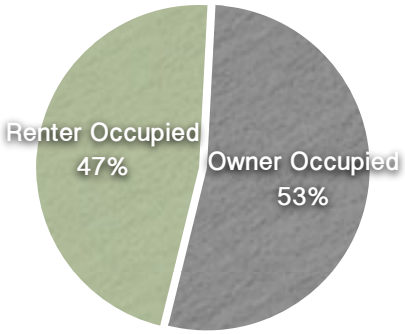
	# Lots	%
1-2 Family Residential	5,549	76.4%
Multi-Family Residential	771	10.6%
Mixed Residential/ Commercial	469	6.5%
Commercial/Office	113	1.6%
Industrial/ Manufacturing	64	0.9%
Transportation/ Utility	55	0.8%
Public Facility/ Institution	52	0.7%
Open Space/ Outdoor Recreation	13	0.2%
Parking Facilities	89	1.2%
Vacant Land	80	1.1%
Miscellaneous	0	0.0%
Total	7,260	100.0%

POPULATION

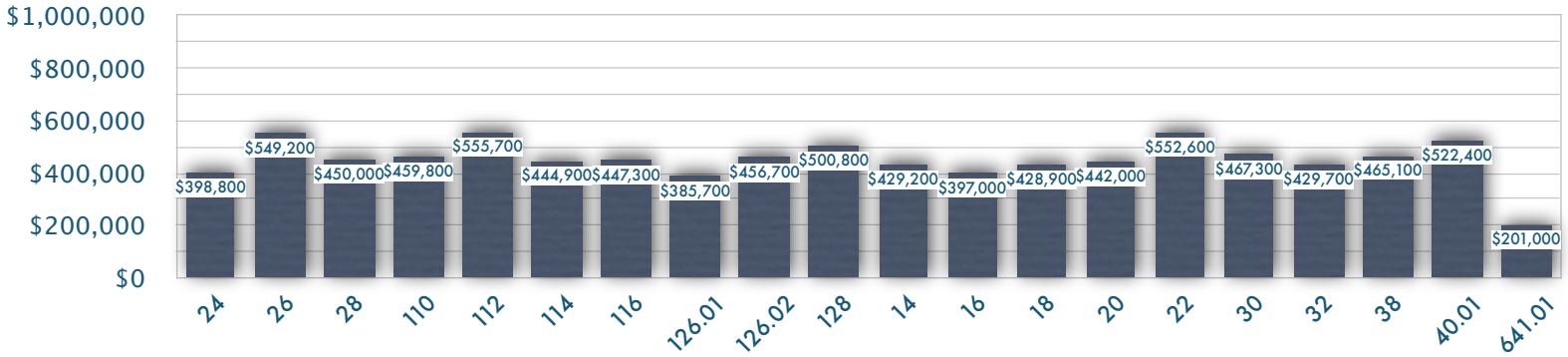
	#	%
Total Population	48,167	
White non -Hispanic	26,043	54.1
Black non- Hispanic	1,024	2.1
South Asian*	2,036	4.2
East Asian^	10,015	20.8
Hispanic	7,302	15.2

*Includes: Asian Indian, Bangladeshi, Bhutanese, Nepalese, Pakistani and Sri Lankan
^Includes: Burmese; Cambodian; Chinese; Filipino; Hmong; Indonesian; Japanese; Korean; Laotian; Malaysian; Taiwanese; Thai and Vietnamese

HOUSING TENURE

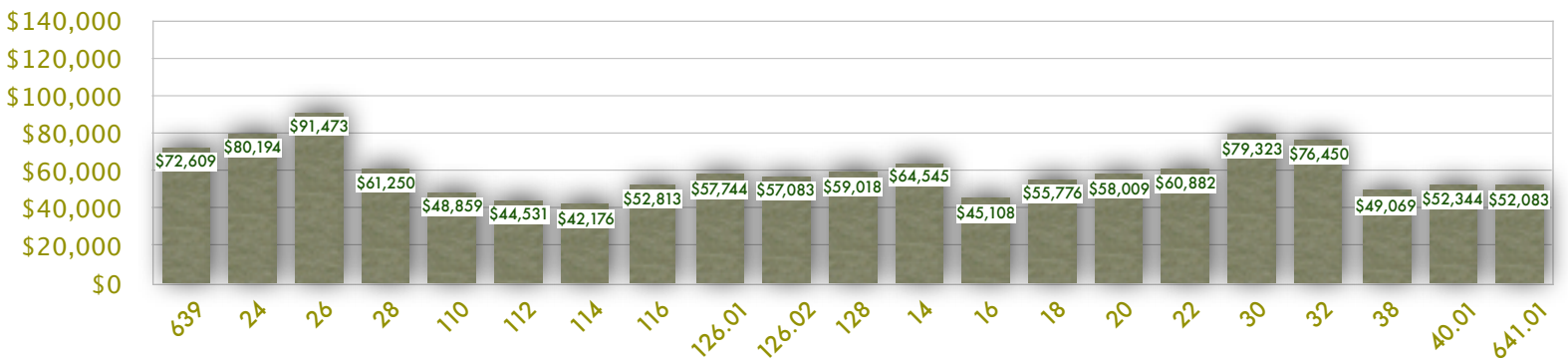


MEDIAN HOUSE VALUE



Census Tract

MEDIAN HOUSEHOLD INCOME



Census Tract

Richmond Hill-Woodhaven

Bordered by Forest Park in the north and Rockaway Boulevard in the south, this area includes census tracts in the neighborhoods of Richmond Hill and Woodhaven. It roughly corresponds to the boundaries of Community District 9.[13]

While the population of this area grew just 4.1 percent between 2000 and 2010, between 1990 and 2010 it grew more than 26 percent. Contributing to that rapid growth has been a steady influx of South Asian and especially Hispanic populations, including increasing numbers from Central and South America. Hispanics, who made up slightly less than one quarter of the area's population in 1990 now account for 43.6 percent of residents. They are a clear majority of the population in 16 of the 21 census tracts in this area, **(Figure 8)**[14] and account for more than 50 percent of the population in 12 **(Figure 9)**.

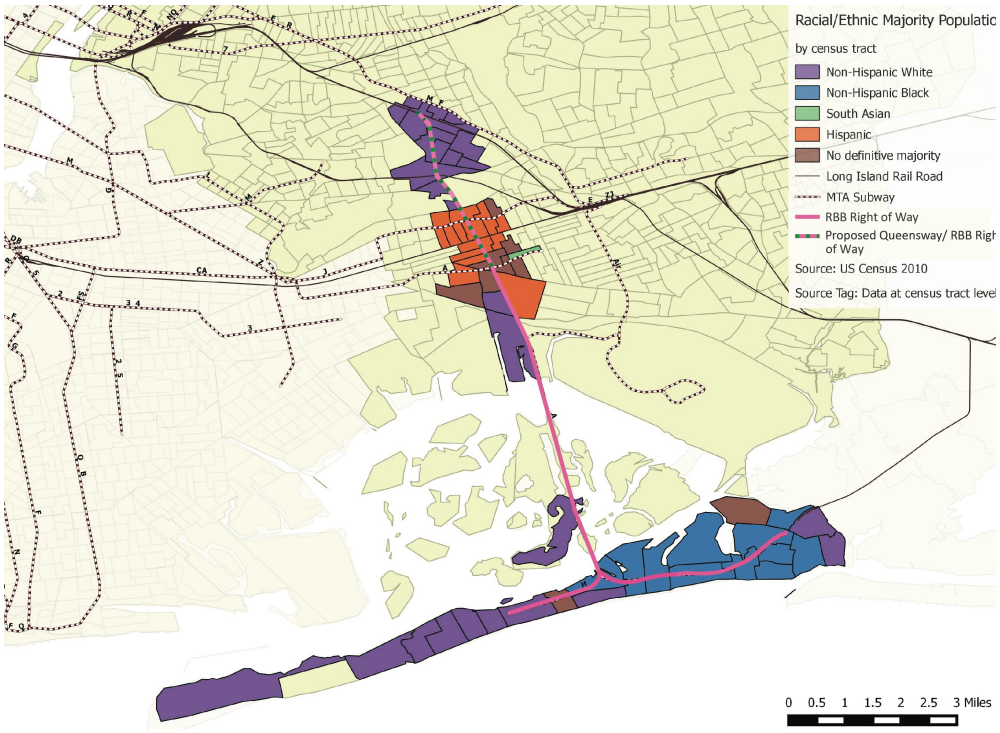


Figure 8: Ethnic-racial majority (map shows entire study area)

Still, communities in Richmond Hill-Woodhaven are among the most racially and ethnically diverse along the right of way. No single group makes up a clear majority in six of the area's 24 census tracts **(Figure 8)**.

[13] A portion of CT112 is in Community District 10. Data for that entire census tract is included here

[14] No definitive majority = no single group represents more than 40 percent of the total population or is more than 10 percent larger than next largest group

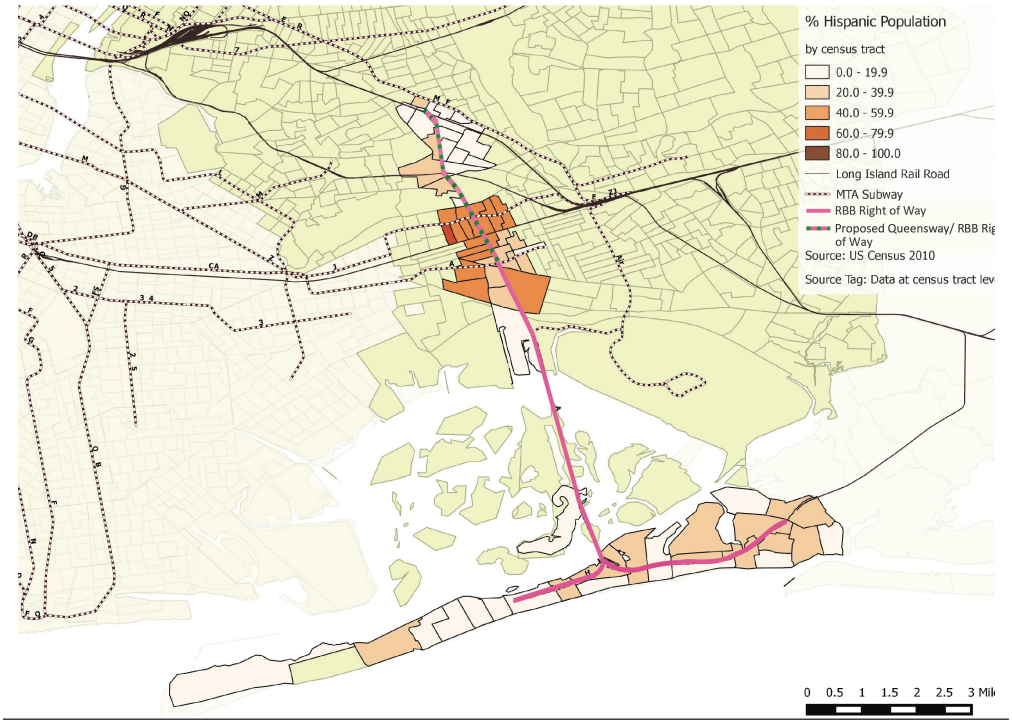


Figure 9: Hispanic population (map shows entire study area)

The area is mostly residential and known for its family-oriented, middle-class character. Portions of Richmond Hill, for instance, have long been associated with multi-generational families living on the same block and for its stock of historic Queen Anne homes. In 2005 parts of the neighborhood were downzoned to preserve existing one- and two-family nature while directing new residential and mixed-use development to main commercial corridors and near transit resources. Parts of Woodhaven were downzoned for the same purpose in 2012. One result of the rezonings was an increase in the residential densities along Jamaica Boulevard and Atlantic Avenue.

While the bulk of area housing is low-density, one- or two-family homes on narrow lots with deep backyards, the nine-building Forest Park Co-op sits adjacent to the right of way just south of Forest Park's Victory Field.

Just over half of the area's 6,390 housing units are owner occupied, though in two Woodhaven census tracts – CT 641.01 (which includes Forest Park Co-op) and CT 16 – seven of 10 residences are occupied by owners.

Median house values reflect the area's middle-class character, as do median family incomes, most of which fall in the $40,000-$60,000 range. Nine of the area census tracts have median household incomes lower than that of Queens as a whole ($56,780); 11 have median household incomes that are higher.

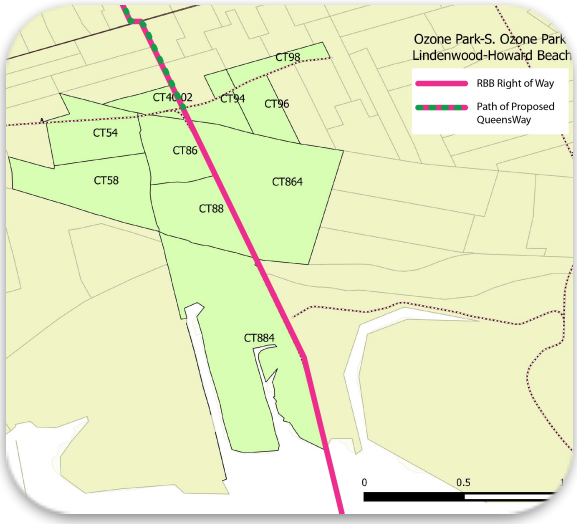
Area commercial activity is centered on three main arteries, Woodhaven Boulevard, Jamaica Avenue and Atlantic Avenue, and to a lesser degree 101st Avenue. Large national restaurant and retail chains are located mainly on Woodhaven Boulevard, while smaller, local shops dot the neighborhoods. Many

of these local businesses are trade-related or specialty stores that reflect the area's growing international character. Along Jamaica Avenue ethnic restaurants serve Dominican, Peruvian, Thai, Chinese and Mexican cuisines, while many of the shops bear names or sell products suggestive of the ethnic backgrounds of their owners. Commercial activity along Atlantic Avenue is oriented to auto body repair shops and other more industrial uses. 101st Avenue, meanwhile, caters to the growing South Asian population.

Jamaica Avenue is one of the major commercial streets to intersect the RBB right of way in Woodhaven.

Woodhaven Boulevard and Jamaica Avenue, which features stops on the J/Z subway line, are the area's main transit corridors. The A line of the subway skirts the southern portion of the area before turning south towards the Rockaways.

Ozone Park•S. Ozone •Lindenwood•Howard Beach



Land Use, 2013

Data at census tract level
Source: US Census 2010

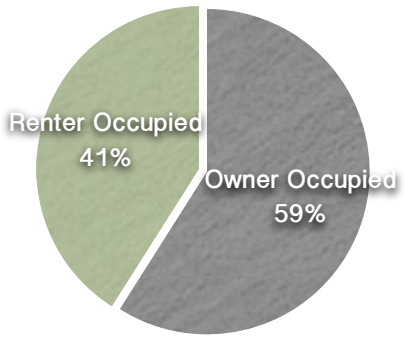
	# Lots	%
1-2 Family Residential	6,949	80.8%
Multi-Family Residential	379	4.4%
Mixed Residential/ Commercial	314	3.7%
Commercial/Office	112	1.3%
Industrial/ Manufacturing	30	0.3%
Transportation/Utility	56	0.7%
Public Facility/ Institution	31	0.4%
Open Space/Outdoor Recreation	36	0.4%
Parking Facilities	112	1.3%
Vacant Land	574	6.7%
Miscellaneous	3	0.0%
Total	8,596	100.0%

POPULATION

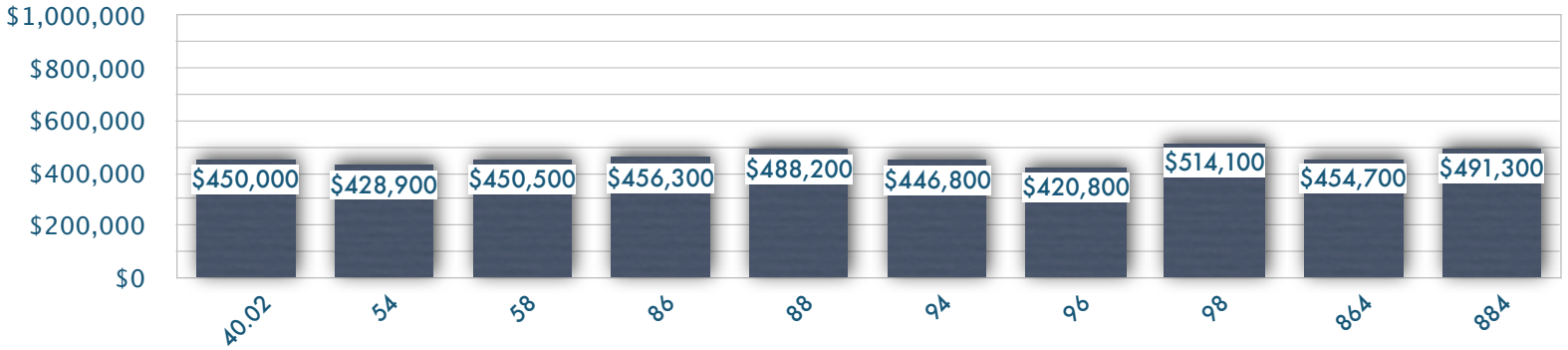
	#	%
Total Population	26,548	
White non- Hispanic	12,735	48.0
Black non- Hispanic	1,173	4.4
South Asian*	1,589	6.0
East Asian^	1,012	3.8
Hispanic	8,644	32.6

*Includes: Asian Indian, Bangladeshi, Bhutanese, Nepalese, Pakistani and Sri Lankan
^Includes: Burmese; Cambodian; Chinese; Filipino; Hmong; Indonesian; Japanese; Korean; Laotian; Malaysian; Taiwanese; Thai and Vietnamese

HOUSING TENURE

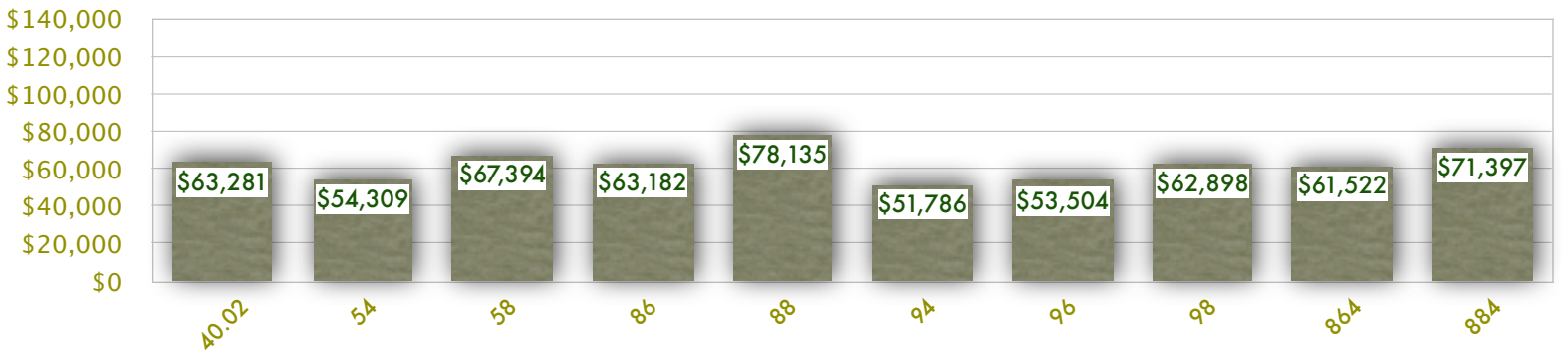


MEDIAN HOUSE VALUE



Census Tract

MEDIAN HOUSEHOLD INCOME



Census Tract

Ozone Park- South Ozone Park- Lindenwood- Howard Beach

The portion of the RBB right of way that runs from 103rd Avenue south through Ozone Park, South Ozone Park, Lindenwood and Howard Beach to Jamaica Bay is a mix of ethnically diverse neighborhoods bordering on areas of relative homogeneity.

According to the Furman Center for Real Estate and Urban Policy's annual State of New York City's Housing and Neighborhoods, Community District 10, in which they are located, was the most diverse in the city from 2006 through 2010. As in neighboring Richmond Hill and Woodhaven, though, growing numbers of Hispanic and South Asian residents are gradually replacing shrinking white populations, especially in the northern portion of the area. Hispanics now account for between 37 percent and 43 percent of the population in half of the area's census tracts **(Figure 9)**. CT 98, meanwhile, is the only census tract along the entire right of way with a majority South Asian population **(Figure 10)**[15]. In CT 884, which covers all of Howard Beach and Lindenwood, however, the population is 85.1 percent non-Hispanic white **(Figure 5)**.

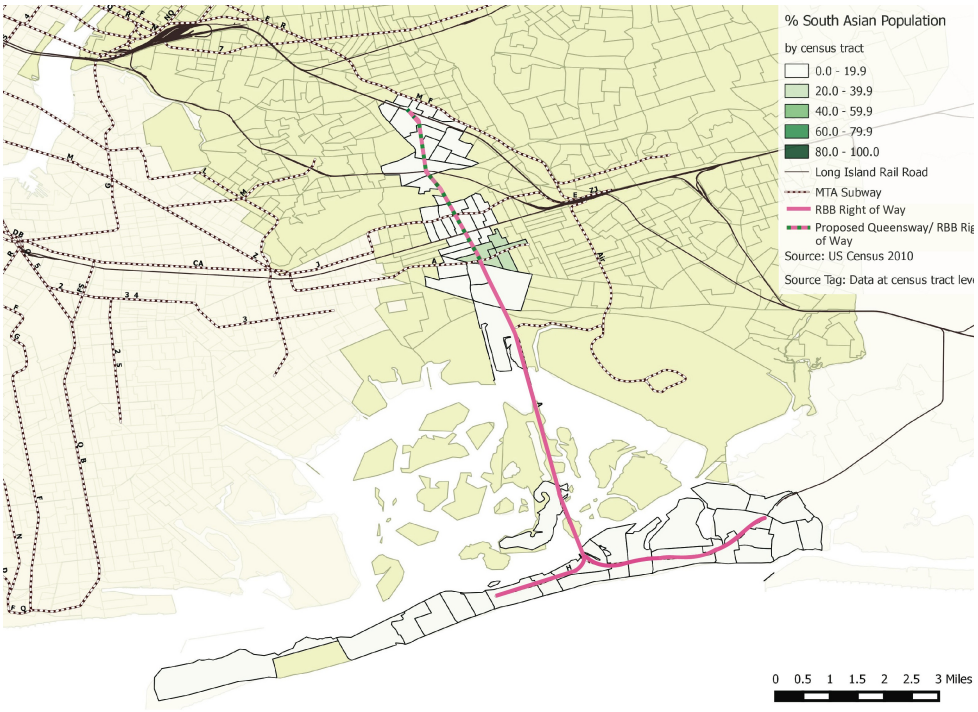


Figure 10: South Asian Population (map shows entire study area)

Historically, the area emerged as a destination for single-family homeowners in the later half of the 19th century and its residential neighborhoods have

[15] Includes Asian Indian, Bangladeshi, Bhutanese, Nepalese, Pakistani and Sri Lankan

developed over time. An estimated 1/3 of the its housing stock was built before 1939, but a burst of home building in the 1950s and 1960s brought new residents to the area.

According to the 2008-2012 American Community Survey, 59 percent of the 10,678 housing units in the area are owner occupied, and the vast majority of these are one- and two-family homes. In fact, in only two of the area census tracts – CT 94 and CT 40.02 – do renters outnumber owners, though in both cases by more than two to one. In Ozone Park and South Ozone Park the homes are generally more modest and sit on smaller lots in more densely developed blocks. Homes in some sections of Howard Beach are larger with bigger yards.

Median house values in the area, meanwhile, are low when compared to those further north along the RBB right of way, and homeowners here have been especially hard hit by recent misfortune. First, the economic crisis of 2007-2008 resulted in a relatively high rate of foreclosures. Then in 2012 Hurricane Sandy inundated area homes, many of which were built below grade. An ongoing issue in the district is the relatively large number of damaged and abandoned homes.

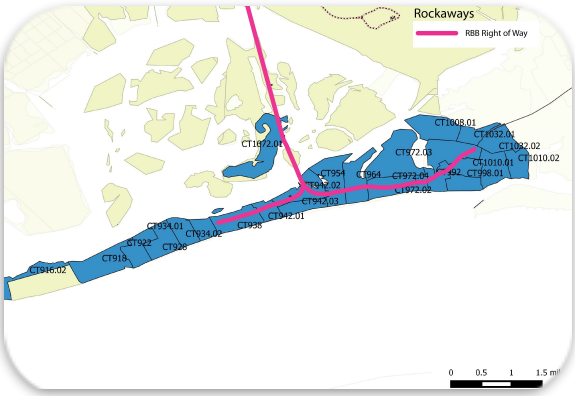
Median household incomes in the area are comparatively high, if still modest. Only three area census tracts have median household incomes lower than Queens as a whole, and only one – CT 94 – has a median household income

A number of auto repair shops, building materials suppliers and beverage distributors operate from underneath the elevated RBB right of way between 99th and 100th streets north of Rockaway Boulevard in Ozone Park.

Rockaways

LAND USE, 2013

Data at census tract level
Source: US Census 2010



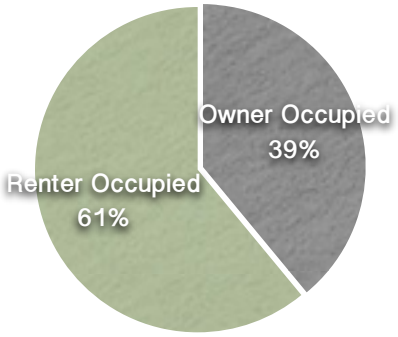
	# Lots	%
1-2 Family Residential	11,014	75.1%
Multi-Family Residential	1,299	8.8%
Mixed Residential/ Commercial	172	1.2%
Commercial/Office	231	1.5%
Industrial/ Manufacturing	53	0.4%
Transportation/ Utility	148	1.0%
Public Facility/ Institution	202	1.4%
Open Space/ Outdoor Recreation	188	1.3%
Parking Facilities	159	1.1%
Vacant Land	1,187	8.1%
Miscellaneous	9	0.1%
Total	14662	100.0%

POPULATION

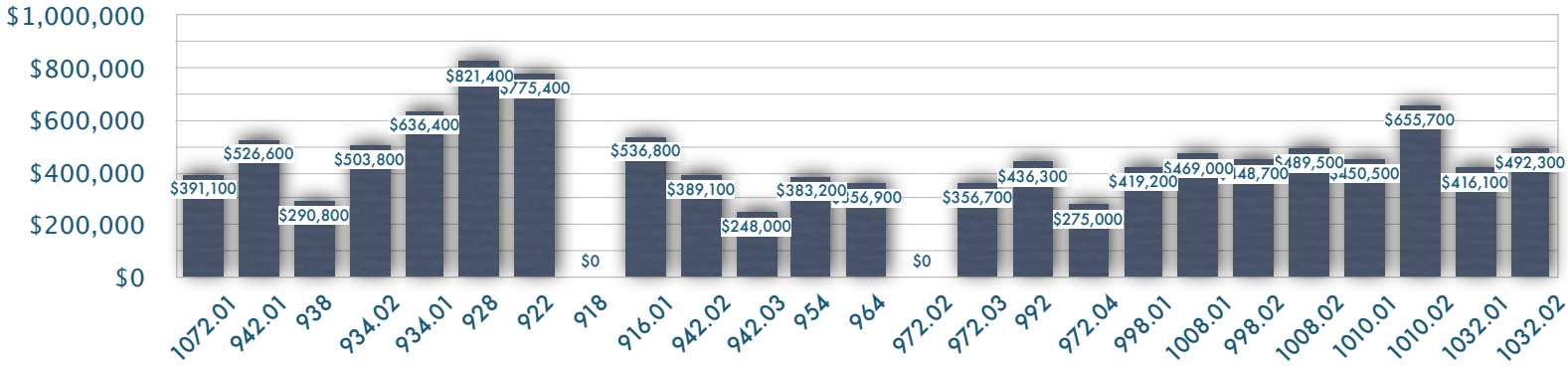
	#	%
Total Population	114,978	
White non-Hispanic	40,459	35.2
Black non-Hispanic	44,663	38.8
South Asian*	1,183	1.0
East Asian^	1,274	1.1
Hispanic	24,102	21.0

*Includes: Asian Indian, Bangladeshi, Bhutanese, Nepalese, Pakistani and Sri Lankan
^Includes: Burmese; Cambodian; Chinese; Filipino; Hmong; Indonesian; Japanese; Korean; Laotian; Malaysian; Taiwanese; Thai and Vietnamese

HOUSING TENURE

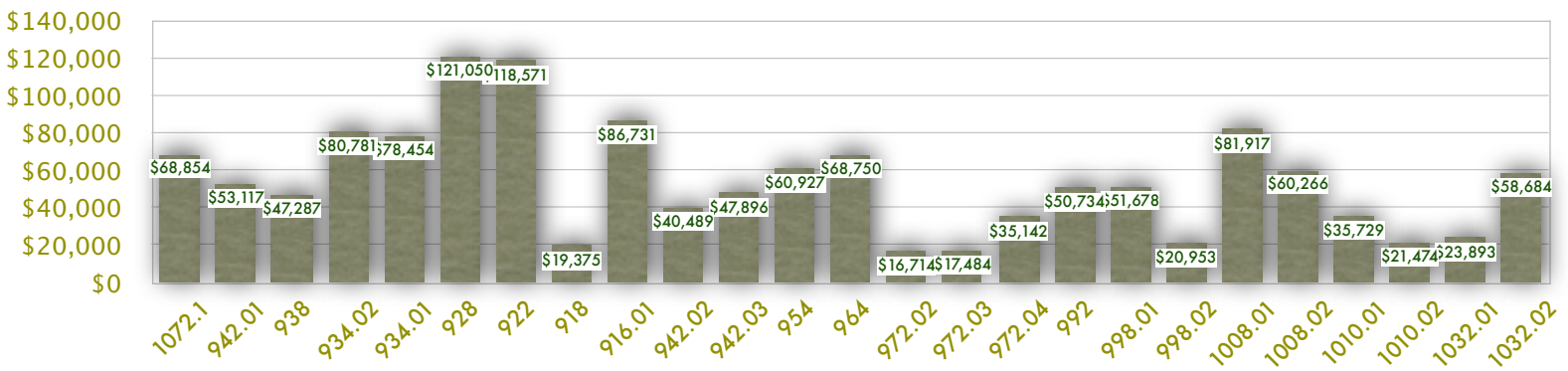


MEDIAN HOUSE VALUE



Census Tract

MEDIAN HOUSEHOLD INCOME



Census Tract

less than all of New York City. According to New York State Department of Labor statistics, the neighborhood workforce is largely employed in service sector jobs, including sales and related occupations, and office and administrative support.

In terms of the neighborhood economy, specialty trades, repair and maintenance companies and food service and retail establishments are the major business activities. Included among these are a number of auto repair shops, building materials suppliers and beverage distributors who operate from underneath the elevated RBB right of way between 99th and 100th streets north of Rockaway Boulevard in Ozone Park.

Other major commercial corridors are Liberty Avenue at the area's northern edge, and Cross Bay Boulevard, which, is bound by Jamaica Bay on the east and residential neighborhoods to the west and serves as the main commercial strip in Howard Beach.

CT 864, meanwhile, is dominated by the Aqueduct Race Track and Casino.

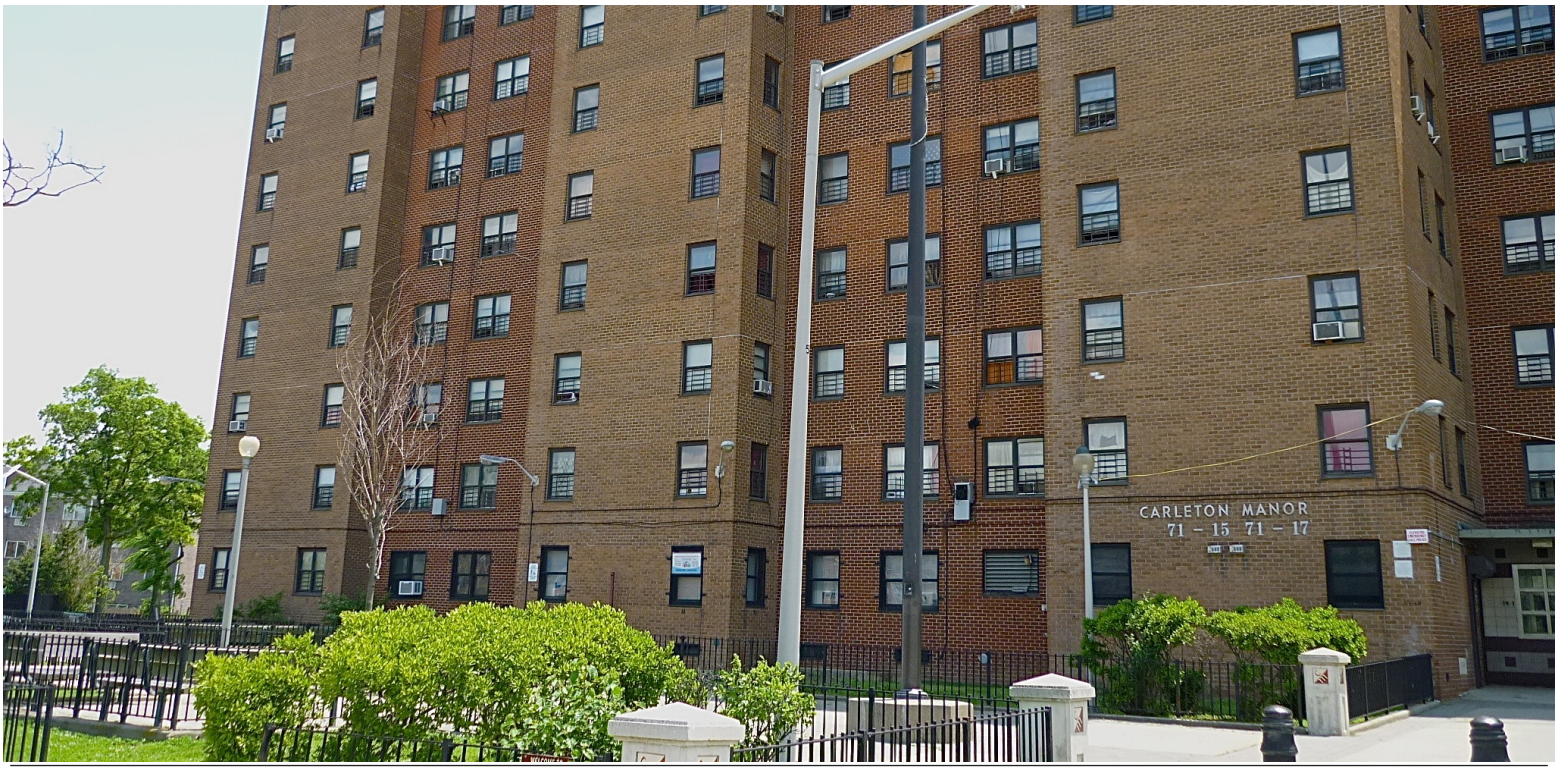
Rockaways

This area, which corresponds to the boundaries of Queens Community District 14, encompasses all of the New York City census tracts on the Rockaway Peninsula. It is the only section along the right of way that the proposed QueensWay linear park does not border on or run through. Here, the MTA's A and Rockaway Park Shuttle subway lines operate on the RBB right of way.

Originally the Rockaways developed as a summer destination for working families, its beach bungalows and amusement parks offering respite from crowded city neighborhoods. By the 1950s, however, the amusement parks were gone, leaving wide stretches of vacant beachfront property, and many of the bungalows have since been torn down to make way for low- and moderate-income housing.

Today the Rockaways are home to some of the highest concentrations of public and senior housing in New York City, and the area is marked by extreme economic disparity.

Six public housing developments in the Rockaways account for 3,986 – or 23 percent – of the 17,103 public housing units in all of Queens. The first development, originally called Arverne Houses (now Ocean Bay Apartments Oceanside) was built in 1951. The largest, Ocean Bay Apartments Bayside with 1,378 units spread over 24 buildings, opened in 1961. All of the projects were built over a 22-year span from 1951 to 1973, and four were built before rail service was suspended on the Rockaway Beach Branch Line in 1962. The two later projects – Carleton Manor Houses in 1967 and the Beach 41st Street Houses in 1973 – added 880 new units of public housing, contributing to a dramatic rise in the peninsula's population over the past five decades.



Carleton Manor Houses is one of six public housing developments in the Rockaways

Between 1960 – two years before service on the RBB ended – and 2010 the population of the Rockaways nearly doubled, growing from 59,919 residents to 114,978 **(Figure 2)**.

Also contributing to that increase in population are 27 nursing homes or elderly/adult care centers, at least 13 of which opened in 1973 or later. Together they operate 4,595 beds.

Emblematic of more recent growth is Arverne by the Sea, a $1 billion, 117-acre oceanfront development featuring two-family homes and condominiums. One of the largest residential developments underway in New York City, it will ultimately house up to 2,300 residents.

Arverne by the Sea, a $1 billion, 117-acre oceanfront development featuring two-family homes and condominiums, is emblematic of recent development in the Rockaways.

But Arverne by the Sea, with a predominately white, middle- to upper-middle class population, is also indicative of the uneven fits of development that have stratified the Rockaways population along economic and racial lines. Non-Hispanic whites, for instance, account for more than 90 percent of the population in four of the five census tracts at the western end of the peninsula **(Figure 5)**. These census tracts – CT 934.01, CT 928, CT 922 and CT 916.01, the relatively affluent private neighborhood of Breezy Point at the extreme western end – also have some of the lowest rates of unemployment **(Figure 11)**, highest incomes, highest median house values, and greatest concentrations of public housing along the right of way.

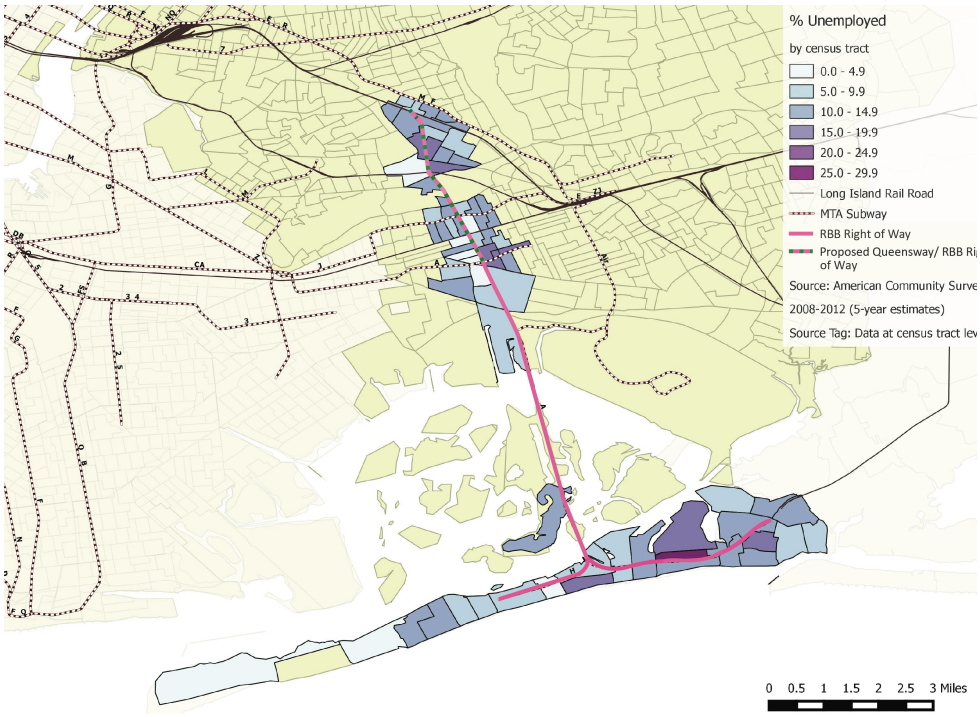


Figure 11: Unemployed (map shows entire study area)

Conversely, non-Hispanic blacks make up more than 50 percent of population in ten census tracts in the middle and eastern sections of the peninsula **(Figure 12)**, and these tracts have among the lowest median household incomes, lowest median house values and highest rates of unemployment.

Contributing to these socio-demographic disparities is a relative lack of economic dynamism on the peninsula. Commercial activity is predominately in

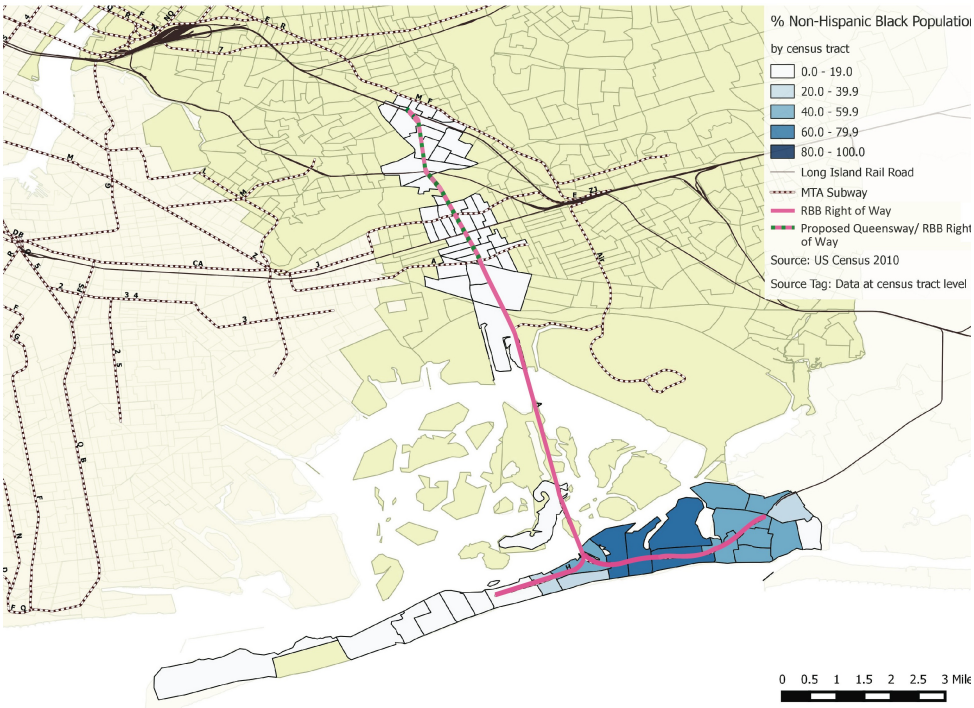


Figure 12: Non-Hispanic Black population (map shows entire study area)

the service sector, including food and restaurants and real estate, and nursing and health care are among the major employers. Retail development is limited, and in the case of the Far Rockaways shopping area, gradually decayed, leaving many residents travel to Brooklyn or Long Island to shop.

Like their neighbors in Howard Beach and Lindenwood, residents of the Rockaways felt the full force of Hurricane Sandy. Especially hard hit were the elderly, the poor and those without vehicles whose ability to evacuate was constrained by a lack of public transportation options. Once the storm hit, many were stranded, without electricity and other essential services for weeks. Many parts of the peninsula have yet to fully recover from the effects of the storm.

EXISTING TRANSPORTATION CONDITIONS

Among transit advocates, the main argument for reactivation of rail service along the Rockaway Beach Branch line is the limit to existing transportation options in communities along the right of way. In fact, many of those communities developed as residential neighborhoods in part because of direct transportation access to midtown and other parts of Manhattan.

With the termination of RBB service in 1962, however, neighborhoods south of Forest Park became relatively isolated from public transit options. For others, existing subway service on the J, M, Z and A or C lines meant circuitous and therefore longer commutes through Brooklyn and Lower Manhattan rather than directly through Queens. Suspension of service also severed direct rail access between northern Queens and the southern part of the borough, including the Rockaways.

One of the major justifications for suspension of service was low ridership. At the time service was discontinued, only 184 riders a day boarded trains on the truncated RBB line according to the MTA, and in 1960 only 1.3 percent of all commuters in the study used commuter rail, according to the 1960 census. Another 42.1 percent used the subway. In the Rockaways, 2.0 percent of the peninsula's 23,495 commuters used rail while 27.7 percent took the subway.[16]

But in the 52 years since, the population of the Rockaways – and the number of potential rail users – has nearly doubled. In 2010, there were 43,413 workers age 16 of older in the Rockaways.[17] How likely those potential riders would be to use a reactivated RBB, and how much it would improve commute times, are points of contention. But as the following analysis of current transportation options and conditions shows, residents in many of the communities along the right of way continue to have relatively few transit options and face longer commute times than residents in other parts of

[16] All data for 1960 is from the 1960 Census.

[17] All data for 2010 is from the 2010 Census.

Queens and New York City. A more detailed analysis of transportation patterns and the potential impact of various right-of-way reactivation options can be found Section Four of this study.

In 2010, of the 105,239 workers age 16 and older along the right of way, 35,538 – or 33.8 percent – commuted for one hour or more each way, and 47.3 percent used some form of public transportation **(Figure 13)**. That compares to 28.3 percent for all workers in Queens who commuted for more than one hour, and 23.8 percent of workers in all of New York City. The burden of long commutes, however, is not felt evenly along the right of way. For the Rockaways, where 39.9 percent of workers commute by public transit, and portions of Woodhaven, Richmond Hill and Ozone Park, those rates are higher still.

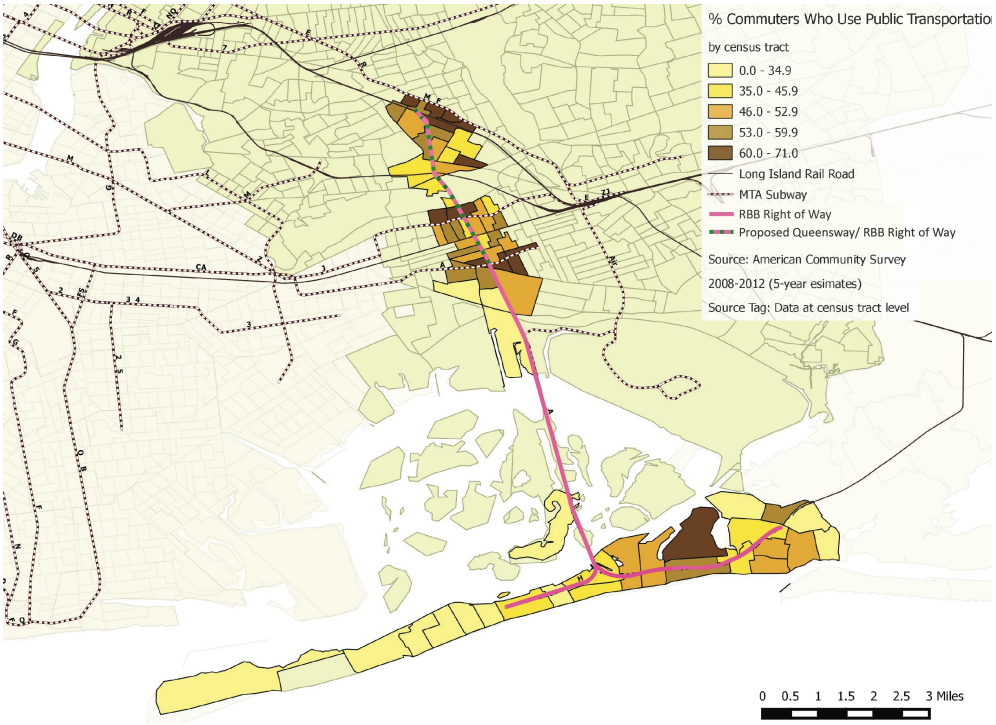


Figure 13: Commuters Who Use Public Transportation (map shows entire study area)

In the Rockaways, 36.3 percent of workers age 16 or older commute for one hour or more, while in census tracts 972.03 and 972.04 – where 64.6 percent and 58.6 percent of workers, respectively, take public transportation **(Table 1)** – more than half of the working population faces a one hour-plus commute in spite of their relative proximity to the A subway line **(Table 2)**.

Similarly, in Woodhaven and Richmond Hill census tracts 24 and 26, 49.0 percent and 50.7 percent of workers, respectively, commute for one hour or more even though both tracts are located within ¼ mile of the 104th Street stop on the J subway line and high percentages – 62.9 percent and 51.4 percent respectively – of commuters use public transit. In CT 98 in Ozone Park,

which sits adjacent to the Ozone Park/Lefferts Boulevard branch of the A subway line, 69.9 percent of workers use public transit but 53.5 percent of them face commutes of one hour or more.

Table 1: Census Tracts with the Highest and Lowest % of Commuters Who Use Public Transit

	Census Tract	Neighborhood	%
Census Tracts with the Highest Percentage of Commuters Who Use Public Transit	693	Rego Park	70.2
	98	Ozone Park	69.9
	713.06	Rego Park	67.2
	22	Woodhaven	67.0
	713.05	Rego Park	64.7
	972.03	Arverne/Rockaways	64.6
Census Tracts with the Lowest Percentage of Commuters Who Use Public Transit	922	Neponsit/Rockaways	22.0
	1010.02	Far Rockaway	20.2
	1008.01	Bayswater/Rockaways	20.0
	916.01	Breezy Point/Rockaways	18.4
	934.01	Belle Harbor/Rockaways	16.1

Table 2: Census Tracts with the Highest and Lowest % of Commuters Who Travel 1 Hour or More Each Way

	Census Tract	Neighborhood	%
Census Tracts with the Highest Percentage of Commuters Who Travel 1 Hour or More	972.04	Edgemere	58.5
	972.03	Edgemere	56.1
	98	Ozone Park	53.5
	26	Richmond Hill	50.7
	24	Woodhaven/Richmond Hill	49.0
Census Tracts with the Lowest Percentage of Commuters Who Travel 1 Hour or More	16	Woodhaven	19.7
	1008.01	Bayswater/Rockaways	19.5
	637	Glendale	18.4
	713.05	Rego Park	17.4
	645	Forest Hills	13.9

For these, and other areas burdened with long commutes, the situation is compounded by lack of available transportation options. While the A and J subway lines serve commuters in Woodhaven, Richmond Hill, Ozone Park, South Ozone Park and the Rockaways, they are the only local subway or rail options available. And while bus service is plentiful and offers connections to alternative subway and rail options in other neighborhoods that does little to reduce overall commute times **(Appendix A)**.

Another contributing factor for many burdened by long commutes is lack of access to a private vehicle, as that confines those who can't afford to own and operate one to the available public transportation options. Not surprisingly, this impact is felt unevenly along class and race lines. Many of the Rockaways workers with long commute times live in predominately black and relatively poor areas where relatively few have access to a car **(Figure 14)**. Residents of the relatively wealthy western portion of the peninsula, meanwhile, had among the highest percentages of commuters who used their own vehicle.

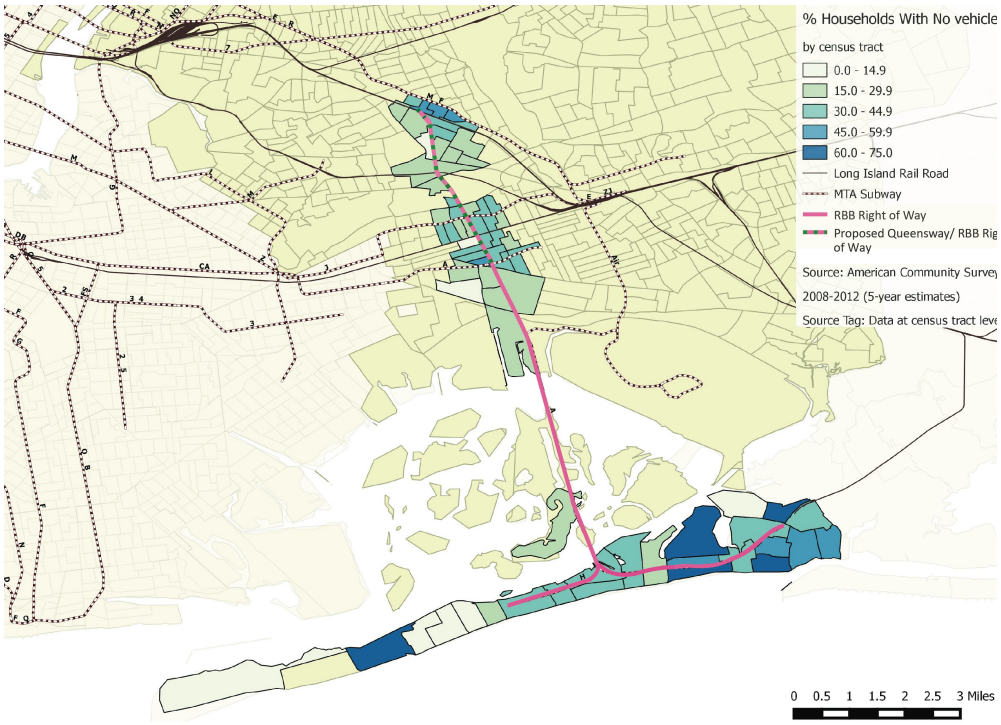


Figure 14: Households With No Vehicle (map shows entire study area)

Conditions at the northern end of the right of way are quite different. While relatively large numbers of commuters use public transportation, they have multiple available options. Communities close to Queens Boulevard, for instance, have access to four subway lines – E, F, M and R – as well as the Long Island Railroad and multiple bus lines. They also have the lowest commute times, and lowest percentage of area population with commutes of more than one hour, along the right of way. Census tracts 713.05 and 713.06, for instance, sit adjacent to the south side of Queen Boulevard and within easy walking distance of a subway station at 67th Avenue. As a result, high percentages of area residents avail themselves of public transit, but only 17.4 percent and 25.3 percent, respectively, had commutes longer than one hour.

Limited options and conditions have made transit issues a focus of local leaders in communities at the south end of the right of way. Community Board 14, which represents the Rockaways, has argued that in order to attract economic activity and new residents to the peninsula, commutes to Manhattan

and Queens' business centers should be 35 to 45 minutes. In 2012, the board suggested three options for improving transportation on the peninsula: revitalization and reactivation of the RBB; a permanent, affordable, high-speed ferry service; and rush hour express service on the A subway line. Members of Community Board 10, meanwhile, have also called for increased and improved rush hour service on the A line.

The New York City Department of Transportation, meanwhile, has proposed institution of Select Bus Service on Woodhaven Boulevard as a means of improving overall transit conditions.

Select Bus Service on Woodhaven Boulevard

Proposed by the New York City Department of Transportation, Select Bus Service will operate on the Q52/Q53 bus routes from Rego Park to Rockaway Park.

The proposal calls for setting aside a dedicated bus lane as a means of reducing service times, schedule conflicts and traffic congestion, and improving safety.

Affected streets include Woodhaven Boulevard, Cross Bay Boulevard and portions of Rockaway Beach Boulevard, Metropolitan Avenue and Roosevelt Avenue. Service would include stops near subway stations at Jamaica Avenue (J train) and Liberty Avenue (A train), as well as major cross streets like 101st Avenue. It would also offer connections via Metropolitan Avenue buses to the M subway line. Similar service has been implemented in parts of Manhattan and Staten Island.

The initial phase of the plan, which, after extensive community outreach, is expected to begin in late summer or early fall of 2014, features curbside bus lanes near Liberty Avenue and Rockaways Boulevard and offset bus lanes between Eliot Avenue and Metropolitan Avenue. Full implementation of service on the corridor is expected by January 2015.

An MTA study conducted between 2008-2013 projected SBS would improve travel times on affected routes by 15 percent -20 percent. Currently, a full trip on the Q52 bus takes approximately 50 minutes, on the Q53 one hour. The MTA also projects the service would increase bus ridership between 10 percent -15 percent in its first year.

Rockaway Ferry

Private ferries have long offered service between Manhattan and the Rockaways, though it was typically limited to the spring and summer weekends. Following Hurricane Sandy, the New York Economic Development

Corp. and the Federal Transit Administration instituted what was to be temporary emergency ferry service from Manhattan to the Rockaways in response to outages on the A subway line.

The service, which is operated by the private provider Seastreak, initially was underwritten by subsidies from the Federal and State government. It provided morning and afternoon commuter service for $2, and the combination of low fares and faster commute times made it popular among Rockaways residents.

Even after A-line service was restored, the administration of then-Mayor Michael Bloomberg twice opted to continue subsidizing the ferry, which runs between East 34th Street/FDR Drive and Pier 11 in Manhattan to the Brooklyn Army Terminal and Far Rockaway Beach. It carries approximately 400 riders per day, though the fare has since risen to $3.50 per trip.

In January 2014, service was extended a fourth time to allow time to study the costs and seek alternative sources of funding for continued operation. That study, whose findings were made public in July, determined that subsidizing ferry service cost the City nearly $30.00 per rider – or several million dollars a year – and was therefore unsustainable. The Di Blasio administration pledged an additional $2 million to keep the ferry running until October.

EXISTING ACCESS TO PARKLAND

One of the central arguments made by QueensWay proponents in support of converting the RBB right of way is that, if the park were built, it would provide quality outdoor recreation and park space in neighborhoods where that is lacking.

Currently there are 744 acres of park and outdoor recreation space in census tracts completely or mostly within 1/2 mile of the path of the proposed QueensWay **(Figure 15)**. That amounts to 6 acres per 1,000 residents. According to Trust for Public Land,[18] in 2011 New York City on the whole had 38,060 acres of parkland, or 4.5 acres per 1,000 residents.

The vast majority of the parkland along the path of the proposed QueensWay is located in 541-acre Forest Park, though not all of Forest Park is part of the right of way. In fact, only nine of the 44 right of way census tracts along the path of the QueensWay border Forest Park, leaving the rest to make do with a network of small neighborhood parks, playgrounds and green spaces that includes 1.6-acre Equity Park in Woodhaven, 1.2-acre Maurice Fitzgerald Playground in Richmond Hill and 2.1-acre Centreville Playground in Ozone Park.

According to the Mayor's Office of Environmental Coordination, a neighborhood is considered underserved in terms of open space if it has less than 2.5 acres

[18] http://www.tpl.org/sites/default/files/cloud.tpl.org/pubs/ccpe-city-park-facts-2011.pdf

of parkland per 1,000 residents. Neighborhoods along the path of the proposed QueensWay deemed underserved by this measure are Ozone Park, Richmond Hill and Rego Park.

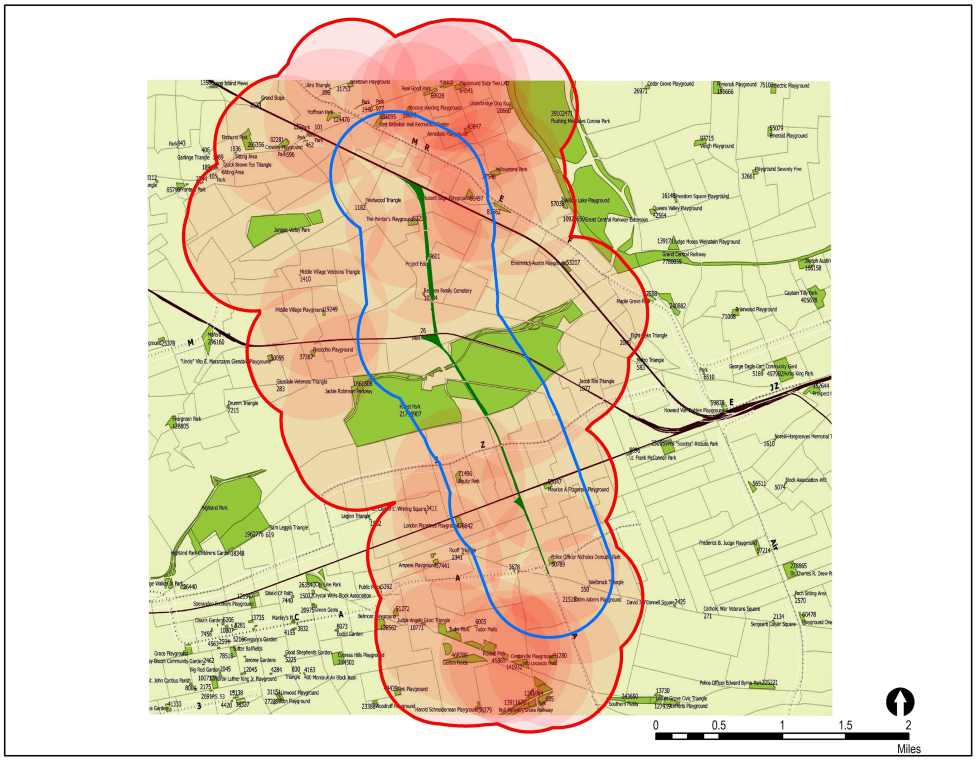


Figure 15: Access to Parks along Path of Proposed QueensWay

However, total parkland is only one – and not necessarily the most useful – measure of access to parkland. In 2007, as part of the Bloomberg administration's NYC2030 initiative, the New York City Department of City Planning established a long-term goal of insuring that every city resident was within a 10-minute walk of a park or outdoor recreation area. Since the average person walks about 3 miles an hour, one would need to live within ½ mile of a park to be able to walk there in 10 minutes.

An estimated 123,000 people live within a ½ mile of the proposed QueensWay. While none of those residents is currently more than ½ mile from an existing park, access for some residents in Ozone Park, Richmond Hill and Rego Park is limited to a single, often relatively small open space.[19]

According to the Furman Center for Real Estate and Urban Policy, Community District 10 – which includes portions of Ozone Park – has the lowest

[19] This analysis is limited to NYC Department of Parks and Recreation properties. Included are recreation fields/ courts, playgrounds, jointly operated playgrounds, neighborhood parks, gardens (Eden Project), flagship parks (Forest Park) and community parks. Not included are triangles/plazas, malls, cemeteries or buildings or institutions (i.e. recreation centers)

percentage of households within ½ mile of a park larger than ¼ acre of all of New York City's 59 community districts.[20]

If built, the QueensWay would contribute an additional 47 acres of parkland to communities along the right of way. Seven acres, however, would be in Forest Park. QueensWay advocates contend those seven acres are already officially parkland and are therefore subject to the Parkland Alienation Act.[21] That act prohibits the conversion of parkland to any other use unless an equal amount of parkland can be created elsewhere in the community, a move that would require approval by the New York State legislature.[22]

Another issue related to parklands along the path of the proposed QueensWay is maintenance and safety in existing parks, especially in Forest Park. Nearby residents and park users point to dilapidated and dangerous playground equipment, deteriorating facilities, erosion on trails in Forest Park, vandalism, graffiti and illegal dumping. "We are witnessing a decline in our parks facilities that we have not seen since the 1980s," Community Board 9 wrote in its annual community needs report for fiscal year 2013. Funds for those needs, it added, are only "sporadically available."

According to preliminary plans unveiled in March, the QueensWay would rely on public money for a "basic level of maintenance," further stretching already tight Parks budget and potentially syphoning resources from already under-maintained existing parks.

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[20] Furman Center for Real Estate and Urban Policy. 2012. *State of New York City's Housing and Neighborhoods.*

[21] Others, including State Assemblyman Michael Miller, believe the original covenant transferring ownership of the right of way to the city preserves the option for reinstituting rail service.

[22] Others disagree, including State Assemblyman Michael Miller who believes the original indenture agreement transferring ownership of the easement to the city allows the right to use it for transportation purposes.

Section 4: Community Impacts

Any redevelopment of the abandoned Rockaway Beach Branch right of way, regardless of its form, has the potential to significantly impact the communities through which it runs. While the potential impacts are manifold, this study focuses on two in particular: transportation patterns and trends and nearby property values. Included in this analysis are the results of a community impact survey that sought to gauge the opinion of various stakeholders in Queens on those issues, as well as the best potential use of the abandoned rail line.

TRANSPORTATION COMMUNITY IMPACT ANALYSIS

This analysis was performed using trip data from an extensive survey conducted by the New York Metropolitan Transportation Council. The NYMTC data set samples from current travel patterns and identifies the population that may be affected by a reactivation of the Rockaway Beach Branch. Our methodology thus limited the cost of our study while providing a relevant and procedurally valid result. It does not, though, predict how trip patterns would change if a new transportation segment were to be built, nor can it provide a ridership estimate for that facility. However, it does allow us to identify the potential scope of the transportation impact that reactivation could have.

Overview

Southern Queens and the Rockaways have some of the most time-consuming transit trips in New York City. At 36.6 minutes, the average subway trip from this area is 42 percent longer than the citywide mean of 25.8 minutes. While distance from Manhattan is certainly a factor, what is surprising is that long commutes of over an hour on public transit are much more common for people from these communities then from even farther away places on Long Island. Less than 7 percent of trips taken on the Long Island Rail Road (LIRR) Main Line from Nassau County are longer than an hour, compared to 22 percent of trips from the Rockaways.

The Rockaway Beach Branch (RBB) was a north-south route connecting the LIRR Mainline with the Rockaways. After it was deactivated by the Long Island Railroad, the southern portion of the route was transferred to New York City Transit where it was incorporated into the present day A-Train service.

The remaining deactivated northern portion is adjacent to present A-train service at Rockaway Blvd and continues north to Rego Park. Thus the RBB offers the potential to directly connect southern Queens including the Rockaways with northern and western Queens via the LIRR Main Line **(Figure 16)** or the Queens Boulevard Line of the subway **(Figure 17)**. This is also a faster route to Midtown, thus leveling commuting time with farther out communities along the LIRR. Current subway service requires complicated transfers and backtracking through Brooklyn, or lengthy circuitous routes through Manhattan to accomplish many of these trips.

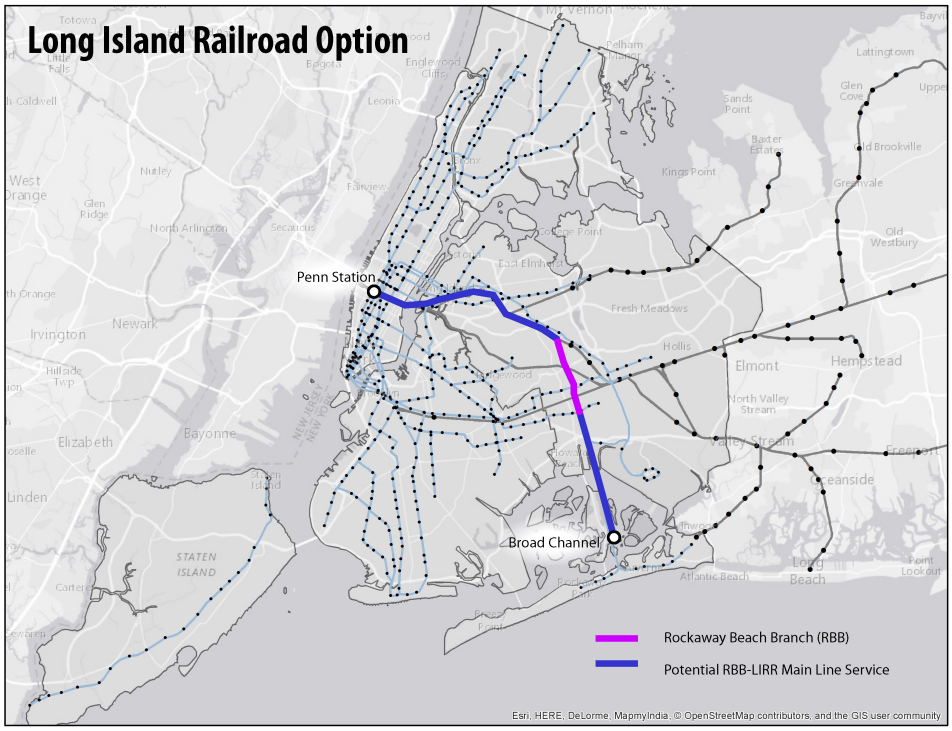


Figure 16: Potential RBB Connection via the LIRR Main Line

To get a sense of the number of people who are currently making trips that the RBB could potentially serve, a zonal model was developed using the New York Metropolitan Transportation Council (NYMTC) Unlinked Household Survey Data. This sample data, which was collected by NYMTC in late 2010 and early 2011, was used to impute the travel mode, purpose and number of trips between Transportation Analysis Zones (TAZ), which are sub-census tract units of geography derived for transportation modeling. It counts all unlinked trips, meaning any change of mode, such as from bus to subway or car to train counts as a discrete trip. While this could limit the possibilities of origin-

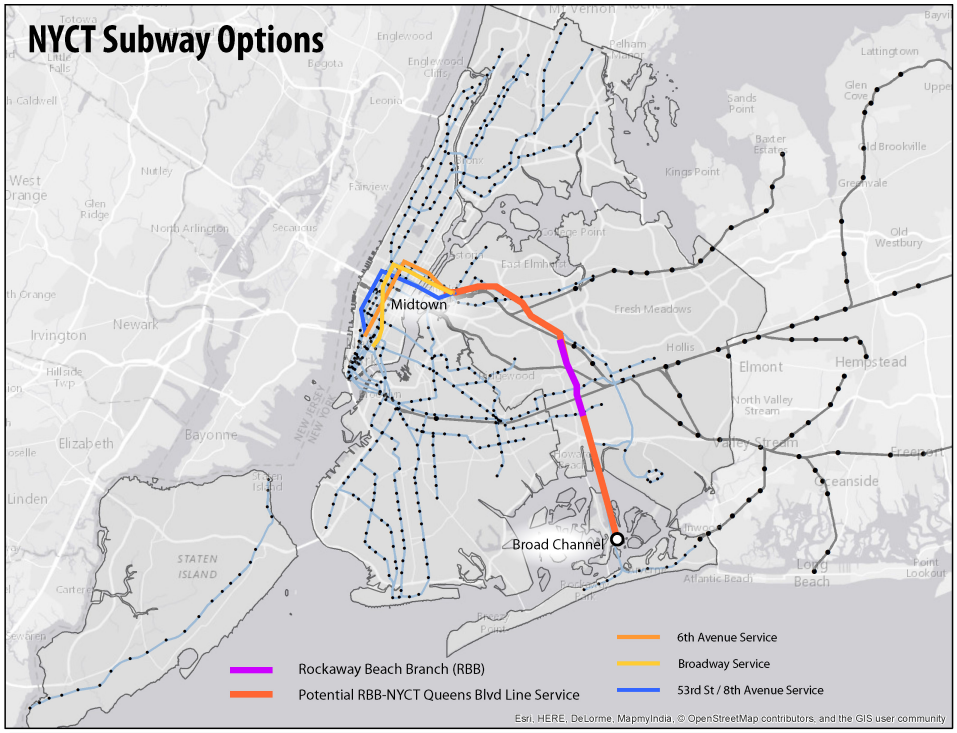


Figure 17: Potential RBB Connection via the Queens Boulevard Subway Line

destination pairs for small geographic areas where normal trips would need to involve a change in mode, this limitation is less serious as trip areas are enlarged. **Unlike Census data, summarized earlier, the NYMTC data is concerned with all trips, not just journey-to-work**.

Because it is sample data, highly specified trip characteristics such as particular purpose, time, demographics, or small geographic areas can suffer from low sample size, which leads to higher margins of error. Thus, this data does not provide exact travel counts, but instead the best estimates of regional travel patterns incorporated into a unified dataset.

To mitigate small sample size issues while maintaining a reliable picture of travel patterns relevant to RBB-impacted communities, TAZs were aggregated into zones based on the extent of the subway system and common destination areas for RBB and southern Queens residents (see figure). The resulting 10 zones are all defined as including TAZs whose centroid is within one mile of a subway or Long Island Railroad (LIRR) station. Borders between zones are based on geographic barriers, rail interconnectivity, and proximity to RBB communities. The one-mile buffer allows us to capture much of the public transit market by including areas where bus service can complement train service.

The resulting zones are:

ZoneID	ZoneName	ZoneDescription
0	NoZone	Not in a Zone – More than 1 mile from Subway or LIRR
1	Qns_South	South Queens – Ozone Park
2	Qns_North	North Queens - LIC to Flushing & Jamaica
3	Brooklyn	Brooklyn (and Queens near the Metropolitan Ave M)
4	LowMh	Lower Manhattan - below 23rd St
5	Midtown	Midtown Manhattan - 23rd St to 79th ST
6	UpMhBx	Upper Manhattan + Bronx, Above 79th St
7	StatenIs	Staten Island
8	LIRR_Main	LIRR Main Line Queens & Nassau
9	LIRR_PW	LIRR Port Washington Line Queens & Nassau
10	Qns_Rockaway	Rockaway & Howard Beach
-	RBB Zone Overlay	TAZs within a half mile of the RBB that are also in Zones 0, 1, or 2

Table 3: Rockaway Beach Branch Transportation Zones

The RBB exists in this configuration as an overlay and not a discrete zone because some areas that would have access to the RBB also currently have access to transit within Zone 1 or Zone 2 – that is, they are within a mile of an existing rail station. However, there are also areas that would have access to the improved RBB that are currently farther than a mile from a rail station. Since the data reflects current conditions, the zones were designed to reflect current conditions, while the overlay is used to allow an analysis of the specific areas that are proximate to the RBB.

The study looked only at trips greater than 1 mile that crossed between zones. Thus a trip from Rego Park to Astoria (both in zone 2) would not be included in the total, nor would a short trip that crossed from Ozone Park (Zone 1) to Jamaica (Zone 2) if it was under a mile. For all zones this leaves over 6.6 million trips per day. The following figures are of trips that meet the above criteria by origin zone to another included destination zone.

		Origin										
Destination		Qns_South	Qns_North	Brooklyn	LowMh	Midtown	UpMhBx	StatenIs	LIRR_Main	LIRR_PW	Qns_Rockaway	**TOTAL**
	ZONE	1	2	3	4	5	6	7	8	9	10	
Qns_South	1	-	105,398	44,939	17,608	18,886	13,557	430	13,016	3,285	8,306	**225,425**
Qns_North	2	62,790	-	150,156	86,647	350,629	51,636	1,722	171,355	58,780	5,460	**939,176**
Brooklyn	3	39,280	140,627	-	360,519	280,647	86,291	31,455	42,005	3,419	13,991	**998,234**
LowMh	4	18,930	82,600	373,954	-	422,239	197,845	36,498	4,234	3,319	2,924	**1,142,543**
Midtown	5	21,159	365,618	261,134	432,502	-	509,336	11,902	74,121	36,813	5,881	**1,718,466**
UpMhBx	6	9,922	67,975	81,312	202,894	512,213	-	1,191	14,501	3,513	1,443	**894,965**
StatenIs	7	430	2,563	30,532	35,680	10,825	1,527	-	-	-	-	**81,557**
LIRR_Main	8	36,383	139,418	44,378	3,586	67,736	14,877	-	-	57,830	24,141	**388,348**
LIRR_PW	9	4,407	69,694	3,221	4,427	40,806	2,963	-	60,735	-	-	**186,253**
Qns_Rockaway	10	9,926	3,326	15,623	5,791	3,800	1,443	-	14,737	-	-	**54,646**
TOTAL		**203,227**	**977,220**	**1,005,249**	**1,149,653**	**1,707,781**	**879,476**	**83,198**	**394,704**	**166,959**	**62,146**	**6,629,612**

Table 4: Imputed Trip Count by Origin and Destination Zone

There were over 6.6 million trips that met the criteria of the study. Of these, almost 550,000 trips (8 percent) had southern Queens or the Rockaways as an origin or destination. Since these areas are primarily residential, most trips that originate there will have a corresponding trip where the zone is a destination, since most people will be leaving for an activity and then returning home. The next table incorporates travel mode and time characteristics of the zones. Not surprisingly, given the vast public transit system that was used to define the zones, nearly 80 percent of trips did not use a private automobile. However, this figure is dominated by trips to/from Lower and Midtown Manhattan where over 40 percent of trips originated from and over 90 percent do not involve private automobiles. The further a zone is from Manhattan, the less transit usage is seen in the data. Thus, southern Queens, the Rockaways, and Staten Island have the lowest inter-zone transit usage within NYC, while LIRR areas outside of the city have the lowest transit usage. Yet the further LIRR zones have less extreme commuting than the Rockaways, Queens or Staten Island.

		Trip Count				Trips > 60 minutes		
Origin ZoneID	Origin Zone Name	NYMTC Survey Records	TOTAL *%*	Auto *% of Total*	Transit *% of Total*	All Trips *% of Total*	Transit *% of Transit*	Auto *% of Auto*
1	Qns_South	177	**203,227**	127,421	75,806	15,223	10,951	4,272
% of Trips			***3.1%***	*62.7%*	*37.3%*	*7.5%*	*14.4%*	*3.4%*
2	Qns_North	1247	**977,220**	347,898	625,996	62,769	35,173	27,380
% of Trips			***14.7%***	*35.6%*	*64.1%*	*6.4%*	*5.6%*	*7.9%*
3	Brooklyn	1418	**1,005,249**	211,497	793,752	131,983	73,081	58,902
% of Trips			***15.2%***	*21.0%*	*79.0%*	*13.1%*	*9.2%*	*27.9%*
4	LowMh	2020	**1,149,653**	100,776	1,048,877	55,915	45,871	10,043
% of Trips			***17.3%***	*8.8%*	*91.2%*	*4.9%*	*4.4%*	*10.0%*
5	Midtown	3014	**1,707,781**	143,336	1,564,445	125,880	100,782	25,098
% of Trips			***25.8%***	*8.4%*	*91.6%*	*7.4%*	*6.4%*	*17.5%*
6	UpMhBx	1597	**879,476**	144,526	734,950	84,339	54,406	29,934
% of Trips			***13.3%***	*16.4%*	*83.6%*	*9.6%*	*7.4%*	*20.7%*
7	StatenIs	197	**83,198**	29,497	53,700	18,288	9,984	8,304
% of Trips			***1.3%***	*35.5%*	*64.5%*	*22.0%*	*18.6%*	*28.2%*
8	LIRR_Main	566	**394,704**	248,906	145,798	37,089	9,374	27,715
% of Trips			***6.0%***	*63.1%*	*36.9%*	*9.4%*	*6.4%*	*11.1%*
9	LIRR_PW	243	**166,959**	107,744	59,216	14,157	466	13,690
% of Trips			***2.5%***	*64.5%*	*35.5%*	*8.5%*	*0.8%*	*12.7%*
10	Qns_Rockaway	78	**62,146**	32,805	29,341	8,741	6,451	2,290
% of Trips			***0.9%***	*52.8%*	*47.2%*	*14.1%*	*22.0%*	*7.0%*
TOTAL		**10,557**	**6,629,612**	**1,494,406**	**5,131,880**	**554,385**	**346,539**	**207,629**
	%		**100%**	**22.5%**	**77.4%**	**8.4%**	**6.8%**	**13.9%**

Table 5: Trips longer than 60 minutes

Southern Queens & The Rockaways

RBB activation would result in substantial time savings for trips by public transit from southern Queens and the Rockaways to the zones north and west Southern Queens and the Rockaways are also the zones with some subway service but the highest level of car usage. Nearly 55 percent of trips over a mile that are leaving the Rockaways are by car, while more than 60 percent of trips over a mile leaving southern Queens are by car. Combined, over 100,000 trips a day originating in these two zones used some form of public transit.

When each zone is looked at in greater detail, the data indicates that nearly 225,000 trips starting in other zones had southern Queens as a destination. Nearby north Queens was the largest contributor, with over 105,000 trips occurring daily, 75 percent of them in an automobile. By contrast, nearby Brooklyn was the second largest contributor with nearly 45,000 trips, of which only 25 percent were by private automobile. Subway connections in this area all lead to Brooklyn, but not North Queens and thus may influence this behavior.

Zone ID	ZoneName	NYMTC Survey Records	AutoTrips	Transit Trips	TOTAL Trips	percent of All Trips	percent Auto	percent Trip > 60 min
From Zone 10 to Other Zones								
10	*Qns_Rockaway*	*78*	*32,805*	*29,341*	***62,146***	*53.2 percent*	*52.8 percent*	*14.1 percent*
From Other Zones to Zone 10								
1	Qns_South	7	7,524	2,401	9,926	8.5 percent	75.8 percent	0.0 percent
2	Qns_North	7	0	3,326	3,326	2.8 percent	0.0 percent	6.5 percent
3	Brooklyn	23	8,837	6,786	15,623	13.4 percent	56.6 percent	11.5 percent
4	LowMh	9	452	5,339	5,791	5.0 percent	7.8 percent	36.7 percent
5	Midtown	9	549	3,251	3,800	3.3 percent	14.5 percent	40.8 percent
6	UpMhBx	3	156	1,287	1,443	1.2 percent	10.8 percent	89.2 percent
8	LIRR_Main	20	12,965	1,772	**14,737**	12.6 percent	88.0 percent	8.2 percent
	SUMMARY	**156**	**63,289**	**50,177**	**116,793**	**100.0 percent**	**54.2 percent**	**14.5 percent**

Table 7: Rockaways (Zone 10) – Trips with an origin or destination in Zone 10

The Rockaways has about one quarter of the travel activity as Southern Queens with a bit more than 115,000 trips greater than a mile originating or ending within its zone. However, it has 8 percent lower car usage for measured trips than Southern Queens. Interestingly, the survey captured no car usage from Northern Queens (Zone 2) into the Rockaways. These trips were made via bus or the LIRR (to the Far Rockaway station). This does not mean that no auto trips occur between these zones, rather this is an artifact of the low

record count found in in this sample. Trips from Brooklyn have the highest representation, and similar to Southern Queens they exhibit a strong tendency to use public transit.

Zone ID	ZoneName	NYMTC Survey Records	Auto Trips	Transit Trips	TOTAL Trips	percent of All Trips	percent Auto	percent Trips > 60 min
From Zone 1 to Other Zone								
1	*Qns_South*	*177*	*127,420.83*	*75,805.96*	*203,227*	*47.4 percent*	*62.7 percent*	*7.5 percent*
From Other Zone to Zone 1								
2	Qns_North	70	79,345.96	26,051.85	105,398	24.6 percent	75.28 percent	4.4 percent
3	Brooklyn	41	12,115.09	32,823.46	44,939	10.5 percent	26.96 percent	6.4 percent
4	LowMh	21	7,195.95	10,411.55	17,608	4.1 percent	40.87 percent	6.1 percent
5	Midtown	20	3,557.88	15,328.22	18,886	4.4 percent	18.84 percent	30.9 percent
6	UpMhBx	6	13,127.94	429.52	13,557	3.2 percent	96.83 percent	2.6 percent
7	StatenIs	1	430.24	0.00	430	0.1 percent	100.00 percent	0.0 percent
8	LIRR_Main	19	11,135.97	1,880.36	13,016	3.0 percent	85.55 percent	0.0 percent
9	LIRR_PW	2	3,284.59	0.00	3,285	0.8 percent	100.00 percent	0.0 percent
10	Qns_Rockaway	6	5,128.98	3,177.03	8,306	1.9 percent	61.75 percent	5.0 percent
	SUMMARY	**363**	**262,743**	**165,908**	**428,651**	**100.0 percent**	**61.3 percent**	**7.1 percent**

Table 6: South Queens (Zone 1) – Trips with an origin or destination in Zone 1

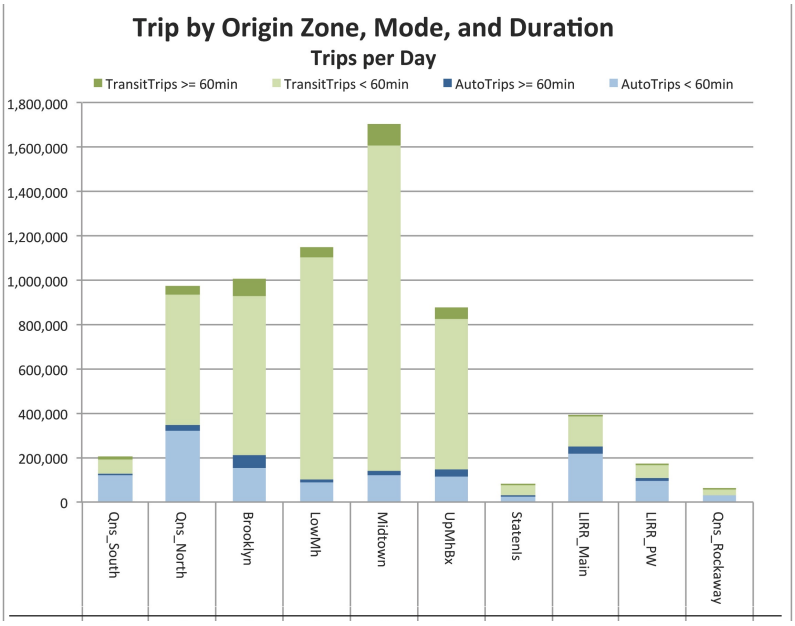


Figure 18: Number of Trips by Origin Zone, Mode and Duration

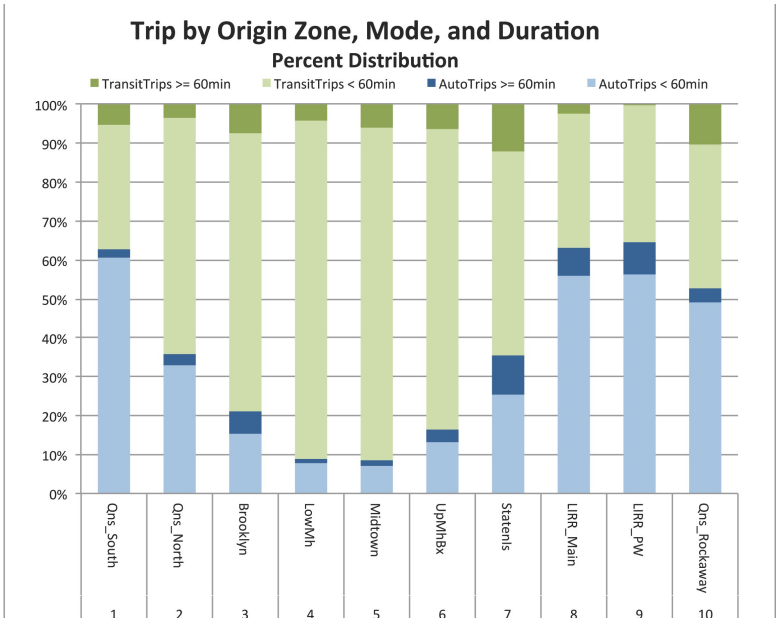


Figure 19: Percent Trips by Origin Zone, Mode and Duration

Trips near the Rockaway Beach Branch

The area within a half-mile of the Rockaway Beach Branch overlaps areas within northern and southern Queens (Zones 1 and 2), and includes additional areas that require lengthy trips to existing subway stations. Reactivating a transit line in this area would impact residents, in terms of the externalities of its operations (noise, foot traffic, etc) but also in terms of improved connection to the region's extensive mass transit system. Currently, 320,000 trips occur each day in this area, of which 40" percent are by public transit – the majority of those trips clustering near present-day subway service. Trip patterns would very likely look considerably different if the RBB were reactivated with transit service. Most significantly for this area would be the greatly improved connection between northern and southern Queens. Currently more than 12 percent of trips between the RBB Overlay and southern Queens take more than 60 minutes. The following table shows the current travel patterns which reactivation would modify.

Zone ID	ZoneName	NYMTC Survey Records	Auto Trips	Transit Trips	TOTAL Trips	percent of All Trips	percent Auto	percent Trips > 60 min
1	*Qns_South*	*52*	*51,570*	*23,638*	*75,208*	*23.6 percent*	*68.6 percent*	*12.2 percent*
2	Qns_North	297	102,262	79,051	181,313	*56.9 percent*	*56.4 percent*	1.5 percent
3	Brooklyn	24	16,302	1,805	18,107	*5.7 percent*	*90.0 percent*	2.7 percent
4	LowMh	11	1,280	3,301	4,580	*1.4 percent*	*27.9 percent*	10.3 percent
5	Midtown	48	4,375	21,617	25,993	*8.2 percent*	*16.8 percent*	23.9 percent
6	UpMhBx	5	1,692	128	1,820	*0.6 percent*	*93.0 percent*	7.0 percent
7	StatenIs	2	358	0	358.11	*0.1 percent*	*100.0 percent*	0.0 percent
8	LIRR_Main	11	10,391	0	10,391	*3.3 percent*	*100.0 percent*	14.5 percent
9	LIRR_PW	4	1,124	0	1,124	*0.4 percent*	*100.0 percent*	0.0 percent
10	Qns_Rockaway	0	0	0	0	*0.0 percent*	*0.0 percent*	0.0 percent
TOTAL		**454**	**189,354**	**129,539**	**318,893**	**100 percent**	**59.4 percent**	**6.5 percent**

Table 8: RBB Overlay – Trips with an origin or destination within a half mile of the RBB

Trips Impacted by Reactivation of the RBB

The trips most impacted by the RBB are those where a rail connection between southern and northern Queens speeds up the travel time. From the Rockaways to Midtown the journey is calculated to take as little as 20 minutes using an RBB connection to either the LIRR Main Line or the express tracks of the

Queens Boulevard Line. Thus trips between southern Queens & the Rockaways to northern Queens, the Manhattan business districts, and areas proximate to the LIRR Main Line branches will be the ones most influenced by an RBB reactivation. Currently that is a total of nearly 357,000 daily trips where the RBB might provide an alternative. Of those trips almost half – 47 percent – are done by automobile **(Figure 20)**.

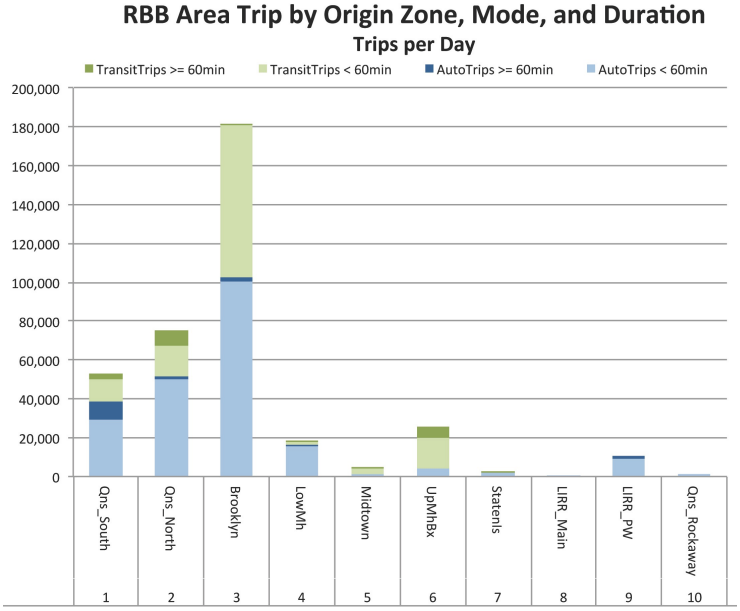


Figure 20: Number of RBB Area Trips by Origin Zone, Mode and Duration

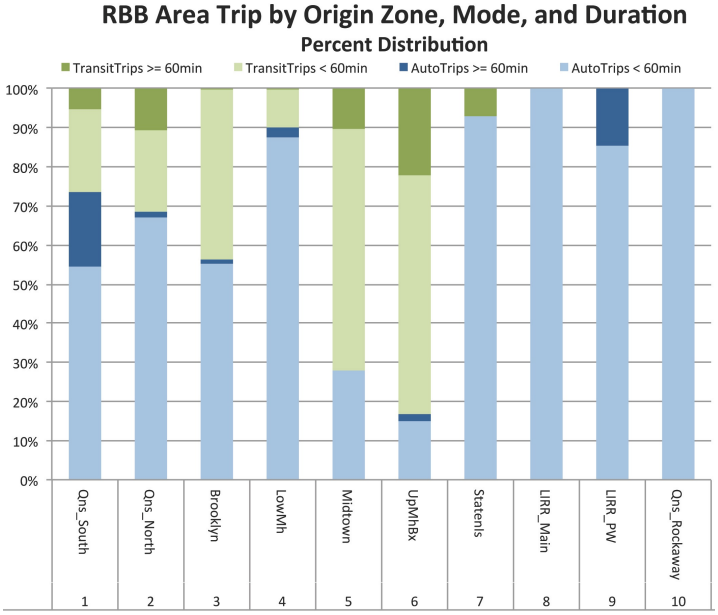


Figure 21: Percent RBB Area Trips by Origin Zone, Mode and Duration

Conclusion

The Rockaway Beach Branch line presents a unique opportunity as a potential transportation improvement. As an existing right-of-way that had historically supported passenger rail service, it is naturally a target for future passenger service in response to changing population needs. The communities that it would most affect are those that immediately surround it and those to the south. This is because a reactivated RBB would connect northern and southern Queens in a way that is not currently possible via existing rapid transit, closing a large and circuitous gap between northern and southern portions of the rail system. The effect would be faster travel between southern Queens, including the Rockaways, and northern/western Queens, Midtown Manhattan, and points north. While ridership in this area is low in comparison to denser parts of the city, the commutes are long, which could lead to appreciable savings in aggregate commute times. Furthermore, such a move would address the lack of transportation equity as other, more distant communities in Nassau County have shorter commutes to Midtown than many Rockaway residents. Current travel patterns between the Rockaways, southern Queens, and areas adjacent to the RBB to other transit-accessible areas in northern/western Queens,

Midtown, and Upper Manhattan suggest that more than half a million trips every day could utilize a reactivated RBB to meet their travel needs.

COMMUNITY IMPACT AND NEEDS ASSESSMENT SURVEY

In an effort to gauge community opinions concerning the various redevelopment options for the Rockaway Beach Branch right of way, the Queens College Department of Urban Studies, through its Office of Community Studies, conducted separate resident **(Appendix B)** and business **(Appendix C)** surveys. Survey questions included basic demographic and socio-economic information along with which particular option community members support and what impact they believed the potential redevelopment projects would have on nearby neighborhoods.

Methodology

Printed resident and business surveys in both Spanish and English were hand-delivered to 5,000 residents and 800 businesses along the right of way.

To ensure a random but controlled and representative sampling, numbers were assigned to each survey and surveys were delivered randomly to residences and business along the right of way. Surveys were delivered to each census tract in proportion to the area population and the number of housing units in each census tract **(Appendix D)**.

Surveys were delivered over a three-week period from June 23, 2014 to July 11, 2014, and survey recipients were asked to return their completed surveys by July 18, 2014. Respondents had the choice of submitting completed questionnaires using self-addressed, postage-paid envelopes or going online to a web address printed on their questionnaire.

Only residents and businesses that received a printed, numbered questionnaire were eligible to complete the survey. Any duplicate questionnaires/submissions were considered not valid and those responses were discarded.

Because small geographic areas such as census tracts can suffer from low sample size, which leads to high error rates, response data was aggregated by the four neighborhood areas analyzed in Section 3 – Rego Park-Forest Hills-Glendale, Richmond Hill-Woodhaven, Ozone Park-South Ozone Park-Lindenwood-Howard Beach and the Rockaways – as well as all Queens neighborhoods not along the right of way (“Queens Other”), and all other respondents (“New York Other”).

For complete survey results visit the Rockaway Beach Branch Survey Appendix available online at http://qcurban.org/office-of-community-studies/our-work/.

Resident Survey Results

A total of 363 valid resident survey responses were received, a response rate of just 7.26 percent and providing a standard error of +- 5.2 percent for the principal results. An additional 161 surveys were returned blank.

The vast majority of respondents – 95.4 percent – completed and returned the printed questionnaire by mail, and 98.6 percent of all respondents completed the questionnaire in English. Responses were received from residents living along the right of way.

Residents of Richmond Hill-Woodhaven, which together account for 22.7 percent of the total population along the right of way, produced 34.2 percent of the total survey responses, while 22.9 percent of responses came from the Rockaways, which account for 46.8 percent of the population along the right of way. Rego Park-Forest Hills-Glendale, with 19.6 percent of the population along the right of way, generated 16.3 percent of the surveys, and Ozone Park-South Ozone Park-Lindenwood-Howard Beach, which accounts for 10.8 percent of the total population, had 17.4 percent of the survey total. These results suggest that residents of Richmond Hill-Woodhaven and Ozone Park-South Ozone Park-Lindenwood-Howard Beach are relatively more aware of and/or concerned with the future redevelopment of the right of way than those in Rego Park-Forest Hills-Glendale and the Rockaways

The number of respondents who said they lived elsewhere in Queens ("Queens Other") and elsewhere in New York ("New York Other") were too low – 20 respondents, or 5.5 percent of the total; and seven respondents, or 1.9 percent of the total, respectively – to allow for meaningful conclusions about those groups.

Race/Ethnicity

While non-Hispanic White residents make up 35.2 percent of the total population along the right of way, they accounted for more than half – 55.1 percent – of the survey's total respondents **(Figure 21)**. Non-Hispanic Blacks, who make up 38.8 percent of the total population along the right of way, accounted for 9.1 percent of survey responses, and Hispanics, with 21.0 percent of the population, returned 6.1 percent of the total surveys. East Asian[23] residents, meanwhile, represent 1.1 percent of the population but 4.1 percent of the survey respondents, and South Asians[24], with 1.0 percent of the population, accounted for 7.7 percent of survey respondents.

[23] Includes: Burmese; Cambodian; Chinese; Filipino; Hmong; Indonesian; Japanese; Korean; Laotian; Malaysian; Taiwanese; Thai and Vietnamese

[24] Includes: Asian Indian, Bangladeshi, Bhutanese, Nepalese, Pakistani and Sri Lankan

Figure 21. Response by race/ethnicity		
	n	%
Black alone (non-Hispanic)	33	9.1
Combination of two or more races	28	7.7
East Asian (Chinese, Japanese, Vietnamese, Filipino, etc.)	22	6.1
Hispanic	40	11
No Response	8	2.2
Other	17	4.7
South Asian (Indian, Pakistani, Bangladeshi, Nepalese, etc.)	15	4.1
White alone (non-Hispanic)	200	55.1
Total	363	100

Income, Employment and Home Ownership

Responses were received from all income groups **(Figure 22)**. Roughly two thirds of respondents were employed, either full or part time, while one fifth of respondents were retired **(Figure 23)**. More than two thirds – 69.4 percent – of the survey's respondents owned their homes, while 27.3 percent rented and 2.2 percent were residents of public housing.

Figure 22. Response by annual household income		
	n	%
Less than $15,000	19	5.2
$15,000-$24,999	15	4.1
$25,000-$34,999	17	4.7
$35,000-$49,999	58	16
$50,000-$74,999	66	18.2
$75,000-$99,999	68	18.7
$100,000-$149,999	61	16.8
$150,000 and more	37	10.2
No Response	22	6.1
Total	363	100

Figure 23. Response by employment status		
	n	%
Employed full time	219	60.3
Employed part time	26	7.2
Not employed outside the home	5	1.4
Unemployed	4	1.1
Student	15	4.1
Retired	71	19.6
Other or multiple	13	3.6
No Response	10	2.8
Total	363	100

Familiarity

Slightly more than two thirds - 68.6 percent – of all respondents said they were either "somewhat" or "very" familiar with the abandoned Rockaway Beach Branch right of way, and 44.6 percent said they lived adjacent to or within 10 blocks of it. Still, only 13.2 percent of all survey respondents said they had attended meetings or public forums on its potential redevelopment.

Among respondents from the four study neighborhood zones, residents of the Rockaways were far more likely to be "somewhat" or "very" familiar with the abandoned right of way **(Figure 24)**.

Figure 24. Familiarity with the abandoned rail right of way, by zone

		No Response	Not at all	Somewhat	Very	Total
Forest Hills, Rego Park, Glendale	Count	3	29	9	18	59
	% within Zone	5.10%	49.20%	15.30%	30.50%	100.00%
Richmondhill, Woodhaven	Count	2	49	9	64	124
	% within Zone	1.60%	39.50%	7.30%	51.60%	100.00%
Ozone Park, South Ozone Park, Howard Beach	Count	0	20	36	7	63
	% within Zone	0.00%	31.70%	57.10%	11.10%	100.00%
Rockaways	Count	0	5	62	16	83
	% within Zone	0.00%	6.00%	74.70%	19.30%	100.00%
Queens Other	Count	0	5	9	6	20
	% within Zone	0.00%	25.00%	45.00%	30.00%	100.00%
New York Other	Count	0	0	5	2	7
	% within Zone	0.00%	0.00%	71.40%	28.60%	100.00%
No Response	Count	0	1	5	1	7

When asked about their familiarity with each of the potential uses for the right of way – convert it to a linear park called the QueensWay, reactivate it for public transportation, leave it as is or a combination of all three – survey respondents in general were more familiar with plans for the proposed QueensWay than they were with efforts to reactivate the right of way for transportation or other options. Nearly 60 percent of all survey respondents said they were "somewhat" or "very" familiar with the QueensWay proposal while 52.4 percent said they were "somewhat" or "very" familiar with efforts to reactivate it for transportation.

Among the four right of way areas, residents from the Rockaways and Richmond Hill-Woodhaven were most familiar with the proposal to turn the right of way into the QueensWay with nearly 70 percent of respondents from each area saying they were either "somewhat" or "very" familiar with the plan. More than one half – 57.6 percent – of respondents from Forest Hills-Rego Park-Glendale said they were "not at all" familiar with the proposed QueensWay even though the linear park, if built, would run through those neighborhoods **(Figure 25)**.

Figure 25: Familiarity with proposal to turninto a park to be called the QueensWay, by zone

		No Response	Not at all	Somewhat	Very	Total
Forest Hills, Rego Park, Glendale	Count	2	34	14	9	59
	% within Zone	3.40%	57.60%	23.70%	15.30%	100.00%
Richmondhill, Woodhaven	Count	3	49	32	40	124
	% within Zone	2.40%	39.50%	25.80%	32.30%	100.00%
Ozone Park, South Ozone Park, Howard Beach	Count	0	27	31	5	63
	% within Zone	0.00%	42.90%	49.20%	7.90%	100.00%
Rockaways	Count	0	25	47	11	83
	% within Zone	0.00%	30.10%	56.60%	13.30%	100.00%
Queens Other	Count	0	7	10	3	20
	% within Zone	0.00%	35.00%	50.00%	15.00%	100.00%
New York Other	Count	0	2	3	2	7
	% within Zone	0.00%	28.60%	42.90%	28.60%	100.00%
No Response	Count	0	2	4	1	7
	% within Zone	0.00%	28.60%	57.10%	14.30%	100.00%
Total	Count	5	146	141	71	363
	% within Zone	1.40%	40.20%	38.80%	19.60%	100.00%

Residents of the Rockaways were also more likely to be either “somewhat” or “very” familiar with efforts to reactivate the right of way for transportation. In each of the other three neighborhood zones, close to or more than half of the respondents said they were not at all familiar with such efforts **(Figure 26)**.

Figure 26: Familiarity with efforts to reactivate for public transportation, by zone

		No Response	Not at all	Somewhat	Very	Total
Forest Hills, Rego Park, Glendale	Count	2	33	14	10	59
	% within Zone	3.40%	55.90%	23.70%	16.90%	100.00%
Richmondhill, Woodhaven	Count	2	60	31	31	124
	% within Zone	1.60%	48.40%	25.00%	25.00%	100.00%
Ozone Park, South Ozone Park, Howard Beach	Count	0	30	26	7	63
	% within Zone	0.00%	47.60%	41.30%	11.10%	100.00%
Rockaways	Count	0	32	41	10	83
	% within Zone	0.00%	38.60%	49.40%	12.00%	100.00%
Queens Other	Count	0	10	8	2	20
	% within Zone	0.00%	50.00%	40.00%	10.00%	100.00%
New York Other	Count	0	2	3	2	7
	% within Zone	0.00%	28.60%	42.90%	28.60%	100.00%
No Response	Count	0	2	4	1	7
	% within Zone	0.00%	28.60%	57.10%	14.30%	100.00%
Total	Count	4	169	127	63	363
	% within Zone	1.10%	46.60%	35.00%	17.40%	100.00%

Preference

Still, when asked to rank those options based on what they knew or had heard, 33.9 percent of all survey respondents said reactivation of the right of way for transportation was their first choice, while 28.1 listed redevelopment as the QueensWay first and 18.2 percent said some combination **(Figure 27)**. Another 10.2 percent said they preferred the line be left as it is. While these results demonstrate a preference for the transportation option, they are within the margin of error of the survey and so cannot be taken as statistically significant.

Figure 27: Which option would you most prefer

	n	%
A combination	66	18.2
Do not know	22	6.1
No Response	10	2.8
Nothing, leave it as it is	37	10.2
Reactivate it as a rail line for public transportation	123	33.9
Something else	3	0.8
Turn it into the proposed QueensWay linear park	102	28.1
Total	363	100

Somewhat surprisingly, a higher percentage of the respondents from Forest Hills-Rego Park-Glendale favored reactivation of the right of way for public transportation than did respondents from the Rockaways. Conversely, the highest percentage of respondents to say they preferred the QueensWay option was in the Rockaways, with the lowest in Forest Park-Forest Hills-Glendale **(Figure 28)**. Once again, these results could be reflective of the relative differences in response rates by area as well as related differences in familiarity and/or concern with proposed redevelopment.

Figure 28: Which options would you most prefer occur, by zone

		A combination	Do not know	No Response	Nothing, leave it as it is	Reactivate it as a rail line for public transportation	Something else	Turn it into the proposed QueensWay linear park	total
Forest Hills, Rego Park, Glendale	Count	5	6	4	9	23	0	12	59
	% within Zone	8.50%	10.20%	6.80%	15.30%	39.00%	0.00%	20.30%	100.00%
Richmondhill, Woodhaven	Count	26	7	3	11	39	3	35	124
	% within Zone	21.00%	5.60%	2.40%	8.90%	31.50%	2.40%	28.20%	100.00%
Ozone Park, South Ozone Park, Howard Beach	Count	14	3	2	5	22	0	17	63
	% within Zone	22.20%	4.80%	3.20%	7.90%	34.90%	0.00%	27.00%	100.00%
Rockaways	Count	16	2	0	9	26	0	30	83
	% within Zone	19.30%	2.40%	0.00%	10.80%	31.30%	0.00%	36.10%	100.00%
Queens Other	Count	3	2	0	0	10	0	5	20
	% within Zone	15.00%	10.00%	0.00%	0.00%	50.00%	0.00%	25.00%	100.00%
New York Other	Count	1	1	1	2	2	0	0	7
	% within Zone	14.30%	14.30%	14.30%	28.60%	28.60%	0.00%	0.00%	100.00%
No Response	Count	1	1	0	1	1	0	3	7
	% within Zone	14.30%	14.30%	0.00%	14.30%	14.30%	0.00%	42.90%	100.00%
Total	Count	66	22	10	37	123	3	102	363
	% within Zone	18.20%	6.10%	2.80%	10.20%	33.90%	0.80%	28.10%	100.00%

Strong majorities of respondents who identified themselves as non-Hispanic Black, Hispanic and South Asian preferred the right of way be reactivated for public transportation, while non-Hispanic White and East Asian respondents were closely split between converting it to the QueensWay or a combination of uses **(Figure 29)**.

Figure 29: Which option would you most prefer, by race/ethnicity

		Race/ ethnicity								
		Black alone (non-Hispanic)	Combination of two or more races	No Response	Other	South Asian (Indian, Pakistani, Bangladeshi, Nepalese, etc.)	White alone (non-Hispanic)	East Asian (Chinese, Japanese, Vietnamese, Filipino, etc.)	Hispanic	Total
A combination	Count	7	7	1	1	4	31	8	7	66
	% within Race/ ethnicity	21.20%	25.00%	12.50%	5.90%	26.70%	15.50%	36.40%	17.50%	18.20%
Do not know	Count	4	2	1	2	0	11	0	2	22
	% within Race/ ethnicity	12.10%	7.10%	12.50%	11.80%	0.00%	5.50%	0.00%	5.00%	6.10%
No Response	Count	0	1	0	0	0	8	1	0	10
	% within Race/ ethnicity	0.00%	3.60%	0.00%	0.00%	0.00%	4.00%	4.50%	0.00%	2.80%
Nothing, leave it as it is	Count	0	3	2	2	1	24	1	4	37
	% within Race/ ethnicity	0.00%	10.70%	25.00%	11.80%	6.70%	12.00%	4.50%	10.00%	10.20%
Reactivate it as a rail line for public transportation	Count	19	9	3	4	6	64	3	15	123
	% within Race/ ethnicity	57.60%	32.10%	37.50%	23.50%	40.00%	32.00%	13.60%	37.50%	33.90%
Something else	Count	0	0	0	2	0	0	0	1	3
	% within Race/ ethnicity	0.00%	0.00%	0.00%	11.80%	0.00%	0.00%	0.00%	2.50%	0.80%
Turn it into the proposed QueensWay linear park	Count	3	6	1	6	4	62	9	11	102
	% within Race/ ethnicity	9.10%	21.40%	12.50%	35.30%	26.70%	31.00%	40.90%	27.50%	28.10%

In general, wealthier respondents were more likely to prefer the QueensWay, though a majority of respondents from the lowest income group – those whose annual household incomes were less than $15,000 – also chose the park option **(Figure 30)**. Still, reactivation for transportation was the choice of a majority of respondents in five of the survey's eight income categories.

Respondents who were homeowners, meanwhile, were almost evenly split in their preference between reactivation for transportation and the QueensWay, while a slightly higher percentage of renters chose the reactivation option

Figure 30: Which option would you most prefer, by income

		Annual household income							
		Less than $15,000	$15,000-$24,999	$25,000-$34,999	$35,000-$49,999	$50,000-$74,999	$75,000-$99,999	$100,000-$149,999	$150,000 and more
A combination	Count	4	1	3	11	8	13	18	5
	% within Annual household income	21.10%	6.70%	17.60%	19.00%	12.10%	19.10%	29.50%	13.50%
Do not know	Count	2	3	0	7	4	2	3	1
	% within Annual household income	10.50%	20.00%	0.00%	12.10%	6.10%	2.90%	4.90%	2.70%
No Response	Count	1	0	0	4	1	1	1	2
	% within Annual household income	5.30%	0.00%	0.00%	6.90%	1.50%	1.50%	1.60%	5.40%
Nothing, leave it as it is	Count	4	0	2	5	7	9	5	1
	% within Annual household income	21.10%	0.00%	11.80%	8.60%	10.60%	13.20%	8.20%	2.70%
Reactivate it as a rail line for public transportation	Count	3	7	8	17	28	26	16	13
	% within Annual household income	15.80%	46.70%	47.10%	29.30%	42.40%	38.20%	26.20%	35.10%
Something else	Count	0	0	0	1	0	0	2	0
	% within Annual household income	0.00%	0.00%	0.00%	1.70%	0.00%	0.00%	3.30%	0.00%
Turn it into the proposed QueensWay linear park	Count	5	4	4	13	18	17	16	15
	% within Annual household income	26.30%	26.70%	23.50%	22.40%	27.30%	25.00%	26.20%	40.50%
Total	Count	19	15	17	58	66	68	61	37
	% within Annual household income	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

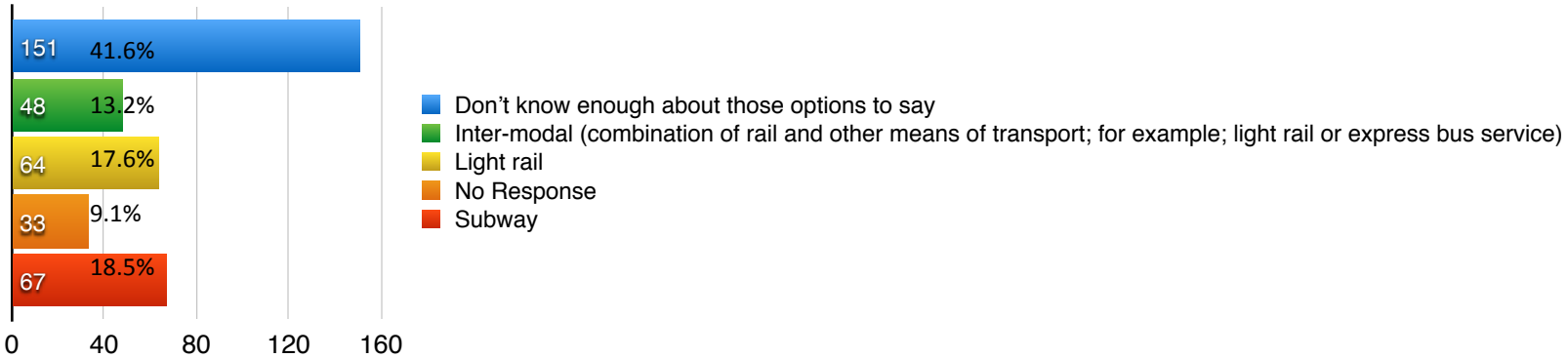
(Figure 31). Respondents who were residents of public housing overwhelmingly chose reactivation, though the sample size of public housing residents was too small to allow for generalizable conclusions.

Figure 31: Which option would you most prefer, by home ownership

		Housing status				
		Own Your Own Home	Rent	Live in Public Housing	No Response	Total
A combination	Count	50	14	0	2	66
	% within Housing status	19.80%	14.10%	0.00%	50.00%	18.20%
Do not know	Count	9	12	1	0	22
	% within Housing status	3.60%	12.10%	12.50%	0.00%	6.10%
No Response	Count	6	4	0	0	10
	% within Housing status	2.40%	4.00%	0.00%	0.00%	2.80%
Nothing, leave it as it is	Count	24	12	0	1	37
	% within Housing status	9.50%	12.10%	0.00%	25.00%	10.20%
Reactivate it as a rail line for public transportation	Count	83	32	7	1	123
	% within Housing status	32.90%	32.30%	87.50%	25.00%	33.90%
Something else	Count	3	0	0	0	3
	% within Housing status	1.20%	0.00%	0.00%	0.00%	0.80%
Turn it into the proposed QueensWay linear park	Count	77	25	0	0	102
	% within Housing status	30.60%	25.30%	0.00%	0.00%	28.10%
Total	Count	252	99	8	4	363
	% within Housing status	100.00%	100.00%	100.00%	100.00%	100.00%

When asked if they would be more likely to support reactivation for transportation if it included light rail, subway or some form of intermodal transportation on the line, a majority of total survey respondents – 41.6 percent – said they didn't know enough about the options to say **(Figure 32).**

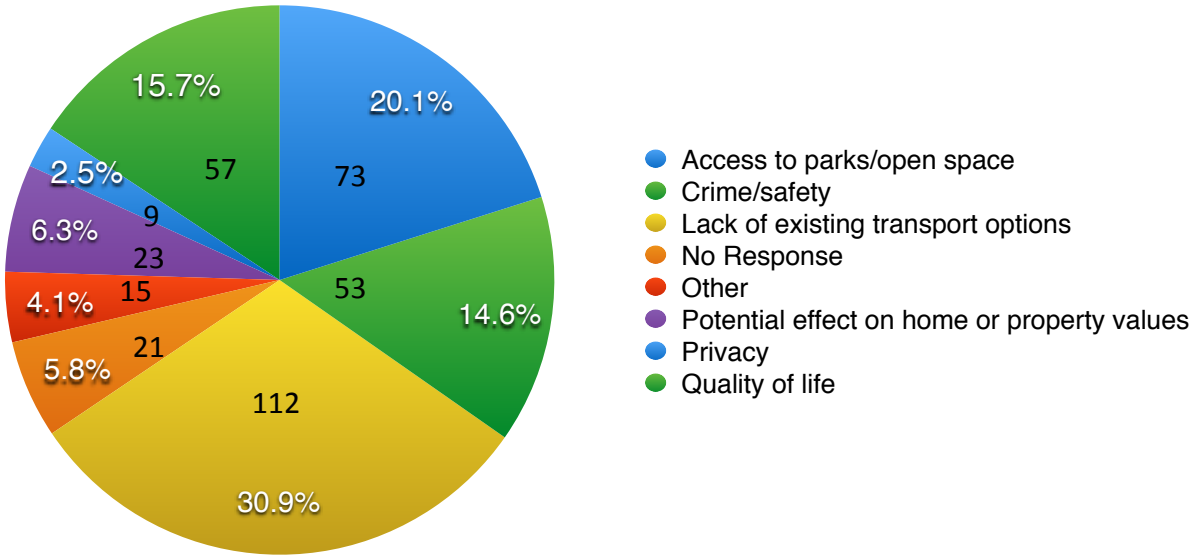
Figure 32: Would you be likely to support reactivation of the line for public transportation if it included



Determining Factors

When asked what the main factors were in determining their preference among the options, nearly one third – 30.9 percent of all survey respondents – cited a lack of existing transportation options, while one fifth said access to parks and open space **(Figure 33)**. Quality of life concerns were cited by 15.7 percent and crime and safety by 14.6 percent, while potential impact on home or property values was mentioned by just 6.3 percent of respondents and privacy by just 2.5 percent.

Figure 33: What are the main factors in determining your preference



The lack of existing transportation options was also selected as the main factor in determining preference in each of the four right of way areas **(Figure 34)**.

Figure 34. What are the main factors in determining your preference, by zone

		Access to parks/open space	Crime/ safety	Lack of existing transport options	No Response	Other	Potential effect on home or property values	Privacy	Quality of life	Total
Forest Hills, Rego Park, Glendale	Count	8	7	20	8	3	2	2	9	59
	% within Zone	13.60%	11.90%	33.90%	13.60%	5.10%	3.40%	3.40%	15.30%	100.00%
Richmondhill, Woodhaven	Count	27	18	33	5	10	10	3	18	124
	% within Zone	21.80%	14.50%	26.60%	4.00%	8.10%	8.10%	2.40%	14.50%	100.00%
Ozone Park, South Ozone Park, Howard Beach	Count	12	6	24	3	0	6	1	11	63
	% within Zone	19.00%	9.50%	38.10%	4.80%	0.00%	9.50%	1.60%	17.50%	100.00%
Rockaways	Count	21	14	25	3	0	3	2	15	83
	% within Zone	25.30%	16.90%	30.10%	3.60%	0.00%	3.60%	2.40%	18.10%	100.00%
Queen Other	Count	3	3	8	1	1	0	0	4	20
	% within Zone	15.00%	15.00%	40.00%	5.00%	5.00%	0.00%	0.00%	20.00%	100.00%
New York Other	Count	1	3	1	1	0	1	0	0	7
	% within Zone	14.30%	42.90%	14.30%	14.30%	0.00%	14.30%	0.00%	0.00%	100.00%
No Response	Count	1	2	1	0	1	1	1	0	7
	% within Zone	14.30%	28.60%	14.30%	0.00%	14.30%	14.30%	14.30%	0.00%	100.00%
Total	Count	73	53	112	21	15	23	9	57	363
	% within Zone	20.10%	14.60%	30.90%	5.80%	4.10%	6.30%	2.50%	15.70%	100.00%

Likely to Use and Frequency

When asked if the right of way were reactivated as a rail line with service between the Rockaways and Manhattan via a connection with the Long Island Railroad Main Line in Rego Park would they use it, three out of five respondents said they would be "somewhat" or "very" likely to **(Figure 35)**, with 16 percent saying they would use it daily and 12.4 percent saying they would ride it at least once a week **(Figure 36)**.

Figure 35. If reactivated for public transportation how likely would you be to use it

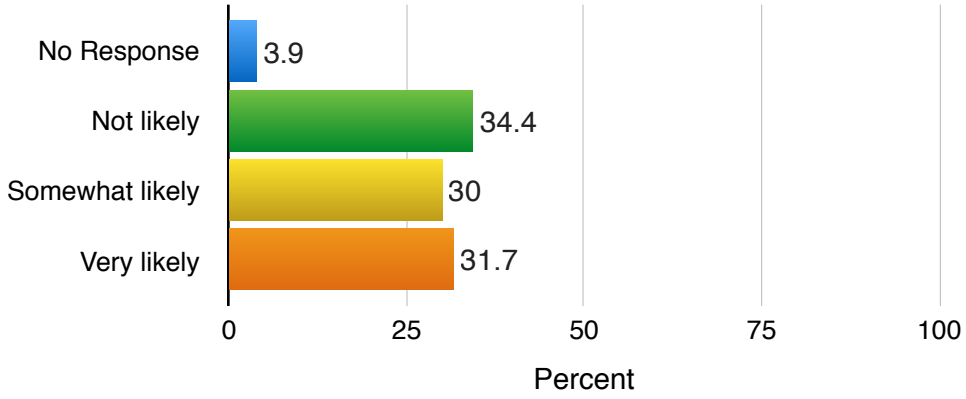
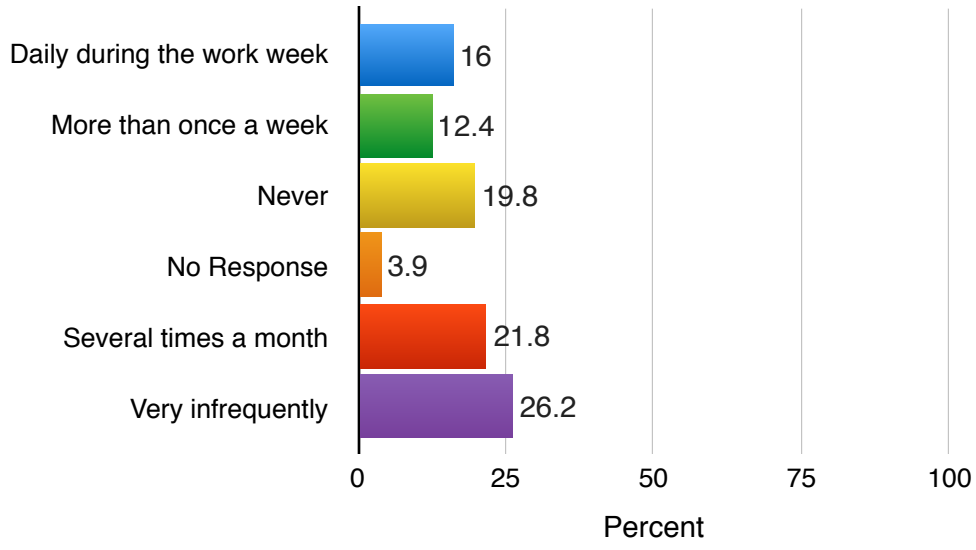


Figure 36. If reactivated for public transportation, how often would you use it



Respondents from Ozone Park-South Ozone Park-Lindenwood-Howard Beach were the most likely to say they would use a reactivated line, with more than two thirds – 68.2 percent – responding "somewhat" or "very" likely. The highest percentage of respondents who said they would "not likely" use a reactivated rail line came from residents of the Rockaways. Similarly, the

Rockaways produced the lowest percentage of respondents who said they were “very” likely to use the line if reactivated **(Figure 37).**

Figure 37. If reactivated for public transportation, how likely would you be to use it, by zone

		No Response	Not likely	Somewhat likely	Very likely	Total
Forest Hills, Rego Park, Glendale	Count	5	20	15	19	59
	% within Zone	8.50%	33.90%	25.40%	32.20%	100.00%
Richmondhill, Woodhaven	Count	4	46	35	39	124
	% within Zone	3.20%	37.10%	28.20%	31.50%	100.00%
Ozone Park, South Ozone Park, Howard Beach	Count	2	18	20	23	63
	% within Zone	3.20%	28.60%	31.70%	36.50%	100.00%
Rockaways	Count	2	31	28	22	83
	% within Zone	2.40%	37.30%	33.70%	26.50%	100.00%
Queen Other	Count	0	4	8	8	20
	% within Zone	0.00%	20.00%	40.00%	40.00%	100.00%
New York Other	Count	1	3	0	3	7
	% within Zone	14.30%	42.90%	0.00%	42.90%	100.00%
No Response	Count	0	3	3	1	7
	% within Zone	0.00%	42.90%	42.90%	14.30%	100.00%
Total	Count	14	125	109	115	363
	% within Zone	3.90%	34.40%	30.00%	31.70%	100.00%

Respondents from Forest Hills-Rego Park-Glendale, however, were most likely to say they would use the line daily – 22.0 percent – while the Rockaways and Richmond Hill-Woodhaven had the highest percentages of respondents who said they would “never” use the line **(Figure 38).**

Figure 38: If reactivated for public transportation, how often would you likely to use it, by zone

		Daily during the work week	More than once a week	Never	No Response	Several times a month	Very infrequently	Total
Forest Hills, Rego Park, Glendale	Count	13	6	11	5	14	10	59
	% within Zone	22.00%	10.20%	18.60%	8.50%	23.70%	16.90%	100.00%
Richmondhill, Woodhaven	Count	13	13	27	3	29	39	124
	% within Zone	10.50%	10.50%	21.80%	2.40%	23.40%	31.50%	100.00%
Ozone Park, South Ozone Park, Howard Beach	Count	12	10	11	2	11	17	63
	% within Zone	19.00%	15.90%	17.50%	3.20%	17.50%	27.00%	100.00%
Rockaways	Count	12	13	18	3	18	19	83
	% within Zone	14.50%	15.70%	21.70%	3.60%	21.70%	22.90%	100.00%
Queen Other	Count	5	3	1	0	4	7	20
	% within Zone	25.00%	15.00%	5.00%	0.00%	20.00%	35.00%	100.00%
New York Other	Count	1	0	2	1	2	1	7
	% within Zone	14.30%	0.00%	28.60%	14.30%	28.60%	14.30%	100.00%
No Response	Count	2	0	2	0	1	2	7
	% within Zone	28.60%	0.00%	28.60%	0.00%	14.30%	28.60%	100.00%
Total	Count	58	45	72	14	79	95	363
	% within Zone	16.00%	12.40%	19.80%	3.90%	21.80%	26.20%	100.00%

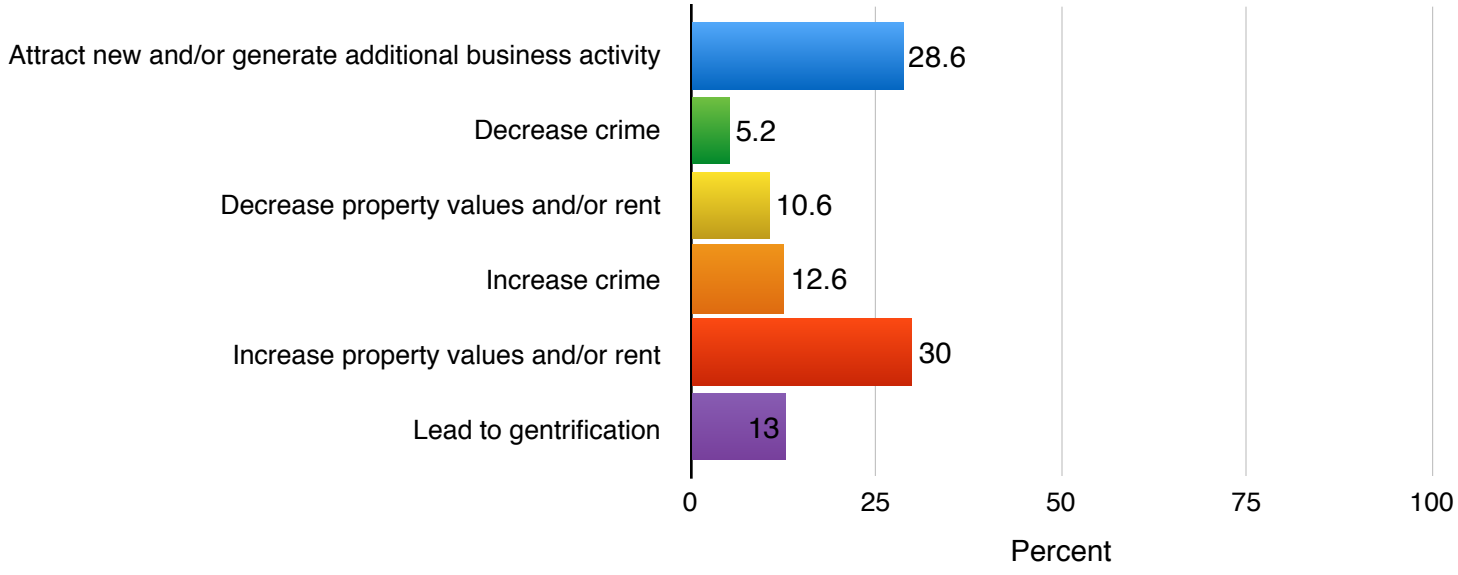
Impacts

Finally, survey recipients were asked to select from a list of potential impacts what effects they believed 1) reactivating the right of way for transportation and 2) turning it into a park would have on their neighborhood and on the borough of Queens. Respondents were allowed to choose more than one impact.

In general, respondents were slightly more likely to believe reactivating the right of way for transportation would have a positive impact on neighborhood property values and business activity than converting it to a park would. Similarly, a slightly higher percentage of respondents felt converting the right of way into a park would lead to an increase in neighborhood crime. Once again, these results are within the study's margin of error and therefore are not statistically significant.

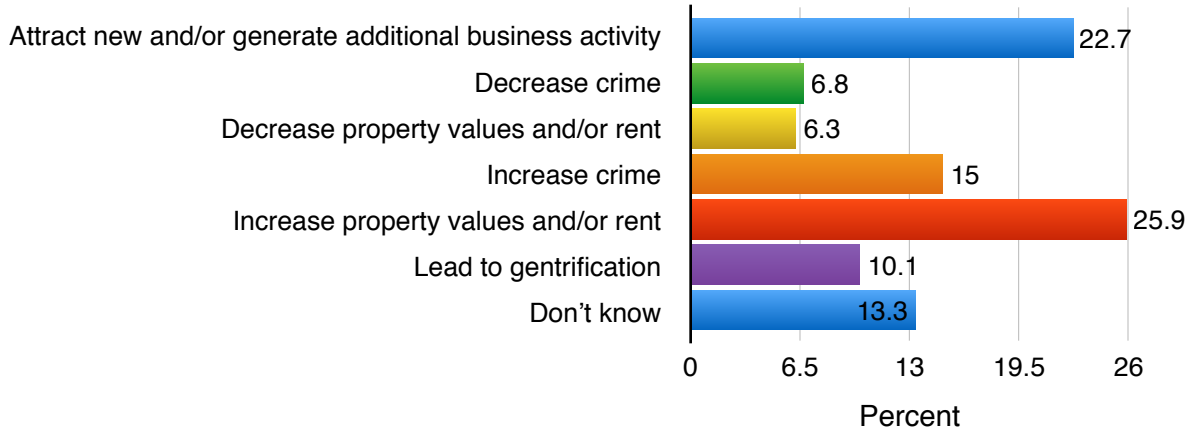
When asked what effect reactivating the right of way for transportation would have on their neighborhood, 30 percent of all survey respondents said it would "increase neighborhood property values," while 28.6 percent said it would "attract new and/or generate additional business activity." Similar percentages of respondents – between 10.6 percent and 13 percent – said it would "decrease property values," "increase crime" and "lead to gentrification" **(Figure 39)**.

Figure 39. If reactivated for public transportation, what effect do you believe that would have on your neighborhood



When asked what effect converting the right of way into a park would have on their neighborhood, the highest percentages of respondents again chose "increase property values" (25.9 percent) and "attract new and/or generate additional business activity" (22.7 percent), while a slightly higher percentage (15 percent) said it would lead to an increase in crime **(Figure 40)**.

Figure 40. If turned into a park, what effect do you believe that would have on your neighborhood



When asked what effect either option would have on Queens as a whole, nearly equal percentages of respondents felt reactivation for public transportation would lead to "new and/or additional business activity," "greater residential density" and "increase tourism" **(Figure 41).** Meanwhile, almost one third of all respondents felt that converting the right of way into the QueensWay would "increase tourism" in the borough while 28.2 percent felt it would lead to "new and/or additional business activity," **(Figure 42).**

Figure 41. If reactivated for public transportation, what effect do you believe that would have on the borough of Queens

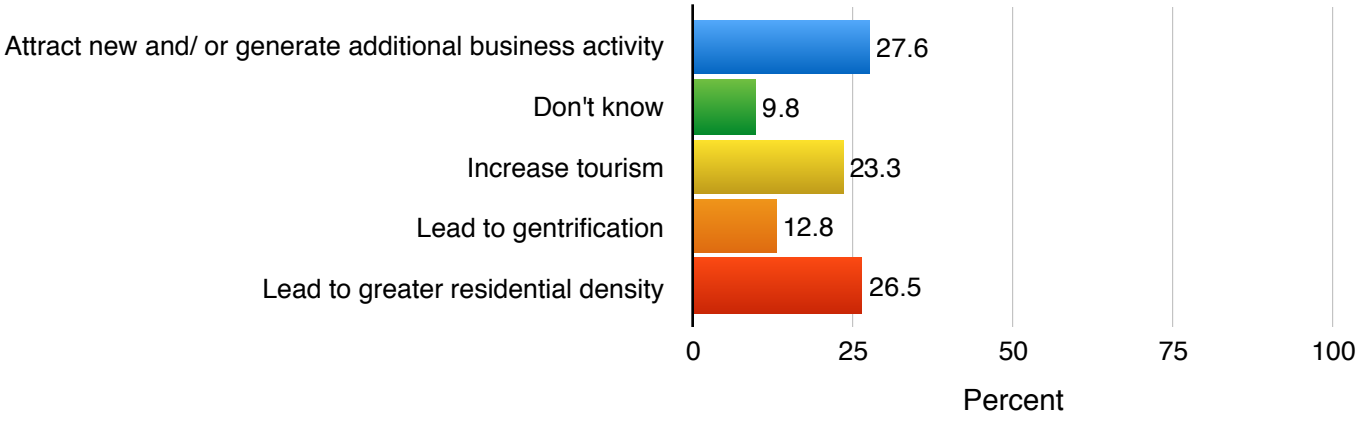
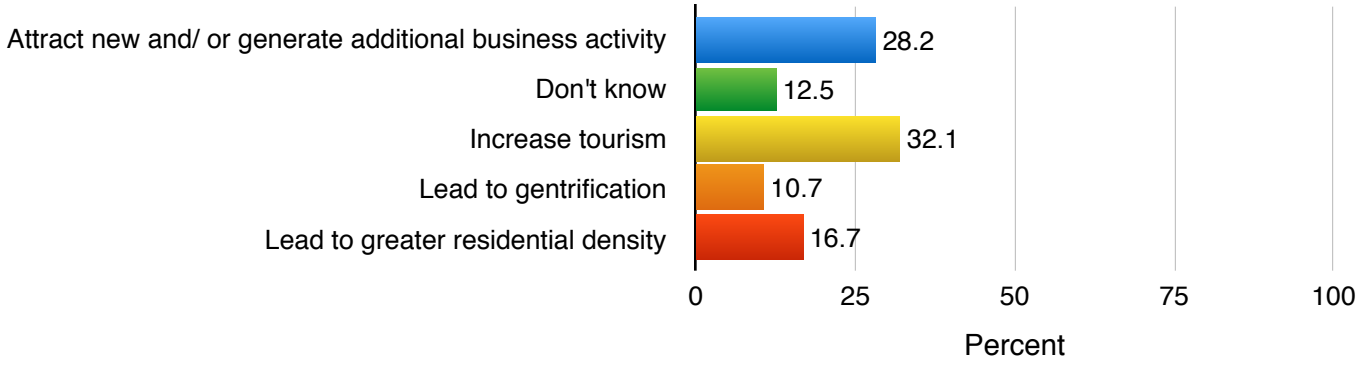


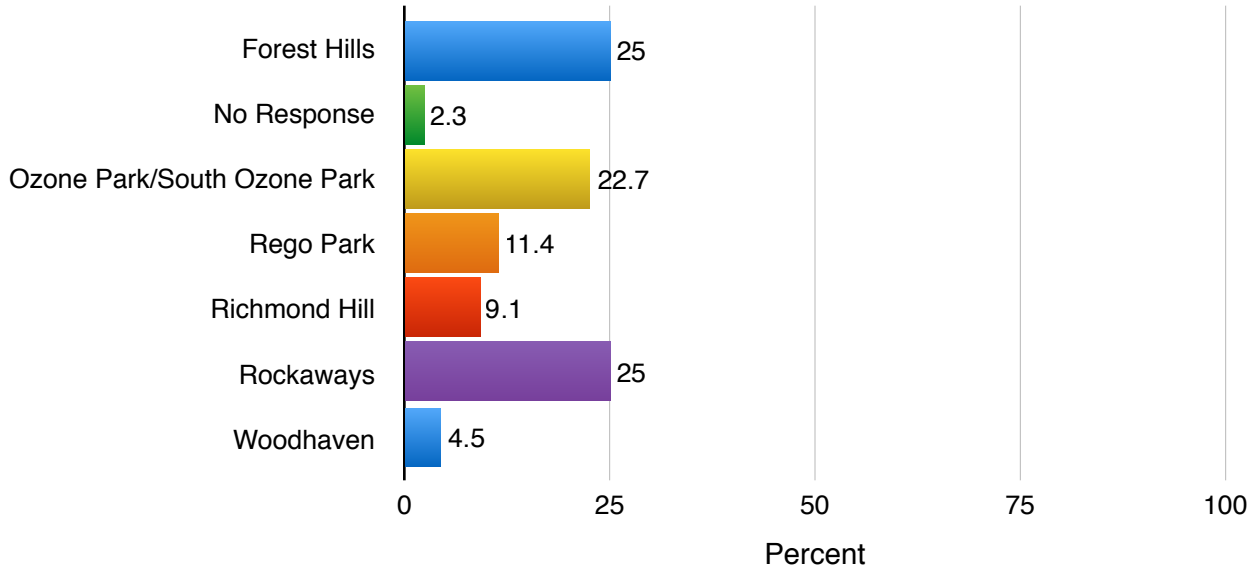
Figure 42. If turned into a park, what effect do you believe that would have on Queens



Business Survey Results

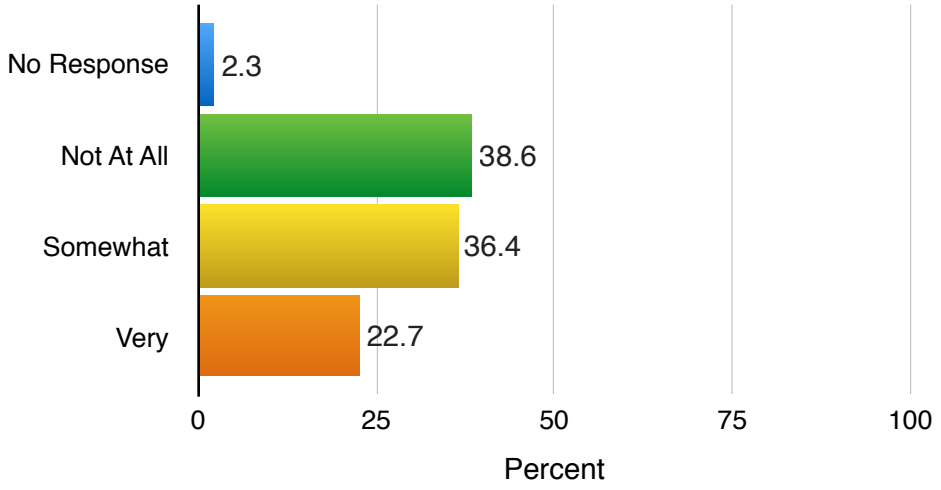
From the 800 business surveys delivered, 44 responses were received, a response rate of 5.5 percent. All 44 respondents completed the survey in English, and responses were received from neighborhoods along the right of way **(Figure 43)**. Responses were provided by business owners (34.1 percent), managers (25 percent) and employees (38.6 percent).

Figure 43: Response by neighborhood



Among the respondents, 59.1 percent said they were “somewhat” or “very” familiar with the abandoned right of way **(Figure 44)**, and 50 percent were “somewhat” or “very” familiar with both the proposal to convert a section of the right of way into the QueensWay and efforts to reactivate for public transportation. Still, only 13.6 percent, said they had attended a public meeting or forum about the right of way’s potential redevelopment.

Figure 44: Familiarity with the abandoned right of way



When asked which redevelopment option they preferred, slightly more than one third of all business respondents chose reactivation for transportation while slightly more than one quarter said the QueensWay linear park **(Figure 45)**. When asked what factors determined that preference, nearly one third identified "potential impact on business" while one quarter said "lack of existing transportation options" **(Figure 46)**.

Figure 45: Preference

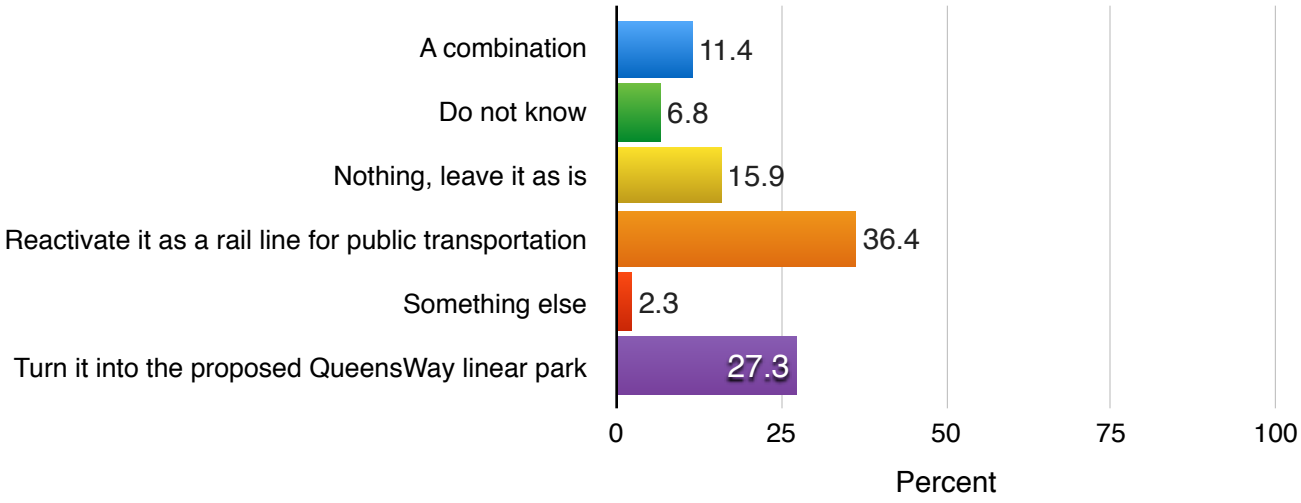
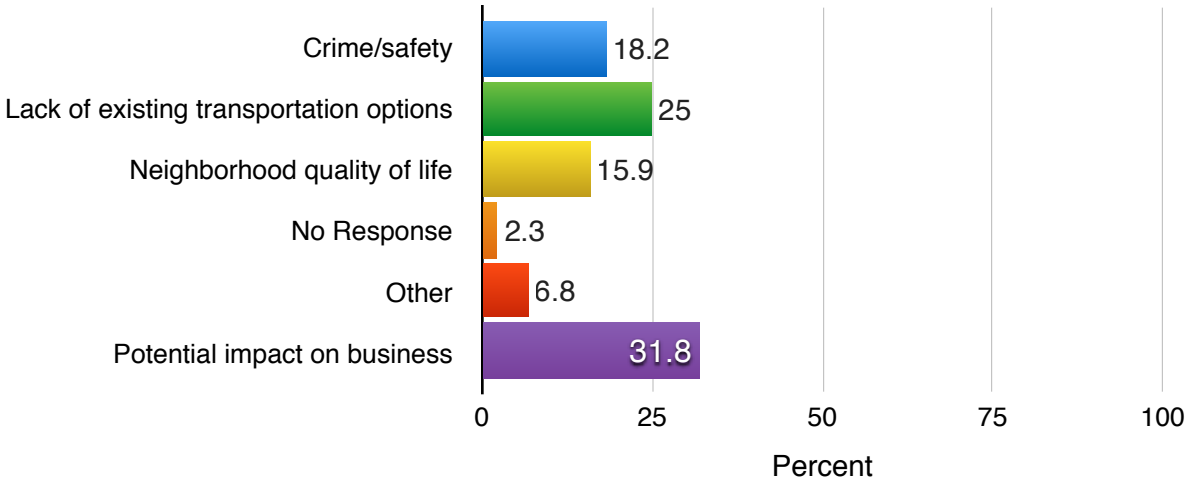


Figure 46: Factors determining preference



As to what degree respondents believed the two main options would have on their business, nearly one half felt that reactivation for public transport would have a "significant positive" impact **(Figure 47)**, while slightly less than one third said the QueensWay would have a "significant positive" effect **(Figure 48)**.

Figure 47: What impact do you believe reactivation of the right of way for transportation would have on your business

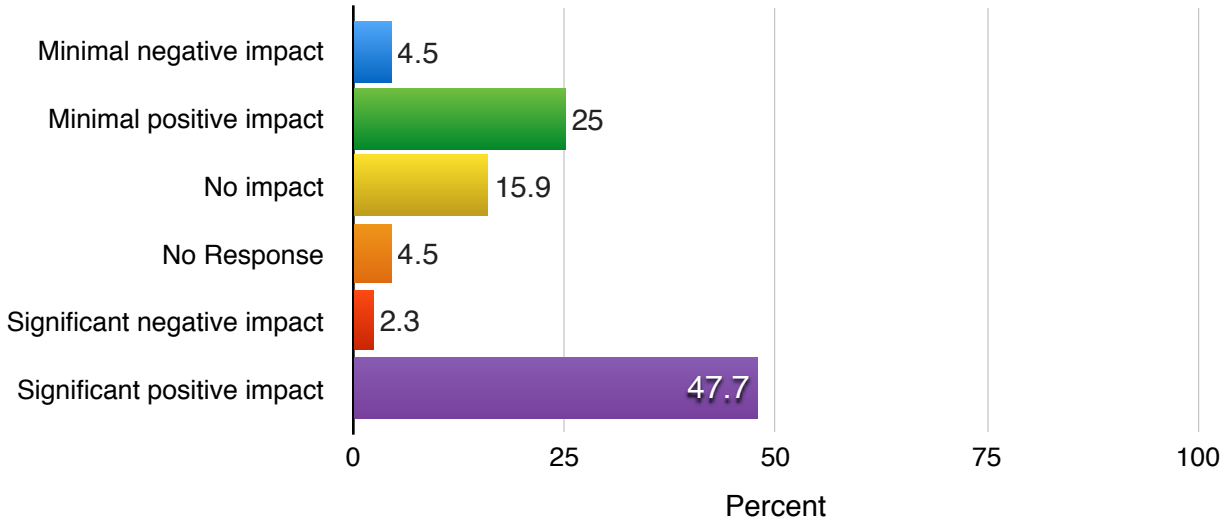
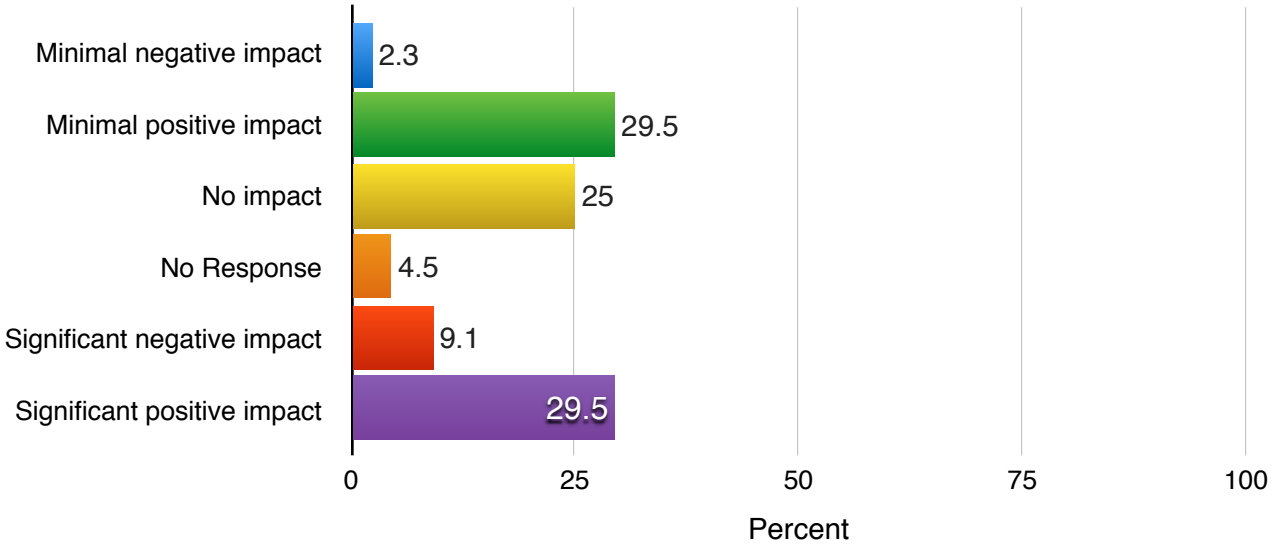


Figure 48: What impact do you believe development of the right of way into the QueensWay linear park would have on your business



Conclusions

While our survey results point to a clear preference for reactivation of the right of way for transportation, the low survey response rates introduce relatively high margins of error. Those margins of error would be even greater for subsets of total responses (by neighborhood, race or income, for example). Standard margins of error also do not account for systemic errors such as advocates of a particular proposal being more likely to respond to the survey.

Given the amount of publicity the QueensWay proposal has generated we expected a much higher response rate – between 500 and 1,000 responses.

While we cannot definitively say why the survey response rate was so low, one possible explanation is that in spite of the associated publicity, relatively few residents appear to be aware of or concerned about the potential redevelopment of the right of way.

For means of comparison, in September 2013 the New York-based research firm Whitman Strategies conducted a telephone survey for the Friends of the QueensWay of 500 Queens residents of voting age. Callers described the proposal to "transform a 3.5 mile portion of the abandoned Rockaway Rail Line into an elevated pedestrian and bicycle pathway and park connecting the communities of Rego Park, Forest Hills, Richmond Hill, and Ozone Park to Forest Park" as "a new public green space to be enjoyed by all" and asked: "Based on what you have just heard, do you support or oppose the QueensWay Project?" Three quarters of all respondents said "yes," while 10 percent said "no" and 15 percent said they were undecided. That survey had a margin of error of 4.3 percent.

That survey also asked about familiarity with the QueensWay proposal. Just 44 of the 500 respondents said they had "heard or seen anything about the QueensWay Project."

PROPERTY VALUES

Proponents of both rail reactivation on the Rockaway Beach Branch line and the development of the QueensWay frame their arguments in terms of potential economic development. Advocates for each option contend their particular plan will attract new businesses, residents and jobs; increase traffic to existing stores and restaurants and improve the quality of life for those who live and work along the right of way. They also contend that those benefits would have the potential over time to resonate beyond the communities immediately adjacent to the abandoned line.

QueensWay proponents, for instance, argue that parks and trails, especially destination parks like the one they aspire to create, have the potential to promote local economic activity, catalyze private investment and generate cultural tourism.[25] In making their case they have referenced Manhattan's high-profile High Line linear park and pointed to studies that argue "trails make our communities more livable; improve the economy through… civic improvement; preserve and restore open space and greenbelts, and most importantly, provide opportunities for physical activity to improve fitness and mental health"[26] (p. 409).

[25] Friends of the QueensWay. 2012. Presentation to the Woodhaven Residents' Block Association, Sept. 29, 2012.

[26] Asabere and Huffman. 2009. "The Relative Impacts of Trails and Greenbelts on Home Price." *Journal of Real Estate Finance and Economics,* 38: 408-419.

Similarly, rail advocates suggest that reactivation would help end the economic isolation of southern Queens, which by all accounts is underserved by mass transit, by kick-starting economic growth. In their view, better transit options, combined with cheap rents, less congestion and potential subsidies would encourage businesses to relocate to southern Queens and promote job growth.[27]

Detractors, meanwhile, invoke many of the same issues in arguing against either plan. Some residents and businesses along the right of way contend that both the QueensWay and a reactivated line would have an overall negative effect. They voice concerns about a loss of privacy; increased crime, litter and noise and potential displacement.

While a detailed analysis of the potential economic impacts of these options is beyond the scope of this study, one aspect of economic development identified as a major concern by residents and businesses alike is the potential impact of both rail reactivation and development of the QueensWay on nearby property values. In both cases, a significant body of academic research exists that can be helpful in understanding potential effects along the RBB right of way.

Impact of parks on property values

One of the main arguments made by QueensWay proponents is that parks and public green spaces such as bicycle and pedestrian trails are desirable amenities that can serve to increase nearby property and house values and attract new economic activity.[28] Yet a number of residents along the RBB right of way, including single-family homeowners on 98th Street in Woodhaven whose properties abut the right of way, contend that a park would bring strangers into their back yards, a loss of privacy and the potential for increased vandalism and crime that would have the opposite effect.

Existing research on the relationship between urban parks and public spaces and home and property values suggests that both arguments might be true. One 2001 study, for instance, found that property values within 300 feet of a small neighborhood park in Greenville, S.C., were 14 percent lower than those of properties further away.[29] A study conducted the same year in Portland, Ore., however, found a statistically significant positive effect for properties located within 600 feet of an urban park.[30]

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[27] John Rosenkowski. 2012. "Benefits of Reactivating the North Rockaway Line." Presentation to the Woodhaven Residents' Block Association, Sept. 2012.

[28] See Neighborhood Open Space Coalition, Urban Open Space: An Investment that Pays, New York City, 1990; and Crompton, 2005. "The Impact of Parks on Property Values: Empirical Evidence From the Past Two Decades in the United States." *Managing Leisure*, 10: 203-218.

[29] Espey and Owusu-Edusei, 2001. "Neighborhood Parks and Residential Property Values in Greenville, South Carolina." *Journal of Agriculture and Applied Economics*, 33 (3): 487-492.

[30] Lutzenhiser and Netusil, 2001. "The Effect of Open Spaces on a Home's Sale Price." Contemporary Economic Policy, 19 (July): 291-298.

What these and other studies indicate is that any particular park's impact on nearby real estate values depends on a range of factors, including, but not limited to, proximity, park size and design, upkeep and maintenance, access to alternative parklands and open space, surrounding residential density and the presence of "negative externalities" associated with public spaces such as noise and congestion. Context, in other words, matters. So while the existing body of work on the relationship between parks and property values can be helpful in pointing to potential impacts, none of those existing studies precisely or fully describes the unique physical and socio-economic conditions along the path of the proposed QueensWay. Similarly, conditions along the QueensWay's path differ – often significantly – from neighborhood to neighborhood, suggesting impacts would likely differ as well.

Contributing to the difficulties in understanding the QueensWay's potential impact on property values is the uniqueness of its conceptual design. While traditional rails-to-trails parks have been a feature of urban environments for decades, high-design, "destination" urban parks built on abandoned transportation infrastructure are a relatively new phenomenon. So while reams of non-scholarly observational and anecdotal evidence suggest such parks are capable of transforming entire neighborhoods,[31] rigorous studies of how and why that occurs have yet to make their way into the literature.

Given the QueensWay's linear design and relatively dense, urban context, one condition worth examining in relation to its impact on property values is proximity. One review of existing research on proximity to parks or trails and property values suggests that positive benefits are significant up to 600 feet – or approximately three blocks – and may be measurable up to 1,500 feet.[32] An earlier study, meanwhile, found that property values in the vicinity of greenbelts in Boulder, Colorado, declined an average of $4.20 for each foot further from the greenbelt, up to 3200 feet.[33]

In a 2005 study on the relationship between a property's proximity to an environmental amenity and its sale price, Netusil looked at 3,981 properties within ½ mile of an urban trail (defined as a linear park that can accommodate pedestrian, bicycle, skating and equestrian uses) in Portland, Ore.[34] That research concluded "a trail within 200 feet of a property is estimated to decrease its sale price by 5.54 percent ," (p. 242). However, properties between ¼ and ½ mile of a trail saw sales prices increase 2.7 percent . The difference, Netusil surmised, "may reflect the benefit of being within walking distance of a trail... but far enough from the trail to not experience noise and congestion" (p. 242).

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[31] See, for instance, "How NYC's High Line Raised Property Values," http://urbantimes.co/2014/02/how-nycs-high-line-raised-property-values/

[32] Crompton. 2004. "The Proximate Principle: The impact of parks, open space and waterfeatures on residential property values and the property tax base. National Recreation and Park Association.

[33] Correll, Lillydahl and Singell. 1978. "The Effects of Greenbelts on Residential Property Values: Some Findings on the Political Economy of Open Space." *Land Economics*, 54(2): 207-218.

[34] Netusil, Noelwah. 2005. "The Effect of Environmental Zoning and Amenities on Property Values: Portland, Oregon." *Land Economics*, 81(2): 227-246.

At its widest point in Rego Park, where it intersects with the LIRR Main Line, the right of way is roughly 600 feet wide, but for most of its length its width is less than 200 feet. In Rego Park, on Alderton Street between Fleet Street and Metropolitan Avenue, some residents' back doors are less than 120 feet from right of way's midpoint. On 98th Street in Woodhaven that distance is roughly 105 feet, and to the east, on 100th Street it is less than 75 feet. Indeed, all of the residences – both single- and multi-family – that abut the proposed park's path from the LIRR Main Line to Rockaway Boulevard are within 200 feet of the center of the right of way.

As noted earlier, QueensWay designers proposed to mitigate some of the negative potential impacts of traffic and noise by creating combinations of planted fences, landform mounds and buffers of trees – some more than 40-feet wide – where possible.

In fact, existing research suggests that the presence of a buffer, or greenbelt, between the trail or path and adjacent residences might mitigate some of the negative impacts of proximity. In a 2009 study, Asabere and Huffman looked at sales of more than 10,000 residential properties in and around San Antonio, Texas, over a one-year period between April 2001 and March 2002.[35] They found that the presence of a trail added roughly $2,350 to a property's value, a greenbelt $4,700 and a greenbelt and trail $5,900. "The implication of this study," they concluded, "is that while trails, and greenbelts, per se, add to home value, the value of the home would be further enhanced when greenbelts are used to buffer trails thus creating greenways" (p. 418).

Impact of Rail Initiatives on Property Values

As with studies related to the impact of parks and trails on nearby property values, the literature on rail networks and property values offers mixed results. In general, these studies argue for a general correlation between access to transport and higher property values. One 2005 study, for example, found that improvements in transportation infrastructure in specific sections of London, England, translated to a 9.3 percent overall increase in local housing prices.[36]

At the same time, much of the literature acknowledges that the effects of access can be nuanced, and in some cases negative. A survey of studies in the late 1990s conducted by the consultant group Booz Allen and Hamilton, for instance, found that there were "generally positive impacts of proximity to rail transit on property values," but that those property value premiums varied from 3 percent to 40 percent due to the relative "value of accessibility" (p. 8). That same survey noted "slight negative impacts" were possible as well, and

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[35] Asabere and Huffman. 2009. "The Relative Impacts of Trails and Greenbelts on Home Price." *Journal of Real Estate Finance and Economics,* 38: 408-419.

[36] Gibbons and Machin. 2005. "Valuing Rail Access Using Transport Innovations." *Journal of Urban Economics*, 57(1): 148-169

that those could be "attributed to noise, visual intrusion, and the association of the rail right-of-way to industrial uses" (p. 8).[37]

Indeed existing research suggests a range of related conditions – including proximity and location along the line, the existence and mode of alternative transportation options, the density and nature of nearby land uses, and demographic factors such as income and race – can influence a particular transit option's potential impact on property values.

In the case of a 2006 study of the benefits of commuter rail access in Eastern Massachusetts, the authors analyzed 1,860 single-family residential properties in four municipalities. They found that properties in municipalities with commuter rail stations were between 9.6 percent and 10.1 percent higher than those in areas without, and that property values within ½ mile of a commuter rail station were 10.1 percent higher than those farther away.[38] Each additional minute of drive time to and from the station, translated to a 1.6 percent decrease in property value. At the same time, proximity to a commuter rail right of way – as opposed to proximity to a station – had the opposite effect. For every 1,000 feet in distance from a commuter rail right of way, property values increased between $732 and $2,897.

Similarly, a 2007 meta-analysis of all available existing studies on transit proximity and property values determined that commercial properties received the greatest benefit from proximity to a station.[39] While residential property values within ¼ mile of a station were 4.2 percent higher than residential properties further away, the value of commercial properties was 12.2 percent higher. Outside the quarter-mile zone, however, the proximity impact was greater for residential properties, which increased 2.3 percent for every 250 meters closer to a station. That study also examined differences between types of rail service and found that commuter rail stations had a consistently higher positive impact on property values than light rail or heavy rail/subway stations.[40]

Over time, however, many communities have opted to invest in light rail projects in part because they offer greater design and operation flexibility than other rail options. Research suggests that like other forms of rail transport, the initiation of light rail service resulted in both positive and negative impacts on property values, with the net positive impacts being greater than the negative.

In one instance, a 2010 study by the Center for Transportation Studies at the University of Minnesota looked at the impact of the Hiawatha Light Rail Line on

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[37] Diaz. 1999. Impacts of Rail Transit on Property Values. Booz Allen and Hamilton. McLean, VA

[38] Armstrong and Rodriguez. 2006. "An Evaluation of the Accessibility Benefits of Commuter Rail in Eastern Massachusetts Using Spatial Hedonic Price Functions." *Transportation*, 33: 21-43.

[39] See also Cervero and Duncan. 2002 "Transit's Value-Added Effects: Light and Commuter Rail Services and Commercial Land Values." Journal of the Transportation Research Board, 1805: 8-15

[40] Debrizion, Pels and Rietveld. 2007. "The Impact of Railway Stations on Residential and Commercial Property Value: A Meta-Analysis." *Journal of Real Estate Finance and Economics*, 35: 161-180.

residential property values, housing investment and land use patterns in metropolitan Minneapolis, Minn.[41] Built at a cost of $715 million, the line runs through a diverse set of neighborhoods ranging from commuter-oriented, heavily commercial downtown Minneapolis to progressively more residential areas, an industrialized airport zone and ultimately the commercial Mall of America in Bloomington. Along the way it passes from racially mixed, lower-income communities with more multi-family housing to more racially homogenous, single-family neighborhoods. When it opened in 2004 it represented the initial major investment in a planned regional network of light rail, heavy rail and bus rapid transit.

That study found that prior to construction of the line, single-family homes within 1/2-mile radius of station areas sold for 16.4 percent less than homes in the greater southeast Minneapolis sub-market. After 2004 those homes sold for 4.2 percent more. Single-family homes west of the line enjoyed a "significant accessibility affect." Even beyond 1/2 mile, homes located closer to stations were associated with higher property values. Between 2004-2007, the average single-family home value increased $5,229, while multi-family housing rose $350 per mile.

Conversely, homes closet to the tracks – again as distinct from proximity to a station – suffered a smaller "negative nuisance effect," and properties east of the line did not enjoy the benefits of proximity due in part to the existence of the four-lane Hiawatha Highway and adjacent industrial land uses.

All told, residential property values along the line increased $47.1 million between 2004 and 2007. The study also noted that construction of the line resulted in little change in land use along its path.

Closer to New York City, a 2013 study examined the impact of initiation in 2000 of light rail service on the Hudson-Bergen Light Rail line in metropolitan New Jersey.[42] Looking at repeat sales data for properties that sold at least twice between 1991 and 2009, the authors found that properties around the HBLR stations most-distant from the downtown central business district appreciated the most in value – at an annual average rate of 18.4 percentage points more than other study-area properties; and that those high appreciation gains began to dissipate rapidly – about 1 percent for every 50 feet – at a distance of ¼ mile from the station.

They also noted that accessibility gains would likely differ among different forms of rail transport, with the relatively “lower speeds realized by LRT service compared to other forms of commuting are expected to result in lower rates of appreciation for residential properties than are obtained via other forms of transportation."

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[41] Center for Transportation Studies. 2010. “The Hiawatha Line: Impacts on Land Use and Residential Housing Value.” University of Minnesota, Minneapolis.

[42] Kim and Lahr. 2013. “The Impact of Hudson-Bergen Light Rail on Residential Property Appreciation.” *Papers in Regional Science*, first published online May, 22, 2013.

Conclusions

As previously noted, context matters when considering the potential impact of rail reactivation and the proposed QueensWay on nearby property values. Since none of the studies cited in the above literature review reflect the exact conditions along the RBB right of way, their findings are limited in their potential to describe possible outcomes related to either option. Still, these studies do provide insight with which to draw certain general conclusions. It is important to emphasize these conclusions are not predictions, but rather projections of what the existing literature suggests might occur.

Based on that literature, both reactivation of rail service and the building of a linear park would almost certainly impact nearby property values. That literature also suggests that proximity alone – with no other conditions taken into account – is a central factor in determining whether those impacts would be positive or negative, as well as their magnitude.

Were the QueensWay to be built, residential properties that abut it would likely see a negative impact on property values. However, plans to incorporate buffers and other design features could help lessen those negative impacts. Properties further from the park but still close by – perhaps as little as 200 feet or as much as three blocks up to ¼-mile – could enjoy relatively large increases in value. Any proximity benefit would then be likely to taper off as one moved further away from the trail. Properties more than ¼ mile from the park would likely experience relatively little impact on values.

Should the right of way be reactivated for rail service, similar impacts could be expected based on proximity. The literature suggests that properties within ½ mile of a rail station on the reactivated line would likely see property values increase due to increased accessibility, while properties closest to the right of way – as opposed to a station – would likely suffer a smaller negative effect due to the noise and “visual intrusion” of passing trains.

The literature also suggests that commercial properties would likely benefit more from closer proximity to a rail station than residential properties.

APPENDIX A: Existing Transportation Options*

MTA Bus Options

BUS		
Q11/ Q21	**Route**	The Q11 bus runs from Elmhurst through Woodhaven to Howard Beach via Woodhaven Boulevard The Q21 also runs on Woodhaven Boulevard from Elmhurst through Woodhaven and Old Howard Beach to Hamilton Beach
	Schedule	Q11 buses leave every 10 minutes, and major stops are approximately nine minutes apart. An entire trip takes approximately 30 minutes Q21 buses leave every half hour, with major stops approximately nine minutes apart. An entire trip takes approximately 30 minutes
	Connections	Both buses make MTA subway connections to the **M**/**R** lines at Woodhaven Boulevard, the J/Z lines at Jamaica Avenue and the **A** line at Liberty Avenue and Howard Beach/JFK Airport
	Fare	Fare: $2.50 plus free transfer to subway or another bus line
Q22		
	Route	The Q22 bus runs from Roxbury to Rockaway Park and Far Rockaway via Rockaway Beach Boulevard and Beach Channel Drive
	Schedule	Buses leave every 10 minutes. Time between major stops is eight to 12 minutes, and the entire trip takes 40 minutes
	Connections	Makes MTA subway connections to the **A** line at Far Rockaway/Mott Avenue and the **A**/Rockaway Park Shuttle (**S**) at Rockaway Park/116th Street
	Fare	$2.50 plus free transfer to subway or another bus line
Q35		
	Route	The Q35 bus runs from Rockaway Park to Neponsit, Flatlands and Flatbush (Brooklyn College) via Flatbush Avenue
	Schedule	Buses leave every 15 minutes, 10 minutes during afternoon rush hour. The entire trip takes 30 minutes
	Connections	Makes MTA subway connection to the **A**/**S** lines at Rockaway Park/116th Street
	Fare	$2.50 with free transfer to subway or another bus line

MTA Bus Options (cont.)

BUS		
Q52/ Q53	**Route**	The Q52 bus runs from Elmhurst to Arverne via Woodhaven Boulevard, Cross Bay Boulevard, and Rockaway Beach Boulevard The Q53 bus runs from Woodside to Rockaway Park via Roosevelt Avenue, Woodhaven Boulevard, Cross Bay Boulevard and Rockaway Beach Boulevard
	Schedule	A total trip on the Q52 bus takes 50 minutes, with buses leaving every 30 minutes in the morning, every 20 minutes in the afternoon A total trip on the Q53 bus takes 60 minutes, with buses leaving every 15, 12 or 10 minutes Both bus lines offer limited stop service.
	Connections	The Q52 bus makes MTA subway connections to the 7 line at 74th Street/Broadway, the M/R lines at Woodhaven Boulevard, the J/Z lines at Woodhaven Boulevard, the A/S lines at Broad Channel and the A/S lines at Rockaway Park/116th Street The Q53 makes a MTA LIRR connection at Woodside. It also makes MTA subway connections to the 7 line at 61 Street/ Woodside, the **E**, **F**, **M**, **R** line at Roosevelt Avenue/Jackson Heights, the **7** line at 74th Street/Broadway, the **M**/**R** lines at Woodhaven Boulevard, the J/Z lines at Woodhaven Boulevard, the A/S lines at Broad Channel and the A/S lines at Rockaway Park/116th Street
	Fare	Fare: $2.50 plus free transfer to subway or another bus line
Q113		
	Route	The Q113 bus runs from Jamaica to South Jamaica, Rosedale, Inwood, Lawrence and Far Rockaway via Guy R. Brewer Boulevard, Rockaway Turnpike and Nassau Expressway with local and limited service
	Schedule	The entire trip for local service takes approximately 63 minutes; for limited service approximately about 48 minutes. Both local and limited buses leave every 20 minutes
	Connections	Makes MTA subway connections to the **F** line at Parsons Boulevard, the **E**/**J**/**Z** lines at Jamaica Center-Parsons Boulevard and Archer Avenue, and the **A** line at Far Rockaway/Mott Avenue
	Fare	$2.50 plus free transfer to subway or another bus line

MTA Bus Options (cont.)

BUS		
N31/ N32	**Route**	N31 and N32 buses run from Far Rockaway to Lawrence, Woodmere/Hewlett, Lynbrook, Malverne and Hempstead via Beach 19th Street, Central Avenue, W. Broadway, Broadway and Hempstead Avenue
	Schedule	A full trip on both buses take approximately 55 minutes. N31 buses leave every 17, 20 or 40 minutes in the morning, then every 40 minutes in the afternoon. N32 buses leave every 40 minutes
	Connections	Both buses make MTA LIRR connections at Far Rockaway, Lynbrook, Malverne, West Hempstead and Hempstead. Both buses make MTA subway connections to the **A** line at Far Rockaway/Mott Avenue
	Fare	Fare: $2.50 plus free transfer to subway or another bus line
N33		
	Route	The N33 bus runs from Far Rockaway to Long Beach via Beach 20th Street, Seagirt Boulevard, Park Street, Beech Street, W. Beech Street and W. Park Avenue
	Schedule	A full trip takes approximately 25 minutes. Buses leave every 30 minutes during rush hour, every 60 minutes during non-rush hours
	Connections	Makes MTA LIRR connection at Long Beach. Makes MTA subway connection to the **A** line at Far Rockaway/ Mott Avenue
	Fare	Fare: $2.50 with free transfer to subway or other bus lines

MTA Subway Options

LINE		
A	**Route**	8th Avenue Express – Washington Heights to Far Rockaway (peak rush hour to Rockaway Park) via Central Park West, 8th Ave, Fulton St, Liberty Ave, Rockaway Freeway
	Schedule	Full trip – first stop to last stop – takes approximately 1 1/2 hours. From Far Rockaway/Mott Avenue to lower Manhattan (Fulton St.) takes approximately 1 hour. In the mornings trains leave Washington Heights every six to nine minutes to Far Rockaway. Five afternoon trains run to Rockaway Park/116th Street and five rush-hour Manhattan-bound morning trains leave Rockaway Park/116th Street.
	Connections	• S at Broad Channel, • C at Euclid Ave (runs with A for rest of line) • J/Z/M/L at Broadway Junction • S (Franklin Avenue Shuttle) at Franklin Avenue • G at Hoyt Schermerhorn • F/ R at Jay Street/MetroTech • 2/3/4/5/J/Z at Fulton Street, E at Canal Street (runs with A to 42nd St/Port Authority) • B/D/F at West 4th Street, L at 14th St. • B/D/1 at 59th Street/Columbus Circle (B/D run with A until 145th Street)
	Fare	Fare: $2.50 with free in-system transfer and free transfer to bus
S	**Route**	Rockaway Park Shuttle via Rockaway Freeway
	Schedule	Full trip – eight minutes Trains leave every 10-20 minutes
	Connections	A at Rockaway Park/116th Street (peak rush hour only), and Broad Channel
	Fare	Fare: $2.50 with free in-system transfer and free transfer to bus

MTA Subway options, (cont.)

LINE		
E	**Route**	8th Avenue Local – Forest Hills/71st Street to Chambers Street/World Trade Center, Manhattan Runs with the F to Jackson Heights/Roosevelt Avenue
	Schedule	Full trip takes approximately 45 minutes Trains leave every 5-8 minutes
	Connections	• F/M/R/7 at Jackson Heights/Roosevelt Avenue • G /M/7 at Court Square/23 Street • 4/5/6 at Lexington Avenue/53rd Street • B/D at Seventh Avenue • A/C /N/Q/1/2/3/7 at 42nd Street/Port Authority Bus Terminal
	Fare	Fare: $2.50 with free in-system transfer and free transfer to bus
F	**Route**	Queens Boulevard/6th Avenue Local – From 71st Street (Forest Hills) to Lower East Side Manhattan (Delancey Street) Runs with the M from 47th-50th Street/Rockefeller Center to Delancy Street
	Schedule	71st Street (Forest Hills) to Lower East Side Manhattan (Delancey Street) takes approximately 35 minutes Trains leave every 4-6 minutes during rush hours, every 15-20 minute at other times
	Connections	• 7/ E/M at Jackson Heights/Roosevelt Avenue • 4/5/6 /N/Q/R at Lexington Avenue/53rd Street • B/D/M at 47th-50th Street/Rockefeller Center • A/C/E at W. 4th Street/Washington Square
	Fare	Fare: $2.50 with free in-system transfer and free transfer to bus
M	**Route**	Queens Boulevard/6th Avenue Local – From 63rd Drive (Rego Park) and 67th Avenue (Forest Hills) to Lower East Side Manhattan (Delancey Street) Runs with the R to Queens Plaza

	Schedule	From 67th Street to Delancy Street approximately 45 minutes; to 34th Street/Herald Square approximately 35 minutes Trains leave every eight-10 minutes
	Connections	• 7/ E/ F at Jackson Heights/Roosevelt Avenue • R at Queens Plaza • 4/5/6 at Lexington Avenue/53rd Street • B/D/M at 47th-50th Street/Rockefeller Center • N/Q at 34th Street/Herald Square • A/C/E at W. 4th Street/Washington Square
	Fare	Fare: $2.50 with free in-system transfer and free transfer to bus
R	**Route**	Queens Boulevard/Broadway Local - From 63rd Drive (Rego Park) and 67th Avenue (Forest Hills) to Lower Manhattan (Canal Street) Runs with the M to Queens Plaza
	Schedule	From 67th Street to Canal Street approximately 45 minutes; to Times Square 42nd Street minutes 35 minutes
	Connections	• 7/ E/ F at Jackson Heights/Roosevelt Avenue • M at Queens Plaza • N/Q/4/5/6/F at Lexington Avenue/59th Street • A/C/1/2/3/7/S at Times Square/42nd Street • B/D at Herald Square • J/Z at Canal Street
	Fare	Fare: $2.50 with free in-system transfer and free transfer to bus
J	**Route**	Nassau Street Local - From104th Street and Woodhaven Boulevard (Jamaica Avenue) to Broad Street/Wall Street, Manhattan
	Schedule	One hour 10 minutes Trains leave every 5-10 minutes between 8 am-7 pm; then every 10-15 minutes
	Connections	• A/C/L at Broadway Junction • M at Myrtle Avenue • F at Essex Street • N/Q/6 at Canal Street • 4 at Chambers Street • A/2 at Fulton Street
	Fare	Fare: $2.50 with free in-system transfer and free transfer to bus

MTA Long Island Railroad options

LINE		
Far Rockaway Branch	**Route**	Far Rockaway-Jamaica-Downtown Brooklyn-Midtown Manhattan (Penn Station)
	Schedule	Trains leave Far Rockaway every 10 or 30 minutes during a.m. rush hour, then once every hour Trains to Downtown Brooklyn require transfer at Jamaica Trip from Far Rockaway to Penn Station takes approximately one hour
	Subway Connections	• E/J/Z at Sutphin Blvd/Archer Ave/JFK Airport • 7 at Woodside/61st Street, Hunterspoint Avenue and Long Island City • A/C/E at 34th Street/Penn Station/MSG
	Fare	Fare: $8.00 off-peak, $11.00 peak
Main Line	**Route**	Forest Hills-Penn Station
	Schedule	Trains leave Forest Hills every 30-40 minutes from 4:41 pm to 6:48 pm; every hour from 11:57 am to 3:55 pm Train to Penn Station takes 14-17 minutes
	Subway Connections	• E/F/M/N at Forest Hills • 7 at Woodside/61st Street, Hunterspoint Avenue and Long Island City

Queens Rockaway Ferry options

FERRY		
Rockaway Beach	**Route**	Riis Landing (Jacob Riis Park) to Pier 11 (Wall Street, Manhattan)
	Schedule	Saturday, Sunday and holiday service only Travel time – 55 minutes
	Fare	Fare: Adult one way - $20.00 off-peak, adult round trip - $30.00; Child one way - $10.00, child round trip - $15.00. Children under 5 years free

Seastreak	**Route**	Far Rockaway (Beach 108th Street and Beach Channel Drive)-Brooklyn Army Terminal (58th Street)-Pier 11 (Wall Street)-E. 34th Street/FDR Drive
	Schedule	Ferries leave Rockaway every 50 minutes, every 1 hour and 10 minutes, or every 35 minutes. After the 9:25 am ferry, no ferries leave Rockaway until 4:35 pm. The last morning ferry to the Rockaways arrives at 9:20 am. The next ferry does not arrive until 4 pm.
	Fare	Fare: $3.50 each way

* This chart is intended to reflect some of the transportation options available to commuters along the RBB right of way. It is not meant to be a complete list of all the available options.

Appendix B: RBB Resident Survey

QUEENS COLLEGE

Urban Studies

Dear Resident:

The Office of Community Studies at Queens College is conducting a study of the potential effects of various proposals and options for the redevelopment of the abandoned Rockaway Beach Branch of the Long Island Railroad.

You have been randomly selected to receive the enclosed survey questionnaire. The questions it asks are mainly about your opinions concerning the various redevelopment options for the abandoned rail line, including which particular option you support and what impact you believe that project would have on nearby neighborhoods. The information collected will contribute to our study findings and be made available to community members and their elected leaders upon its completion. Our hope is our findings will contribute to conversations about the potential benefits and potential negative impacts of each development option.

Your participation is completely voluntary. If for any reason you do not wish to participate you are under no obligation to do so.

Please answer only the questions asked. **No information that can be used to identify you will be collected in connection with this survey. You and your responses will remain anonymous.**

Typically, completing the questionnaire takes 10–15 minutes, depending on your answers.

You have two convenient options for completing the survey:
- Complete and return the printed survey using the enclosed postage-paid, self-addressed envelope; or
- Complete the survey online at http://qcurban.org/office-of-community-studies/survey/. You will be prompted to enter the following password to begin the survey: resident. This option will save on postage and increase the efficiency of data collection.

Please complete and submit your survey by **July 11, 2014. Please do not copy or redistribute this questionnaire. Duplicate questionnaires will be invalidated.**

If you have any questions about your rights as a research participant, or to report a research related problem, you may call: Office of Regulatory Compliance, Queens College, CUNY; telephone 718-997-5415.

If you have concerns or questions about this research project you may contact: Scott Larson, Director, Office of Community Studies, Queens College, CUNY; telephone: 718-997-5142, e-mail: scott.larson@qc.cuny.edu.

Thank you for your time and consideration.

65-30 Kissena Boulevard, Queens, New York 11367-1597
718-997-5130 | Fax 718-997-5133

Appendix C: RBB Business Survey

QUEENS COLLEGE

Urban Studies

Dear Business Representative:

The Office of Community Studies at Queens College is conducting a study of the potential effects of various proposals and options for the redevelopment of the abandoned Rockaway Beach Branch of the Long Island Railroad.

You have been randomly selected to receive the enclosed survey questionnaire. The questions it asks are mainly about your opinions concerning the various redevelopment options for the abandoned rail line, including which particular option you support and what impact you believe that project would have on your business and nearby neighborhoods. The information collected will contribute to our study findings and be made available to community members and their elected leaders upon its completion. Our hope is our findings will contribute to conversations about the potential benefits and potential negative impacts of each development option.

Your participation is completely voluntary. If for any reason you do not wish to participate you are under no obligation to do so.

Please answer only the questions asked. **No information that can be used to identify you will be collected in connection with this survey. You and your responses will remain anonymous.**

Typically, completing the questionnaire takes 10–15 minutes, depending on your answers.

You have two convenient options for completing the survey:
- Complete and return the printed survey using the enclosed postage-paid, self-addressed envelope; or
- Complete the survey online at http://qcurban.org/office-of-community-studies/survey/. You will be prompted to enter the following password to begin the survey: business. This option will save on postage and increase the efficiency of data collection.

Please complete and submit your survey by **July 11, 2014. Please do not copy or redistribute this questionnaire. Duplicate questionnaires will be invalidated.**

If you have any questions about your rights as a research participant, or to report a research related problem, you may call: Office of Regulatory Compliance, Queens College, CUNY; telephone 718-997-5415.

If you have concerns or questions about this research project you may contact: Scott Larson, Director, Office of Community Studies, Queens College, CUNY; telephone: 718-997-5142, e-mail: scott.larson@qc.cuny.edu.

Thank you for your time and consideration.

Rockaway Beach Branch Community Impact Study Business Survey

FIRST WE WOULD LIKE TO ASK YOU SOME GENERAL QUESTIONS ABOUT YOUR BUSINESS.

In what neighborhood is the business located (please check the appropriate box)?

- ☐ Rego Park
- ☐ Forest Hills
- ☐ Glenwood
- ☐ Woodhaven
- ☐ Richmond Hill
- ☐ Ozone Park/South Ozone Park
- ☐ Howard Beach
- ☐ Rockaways
- ☐ Do not know

What type of business is it? _____

_____

Are you (please check the appropriate box):

- ☐ Owner
- ☐ Manager
- ☐ Employee
- ☐ Other. Please explain: _____

_____

How long has the business been in operation at this location? _____

_____

NOW WE WOULD LIKE TO ASK YOU SOME QUESTIONS ABOUT THE ABANDONED ROCKAWAY BEACH BRANCH RAILROAD RIGHT-OF-WAY THAT RUNS FROM REGO PARK AND FOREST HILLS THROUGH RICHMOND HILL AND WOODHAVEN TO OZONE PARK, AS WELL AS VARIOUS PROPOSALS FOR WHAT SHOULD BE DONE WITH IT.

How familiar are you with the abandoned right-of-way (please check the appropriate box)?

- ☐ Very
- ☐ Somewhat
- ☐ Not at all

65-30 Kissena Boulevard, Queens, New York 11367-1597
718-997-5130 | Fax 718-997-5133

Appendix D: Survey Distribution

	CT	Total Pop	Occupied housing units	% of study area pop	% of study area housing units	# of surveys delivered	% surveys/ responses neighborhood	% surveys CT
Neighborhood **(# of surveys delivered)**		2010						
Rego Park **(652)**	693	2,883	1,143	1.17%	1.33%	**67**	**13.0**	**1.3**
	695	2,128	897	0.87%	1.04%	**52**		**1.0**
	697.01	3,616	1,690	1.47%	1.97%	**99**		**2.0**
	697.02	3,911	1,628	1.59%	1.90%	**95**		**1.9**
	703	2,010	743	0.82%	0.86%	**43**		**0.9**
	713.05	4,871	2,360	1.98%	2.75%	**138**		**2.8**
	713.06	5,811	2,744	2.37%	3.19%	**160**		**3.2**
Forest Hills **(425)**	645	1,979	783	0.81%	0.91%	**46**	**8.5**	**0.9**
	707	2,303	950	0.94%	1.11%	**56**		**1.1**
	709	2,483	1,006	1.01%	1.17%	**59**		**1.2**
	711	5,272	2,735	2.15%	3.18%	**159**		**3.2**
	723	2,127	839	0.87%	0.98%	**49**		**1.0**
	729	1,363	466	0.56%	0.54%	**27**		**0.5**
	731	1,515	527	0.62%	0.61%	**31**		**0.6**
Glendale **(122)**	637	3,148	1,080	1.28%	1.26%	**63**	**2.4**	**1.3**
	639	2,747	1,014	1.12%	1.18%	**59**		**1.2**
Richmond Hill **(540)**	24	2,145	661	0.87%	0.77%	**39**	**10.8**	**0.8**
	26	2,055	675	0.84%	0.79%	**40**		**0.8**
	28	3,033	929	1.24%	1.08%	**54**		**1.1**
	94	2,834	868	1.15%	1.01%	**51**		**1.0**
	96	3,135	877	1.28%	1.02%	**51**		**1.0**
	98	2,688	677	1.10%	0.79%	**40**		**0.8**
	110	3,075	794	1.25%	0.92%	**46**		**0.9**
	112	2,358	618	0.96%	0.72%	**36**		**0.7**
	114	1,330	335	0.54%	0.39%	**20**		**0.4**
	116	2,178	576	0.89%	0.67%	**34**		**0.7**
	126.01	2,413	772	0.98%	0.90%	**45**		**0.9**
	126.02	2,578	782	1.05%	0.91%	**46**		**0.9**
	128	2,030	715	0.83%	0.83%	**42**		**0.8**
Woodhaven **(434)**	14	3,683	1,048	1.50%	1.22%	**61**	**8.7**	**1.2**
	16	2,831	801	1.15%	0.93%	**47**		**0.9**
	18	2,931	962	1.19%	1.12%	**56**		**1.1**
	20	1,797	499	0.73%	0.58%	**29**		**0.6**
	22	2,077	724	0.85%	0.84%	**42**		**0.8**
	30	1,399	453	0.57%	0.53%	**27**		**0.5**
	32	1,504	375	0.61%	0.44%	**22**		**0.4**
	38	2,287	731	0.93%	0.85%	**43**		**0.9**
	40.01	2,134	651	0.87%	0.76%	**38**		**0.8**
	40.02	1,270	333	0.52%	0.39%	**20**		**0.4**
	641.01	1,960	871	0.80%	1.01%	**51**		**1.0**
Ozone Park **(365)**	54	5,257	1,598	2.14%	1.86%	**93**	**7.3**	**1.9**
	58	5,414	1,976	2.21%	2.30%	**115**		**2.3**
	86	2,811	836	1.15%	0.97%	**49**		**1.0**
	88	3,095	1,109	1.26%	1.29%	**65**		**1.3**
	864	2,634	752	1.07%	0.88%	**44**		**0.9**
Howard Beach **(161)**	884	7,337	2,761	2.99%	3.21%	**161**	**3.2**	**3.2**
Broad Channel **(48)**	1072.01	2,443	824	1.00%	0.96%	**48**	**1.0**	**1.0**
								0.0
ROCKAWAYS (2254)								**0.0**
Breezy Point **(102)**	916.01	4,079	1,742	1.66%	2.03%	**102**	**2.0**	**2.0**
Neponsit-Belle-Harbor **(118)**	922	2,206	802	0.90%	0.93%	**47**	**2.4**	**0.9**
	928	3,246	1,231	1.32%	1.43%	**72**		**1.4**
Rockaway Park **(185)**	934.01	3,789	1,538	1.54%	1.79%	**90**	**3.7**	**1.8**
	934.02	3,657	1,638	1.49%	1.91%	**96**		**1.9**
Seaside **(206)**	938	5,218	2,305	2.13%	2.68%	**134**	**4.1**	**2.7**
	942.01	3,380	1,239	1.38%	1.44%	**72**		**1.4**
Hammels **(391)**	942.02	4,700	1,587	1.92%	1.85%	**93**	**7.8**	**1.9**
	942.03	5,369	2,538	2.19%	2.95%	**148**		**3.0**
	954	5,368	1,453	2.19%	1.69%	**85**		**1.7**
	964	4,441	1,133	1.81%	1.32%	**66**		**1.3**

Arverne **(248)**	972.02	2,795	854	1.14%	0.99%	**50**	**5.0**	**1.0**
	972.03	6,865	2,369	2.80%	2.76%	**138**		**2.8**
	972.04	3,544	1,038	1.44%	1.21%	**61**		**1.2**
Edgemere **(70)**	992	3,803	1,185	1.55%	1.38%	**70**	**1.4**	**1.4**
Bayswater-Far Rockaway **(935)**	998.01	7,608	2,213	3.10%	2.58%	**129**	**18.7**	**2.6**
	998.02	5,283	2,529	2.15%	2.94%	**147**		**2.9**
	1008.01	2,327	665	0.95%	0.77%	**39**		**0.8**
	1008.02	8,106	2,383	3.30%	2.77%	**139**		**2.8**
	1010.01	9,943	2,983	4.05%	3.47%	**174**		**3.5**
	1010.02	4,138	1,556	1.69%	1.81%	**91**		**1.8**
	1032.01	6,456	1,887	2.63%	2.20%	**110**		**2.2**
	1032.02	6,197	1,844	2.53%	2.15%	**108**		**2.2**
Total		245,401	85,900	100.00%	100.00%	**5000**	**100.0**	**100.0**