

STATEN ISLAND
NORTH SHORE
BRT

Environmental Impact Statement Draft Scoping Document

September 2019



New York City Transit





Table of Contents

1	Introduction.....	1
	Project Overview.....	1
	Regulatory Framework.....	7
	Scoping Meetings and Opportunity for Public Comment.....	9
	Organization of this Document.....	11
2	Purpose and Need.....	13
	Background.....	13
	Purpose of the Project.....	14
	Need for the Project.....	15
	Goals and Objectives.....	20
3	Proposed Project and Alternatives.....	22
	Introduction.....	22
	No-Action Alternative.....	25
	Build Alternative	26
4	Environmental Analysis Framework	34
	Introduction.....	34
	Regulatory Approvals.....	34
	Study Area.....	35



STATEN ISLAND NORTH SHORE BUS RAPID TRANSIT

Analysis Year	36
Organization of the Environmental Analysis	36
Methodology.....	36
5 EIS Scope of Work.....	38
Project Description.....	38
Land Use, Zoning, and Public Policy.....	38
Socioeconomic Conditions.....	49
Community Facilities and Services.....	51
Open Space.....	51
Shadows.....	51
Historic and Cultural Resources	52
Urban Design and Visual Resources.....	53
Natural Resources	54
Hazardous Materials	55
Water and Sewer Infrastructure.....	57
Solid Waste and Sanitation Services.....	58
Energy	58
Transportation	58
Air Quality.....	63
Greenhouse Gas Emissions and Climate Change	64
Noise.....	65
Public Health.....	67
Neighborhood Character.....	67
Construction Impacts	67
Mitigation	70



STATEN ISLAND NORTH SHORE BUS RAPID TRANSIT

Alternatives	71
Summary EIS Chapters	71
6 Additional Studies.....	72
7 Agency and Public Involvement	77
Summary of Outreach to Date.....	78

List of Figures

Figure 1. Staten Island North Shore Proposed Alignment.....	2
Figure 2. Photographs of the Proposed Alignment.....	3
Figure 2. Photographs of Proposed Alignment (continued).....	4
Figure 3. Area Map.....	6
Figure 4. Recent Development in St. George.....	24
Figure 5. BRT Service & Feeder Routes (2012 SINSAA).....	29
Figure 6. Proposed BRT Service.....	30
Figure 7. Photographs of Caddell Dry Dock & Atlantic Salt.....	33
Figure 8. Section Overview Map.....	41
Figure 9. St. George Land Use	42
Figure 10. New Brighton Land Use.....	43
Figure 11. West Brighton Land Use.....	44
Figure 12. Viaduct Land Use.....	45



STATEN ISLAND NORTH SHORE BUS RAPID TRANSIT

Figure 13. Open-Cut Section Land Use	46
Figure 14. Arlington Station Land Use	47
Figure 15. South Avenue Land Use	48
Figure 16. NYC Coastal Zone.....	50

List of Tables

Table 1 – Goals and Objectives	21
--------------------------------------	----



1 Introduction

The Metropolitan Transportation Authority New York City Transit (MTA-NYCT) will prepare an Environmental Impact Statement (EIS) for the Staten Island North Shore Bus Rapid Transit (BRT) Project (the Proposed Project) in accordance with New York's State Environmental Quality Review Act (SEQRA). As the lead agency under SEQRA, MTA-NYCT has developed this document to define the scope of the EIS. This Draft Scoping Document: includes a description of the Proposed Project and the actions necessary for its implementation, presents the proposed framework for the EIS analysis; and, discusses the procedures to be followed in the preparation of the EIS. This Draft Scoping Document will be made available to agencies and the public for review and comment. The Final Scoping Document will consider comments received during the comment period and will incorporate any appropriate changes into the analysis that will be used in the preparation of the EIS.

Project Overview

The environmental analysis of the Proposed Project will assess the implementation of new and enhanced public transit service along the North and West Shores of Staten Island (see Figure 1) between South Avenue (West Shore Plaza, located near the intersection of South Avenue and Chelsea Road) and St. George (St. George Terminal, located near the intersection of Richmond Terrace and Bay Street) in Richmond County, New York. The approximately 8-mile proposed alignment would be comprised of approximately 5.3 miles of right-of-way (ROW) from the former North Shore Railroad and approximately 2.7 miles of City roadways such as Richmond Terrace and South Avenue. As shown in Figure 1 and Figure 2, the proposed alignment includes at-grade, elevated viaduct, and below grade open-cut sections, with street-running portions along South Avenue (mixed-traffic) and Richmond Terrace (exclusive two-lane median busway).



STATEN ISLAND NORTH SHORE BUS RAPID TRANSIT

Figure 1. Staten Island North Shore Proposed Alignment





Figure 2. Photographs of the Proposed Alignment



On-Street (Exclusive Lanes): View of Richmond Terrace looking west



At-Grade: View of ROW and destabilized shoreline near Snug Harbor



At-Grade: View of Bank Street; Richmond Terrace at left



Viaduct: View of Richmond Terrace looking south from viaduct



Figure 2. Photographs of Proposed Alignment (continued)



Viaduct: View of remnant station on viaduct segment of ROW



Open-Cut: View of western portion of open-cut section (freight use)



Open-Cut: View of overhead bridge and abutments in open-cut section



On-Street (Mixed-Traffic: View of South Avenue



The Staten Island North Shore Alternatives Analysis (SINSAA), completed in 2012, as well as several concurrent and subsequent planning studies, have identified key, pervasive transportation issues that continue to exist in the North Shore and West Shore areas of Staten Island. These issues are described in Chapter 2, Purpose and Need of this Draft Scoping Document. The SINSAA evaluated alternatives to address the identified needs, which are described in Chapter 3, Proposed Project and Alternatives. These alternatives were revisited in the June 2019 Supplement to the 2012 SINSAA (the “Supplement”), which identified Bus Rapid Transit (BRT) as the Preferred Alternative. The Proposed Project would address the existing transportation needs and meet the demand for expanded transportation capacity through improved and priority transit service. Use of the former North Shore Railroad ROW would provide more consistent and reliable travel times and would improve transit access, capacity and connectivity between North Shore and West Shore activity and residential centers and the St. George Terminal. St. George Terminal provides on-island transfers between the Staten Island Railway (SIR) and connections to MTA-NYCT bus routes as well as off-island transfers to Lower Manhattan via the New York City Department of Transportation’s (NYCDOT) Staten Island Ferry.

The proposed alignment would extend through and serve an area comprised of several neighborhoods along the North and West Shores, including Arlington, Mariners Harbor, Elm Park, Port Richmond, West Brighton, New Brighton, and St. George (see Figure 3). Community Board 1 and parts of Community Board 2 comprise the study area. These neighborhoods are characterized by varied land use patterns, highlighted by civic and commercial clusters in St. George and Port Richmond, and historic Snug Harbor’s well-established cultural uses. Other prevalent land uses include parkland such as Heritage Park, housing developments, and a waterfront industrial sector featuring an array of maritime support services as well as the city’s Port Richmond Water Pollution Control Plant (WPCP). The Port Authority of New York and New Jersey’s (PANYNJ) Howland Hook Marine Terminal is a major freight terminal and container port at the western end of the proposed alignment, and both the Teleport and Matrix Global Logistics Park are significant business parks on the West Shore. In St. George, significant economic growth has and is occurring, including the development of the Empire Outlets retail center, the Lighthouse Point mixed-use



STATEN ISLAND NORTH SHORE BUS RAPID TRANSIT

Figure 3. Area Map



Staten Island North Shore BRT | Staten Island, NY

Area Map



development, and other developments which complement existing municipal, residential and educational land uses.

The North Shore roadway network includes the two-lane Richmond Terrace, which is the area's primary east-west roadway running primarily along the shoreline. Other notable streets include Forest Avenue, Castleton Avenue, and the Staten Island Expressway (I-278), which connects Staten Island with New Jersey via the Goethals Bridge. North-south access routes between the North Shore and points south include South Avenue, Harbor Road, NY Route 440 (which connects Staten Island with New Jersey via the Bayonne Bridge), Port Richmond Avenue, and Jersey Street.

MTA-NYCT operates an extensive network of local and limited bus routes that serve the entire borough (<http://web.mta.info/nyct/maps/bussi.pdf>). The four-primary local/limited bus routes that link the North Shore with the St. George Terminal are the S40/90, S44/94, S46/96, and S48/98. The terminal is currently served by 22 NYCT bus routes and provides connections to lower Manhattan via the Staten Island Ferry and the MTA Staten Island Railway (SIR), which is the borough's only passenger rail line, serving communities between St. George and Tottenville.

The former North Shore Railroad right-of-way offered Staten Island Rapid Transit passenger and freight service ending in 1953 and 1989, respectively. In 1993, the City of New York acquired the North Shore right-of-way via a federal grant preserving the corridor for transportation use. Currently, the right-of-way, managed by the New York City Economic Development Corporation (NYCEDC), is largely abandoned except for the portion of the western section of the right-of-way that is used as a tail track which serves rail freight supporting the PANYNJ Howland Hook Marine Terminal.

Regulatory Framework

The environmental review process allows decision-makers to systematically consider environmental effects of the Proposed Project, to evaluate reasonable alternatives, and to identify measures to mitigate significant adverse environmental effects. As discussed in the Introduction, the EIS for the Proposed Project will be prepared in accordance with the State Environmental Quality Review Act (SEQRA), codified in Article 8 of the



Environmental Conservation Law (ECL §§ 8-0101 *et seq.*), and its implementing regulations, promulgated in Part 617 of Title 6 of the New York Codes, Rules and Regulations—which collectively contain the requirements for the State Environmental Quality Review (SEQRA) process. Analytical methodologies for evaluating baseline environmental conditions and project-related impacts will be consistent with the guidelines set forth in the New York City *Environmental Quality Review (CEQR) Technical Manual*, where applicable, as described below. These are the most appropriate methodologies and guidelines for environmental impact assessment in New York City.

The Proposed Project may apply for federal funding from the Federal Transit Administration (FTA); thus, the EIS will also be prepared to be consistent with the requirements of the National Environmental Policy Act (NEPA) of 1969, (42 U.S.C. 4321 *et seq.*), as amended.¹ The process for meeting the requirements of NEPA and federal surface transportation statutes is defined in the Environmental Impact and Related Procedures (23 C.F.R. 771), which jointly applies to FTA, the Federal Highway Administration, and the Federal Railroad Administration.² The regulation sets forth the agencies' policy of combining all environmental analyses and reviews into a single review process. It also defines the roles and responsibilities of FTA and its grant applicants in preparing documents, and in managing the environmental process within the various project development phases.

According to FTA guidance, *early scoping* may be initiated prior to an NOI if there is appropriate public notice and sufficient project information available so that the public and relevant agencies can participate effectively. Incorporating environmental review process considerations (e.g., purpose and need, alternatives, significant environmental issues) during project planning stage can also be referred to as *early scoping* when the scope of environmental issues associated with a project are being determined, as is the case with this project. Conducting preliminary data analysis and requesting input from the public and agencies on issues before NEPA begins

¹ <https://www.govinfo.gov/content/pkg/USCODE-2017-title42/html/USCODE-2017-title42-chap55.htm>

² https://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&SID=53d557efda087e7a5514dc356e125122&rgn=div5&view=text&no_de=23:1.0.1.8.43&idno=23



can also be considered as early scoping. Coordination between the FTA and MTA-NYCT will occur to identify the potential to apply *early scoping* and to provide process guidance. In the event that *early scoping* (satisfied by data collection and outreach to support the SEQRA scoping process) is agreed upon by the FTA and MTA-NYCT, the FTA will publish an early scoping notice in the Federal Register.³

Scoping Meetings and Opportunity for Public Comment

MTA-NYCT is seeking input and comments on the following:

- » Purpose & Need
- » Goals & Objectives
- » Proposed Actions
- » Analyses to be included and impact methodologies to be utilized in the environmental review for the Proposed Project
- » Opportunities for agency involvement and public comment
- » Any additional concerns related to potential project-related environmental impacts

The public will be provided with an opportunity to offer input on the topics identified above during a 60-day public scoping comment period. The public scoping comment period begins on September 18, 2019 and ends on November 18, 2019. Opportunities for public comment during the scoping period are detailed below.

A project scoping Public Meeting will be held on Thursday, October 17, 2019 from 6:00 pm to 8:30 pm at the Snug Harbor Cultural Center & Botanical Gardens, Lower Great Hall, 1000 Richmond Terrace, Staten Island, New York 10301. Members of the public, agency representatives, and elected officials will have the opportunity to: view project materials, attend a scoping presentation, meet with MTA-NYCT representatives and provide oral and/or written comments on this Draft Scoping Document.

³ <https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/regulations-and-guidance/environmental-programs/55956/03-early-scoping.pdf>



STATEN ISLAND NORTH SHORE BUS RAPID TRANSIT

Public and agency written comments can also be submitted through the end of the public comment period closing at 5:00 pm EST on November 18, 2019 via the following:

- » Project website feedback form found at https://new.mta.info/system_modernization/northshoreeis
- » Email: NorthShoreEIS@nyct.com
- » Phone: 511 (MTA General Call Center)
- » Mail: MTA New York City Transit
Staten Island North Shore EIS
C/O Government & Community Relations
2 Broadway, D17.112
New York, NY 10004

After the scoping comment period has ended, a Final Scoping Document will be prepared that will identify comments received during the scoping period and provide responses to comments. The Final Scoping Document will also include updated project information that incorporates agency and public input as well as any new project material that may become available after the publishing of the Draft Scoping Document. The Final Scoping Document will be made available to the public. The SEQRA Draft EIS (DEIS) will then be prepared in accordance with the Final Scoping Document.

Once MTA-NYCT, as lead agency, is satisfied that the DEIS is complete, it will be made available for public review and comment. MTA-NYCT will prepare a Notice of Completion, which will be published in the Environmental Notice Bulletin and local newspapers, and distribute the DEIS. A copy of the DEIS will be posted on the MTA website consistent 6 NYCRR 617.12. A public hearing will be held on the DEIS to afford all interested parties the opportunity to submit oral and written comments. MTA-NYCT will maintain a record of all comments received during the DEIS public comment period.

At the close of the 60-day public comment period, a Final EIS (FEIS) will be prepared that will respond to all comments made on the DEIS, along with any revisions to the technical analyses necessary to respond to those comments. The FEIS will include a separate chapter summarizing the comments received and referencing the MTA-NYCT responses to the comments. Upon issuance of the FEIS, MTA-NYCT will also issue a Statement of Findings to the MTA Board of Directors for their consideration. In addition, the City of New York may



utilize the SEQRA FEIS to make CEQR findings should it be determined that potential city actions are required to facilitate the Proposed Project (see Chapter 4, Environmental Analysis Framework).

Organization of this Document

In accordance with Title 6 CRR-NY § 617.8, *Scoping*, this Draft Scoping Document will help focus the environmental review process on potentially significant impacts. Early and open scoping will benefit the Proposed Project by establishing a framework for the EIS, eliminating the consideration of impacts that are irrelevant or not significant, and taking into consideration input from involved agencies (e.g., New York City Department of City Planning, New York City Department of Parks and Recreation, Small Business Services, New York City Department of Transportation) and the public.

This Draft Scoping Document is organized in the following manner:

- » **Chapter 1: Introduction.** Introduces the reader to the Proposed Project, discusses the procedures to be followed in the preparation of the EIS, describes the public outreach completed to date, and specifies how agencies and the public will be invited to participate during the scoping process.
- » **Chapter 2: Purpose and Need.** Summarizes the background and history of the Proposed Project, describes the project's purpose and why it is needed, and presents the project's goals and objectives.
- » **Chapter 3: Proposed Project and Alternatives.** Chronicles the identification, development, and evaluation of alternatives in the environmental review process and provides additional detail on the Proposed Project.
- » **Chapter 4: Environmental Analysis Framework.** Presents the proposed framework for the EIS analysis, which closely follows the guidance of the *CEQR Technical Manual*.
- » **Chapter 5: EIS Scope of Work.** Describes the methodologies that will be used to conduct the required analyses. Any environmental requirements necessary as part of the Proposed Project will also be identified.
- » **Chapter 6: Additional Studies.** Defines the studies required under NEPA which will be undertaken for the Proposed Project, concurrent with this SEQRA environmental review process.
- » **Chapter 7: Agency and Public Involvement.** Describes how involved and interested agencies and the public will be involved throughout the



STATEN ISLAND NORTH SHORE BUS RAPID TRANSIT

environmental review process, including opportunities for open, collaborative, and meaningful participation.



2 Purpose and Need

Background

The Proposed Project would primarily serve residents, business and neighborhoods along the North Shore as well as West Shore employment centers along South Avenue.

Several planning studies, including the 2012 *Staten Island North Shore Alternatives Analysis (SINSAA)*⁴, *North Shore 2030*⁵, *Working West Shore 2030*⁶, and studies for the Port Richmond and West Brighton Brownfield Opportunity Areas (BOAs),^{7 8} have identified pressing transportation-related issues within the North and West Shores of Staten Island. The North Shore has a discontinuous street grid that physically constrains the roadway network, with only one east-west route—Richmond Terrace—running the east-west length of Staten Island north of the Staten Island Expressway (I-278) as shown in Figure 3. This limited network is inadequate to accommodate the shared movement of automobiles, trucks, bicycles, pedestrians and transit vehicles.

⁴ <http://web.mta.info/mta/planning/nsaa/pdfs/FinalReport.pdf>

⁵ <https://www.nycedc.com/resource/north-shore-2030>

⁶ <https://www.nycedc.com/resource/working-west-shore-2030>

⁷ <https://www1.nyc.gov/site/planning/plans/port-richmond-boa/port-richmond-boa.page>

⁸ <https://www1.nyc.gov/site/planning/plans/west-brighton-boa/west-brighton-boa.page>



Demand for transit among North Shore residents is high and growing. According to the New York City Community District Profiles, the North Shore's population is nearly twice as dense as Staten Island's overall population, more racially and economically diverse, and considerably more transit-reliant.⁹ However, the North Shore's constrained infrastructure makes it difficult to serve the area's transit needs efficiently. Service on the area's four primary bus routes (S40/S90, S44/S94, S46/S96, and S48/S98) is characterized by: overcrowding of buses during peak commute periods; inconvenient transfers between travel modes; and lack of reliability, with nearly two-thirds of bus trips running five or more minutes late. The potential to add future transit capacity to meet growing demand is severely constrained by the physical limitations of the existing roadway network.

These limitations on expanded transit capacity inhibit local economic growth and the quality of life for residents along the North and West Shores. Providing a direct, reliable transit connection along South Avenue and across the North Shore (between the West Shore and St. George) would help address service and capacity issues, support economic growth, and support projected ridership demand. Such a connection would provide faster and more consistent travel times and improve overall transit access and connectivity between the commercial hub at West Shore Plaza, various existing and planned West Shore and North Shore activity centers such as the Teleport Business Park, Matrix Global Logistics Park, Snug Harbor Cultural Center, civic and commercial concentrations in St. George, and the St. George Terminal.

Purpose of the Project

The purpose of the Proposed Project is to:

- » Provide frequent, efficient, and reliable transit to serve growing demand on the North and West Shores of Staten Island.

⁹ <https://communityprofiles.planning.nyc.gov/staten-island/1>. Profiles are based on 2010 U.S. Census data and 2012-2016 American Community Survey (ACS) 5-year estimates.



STATEN ISLAND NORTH SHORE BUS RAPID TRANSIT

- » Facilitate improved connections between Staten Island neighborhoods and existing North and West Shore activity centers, industries, and employment centers.
- » Offer a reliable and cost-effective transportation solution that supports adopted City and community-endorsed public policy initiatives, such as the North Shore 2030¹⁰, pertaining to economic growth and development.
- » Maximize transportation use of the former and currently unused North Shore Railroad right-of-way while minimizing property acquisition and disruption to the community and businesses.

Need for the Project

The North and West Shores have a high demand for public transit that is expected to grow in the future. This demand is not effectively served by existing transit routes, which creates a need for transit improvements, as described below.

Public transportation demand is higher on the North Shore than the rest of Staten Island.

Staten Island's North Shore (Community District 1) is home to about 37 percent of Staten Island's nearly 470,000 residents. Approximately 38 percent of North Shore residents aged 16 or older use public transportation to commute to work—significantly more than other Staten Islanders.¹¹ Approximately 73 percent of the transit commuters on the North Shore use the bus as their mode of transport to work. The four, primary east-west bus routes serving the area carried a combined average of more than 25,000 riders on an average weekday in 2017. Many peak-hour buses are crowded (operating over capacity), and in some cases buses bypass stops because they are too full to serve waiting passengers. Approximately 64 percent of morning peak-hour (eastbound) trips on the S40 route operate

¹⁰ <https://www.nycedc.com/resource/north-shore-2030>

¹¹ NYC Department of City Planning. *NYC Population Factfinder* <https://popfactfinder.planning.nyc.gov/profile/1031/economic?comparator=5>. Data used for the Population Factfinder is from the 2012-2016 American Community Survey.



over capacity; significant crowding is also experienced in the evening peak (54 percent of trips).¹²

The demographic characteristics of the North Shore—including a higher poverty rate and lower car ownership than Staten Island overall—are consistent with high use of transit.

With a population that is 62 percent minority and 19.3 percent at or below the poverty level—compared to 24.2 percent and 11.9 percent, respectively, for Staten Island overall—the North Shore meets New York State’s definition of a Potential Environmental Justice Area (PEJA).¹³ Studies conducted in 2015 by the Pew Research Center have shown that in urban areas, people who are lower-income, black or Hispanic, or immigrants are much more likely than non-Hispanic white adults to use public transportation on a regular basis.¹⁴ In addition, while only 17.4 percent of Staten Island households do not own at least one vehicle, almost 28 percent of households in Community District 1 are non-vehicle owners.¹⁵ This rate is markedly higher than in either Community District 2 (15.6 percent) or Community District 3 (8.2 percent), indicating that North Shore residents are transit-dependent to a greater degree than residents in other areas of the borough.¹⁶ These factors, combined with the high percentage of North Shore commuters currently using public transportation, means there will continue to be a strong demand for, and reliance on, public transportation in this area.

Commutes on Staten Island and the North Shore are longer and more circuitous than those in New York City as a whole.

Many Staten Islanders—especially those who commute off-island—have long commutes involving multiple transit modes. Currently, the mean travel time to work for residents of Staten Island is 46.2 minutes, which is the longest

¹² Over capacity as represented by 55 or more passengers on a standard size bus,

¹³ <https://censusreporter.org/profiles/79500US3603903-nyc-staten-island-community-district-1-port-richmond-stapleton-mariners-harbor-puma-ny/>

¹⁴ <https://www.pewresearch.org/fact-tank/2016/04/07/who-relies-on-public-transit-in-the-u-s/>

¹⁵ North Shore demographic data was derived from U.S. Census Public Use Microdata Area (PUMA) data; PUMA 3903 - Port Richmond, Stapleton & Mariner’s Harbor covers an area that is geographically coterminous with Staten Island Community District 1.

¹⁶ NYC Department of City Planning. *NYC Population Factfinder* <https://popfactfinder.planning.nyc.gov/profile/1031/housing> 2012-2016 American Community Survey



STATEN ISLAND NORTH SHORE BUS RAPID TRANSIT

commute time of any borough and longer than the citywide mean of 41.8 minutes.¹⁷ On the North Shore, nearly 45 percent of residents spend 45 minutes or longer commuting each way to work, and over 33 percent have commutes of an hour or longer.¹⁸

The length and complexity of transportation routes on Staten Island contribute to long commutes for residents. Four of the ten longest bus routes in New York City operate in Staten Island. Two of the Staten Island routes operate within North Shore communities and are far longer than the citywide bus route average of 6.8 miles.¹⁹ More specifically, the S59 bus route (16 miles) provides service to Port Richmond Terminal and the S54 (11.5 miles) serves West Brighton (Richmond Terrace & Broadway). Compounding the length of these routes is their circuitous nature; local Staten Island bus routes average 13 turning movements per route, which is the highest average number of turns for buses in any borough.

Because ferry and rail service are accessed via the St. George Terminal, most North Shore residents must travel east-west by bus to reach these services. Approximately two-thirds of transfers on the four primary local bus routes (S40, S44, S46, S48) occur at the St. George Terminal. North Shore residents who travel to off-island employment destinations via the Staten Island Ferry are affected by the long travel times and on-time performance issues of existing bus routes, which increase the difficulty of consistently making timely ferry connections. Overall, roughly 30 percent of all S40 trips (eastbound and westbound) are late throughout the day. These on-time performance issues are exacerbated in the peak periods, especially during the evening peak, when over half of the westbound S40 trips are late. This highlights the need

¹⁷ NYC Department of City Planning. *DP03: Selected Economic Characteristics 2017 American Community Survey 1-Year Estimates New York City and Boroughs* https://www1.nyc.gov/assets/planning/download/pdf/data-maps/nyc-population/acs/econ_2017acs1yr_nyc.pdf

¹⁸ Census Reporter. Table B08012 Sex of Workers by Travel Time to Work ACS 2017 1-year <https://censusreporter.org/>

¹⁹ Office of the New York City Comptroller. Bureau of Policy and Research. *The Other Transit Challenge: How to Improve the NYC Bus System*. November 2017. https://comptroller.nyc.gov/reports/the-other-transit-crisis-how-to-improve-the-nyc-bus-system/#_ednref18



to enhance multi-modal connectivity between bus service, ferry service, and Staten Island Railway service at the St. George Terminal.

Transit demand will increase in the future as growth continues in North Shore communities and as the population ages.

The population of Staten Island and the North Shore are expected to continue growing, creating additional demand for public transit. Staten Island was the only borough that experienced a population increase between 2017 and 2018²⁰; based on the latest available City estimates, the borough's population is projected to increase by 6.9 percent (from 468,730 to 501,109) between 2010 and 2040.²¹ The North Shore's population has been increasing faster than that of Staten Island overall. Between 2010 and 2017, Community District 1 grew by approximately 4.3 percent, compared to 2.3 percent for the borough as a whole.²² This growing population is expected to increase the demand for transit among North Shore residents, who, as described previously, are generally more reliant on public transit.

While the population of Staten Island is growing, it is also becoming steadily older. Based on the City's latest population projections, the number of Staten Islanders aged 65 years or over is expected to grow from 59,344 in 2010 to 97,883 by 2040, an increase of approximately 65 percent.²³ This increase is the largest of any borough, and significantly greater than the 40.7 percent increase projected for New York City as a whole. While many factors influence older adults' use of public transit, research shows that transit can provide older adults who choose not to or are unable to drive with a means of independent travel and improved mobility.²⁴ Transit is also vital to connecting older adults to health care and other community resources.

²⁰ <https://www.silive.com/news/2019/04/staten-island-was-the-only-nyc-borough-to-see-a-population-increase-in-2018.html>

²¹ New York City Department of City Planning. *New York City Population Projections by Age/Sex & Borough 2010-2040*
https://www1.nyc.gov/assets/planning/download/pdf/data-maps/nyc-population/projections_report_2010_2040.pdf

²² <https://www.census.gov/quickfacts/richmondcountystatenislandboroughnewyork>

²³ <https://www.census.gov/quickfacts/richmondcountystatenislandboroughnewyork>

²⁴ University Transportation Research Center Region 2. *Access to Public Transit and Its Influence on Ridership for Older Adults in Two U.S. Cities*.
http://www.utrc2.org/sites/default/files/pubs/access-transit-ridership-older-adults-journal_0.pdf



Adopted plans for the North Shore and all of Staten Island have established economic development goals that require efficient, reliable transportation.

The North Shore has a diverse range of commerce that includes maritime industries, light industrial activities, service businesses, educational and historic centers, and neighborhood commercial centers. The area has experienced substantial economic growth in recent years as the borough has rebounded from the damage caused by Superstorm Sandy. Between 2012 and 2017, employment on all of Staten Island grew by 11,000 jobs; taxable sales in the same period grew by 16 percent, with the North Shore experiencing the fastest growth in the borough at 22 percent²⁵. Several large redevelopment programs are underway in the St. George area, and recently completed warehouse facilities for Amazon and Ikea at Phase 1 of the Matrix Global Logistics Park on the West Shore are expected to employ more than 4,000 workers. From 2006 to 2016, the number of Staten Islanders commuting within the borough has increased by 30 percent. This underscores the need for frequent and reliable transit service to move residents and workers between neighborhoods and employment centers both on and off the island.

Recent planning efforts seek to continue these economic development trends. The *North Shore 2030* study identified several economic growth objectives, including job creation and retention, the future reuse of the former North Shore Railroad right-of-way, and the provision of improved transit and roadway connections. Building on the recommendations identified in *North Shore 2030*²⁶, several communities, including Port Richmond (2014)²⁷ and West Brighton and New Brighton (2016)²⁸, have worked with the Department of City Planning to envision the future of growth and transportation on the North Shore. Collectively, these studies outline a need for enhanced connections, greater mobility, and improved public

²⁵ Office of the New York State Comptroller, *An Economic Snapshot of Staten Island*. September 2018. <https://osc.state.ny.us/osdc/rpt7-2019.pdf>. Taxable sales are sales of goods or services that are subject to sales tax.

²⁶ <https://www.nycedc.com/resource/north-shore-2030>

²⁷ <https://www1.nyc.gov/site/planning/plans/port-richmond-boa/port-richmond-boa.page>

²⁸ <https://www1.nyc.gov/site/planning/plans/west-brighton-boa/west-brighton-boa.page>



transportation options to support the anticipated level of economic development.

The existing transportation network is physically constrained and limits mobility for general-purpose and transit vehicles.

The North Shore's roadway network, based on former Native American trails, is influenced by the area's hilly topography and contains few direct east-west through streets. These conditions have resulted in an irregular street grid characterized by circuitous routes, sharp curves, and misaligned intersections. Roadway capacity and maneuverability for buses are constrained by narrow curb-to-curb widths, winding roadway alignments, and on-street parking, which have a severe impact on the reliability of bus routes serving the North Shore. Sharp curves, steep hills, narrow lanes, and a lack of turn lanes reduce travel speeds. Buses picking up or dropping off passengers often block traffic when they are stopped, due to the absence of bus pullout areas or travel lanes for traffic to bypass. The two-lane corridors pose additional challenges near bus stops, as drivers cross into oncoming traffic lanes when clear to pass buses stopped at a bus stop. All these factors combine to impede the efficiency of surface transit operations along the North Shore.

Goals and Objectives

The goals and supporting objectives of the Proposed Project are shown in Table 1. The proposed transportation improvements were developed to cost-effectively improve transit accessibility, reduce travel time, improve reliability, and support Staten Island's growth objectives within a reasonable timeframe. They were also designed to provide benefits to community character and avoid or minimize impacts on the environment.



Table 1 – Goals and Objectives

Goal	Objective
<p>Improve Mobility</p>	<ul style="list-style-type: none"> » Provide increased and improved travel options along Staten Island’s North Shore. » Provide a well-integrated and efficient transit system. » Improve transit access for the transit-dependent and transit-reliant. » Reduce travel time for linked, Manhattan-bound trips. » Reduce crowding on transit services. » Improve transit reliability. » Provide improved transit access to growing activity centers. » Reduce increasing roadway congestion by attracting auto users to transit.
<p>Preserve and Enhance the Environment, Natural Resources and Open Space</p>	<ul style="list-style-type: none"> » Improve air quality by providing transit alternatives that moderate the increase of vehicle emissions. » Minimize potential adverse impacts on residential areas, businesses and the built environment from the operation of a transit mode on the North Shore. » Minimize potential adverse impacts on the natural environment from the operation and construction of a transit mode on the North Shore. » Maintain safe and efficient access to land uses along the North Shore.
<p>Maximize Limited Financial Resources for the Greatest Public Benefit</p>	<ul style="list-style-type: none"> » Make use of existing capacity in transportation corridors, assets and infrastructure. » Advance the most cost-effective transportation options. » Increase revenue potential, thereby minimizing the level of subsidy required. » Develop transit options that use known and proven technologies suitable for use on the North Shore. » Provide a transportation solution that can be implemented in a timely manner.



3 Proposed Project and Alternatives

Introduction

The identification and evaluation of a range of reasonable alternatives to the Proposed Project, including a No-Action Alternative, is a required component of an EIS under SEQRA and NEPA. This allows decision-makers to consider whether alternatives exist that would avoid or minimize significant adverse environmental impacts while satisfying the goals of the Proposed Project. The alternatives development and screening process for the Proposed Project, summarized below, was linked to both the Purpose and Need and Goals and Objectives, as described in Chapter 2 of this document.

Alternatives Development Process

In August 2012, MTA-NYCT published the SINSAA, which assessed the implementation of new or enhanced transit service along the North and West Shores of Staten Island between West Shore Plaza and St. George Terminal.²⁹ The 2012 SINSAA identified and evaluated eight alternatives representing a mix of modes, routes, alignments and termini with a desired re-use of the former North Shore Railroad right-of-way for transit service. These “Long List Alternatives” included:

- » Transportation Systems Management (TSM)
- » Heavy Rail along the Staten Island Railway (SIR – St. George to Arlington)

²⁹ <http://web.mta.info/mta/planning/nsaa/pdfs/FinalReport.pdf>



STATEN ISLAND NORTH SHORE BUS RAPID TRANSIT

- » Electric Light Rail (LRT – St. George to Arlington)
- » Diesel Light Rail (DLRT – St. George to Arlington)
- » Electric Light Rail (LRT – St. George to West Shore Plaza)
- » Diesel Light Rail (DLRT – St. George to West Shore Plaza)
- » Bus Rapid Transit (BRT – St. George to West Shore Plaza)
- » Ferry/Water Taxi (Kill Van Kull from St. George Terminal to Mariners Harbor)

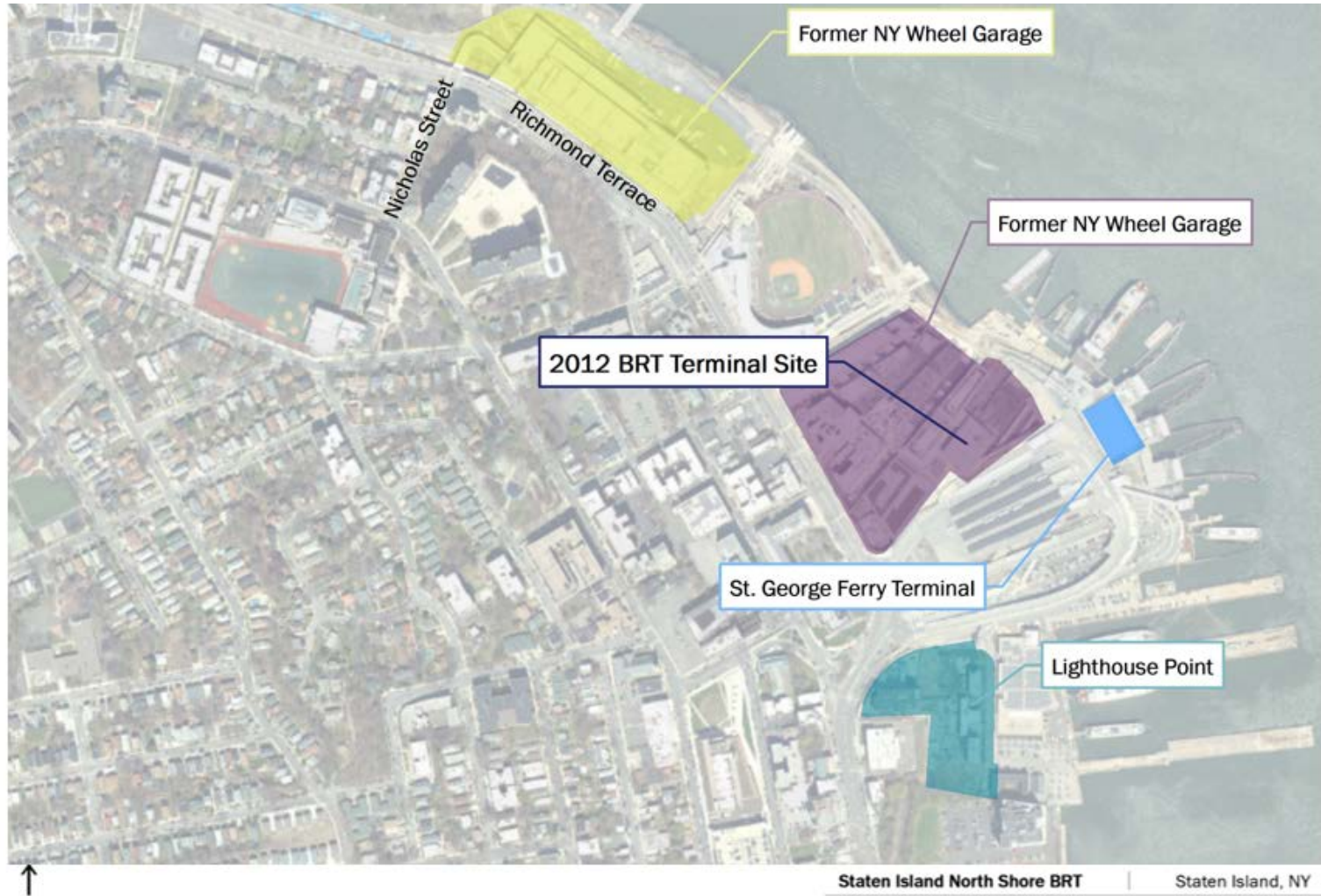
Three of the eight alternatives were advanced and further developed as part of a “Short List,” including **Transportation Systems Management (TSM)**, **Electric Light Rail (LRT – St. George to West Shore Plaza)**, and **Bus Rapid Transit (BRT – St. George to West Shore Plaza)** alternatives. The TSM Alternative was not advanced as it was determined to be the least effective in terms of improving mobility and meeting the project goals and objectives. Ultimately, after extensive analysis as well as stakeholder and public outreach, the 2012 SINSAA identified the BRT Alternative as the Preferred Alternative based on its potential to reduce travel time, improve transit access, and attract the most riders with lower capital and operating costs than the LRT Alternative.

Since the publication of the SINSAA in 2012, the portion of St. George near NYCDOT’s St. George Terminal has undergone significant changes. The construction of the Empire Outlets and the New York Wheel parking garage, as well as resiliency-related infrastructure measures, have complicated access between Nicholas Street and St. George Terminal in St. George, precluding the proposed St. George BRT terminal as originally planned (see Figure 4). Given these changes, a Supplement to the 2012 SINSAA (“the Supplement”) was published in June 2019.³⁰ The Supplement builds on the substantial work that was previously completed, reassesses the potential accessibility of the SINSAA BRT and LRT alternatives to St. George Terminal, and re-evaluates those alternatives against the Proposed Project’s goals and objectives. The common alignment for the BRT and LRT alternatives west of Nicholas Street has not changed since the completion of the 2012 SINSAA, and thus the focus of the updated analyses was in St. George.

³⁰ <https://new.mta.info/sites/default/files/2019-06/FINAL%20Staten%20Island%20North%20Shore%20Alternatives%20Analysis%20Supplement.pdf>



Figure 4. Recent Development in St. George



Recent Development in St. George



The Supplement provided information regarding the updated LRT and BRT Alternatives and an evaluation that confirmed their feasibility and ability to serve a terminal station at St. George with a new, dedicated ROW transit facility. Despite a slightly greater travel time and some impacts to Richmond Terrace (reduced on-street parking), the BRT Alternative still provided greater potential to attract transit riders at a lower cost than the LRT Alternative. Consistent with the 2012 SINSAA, the BRT Alternative remains the higher rated alternative.

The BRT Alternative was presented as the Recommended Alternative at a public meeting held at Snug Harbor on May 8, 2019. Feedback received at this meeting and from the public and local elected officials, along with the analyses presented in the SINSAA and the Supplement, reconfirmed the BRT Alternative as the Preferred Alternative for new transit service on the North Shore.

No-Action Alternative

The No-Action Alternative (or No-Action condition) serves as a baseline, against which the environmental effects of the Build Alternative can be compared. Under the No-Action condition, the Proposed Project would not be implemented, and the former North Shore right-of-way would remain abandoned and unimproved. The No-Action Alternative assumes that existing NYCT bus service would continue to operate on Richmond Terrace and throughout the North Shore on a constrained roadway network. However, without the Proposed Project in place, the ability to add enhanced public transit capacity to meet growing demand would be severely hindered.

The No-Action condition incorporates known planned and funded roadway and transit improvements as well as development projects that are likely to be implemented by the project's Build Year of 2027, including development currently under construction or that which can be reasonably anticipated. The agencies to be contacted to obtain this information may include: the New York City Departments of City Planning, Parks and Recreation, and Transportation as well as the New York City Economic Development Corporation.



Build Alternative

The Build Alternative, referenced as the Bus Rapid Transit (BRT) Alternative in the 2019 Supplement, would involve the implementation of BRT service between West Shore Plaza and St. George Terminal. The approximately 8-mile proposed alignment would comprise approximately 5.3 miles of ROW from the former North Shore Railroad, and approximately 2.7 miles of City roadways such as Richmond Terrace and South Avenue. The proposed alignment, stations, and service for the project are described below, along with potential design options under consideration.

Proposed BRT Alignment Location

As noted in the Project Overview, the proposed alignment comprises varying types of ROW segments. The proposed BRT service would operate within a two-lane, dedicated busway with the potential passing lanes at certain stations on the portion of the proposed alignment that uses the former North Shore Railroad right-of-way. The proposed BRT would operate in mixed-traffic (with no exclusive lanes) on the portion of the alignment that uses South Avenue.

As the BRT service travels west from the existing bus terminal at St. George, the BRT would operate on Richmond Terrace in a new, approximately 0.5-mile exclusive two-lane median busway with a center median and mountable curbs. The exclusive BRT alignment would transition from Richmond Terrace to the former North Shore Railroad ROW at Nicholas Street via a new ramp. The at-grade segment of the former North Shore Railroad ROW generally abuts the waterfront as it travels west. The North Shore's shoreline has been notably altered because of both continuous natural erosion and severe weather events. Additionally, larger vessels passing through the Kill Van Kull as a result of the Bayonne Bridge modification are anticipated to further exacerbate erosion. At present, the right-of-way and bulkhead in the vicinity of Sailors' Snug Harbor has sustained substantial storm damage and has largely been submerged by the Kill Van Kull. Conceptual design options under consideration for this area (described further below) may include an in-water causeway or shifting the proposed busway away from the shoreline and closer to Richmond Terrace.



STATEN ISLAND NORTH SHORE BUS RAPID TRANSIT

At Heritage Park, the at-grade segment of the exclusive BRT alignment would transition to the former North Shore Railroad a viaduct structure (for approximately 1.2 miles) that extends past the Port Richmond WPCP and Bodine Creek, shifting slightly inland as it crosses through Port Richmond over Richmond Terrace. East of the Bayonne Bridge, near John Street, the viaduct transitions to the ROW's open-cut section that extends west toward the existing freight terminal. The open-cut is approximately 0.9 miles long and is situated roughly 20 to 30 feet below grade with varying widths. In the western section of the cut near Van Name and Union Streets, the BRT would be situated to safely coexist with the existing rail freight service. Near Roxbury Street, the proposed alignment would leave the open-cut and rise to grade below the South Avenue bridge. It would then transition through Arlington where it would join South Avenue at approximately Cable Way where it would operate without exclusive lanes in mixed traffic along South Avenue to West Shore Plaza.

The proposed BRT service would utilize the existing bus depot at the St. George Terminal as its eastern terminus and the existing West Shore Plaza as the western terminus. In between these termini, twelve BRT stations, with amenities such as platforms and shelters, would be provided, as shown below. The specific locations and layouts of the proposed stations will be determined based on their ability to maximize the transportation goals of the project while minimizing environmental impacts, where practicable.

Terminus	Stations by Segment				Terminus
	At-Grade	Viaduct	Open-Cut	On-Street (South Avenue)	
<ul style="list-style-type: none"> • St. George Terminal (Eastern) 	<ul style="list-style-type: none"> • West Brighton Station • Livingston Station • New Brighton Station 	<ul style="list-style-type: none"> • Port Richmond Station 	<ul style="list-style-type: none"> • Mariners Harbor Station • Elm Park/Morningstar Station 	<ul style="list-style-type: none"> • Teleport Station • Lois Lane Station • Bloomfield Station • Goethals Road Station • Forest Avenue Station • Arlington Station 	<ul style="list-style-type: none"> • West Shore Plaza (Western)

It is anticipated that stations in the open-cut and elevated viaduct sections would be accessed via stairs and ADA-compliant ramps or elevators. Stations along South Avenue, where the bus would operate with traffic in non-separated lane, would be similar to existing transit stops on Staten Island. Transit Signal Priority (TSP) would be implemented at appropriate intersection locations where feasible. Access to the proposed busway would be provided



at four points, located in Arlington, at Bard Avenue, at an extended Alaska Street and at Nicholas Street. Additional considerations include the curb-to-curb reconstruction of Richmond Terrace between Nicholas Street and the St. George Terminal to facilitate an exclusive busway and the design treatment of the submerged ROW proximate to Snug Harbor (see overview of design options below).

The engineering of the project components, identified above, (e.g., station areas, busway, access points, etc.) will be further refined to a conceptual level to support the environmental analysis. The Build Alternative will be fully described in the EIS.

Proposed BRT Service

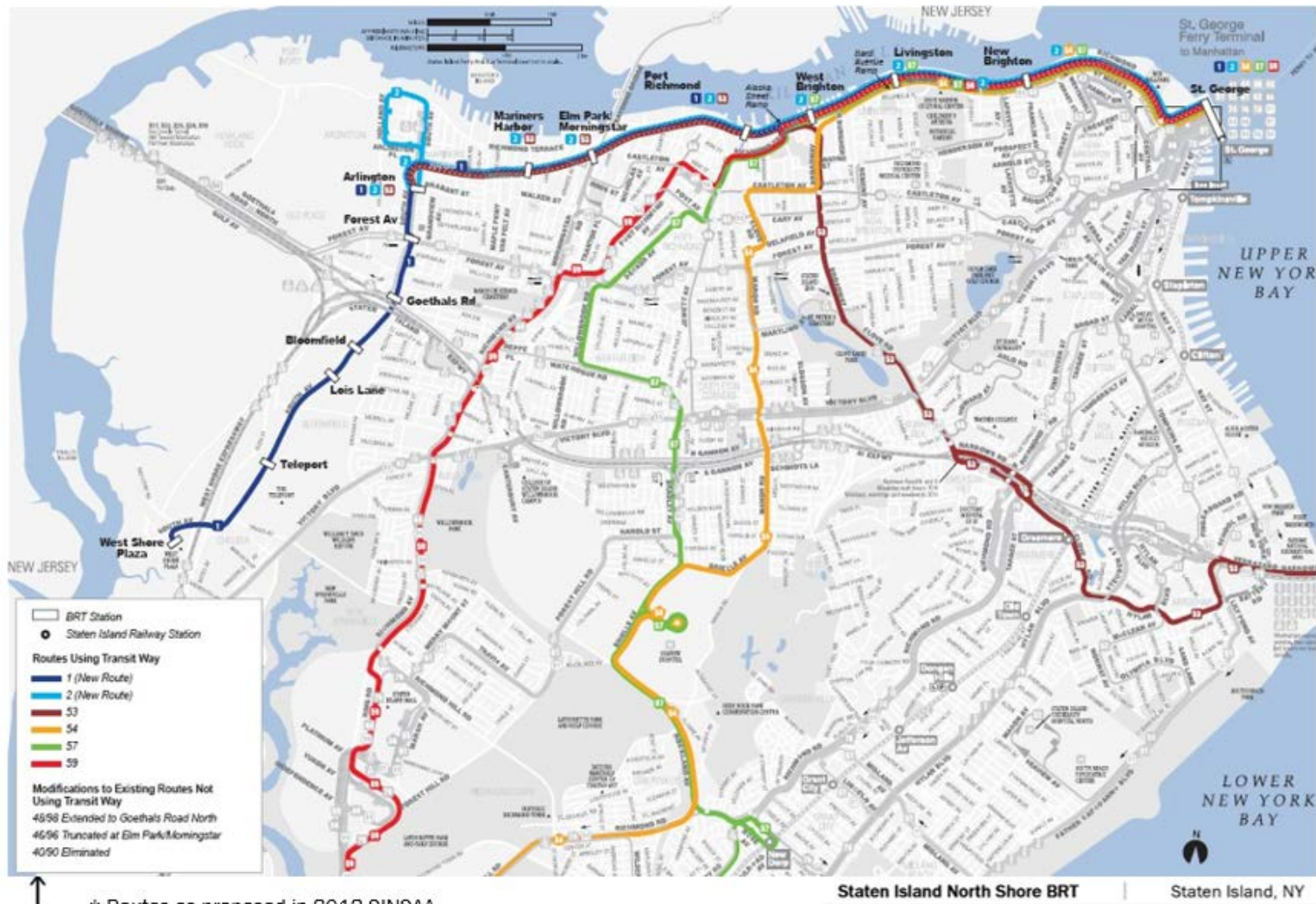
Figure 5 shows BRT and feeder routes as proposed in the 2012 SINSAA. An operating plan for BRT service will be developed and refined; additional detail will be provided in the EIS by MTA-NYCT. Currently, it is anticipated that two new BRT routes operating as the S1 and S2 (see Figure 6), as well as extended/rerouted existing bus service (feeder routes), would make use of the proposed BRT alignment, also referred to as a busway. The newly proposed BRT routes are assumed to utilize a fully electric fleet. It is anticipated that existing NYCT bus depots on Staten Island would be utilized for the storage, inspection, and maintenance of the BRT fleet. Specifics regarding these depot locations will be further refined as the service plan is more fully developed and documented in the EIS.

- » The S1 would operate via an enhanced on-street South Avenue bus corridor from the West Shore Plaza commercial center to the new, proposed Arlington Station, where it would enter the busway for the remainder of the trip to St. George. This route would create connectivity between West Shore Plaza, South Avenue communities and the St. George Terminal.
- » The S2 would travel between the St. George Terminal and the Teleport in peak hours and St. George and Arlington in off-peak hours.
- » Headways of local bus routes would be adjusted, and there would be some modification of existing bus routes (e.g., the S40/S90).
- » Buses from other locations (specifically the S53, S54, S57, and S59) would enter the busway at access points to provide improved travel times to St. George.



STATEN ISLAND NORTH SHORE BUS RAPID TRANSIT

Figure 5. BRT Service & Feeder Routes (2012 SINSAA)



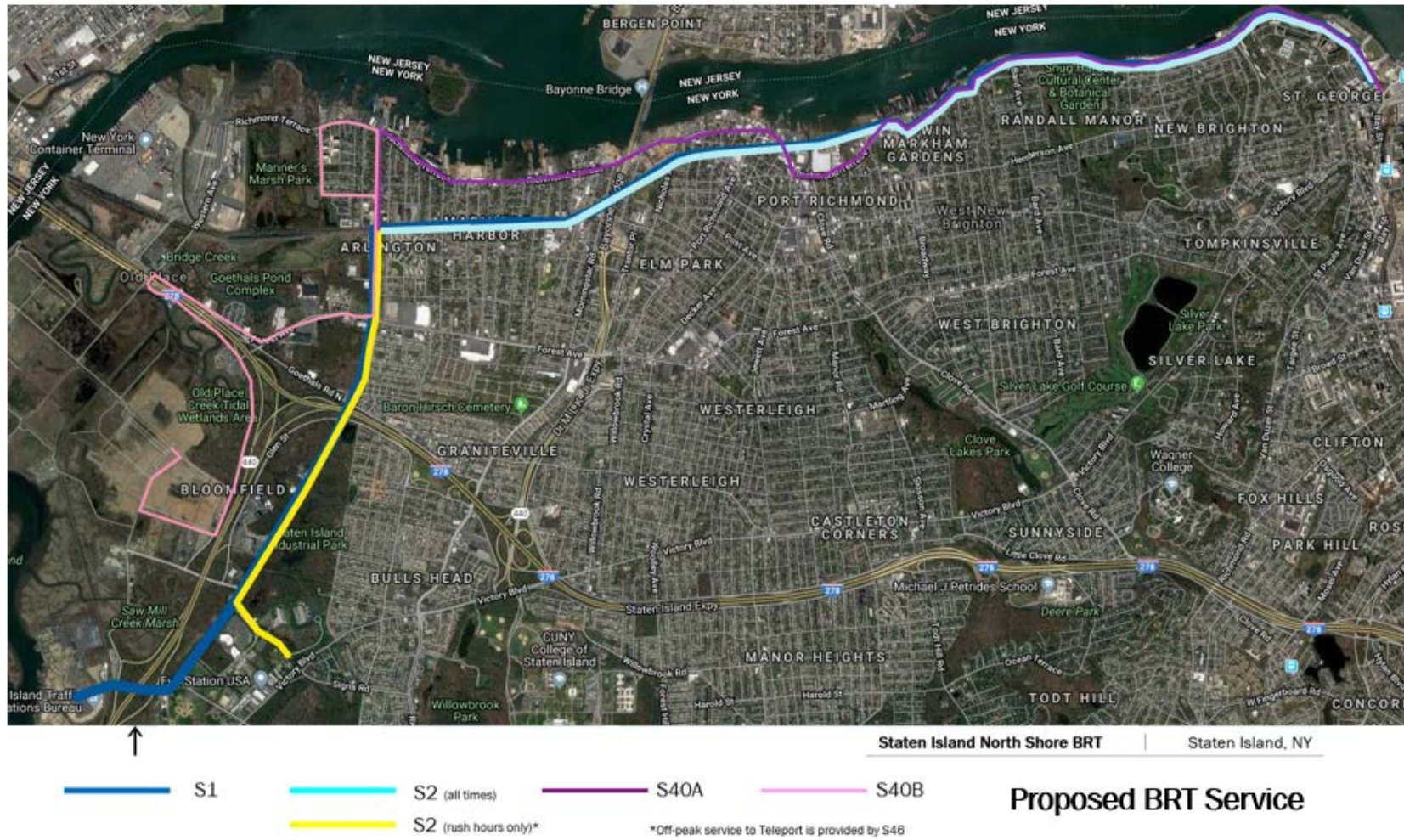
↑ * Routes as proposed in 2012 SINSAA

BRT Service & Feeder Routes (2012 SINSAA)



STATEN ISLAND NORTH SHORE BUS RAPID TRANSIT

Figure 6. Proposed BRT Service





Design Options

In several locations along the alignment, design options are being considered to avoid or minimize the impacts of the Proposed Project. These design options involve shifts in the alignment to move farther away from protected resources or established waterfront businesses bisected by the ROW. The evaluation of the design options in the EIS, described briefly below, will be tailored to the specific technical environmental resource categories in which the potential design option impacts would differ from those of the Build Alternative.

Snug Harbor Design Options

Near Snug Harbor, the former North Shore Railroad right-of-way is located north of Richmond Terrace. A narrow strip of parkland that is part of Snug Harbor runs between Richmond Terrace and the ROW in this area (see Figure 2: At-Grade Photographs). The former railroad ROW was originally located on dry land to the north of this strip of parkland, but due to decades of severe weather—most recently Hurricane Sandy—the shoreline has eroded, and much of the ROW that was formerly on land is now submerged in the waters of the Kill Van Kull. MTA-NYCT has identified the potential alignment options for this area as follows:

- » **Shifting the ROW:** In this option, land from the existing right-of-way (which MTA-NYCT will acquire from the City) would be exchanged for land adjacent to Richmond Terrace that is currently mapped parkland and part of Snug Harbor. The BRT alignment would be constructed in the acquired area closer to Richmond Terrace, while the former right-of-way to the north would become parkland.

Existing ROW: This option would make use of the existing ROW in the shoreline area. Two potential design treatments to address the existing ROW in this area will be analyzed in the EIS. These include:

- **BRT Causeway:** This design treatment would make use of the existing ROW with the BRT roadway elevated above the water on a causeway structure supported by columns over the submerged areas.
- **Refilling to the Remaining Bulkhead Line:** This design treatment would restore the submerged ROW and bulkhead through the creation of an elevated berm.



Land Exchanges at Maritime Industrial Properties

The ROW bisects two active water-dependent industrial uses situated along the Kill Van Kull (Caddell Dry Dock and Atlantic Salt). Although these businesses, Caddell Dry Dock and the former U.S. Gypsum Company (now Atlantic Salt), previously operated when the North Shore Railroad was an active railroad through their property, the re-establishment of transit service along the ROW would likely be problematic for the viability of their current operations. Refer to Figure 7 for representative photographs. As such, a shift in alignment to the south will be evaluated to determine if it would enable these property owners to maximize waterfront access for their business functions.



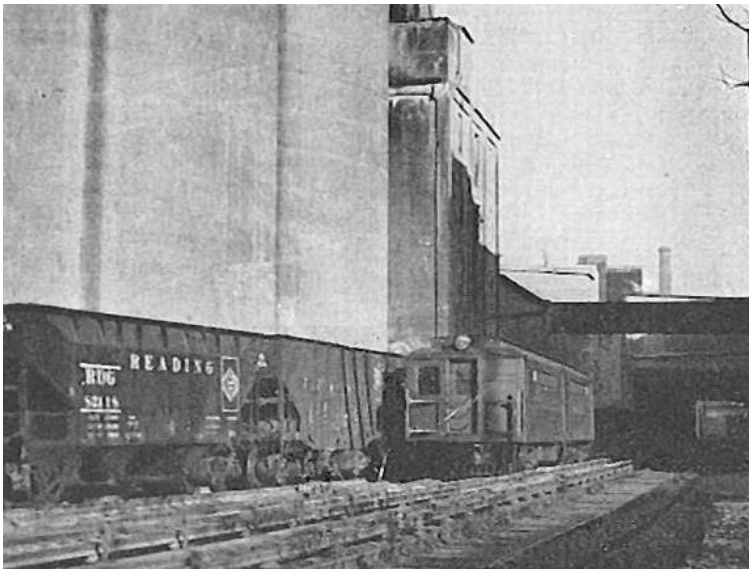
Figure 7. Photographs of Caddell Dry Dock & Atlantic Salt



View of ROW through Caddell Dry Dock & Repair



View of remnant track & ROW through Caddell Dry Dock & Repair



Former passenger rail operating through U.S. Gypsum Plant (now Atlantic Salt)



View of Atlantic Salt, present day



4 Environmental Analysis Framework

Introduction

This chapter of the Draft Scoping Document describes the framework to be followed for the environmental analysis. MTA-NYCT, as lead agency, has determined that the size and scope of the Proposed Project may result in one or more significant adverse environmental impacts and thus require an EIS.

Regulatory Approvals

As described in the Introduction Chapter, MTA-NYCT, pursuant to SEQRA procedures, will initiate an EIS in conformance with all applicable laws and regulations. This Draft Scoping Document was prepared in accordance with those laws and regulations. As noted in Chapter 1, the EIS will be prepared in compliance with NEPA and CEQR, as required. Refer to Chapter 6, Additional Studies, for further detail on NEPA-related procedural requirements. Potential approvals that may be obtained for the Proposed Project include:

Potential City Approvals

Transfer of Property

- » Currently, the ROW is under New York City ownership and is anticipated to be conveyed to MTA-NYCT in ownership or added to the MTA's Master Lease Agreement with the City. The specific transfer mechanism and ownership status of the ROW will be determined at a later date.



Potential Land Use Actions

- » Landfills: ULURP application to facilitate constructing fill at the Snug Harbor waterfront portion of the proposed alignment
- » Change in the City Map: ULURP application to facilitate a change in the City map may be require at several locations including: Roxbury Street, Richmond Terrace, parkland at Snug Harbor, and parkland near the intersection of Jersey Street and Richmond Terrace.
- » Cross Access Connections: Non-ULURP application from the New York City Department of City Planning for cross access for the potential station surface parking facilities located at Arlington Station and Livingston Station.
- » Acquisitions and Dispositions: ULURP application(s) to acquire private properties and dispose of city-owned properties to facilitate the proposed alignment.

Other Potential Approvals

- » US Army Corps of Engineers, Clean Water Act Section 404/Section 10 permit(s)
- » US Coast Guard, Rivers and Harbors Act Section 9 permit
- » New York State legislation authorizing the alienation of mapped parkland
- » New York State Historic Preservation Office and New York City Landmarks Preservation Commission, State Historic Preservation Act of 1980 (SHPA), Section 14.09 of the *Parks, Recreation and Historic Preservation Law (PRHPL)*.
- » New York State Department of Environmental Conservation, State Pollutant Discharge Elimination System (SPDES) Permit; tidal and freshwater wetlands permit

Study Area

A study area is the area that may be directly or indirectly affected by a project. The primary study area for the Proposed Project includes the project site (alignment) and a 400-foot wide buffer around each side of the approximately 8-mile proposed alignment. The study area will vary if appropriate according to the resource under consideration and the scope of potential impacts. If a specific resource study area differs from the primary study area, then it will be clearly defined in the methodology .



Analysis Year

The future build analysis of the Proposed Action will be performed for 2027 (Build Year), the expected year of completion of the Proposed Project. This analysis year was selected because 2027 is projected to be the first full year of operation. The No-Action condition will serve as the 2027 baseline, or the projected environmental setting where the Proposed Project would not be constructed. It will be used as a basis for evaluating potential impacts of the Proposed Project. In addition to analysis of the two future scenarios, the EIS will describe the existing conditions for each technical area, or resource, to be assessed.

Organization of the Environmental Analysis

As described in greater detail below, the EIS will contain:

- » A description of the Proposed Project, the required actions and approvals, and the environmental setting;
- » An analysis of the environmental impacts of the Proposed Project;
- » An identification of any adverse environmental effects that cannot be avoided if the Proposed Project is implemented;
- » A discussion of alternatives to the Proposed Project;
- » An identification of irreversible and irretrievable commitments of resources that would be involved if the Proposed Project is built; and
- » A description of measures proposed to minimize or fully mitigate any significant adverse environmental impacts.

Methodology

The SEQRA EIS will use the *CEQR Technical Manual*, where applicable, on the methodologies and impact criteria for evaluating the Proposed Project's potential effects on the environmental technical areas to be studied. In disclosing impacts, the EIS will consider the Proposed Project's potential adverse effects on its environmental setting. The *CEQR Technical Manual* will also guide the development of mitigation measures.

As described above, for each technical area in which the potential for significant adverse impacts exists, the impact assessment will include:

- » A description of existing conditions;



STATEN ISLAND NORTH SHORE BUS RAPID TRANSIT

- » A description of the future without the Proposed Project for the year 2027, when it would be completed and operational (No-Action condition); and
- » A description of the future with the Proposed Project for the year 2027, when it would be completed and operational (With-Action condition).

Comparing the two future scenarios identifies the project's impacts on its environmental setting.



5 EIS Scope of Work

The EIS will contain the following analyses, which will be conducted utilizing the methodologies described below:

Project Description

The project description introduces the reader to the Proposed Project and provides the project design information from which impacts are assessed. The chapter will contain a detailed description of the Proposed Project; the background and history of the Proposed Project; a summary of previous investigations and actions; and a statement of purpose and need, and anticipated benefits of the Proposed Project. The chapter will identify the permits and approvals required for the Proposed Project, including other discretionary actions and review by responsible state and federal agencies. The role of MTA-NYCT, the lead agency for SEQRA, will also be described. Any environmental requirements necessary as part of the Proposed Project will also be identified.

Land Use, Zoning, and Public Policy

A land use analysis characterizes the uses and development trends in the area that may be affected by a Proposed Project and determines whether a Proposed Project is compatible with those conditions. Similarly, the analysis considers the project's effect on, the area's zoning and other applicable public policies. Following *CEQR Technical Manual* guidelines, the land use, zoning, and public policy analysis will be conducted within a study area



extending approximately 400 feet on each side of the Proposed Project limits. The boundaries were chosen to include those communities and uses that could potentially be affected by the Proposed Project. The proposed alignment was divided into seven sections, each of which comprises generally similar land uses and/or reflects a section of the proposed alignment that is distinct from an engineering standpoint (see Figure 6 on following page):

- » **Section 1.** St. George (Richmond Terrace from the St. George Terminal west to Jersey Street)
- » **Section 2.** New Brighton Waterfront (Kill Van Kull shoreline in the New Brighton neighborhood from Jersey Street west to Davis Avenue)
- » **Section 3.** West Brighton Waterfront (generally parallels the Kill Van Kull shoreline from Davis Avenue to the foot of Alaska Street)
- » **Section 4.** Viaduct (existing viaduct section of the right-of-way from Alaska Street west to John Street)
- » **Section 5.** Open-Cut Section (follows open-cut section of the former right of way from John Street west to Harbor Road)
- » **Section 6.** Arlington Station (follows the former right-of-way along an at-grade section from Harbor Road to South Avenue, where the BRT route would turn south to Cable Way/Netherland Avenue)
- » **Section 7.** South Avenue (south of Cable Way/Netherland Street to West Shore Plaza)

Land use maps by section are shown on the following pages (refer to Figures 8 through 14).

Key issues include the compatibility of the Proposed Project with existing patterns of development, including residential neighborhoods, commercial uses, and community facilities; the Proposed Project's consistency with underlying zoning and officially approved or adopted future plans and programs (e.g., North Shore 2030); and the Proposed Project's potential effects on sensitive uses and neighborhood activity patterns. The land use chapter will provide the following:

- » A brief development history of the study area, which will include the Proposed Project limits and a distance of approximately 400 feet around this area;



STATEN ISLAND NORTH SHORE BUS RAPID TRANSIT

- » A description of existing conditions in the study area, including existing land uses and the underlying zoning;
- » A description of land use patterns in the study area, including recent development trends;
- » Existing zoning and recent zoning actions, if any, in the study area;
- » Other public policies that may apply to the study area, including any formal neighborhood or community plans;



STATEN ISLAND NORTH SHORE BUS RAPID TRANSIT

Figure 8. Section Overview Map





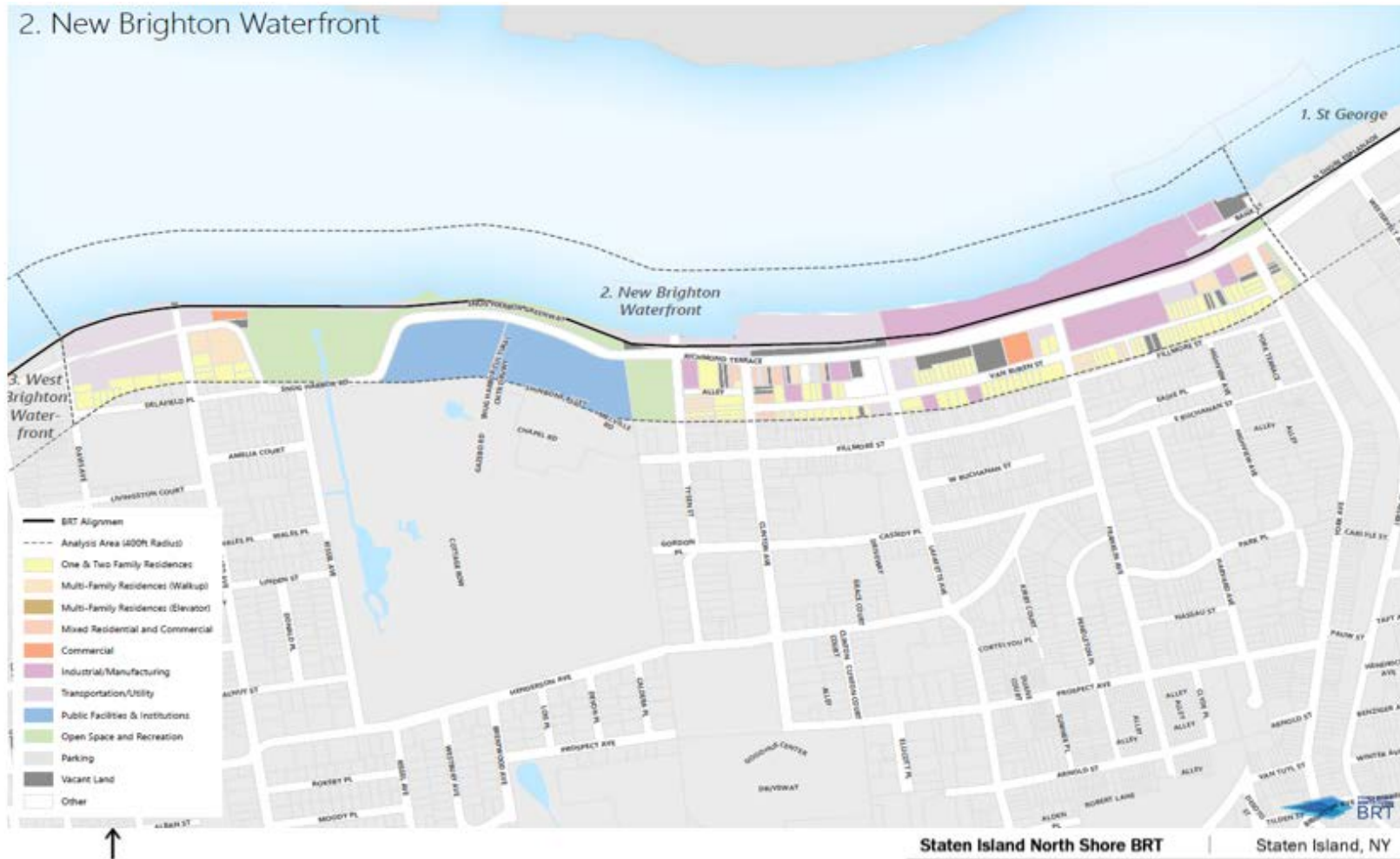
Figure 9. St. George Land Use



Land Use



Figure 10. New Brighton Land Use



Land Use



Figure 11. West Brighton Land Use





Figure 12. Viaduct Land Use





Figure 13. Open-Cut Section Land Use



Land Use



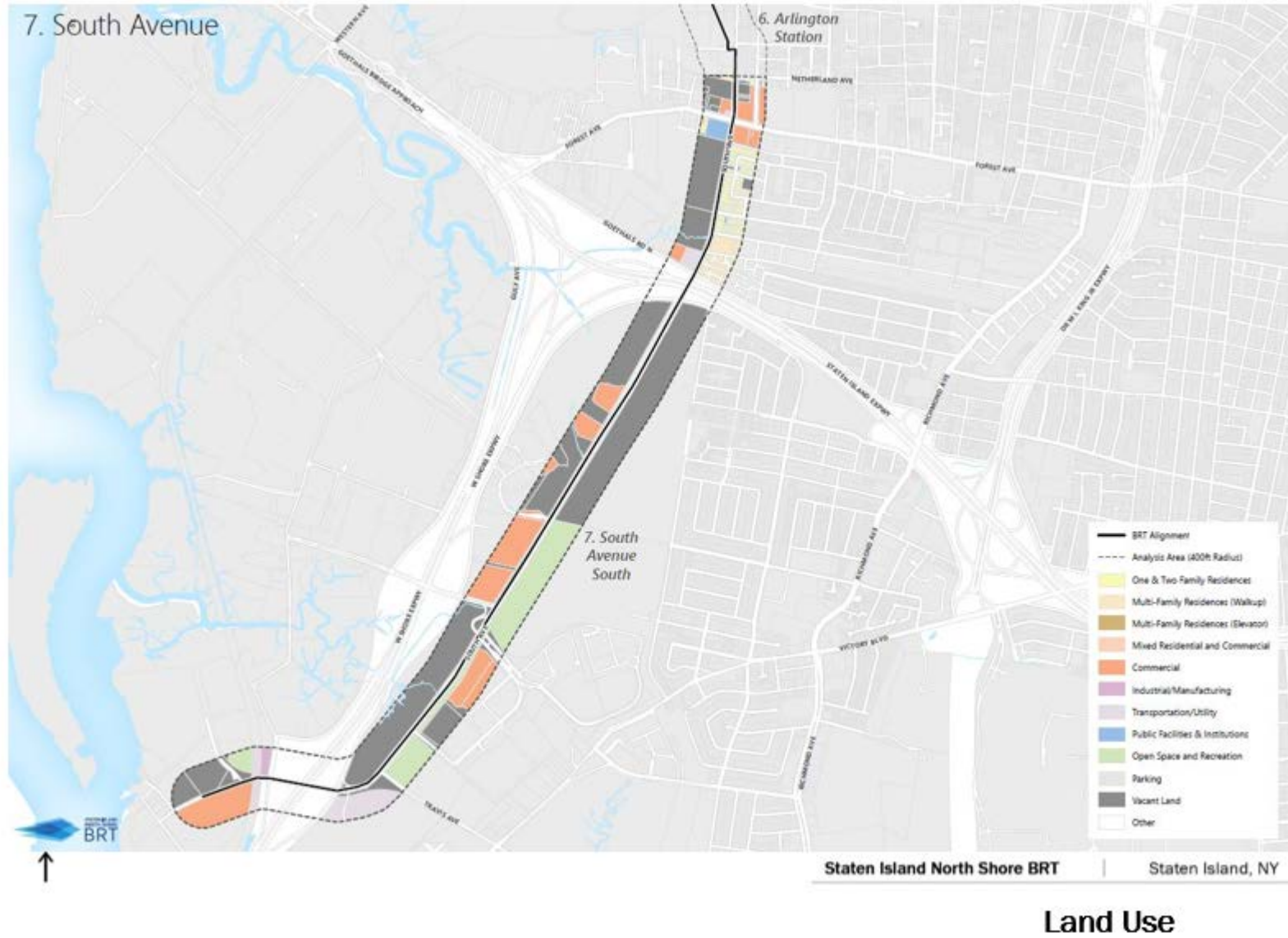
Figure 14. Arlington Station Land Use



Land Use



Figure 15. South Avenue Land Use





STATEN ISLAND NORTH SHORE BUS RAPID TRANSIT

- » A discussion of other future projects in the study area that would be completed by the build analysis year, including how these projects would affect land use patterns and development trends;
- » Identification of any pending zoning actions or other public policy actions that could affect land use patterns and trends in the study areas, including plans for public improvement; and
- » An assessment of the impacts of the Proposed Project on land use and land use trends, zoning, and public policy, including impacts related to issues of compatibility with surrounding land use, consistency with zoning and other public policies, and the effect of the Proposed Project on development trends and conditions in the area.

As shown in Figure 16, the Proposed Project limits are located partially within the New York City Coastal Zone³¹; therefore, an assessment of the Proposed Project's consistency with the New York City Waterfront Revitalization Program (WRP) will also be prepared. NYC Waterfront Revitalization Program Policies specific to mass transit such as Policy 1.3 will be noted in the consistency assessment.³²

Socioeconomic Conditions

The socioeconomic character of an area includes its population, housing, and economic activity. Socioeconomic changes can occur when a project directly or indirectly changes any of these elements. According to the *CEQR Technical Manual*, the six principal issues of concern are whether a project would result in: (1) direct residential displacement; (2) direct business displacement; (3) indirect residential displacement; (4) indirect business displacement due to increased rents; (5) indirect business displacement due to retail market saturation; and (6) adverse effects on a specific industry.

According to the *CEQR Technical Manual*, which is being utilized for the EIS analysis, direct displacement of less than 500 residents or 100 employees would not typically be expected to substantially alter the socioeconomic character of a neighborhood. The Proposed Project would unlikely exceed any of the thresholds requiring a detailed socioeconomic analysis. To

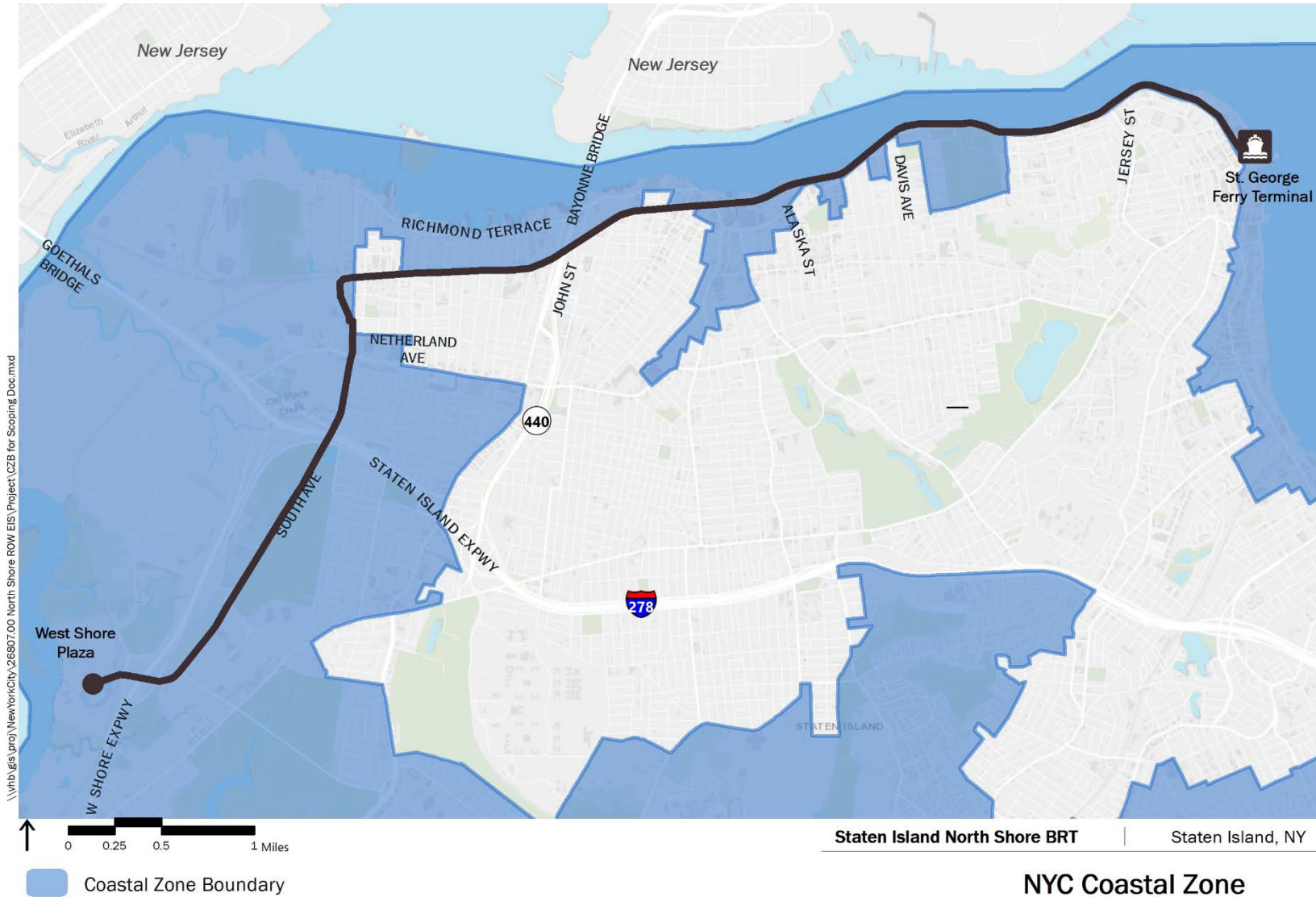
³¹<http://dcp.maps.arcgis.com/apps/View/index.html?appid=90e3a9f927c2471483631a20e8a41d8d>

³² <https://www1.nyc.gov/assets/planning/download/pdf/applicants/wrp/wrp-2016/nyc-wrp-partII.pdf#page=2>



STATEN ISLAND NORTH SHORE BUS RAPID TRANSIT

Figure 16. NYC Coastal Zone





confirm this conclusion, the EIS will include a preliminary screening assessment of the Proposed Project for the above referenced six principal issues of concern, consistent with CEQR. If the preliminary assessment concludes that a detailed assessment is warranted, the analyses will be conducted in accordance with *the CEQR Technical Manual*.

Community Facilities and Services

The *CEQR Technical Manual* defines community facilities as public or publicly funded schools, libraries, childcare centers, health care facilities, and fire and police protection. A project can affect these facilities and services when it physically displaces or alters a community facility or causes a change in population that may affect the services delivered by a community facility, such as by creating a demand that could not be met by the existing facility. The Proposed Project would be unlikely to exceed any of the thresholds requiring a detailed community facilities analysis. To confirm this conclusion, the EIS will include a preliminary screening assessment of the Proposed Project utilizing CEQR.

Open Space

The *CEQR Technical Manual* recommends performing an open space assessment if a project would have a direct or indirect effect on an area open space. The Proposed Project is adjacent, in proximity or may directly impact a number of designated park and open space areas. The potential changes to parklands that may result from the Proposed Project will therefore warrant an assessment of direct effects on area open spaces. The analysis will assess, as appropriate, any potential displacement of open space and recreational resources and potential increases in noise, air pollutants, or shadows from the Proposed Project. The Proposed Project would not increase the residential or employee population in the study area. As such, the Proposed Project would not have an indirect effect on open space. The potential need for parkland alienation will also be evaluated.

Shadows

The *CEQR Technical Manual* recommends a shadows assessment for Proposed Projects that would result in new structures (or additions to existing structures) greater than 50 feet in height or located adjacent to, or across the street from, a sunlight-sensitive resource. Such resources include



publicly accessible open spaces, sunlight-sensitive natural features, or historic resources with sun-sensitive features. If warranted (i.e., if new or modified elevated BRT structures would exceed 50 feet in height and have the potential to create new shadows on adjacent sensitive resources, particularly adjacent open spaces), a shadows assessment will be provided following the methodology described in the *CEQR Technical Manual*.

Historic and Cultural Resources

The *CEQR Technical Manual* identifies historic and cultural resources as districts, buildings, structures, sites, and objects of historical, aesthetic, cultural, and archaeological importance. Historic and cultural resources include designated New York City Landmarks (NYCLs) and Historic Districts; properties calendared for consideration as NYCLs by the New York City Landmarks Preservation Commission (LPC) or determined eligible for NYCL designation (NYCL-eligible); properties listed on the State and National Register of Historic Places (S/NR) or formally determined eligible for S/NR listing (S/NR-eligible), or properties contained within a S/NR listed or eligible district; properties recommended by the New York State Board for listing on the S/NR; National Historic Landmarks (NHLs); and potential historic resources (i.e., properties not identified by one of the programs listed above, but that appear to meet their eligibility requirements). According to the *CEQR Technical Manual*, a historic and cultural resources assessment is recommended if there is the potential to affect either archaeological or architectural resources.

The Proposed Project would pass near several designated historic resources, including Sailors Snug Harbor and various sites in the St. George/New Brighton Historic District. The study area may also be sensitive for archaeological resources, subject to further consultation with LPC and the State Historic Preservation Office (SHPO). A historic and cultural resources analysis will be prepared utilizing the *CEQR Technical Manual* guidelines, which will include the following:

- » Identify and delineate the Proposed Project's study area (the Area of Potential Effects [APE]) for direct and indirect effects in consultation with LPC and SHPO;
- » Assess the potential for archaeological resources in the area to be directly affected (the Proposed Project study area) in consultation with LPC and SHPO. If necessary, a Phase 1A Archaeological survey will be



prepared, and based on a review by LPC and SHPO, conclusions and recommendations will be summarized. If any additional archaeological investigations are required (e.g., Phase 2 testing and Phase 3 Data Recovery) and completed during the environmental review, the conclusions and recommendations of these investigations will be summarized in the EIS; if work cannot be completed until after environmental review, the commitments to undertake necessary steps with appropriate consultation will be summarized. All archaeological reports and protocols will be submitted to LPC and SHPO for review and comment and all agency comment letters will be included as an appendix;

- » Map and briefly describe designated architectural resources within the APE, Proposed Project limits, and a study area approximately 400 feet on each side of the Proposed Project's limits of disturbance;
- » Consistent with the *CEQR Technical Manual*, conduct a field survey of the study area to identify any potential architectural resources that could be affected by the Proposed Project. The field survey will be supplemented with research at relevant repositories, online sources, and current sources prepared by LPC and SHPO;
- » Seek determinations of eligibility from LPC and SHPO for any potential architectural resources. Map and describe any architectural resources identified through this process;
- » Assess the potential for the Proposed Project to have direct, physical impacts on architectural and archaeological resources. Assess the Proposed Project's potential to result in any visual and contextual impacts on architectural resources. The analysis will include a description of the consultation undertaken with LPC and SHPO; and
- » Identify any measures that would be necessary to mitigate and/or reduce any potential adverse impacts on historic or cultural resources, in consultation with LPC and SHPO.

Note that, while the analysis described above is generally consistent with the requirements of Section 106 of the National Historic Preservation Act (NHPA), additional coordination with LPC and SHPO will be required as part of NEPA compliance. This is discussed under "Additional Studies" below.

Urban Design and Visual Resources

According to the *CEQR Technical Manual*, a visual resource is the connection from the public realm to important natural or built features, including views of the waterfront, public parks, landmark structures or districts, otherwise distinct buildings or groups of buildings, or natural resources. If a project



would result in physical changes that could be observed by a pedestrian from street level and could potentially change or restrict views of those visual resources, a preliminary assessment of urban design and visual resources should be prepared. While the Proposed Project is not expected to affect urban design in the study area, the EIS will include a detailed analysis of its potential visual impacts on visual resources, specifically in areas where the viaduct and at-grade sections of the proposed alignment may result in changed views at street level. The analysis will include photographs of existing conditions from key viewpoints and renderings of the “with-project” condition for comparison.

Natural Resources

An assessment of natural resources is conducted when a natural resource is present on or near a development site and the project may involve the direct or indirect disturbance of that resource. The *CEQR Technical Manual* defines natural resources as water resources, including surface water bodies and groundwater; wetlands, including freshwater and tidal wetlands; terrestrial resources, such as grasslands and thickets; shoreline resources, such as beaches, dunes, and bluffs; gardens and other ornamental landscaping; and natural resources that may be associated with built resources, such as old piers and other waterfront structures. Because the at-grade portion of the Proposed Project would run adjacent or close to the Kill Van Kull and would pass through several mapped wetland areas, a detailed assessment of the project’s potential impacts on wetlands, species and habitat, surface water/floodplains, and coastal erosion will be required. The work will be done in consultation with responsible agencies, including the New York State Department of Environmental Conservation (NYSDEC), the U.S. Army Corps of Engineers (USACE), the U.S. Fish and Wildlife Service (USFWS), and the National Marine Fisheries Service (NMFS). Investigations to be completed will include:

- » Wetlands and buffers within approximately 150 feet on either side of the Proposed Project’s limits of disturbance will be delineated and mapped, and a functional assessment of the mapped wetlands will be completed. The direct impacts (wetland loss through filling or dredging) and indirect impacts (changes in hydrology, water quality, and similar long-term effects) will be evaluated, and appropriate avoidance, minimization, and mitigation measures will be identified in consultation with the agencies



with jurisdiction. Coordination will be conducted with NYSDEC and USACE to concur on jurisdictional determinations for study area wetlands.

- » A field investigation will be conducted to determine existing terrestrial and aquatic ecological characteristics in the existing and proposed right-of-way. The nature, extent, and significance of potential impacts, including impacts during construction, of the Proposed Project on fish and wildlife habitat will be evaluated. Determinations of the amount and type of vegetation to be disturbed, special habitats that might be damaged, and possible interruption of fish and wildlife movements will be included. Appropriate avoidance, minimization of harm, and mitigation measures to compensate for Proposed Project impacts will also be determined. Coordination will be conducted with USFWS, NMFS, and NYSDEC regarding the potential for impact on federal and state threatened and endangered species.
- » In addition to being adjacent to the Kill Van Kull, portions of the proposed alignment would cross streams that discharge into the Kill Van Kull. The proposed alignment also lies partially within the coastal zone and the mapped 100-year Federal Emergency Management Agency (FEMA) floodplain. The EIS will evaluate the effects of construction and operation of the Proposed Project on surface waters, including changes in runoff volume and quality, effects on hydrology of study area streams, and potential impacts on coastal and upstream flooding. Mitigation measures are expected to include best management practices (BMPs) to control erosion and sedimentation from runoff and provide water quality treatment to remove pollutants before runoff is discharged into surface waters. Coordination will occur with FEMA and NYSDEC as appropriate.

The EIS will evaluate the potential impact on the groundwater system of the study area. This includes short-term construction impacts, long-term Proposed Project impacts, and the development of appropriate avoidance and mitigation measures.

Hazardous Materials

Baseline conditions concerning the potential for contamination in areas that could be disturbed by the Proposed Project will be identified. A corridor-level Environmental Site Assessment (Corridor Assessment) will be prepared for these areas to identify the presence of known hazardous waste or contamination and the presence of environmental problems due to past or current land uses. The Corridor Assessment will encompass the seven right-of-way sections previously described.

Preparation of the Corridor Assessment includes the following tasks:



- » Conduct a reconnaissance of the properties within the Proposed Project footprint and surrounding area to identify potential sources or indications of hazardous substances and petroleum products, including aboveground storage tanks (ASTs); evidence of underground storage tanks (USTs); transformers and other items that could contain polychlorinated biphenyls (PCBs); waste storage areas; hazardous materials usage, storage, and disposal; stained surfaces and soils; stressed vegetation; leaks; and odours.
- » Review Federal, State, and local regulatory agency records for information regarding documented and/or suspected releases of regulated hazardous substances and/or petroleum products on or near the properties.
- » Review historic sources (e.g., fire insurance maps [Sanborn Maps], aerial photographs, topographic maps, as applicable) to develop a history of the previous uses of the property and surrounding area.
- » Review physical setting sources for information about the geologic, hydrogeologic, hydrologic, and topographic characteristics of the property.
- » Interview past and present owners and occupants, as appropriate.

The assessment will evaluate the extent and nature of contamination of sites that would potentially be impacted by construction of each right-of-way section. For each site identified, a value ranking for potential site contamination will be provided. The sites with potential contamination will be ranked in the following categories: (a) sites where contamination may exist, but have little or no potential to affect the construction or operation of the Proposed Project; and, (b) sites where contamination may exist **and** have the potential to affect the construction or operation of the Proposed Project.

Through the of review of regulatory records, historical sources, physical setting sources, and Site reconnaissance observations, the value ranking system will evaluate sites based on the following:

- » Documented historical industrial or manufacturing uses, hazardous waste storage and generation, and/or petroleum/chemical storage that has the potential to affect the construction or operation of the Proposed Project;
- » State Superfund Sites, State Hazardous Waste Sites, Brownfield Cleanup Sites, Voluntary Cleanup Sites, and/or Manufactured Gas Plant sites that are active, have not undergone remediation to the satisfaction of the



governing regulatory agency, and have the potential to affect the construction or operation of the Proposed Project;

- » Open NYSDEC spill cases with documented soil and/or groundwater impacts that may be present and have the potential to affect the construction or operation of the Proposed Project.
- » Properties identified with hazardous materials storage and/or generation with open violations associated with on-site mismanagement and/or improper disposal activities that have the potential to affect the construction or operation of the Proposed Project; and,
- » Surrounding properties that are identified as potential sources or indications of hazardous substances and/or petroleum products based on observed spills/releases associated with ASTs and waste storage areas; stained surfaces and soils, stressed vegetation, leaks, and odours; and evidence of unregulated USTs that have the potential to affect the construction or operation of the Proposed Project.

Sites requiring further analysis will be identified and the requirements for potential future testing and remediation will be described. The performance of future testing and remediation, if warranted, will be performed in accordance with the *CEQR Technical Manual* and will apply specifically to media (soil and groundwater) that will be affected by the construction or operation of the Proposed Project (i.e., soil handling as a result of excavation activities and potential dewatering activities where groundwater is encountered within excavations at the Proposed Project).

Water and Sewer Infrastructure

A water and sewer infrastructure assessment evaluates whether a project may adversely affect the City's water distribution or sewer system. The *CEQR Technical Manual* recommends that a water and sewer infrastructure analysis be performed only on projects that increase density or change drainage conditions on a large site. The Proposed Project would not result in residential or commercial development and is not expected to exceed the thresholds of the *CEQR Technical Manual* requiring a water and sewer infrastructure analysis. The EIS will include a preliminary screening assessment of the Proposed Project's potential to affect any water and sewer infrastructure. Since the Proposed Project would result in an increase in impervious surfaces, the EIS will include an assessment of potential impacts on the stormwater infrastructure system.



Solid Waste and Sanitation Services

A solid waste and sanitation services assessment determines whether a project has the potential to cause a substantial increase in solid waste production that could overburden available waste management capacity or otherwise be inconsistent with New York City's Solid Waste Management Plan (SWMP) or with New York State policy. The *CEQR Technical Manual* recommends a detailed analysis of solid waste impacts for projects that would result in substantial amounts of solid waste (generally 50 tons per week or more). Although a small amount of solid waste would be generated at station areas, the Proposed Project would not result in substantial amounts of solid waste. The EIS will include a preliminary screening assessment of the Proposed Project's potential to affect any solid waste and sanitation services.

Energy

The *CEQR Technical Manual* recommends a detailed analysis of energy impacts for projects that could substantially affect the transmission or generation of energy or cause substantial new consumption of utility energy (e.g., electricity, natural gas, or steam). The Proposed Project would not substantially affect the transmission or generation of energy and would not result in new development that requires utility energy services; therefore, the Proposed Project is not expected to result in substantially increased energy consumption. The EIS will include a preliminary screening assessment of the Proposed Project's potential effects on utility energy. In addition, the Proposed Project's direct and indirect energy consumption during construction (i.e., energy required to produce and transport construction materials) will be estimated as part of the Greenhouse Gas Emissions and Climate Change analysis, described below.

Transportation

The *CEQR Technical Manual* prescribes technical analyses to determine potential project impacts on "key technical areas of the transportation system." These areas include traffic, transit, pedestrians, and parking. Separate assessments of project impacts on each individual technical area are used to determine whether a project may adversely affect a specific area of the transportation system.



Traffic

The examination of traffic effects will include evaluation of vehicular access and circulation. It will also assess existing conditions and potential impacts of the Proposed Project on study intersections and corridors. This detailed analysis will include the following tasks:

» **Identification of Study Area.** The study area includes intersections along Richmond Terrace, Castleton Avenue, Forest Avenue, and South Avenue. A total of 25 signalized and stop-controlled intersections will be analyzed. The selected intersections include those that may be affected by construction and operation of the Proposed Project. The intersections selected for analysis fall into three categories. The first category includes intersections where the proposed alignment passes directly through. The second includes intersections where there are access points to the proposed alignment. The third includes critical intersections which would see an increase in bus traffic or would otherwise be affected by the project. The following lists the 25 intersections that will be analyzed.

- Ferry Terminal Viaduct/Richmond Terrace/Bay Street
- Ferry Terminal Viaduct/Richmond Terrace
- Richmond Terrace/Schuyler Street
- Richmond Terrace/Wall Street
- Richmond Terrace/Hamilton Avenue
- Richmond Terrace/Stuyvesant Place
- Richmond Terrace/Nicholas Street
- Richmond Terrace/St Peters Place
- Richmond Terrace/Westervelt Avenue
- Richmond Terrace/Jersey Street
- Richmond Terrace/Franklin Avenue
- Richmond Terrace/Lafayette Avenue
- Richmond Terrace/Bard Avenue
- Richmond Terrace/Broadway
- Richmond Terrace/Alaska Street
- Jewett Ave/Richmond Terrace
- Richmond Terrace/Heberton Avenue
- South Ave/Brabant Street



- South Ave & Cable Way
 - South Ave/Forest Avenue
 - South Ave/Goethals Road North
 - South Ave/Fahy Ave/Glen Street
 - South Ave/Ed Curry Avenue
 - South Ave/Teleport Drive
 - South Ave/Travis Avenue
- » **Traffic Data Collection.** Traffic data collection will include manual and automated traffic counts. These data will be summarized and used to develop a large-scale, detailed traffic model. The model will support ongoing traffic analysis throughout the Proposed Project. If air quality and/or noise analyses show that the Proposed Project may cause substantial adverse impacts, additional targeted traffic data collection may be undertaken to validate these conclusions, in accordance with the *CEQR Technical Manual* guidelines that MTA-NYCT has opted to use for these analyses.
- » **Modeling Approach.** The 25 study area intersections will be analyzed under Existing conditions, two Future No-Action analysis years, and two Future With-Action analysis years. All 25 intersections will be analyzed using Synchro Version 9 for delay by movement, in accordance with CEQR guidance. The resulting traffic delay will be used to support air quality and noise analyses. Up to 8 of the 25 study area intersections will be analyzed in a microsimulation model using Vissim Version 11.00. This analysis tool will be used to evaluate critical locations along the BRT corridor that involve intersections with Transit Signal Priority (TSP), complex geometry, bottlenecks, crossings with heavy pedestrian demands, or locations where vehicles in the transit-only proposed alignment and general traffic interact.
- » **Existing Conditions Analysis.** Traffic analysis for all 25 intersections will be performed for the weekday AM and PM peak hours, and traffic analysis for up to eight intersections will be performed for a Saturday peak hour determined based on the results of weekday and weekend traffic counts that comply with CEQR guidance. These peak analysis hours are as follows:
- Weekday AM (7:30 AM – 8:30 AM)
 - Weekday PM (5:00 PM – 6:00 PM)
 - Saturday Peak (1:00 PM – 2:00 PM)
- » **Future No-Action Condition Analysis.** The Proposed Project’s anticipated build year, or Estimated Time of Completion (ETC), is 2027. Traffic



analysis for the No-Action condition will include estimation of volumes and levels of service during the peak analysis hours for the ETC year, which is 2027, and the design (or ETC+30) year, which is 2057.

Current daily peak hour traffic will be used as a baseline to obtain inputs for the ETC year. Appropriate annual background growth rates will be determined through use of the *CEQR Technical Manual* guidelines based on historical and current traffic counts. Trip generation assessments for programmed and potential development activities within the study area will also be conducted. This analysis will include consideration of “soft sites,” where no development proposals currently exist, but where development may reasonably be expected to occur by the projected build year, based on current zoning regulations. Finally, the analysis will consider any programmed changes to roadway geometry, direction, or infrastructure that would affect traffic volumes and roadway capacity and levels of service.

- » **Future With-Action Condition Analysis.** Similar analyses will be undertaken to determine the effects of With-Action conditions when the Proposed Project is built and fully operational. These analyses will cover the ETC year and the design (or ETC+30) year, which is 2057. The traffic models described above will be used to quantify changes in local and regional traffic patterns that would result from changes to transit and general-purpose traffic with the Proposed Project. Future anticipated growth rates and other metrics for the No-Action and With-Action conditions will be compared to determine whether the Proposed Project will have a substantial impact on traffic within the study area.

Bus Service

The Proposed Project is designed to provide a direct and substantial benefit to bus service on the North Shore of Staten Island. The proposed BRT routes will be described in terms of anticipated ridership, levels of service, and coordination with existing routes. The impacts of the new service on existing and planned bus transit routes, including the potential effects of BRT service on load levels of connecting routes, will be quantified.

Pedestrian Facilities

A pedestrian analysis will be undertaken at up to 40 elements such as crosswalks, sidewalks, and corner reservoirs throughout the study area where additional pedestrian traffic is anticipated or where pedestrian patterns might be significantly affected. The analysis will be performed for the



weekday AM and PM peak hours. In addition, the assessment will account for existing bicycle lanes as well as NYCDOT's proposed plans for future bicycle lanes in the area. Using this information, appropriate provisions will be made when recommending improvements and modifications to intersection configurations.

Pedestrian, Bicycle, and Vehicular Safety Assessment

Recent study area crash data will be obtained from NYCDOT to examine vehicular and pedestrian safety issues near proposed BRT stops. These data will be analyzed to identify high vehicle or high pedestrian/bike crash locations, utilizing CEQR criteria. Design scenarios will be reviewed to identify potential changes that could avoid adverse impacts to pedestrian or vehicle safety. Feasible improvement measures will be developed to mitigate potential safety issues identified during this review.

Parking Conditions

The parking analysis will focus primarily on an assessment of curbside parking spaces displaced along the proposed alignment. This displacement may include on-street parking spaces used by autos as well as spaces used for truck loading/unloading and service vehicles. The evaluation will include a detailed inventory of on-street parking and public off-street facilities for weekday AM, midday, and PM periods to assess available capacity. This assessment will also include any additional parking demand induced by the Proposed Action.

The parking study area will be within a quarter-mile radius at each station along the proposed alignment, as well as at locations where access to the proposed North Shore ROW changes the number of on-street and off-street parking spaces. This baseline parking inventory will be updated to reflect the two future No-Action conditions with new developments in the corridor through the Build Year and the Future Analysis Year. Under With-Action conditions, the displacement effects on parking will be quantified by neighborhood as well as for the corridor as a whole. Measures to ameliorate parking shortfalls will be developed as needed.



Freight Rail

The effects on the freight rail due to the Proposed Project during construction and post implementation will be identified, and potential impacts would be addressed based on FTA standards (e.g., use of impact attenuators at the end of the line, etc.).

Air Quality

The CEQR Technical Manual will be utilized to study air quality impacts for this project. Air quality analyses are provided in an EIS in order to determine whether project-related pollutant emissions would result in a stationary or mobile source adverse impact on ambient air quality. The Proposed Project would not include any new permanent stationary emission sources such as building heating, ventilating, and air conditioning (HVAC) equipment; therefore, a stationary source analysis is not warranted.

The Proposed Project would create dedicated lanes for BRT transit service, thus adding to overall roadway capacity. Although the BRT buses would be all-electric and would therefore not emit air pollutants, the dedicated lanes would free up capacity for general-purpose vehicles on Richmond Terrace and other nearby roadways. In addition, the Proposed Project may alter traffic patterns on surrounding local streets (e.g., by changing transit local routes to serve as “feeders” to the BRT route). Therefore, a mobile source air quality analysis is warranted and will be conducted.

The U.S. Environmental Protection Agency (USEPA) has set National Ambient Air Quality Standards (NAAQS) for six air pollutants of concern to air quality (carbon monoxide, lead, nitrogen dioxide, ozone, particulate matter, and sulfur dioxide). In addition to the NAAQS, emissions of other pollutants from vehicles (known as mobile source air toxics, or MSATs) are also often considered for large transportation projects. The air quality analysis for the EIS will identify whether implementation of the Proposed Project would result in any exceedances of NAAQS or any substantial increases or decreases in air pollutant emissions.

The air quality analysis will include a mesoscale (regional) and a microscale (local, or “hot-spot”) analysis. The mesoscale analysis will estimate the net change in emissions associated with the Proposed Project, stemming from



the projected changes in speed, vehicle miles traveled (VMT), and roadway type and configuration. The microscale analysis will be conducted to assess future carbon monoxide (CO) and particulate matter (PM_{2.5}) levels at intersections and parking areas where the greatest increase in traffic is projected and where sensitive uses, such as residences, are closest.

The air quality analysis in the EIS will be undertaken in accordance with all Federal and State requirements. It will consist of the following steps:

- » Establish the study area. For the mesoscale analysis, the study area will conform to the transportation (traffic) study area. The study area for the microscale analysis will include up to three worst-case intersections, including two (2) intersections for CO analysis and one (1) intersection for PM_{2.5} analysis;
- » Identify the NAAQS and discuss the study area's attainment status;
- » Describe existing pollutant concentrations based on data from NYSDEC air monitoring stations;
- » Using the USEPA MOVES (Motor Vehicle Emission Simulator) model, estimate criteria pollutant and MSAT emissions with the Proposed Project, within the mesoscale study area, for ETC, ETC +10 and ETC +20 No-Action and With-Action conditions;
- » Perform a CO and PM_{2.5} screening to determine where a detailed air quality analysis would be required. For locations where a detailed analysis is required, CO and/or PM_{2.5} levels will be modeled using the MOVES model to calculate emissions and the CAL3QHC model to assess the dispersion of the pollutants. CAL3QHC is a model accepted by USEPA for assessing air quality impacts resulting from the operation of roadways. The critical analysis year (i.e., the year when the potential for the greatest impact is likely) will be modeled;
- » Determine whether the Proposed Project would result in exceedances of the NAAQS; and
- » If adverse impacts on air quality are identified, develop mitigation measures, as appropriate.

Greenhouse Gas Emissions and Climate Change

In accordance with the *CEQR Technical Manual*, a greenhouse gas (GHG) emissions analysis discloses GHG emissions that could result from a large-scale project, and assesses the consistency of a Proposed Project with the City's goals to reduce GHG emissions. Therefore, this chapter of the EIS will quantify GHG emissions associated with the Proposed Project and assess the



consistency of the Proposed Project with the City's established GHG reduction goal. Emissions will be estimated based on the change in vehicle speeds and miles traveled due to the Proposed Project. Direct energy consumption and GHG emissions associated with vehicle operations will be estimated using the MOVES model, based on forecasts of vehicle miles traveled. Direct and indirect energy consumption during construction (i.e., energy required to produce and transport construction materials) will be discussed qualitatively. Features of the Proposed Project that demonstrate consistency with the City's GHG reduction goal will be described.

Because the study area is located in a flood hazard zone, the potential impacts of climate change on the Proposed Project will also be evaluated. The discussion will focus on sea level rise and changes in storm frequency projected to result from global climate change and the potential future impact of those changes on the Proposed Project's infrastructure. Design measures to increase infrastructure resiliency will also be discussed.

Noise

The Proposed Project will add new BRT operations to the study area and may alter traffic patterns on surrounding local streets. These changes in vehicle and bus noise have the potential to cause adverse impact to noise receptors, such as residences, health care facilities, schools, and parks/open space. If significant adverse impacts are identified, measures will be identified to mitigate or avoid those impacts to the greatest extent practicable. The noise impact assessment will be conducted through utilization of the CEQR *Technical Manual* guidelines for compliance with SEQRA and in accordance with the Federal Transit Administration's (FTA) *Transit Noise and Vibration Impact Assessment Manual* (dated September 2018) for compliance with NEPA.

The following tasks will be performed as part of the noise assessment:

- » Noise-sensitive land uses will be identified throughout the study area and categorized according to the CEQR Noise Exposure Guidelines for Use in City Environmental Impact Review (CEQR Table 19-2) and FTA land use categories (FTA Table 4-3). Land use will be identified using the New York City Zoning Tax Lot Database and field observations.



- » Ambient noise measurements will be conducted in the study area to characterize the existing conditions. Measurement sites will be selected at representative sites of sensitive uses. A preliminary review of the study area has identified approximately 16 measurement locations throughout the study area including locations near intersections that will be analyzed as part of the *Traffic Existing Conditions Analysis* and along the proposed alignment.
- » At each measurement site, measurements will be conducted for 20-minute periods during weekday morning, mid-day, and evening peak periods. At approximately six sites near intersections that will be analyzed as part of the *Traffic Existing Conditions Analysis*, measurements will also be conducted for 20 minutes during the Saturday afternoon peak period. At approximately 12 of the sites adjacent to the BRT corridor, measurements will be conducted for 1 hour between 7:00 AM and 7:00 PM. for estimating the day-night average sound level (L_{dn}) according to FTA methods (FTA manual Appendix E Option 1 and 4) for determining existing noise conditions.
- » Data collected will include overall A-weighted and octave-band equivalent sound levels (L_{eq}), statistical sound level descriptors (L_{max} , L_{min} , L1, L10, L50, and L90). A complete record of the measurements, including the specific measurement location, time of measurements, meteorological conditions, equipment used, and significant noise sources will be documented. A summary table of existing measured noise levels will be provided as part of the EIS.
- » Based on the traffic studies (described above under “Transportation”), a noise screening analysis will be conducted to determine whether there are any locations where there is the potential for the Proposed Project to result in adverse noise impacts (i.e., doubling Noise Passenger Car Equivalent [PCEs]) due to project-generated traffic. Following procedures outlined in the *CEQR Technical Manual* for assessing mobile source noise impacts, future No-Action and With-Action noise levels will be estimated at the noise receptor locations based on proportional modeling.
- » At any receptor locations where the noise screening analysis indicates the potential for a doubling of traffic or more between the No-Action and With-Action conditions, a detailed traffic noise analysis will be conducted using the Federal Highway Administration’s Traffic Noise Model (TNM).
- » Noise impact from the Proposed Project including the increase in traffic and BRT operations will be assessed using the methods and criteria described in the *CEQR Technical Manual* and the FTA guidance manual. FTA reference noise emissions for electric buses will be used to predict future noise conditions with the Proposed Project. If there would be significant adverse noise impact due to the Proposed Project, mitigation measures to reduce the potential noise effects will be evaluated.



- » Vibration from rubber-tired vehicles generally does not have the potential to cause annoyance within nearby buildings unless travel lanes are particularly close to structures. A screening will be conducted to assess the potential for vibration effects due to the Proposed Project.

Public Health

As indicated in the *CEQR Technical Manual*, a public health assessment may be warranted if an unmitigated impact is identified in other CEQR analysis areas, such as air quality, water quality, hazardous materials, or noise. If unmitigated impacts are identified in any one of these technical areas and the lead agency determines that a public health assessment is warranted, an analysis will be provided for that specific technical area.

Neighborhood Character

Neighborhood character is determined by a number of factors, including land use, socioeconomic conditions, open space, historic and cultural resources, urban design, visual resources, shadows, transportation, and noise. According to the *CEQR Technical Manual* guidance, an assessment of neighborhood character is generally needed when a project has the potential to result in adverse impacts in one of the technical areas presented above, or when a project may have moderate effects on several of the elements that define a neighborhood's character. Therefore, if warranted based on an evaluation of the Proposed Project's impacts, an assessment of neighborhood character would be prepared following the methodologies outlined in the *CEQR Technical Manual*. The analysis would begin with a preliminary assessment, which would involve identifying the defining features of the area that contribute to its character. If the preliminary assessment establishes that the Proposed Project would affect a contributing element of neighborhood character, a detailed assessment will be prepared to examine the potential neighborhood character-related effects of the Proposed Project through a comparison of future conditions with and without the Proposed Project.

Construction Impacts

Construction impacts, though temporary, can have a disruptive and noticeable effect on the adjacent community, as well as on people passing through the area. The Proposed Project, because of its anticipated construction activities and duration, as well as potential changes to vehicular



and pedestrian circulation (e.g., lane closures or temporary loss of sidewalks) and its proximity to sensitive receptor locations, such as residences and open space, may have the potential for construction impacts. Therefore, a construction assessment will be performed for potential construction-related impacts. This assessment will describe the construction schedule and logistics, discuss anticipated on-site activities, and provide estimates of construction workers and truck deliveries for the Proposed Project.

Technical areas to be assessed include the following:

Transportation

This assessment will consider construction vehicle and worker trips during the weekday AM and PM peak construction hours (which typically coincides with the hours when workers arrive on site and workers leave the area) to determine potential transportation-related impacts. The construction analysis would incorporate the effects of temporary lane closures or other capacity losses or diversions.

A detailed traffic analysis for construction conditions will be performed at up to eight intersections that would be most affected during this scenario. Traffic levels during the construction period will be compared to the impact criteria outlined in the *CEQR Technical Manual* to determine the potential for adverse traffic impacts. Where potential impacts are identified, improvements will be explored to mitigate those impacts to the extent practicable. The construction transportation analysis will also identify the number of parking spaces that may be needed during peak construction activities.

Air Quality

Emissions from on-site construction equipment and on-road construction-related vehicles, as well as dust-generating construction activities, have the potential to affect air quality. This assessment will include a qualitative analysis of construction activities to determine the potential for air quality impacts on nearby sensitive receptor locations. If the construction traffic analysis (described previously) identifies that the construction peak hour would generate significantly more vehicles than the project peak hour or if significant air quality impacts are expected under the With-Action condition, more detailed analyses may be necessary.



Noise and Vibration

The construction noise impact analysis will include a qualitative evaluation of noise from construction of the Proposed Project. Construction noise methodologies will be based on NYSDEC noise policy and FTA criteria (which is largely consistent with CEQR). This analysis will be conducted for sensitive receptors (i.e., residences, open spaces, churches, schools, etc.) located near proposed construction work areas and potential staging sites. Noise levels due to construction will be predicted at each sensitive receptor based on the types and locations of anticipated construction activities and equipment. If necessary based on the results of the construction noise analysis, the feasibility, practicability, and effectiveness of implementing measures to mitigate any construction noise impacts will be examined.

Construction activities also have the potential to result in vibration levels that may result in structural or architectural damage and/or annoyance or interference with vibration-sensitive activities. A construction vibration assessment will be performed to determine critical distances at which various pieces of equipment may cause building damage or annoyance based on the type of equipment, building construction type, and applicable vibration level criteria. Should it be necessary for certain construction equipment to be located closer to a building than its critical distance, vibration mitigation options will be proposed.

Historic Resources

Some project construction activities would occur within 400 feet of historic resources. Construction activities have the potential to result in inadvertent damage to fragile, historic structures in close proximity to the construction zone, including through direct physical damage or through vibration-related damage. The EIS will document procedures to protect these structures from such damage to the extent practicable.

Open Space

Construction of the Proposed Project would have potential temporary effects on adjacent open spaces, including access changes and potential use for construction staging. An assessment of the Proposed Project's temporary effects on adjacent publicly accessible open spaces during construction will be provided.



Natural Resources

Because construction is planned to occur in areas in and adjacent to sensitive natural resources, including wetlands, streams, and the Kill Van Kull shoreline, construction impacts to these resources will be evaluated. This evaluation will include assessing the acreage of temporary disturbance to sensitive resources, the amount of vegetation removal, and the potential for water quality impacts to wetlands and surface waters from erosion and sedimentation of exposed soils. Mitigation measures will be developed in coordination with agencies with jurisdiction, including the USACE and NYSDEC.

Hazardous Materials

The EIS will describe any construction procedures for the Proposed Project that may result in disturbances of hazardous waste and contaminated materials, including asbestos-containing materials. The analysis will identify the need for additional site investigation (e.g., collection and laboratory analysis of soil, groundwater, or soil vapor samples) and procedures required to reduce the potential for adverse impacts due to hazardous materials, including procedures during construction to manage and dispose of excavated material and procedures to protect the health of local residents and Proposed Project construction workers.

Other Technical Areas

As appropriate, other areas of environmental assessment for potential construction-related impacts will be discussed, including but not limited to socioeconomic conditions, community facilities, and land use and neighborhood character.

Mitigation

Where adverse impacts that meet thresholds for significance, including those enumerated in the *CEQR Technical Manual*, have been identified for the Proposed Project, measures to mitigate those impacts will be described. The mitigation chapter will address the anticipated impacts requiring mitigation, likely mitigation measures, and the timing of the mitigation measures. Where impacts cannot be practicably mitigated, they will be disclosed as unavoidable adverse impacts.



Alternatives

SEQRA requires an analysis of a No-Action condition (without the Proposed Project), which in this case assumes that the existing former railroad right-of-way would not be used for transit and that transit service on Staten Island would remain at its current levels. Other alternatives to be considered include the Proposed Project alternatives eliminated based on analyses performed as part of the 2012 SINSAA. In addition, design variations may be analyzed in some areas (e.g., at-grade vs. overwater structure in areas where shoreline erosion has affected the former rail right-of-way).

Summary EIS Chapters

Several summary chapters will be prepared, focusing on various aspects of the EIS, as set forth in the SEQRA regulations and the *CEQR Technical Manual*. They are as follows:

- » **Executive Summary.** Once the EIS technical analyses have been prepared, a concise executive summary will be drafted. The executive summary will utilize relevant material from the body of the EIS to describe the Proposed Project, the environmental impacts, measures to mitigate those impacts, and alternatives to the Proposed Project.
- » **Unavoidable Adverse Impacts.** This chapter will describe those impacts, if any, that could not be avoided and could not be practicably mitigated.
- » **Growth-Inducing Aspects of the Proposed Project.** This chapter will focus on whether the Proposed Project has the potential to induce new development within the surrounding area.
- » **Irreversible and Irretrievable Commitments of Resources.** This chapter focuses on those resources that would be irretrievably committed if the Proposed Project is built.



6 Additional Studies

The Proposed Project is being undertaken in accordance with the requirements of SEQRA. If the MTA intends to seek federal funding to support the capital construction of the Build Alternative, the Proposed Project will require a separate analysis under the requirements of NEPA. The FTA would be the lead agency for NEPA compliance.

A NEPA analysis would require several additional studies and procedural steps to comply with NEPA and the FTA's capital improvement grant (CIG) program's project development process. To enable the Proposed Project to be eligible for federal funds, MTA-NYCT is expediting certain studies that are required under NEPA, but not under SEQRA. These studies, which will be undertaken concurrent with this SEQRA analysis, are: Indirect and Cumulative Effects (40 CFR Part 1500-1508); Executive Order 12898 on Environmental Justice; Section 106 of the National Historic Preservation Act; Section 4(f) of the U.S. Department of Transportation (USDOT) Act of 1966; Section 6(f) of the Land and Water Conservation Fund Act (LWCFA); and Section 7 of the Endangered Species Act.

Indirect and Cumulative Effects

Council on Environmental Quality (CEQ) regulations (40 CFR Part 1500-1508) define indirect impacts as those that are "caused by an action and are later in time or farther removed in distance, but are still reasonably foreseeable." NEPA also requires consideration of a project's cumulative effects, which are the impacts that may result from the incremental consequences of an action when added to other past and reasonably foreseeable future actions (40 CFR



1508.8). Both types of impacts can occur within the full range of impact areas. This analysis will evaluate any indirect and cumulative effects, both adverse and beneficial, that may occur as a result of the Proposed Project.

Environmental Justice

Pursuant to Executive Order 12898, an environmental justice analysis will be prepared to identify any disproportionately high and adverse impacts on minority or low-income populations that could result from the Proposed Project. The analysis will follow methodologies and guidance established by the CEQ, USDOT Order 5610.2(a), and FTA Circular 4703.1. Similarly, the analysis will be consistent with New York State Department of Environmental Conservation (DEC) environmental justice guidance (CP-29). The analysis will contain the following components:

- » In general, the environmental justice analysis study area will include block groups (consistent with 2010 U.S. Census geographies) that intersect the area within 400 feet of the Proposed Project limits. The analysis will be conducted for all block groups that intersect this area, even if portions of those block groups are outside the 400-foot radius. If the technical analyses indicate potential for adverse impacts in areas outside this radius, the study area will be expanded accordingly.
- » Environmental justice communities (minority or low-income populations) within the study area will be identified using data from the 2010 U.S. Census and the most recent American Community Survey (ACS). If applicable, this may be supplemented by local data as described in FTA Circular 4703.1.
- » The environmental justice analysis will examine the potential effects of the Proposed Project for the full range of environmental topic areas addressed in the EIS and determine whether the Proposed Project would result in disproportionately high and adverse impacts (direct or indirect) on minority and low-income populations.
- » If the potential for disproportionately high and adverse impacts is identified, potential measures to mitigate impacts on environmental justice communities will be identified.
- » This analysis will also identify and describe efforts to engage environmental justice communities in the Proposed Project study area.

Section 106 of the National Historic Preservation Act

Many funding programs and approvals by FTA are subject to Section 106 of the National Historic Preservation Act (NHPA) and its implementing



regulations (36 CFR Part 800), which mandates that federal agencies consider the effects of their actions on any properties listed on or determined eligible for listing on the National Register and afford the federal Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on such undertakings. Under Section 106 regulations, properties are considered to be historic if they are included in the National Register of Historic Places (NRHP) or meet the criteria for the NRHP.

If the agency's undertaking could affect historic properties, the agency determines the scope of appropriate identification efforts and then proceeds to identify historic properties in the area of potential effects. The agency reviews background information, consults with the State Historic Preservation Office (SHPO), tribal organizations, and others, seeks information from knowledgeable parties, and conducts additional studies as necessary (collectively, “parties”, “consulting parties”, or “Section 106 consulting parties”). Districts, sites, buildings, structures, and objects listed in the NHRP are considered; unlisted properties are evaluated against the National Park Service's published criteria, in consultation with the SHPO and any Native American tribe or Native Hawaiian organization that may attach religious or cultural importance to them.

If the agency finds that historic properties are present, it proceeds to assess whether there are possible adverse effects. The agency, in consultation with the SHPO, makes an assessment of adverse effects on the identified historic properties based on criteria found in ACHP's regulations. If the SHPO determines that there will be no adverse effect, the agency proceeds with the undertaking and any agreed-upon mitigation. If the SHPO finds that there is an adverse effect, or if the parties cannot agree and ACHP determines within 15 days that there is an adverse effect, the agency begins consultation to seek ways to avoid, minimize, or mitigate the adverse effects.

Agency consultation to resolve adverse effects involves the SHPO and potentially other entities called “consulting parties,” which may include Native American tribes, local governments, permit or license applicants, and members of the public. ACHP may participate in consultation when there are substantial impacts to important historic properties, when a case presents important questions of policy or interpretation, when there is a potential for procedural problems, or when there are issues of concern to Native American



tribes. Consultation usually results in a Memorandum of Agreement (MOA), which outlines measures that the agency will take to avoid, minimize, or mitigate the adverse effects. In some cases, the consulting parties may agree that no such measures are possible, but that the adverse effects must be accepted in the public interest. The agency proceeds with its undertaking under the terms of the MOA.

The regulations emphasize consultation with Native American tribes and Native Hawaiian organizations, in keeping with the 1992 amendments to NHPA. Consultation with a Native American tribe must respect tribal sovereignty and the government-to-government relationship between FHWA and Native American tribes. Even if a Native American tribe has not been certified by the National Park Service (NPS) to have a Tribal Historic Preservation Officer who can act for the SHPO on its lands, it must be consulted about undertakings on or affecting its lands on the same basis and in addition to the SHPO. The views of the public must be solicited and considered throughout the process.

Section 4(f) of the Department of Transportation Act

Section 4(f) prohibits USDOT agencies (including FTA) from approving any project that “uses” (i.e., incorporates right of way from or severely impairs key features and attributes of) public parks, wildlife refuges, or historic resources unless there is no feasible and prudent alternative to that use and all measures to minimize harm have been incorporated into the Proposed Project. The Section 4(f) evaluation will build on the findings of the Historic and Cultural Resources chapter and the Open Space chapter (with respect to parks and recreational resources). Potential uses of Section 4(f) properties will be identified, as will any feasible and prudent alternatives to avoid those uses and all planning efforts to minimize harm to 4(f) properties resulting from unavoidable uses.

Section 6(f) of the Land and Water Conservation Fund Act

The U.S. Department of Interior provides funding under the LWCF for state and local efforts to acquire or develop land to advance outdoor recreational activities. When a project may incorporate lands that may have received LWCF improvement funds (referred to as “conversion”), the project sponsor must undertake a Section 6(f) evaluation. MTA, in consultation with FTA, will



determine whether any such properties would be affected by the Proposed Project and conduct a Section 6(f) evaluation if necessary.

Section 7 of the Endangered Species Act

The Section 7 evaluation will assess the Proposed Project's potential effects on endangered species, pursuant to the Endangered Species Act (16 USC §§ 1531-1544; 50 CFR Part 402). Section 7 of this act requires FTA to consult with the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) for projects that may jeopardize threatened or endangered species, or destroy or adversely modify their critical habitats. As part of this effort, MTA-NYCT will consult with the New York State Department of Environmental Conservation's Natural Heritage Program to identify state-listed species of special concern.



7 Agency and Public Involvement

MTA-NYCT will provide opportunities for open, collaborative, and meaningful public and agency participation throughout the SEQRA environmental review process. Agencies and the public will be notified of key opportunities to participate, including opportunities to review and comment on pertinent environmental documents. Notifications will appear in the various official and local publications required under SEQRA, as well as via the MTA web site.

Because MTA-NYCT anticipates potential future FTA involvement in the Proposed Project (e.g., potential source of funding for project construction), public outreach and engagement activities to support the SEQRA EIS will be undertaken in a manner consistent with FTA requirements under NEPA and associated federal regulations. Meetings will be held with relevant agencies throughout the EIS process to update them on the status of the Proposed Project and discuss topics related to their regulatory responsibilities, as described further below.

An Agency Coordination and Public Outreach Plan (ACPOP) has been prepared for the Proposed Project and will serve as guidance throughout the SEQRA process. The ACPPOP identifies the forums and means of communication appropriate to informing stakeholders about the environmental review process and obtaining their input. In addition, the ACPPOP outlines the ways in which MTA-NYCT will address communities with special needs, including limited English proficiency (LEP), minority, and/or low-income communities, in



conformance with applicable requirements, such as DEC guidance (CP-29) and Executive Order 12898 on Environmental Justice.

If NEPA compliance is undertaken at some point in the future (e.g., by FTA after the SEQRA process), an Agency Coordination Plan (ACP) will be prepared and published in accordance with FTA requirements. It is expected that the ACP would build on the ACPOP and would include agencies that FTA would invite to serve as Cooperating or Participating agencies under NEPA, pursuant to Council on Environmental Quality (CEQ) regulations (40 CFR § 1508.5).³³ Cooperating and Participating agencies are responsible for identifying, as early as practicable, any issues of concern regarding the project's potential environmental or socioeconomic impacts that could substantially delay or prevent an agency from granting a permit or other approval. These agencies, along with FTA, will be kept informed throughout the SEQRA EIS process as part of the ACPOP.

Summary of Outreach to Date

In addition to the development of the ACPOP, public outreach activities undertaken to date in support of the Proposed Project have included the compilation of a study database that includes information such as project contacts and meeting materials; the preparation and distribution of public information materials (e.g., fact sheet, informative posters placed on MTA-NYCT buses); and the implementation of a project website (<https://new.mta.info/northshoreeis>). MTA-NYCT will maintain the project database and website throughout the environmental review process. Materials will continue to be prepared to support transparent and documented stakeholder outreach.

As described in Chapter 3 of this document, the 2012 SINSAA and 2019 Supplement were prepared with significant public participation. Information

³³ According to CEQ regulations, a "Cooperating" agency is any Federal agency, other than a Lead agency, that has jurisdiction by law or special expertise with respect to any environmental impact involved in a Proposed Project or project alternative; a state or local agency of similar qualifications or, when the effects are on a reservation, a federally recognized Native American tribe, may also serve as a Cooperating agency. "Participating" agencies are those federal, state, or local agencies or federally recognized Native American tribes with an interest in the project. (In accordance with SAFETEA-LU Section 6002, Cooperating agencies are also Participating agencies.)



about the public process undertaken can be found in these documents, which are accessible on the project website.

As part of the planning process an Interagency Advisory Committee (IAAC), which included city (local), state and federal stakeholders, was assembled. MTA-NYCT hosted two Interagency Advisory Committee (IAAC) meetings during the preparation of the Supplement to provide detailed information about the advancement of the project studies to state and City agencies, including agencies that will be invited to participate in the environmental review process as “interested” or “involved” agencies. The IAAC meetings are intended to be a means of gathering input from these agencies pertaining to design and potential property acquisitions and related agency procedures. It is intended that IAAC meetings will continue at key milestones during the environmental review process to provide these stakeholders with the opportunity to guide the development of the technical analyses. In addition, individual meetings will be held with key agencies, as needed, throughout the SEQRA process.

In addition to the IAAC, MTA-NYCT has been meeting individually and collectively with local and state elected officials throughout the planning process. These meetings provide a local framework for the Proposed Action’s development and they will continue through the environmental review process. In addition, MTA-NYCT has met with some potentially affected property owners.

A Public Information Open House meeting was held on May 8, 2019, at Snug Harbor Cultural Center on Staten Island, with 50 attendees to support the planning process and inform the Supplement and the subsequent selection of the Preferred Alternative. Public meetings will be held at key milestones throughout the environmental process, with significant notice and advertisement.

MTA-NYCT has also organized a Public Advisory Committee (PAC) that will meet throughout the environmental process. The PAC will include local advocacy, community, environmental and other organizations. The meetings are intended to provide an opportunity to disseminate information to the public via community leaders and organizations (other than elected officials and public agencies), and to provide an opportunity to inform MTA-NYCT of community interests pertaining to the project and the environmental review.

