GREAT KILLS TRANSPORTATION STUDY

Final Report, May 2025

NYC DEPARTMENT OF CITY PLANNING
Staten Island Office

Study Context

The Great Kills Transportation Study is a Department of City Planning (DCP)-led initiative, partially funded by the New York Metropolitan Transportation Council (NYMTC) through the Unified Planning Work Program (UPWP), with funding secured in April 2024.

Introduction – Study Objectives and Goals

The Great Kills Transportation Study aims to identify existing constraints and potential infrastructure improvements to the street network and public transportation service in the Great Kills neighborhood of Staten Island.

The study will give the Department of City Planning's Staten Island Office (SIO) an up-to-date understanding of existing conditions and enables the identification of potential improvements for the surrounding neighborhood. SIO identified four key pillars for this report:

1) Promote pedestrian-friendly streets
2) Identify opportunities to support and enhance transit ridership
3) Inform plans to activate retail corridors
4) Support the long-term growth of Great Kills

Beyond the scope of this study, these results can be used to support future planning efforts by the City of New York and inform land use decisions for the Great Kills neighborhood in Staten Island's Community District 3 (CD3).

Project Methodology

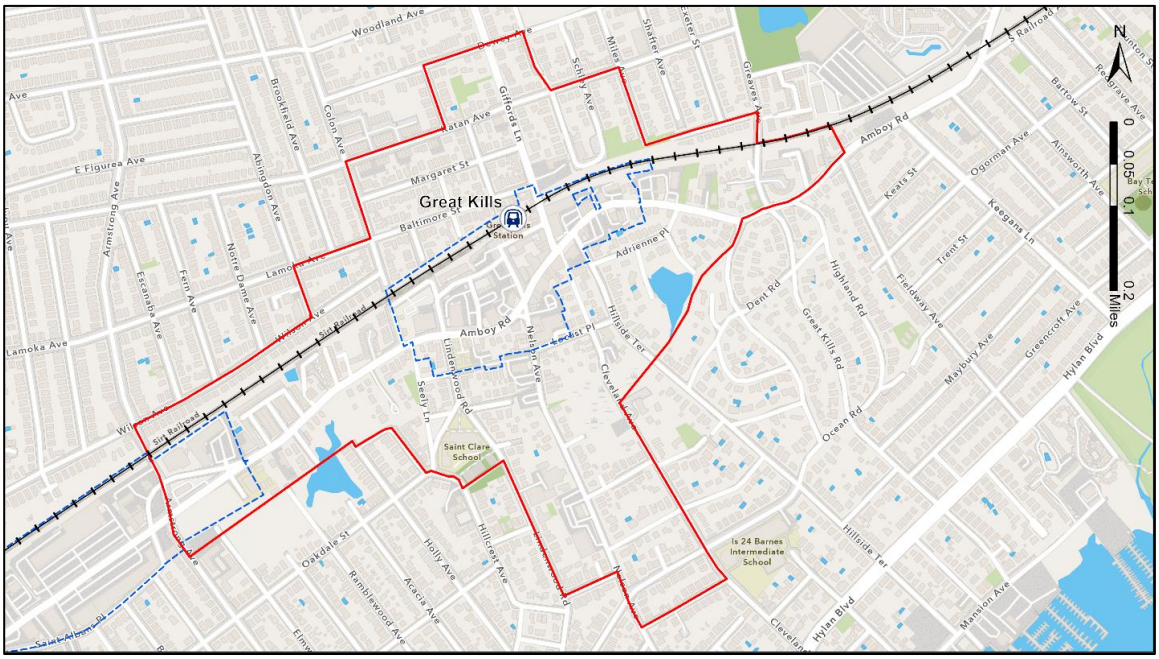
To assess the existing conditions of the Great Kills neighborhood, SIO conducted three types of analysis:

1. Existing Conditions
2. Transportation
3. Public Realm

Each analysis is detailed in the subsequent sections and is based on a combination of quantitative and qualitative data to provide a comprehensive understanding of the area's demographic and socio-economic composition, existing conditions of the built environment, and transportation patterns within Great Kills and the surrounding area.

The transportation report enables SIO to understand current needs and make recommendations about opportunities for improvement to the street network and the built environment.

Study Area Boundary



Map 1: Study Area Boundary in red outline and BID in blue dotted line

The overall Great Kills study area ('the study area') is bounded by Armstrong Avenue to the west, Fieldway Avenue to the east, Dewey Avenue to the north, and Nash Court to the south (Map 1).

Within the study area boundary, the report primarily focuses on two commercial areas:

1) Sections of the South Shore Business Improvement District (BID) located west on Seely Lane, north to the Staten Island Railway (SIR) train tracks, east on Amboy Rd and Adrinne Place, and south on Pleasant Street and Locust Place. This area includes the Great Kills SIR Station and several community assets with the South Shore BID area is represented by dashed blue lines (Map 1); and

2) Sections in and around the Eltingville Commons Shopping Center which is 0.5 miles south of Great Kills Station. This commercial area is bounded by Armstrong Avenue and the intersection of Old Amboy Road and Amboy Road.

Why Great Kills?

DCP SIO has closely monitored the opportunities and challenges in Great Kills through over a decade of town center research and visioning.

These efforts have included several Town Center studies and research which include:

- South Richmond Historic Town Centers: Attracting Investment *(Cornell University and DCP-SIO, 2015)*
- Staten Island Town Centers Study *(DCP-SIO, 2013)*
- City of Yes for Housing Opportunity *(DCP, 2024)*

As a key hub on the South Shore, Great Kills holds potential as a pedestrian friendly town center, not only for the local community, but for the Borough as a whole. The SIR offers express rail service to the St. George Ferry Terminal, significantly reducing commute times for residents, and the neighborhood features a fairly active commercial corridor along Amboy Road, a major South Richmond Street, with some pre-war buildings of modest densities that support walkability (Image 1).

Image 1: Amboy Road, present day – looking east

Map 2: Armstrong Avenue, far left arrow; Giffords Lane, middle arrow; and Greaves Avenue, far right arrow

Despite its potential, several challenges hinder development:

- Narrow, irregular streets along Amboy Road and secondary roads connecting to Amboy Road limit multi-modal transportation options
- Limited north-south connectivity with only three streets crossing the SIR. Armstrong Avenue, Giffords Lane, and Greaves Avenue are each approximately 0.41 miles apart and restrict access to the greater Great Kills neighborhood (Map 2).
- Poor pedestrian safety around the SIR station including unmarked parking areas and unsafe sidewalks due to various curb cuts along the right-of-way (Image 2).

Image 2: Lack of sidewalk on Giffords Glen

Image 3: Great Kills SIR Station – Accessible Ramp and Parking Area

Historical Context of Great Kills

The name "Great Kills" originates from the Dutch word "kill" which means "creek" or "channel", reflecting the many waterways that run through the area, it was originally settled by the Dutch in the early 1600s (NYC Department of Parks & Recreation, n.d.).

In the 1960s, upon the opening of the Verrazzano Narrows Bridge, families flocked to Staten Island. Many were drawn to Great Kills due to the presence of the train station, which, at the time, created a lively town center. During its heyday, the corner of Amboy Road and Nelson Avenue had many businesses and restaurants which have come and gone; the business corridor was nicknamed "The Village" by locals (P. Gutis, 1986) (Images 4 & 5).

The continued suburbanization of Staten Island in the 1960s led to streets being redesigned for vehicles, and town centers, such as Great Kills, were replaced by parking lots and strip malls (Staten Island Advance, 1962). In Great Kills, this meant that the business corridor became less amenable to foot traffic, as vehicular traffic increased over time. In areas where storefronts previously opened directly to the sidewalk, which created the feeling of “The Village” town center, large surface parking lots in present day ensure ample parking is available for errands, but discourage activities like walking, window-shopping, and lengthy visits to the neighborhood (P. Gutis, 1986) (Image 3).

The mid 1960’s brought about more commercial rezonings with abundant parking to the area. The Eltingville Commons shopping area, a strip mall designed with the automobile in mind, is connected to the Great Kills business corridor via Amboy Road, a major thoroughfare which serves heavy northbound and southbound traffic, made up of commuters, trucks, and locals accessing the shopping area for everyday needs. The current road design of the entire intersection where Amboy Road branches off onto Old Amboy Road, which includes an access point to the shopping area, raises safety concerns for vehicular, bicycle, and pedestrian traffic. This junction, including the access point to the shopping area is examined further in the study’s analysis.

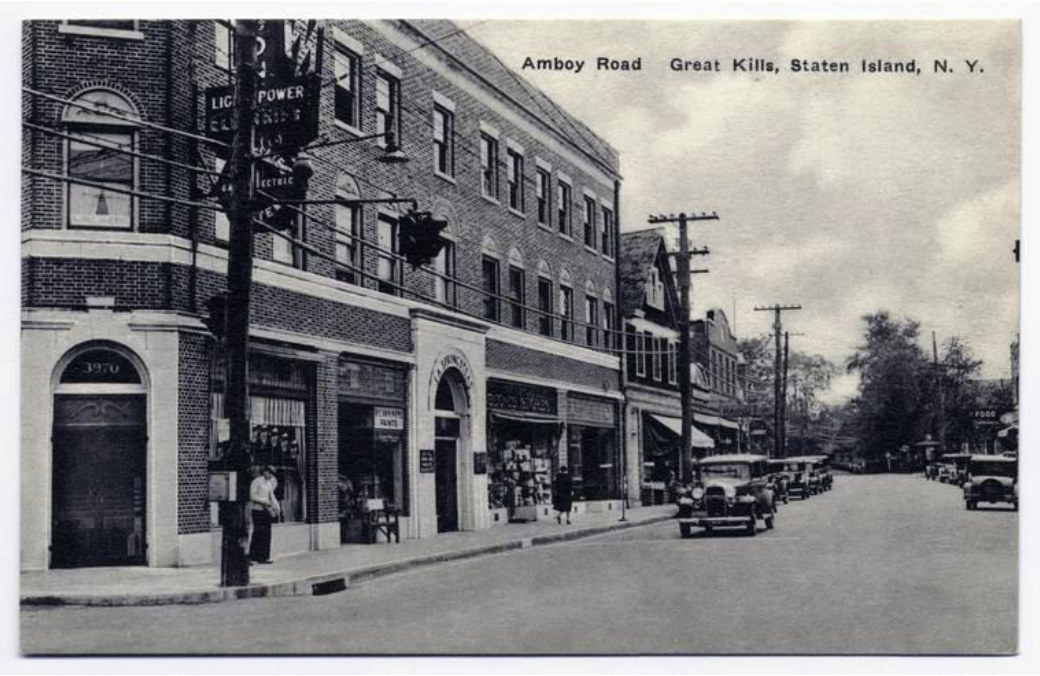


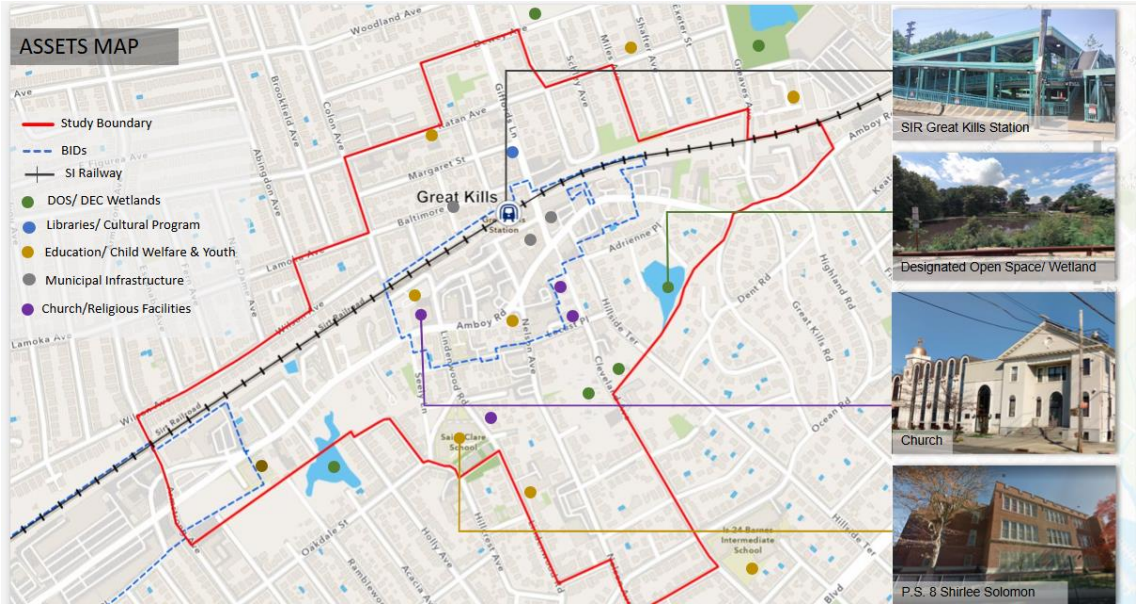
Image 4: Amboy Road circa 1920s

Image 5: Amboy Road present day

Existing Conditions

Today, Great Kills remains a residential community with a small commercial town center. While the area adjacent to the SIR station has a handful of historic buildings with modest densities, the built environment currently lacks the infrastructure and characteristics of a walkable and active town center.

The unique characteristics of Great Kills extend beyond its street network and town center layout. Great Kills is geographically situated on Staten Island's South Shore, the neighborhood is bordered by Richmond town to the north, sitting between Bay Terrace to the east and Eltingville to the west, and the Great Kills Harbor to the south, from the Atlantic Ocean to Arthur Kill Road. Great Kills benefits from its central location within Staten Island which not only allows it to function as a transportation hub, but it also contains green space and recreational sites (Map 3).



Map 3: Assets Map

In the following sections, SIO presents key takeaways regarding the demographic and socioeconomic composition of the Great Kills area, by using data from the Decennial Census (2000, 2010, 2020), and the American Community Survey (ACS) (2020 and 2023).

The US Census is conducted every ten years and counts every person living in the 50 states, including the District of Columbia, and the five U.S. territories. The Census provides key demographic data, such as age, sex, race, and owner/renter status. In comparison, the American Community Survey (ACS) is administered every year across the 50 states, including the District of Columbia and Puerto Rico. It covers a range of topics not included in the Census, such as education, employment, and transportation. Since ACS data relies on smaller sample sizes to describe the population, significant margins of error sometimes occur, potentially impacting the reliability of the data.

For this study, DCP narrowed the project area and compiled data from the ACS and Population Factfinder (2010-2020) from four Census tracts within the immediate vicinity of the Great Kills Train Station, encompassing the Eltingville-Annadale Commercial area (Map 4). These tracts were: 146.04, 146.05, 132.03 and 156.01. To present a general view of the population within this study area, an average of the four census tracts is being used, with the exception of any total numbers, such as population size.

Map 4: The four census tracts are outlined in the solid black lines; intersecting boundaries are indicated with dotted black lines.

Population Size, Housing Density, and Income

The population size in Great Kills (zip code 10308) has remained fairly stable over the last decade. In 2010, the population of Great Kills was 27,357. By 2020, the population had only slightly increased by 3% to 28,198 (US Census, n.d.).

Within the four census tracts the total population was 22,889 spread across 8,921 housing units in 2020. The population density within this area is about half of New York City overall, with 13,706 people per square mile compared to 28,000 people per square mile.

Great Kills is a middle-income neighborhood with a median household income of $131,338 per year across the four census tracts. This makes the income level relatively higher compared to Staten Island as a whole ($95,543 per year in

2023). The population has a labor force participation of around 60%, and an unemployment rate of 3.6% in 2023 (similar to that of the total US population). About 50% of the workforce work within Staten Island (Richmond Country) while 50% either work in a different county or in a different State, which is about 7% higher than Staten Island overall (43%).

Age Group & Household Composition

Overall, the population within the four census tracts is slightly older compared to the rest of Staten Island, and it has been continually aging over the past decade. In 2000, the 65+ population were 13% compared to 20.0% in 2020, making a 54% increase. Additionally, from 2000 to 2023, the number of retirees receiving social security increased from 30% to 42%.

Great Kills has a high percentage of married households and a relatively low concentration of young adults (Figure 1). This demographic trend aligns with the neighborhood's suburban character, where family-oriented living is more common than a younger, transient population.

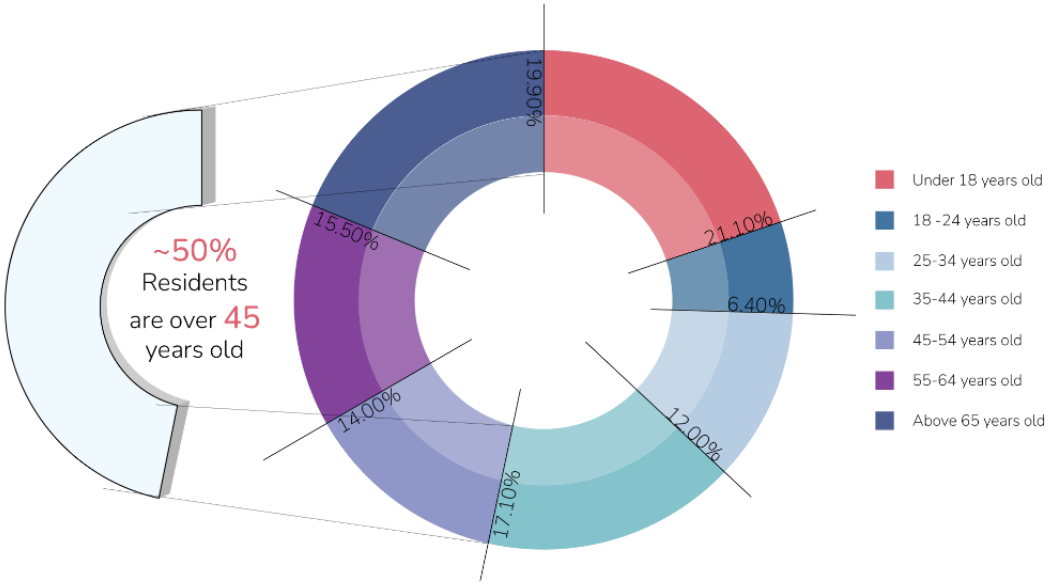


Figure 1: Age Group & Household Composition

Homeownership and Household Composition

The population within the four census tracts are predominantly owner-occupied units: 77% as opposed to 23% renter occupied units (Figure 2). These numbers are higher than those of Staten Island and NYC which are 63% owners and 37% renters, and 30% owners and 70% renters respectively.

The household composition within Great Kills largely consists of married couples (55%) and two-person households or single occupants (male/female) without any children under 18 years of age. Great Kills has a population with a relatively small number of households with children under 18 (26%).

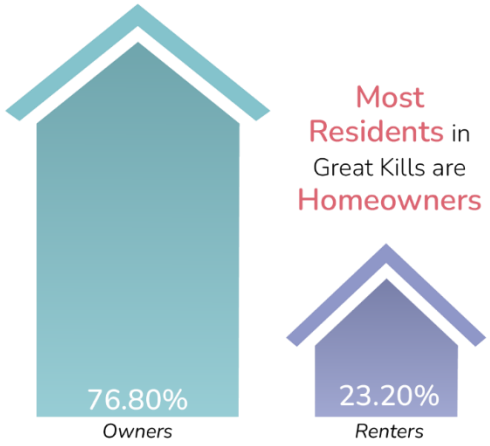


Figure 2: Homeownership and Household Composition

Public Transportation & Commute

Great Kills is a main transportation hub not only in the South Shore of Staten Island, but within the borough as a whole (Image 6).

The SIR serves the neighborhood via the Great Kills SIR station, located at Giffords Lane near Amboy Road within the BID area. Since Great Kills is located in the middle of Staten Island, the Great Kills SIR station is the halfway point on the SIR system. The SIR train provides express train station between Great Kills and St. George during peak hours. The express train to and from the Staten Island Ferry Terminal at St. George is a 18-minute ride (on express); it operates during the morning and evening weekday rush hours which shortens commute times (by eight minutes compared to local service) for residents in the neighborhood (Metropolitan Transportation Authority, MTA, n.d.)

Some of the features of the station include ADA accessibility via a pair of long ramps from the Brower Court entrance (see image 3). In addition, there is an overpass connecting the Northbound and Southbound tracks. The overpass leads to two entrances: one on Brower Court and Nelson Avenue that leads to the commercial district, and the other at the rear of the station on the residential side at Baltimore Place via a pedestrian passageway (Image 7). The north end at Giffords Lane has the standard SIRT street-level stationhouse (that is temporarily open during the winter season).

Recently, the MTA has been implementing additional initiatives, improving the overall rider experience:

- With the DOT and Councilmember Joe Borelli, the MTA installed a new pole with multiple lighting fixtures to illuminate the pedestrian passageway by the rear entrance of the station on north side at Baltimore Place, in December 2023. The new lighting was created to provide a more visible and safer corridor for train riders at night and to deter crime.
- In 2024, the SIR introduced the new R-211 train cars to the system, which was the first time new cars were added to the line in over 50 years. The new cars feature larger 58-inch doors for easier access, digital displays with station-specific information, enhanced accessibility features and security cameras. This modernization marks a significant upgrade to the borough's public transportation system.

Image 6: Great Kills train station circa 1870s

Image 7: Great Kills train station with featured stationhouse, present day – looking northbound

In addition to the train system, the surrounding Great Kills neighborhood is also served by numerous local and express buses. The local buses are the S54, S74, S78, S79 and S84, and Manhattan express buses are the SIM1, SIM5, SIM6, SIM7, SIM9 and SIM10 (MTA, n.d.). Within the study boundary, the S54 is the only local bus that runs through the area with a stop located on Giffords Lane and Baltimore Street. The SIM5 and SIM6 are the two express buses that run through the area that share a stop located on Nelson Avenue and Amboy Road.

In Great Kills, commuting patterns reveal a strong reliance on personal vehicles, where approximately 56% of residents have a commute lasting 45 minutes or more, and the average commute time is around one hour (Figure 4). Additionally, 72% of residents use cars as their primary mode of transportation (Figure 3). While public transportation options, such as the SIR station, are available, they may not fully meet the needs of all commuters, which contributes to the high percentage of residents who drive (American Community Survey, n.d.).

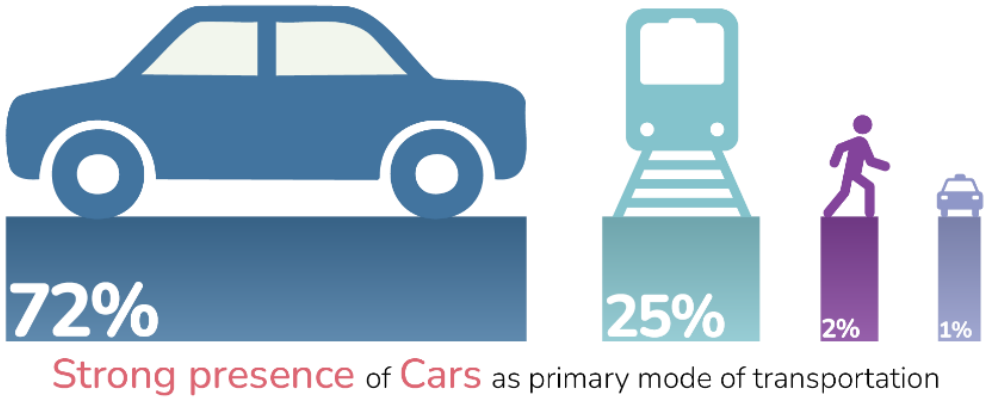


Figure 3: Commute Mode

This highlights the importance of transportation studies such as this one by analyzing key indicators of traffic and pedestrian safety, such as traffic flow, pedestrian space/amenities, crash data, and traffic signal timing. These analytics are essential in creating effective solutions that can accommodate the commuting preferences of Great Kills residents and improve their daily travel experience.

Learning from past traffic studies, DOT initiated a Congested Corridors Study in 2008 with the goal of reducing traffic congestion and improving air quality across the five boroughs. One of the five pilot locations was Amboy Road from Guyon Avenue to Arden Avenue. The Congested Corridors Study was a PlaNYC initiative, funded through the federal Congestion Mitigation and Air Quality Improvement (CMAQ) program. Among the improvements DOT created within the study area were signal timing adjustments throughout the corridor to improve traffic flow and left-turn bays that were installed along Amboy Road (at the Lindenwood Road and Nolan Avenue intersections). Additionally, DOT constructed a channelized right-turn lane, which includes a pedestrian island for eastbound Amboy Road traffic at Nelson Avenue. The pedestrian island helps calm traffic and make traffic movement more noticeable to pedestrians and other motorists, thus increasing safety along Amboy Road (Sustainable Streets Index, 2010).

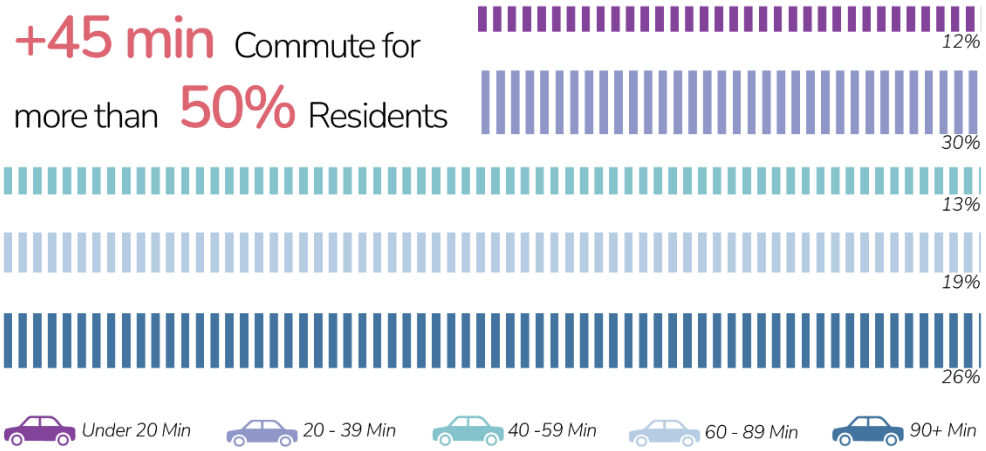


Figure 4: Commute Time

Land Use & Zoning

The majority of the land use within the study area is low-density residential (61.5%) with a mix of public facilities (15.2%) and commercial uses (11.5%) immediately surrounding the SIR station. It is also important to note that while DCP data for Primary Land Use and Tax lot Output (PLUTO) indicates more vacant land (8.3%) than usable open space (1.7%), many of the aforementioned recreational wetlands are categorized as vacant land (Figure 5).

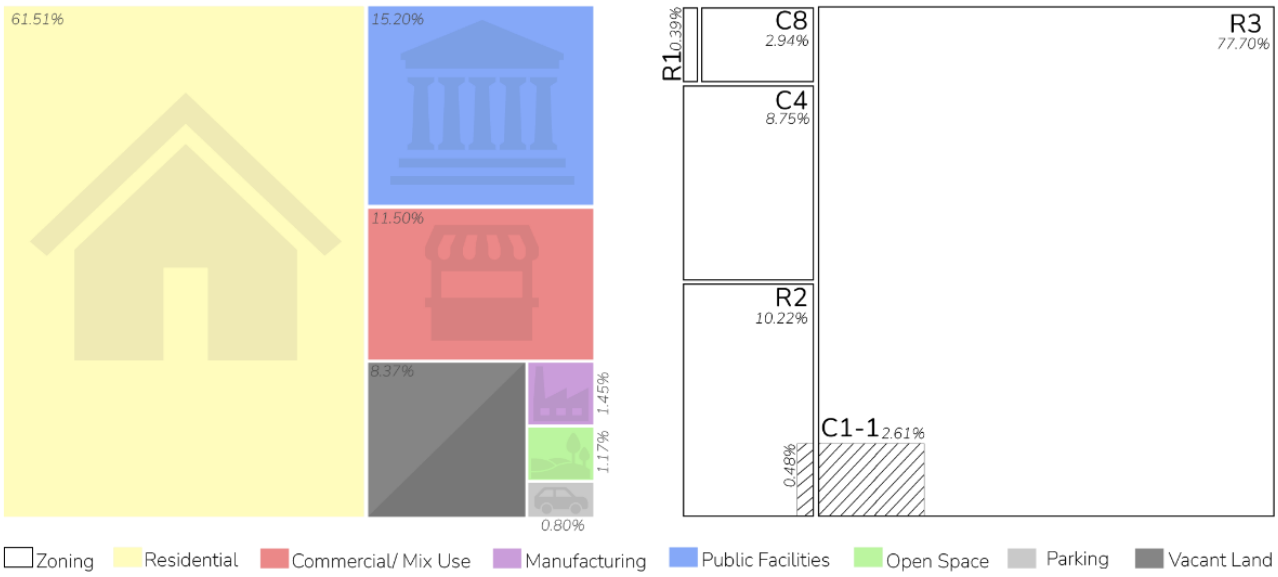


Figure 5: Land Use & Zoning

Residential Districts

The study area contains a mixture of several residential districts which are varied, from R3-2, R3A, R3X to R2 with C1-1 commercial overlays. These residential districts allow for a variety of housing types, which include low-rise attached houses, small multifamily apartment houses, single-family detached houses, and detached and semi-detached one- and two-family residences (Map 5).

Commercial Districts

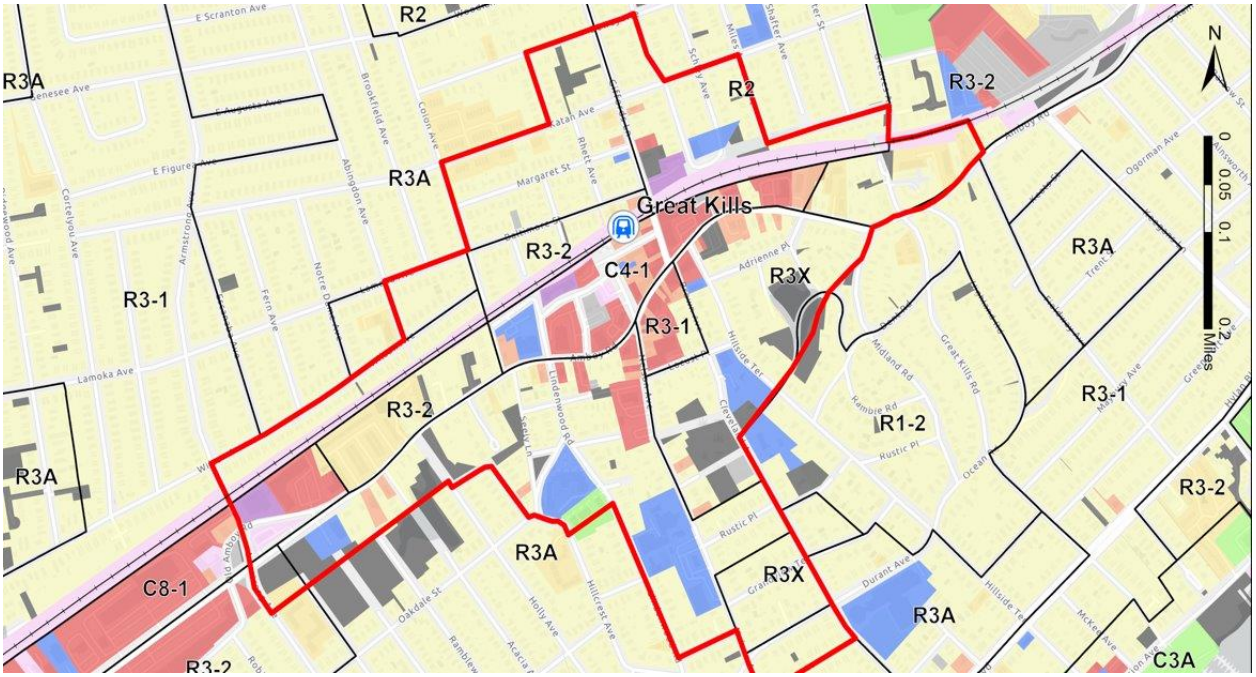
C4-1

Surrounded by a sea of varied residential districts, the C4-1 district is at the center of the greater Great Kills neighborhood, encompassing the SIR station (located on Giffords Lane and Brower Court) and the South Shore BID. This C4-1 district borders Colon Avenue to the west, Amboy Road to the south, cutting through two lots: lot 291 (commercial) and lot 288 (residential) to the east, and the SIR train tracks to the north (Map 5).

Adjacent to this C4-1 district are a group of mixed commercial/residential buildings, along Amboy Road and Giffords Lane, where C1-1 commercial overlays are located. These pre-war buildings with street fronting retail were developed as-of-right before the 1961 zoning resolution separated commercial and residential uses. The C4-1 and C1-1 function as one dynamic district and make up the densest area in Great Kills (Map 5). Building heights within these commercial districts are typically no taller than five stories.

Within the C4-1 district, the retail uses include neighborhood grocery stores (Top Tomato), local restaurants (Village Maria Pizzeria) and beauty parlors (Hair Creation & Color) on Amboy Road. Other land uses include: the United States Post Office on Brower Court; religious institutions such as the Archangel Michael & Saint Mena Coptic Church on Amboy Rd and Lindenwood Road; educational businesses, such as the Staten Island School of Rock on Gifford Lane; and municipal parking on Amboy Road, vacant lots, and a defunct lumber yard on Nelson Avenue.

There are several elementary and preschools schools along the periphery of the study area, including PS. 8 Shirlee Solomon on Lindenwood Road, St. Clare School on Nelson Avenue, and the Rabbi Jacob Joseph Boy's School on Amboy Road. Within the study area, there are several vacant lots and City owned properties – see map of vacant and City owned lots with corresponding agency (Maps 6, 16 & 17).



Map 5: Zoning Districts

C8-1

The C8-1 district within the study area is located along Amboy Road, Old Amboy Road, and Armstrong Avenue.

C8 districts are characterized as having both commercial and manufacturing uses, including heavy commercial services that often require large amounts of land. Land uses within the C8-1 district in the study area include the Eltingville Commons shopping center, a vacant lot, an auto repair shop, and a Stop & Stor storage facility on Old Amboy Road; there is a BP gas station island between Old Amboy and Amboy Road.

Open Space & Outdoor Recreation

Great Kills is surrounded by green space, parks, and recreational community amenities, which include Bluebelts within the immediate study area (Image 9), as well as open spaces such as Great Kills Park, Staten Island Marina, and the Seaside Wildlife Nature Park along the periphery of the neighborhood.

The Bluebelts, first and foremost a flood mitigation system, have undergone vast expansion in Staten Island, currently consisting of 84 individual drainage systems spread across 14,000 acres. A complex system with a variety of benefits, they reduce urban flooding, enhance natural drainage corridors to convey, store, and filter stormwater, improve the health of local waterways, and provide diverse habitat for wildlife. The system has viewing platforms designed for scientific analysis, educational purposes for local school use, and for community recreational activities. During a site visit, SIO observed local teenagers fishing off the platform located at Jack's Pond (Image 8).

Image 8 – Jack's Pond

Image 9: Sign for Staten Island Bluebelt, Great Kills

Approximately, 1.55 miles Southeast of the SIR station, cradling the Great Kills Harbor, is Great Kills Park, a vast recreational area consisting of salt marsh, beach, and woodlands, which features trails, birdwatching and fishing areas, and sports fields. Its beaches and wetlands help fight against erosion and flooding in nearby neighborhoods (National Park Service, n.d).

This combination of resources and greenspace makes Great Kills a well-connected, environmentally conscious community.

Retail and Economic Development

The study area includes 113 storefronts, primarily consisting of service businesses, such as beauty & personal care services and commercial & professional services (42%) which includes doctor's offices and health clinics. This is followed by food & drink (21%) and community facility uses (19%). Retail businesses have a smaller presence (10%) (Figure 6).

DCP's Economic and Regional Development (EDR) Division provided SIO with data indicating how storefront vacancies have changed over time. Within the study area, storefront vacancy has consistently stayed below the borough average, and vacancy at the end of 2024 was only marginally above the area's pre-Covid rate (7.96% vs 7.08%). At the end of 2024, nine storefronts (8%) were vacant which is on-par with Staten Island as a whole and slightly less than the vacancy rate Citywide (11%). Of the nine vacancies, three spaces have been vacant for over a year. These are located at: 61 Giffords Lane, 35 Giffords Glen, and 10 Brown Ave. Only one of the nine storefronts, Block 5428, Lot 8 on Amboy Road, has been vacant for more than a couple years.

Additionally, some of the businesses in the area are situated on larger lots of which the majority of the space is being used for parking, such as CVS Pharmacy, Top Tomato Supermarket, Santander Bank, and Eltingville Auto Locksmith. These parking lots contain curb cuts that detract from an inviting walkable environment.

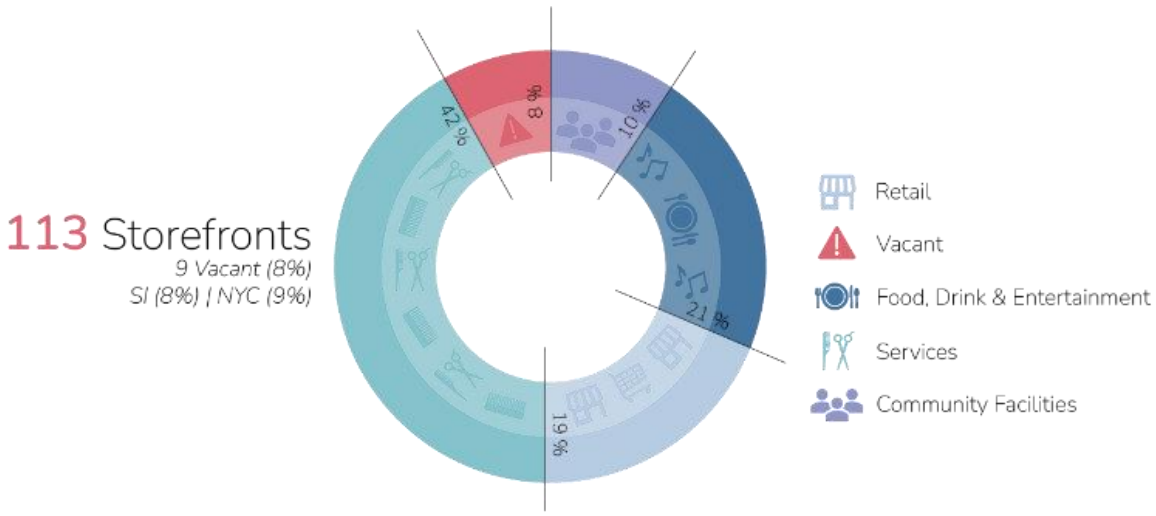


Figure 6: Commercial / Retail Distribution

City Owned Properties

Within the study area, there are a variety of City owned properties (Map 6), some of which constitute community assets within the neighborhood:

- The Great Kills SIR station, located at the center of the study area is owned and managed by the MTA
- There are three public schools inside the study area: Myra S. Barnes Intermediate School 024, St Clare School, PS 8 Shirlee Solomon. Additionally, the broader Great Kills neighborhood is known for having many public and private schools that are highly sought after, not just within the study area, but also around it.
- There is a municipal parking lot along Amboy Road (owned by the DOT) [lot size] which is about a four-minute walk from the train station and the USPS.
- The Great Kills Public Library, located on Giffords Lane, in close proximity to the train station and multiple S54 bus stops.
- The Great Kills Friendship Club at the Great Kills Neighborhood Senior Center which provides daily activities and services for seniors (owned by NYC Department of the Aging)
- There is a public park by the Saint Clare School (managed by the Parks Department)
- Multiple Bluebelt properties (owned and managed by the Department of Environmental Protection), located along the border or the study area.

Map 6. City Owned Properties

Transportation Analysis

DCP put out a Request for Proposal (RFP) in September 2024 soliciting a consultant to conduct traffic data collection within the study area. The contract was awarded to Simco Engineering, D.P.C. (the consultant') in October 2024. DCP in coordination with the consultant collected all necessary data for the study area in November 2024.

Existing traffic volumes were collected on weekday morning, midday, evening, and Saturday hours. For each signalized intersection, the signal timing, cycle length, and phasing were obtained from the (NYC Department of Transportation (DOT).
The consultant collected two main types of data:

1. Vehicular traffic counts; and
2. Pedestrian counts consisting of bi-directional pedestrian movements across crosswalks, along sidewalks and on intersection corners.

The different aspects of this transportation report include existing conditions level-of-service (LOS) analysis for both vehicular and pedestrian circulation as well as the physical conditions of the intersections, streets, and sidewalks. Additionally, public transportation and on/off-street parking are also included.

SIO and DOT conducted a site visit of the study area in October 2024; intersections with transportation issues for potential future study were discussed. SIO also collected study area vehicular and pedestrian collision data which includes the 2024 DOT Vision Zero data (obtained from the Vision Zero Viewer database). Data was compiled from NYC DOT for the most recent years through 2024.

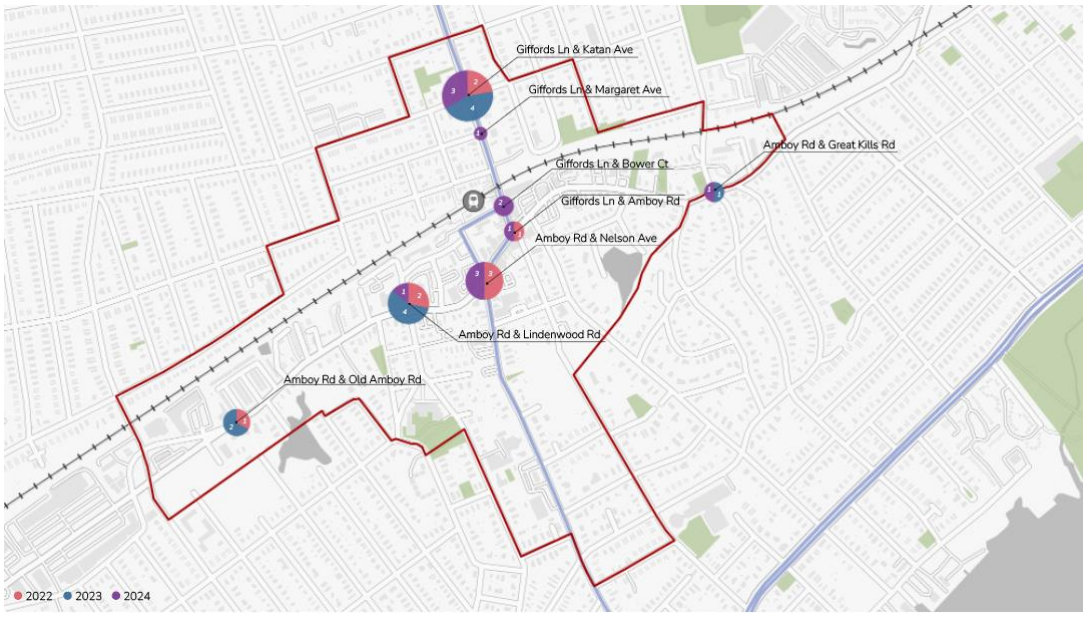
The following information was gathered from this dataset and includes total collisions and pedestrian collisions.

* ***Total Collisions*** - are the number of collisions wherein a police report was taken at the scene of the collision. The site of the collision may either be at an intersection or at a mid-block location between two intersections.
* ***Pedestrian Collisions*** - are collisions in which a pedestrian was involved.

There were 32 total collisions within the study area during the period from 2022 through 2024. Data on the highest number of total recorded collisions revealed that at two locations, Amboy Road at Lindenwood Road and Giffords Lane at Katan Avenue there were four (4) collisions occurred in 2023 at each location (*Figure 7 and Map 7)*.

Vehicular Collisions			
Intersections	2022	2023	2024
Giffords Lane at Katan Avenue	2	4	3
Giffords Lane at Margaret Street	0	0	1
Giffords Lane at Brower Court	0	0	2
Giffords Lane at Brown Ave at Amboy Road	1	0	1
Amboy Road at Nelson Avenue	3	0	3
Amboy Road at Lindenwood Road	2	4	1
Amboy Road at Old Amboy Road	1	2	0
Amboy Road at Greaves Avenue & Great Kills Road	0	1	1
Total	**9**	**11**	**12**

Figure 7: Vehicular Collisions



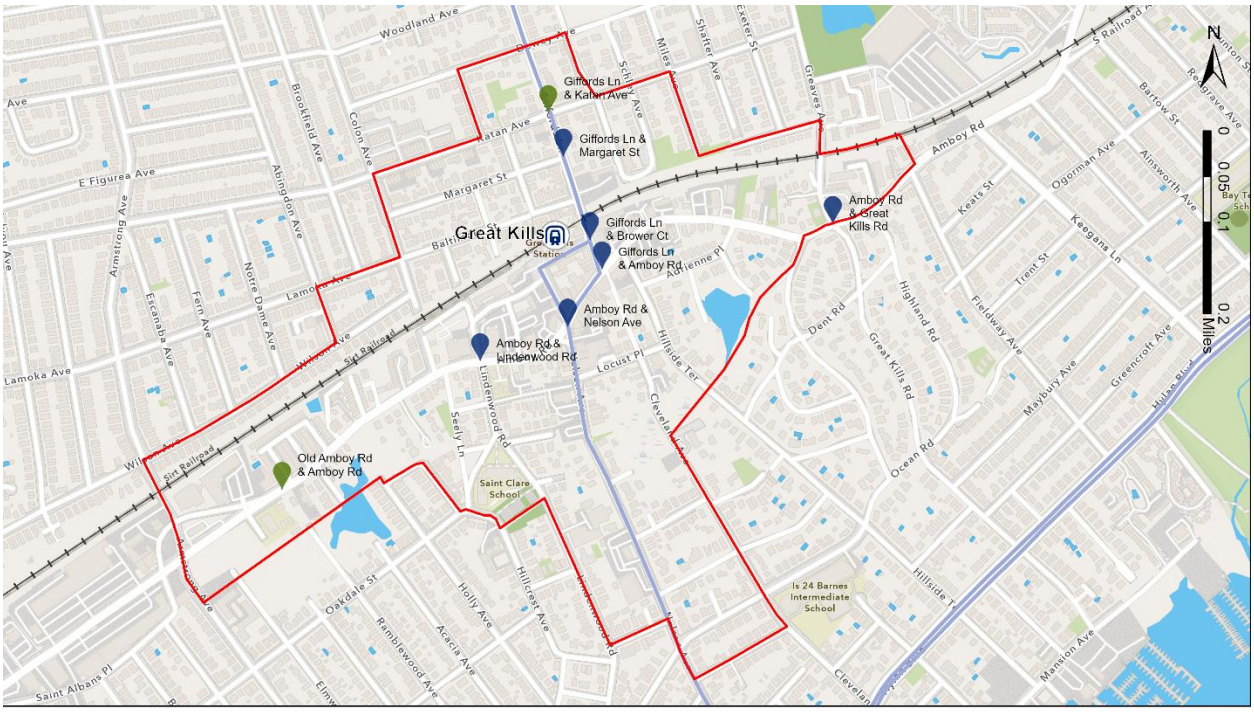
Map 7: Vehicular Collisions from 2022 – 2024

The data involving pedestrians revealed that two pedestrian collisions occurred at the following intersections over the past 3 years: at Amboy Road and Nelson Avenue in 2022 and ne in 2024, at Amboy Road at Old Amboy Road in 2023, and at Giffords Lane and Brower Court in 2024.In 2024, the total number of crashes involving pedestrians doubled the previous two years (Figure 8). None of the crashes involving pedestrians resulted in a fatality.

Crashes Involving Pedestrians			
Intersections	2022	2023	2024
Giffords Lane at Katan Avenue	0	0	0
Giffords Lane at Margaret Street	0	0	1
Giffords Lane at Brower Court	0	0	2
Giffords Lane at Brown Ave at Amboy Road	0	0	0
Amboy Road at Nelson Avenue	2	0	1
Amboy Road at Lindenwood Road	1	0	1
Amboy Road at Old Amboy Road	0	2	0
Amboy Road at Greaves Avenue & Great Kills Road	0	1	1
Total	**3**	**3**	**6**

Figure 8: Pedestrian Crashes

Based on the above crash analysis and coordination with DOT, as well as proximity to the SIR station, SIO selected eight intersections for LOS analysis – 8 for vehicular and 6 for pedestrian (Map 8).



Map 8: Intersections

Vehicular Traffic Counts and ATR Locations

Vehicular turning movements by vehicle classification and bi-directional pedestrian counts were conducted during the same time in 15-minute intervals in two-hour segments.

Vehicle types are classified as: Autos, taxis, vans & pick-up trucks, Buses (all types), Single unit trucks, Tractor-trailers, and Bicycles.

Vehicular counts were collected at eight intersections:
1. Giffords Lane at Katan Avenue
2. Giffords Lane at Margaret Street
3. Giffords Lane at Brower Court
4. Giffords Lane at Amboy Road
5. Amboy Road at Greaves Avenue/Great Kills Road
6. Amboy Road at Nelson Avenue
7. Amboy Road at Lindenwood Road
8. Amboy Road at Old Amboy Road

As supplemental data, Automatic Traffic Recorders (ATR) were installed in the midblock between selected intersections and used to conduct automatic 24-hour traffic counts for one full week (seven consecutive days), the same week as vehicular turning movement and pedestrian counts.

The following five ATR locations were:
1. Giffords Lane between Margaret Street and Katan Avenue
2. Giffords Lane between Brower Court and Amboy Road
3. Amboy Road between Lindenwood Road and Nolan Avenue
4. Amboy Road between Adrienne Place and Midland Road

5. Nelson Avenue between Locust Place and Belden Street

The traffic analysis focused on the peak hour of traffic volume on weekdays (morning, midday, evening) and during the Saturday midday hour.

Traffic volume, turning movement and vehicle classification counts were performed during the weekday morning, midday, evening, and Saturday hours at eight selected intersections within the study area. The peak hours were identified as 7:00 AM to 8:00 AM for the morning weekday period, 1:00 PM to 2:00 PM for the midday weekday period, 5:00 PM to 6:00 PM for the evening weekday period, and 1:00 PM to 2:00 PM for the Saturday midday period.

Pedestrian Counts

The Study Area's sidewalks, crosswalks, and corner levels-of-service were calculated based on the methodologies presented in the 2010 Highway Capacity Manual, and in accordance with procedures in the 2021 CEQR Technical Manual for the specific pedestrian elements noted above.

The pedestrian data was used to identify existing volumes, pedestrian flow patterns, and levels of service (measure of congestion) to determine how heavily sidewalks, corners, and crosswalks were utilized. The result of the existing conditions could provide a baseline from which future conditions can be analyzed. This analysis includes data about the capacity of sidewalks, crosswalks, and intersection corners where pedestrians wait for a walk signal enabling them to cross the street.

This analysis examined six study locations:

1. Giffords Lane at Margaret Street
2. Giffords Lane at Brower Court
3. Giffords Lane at Amboy Road
4. Amboy Road at Greaves Avenue/Great Kills Road
5. Amboy Road at Nelson Avenue
6. Amboy Road at Lindenwood Road

Evaluation of the Existing Traffic Conditions

As noted above, existing traffic volumes were collected and summarized for the weekday morning, midday, evening, and Saturday peak hours. For each signalized intersection, the signal timing, cycle length, and phasing were obtained from the DOT.

Signalized Intersections

The operation of signalized intersections within the study area was analyzed using the Synchro 11 software, currently used by NYC DOT for intersection capacity analysis. These procedures evaluate signalized intersections based on average delay per vehicle, the ratio of volume to capacity (i.e, volume-to-capacity (v/c) ratio), queue lengths, and LOS.

For signalized intersections, the capacity analysis methodology separates an intersection approach into lane groups based on the movements occurring during each signal phase. The lane groups are then analyzed to determine their respective v/c ratios, queue lengths, average delays and corresponding LOS. This analysis requires the following input parameters: intersection geometry, lane configuration, number of travel lanes, width of travel lanes, on-street parking conditions, locations of bus stops, number of buses stopping per hour, vehicle turning movements (i.e, left-turns, through movements, right-turns), vehicle classification, conflicting pedestrian movements, traffic signal cycle length, and allocation of green time.

The capacity analysis computes the volume to- capacity ratio (v/c ratio) which presents the proportion of capacity (supply) utilized by the existing traffic volume (demand). High v/c ratios (>0.85) indicate greater traffic congestion, and low v/c ratios (<0.60) indicate less congested conditions traffic flow.

The LOS performance of an intersection is based on the estimated average delay per vehicle in each lane group. Average delay is determined by the capacity of a lane group, the amount of green time allotted to a lane group, and the signal cycle length.

Short delays correspond to a good LOS while long delays correspond to a poor LOS. For example, an average delay of up to ten seconds per vehicle corresponds to LOS A, while an average delay of 45 seconds per vehicle corresponds to LOS D etc. Table below describes the LOS definitions for signalized intersections (Figures 9 & 10).

Flow Quality	Description
Level A	Describes operation with very low delays, i.e., less than or equal to 10 seconds per vehicle. This occurs when progression is extremely favorable, and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.
Level B	Describes operation with delay in the range of >10-20 seconds per vehicle. This generally occurs with good progression and/or short cycle lengths. More vehicles stop than for LOS A, causing higher levels of average delay.
Level C	Describes operation with delay in the range of >20-35 seconds per vehicle. These higher delays may result from fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant at this level, although some may still pass through the intersection without stopping.
Level D	Describes operation with delay in the range of >35-55 seconds per vehicle. At level D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, longer cycle lengths, or high v/c ratios. Many vehicles stop and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
Level E	Describes operation with delay in the range of >55-80 seconds per vehicle. This is the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high v/c ratios. Individual cycle failures are frequent occurrences.
Level F	Describes operation with delays of more than 80.0 seconds per vehicle. This is unacceptable to most drivers. This condition often occurs with saturation, i.e., when arrival flow rates exceed the capacity of the intersection. It may also occur at high v/c ratios below 1.00 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing causes to such delay levels.
Source: *Highway Capacity Manual,* Transportation Research Board, National Research Council, Washington, D.C., 2010	

Figure 9: Level of Service Definitions for Signalized Intersections

Intersection Analysis

2024 Existing LOS Conditions

Direction	Appr.	Existing AM			Existing MD			Existing PM			Existing SAT		
		v/c	Delay	LOS	v/c	Delay	LOS	v/c	Delay	LOS	v/c	Delay	LOS
Amboy Road and Nelson Avenue													
Eastbound	LTR	0.54	10.0	A	0.40	15.3	B	0.42	10.1	B	0.5	14.1	B
	L	0.33	7.6	A	0.17	14.0	B	0.15	7.0	A	0.12	10.9	B
Westbound	LTR	0.64	10.9	B	0.52	7.2	A	0.62	8.2	A	0.7	10.9	B
Northbound	LTR	1.10	113.0	F	0.51	31.0	C	0.91	64.1	E	0.69	37.7	D
Southbound	LTR	0.40	28.2	C	0.26	25.9	C	0.44	32.0	C	0.31	26.7	C
Intersection Delay		**0.78**	**31.7**	**C**	**0.50**	**16.0**	**B**	**0.69**	**20.6**	**C**	**0.67**	**17.8**	**B**
Amboy Road and Lindenwood Road													
Eastbound	L	0.08	11.2	B	0.08	9.2	A	0.17	10.7	B	0.13	9.8	A
	LTR	0.82	25.9	C	0.42	12.4	B	0.45	12.8	B	0.47	13.1	B
Westbound	L	0.25	15.2	B	0.09	5.3	A	0.22	7.4	A	0.15	5.2	A
	LTR	0.56	16.2	B	0.45	7.1	A	0.64	9.8	A	0.53	7.4	A
Northbound	LTR	0.63	34	C	0.14	27.3	C	0.51	33.9	C	0.16	24.5	C
Southbound	LTR	0.13	24.2	C	0.17	27.7	C	0.25	28.7	C	0.18	27.8	C
Intersection Delay		**0.73**	**24.2**	**C**	**0.36**	**13.3**	**B**	**0.58**	**16.1**	**B**	**0.41**	**13.3**	**B**
Amboy Road, Old Amboy Road and Cloverdale Avenue													
Eastbound	L	0.09	40.9	D	0.49	54.6	D	0.54	57.7	E	0.59	60.7	E
	TR	0.47	8.5	A	0.33	7.0	A	0.34	7.1	A	0.34	7.1	A
Westbound	L	0.00	0	A	0.01	9.7	A	0.01	9.7	A	0	0	A
	T	0.59	16.6	B	0.45	13.7	B	0.53	15.0	B	0.52	14.9	B
	R	0.14	10.4	B	0.11	10.2	B	0.28	11.8	B	0.12	10.2	B
Northbound	LL	0.02	27.4	C	0.08	28.2	C	0.07	28.1	C	0	0	A
	TR	0	0	A	0	27.2	C	0.02	27.5	C	0	0	A
Southbound	LTR	0.00	27.3	C	0.13	28.8	C	0.09	28.3	C	0.11	28.6	C
Intersection Delay		**0.45**	**12.1**	**B**	**0.36**	**13.4**	**B**	**0.41**	**14.1**	**B**	**0.42**	**14.1**	**B**

Figure 10: 2024 Existing LOS Conditions

The following intersections are ones which have one or more movements operating at LOS D, E, or F:

Morning Peak Hour:

- The northbound Nelson Avenue left-thru-right approach at Amboy Road operates at **LOS F** with a delay of 113 seconds per vehicle.
- The eastbound Amboy Road left-turn movement at Old Amboy Road/ Cloverdale Avenue operates at **LOS D** with a delay of 40.9 seconds per vehicle.

Midday Peak Hour:

- The eastbound Amboy Road left-turn movement at Old Amboy Road/ Cloverdale Avenue operates at **LOS D** with a delay of 54.6 seconds per vehicle.

Evening Peak Hour:

- The northbound Nelson Avenue left-thru-right approach at Amboy Road operates at **LOS E** with a delay of 64.1 seconds per vehicle.
- The eastbound Amboy Road left-turn movement at Old Amboy Road/ Cloverdale Avenue operates at **LOS E** with a delay of 57.7 seconds per vehicle.

Saturday Peak Hour:

- The eastbound Amboy Road left-turn movement at Old Amboy Road/ Cloverdale Avenue operates at **LOS E** with a delay of 60.7 seconds per vehicle.

The LOS summary sheets, which document the existing signal timing, phasing, allowed traffic movements, traffic volumes, peak hour factors, percent of heavy vehicles, LOS by approach, and LOS for the entire intersection, are on file at the NYC DCP (Figure 11).

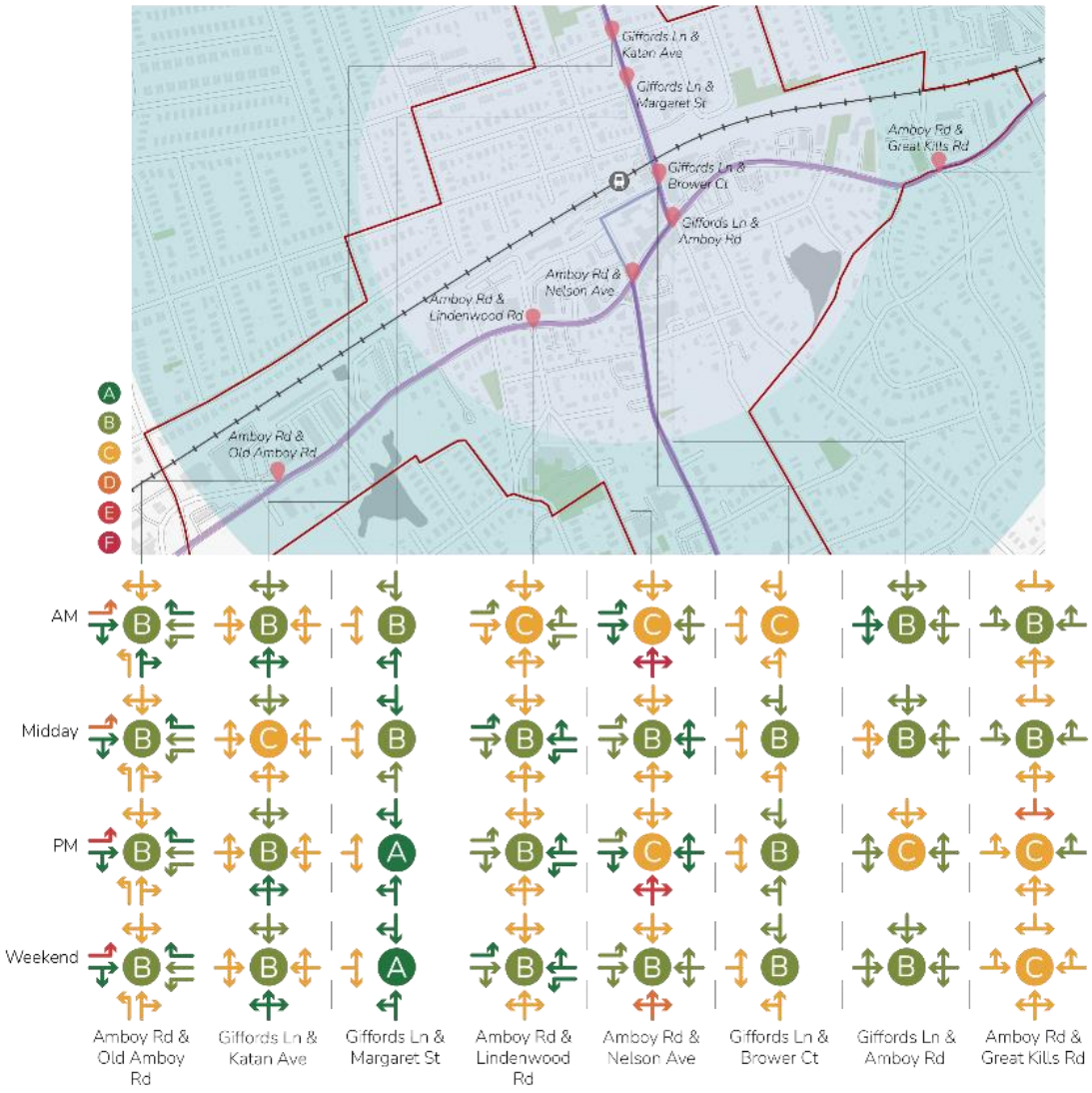


Figure 11: Level of Service – Vehicular

Evaluation of the Existing Pedestrian Conditions

The pedestrian LOS, which is measured by the pedestrian flow rate per foot of width per minute (PFM), was analyzed to identify the quality of pedestrian movement and comfort and is defined by a density-comfort relationship. The table below describes definition for the LOS criteria for pedestrian sidewalk, crosswalks and corners conditions (Figure 12). All pedestrian analyses were conducted for the average pedestrian flow conditions during a full peak hour and were recorded in 15-minute increments.

LOS standards are based on the average area available per pedestrian during the analysis period, typically expressed as a 15-minute peak period. LOS grades from A to F are generally represent different conditions: with LOS A represent the free flow conditions without pedestrian conflicts and LOS F showing significant capacity limitations and inconvenience.

Table Level of Service Criteria for Sidewalks, Corners and Crosswalks

Flow Quality	Description	Sidewalks	Corner Reservoirs and Crosswalks
		Platoon Flow	
LOS A	Unrestricted	> 530 SFP	> 60 SFP
LOS B	Slightly restricted	> 90 and ≤ 530 SFP	> 40 and ≤ 60 SFP
LOS C	Restricted but fluid	> 40 and ≤ 90 SFP	> 24 and ≤ 40 SFP
LOS D	Restricted; necessary to continuously alter walking stride and direction	> 23 and ≤ 40 SFP	> 15 and ≤ 24 SFP
LOS E	Severely restricted	> 11 and ≤ 23 SFP	> 8 and ≤ 15 SFP
LOS F	Forward progress only by shuffling; no reverse movement possible	≤ 11 SFP	≤ 8 SFP

*Note: SFP = square feet per pedestrian

Figure 12: Level of Service Criteria for Sidewalks, Corners and Crosswalks

Sidewalk Analysis

The sidewalk midblock analysis measures the average flow rate LOS as well as the "platoon" LOS. Pedestrians often travel together as a group, voluntarily or involuntarily, due to signal control, or bus or subway riders exit onto the sidewalk in short period of time. This phenomenon is called platooning. An analysis of existing conditions at selected intersections indicates that the pedestrian LOS generally operates at a comfortable LOS A during all four peak periods.

Corner Analysis

Street corner and crosswalk analyses are more complex than sidewalk analysis since they involve sidewalk flows, pedestrian crossings, and other queued pedestrians waiting for the traffic signal to change. Analyses of the existing corners indicate that, during four peak periods, most corners generally operate at LOS A or better for all peak periods.

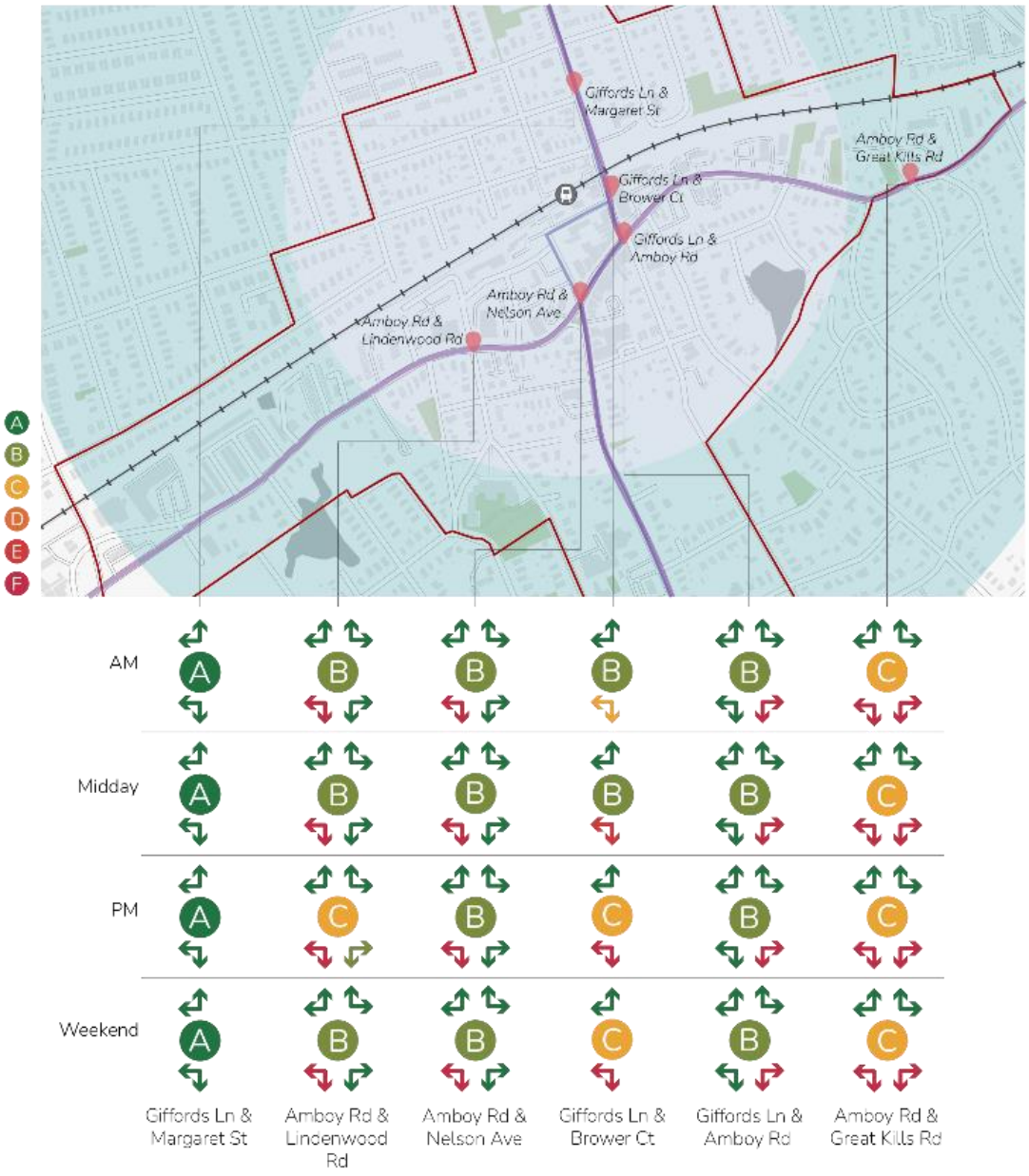


Figure 13: Level of Service Pedestrian Corners

However, six corners at analyzed intersections operate at LOS E or worse (Figures 13 & 14). These corners are located at four intersections along Amboy Road, and one intersection on Giffords Lane. They are as follows:

- Giffords Lane at Brower Court southwest corner operates at LOS E during the midday peak hour and at LOS F during both evening and Saturday peak hours.
- Amboy Road at Giffords Lane/Brown Avenue southeast corner operates at LOS F during all peak periods.
- Amboy Road at Great Kills Road both southeast and southwest corners operate at LOS F during all peak periods.
- Amboy Road at Nelson Avenue southwest corner operates at LOS F during all peak periods, and
- Amboy Road at Lindenwood Road southwest corner operates at LOS F during all peak periods.

Table
2024 Existing Conditions - Corner Level of Service
(SF/P = Square Foot per Pedestrian)

Intersection	Corner	AM		MD		PM		SAT	
		SF/P	LOS	SF/P	LOS	SF/P	LOS	SF/P	LOS
Gifford Lane at Margaret Street	Northwest	63.3	A	110.1	A	108.8	A	176.6	A
	Southwest	377.5	A	580.9	A	498.9	A	504	A
Gifford Lane at Brower Court	Northwest	244.1	A	233.6	A	194.9	A	186.2	A
	Southwest	24.7	C	9.8	E	3.1	F	4	F
Gifford Lane/Brown Avenue at Amboy Road	Northeast	5440.4	A	1430.6	A	2000.3	A	850.1	A
	Southeast	1079.1	F	0	F	0	F	0	F
	Southwest	569.4	A	363.5	A	385	A	344.9	A
	Northwest	447.2	A	198.7	A	189.8	A	83.2	A
Great Kills Road/Greaves Avenue at Amboy Road	Northeast	2395.9	A	2881.5	A	1432.1	A	2885.4	A
	Southeast	0	F	0	F	0	F	0	F
	Southwest	0	F	0	F	0	F	0	F
	Northwest	958.6	A	950.3	A	661.8	A	1343.1	A
Nelson Avenue at Amboy Road	Northeast	1400	A	1334.3	A	885.8	A	661.6	A
	Southeast	131.9	A	127	A	122.6	A	133.2	A
	Southwest	0	F	0	F	0	F	0	F
	Northwest	495.2	A	458.6	A	400.2	A	250	A
Lindenwood Road at Amboy Road	Northeast	3356.3	A	3001.6	A	2382.2	A	3052.9	A
	Southeast	109.5	A	113.6	A	48.3	B	178	A
	Southwest	0	F	0	F	0	F	0	F
	Northwest	1353.6	A	1573.3	A	1703.2	A	881.1	A

Figure 14: 2024 Existing Conditions – Corner Level of Service

Crosswalk Analysis

Crosswalk analyses were also conducted for the average pedestrian flow conditions during a full peak hour and were recorded in 15-minute increments. Analyses of the existing crosswalks indicate that, during all four peak periods, crosswalks generally operate at LOS A. The HCM summary package, which documents the existing pedestrian LOS, is on file at the NYC DCP.

Existing Transportation Network

Public Transportation

DCP analyzed several datasets related to public transportation including data provided by MTA including buses and railroad ridership as further explained below.

Staten Island Rail (SIR)

The SIR runs through the study area and serves the eastern part of Staten Island. It connects the southernmost part of the Island at Tottenville Station to St. George Terminal (with ferry service to lower Manhattan at Whitehall Terminal); fare collection takes place at the St. George Terminal Station. Between the Great Kills Station and St. George Terminal, the SIR runs local service and also operates express service. During morning peak hours, it has the express service to St. George Terminal and during evening peak hours, the SIR has an express line to Great Kills Station and continues local service to Tottenville Station which is the end of the line (Figure 15). SIR service operates 24 hours per day, providing frequent service throughout the day and night. Trains run at all hours, every day of the week, and all train times at the St. George Staten Island Ferry Terminal are coordinated to meet ferry arrivals and departures.

In Great Kills, local train frequency is about every 15 minutes during the early morning hours after 5am. From 6-8am express train service begins; and the express trains and the local trains alternate, each running every 15 minutes. From 8am-3pm the local train runs every 30 minutes, from 3-5pm every 20 minutes, from 5-8:30pm every 15 minutes, and at night, from 8:30pm-5am, the train runs every 30 minutes.

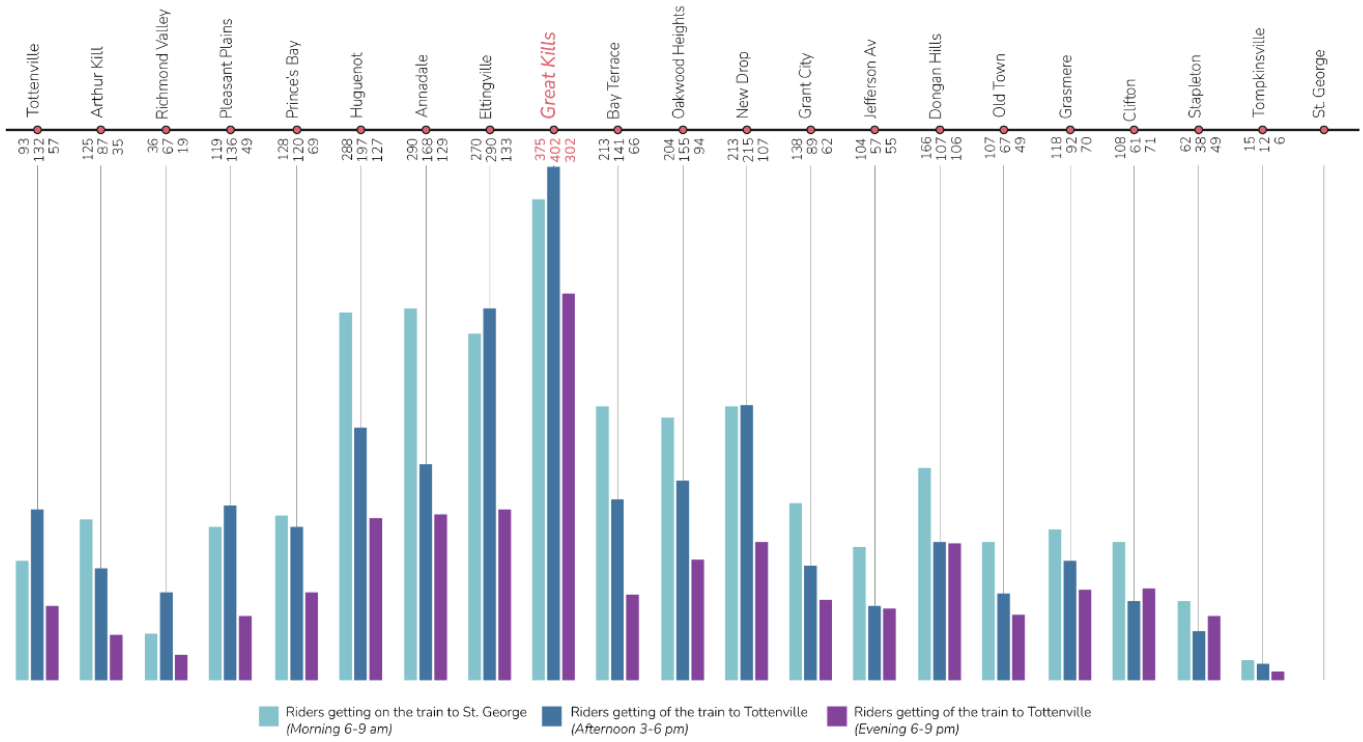


Figure 15: Staten Island Rail (SIR) Ridership, Peak Hours

The MTA provided ridership data from a four-day period, October 19, 26, 31, and November 2, 2023. The numbers presented below are averages across those four days (Figure 16).

MTA ridership data between Great Kills station and St. George Terminal followed common commute patterns of people leaving to go work in the morning and coming back in the afternoon or evening (Figure 16). As presented in the demographics section, around 50% of the workforce in Great Kills works outside of Staten Island – either in a different NYC borough or a different state – suggesting that a considerable portion of these train commuters work in Manhattan/outside of Staten Island (Figure 4).

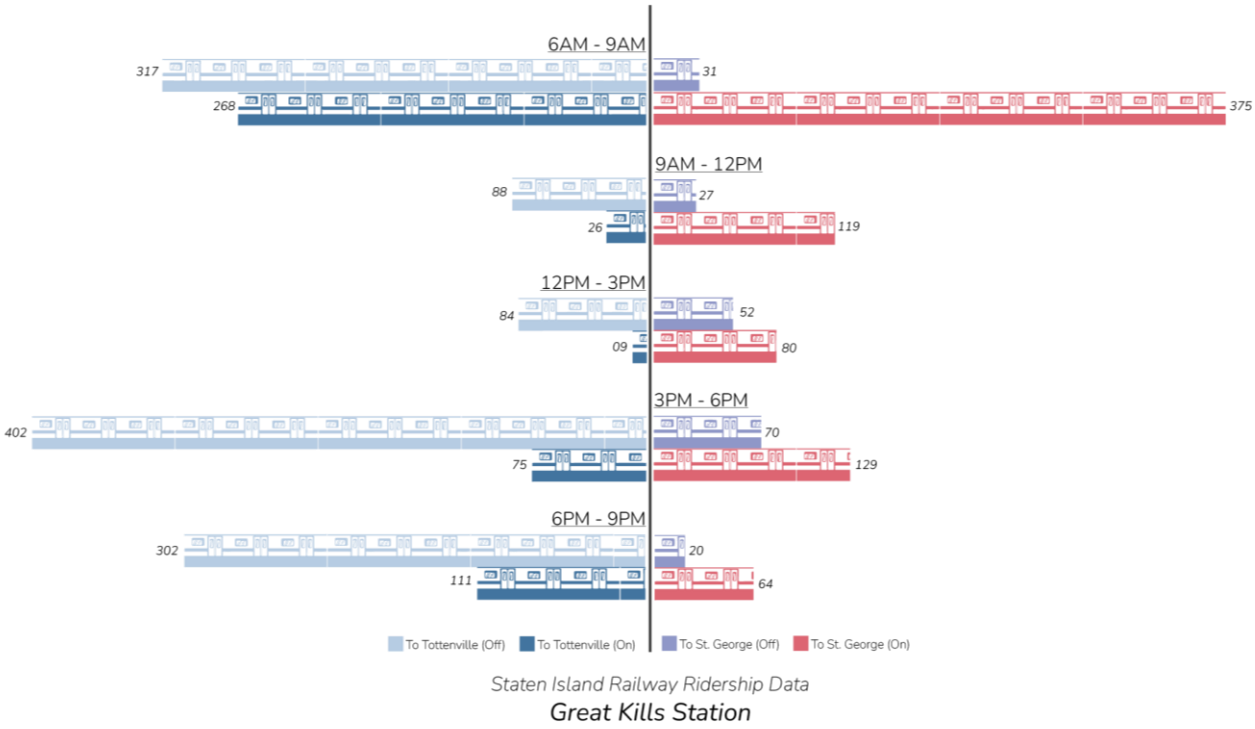


Figure 16: Staten Island Rail (SIR) Ridership, Directional

Northbound Train

The Great Kills station has the highest number of northbound morning passengers on the SIR system; between the hours of 6am – 9am a total of 375 people took train towards St George Terminal. In comparison, the average number of northbound passengers getting on during the morning rush hour across the entire route is 159 people during those hours. In Great Kills, from 9am-3pm ridership gradually slowed down, but then picked back up between 3pm-6pm, where a total of 129 people took the train in Great Kills. The lowest ridership numbers were observed between 6pm-9pm, where 64 people got on the train.

A significantly smaller number of people got off the northbound train at Great Kills station throughout the day, ranging between 70 people during the afternoon rush hour (3-6pm) as the highest number, and 20 people at night (6pm-9pm) as the lowest number.

Southbound Train

During morning peak hours (6:00am-9:00am) a total of 268 people got on the southbound train from Great Kills towards Tottenville station, and 317 people got off at Great Kills, which makes Great Kills a station with a relatively high volume of riders getting both on and off during morning peak hours.

The number of people getting off the train in Great Kills after the morning peak hours dropped to a consistent level between 9am-3pm (88 people from 9am-12pm, and 84 people from 12-3pm). The volume of train riders getting off then took a dramatic increase: 402 people got off at Great Kills between 3-6pm, and 302 people got off between 6-9pm. This volume of people lines up well with the number of people getting on the train towards St George in the morning, making it very likely that these are the same commuters leaving for work and coming back to Great Kills in the afternoon/evening.

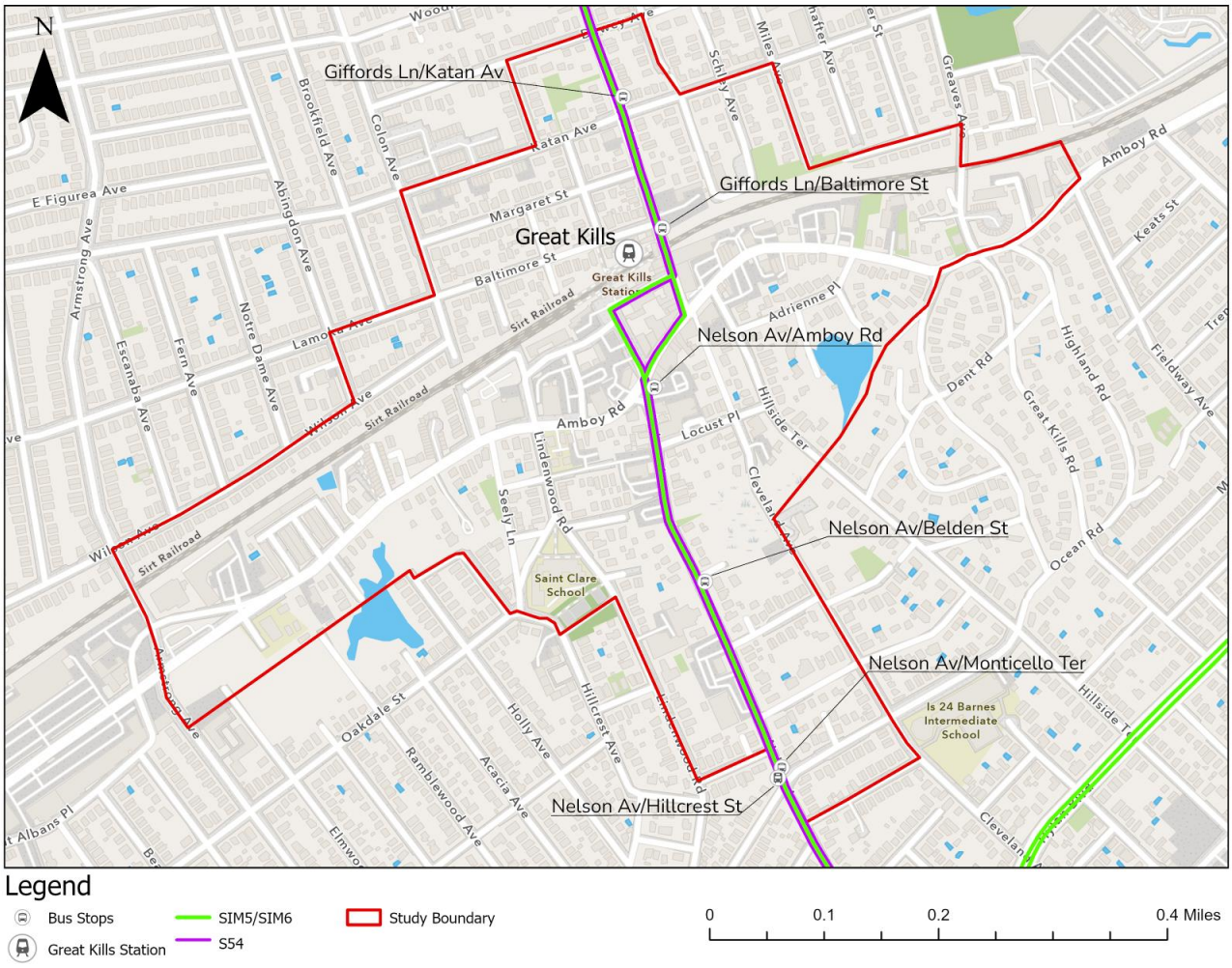
The volume of passengers getting on the train in Great Kills decreased significantly after the morning

peak hours: from 268 to only 9 passengers between 12-3pm. In the late afternoon ridership steadily increased again until reaching 111 passengers getting on the train between 6-9pm.

Buses: S54, SIM5, SIM6

The study area is served by the S54 local bus, and the SIM5 and SIM6 express buses which provide access to Manhattan via the Verrazzano Bridge during the morning peak hours. SIM5 provides service to/from Lower Manhattan/Financial District, while SIM6 provides service to/from 55th Street, Midtown Manhattan (Map 8). All three bus lines run on weekdays only; there is no weekend service.

SIO analyzed ridership numbers from six bus stops within the study area: Nelson Avenue/Monticello Terrace (S54); Nelson Avenue/Hillcrest Street (S54; SIM5 and SIM6); Nelson Avenue/Belden St (S54); Nelson Avenue/Amboy Road (S54, SIM5, SIM6), Giffords Lane/Baltimore St (S54); and Giffords Lane/Katan Avenue (S54) (Map 9). The MTA shared ridership data from a four-day period from May 24-23 and October 22-23, 2024. The data presented is averages across those four days (Figure 17). Since these averages are based on a small sample size, they are not statistically representative of the general ridership volumes.



Map 9: Bus Route Through Study Area

S54 Ridership

The S54 route begins in Eltingville on Hylan Blvd/Richmond Ave; the bus runs through Great Kills, Willowbrook, Manor Heights Castleton Corners, and ends at West New Brighton at Broadway and Richmond Terrace. The most frequently used stops along the route are Brielle Ave/Gansevoort Blvd, close to Susan E. Wagner High School; Manor Road/Victory Blvd which functions as a transfer hub to five local busses; and Manor Road/Forest Ave which also functions as a bus transfer hub to two local busses and two express busses.

In the study area, local ridership numbers vary when looking at the volume of people getting on vs off each stop. Overall, the data shows that Great Kills is a destination in itself, and the ridership volumes reflect some of the key assets of the neighborhood, including the SIR station, the commercial district, and a middle school.

The **Giffords Lane/Baltimore Street** stop had the highest number of people getting on (38 people per day on average) within the study area. Since this stop is close to the train station, it is likely that some of these people got off the train and then took the bus to their destination. The number of people getting off at this stop was considerably smaller – only 14 per day. Aside from the train station, people might get off at this stop due to its proximity to the commercial area.

Nelson Avenue/Amboy Road stop is the most centrally located within Great Kills' commercial area, and it had the highest number of passengers getting off (47 people per day on average) and also the highest total number of on/off passengers combined (66 people per day on average). Thus, it is reasonable to believe that many passengers take the S54 to and from this stop because they either work at, or patron businesses in the commercial area.

Nelson Avenue/Monticello Terrace stop is located just a 3-minute walk, or 0.1 miles north from I.S. 024 Myra S Barnes middle school, which is likely to be why this stop also had a high volume of riders getting off (34 per day). Fewer (16 per day) got on at this stop.

Nelson Avenue/Belden Street and **Giffords Lane/Katan Avenue** stops are both situated within more residential sections of the neighborhood. These stops had the lowest ridership numbers, averaging between 16-22 passengers getting on and 16-34 passengers getting off per day.

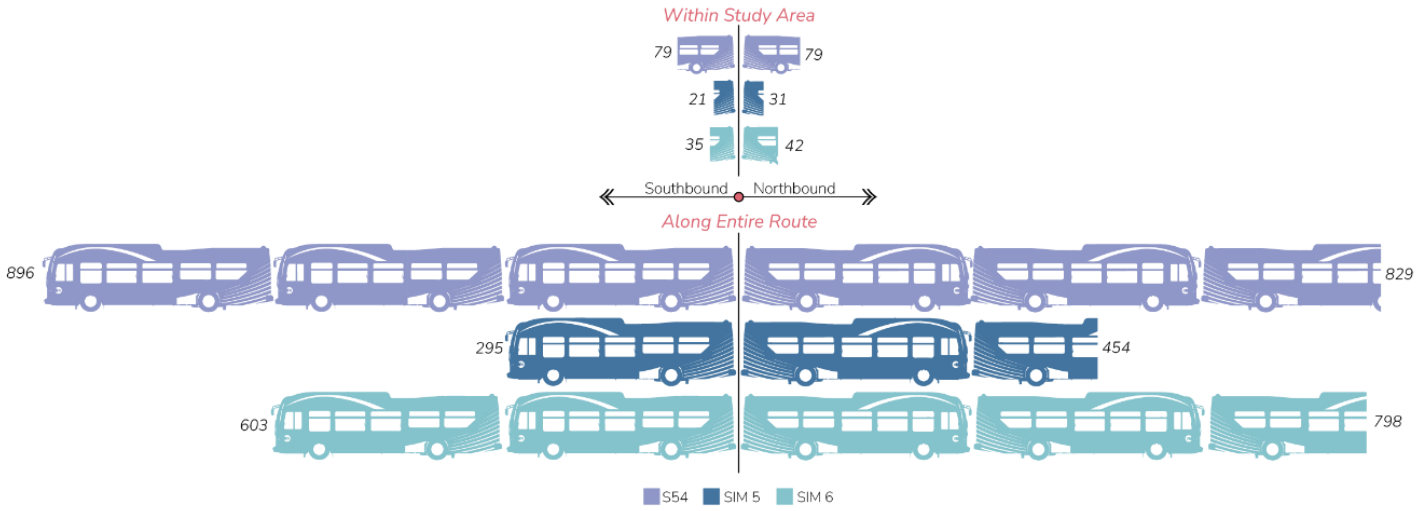


Figure 17: Bus Service Ridership (S54, SIM5, SIM6)

SIM5 and SIM6 Ridership

The express buses, SIM5 and SIM6, makes three stops within the study area: Nelson Avenue/Amboy Road, which is about a 3-minute walk from the Great Kills train station, Nelson Avenue/Monticello Terrace (southbound only stop) and Nelson Avenue/Hillcrest St (northbound only stop); the last two are located across from each other near the southern border of the study area.
The ridership data clearly shows that the SIM 5 and 6 buses are used by local commuters going to and from Manhattan.

SIM5 northbound service to downtown Manhattan starts at the Eltingville/Transit Center; northbound buses run on a morning (5am-9am) only schedule. In total, there are 23 scheduled northbound buses, running in 15-minute intervals. The last bus arrives at Pearl Street/Pack Slip at 10:08am. During the four-day period, the northbound buses had similar ridership volumes at the Nelson Avenue/Amboy Road stop and the Nelson Avenue/Hillcrest Street stop, averaging 15-16 people getting on per day. There were no northbound passengers getting off at these stops.

SIM5 southbound service to Staten Island starts at Pearl Street/Frankfort Street in downtown Manhattan; southbound buses run on an afternoon/evening (3pm-8pm) schedule. There are 15 southbound bus departures per day, running in 20-30 minutes intervals. The last southbound bus arrives at the Eltingville/Transit Center at 7:59pm. The northbound bus and the southbound buses had similar ridership volumes at the Nelson Avenue/Amboy Road stop and the Nelson Avenue/Monticello Terrace stop, averaging 10-11 people getting off per day. There were no southbound passengers getting on at these stops.

SIM6 northbound service to midtown Manhattan also starts at the Eltingville/Transit Center; northbound buses run on a morning (5am-10:30am) schedule. In total, there are 33 scheduled northbound buses per day, running in 10-minute intervals. The last northbound bus arrives at East 57th Street/Lexington Avenue at 10:34am. On average, 21 people got on at Nelson Avenue/Amboy Road and Nelson Ave/Hillcrest Street respectively. There were no northbound passengers getting off at these stops.

SIM6 southbound service to Staten Island starts at Lexington Avenue/East 55th Street in Midtown Manhattan; southbound buses run on an afternoon/evening (2pm-9pm) only schedule. In total, there are 30 southbound buses per day, running in 25 minutes intervals. The last southbound bus arrives at the Eltingville/Transit Center at 9:06pm. The volume of passengers getting off at the Nelson Avenue/Amboy Road stop and the Nelson Avenue/Monticello Terrace stop were 17 and 14 per day respectively. There were no southbound passengers getting on at these stops.

Parking

SIO analyzed parking information within the study area. The parking data was collected in-person by SIO during site visits

Off-Street Parking

There is one City Municipal DOT Parking Facility located on Amboy Road with long and short-term parking within the study area. From the site visit observation, during weekday midday it showed very low utilization rate at approximately 25% - 30% of the total parking spaces with $1.50 per hour (31 long term parking spaces with maximum $12 per 15 hours and 20 short term parking spaces – 4-hours parking. There were also 11 parking spaces that required a special permit available from the NYC DOT Bureau of Parking). This parking lot is open from Monday to Saturday from 7AM to 10PM except Sunday.

On-Street Parking regulations

The on-street parking regulations within the study area do not vary considerably, and they can be grouped into the following three major categories: parking, no parking and no standing.

I. Parking
The metered parking regulations are mainly posted along streets with local commercial uses, such as Giffords Lane, Amboy Road, Nelson Avenue, and Brower Court. Permitted Parking regulations facilitate legal parking, within an allotted time, for local users to conduct business. The Permitted Parking regulations within the study area are restricted to 2-hour meters from 8am-5pm except Sunday.

II. No Parking
Within the study area, 'No Parking Any Time' regulations are only posted on streets that are not essential for through-traffic, such as the segment of Nelson Avenue at Brower Court and the section of Nelson Avenue south of Locust Place. However, adjacent land uses require short-term parking (i.e. standing) for local delivery purposes.

III. No Standing
'No Standing Any Time' rules are posted on streets where through traffic is important, for mobility and circulation purposes, on narrow streets to facilitate traffic flow, or where curb-side space is needed for trucks and/or other authorized vehicles to turn. The major No Standing rules are: 'No Standing Any Time' and 'No Standing Any Time - Bus Stop'. 'No Standing Any Time' regulations are in general, a response to the street geometry and intensity of traffic as well as land use needs and safety. This parking regulation can be found along the section of Giffords Lane from the Great Kills Railroad Station north, along Amboy Road from Nelson Avenue to the west, along Nelson Avenue south of Amboy Road and mostly on all corners within 100 -150 feet from the intersection.

Truck Routes
Truck movement within the five boroughs of New York City is currently governed by the traffic rules and regulations of New York City, Chapters 4-13. These regulations apply to all trucks that have either of the following characteristics: two axles and six tires or three or more axles.

There are two major truck route designations: through and local. Through truck routes are designated for trucks having neither an origin nor a destination within the local area. There is no through truck route within the study area.
Local truck routes are designated for trucks with origins or destinations within an area for the purpose of delivery, loading, or providing service. The following are local truck routes that traverse the study area: Amboy Road, Giffords Lane, and Nelson Avenue.

Public Realm Rubric

Introduction

The Public Realm Rubric is a toolkit designed to quantify and score certain elements of the built environment, specifically the urban fabric and public spaces of a neighborhood or area. Since individual experiences in the built environment can be very subjective, the toolkit establishes two main overarching themes (Figure 18) and then assigns a set of criteria to specific elements found in the built environment. Each of the elements receives a score determined by a set of definitions (see Appendix) in order to quantify the purpose, standard, and practicality of each element experienced by the user.

The tool begins with two overarching themes with two sub-themes for one of them:

- Access & visibility: the concept of "access and visibility" refers to a person's walking experience and is further separated into *vertical* aspects that a person observes while in motion and *horizontal* elements that we physically engage with when walking along the sidewalk.

- Comfort & Safety: the concept of "comfort and safety" focuses more on how safe and comfortable a person's experience of space is by cataloguing elements like seating space, streetlights, trees and so forth.

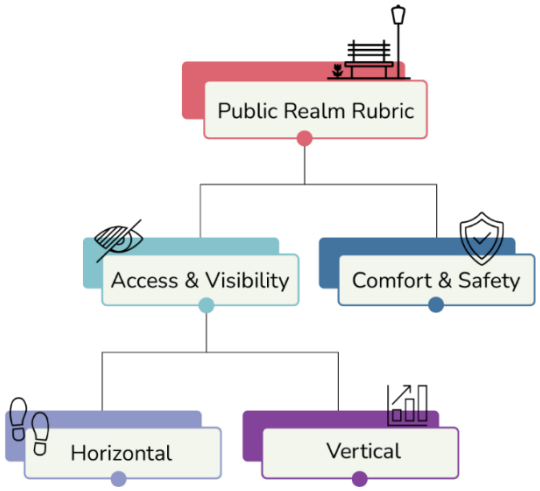


Figure 18: Public Realm Rubric Inventory Parameters

Methodology

The development of the Public Realm Rubric provides a comprehensive tool that bridges the gap between subjective perception and objective analysis of public spaces. The goal was to create a flexible, adaptable framework capable of capturing a wide range of urban conditions, while maintaining an observed approach to assessing the lived experience of public spaces.

The process involved a collaborative team of planners, urban designers, and architects within the division, guided by input from division leadership. To build the rubric, the team held two to three workshops which identified a list of key elements and then assigned four criteria to each element in order to quantify and score the element (Figure 19).

The definitions for each element and criteria are intentionally straightforward, designed to yield a simple "yes" or "no" answer based on observable characteristics in the space. These responses then determine the score for each element, making the assessment process both efficient and objective. Through this collaborative process, the team was able to create a flexible toolkit that provides clear and actionable insights for the conditions of public spaces, offering a practical means of evaluating and improving urban environments. The full definitions of each element and criteria can be found in the appendix.

PUBLIC SPACE RUBRIC				
ELEMENT	CRITERIA			
Access & Visibility - Vertical (As Perceived)				
Building Entrances[1]	Accessibility	Visibility	Transparency	Condition
Outdoor Seating (Cafes/Restaurants)	Availability	Condition	Protection	Flow
Wayfinding[2] (Public)	Clarity	Visibility	Multilingual	Relevance

Signage[3] (Private)	Clarity	Visibility	Multilingual	Relevance
Visibility of Interior Spaces	Transparency	Safety	Engagement	Ambiance
Fence (Construction or Blocking Views)	Aesthetic	Safety	Transparency	Impact
Bollards	Safety	Visibility	Aesthetic	Functionality
Murals	Aesthetic	Relevance	Condition	Visibility
Access & Visibility - Horizontal (Walking Experience)				
Curb Cuts	Accessibility	Visibility	Safety	Functionality
Bike Racks[4]	Visibility	Safety	Condition	Impact
On-Street Parking	Transparency	Visibility	Flow	Condition
Crosswalks	Visibility	Accessibility*	Flow	Condition
Sidewalks	Width	Condition*	Connectivity	Accessibility
Elevation Changes (Steps/Ramps)	Accessibility	Visibility	Safety	Design
Comfort & Safety				
Seating Space	Accessibility	Condition	Comfort	Aesthetic
Streetlights	Visibility	Condition	Functionality	Aesthetic
Public Dustbins	Placement	Visibility	Condition	Aesthetic
Bus Stops	Visibility	Clarity	Protection	Accessibility
Street Trees	Placement	Shade	Condition	Aesthetic
Landscape	Visibility	Relative Size	Condition	Aesthetic
Community Facilities	Location	Visibility	Parking	Accessibility

Figure 19: Public Realm Rubric Methodology

Criteria and Scoring System

In order to describe the nature of each element, the criteria varied slightly across the different elements. For example, 'building entrances' contained the criteria: accessibility, visibility, transparency, and condition, while 'crosswalks' contained the criteria: visibility, accessibility, flow, and condition. The data collection was a three-step process consisting of tracking, evaluating, and scoring each element. (Figure 20)

Step 1: Tracking

- Determine whether the element is present in the segment being assessed.
- If absent, the element is marked as N/A and is not evaluated or scored.

Step 2: Evaluation

- If the element is present, it is evaluated using a set of predefined definition that are tailored to the element's function and relevance in the public realm.
- Each criterion is assessed using a binary scale:
    - Yes = 1 point
    - No = 0 points

Step 3: Scoring

- The total score for each element is calculated by summing the values of the criteria.
- Each element has four criteria, so scores will range from 0 to 4.
- Elements marked N/A are not included in segment-level score averages.

Name					Date & Time: 01/13/25	
Location / Block: Segment 1 Amboy + Armstrong (North Parking Lot)						
GREAT KILLS PUBLIC SPACE RUBRIC: ACCESS & VISIBILITY						
Element	**Criteria**				**Score**	**Comments**
VERTICAL (As Perceived)						
Building Entrances[1]	Accessibility: X	Visibility: ✓	Transparency: ✓	Condition: ✓	3	5-6 building entrances. Salon business is closed
Outdoor Seating (Cafes/Restaurants)	Availability: NA	Condition: NA	Protection: NA	Flow: NA	NA	
Wayfinding[2]	Clarity: ✓	Visibility: ✓	Multilingual: X	Relevance: ✓	3	
Signage[3]	Clarity: ✓	Visibility: ✓	Multilingual: X	Relevance: ✓	3	
Visibility of Interior Spaces	Transparency: ✓	Safety: ✓	Engagement: ✓	Ambiance: ✓	4	
Fence	Aesthetic: X	Safety: ✓	Transparency: X	Impact: ✓	2	Fence to closed salon(see Picture)
Bollards	Safety: ✓	Visibility: ✓	Aesthetic: X	Functionality: ✓	3	
Murals	Aesthetic: NA	Relevance: NA	Condition: NA	Visibility: NA	NA	
HORIZONTAL (Walking Experience)						
Curb Cuts	Accessibility: ✓	Visibility: ✓	Safety: X	Functionality: ✓	3	~~Ex~~ Vehicles back up into street in restaurant lot
Bike Racks[4]	Visibility: NA	Safety: NA	Condition: NA	Impact: NA	NA	
On Street Parking	Transparency: NA	Visibility: NA	Flow: NA	Condition: NA	NA	
Crosswalks	Visibility: X	Accessibility*: X	Flow: ✓	Condition: ✓	2	Crosswalk needs repainting (see Picture)
Sidewalks	Width: X	Condition*: ✓	Connectivity: ✓	Accessibility: X	2	Very small sidewalk width
Elevation Change	Accessibility: NA	Visibility: NA	Safety: NA	Design: NA	NA	

Figure 20 Sample Worksheet

Fieldwork

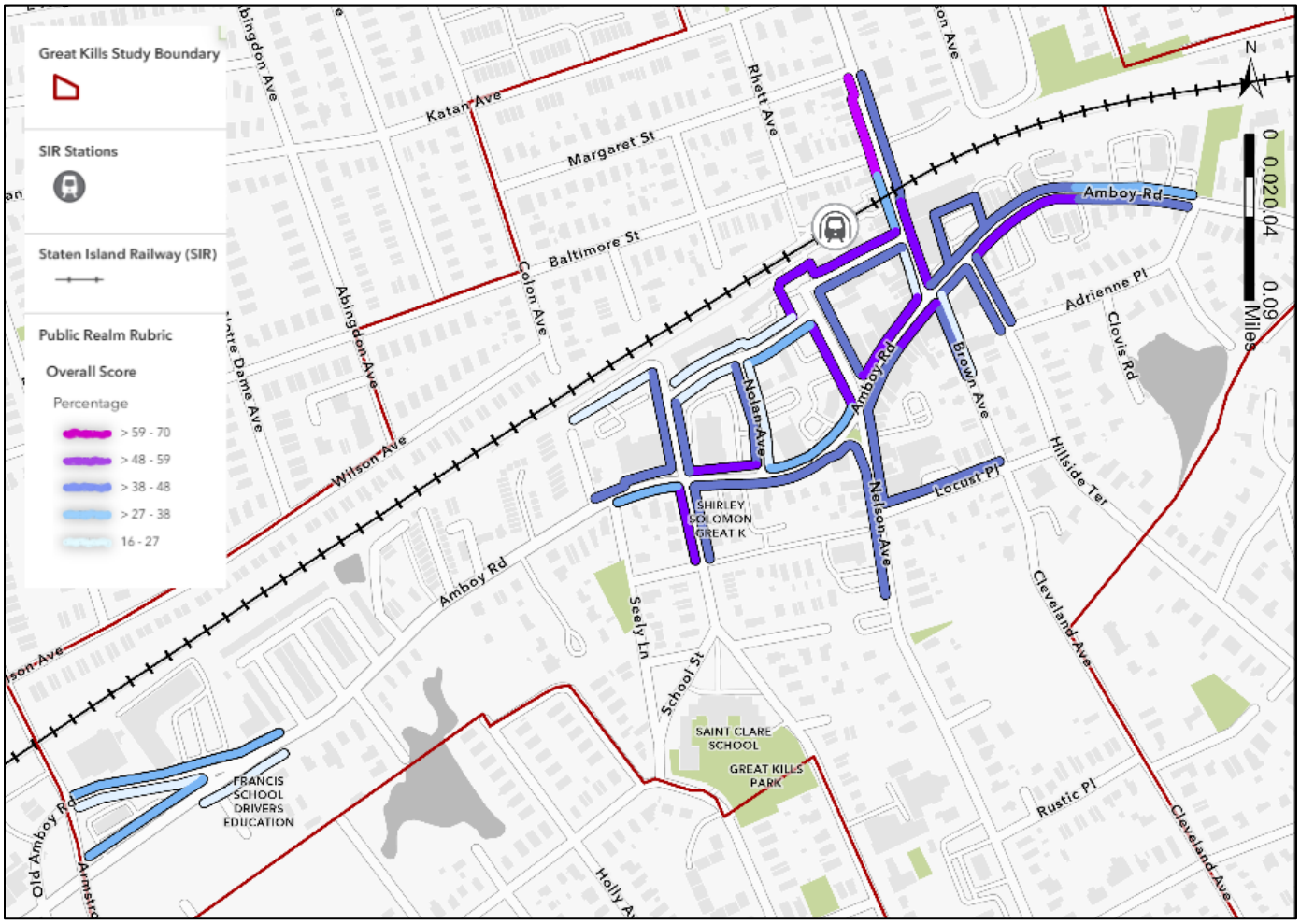
DCP took inventory of street segments along two predominantly commercial areas in the study area: (1) the South Shore BID area including Great Kills Rail Station, and (2) the Eltingville Commons Shopping Center at the intersection of Old Amboy Road and Amboy Road, as described above in the Study Objectives and Goals (Map 1). Fieldwork was conducted on October 10, 2024, between 1pm and 3pm to capture commercial activity during business hours and included sections of the South Shore BID area and around the Eltingville Commons Shopping Center.

A team of seven planners examined a total of 80 street segments using a consistent rubric. Additionally, planners collected data on sidewalk width, number of curb cuts, sidewalk state, and number of on-street parking spaces along each street segment.

Public Realm - Results and Maps

The variety of maps below illustrates the outcomes of the public realm rubric, using the above themes and concluding with a highlight on few of the specific elements. The map's color spectrum indicates the segment's score in terms of its presence and functionality. The lowest percentage or “better” score is represented by light blue, while the highest percentage or “poor” score is represented by bright magenta.

Total Comprehensive Score

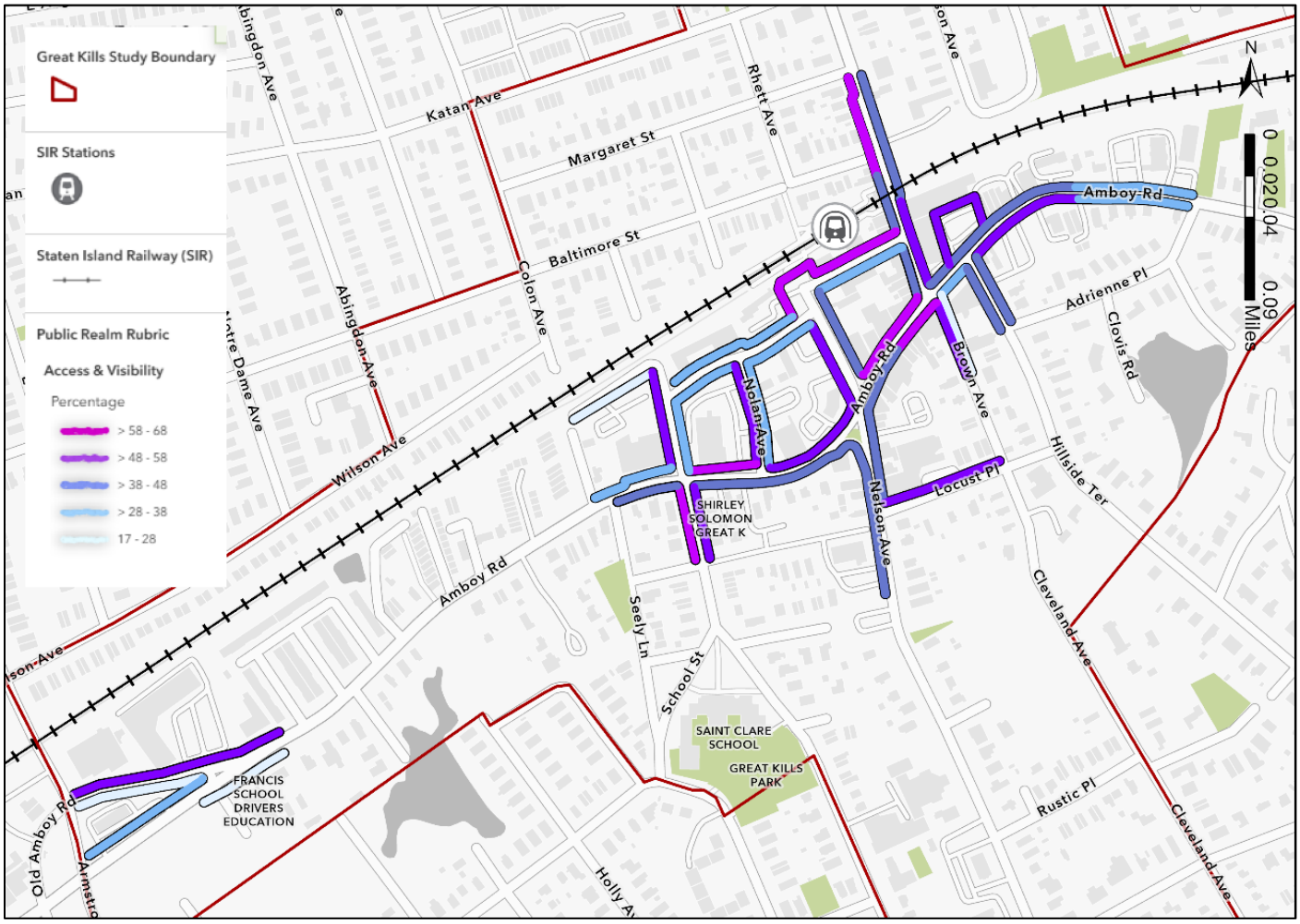


Map 10: Public Realm Rubric – Aggregate

This map (Map 10) shows an aggregate outcome of the two themes to present an overall picture of the existing conditions of the street in terms of pedestrian experience. The streets closest to the Great Kills Station function more effectively than those farther away, with the segment south of Gifford's Lane along the intersection of Margaret Street standing out as the best in the area.

This information also ties back to the land use conditions of the area, wherein the streets with blue segments have a higher concentration of automobile uses, lacking elements for a desirable pedestrian experience. Overall, the rubric presents serval opportunities for improvement.

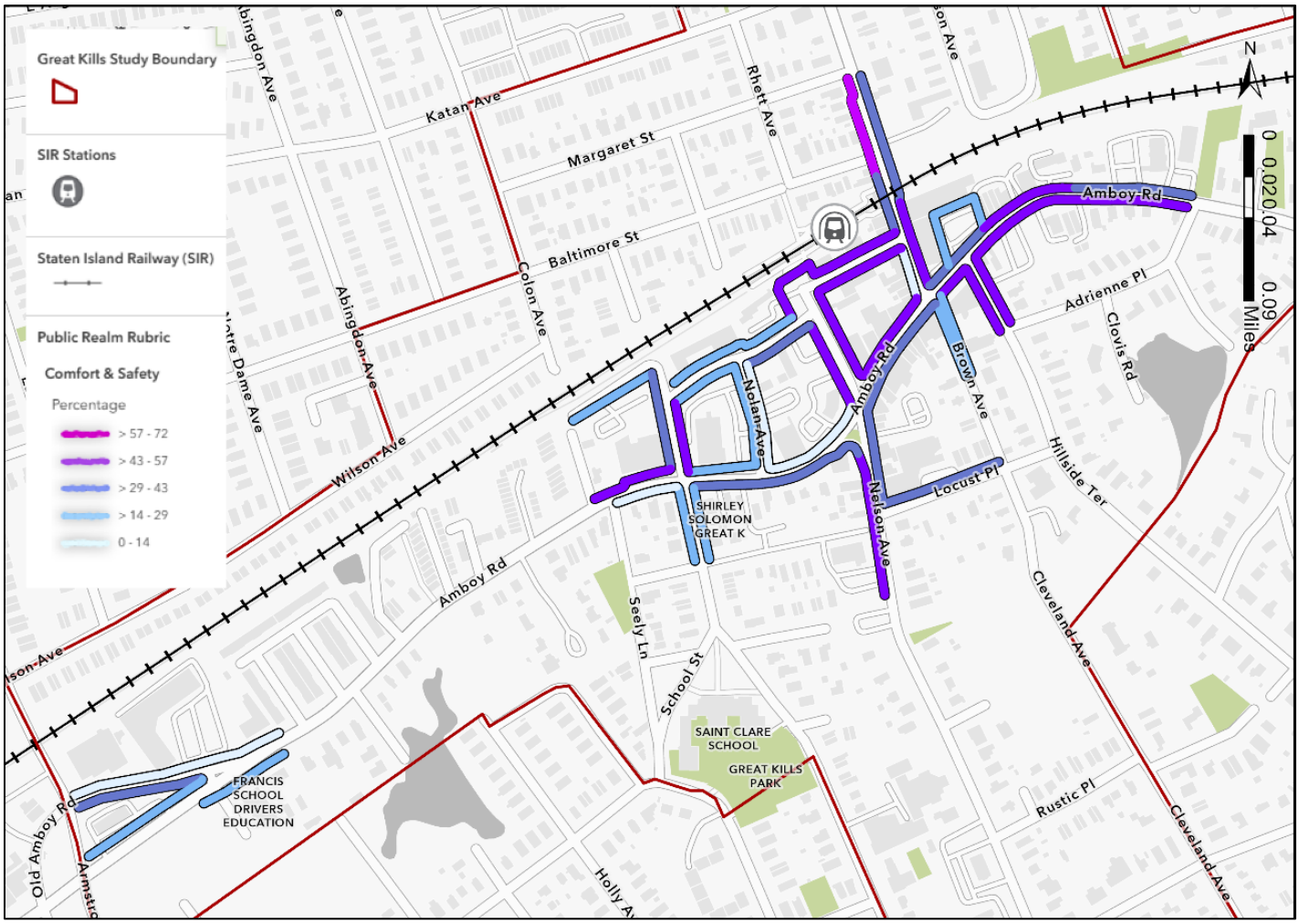
Access & Visibility – Aggregate



Map 11: Access & Visibility –Aggregate

The pedestrian experience is notably guided by vertical elements such as wayfinding, signage, visibility of the ground floor spaces, and as such. This is evident when walking along the northside of Bower Court and westside of Gifford's Lane; both feature entrances to the station platform and are more accessible and prominent than their counterparts across the street (Map 11).

Comfort & Safety – Aggregate

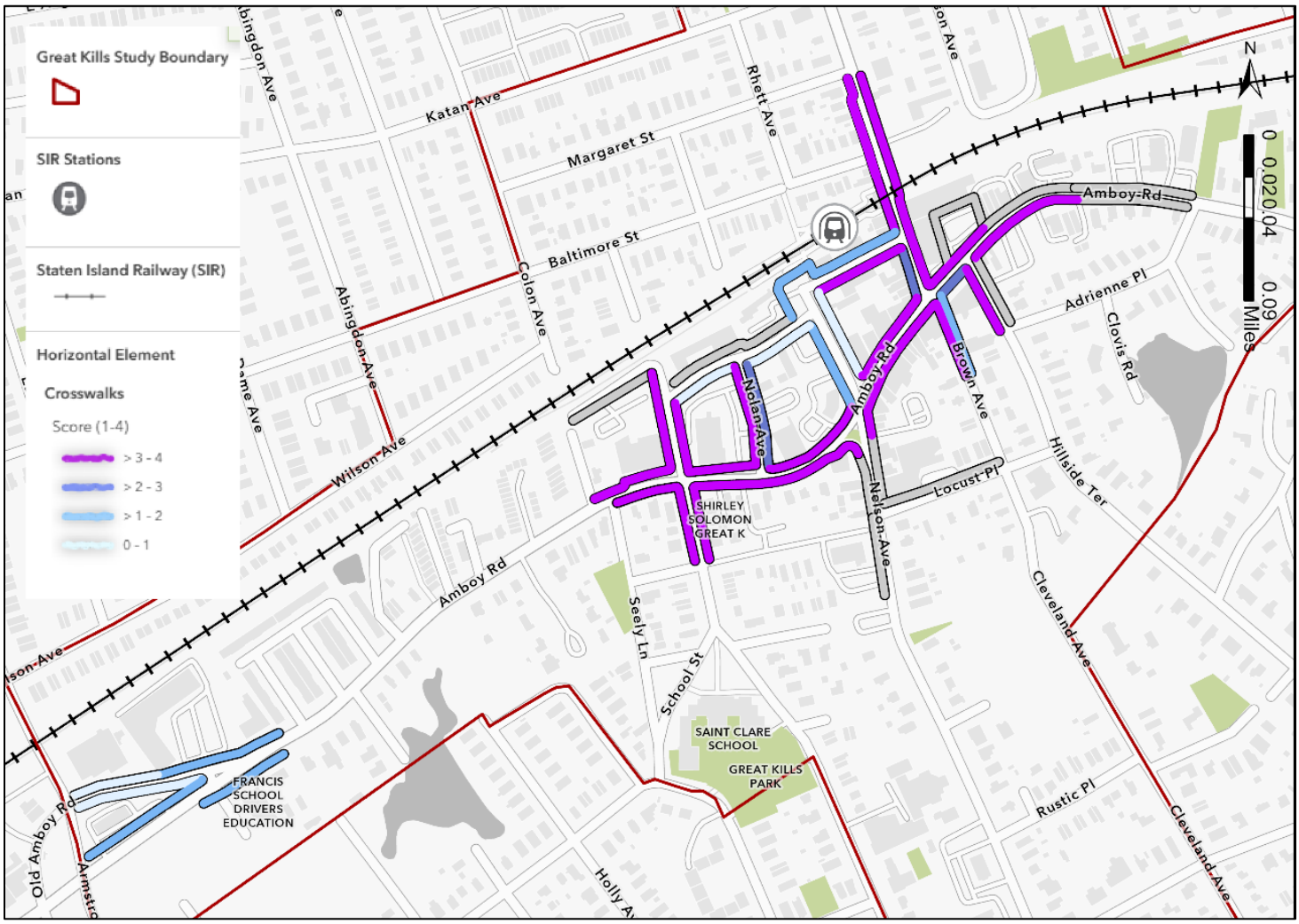


Map 12: Comfort & Safety –Aggregate

The theme of access & visibility displays a range of experiences, from positive to negative. Comfort & safety tend to be less favorable, suggesting that the segments lack in elements which guides the safety & comfort of the pedestrian experience (Map 12).

There are fewer elements present on streets farther from the primary commercial areas, suggesting that a person walking down these streets would have a less pleasant experience than on streets closer the station, which offer a friendlier ambience. The sections along the Old Amboy and Amboy Road in the west end of the study boundary score significantly worse, in part because almost all of the elements under comfort and safety are lacking.

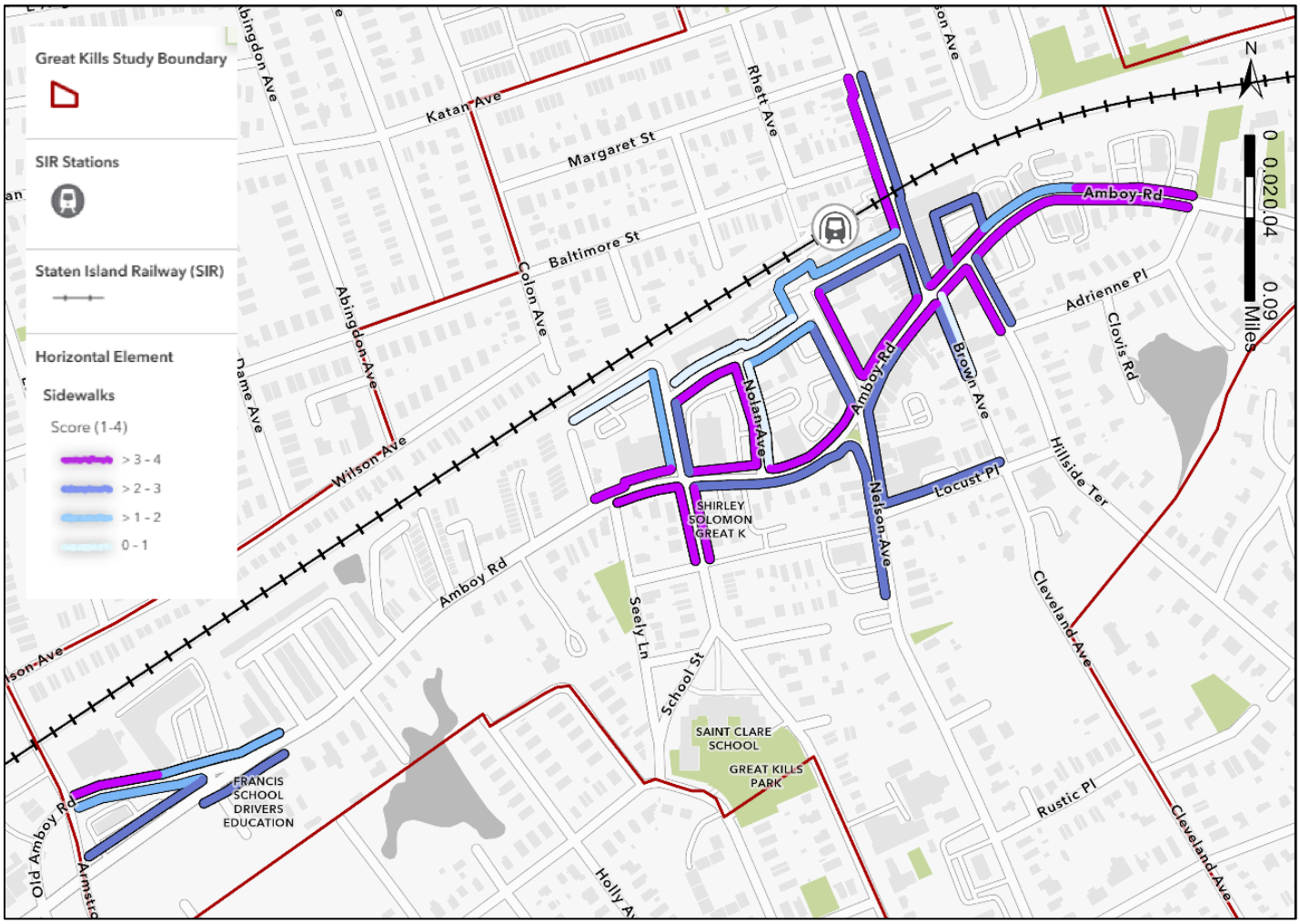
Horizontal Element – Crosswalks



Map 13: Horizontal Element – Crosswalks

This map (Map 13) demonstrates that the majority of the crosswalks assessed in DCP's inventory, particularly those near the station, result in a high score. Conversely, areas along Amboy Road and Old Amboy Road are devoid of safe crosswalks and perform unfavorably in the 'Crosswalks' element with low scores. The area in front of the station entrance at the intersection of Bower Court and Nelson Avenue is another significant node that lacks a suitable crossing and scored low on the rubric.

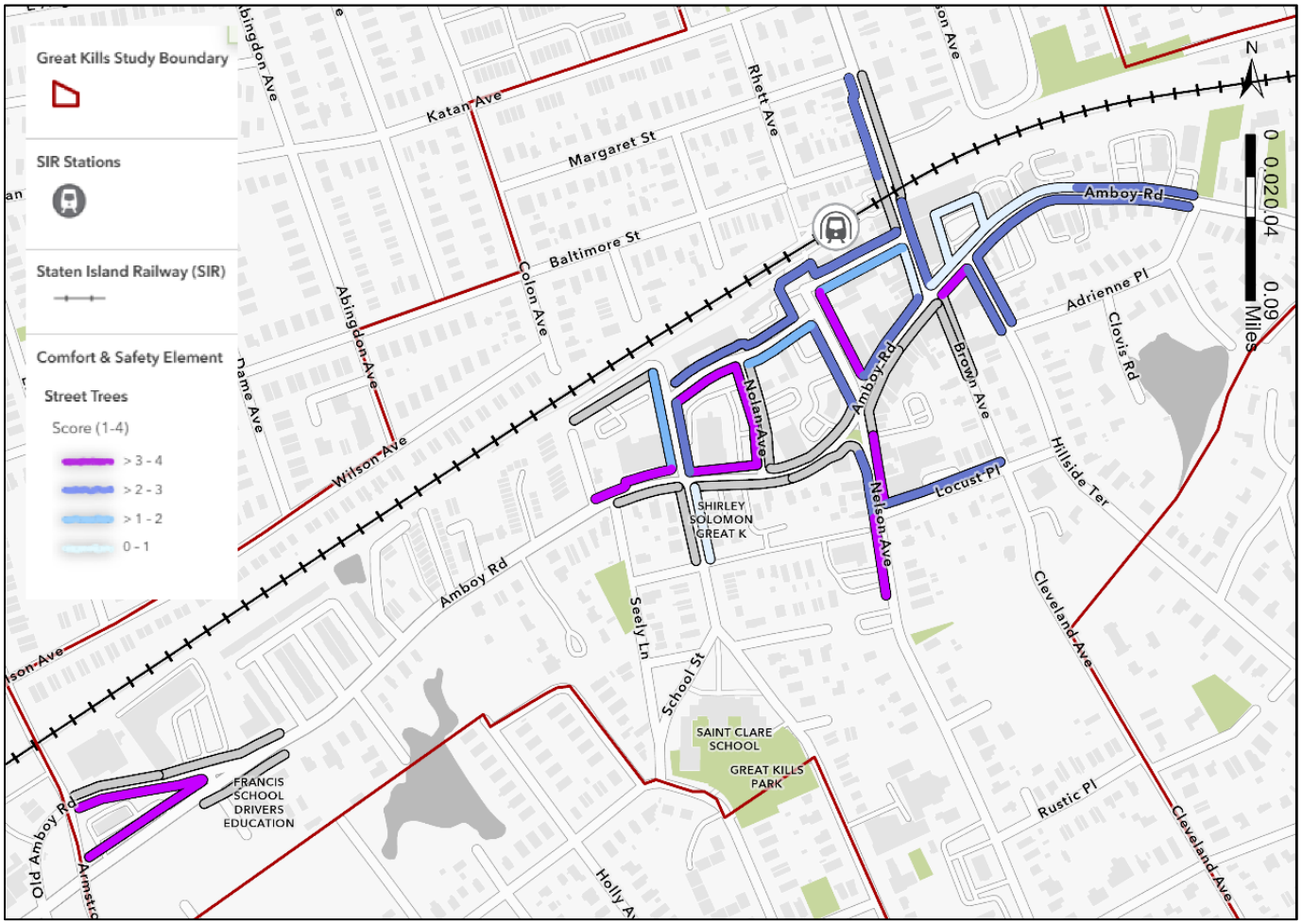
Horizontal Element – Sidewalks



Map 14: Horizontal Element – Sidewalks

The majority of the assessed network has good sidewalk conditions, with the two outliers; eastern segment of Brown Ave and southern segment of the Lindenwood Road being the sections marked by black outlines; this signifies that those sections lack sidewalks. The Bower Court and Nelson Avenue intersection, located in front of the station entrance, has the potential to become a public space doubling as a buffer between pedestrians and automobile traffic (Map 14).

Comfort & Safety Element - Street Trees



Map 15: Comfort & Safety Element - Street Trees

Trees play a significant role in shaping the streets for a pedestrian experience. This map shows where trees were present along the streets analyzed in DCP's inventory. Segments that are represented in just a black outline do not have any trees, making those areas less desirable. Unlike the previous maps, streets further away from the station have more trees than the area in its immediate vicinity. Many segments along Amboy Road lack street trees altogether, as well as along Gifford's Lane (Map 15).

A comprehensive result of the public realm rubric cataloguing scores for all the elements can be found in the appendix.

Development Potential

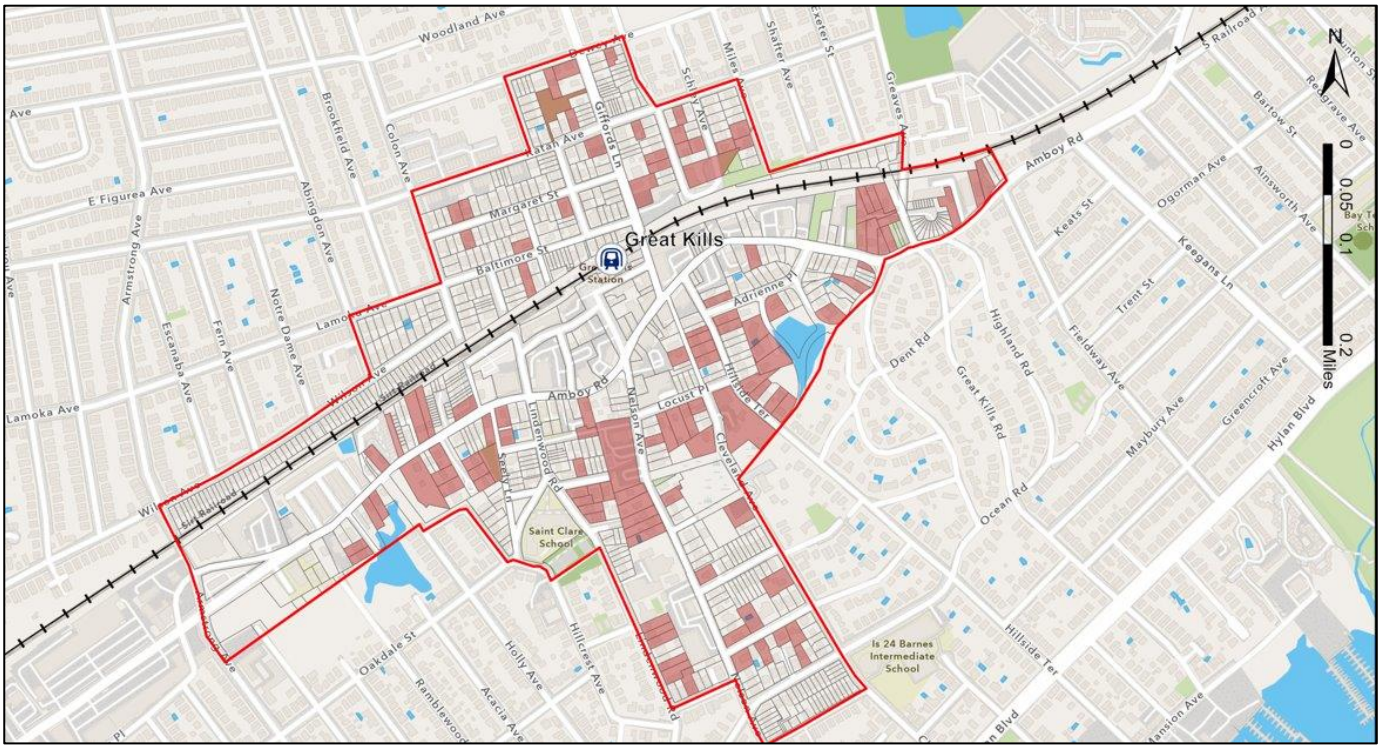
Although this transportation report is primarily focused on public transportation, street networks, and the public realm, recent changes to the NYC Zoning Resolution (ZR) have had significant impact on land use and zoning within the study area which could affect transportation. Specifically, City of Yes for Housing Opportunity (COYHO) was adopted by the New

York City Council on December 5th, 2024 – a zoning text amendment that proposed 'a little more housing in every neighborhood' by removing impediments to residential development across the city.

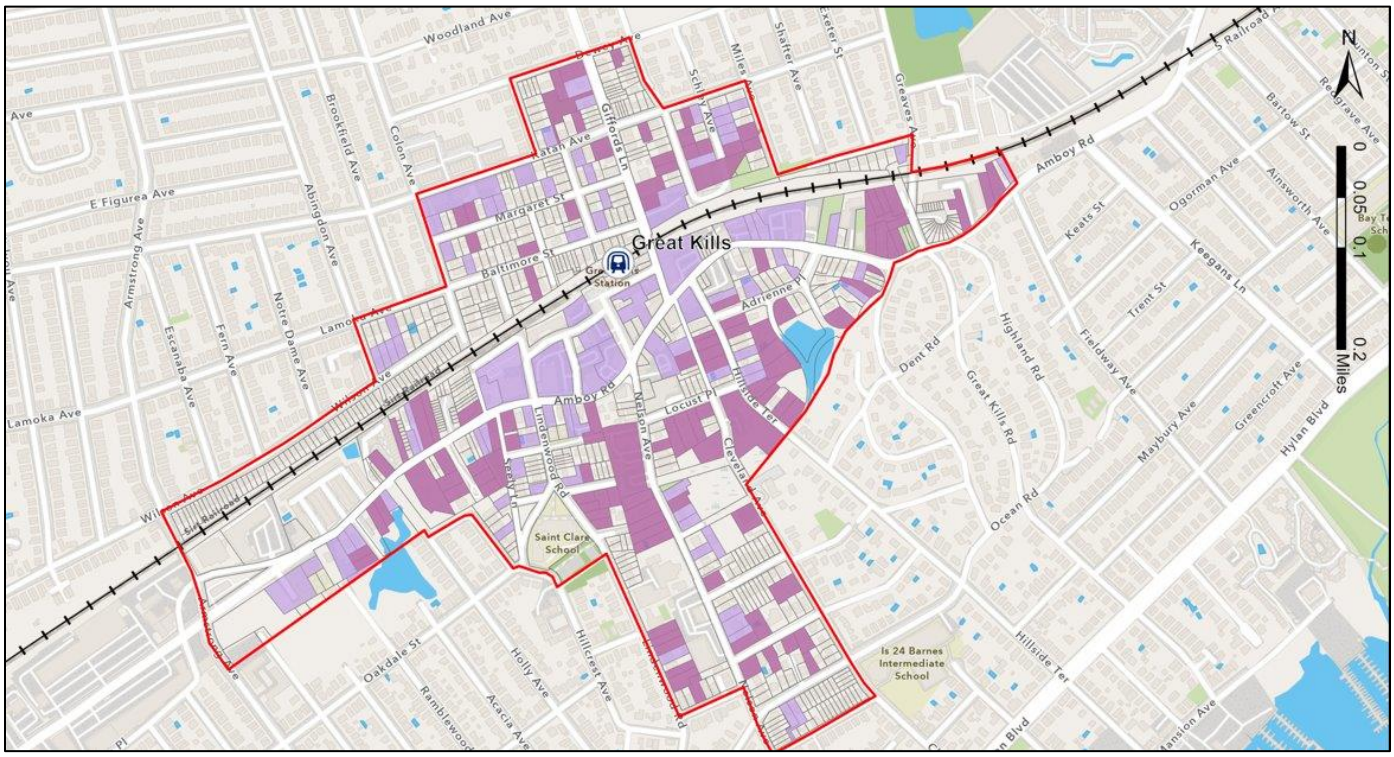
COYHO provides additional height and floor area bonuses for 'transit-oriented development' (TOD) which is defined as any zoning lot on a block within a half-mile of a train station which meets certain criteria - the zoning lot must be at least 5,000 square feet in size and be located either on a wide street (i.e. 75 feet) or on the short end of a block (ie. the block is less than 230 feet long). There are several zoning lots in the Great Kills neighborhood which meet these criteria and can now potentially add more residential units within walking distance to the SIR.

Additionally, the regulations pre-COYHO restricted residential development within C4-1 zoning districts by requiring a City Planning Commission (CPC) special permit per ZR Section 74-121 for any residential use on a zoning lot greater than 20,000 square feet in size. As previously noted, a majority of the area surrounding the Great Kill SIR station is designated as a C4-1 zoning district (Map 5) and several of the properties in the study area have been subject to these restrictions. However, ZR Section 32-122 was amended to remove this restriction on zoning lot size and allow residential development as-of-right within most C4-1 districts (there is still a restriction for zoning lots within a C4-1 district that occupies at least four acres of a zoning block, yet this condition does not exist within the study area).

Taking into account both the TOD bonuses and amendment to ZR Section 32-122, the amount of potential development sites within the study area increased from 115 zoning lots pre-COYHO (Map 16) to 206 zoning lots post-COYHO (Map 17).



Map 16: Zoning Lots Pre-COYHO



Map 17: Zoning Lots Post-COYHO

Conclusion and Findings

SIO identified the following assets to utilize and opportunities for improvement within the study area:

Assets to utilize

1) SIR train station
    a. The Great Kills station provides train service both local and express to the St George Ferry Terminal with the highest ridership of any station south of the terminal; and
    b. The station is centrally located within the South Shore BID, providing direct access to shopping and services for people outside of Great Kills.

2) Low rates of traffic crashes and congestion
    a. Recent installations of traffic islands (e.g. Amboy Road and Nelson Avenue intersection) and other road engineering initiatives have improved traffic circulation and safety; and
    b. The Data collected by the consultant shows that pedestrian crashes are relatively low within the study area.

3) Historic town center
    a. The study area includes pre-war buildings which provide neighborhood character; and
    b. The block sizes surrounding the SIR station resemble the walkable town center which existed prior to the opening of the Verrazzano Bridge and auto-oriented development.

4) Public sites and community resources
    a. There are several public facilities managed by the city including the SIR station, the public library, public schools, recreational wetlands, public parks, and community centers; as well as

b. Private businesses and organizations such as restaurants, pharmacies, medical clinics, houses of worship, and day care centers.

Opportunities for improvement

1) Enhance mobility and public space
    a. The street network could be improved to allow for multi-modality such as accommodating adequate bus, bike, or pedestrian infrastructure.
    b. There is limited north/south connectivity to the greater neighborhood since there are three streets that cross the SIR tracks.
    c. A majority of sidewalks within the study area are not well-maintained, lacking connections, and limiting usable pedestrian space, so pedestrian improvements could be explored within the study area, specifically at the intersection of Amboy Road and Old Amboy Road which has had one pedestrian crash per year.
    d. Public space throughout the study area is insufficient, specifically adjacent to the train station which lacks a sense of place and does not provide an area for community events or programming.

2) Support Small Businesses
    a. Zoning changes with DCP or financial incentives from NYC Small Business Services (SBS) could be explored to support the three storefronts that have been vacant for over one year and other small businesses within the study area.
    b. Improvements to the public realm and increasing walkability would increase foot traffic and could also support economic development.

3) Improve Transit Ridership
    a. To increase SIR ridership, SIO and the MTA discussed potential improvements to the Great Kills Station and surrounding area, such as increasing express service and supporting transit-oriented development.
    b. Local bus ridership is low so there is potential for the bus network to be improved via route changes in coordination with the MTA or the introduction of a circulator shuttle bus with the local South Shore BID.

4) Support neighborhood growth:
    c. The existing C4-1 zoning district has a residential equivalent of R6 zoning which allows for modest density with mid-rise, multi-family, development but could be updated to provide more flexibility for site design.
    d. Although the City of Yes text amendment designated the study area as a TOD area, parking requirements within the study area are still relatively high for individual sites and could be supplemented by additional municipal lots similar to the off-site parking provisions which exist in other areas of Staten Island, specifically ZR 128-53.

Next Steps

In summary, DCP SIO would like to explore potential improvement to promote pedestrian friendly streets and to promote and enhance transportation in the study area. Although the traffic analysis revealed that traffic generally operates at a good level-of-service during peak periods there are certain movements at specific intersections that experience high delays during peak hours and some street corners that lack adequate space during peak hours. Additionally, the public realm rubric and retail storefront retail analysis indicates that there are opportunities to support economic development and utilization of public space.

SIO plans to present these findings to local stakeholders and solicit feedback during the Summer of 2025 in order to identify potential solutions to the challenges identified within this transportation study. Potential stakeholders to engage include, but are not limited to, NYC DOT, the MTA, the local BID, local elected officials, and SI Community Board 3.

Acknowledgements

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Metropolitan Transit Authority

MTA New York City Transit, Operations Planning Division

NYCT/MTA Bus Company, Bus Service Planning Division

Staten Island Railway, Engineering and Capital Projects Division

Construction & Development, Transit-Oriented Development Division

New York City Department of Transportation

Division of Transportation Planning & Management

Staten Island Borough Commissioner's Office

Appendix

2024 Existing LOS Conditions

Direction	Appr.	Existing AM			Existing MD			Existing PM			Existing SAT		
		v/c	Delay	LOS	v/c	Delay	LOS	v/c	Delay	LOS	v/c	Delay	LOS
1. Giffords Lane and Katan Avenue													
Eastbound	LTR	0.52	27.0	C	0.26	22.3	C	0.44	25.2	C	0.23	21.8	C
Westbound	LTR	0.39	24.4	C	0.33	23.3	C	0.4	24.3	C	0.34	23.4	C
Northbound	LTR	0.32	3.4	A	0.24	26.3	C	0.34	3.5	A	0.28	2.4	A
Southbound	LTR	0.41	13.4	B	0.22	11.2	B	0.29	11.9	B	0.26	11.5	B
Intersection Delay		**0.45**	**16.1**	**B**	**0.27**	**20.9**	**C**	**0.38**	**15.1**	**B**	**0.30**	**13.0**	**B**
2. Giffords Lane and Margaret Avenue													
Eastbound	LR	0.33	23.6	C	0.23	22.1	C	0.22	21.9	C	0.2	21.7	C
Northbound	LT	0.28	5.0	A	0.24	12.0	B	0.35	6.2	A	0.28	6.6	A
Southbound	TR	0.49	11.8	B	0.25	9.8	A	0.30	9.2	A	0.34	9.2	A
Intersection Delay		**0.43**	**11.7**	**B**	**0.24**	**12.9**	**B**	**0.30**	**9.6**	**A**	**0.29**	**9.8**	**A**
3. Giffords Lane and Brower Court													
Eastbound	LR	0.45	25.6	C	0.39	24.4	C	0.43	25.1	C	0.36	23.9	C
Northbound	LT	0.13	28.1	C	0.18	28.4	C	0.25	14.3	B	0.22	31.7	C
Southbound	TR	0.74	20.4	C	0.37	13.0	B	0.47	13.9	B	0.50	13.1	B
Intersection Delay		**0.6**	**22.5**	**C**	**0.37**	**19.7**	**B**	**0.44**	**17.1**	**B**	**0.43**	**19.5**	**B**
4. Giffords Lane/Brown Avenue and Amboy Road													
Eastbound	LTR	0.69	7.4	A	0.49	20.2	C	0.74	19.2	B	0.61	19.5	B
Westbound	LTR	0.59	20	B	0.52	16.0	B	0.74	19.2	B	0.65	18.9	B
Southbound	LTR	0.67	13.2	B	0.55	18.5	B	0.70	28.8	C	0.60	13.6	B
Intersection Delay		**0.67**	**13.1**	**B**	**0.51**	**18.1**	**B**	**0.71**	**20.8**	**C**	**0.62**	**18.1**	**B**
5. Amboy Road and Great Kills Road/Greaves Avenue													
Eastbound	LT	0.71	19.7	B	0.56	15.8	B	0.79	24.0	C	0.83	27.5	C
Westbound	TR	0.42	13.4	B	0.54	15.5	B	0.72	19.3	B	0.73	20.3	C
Northbound	LTR	0.20	21.6	C	0.19	21.5	C	0.43	25.2	C	0.18	21.3	C
Southbound	LR	0.56	29.2	C	0.63	31.7	C	0.75	38.4	D	0.56	29.1	C
Intersection Delay		**0.66**	**19.7**	**B**	**0.59**	**19.2**	**B**	**0.77**	**24.4**	**C**	**0.73**	**24.3**	**C**
6. Amboy Road and Nelson Avenue													
Eastbound	LTR	0.54	10.0	A	0.40	15.3	B	0.42	10.1	B	0.5	14.1	B
	L	0.33	7.6	A	0.17	14.0	B	0.15	7.0	A	0.12	10.9	B
Westbound	LTR	0.64	10.9	B	0.52	7.2	A	0.62	8.2	A	0.7	10.9	B
Northbound	LTR	1.10	113.0	F	0.51	31.0	C	0.91	64.1	E	0.69	37.7	D
Southbound	LTR	0.40	28.2	C	0.26	25.9	C	0.44	32.0	C	0.31	26.7	C
Intersection Delay		**0.78**	**31.7**	**C**	**0.50**	**16.0**	**B**	**0.69**	**20.6**	**C**	**0.67**	**17.8**	**B**
7. Amboy Road and Lindenwood Road													
Eastbound	L	0.08	11.2	B	0.08	9.2	A	0.17	10.7	B	0.13	9.8	A
	LTR	0.82	25.9	C	0.42	12.4	B	0.45	12.8	B	0.47	13.1	B
Westbound	L	0.25	15.2	B	0.09	5.3	A	0.22	7.4	A	0.15	5.2	A
	LTR	0.56	16.2	B	0.45	7.1	A	0.64	9.8	A	0.53	7.4	A
Northbound	LTR	0.63	34	C	0.14	27.3	C	0.51	33.9	C	0.16	24.5	C
Southbound	LTR	0.13	24.2	C	0.17	27.7	C	0.25	28.7	C	0.18	27.8	C
Intersection Delay		**0.73**	**24.2**	**C**	**0.36**	**13.3**	**B**	**0.58**	**16.1**	**B**	**0.41**	**13.3**	**B**
8. Amboy Road, Old Amboy Road and Cloverdale Avenue													
Eastbound	L	0.09	40.9	D	0.49	54.6	D	0.54	57.7	E	0.59	60.7	E
	TR	0.47	8.5	A	0.33	7.0	A	0.34	7.1	A	0.34	7.1	A
Westbound	L	0.00	0	A	0.01	9.7	A	0.01	9.7	A	0	0	A
	T	0.59	16.6	B	0.45	13.7	B	0.53	15.0	B	0.52	14.9	B
	R	0.14	10.4	B	0.11	10.2	B	0.28	11.8	B	0.12	10.2	B
Northbound	LL	0.02	27.4	C	0.08	28.2	C	0.07	28.1	C	0	0	A
	TR	0	0	A	0	27.2	C	0.02	27.5	C	0	0	A
Southbound	LTR	0.00	27.3	C	0.13	28.8	C	0.09	28.3	C	0.11	28.6	C
Intersection Delay		**0.45**	**12.1**	**B**	**0.36**	**13.4**	**B**	**0.41**	**14.1**	**B**	**0.42**	**14.1**	**B**

Table
2024 Existing Conditions - Crosswalk Level of Service
(SF/P = Square Foot per Pedestrian)

Intersection	Crosswalk	AM		MD		PM		SAT	
		SF/P	LOS	SF/P	LOS	SF/P	LOS	SF/P	LOS
Gifford Lane at Margaret Street	North	12357.2	A	6204.1	A	6229.8	A	12424.1	A
	South	1898.1	A	2959.3	A	2915.7	A	1959.5	A
	West	444.1	A	814.2	A	681.0	A	1088.4	A
Gifford Lane at Brower Court	North	491.0	A	517.1	A	641.0	A	516.9	A
	South	5387.1	A	2156.0	A	968.6	A	889.3	A
	West	1274.3	A	849.2	A	645.3	A	657.8	A
Gifford Lane/Brown Avenue at Amboy Road	North	15146.4	A	2046.7	A	2497.0	A	691.7	A
	East	2701.9	A	780.2	A	1362.8	A	1168.2	A
	South	4123.1	A	1519.6	A	2521.0	A	1947.1	A
	West	1471.1	A	1693.1	A	1216.5	A	1095.3	A
Great Kills Road/Greaves Avenue at Amboy Road	North	3527.9	A	5205.2	A	1223.8	A	9844.3	A
	East	3457.2	A	2373.5	A	6947.7	A	2381.3	A
	South	13325.8	A	3364.3	A	4478.9	A	3350.8	A
	West	3943.2	A	1598.8	A	7958.2	A	0.0	A
Nelson Avenue at Amboy Road	North	2834.0	A	3475.8	A	1715.9	A	916.2	A
	East	716.0	A	910.1	A	476.0	A	574.9	A
	South	2553.7	A	2715.7	A	3590.9	A	3214.9	A
	West	1967.6	A	1315.3	A	1607.6	A	1311.6	A
Lindenwood Road at Amboy Road	North	1979.6	A	1695.0	A	3802.5	A	1149.5	A
	East	920.2	A	939.7	A	353.3	A	2137.1	A
	South	2744.8	A	4084.3	A	2470.2	A	7571.6	A
	West	1843.7	A	3258.0	A	2533.0	A	1282.1	A

2024 Existing Conditions - Sidewalk Level of Service
(p/m/f= Pedestrian/Minute/Foot)

Intersection	Walkway	AM		MD		PM		SAT	
		p/m/f	LOS	p/m/f	LOS	p/m/f	LOS	p/m/f	LOS
Gifford Lane at Margaret Street	1	0.2	A	0.1	A	0.2	A	0.1	A
	3	0.1	A	0.2	A	0.2	A	0.2	A
	5	0.4	A	0.3	A	0.3	A	0.3	A
	6	0.0	A	0.1	A	0.1	A	0.2	A
	7	0.4	A	0.2	A	0.2	A	0.2	A
	8	0.1	A	0.0	A	0.0	A	0.0	A
Gifford Lane at Brower Court	1	0.1	A	0.2	A	0.2	A	0.4	A
	3	0.0	A	0.1	A	0.1	A	0.2	A
	5	0.1	A	0.2	A	0.3	A	0.3	A
	6	0.0	A	0.2	A	0.4	A	0.3	A
	7	0.5	A	0.4	A	0.6	A	0.6	A
	8	0.1	A	0.1	A	0.1	A	0.1	A
Gifford Lane/Brown Avenue at Amboy Road	1	0.0	A	0.1	A	0.0	A	0.1	A
	2	0.0	A	0.0	A	0.0	A	0.1	A
	3	No sidewalk							
	4	0.0	A	0.1	A	0.1	A	0.1	A
	5	0.1	A	0.0	A	0.1	A	0.1	A
	6	0.0	A	0.1	A	0.1	A	0.1	A
	7	0.1	A	0.2	A	0.2	A	0.3	A
	8	0.0	A	0.2	A	0.2	A	0.4	A
Great Kills Road/Greaves Avenue at Amboy Road	1	0.1	A	0.0	A	0.1	A	0.1	A
	2	0.0	A	0.0	A	0.0	A	0.0	A
	3	0.1	A	0.0	A	0.0	A	0.0	A
	4	0.0	A	0.1	A	0.1	A	0.1	A
	5	0.0	A	0.0	A	0.0	A	0.0	A
	6	0.0	A	0.0	A	0.1	A	0.0	A
	7	0.0	A	0.0	A	0.0	A	0.0	A
	8	0.1	A	0.0	A	0.1	A	0.1	A
Nelson Avenue at Amboy Road	1	0.1	A	0.0	A	0.1	A	0.1	A
	2	0.0	A	0.1	A	0.1	A	0.1	A
	3	0.2	A	0.2	A	0.2	A	0.1	A
	4	0.0	A	0.3	A	0.1	A	0.1	A
	5	0.2	A	0.1	A	0.1	A	0.1	A
	6	0.1	A	0.1	A	0.1	A	0.0	A
	7	0.1	A	0.0	A	0.1	A	0.2	A
	8	0.1	A	0.1	A	0.1	A	0.3	A
Lindenwood Road at Amboy Road	1	0.0	A	0.0	A	0.0	A	0.0	A
	2	0.0	A	0.0	A	0.0	A	0.1	A
	3	0.1	A	0.2	A	0.2	A	0.2	A
	4	0.0	A	0.0	A	0.1	A	0.0	A
	5	0.0	A	0.0	A	0.0	A	0.0	A
	6	0.1	A	0.1	A	0.0	A	0.0	A
	7	0.0	A	0.0	A	0.0	A	0.0	A
	8	0.1	A	0.1	A	0.1	A	0.1	A

Public Realm Rubric

PUBLIC SPACE RUBRIC: GLOSSARY		
Nos.	Element	Definition
1	Building Entrances[1]	Include number of entrances in the comment. Give average score out of 4 for all entrances.
2	Wayfinding[2]	Signs put up by the city/state agencies like DOT, Parks, DEC, etc.
3	Signage[3]	Signs put up by private entities like shop owners.
4	Bike Rack[4]	Add a note to comments if a bike path was present on your segment.
Nos.	Criteria	*Note: If the requirement is satisfactory, include its point.*
1	Accessibility	The place/element is wheelchair or stroller accessible.
2	Accessibility*	The crosswalk has a hearing aid and the pedestrian ramp is aligned with a crosswalk.
3	Aesthetic	The element adds value to the public realm or is pleasing to look at.
4	Ambiance	Is the element/ place inviting?
5	Clarity	The information is easy to read and understand.
6	Comfort	Don't consider the seating comfortable if it's a hostile environment.
7	Condition	The element does not need any repair or immediate improvement.
8	Condition*	The sidewalk is walkable and without any cracks.
9	Connectivity	Is the element connecting to like elements?
10	Design	Is the slope/ steps taken into consideration with its context?
11	Engagement	Does the element engage with the public realm in any way?
12	Flow	Is the element linked with its context easily traversed?
13	Functionality	Is the element functioning as it was meant to?
14	Impact	Is the placement obstructing visibility of surrounding area?
15	Location	Is the facility located on a commercial street?
16	Multilingual	The sign includes languages other than English.
17	No Obstructions	Is the sidewalk free of obturations like trash, or bikes parked without a rack.
18	Parking	The facility has on-site parking for customers.
19	Placement	The element is in a location which is easy to access, without disturbance.
20	Protection	Element features overhead protection, enhancing usability by shielding from weather.
21	Safety	Traverse the block with a degree of protection.

22	Shade	The tree is big enough to shade is immediate surrounding.
23	Relative Size	The element is below 4 feet from ground.
24	Relevance	Is element relevant to its context or neighborhood?
25	Transparency	There is certain degree of relationship between the structure and public realm. (Not a dead wall) Having appropriate ads or signs is included.
26	Visibility	Is the element easily seen without affecting safety or usability?
27	Width	The sidewalk has at least a clear path of 8 feet width. **Required for wheelchair accessibility*

Map for the segments analyzed under the public realm rubric:

Name_ID	Total Score (Percentage)	Access & Visiblity (Percentage)	Vertical (Percentage)	Horizontal (Percentage)	Comfort & Safety (Percentage)	Building Entrances	Outdoor Seating (Cafes/Restaurants)	Wayfinding	Signage	Visibility of Interior Spaces	Fence	Bollards	Murals
Amoby Rd North-East	30.95	30.36	31.25	29.17	32.14	3	n/a	n/a	3	n/a	4	n/a	n/a
Amboy Rd South-East	34.52	32.14	31.25	33.33	39.29	2	n/a	n/a	4	n/a	4	n/a	n/a
Amboy Rd/ Brown Ave South-East	34.52	30.36	31.25	29.17	42.86	4	n/a	2	2	2	n/a	n/a	n/a
Amboy Rd/ Brown Ave South-West	48.81	58.93	56.25	62.50	28.57	3	4	3	4	4	n/a	n/a	n/a
Amboy Rd/ Flagstar Bank	36.90	37.50	50.00	20.83	35.71	4	n/a	2	3	3	4	0	n/a
Amboy Rd/ Giffords Ln East	48.81	48.21	56.25	37.50	50.00	3	n/a	3	3	4	2	n/a	3
Amboy Rd/ Giffords Ln North-East	34.52	37.50	28.13	50.00	28.57	n/a	n/a	3	3	0	3	0	n/a
Amboy Rd/ Giffords Ln North-West	51.19	57.14	37.50	83.33	39.29	4	n/a	n/a	4	4	n/a	n/a	n/a
Amboy Rd/ Giffords Ln West	23.81	35.71	43.75	25.00	0.00	3	n/a	3	4	4	n/a	n/a	n/a
Amboy Rd/ Lindenwood Rd North-East	42.86	57.14	62.50	50.00	14.29	4	n/a	3	3	3	4	3	n/a
Amboy Rd/ Lindenwood Rd North-West	35.71	33.93	34.38	33.33	39.29	4	n/a	n/a	3	4	n/a	n/a	n/a
Amboy Rd/ Lindenwood Rd South-East	34.52	37.50	31.25	45.83	28.57	2	n/a	3	3	2	n/a	n/a	n/a
Amboy Rd/ Lindenwood Rd South-West	26.19	39.29	31.25	50.00	0.00	n/a	n/a	3	3	n/a	4	n/a	n/a
Amboy Rd/ Nelson Ave South-East	35.71	41.07	37.50	45.83	25.00	3	n/a	3	3	3	n/a	n/a	n/a
Amboy Rd/ Nelson Ave South-West	34.52	37.50	31.25	45.83	28.57	2	n/a	3	3	2	n/a	n/a	n/a
Amboy Rd/ Nolan Ave North-East	30.95	46.43	43.75	50.00	0.00	n/a	n/a	3	3	2	3	3	n/a
Amboy Rd/ Parking Lot	45.24	48.21	46.88	50.00	39.29	4	n/a	n/a	4	3	4	n/a	n/a
Brew Bar Loop	40.48	51.79	68.75	29.17	17.86	4	3	1	3	4	n/a	3	4
Brower Ct South	36.90	32.14	15.63	54.17	46.43	n/a	2	n/a	1	0	2	n/a	n/a
Brown Ave East	16.67	17.86	25.00	8.33	14.29	n/a	n/a	3	n/a	2	3	n/a	n/a
Brown Ave West	33.33	42.86	40.63	45.83	14.29	3	n/a	3	2	2	3	n/a	n/a
Giffords Glen North	22.62	28.57	28.13	29.17	10.71	1	n/a	2	3	0	1	2	n/a
Giffords Glen South-East	28.57	30.36	28.13	33.33	25.00	2	n/a	3	3	0	1	n/a	n/a
Giffords Glen South-West	22.62	26.79	21.88	33.33	14.29	n/a	n/a	3	n/a	1	3	n/a	n/a
Giffords Ln East	34.52	35.71	34.38	37.50	32.14	3	n/a	n/a	3	2	2	1	n/a
Giffords Ln West	69.05	67.86	68.75	66.67	71.43	4	4	3	4	3	4	n/a	n/a
Hillside Terrace East	36.90	35.71	34.38	37.50	39.29	4	n/a	n/a	3	n/a	4	n/a	n/a
Hillside Terrace West	38.10	37.50	18.75	62.50	39.29	3	n/a	n/a	3	n/a	n/a	n/a	n/a
Lindenwood Rd North-East	34.52	33.93	25.00	45.83	35.71	n/a	n/a	2	2	n/a	4	n/a	n/a
Lindenwood Rd North-West	39.29	46.43	46.88	45.83	25.00	4	n/a	3	3	1	2	2	n/a
Lindenwood Rd South	17.86	19.64	21.88	16.67	14.29	n/a	n/a	n/a	3	n/a	4	0	n/a
Lindenwood Rd South-East	40.48	51.79	43.75	62.50	17.86	2	n/a	3	3	3	3	n/a	n/a
Lindenwood Rd South-West	45.24	60.71	43.75	83.33	14.29	4	n/a	3	3	4	n/a	n/a	n/a
Locust Pl North	40.48	48.21	53.13	41.67	25.00	4	n/a	3	3	3	2	2	n/a
Nelson Ave South	36.90	35.71	40.63	29.17	39.29	4	n/a	3	2	n/a	4	n/a	n/a
Nelson Ave South-East	34.52	39.29	53.13	20.83	25.00	3	n/a	4	4	4	n/a	2	n/a
Nelson Ave South-West	39.29	37.50	46.88	25.00	42.86	3	n/a	3	3	3	3	n/a	n/a
Nelson Ave/ Amboy Rd North-East	38.10	37.50	34.38	41.67	39.29	3	n/a	3	2	1	2	n/a	n/a
Nelson Ave/ Amboy Rd North-West	47.62	46.43	46.88	45.83	50.00	3	n/a	3	3	0	3	3	n/a
Nolan Ave East	22.62	33.93	37.50	29.17	0.00	2	n/a	2	3	0	1	4	n/a
Nolan Ave West	38.10	50.00	40.63	62.50	14.29	n/a	n/a	3	3	3	4	n/a	n/a
SIR GK Station East	32.14	37.50	40.63	33.33	21.43	4	n/a	3	4	2	n/a	n/a	n/a
SIR GK Station/ Brower Ct	54.76	58.93	65.63	50.00	46.43	4	n/a	3	3	4	2	2	3
Old Amboy Road North-East	29.76	44.64	56.25	29.17	0.00	3	n/a	3	3	4	2	3	n/a
Old Amboy Road North-West	32.14	44.64	50.00	37.50	7.14	4	n/a	3	3	3	n/a	3	n/a
Old Amboy Road South-West	23.81	19.64	18.75	20.83	32.14	n/a	n/a	3	n/a	1	2	n/a	n/a
Amboy Road/ BP	27.38	33.93	37.50	29.17	14.29	3	n/a	3	3	3	n/a	n/a	n/a
Amboy Road South	20.24	25.00	21.88	29.17	10.71	2	n/a	3	2	0	n/a	n/a	n/a

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