APPENDIX C

TRANSPORTATION

Transportation Planning Factors and Travel Demand Forecast Memo

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Draft Travel Demand Factors (TDF) Memorandum

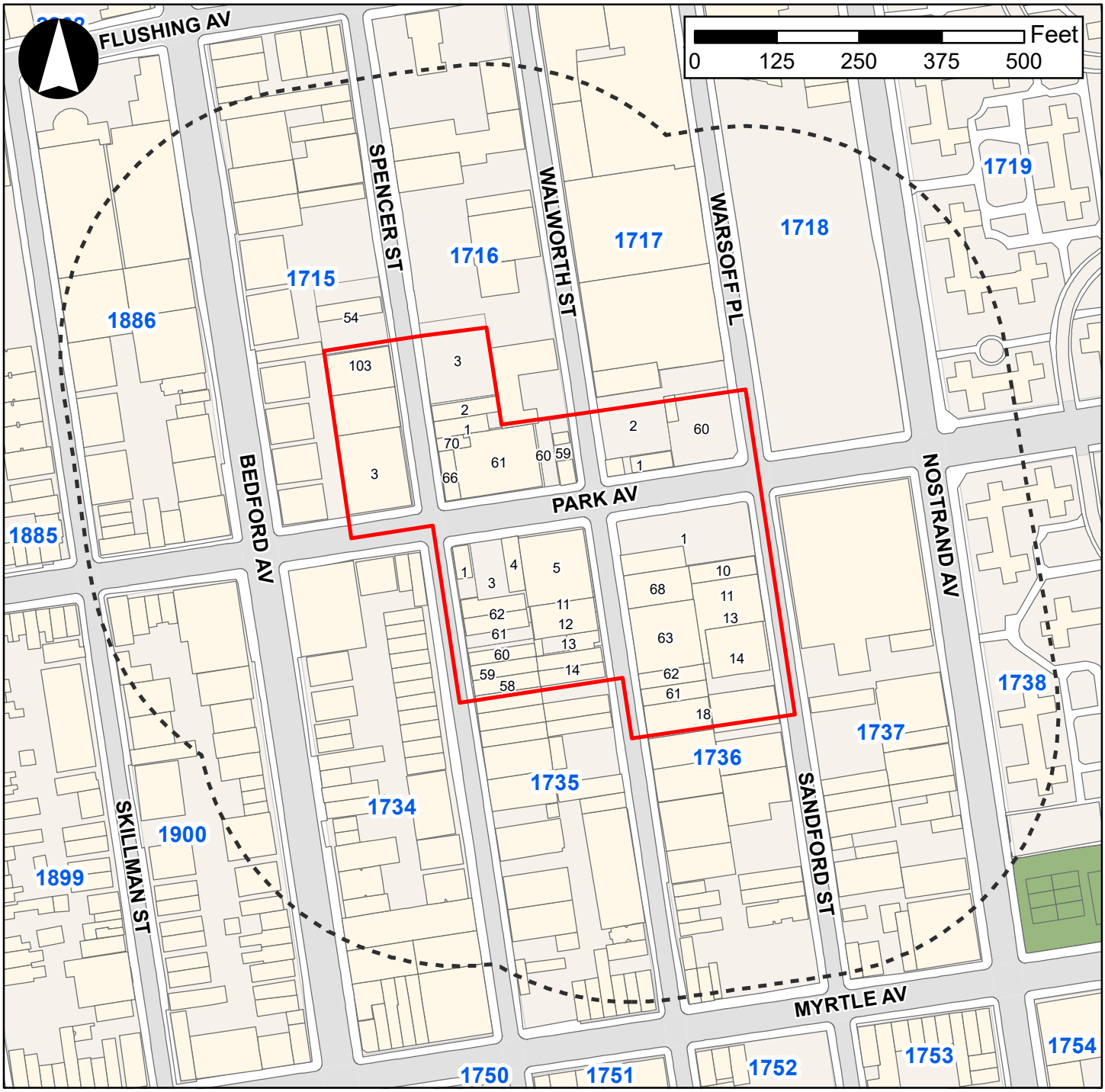
To:	NYCDCP
From:	AKRF, Inc.
Date:	March 11, 2026
Re:	Park Avenue Brooklyn Rezoning EIS - Travel Demand Analysis
cc:	Project Team

This memorandum summarizes the transportation planning factors to be used for the analyses of traffic, transit, pedestrian and parking conditions for the *Park Avenue Rezoning EIS*. Estimates of the peak travel demand for the Proposed Actions' reasonable worst-case development scenario (RWCDS) are provided, along with a discussion of trip assignment methodologies and study area definitions.

INTRODUCTION

The Applicant, Park Ave. Rezoning Partners LLC, is requesting several discretionary actions from the New York City Planning Commission (CPC) to facilitate the redevelopment of several blocks in the Bedford-Stuyvesant neighborhood of Brooklyn Community District (CD) 3. Development in the Project Area would include three new private schools, new housing, and local retail uses. The Project Area consists of portions of Blocks 1715, 1716, 1717, 1735, and 1736. As shown in **Figure 1**, the Project Area is bounded by a depth of 250 feet from Park Avenue on the eastern side of Block 1715 and the western side of Block 1716, a depth of 225 feet from Park Avenue on Block 1735, a depth of 100 feet from Park Avenue on the eastern side of Block 1716 and on Block 1717, and a depth of 325 feet from Park Avenue on Block 1736.

The Applicant seeks the following discretionary approvals (collectively, the "Proposed Actions"). A proposed zoning map amendment to rezone portions of existing M1-1 and M1-2 zoning districts to M1-4/R7D and M1-4/R6-1 mixed-use districts. A zoning text amendment to Appendix F of the Zoning Resolution is requested to establish the Project Area as a Mandatory Inclusionary Housing (MIH) area. A zoning text amendment to Article II would establish a new R6-1 zoning district designation. Finally, the Applicant requests a zoning text amendment to modify Section 123-90 of the Zoning Resolution to modify the Special Mixed Use District MX-4 (Flushing/Bedford) to include M1-4/R6-1 and M1-4/R7D zoning designations. Specifically, ZR 123-63 will be modified to include R6-1 and R7D districts as designated Residence Districts within Special Mixed Use District MX-4.



Source: NYCDCP (PLUTO 2023, Version 3.1); DoITT; ESRI

Legend

- 400-foot Radius
- Proposed Rezoning Area (Project Area)
- Existing Buildings
- 3 Tax Lots
- 1715 Tax Blocks



REASONABLE WORST CASE DEVELOPMENT SCENARIO

Approval of the Proposed Actions would facilitate the redevelopment of nine Applicant-controlled Projected Development Sites and three non-Applicant-controlled Projected Development Sites within the Project Area (see **Figure 2**). For CEQR analysis purposes, the Applicant's nine development sites and three non-Applicant sites are considered collectively and referred to as the total RWCDS for the Proposed Actions. The total RWCDS for the Proposed Actions would result in a total of 483 dwelling units (DUs), including approximately 124 affordable units pursuant to the MIH program, 80,155 gsf of ground floor local retail, 11,590 gsf of medical office space, 244,088 gsf of private school space, and 151 accessory parking spaces.

Absent approval of the Proposed Actions, existing uses would remain on most of the identified projected development sites; however, two sites within the Project Area are expected to be redeveloped on an as-of-right basis. At Projected Development Site 2 (49 Spencer Street), the currently vacant site is expected to be redeveloped with a 69,000-gsf mixed-use building with 28,750 gsf of commercial space (17,969 gsf of office and 10,781 gsf of retail) and 40,250 gsf of medical office space. At Projected Development Site 12, the currently vacant site would be redeveloped with a 6,216-gsf one-story commercial building.

As shown in **Table 1**, compared to No-Action conditions, the net increment resulting from the Proposed Actions would be 481 DUs, 28,505 gsf of local retail, 201,838 gsf of private school space, a reduction of 17,969 gsf of office space, a reduction of 40,250 gsf of medical office space, a reduction of 5,000 gsf of house of worship space, and a reduction of 11,400 gsf of warehouse space. It should be noted that no No-Action uses/credit are assumed for sites that would be occupied by educational facilities in the With-Action conditions (i.e., Projected Development Sites 2, 6, and 8) for conservative transportation analysis purposes. As such, **Table 1** also shows the increment being assumed for transportation analysis purposes.

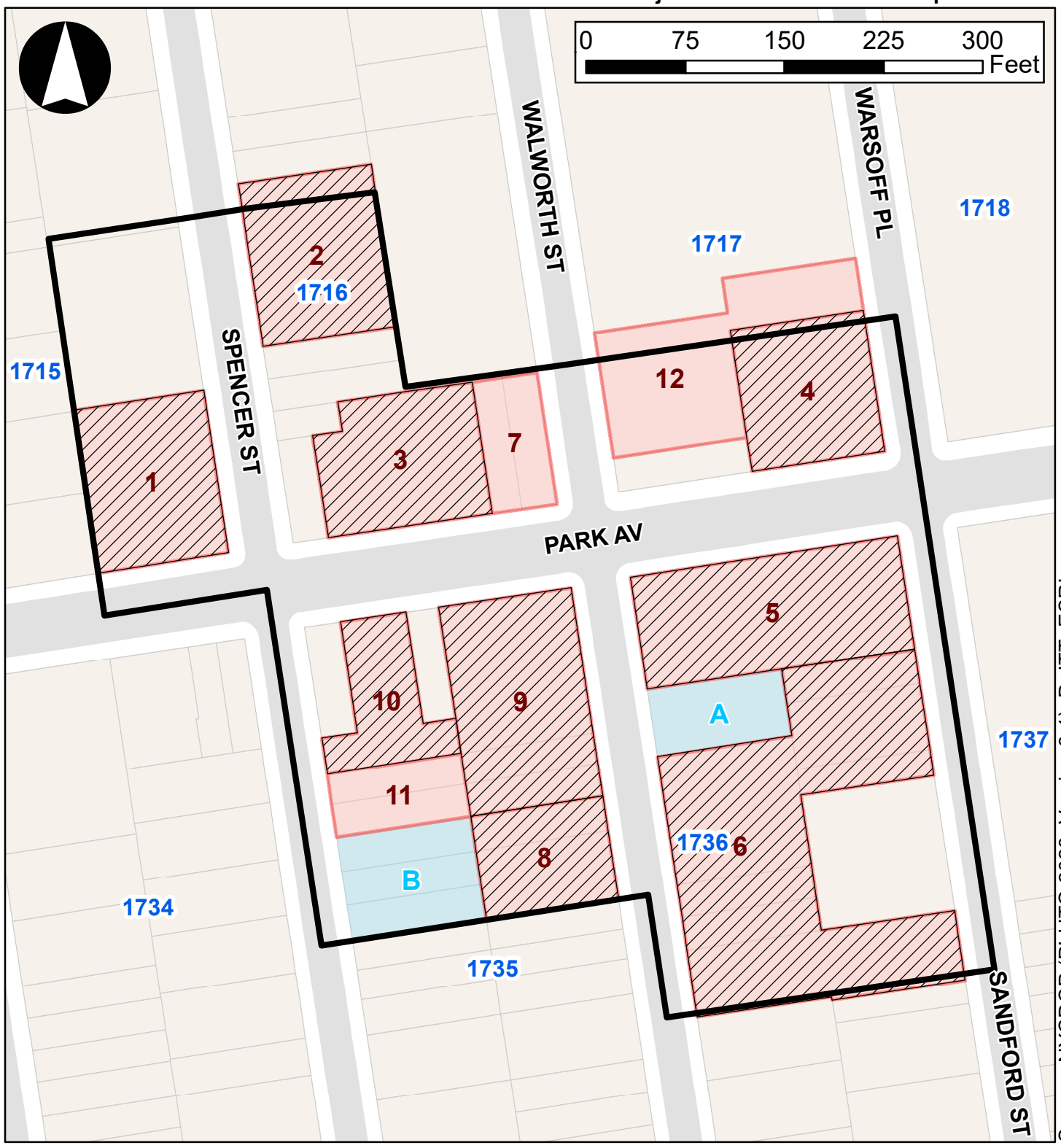
TABLE 1
Comparison of No-Action and With-Action Development Scenarios for Project Area (RWCDS)

Use		**No-Action Scenario**	**With-Action Scenario**	**Increment**	**Increment for Transportation[2]**
Residential	Affordable	-	*124*	***+124 DU***	***+124 DU***
	Market-Rate	2	*359*	***+357 DU***	***+359 DU***
	Total Residential Units	*2*	483	**+481 DU**	**+483 DU**
Medical Office		51,840 gsf	11,590 gsf	**-40,250 gsf**	**-**
School		42,250 gsf	244,088 gsf	**+201,838 gsf**	**+201,838 gsf**
House of Worship		5,000 gsf	-	**-5,000 gsf**	**-**
Local Retail		51,650 gsf	80,155 gsf	**+28,505 gsf**	**+39,286 gsf**
Office		17,969 gsf	-	**-17,969 gsf**	**-**
Warehouse		11,400 gsf	-	**-11,400 gsf**	**-8,900 gsf**
Parking Spaces		251 spaces	151 spaces	**-100 spaces**	**-100 spaces**
Population/Employment[1]		**No-Action Scenario**	**With-Action Scenario**	**Increment**	**Increment for Transportation[2]**
Residents		5 residents	1,236 residents	**+ 1,231 residents**	**+ 1,236 residents**
Workers		449 workers	500 workers	**+ 51 workers**	**+ 51 workers**
Students		0 students	2,220 students	**+2,220 students**	**+2,220 students**

Notes:
[1] Based on 2.56 persons per DU (2020 Census average household size for Brooklyn Community District 3). Estimate of workers assumes one retail worker per 333 gsf. One medical office worker per 333 gsf. One warehouse worker per 1,000 gsf. One school employee per 11 students. One worker per 50 attended parking spaces. One worker per 25 DU. One student per 110 gsf of school space.

Figure 2

Projected and Potential Development Sites



Source: NYCDCP (PLUTO 2023, Version 3.1); DoITT; ESRI

Legend

- Proposed Rezoning Area
- Applicant-controlled sites
- 11 Projected Development Sites
- A Potential Development Sites
- 1715 Tax Blocks

[2] No No-Action uses/credit are assumed for sites that would be occupied by educational facilities in the With-Action conditions (i.e., Projected Development Sites 2, 6, and 8) for conservative transportation analysis purposes. These No-Action uses include residential, medical office, local retail, house of worship, office, and warehouse space on Projected Development Sites 2, 6, and 8.

TRANSPORTATION PLANNING FACTORS

The transportation planning factors used to forecast the travel demand that would be generated by the No Action and With Action land uses on Projected Development Sites are summarized in **Table 2** and discussed below. The trip generation rates, temporal distributions, modal splits, vehicle occupancies, and truck trip factors for each of the land uses were primarily based on those cited in the 2025 *City Environmental Quality Review (CEQR) Technical Manual*, factors developed for recent environmental reviews, 2015–2019 American Community Survey (ACS) journey-to-work data for Brooklyn census tracts in proximity to the Project Area (191, 235, 241, 255, 531, 537, and 1237), 2012–2016 American Association of State Highway Transportation Officials (AASHTO) Census Transportation Planning Products (CTPP) reverse journey-to-work data , data provided by the New York City departments of Transportation (DOT) and City Planning (DCP), data derived from student and staff surveys at an adjacent school owned by the applicant, and data from other standard professional references. Factors are shown for the weekday AM and PM peak hours (typical peak periods for commuter travel demand) and the weekday midday and Saturday peak hours (typical peak periods for retail demand).

Table 2
Transportation Planning Factors

Land Use:	Residential	Residential (Single-Family)	Local Retail	Warehouse	Elementary School Students	Middle School Students	High School Students	Elementary School Parents		Grade 6 Parents		School Staff
								(9)		(11)		(10)
								AM	PM	AM	PM	
Size/Units:	483 DU	0 DU	39,286 gsf	-8,900 gsf	795 students	398 students	1,027 students	74 Parents	95	69 Parents	78	339 staff
Trip Generation:	(1)	(1)	(1)	(4)	(1)	(1)	(1)	(1)		(1)		(1)
Weekday	8.18	12.6	329.0	2.4	2.0	2.0	2.0	4.0		4.0		2.0
Saturday	9.08	13.7	358.0	0.2	0.0	0.0	0.0	0.0		0.0		0.0
	per DU	per DU	per 1,000 sf	per 1,000 sf	per student	per student	per student	per parent		per parent		per staff
Temporal Distribution:	(1)	(1)	(1)	(4)	(1)	(1)	(1)	(1)		(1)		(1)
AM	9.3%	9.3%	4.8%	10.0%	49.5%	49.5%	49.5%	49.5%		49.5%		40.0%
Midday	5.6%	5.6%	8.0%	9.0%	0.0%	0.0%	0.0%	0.0%		0.0%		0.0%
PM	8.5%	8.5%	10.9%	11.0%	49.5%	49.5%	49.5%	49.5%		49.5%		40.0%
Saturday	8.4%	8.4%	11.7%	33.0%	0.0%	0.0%	0.0%	0.0%		0.0%		0.0%
Modal Splits:	(2)	(2)	(4)	(3)	(6)	(6)	(8)	(7)		(7)		(6)
	All Periods	All Periods	All Periods	All Periods	Wk AM	Wk PM	Wk AM	Wk PM	All Periods	Wk AM	Wk PM	Wk AM	Wk PM	All Periods
Auto	17.6%	17.6%	11.0%	31.0%	1.5%	0.3%	0.4%	0.2%	3.9%	0.0%	0.0%	0.0%	0.0%	17.3%
Taxi	0.0%	0.0%	0.0%	0.2%	0.2%	0.1%	0.2%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	17.3%
Subway/Railroad	40.1%	40.1%	3.0%	19.5%	0.4%	0.0%	0.0%	0.0%	54.2%	3.6%	0.0%	0.0%	0.0%	0.0%
Bus	5.5%	5.5%	2.0%	11.9%	0.4%	0.3%	0.2%	0.2%	21.7%	3.6%	2.2%	0.3%	0.3%	2.3%
School Bus	0.0%	0.0%	0.0%	0.0%	86.2%	83.9%	32.3%	23.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bicycle	3.8%	3.8%	0.0%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Walk/Other	33.0%	33.0%	84.0%	35.5%	11.2%	15.3%	66.9%	75.7%	20.2%	92.7%	97.8%	99.7%	99.7%	63.2%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
In/Out Splits:	(1)	(1)	(1)	(4)	(1)	(1)	(1)	(1)		(1)		(1)	
	In Out	In Out	In Out	In Out	In Out	In Out	In Out	In Out		In Out		In Out	
AM	22% 78%	22% 78%	52% 48%	77% 23%	100% 0%	100% 0%	100% 0%	50% 50%		50% 50%		100% 0%	
Midday	50% 50%	50% 50%	50% 50%	53% 47%	0% 0%	0% 0%	0% 0%	0% 0%		0% 0%		0% 0%	
PM	62% 38%	62% 38%	50% 50%	27% 73%	0% 100%	0% 100%	0% 100%	50% 50%		50% 50%		0% 100%	
Saturday	55% 45%	55% 45%	50% 50%	64% 36%	0% 0%	0% 0%	0% 0%	0% 0%		0% 0%		0% 0%	
Vehicle Occupancy:	(2,5)	(2,5)	(4)	(3)	(6)	(6)	(8)					(6)	
	All Periods	All Periods	All Periods	All Periods	Wk AM	Wk PM	Wk AM	Wk PM	All Periods	All Periods		All Periods		All Periods
Auto	1.12	1.12	1.20	1.17	1.63	1.63	1.63	1.63	1.30	N/A		N/A		1.00
Taxi	1.30	1.30	1.20	1.18	2.00	2.00	2.00	2.00	1.30	N/A		N/A		1.00
School Bus					35.0	35.0	35.0	35.0	35.00					
Truck Trip Generation:	(1)	(1)	(1)	(4)	(5)	(5)	(8)						
Weekday	0.06	0.06	0.35	0.91	0.03	0.03	0.03						
Saturday	0.02	0.02	0.04	0.08	0.00	0.00	0.00						
	per DU	per DU	per 1,000 sf	per 1,000 sf	per 1,000 sf	per 1,000 sf	per 1,000 sf						
Truck Temporal Distribution:	(1)	(1)	(1)	(4)	(5)	(5)	(8)						
AM	12.0%	12.0%	8.0%	9.9%	9.6%	9.6%	9.6%						
MD	9.0%	9.0%	11.0%	8.0%	11.0%	11.0%	11.0%						
PM	2.0%	2.0%	2.0%	7.0%	1.0%	1.0%	1.0%						
Saturday	9.0%	9.0%	11.0%	28.0%	0.0%	0.0%	0.0%						
Truck Directional Distribution:	In Out	In Out	In Out	In Out	In Out	In Out	In Out						
All Periods	50.0% 50.0%	50.0% 50.0%	50.0% 50.0%	67.0% 33.0%	50.0% 50.0%	50.0% 50.0%	50.0% 50.0%						
				57.0% 43.0%									
				60.0% 40.0%									
				42.0% 58.0%									

Table 2
Transportation Planning Factors (cont'd)

Notes :

(1) *2025 City Environmental Quality Review (CEQR) Technical Manual.*
(2) Based on ACS 2015-2019 journey-to-work data for Brooklyn tracts 191, 235, 241, 255, 531, 537 and 1237.
(3) Based on AASHTO CTPP 5-Year (2012-2016) reverse journey-to-work data for Brooklyn tracts 191, 235, 241, 255, 531, 537 and 1237.
(4) Based on data provided by DOT.
(5) *Gowanus Rezoning FEIS* , 2021.
(6) Based on the survey conducted at the existing CUTA school in Williamsburg, Brooklyn in June, 2024. Staff mode choice modified from survey result to more accurate represent the future condition.
(7) Parent modal split adjusted for pedestrian related trips only.
(8) *Brooklyn Lab Charter School EAS* , 2018.
(9) Assumes a 1:1.3 parent-to-grade 1 to 6 student ratio taking subway, bus, and walk modes.
(10) Assumes 1 employee per 11 Students (For High School). 1 employee per 4.86 Students (For Elemetary and Middle School, based on data from CUTA school survey)

Retail

The trip generation rates, temporal distributions, in/out splits, and truck generation rates for local retail uses were based on data from the 2025 *CEQR Technical Manual*. The modal splits and vehicle occupancies were based on survey data provided by DOT.

Light Industrial/Warehouse

The trip generation rates, temporal distributions, directional in/out splits and truck factors for light industrial uses were based on data provided by NYCDOT. The modal splits and vehicle occupancies were based on American Association of State Highway and Transportation Officials (AASHTO) Census Transportation Planning Products (CTPP) reverse journey-to-work data for workers in census tracts 191, 235, 241, 255, 531, 537 and 1237.

Residential

Residential person trip rates, directional splits, and temporal distribution reflect data from the *CEQR Technical Manual*, while modal splits and auto vehicle occupancy were based on 2015-2019 5-year ACS journey-to-work data for census tracts 191, 235, 241, 255, 531, 537 and 1237. Taxi occupancy was based on data from the 2021 *Gowanus Rezoning FEIS*. Truck trip generation rates and temporal distributions reflect those cited in the *CEQR Technical Manual*.

School

The Proposed Actions would facilitate the development of a new high school and two new K-12 schools. The trip generation, temporal distribution, and directional splits were based on the *CEQR Technical Manual*. With regards to temporal distribution, on a typical weekday, these private schools generally start before 9:00 AM, which is closer to the AM commuter peak hour, and dismiss students at 4:00 PM or later, which is closer to the PM commuter peak hour. As such, the temporal distribution from the *CEQR Technical Manual* is conservatively utilized during the PM peak hour. Also, it should also be noted that these schools do not operate on Saturday and only some grades/classes are in session for half-day on Fridays and Sundays.

The travel demand characteristics from an adjacent existing school, Central United Talmudical Academy (CUTA) school in Williamsburg, Brooklyn, were incorporated as some of the transportation planning factors for the proposed schools as part of the Park Avenue Rezoning. These travel demand characteristics were derived from transportation surveys conducted in June 2024 from students and staff at the existing adjacent school. The full transportation survey memorandum, including survey methodology and findings, is included in this appendix.

The elementary and middle/intermediate school modal splits for students of the proposed schools were based on the CUTA surveys for students in grades 1 through 5 and grades 6 through 8, respectively. Modal splits for high school students were based on the *Brooklyn Lab Charter School EAS*. Modal splits for school staff were based on the surveys for CUTA staff at the adjacent school. It should be noted that existing CUTA school is an all-girls school with female staff members only; female members in the Hasidic community do not operate automobiles and typically opt to travel by taxi alternatively. As the proposed schools would be co-ed, 50% of the taxi-share derived from the survey is assumed to utilize automobile

to account for the male staff in the proposed schools. The modal split for parents is proportioned similar to those splits for elementary and intermediate schools for pedestrian-related modes only (i.e., walk-only, subway, and transit bus).

Auto and taxi vehicle occupancies for elementary and intermediate school students were based on the survey for the adjacent CUTA school for those respective grade levels. Vehicle occupancies and truck trip generation rates and factors for high school students were based on the *Brooklyn Lab Charter School EAS* . Vehicle occupancies for school staff were based on the surveys for CUTA staff at the adjacent school. Lastly, truck trip generation rates and factors for elementary and intermediate school use were based on the 2021 *Gowanus Rezoning FEIS.*

LEVEL 1 SCREENING ASSESSMENT

The 2025 *CEQR Technical Manual* describes a two-level screening procedure for the preparation of a "preliminary analysis" to determine if quantified operational analyses of transportation conditions are warranted. As discussed in the following sections of this memorandum, the preliminary analysis begins with a trip generation (a Level 1 screening assessment) analysis to estimate the numbers of person and vehicle trips attributable to a proposed action. According to the 2025 *CEQR Technical Manual*, if a proposed action is expected to result in fewer than 50 peak hour vehicle or ferry trips and fewer than 200 peak hour transit or pedestrian trips, further quantified analyses are not warranted. When these thresholds are exceeded, detailed trip assignments (a Level 2 screening assessment) are to be performed to estimate the incremental trips that could occur at specific transportation elements and to identify potential locations for further analysis. If the trip assignments demonstrate that a proposed action would generate 50 or more peak hour vehicle trips at an intersection, 200 or more peak hour subway trips at a station, 50 or more peak hour bus trips in one direction along a bus route, 25 or more peak hour trips by Citywide Ferry Service ("CWFS") in a single direction on a single route or 50 or more at a ferry landing, or 200 or more peak hour pedestrian trips traversing a sidewalk, corner area, or crosswalk, then further quantified operational analyses may be warranted to assess the potential for significant adverse impacts on traffic, transit, pedestrian, vehicular and pedestrian safety, and parking conditions.

Trip Generation

The net incremental change in person and vehicle trips expected to result from the Proposed Actions by the 2031 analysis year was derived based on the net change in land uses shown in **Table 1** and the transportation planning factors shown in **Table 2**. **Table 3** shows an estimate of the net incremental change in peak hour person trips and vehicle trips, (versus the No Action condition) that would occur in 2031 with implementation of the Proposed Actions. As shown in **Table 3**, under the RWCDS, the Proposed Actions would generate a net increase of approximately 3,732 person trips in the weekday AM peak hour, 1,250 in the weekday midday, 4,552 in the weekday PM peak hour and 2,006 in the Saturday peak hour. Peak hour vehicle trips (including auto, truck, school bus and taxi trips balanced to reflect that some taxis arrive or depart empty) would increase by a net total of approximately 388, 136, 440 and 212 (in and out combined) in the weekday AM, midday and PM, and Saturday peak hours, respectively. Peak hour subway trips would increase by a net total of approximately 722, 120, 725, and 198 during these periods, respectively, while transit bus trips would increase by approximately 270, 34, 280, and 52, respectively. Lastly, walk-only trips would increase by 1,643, 936, 2,428, and 1,496 trips during the weekday AM, midday and PM, and Saturday peak hours, respectively. **Table 4** shows a summary of the data presented in **Table 3**.

Traffic

Based on *CEQR Technical Manual* guidelines, a quantified traffic analysis is typically required if the Proposed Action(s) would result in 50 or more vehicle trip ends in a peak hour at one or more intersections. As shown in **Table 4**, under the RWCDS, the net number of incremental vehicle trips—388, 136, 440, and 212 in the weekday AM, midday and PM peak hours, and Saturday peak hour, respectively—would exceed the 50-trip threshold in three peak hours, and a Level 2 screening analysis is therefore warranted for these periods to determine which if any intersections would require quantified analysis.

Transit

According to the general thresholds used by the Metropolitan Transportation Authority (MTA) and cited in the *CEQR Technical Manual*, detailed transit analyses are generally not required if the Proposed Action(s) is projected to result in fewer than 200 peak hour rail or bus transit riders. If the Proposed Action(s) would result in 50 or more bus passengers being assigned to a single bus route in one direction, or if it would result in an increase of 200 or more passengers at a single subway station or on a single subway line, a detailed bus and/or subway analysis would be warranted. Transit analyses typically focus on the weekday AM and PM commuter peak hours, as it is during these periods that overall demand on the subway and bus systems is usually highest.

As shown in **Table 4**, the RWCDS is expected to generate approximately 722 and 725 incremental subway trips in the weekday AM and PM peak hours, respectively. As these numbers of trips would exceed the 200-trip *CEQR Technical Manual* analysis threshold, a Level 2 screening analysis is warranted to determine which if any subway stations and routes would require quantified analysis. As also shown in **Table 4,** the Proposed Actions is expected to generate 270 and 280 incremental bus trips in the weekday AM and PM peak hours, respectively. As these numbers of trips could potentially exceed the 50-trips per direction *CEQR Technical Manual* analysis threshold on one or more routes, a Level 2 screening analysis is also warranted for the bus mode to determine which if any bus routes would require quantified analysis.

CWFS

According to *CEQR Technical Manual* guidance, detailed analyses of the CWFS are not typically required if the Proposed Action(s) would result in 50 or fewer peak hour CWFS peak hour ferry riders to a ferry landing within a half-mile of the Project Area. As the Area is not located within half-mile of a CWFS ferry landing, a Level 2 screening analysis is not warranted according to *CEQR Technical Manual* guidance.

Pedestrians

According to *CEQR Technical Manual* guidelines, a quantified analysis of pedestrian conditions is typically required if a proposed action would result in 200 or more peak hour pedestrian trips at any pedestrian element (sidewalk, corner area or crosswalk). As shown in **Table 4**, the RWCDS would generate an incremental demand of approximately 2,735, 1,170, 3,590, and 1,873 total pedestrian trips (including walk-only trips, pedestrians en route to and from nearby subway stations and bus stops, and persons en route to and from nearby parking facilities) in the weekday AM, midday and PM peak hours, and Saturday peak hour, respectively. As the numbers of trips in each of these periods would exceed the 200-trip threshold, a Level 2 screening analysis is warranted to determine which if any pedestrian elements would require quantified analysis.

Table 3

RWCDS Travel Demand Forecast

Land Use:	Residential		Residential (Single-Family)		Local Retail		Warehouse		Elementary School		Middle School (Students)		High School (Students)		Elementary School (Parents)		Elementary School (Parents)		School (Staff)		
													AM	PM	AM	PM	AM	PM				
Size/Units:	483 DU		0 DU		39,286 gsf		-8,900 gsf		795 students		398 students		1,027 Parents	0	74 Parents	95	69 Parents	78	339 staff			
Peak Hour Trips:																					**Total Trips**	
AM	364		0		618		-2		788		394		1,018		146		136		270		3,732	
Midday	220		0		1,032		-2		0		0		0		0		0		0		1,250	
PM	334		0		1,408		-2		788		394		1,018		188		154		270		4,552	
Saturday	364		0		1,642		0		0		0		0		0		0		0		2,006	
Person Trips:																						
AM	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	15	50	0	0	35	32	0	0	11	0	1	0	40	0	0	0	0	0	46	0	148	82
Taxi	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	46	0	48	0
Subway	31	114	0	0	9	9	0	0	4	0	0	0	551	0	2	2	0	0	0	0	597	125
Bus	5	16	0	0	7	6	0	0	4	0	1	0	221	0	2	2	0	0	6	0	246	24
School Bus	0	0	0	0	0	0	0	0	680	0	127	0	0	0	0	0	0	0	0	0	807	0
Bicycle	2	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	10
Walk/Other	26	95	0	0	272	248	-2	0	88	0	264	0	206	0	69	69	68	68	172	0	1,163	480
Total	79	285	0	0	323	295	-2	0	788	0	394	0	1,018	0	73	73	68	68	270	0	3,011	721
Midday	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	20	20	0	0	56	56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	76	76
Taxi	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subway/Railroad	44	44	0	0	16	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60	60
Bus	6	6	0	0	11	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	17
School Bus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycle	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4
Walk/Other	36	36	0	0	433	433	-2	0	0	0	0	0	0	0	0	0	0	0	0	0	467	469
Total	110	110	0	0	516	516	-2	0	0	0	0	0	0	0	0	0	0	0	0	0	624	626
PM	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	37	23	0	0	77	77	0	0	0	2	0	1	0	40	0	0	0	0	0	46	114	189
Taxi	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	46	0	48
Subway	81	51	0	0	21	21	0	0	0	0	0	0	0	551	0	0	0	0	0	0	102	623
Bus	11	7	0	0	14	14	0	0	0	2	0	1	0	221	2	2	0	0	0	6	27	253
School Bus	0	0	0	0	0	0	0	0	0	662	0	93	0	0	0	0	0	0	0	0	0	755
Bicycle	8	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	5
Walk/Other	68	43	0	0	592	592	-2	0	0	121	0	298	0	206	92	92	77	77	0	172	827	1,601
Total	205	129	0	0	704	704	-2	0	0	788	0	394	0	1018	94	94	77	77	0	270	1,078	3,474
Saturday	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	35	30	0	0	91	91	0	0	0	0	0	0	0	0	0	0	0	0	0	0	126	121
Taxi	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subway/Railroad	80	66	0	0	26	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	106	92
Bus	11	9	0	0	16	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	25
School Bus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycle	7	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	6
Walk/Other	67	53	0	0	688	688	0	0	0	0	0	0	0	0	0	0	0	0	0	0	755	741
Total	200	164	0	0	821	821	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,021	985

Table 3
RWCDS Travel Demand Forecast (Cont'd)

Land Use:	Residential		Residential (Single-Family)		Local Retail		Warehouse		Elementary School		Middle School (Students)		High School (Students)		Elementary School (Parents)		Elementary School (Parents)		School (Staff)		Total Trips	
													AM	PM	AM	PM	AM	PM				
Size/Units:	483 DU		0 DU		39,286 gsf		-8,900 gsf		795 students		398 students		1,027 Parents	0	74 Parents	95	69 Parents	78	339 staff			
Peak Hour Trips:																						
AM	364		0		618		-2		788		394		1,018		146		136		270		3,732	
Midday	220		0		1,032		-2		0		0		0		0		0		0		1,250	
PM	334		0		1,408		-2		788		394		1,018		188		154		270		4,552	
Saturday	364		0		1,642		0		0		0		0		0		0		0		2,006	
Vehicle Trips :																						
AM	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	15	45	0	0	29	27	0	0	7	7	1	1	31	31	0	0	0	0	46	0	129	111
Taxi	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	46	0	48	0
Taxi (Balanced)	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	46	46	48	48
School Bus	0	0	0	0	0	0	0	0	21	21	4	4	0	0	0	0	0	0	0	0	25	25
Truck	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1
Total	15	45	0	0	29	27	0	0	30	30	6	6	31	31	0	0	0	0	92	46	203	185
Midday	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	20	20	0	0	47	47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	67	67
Taxi	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Taxi (Balanced)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
School Bus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Truck	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1
Total	20	20	0	0	47	47	0	0	1	1	0	0	0	0	0	0	0	0	0	0	68	68
PM	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	33	23	0	0	64	64	0	0	1	1	1	1	31	31	0	0	0	0	0	46	130	166
Taxi	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	46	0	48
Taxi (Balanced)	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	46	46	48	48
School Bus	0	0	0	0	0	0	0	0	20	20	4	4	0	0	0	0	0	0	0	0	24	24
Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	33	23	0	0	64	64	0	0	22	22	6	6	31	31	0	0	0	0	46	92	202	238
Saturday	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	32	28	0	0	76	76	0	0	0	0	0	0	0	0	0	0	0	0	0	0	108	104
Taxi	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Taxi (Balanced)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
School Bus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	32	28	0	0	76	76	0	0	0	0	0	0	0	0	0	0	0	0	0	0	108	104

Table 4
Forecast Summary

Peak Hour	Vehicle Trips			Person Trips														
				Auto[1]			Subway			Bus			Walk/Other			Total Pedestrian Trips[2]		
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total
AM	203	185	388	71	29	100	597	125	722	246	24	270	1,163	480	1,643	2,077	658	2,735
MD	68	68	136	40	40	80	60	60	120	17	17	34	467	469	936	584	586	1,170
PM	202	238	440	57	100	157	102	623	725	27	253	280	827	1,601	2,428	1,013	2,577	3,590
SAT	108	104	212	64	63	127	106	92	198	27	25	52	755	741	1,496	952	921	1,873

Notes:
1- Trips en route to/from nearby on-street and off-street parking spaces.
2- Includes walk-only trips and pedestrians en route to/from nearby subway stations, bus stops, and off-site parking spaces.

LEVEL 2 SCREENING ASSESSMENT

Traffic

Project Area Street Network

As shown in **Figure 1** the street network in proximity to the Project Area is comprised of a grid system interrupted by the Brooklyn-Queens Expressway (I-278) northeast of the area. The Project Area is generally bounded by Flushing Avenue to the north, Bedford Avenue to the west, Myrtle Avenue to the south, and Warsoff Place/Sandford Street to the east. **Flushing Avenue** operates as an east-west minor arterial with one moving lane in each direction and parking along both curbs. The corridor serves the B57 bus and is a DOT-designated Local Truck Route. **Bedford Avenue** is a northbound principal arterial with two moving lanes and parking along both curbs. The corridor also includes a bus lane along the eastern curb and a bike lane adjacent to a parking lane along the western curb. Bedford Avenue serves the northbound B44 bus and is a DOT-designated Local Truck Route. **Myrtle Avenue** is an east-west principal arterial with one moving lane in each direction and parking along both curbs. The corridor serves the B54 bus and is a DOT-designated Local Truck Route. **Warsoff Place** is a southbound local street with one moving lane and parking along both curbs. The corridor turns into Sandford Street south of Park Avenue. **Sandford Street** is also a southbound local street with one moving lane and parking along both curbs.

The **Brooklyn-Queens Expressway** (BQE) is a principal arterial interstate that connects Brooklyn to Queens. The expressway connects to several neighborhoods such as Downtown Brooklyn and South Williamsburg in Brooklyn and Long Island City in Queens, as well as major hubs like LaGuardia Airport. The BQE is part of Interstate 278 (I-278) which connects Brooklyn, Queens, Staten Island, Bronx and New Jersey.

Other study area corridors include Nostrand Avenue, Marcy Avenue, Broadway, Dekalb Avenue, and Lafayette Avenue. **Nostrand Avenue** operates as a southbound principal arterial with one moving lane, one bus lane, and parking along both curbs. **Marcy Avenue** operates as a northbound minor arterial with two moving lanes and parking along both curbs. **Broadway** operates as a northwest – southeast minor arterial with one moving lane in each direction and parking along both curbs. The J/M lines operate on elevated tracks above Broadway. **Dekalb Avenue** is a westbound principal arterial with one moving lane, one bike lane, and parking along both curbs. **Lafayette Avenue** is an eastbound principal arterial with

two moving lanes and parking along both curbs. Walworth Street and Spencer Street are also important local corridors within the Project Area.

Traffic Assignment and Analysis Locations

The assignments of auto and taxi trips to the street network in proximity to the Project Area are based on the locations of each Projected Development Sites and the anticipated origins and destinations of vehicle trips associated with the different uses projected for each site under the RWCDS (e.g., commercial, residential, etc.). **Table 5** shows the directional distributions of auto and taxi trips by land use based on origin/destination data. The origins/destinations of residential trips are based on 2012-2016 journey-to-work data, while the origins/destinations of warehouse uses are based on 2012-2016 AASHTO CTPP reverse journey-to-work data. Origin/destination for private school staff are based on staff zip-code data from a June 2024 survey done at the CUTA school in Williamsburg, Brooklyn. Origins/destinations for uses that generate mostly local trips, including local retail and private school (students) are based on population density in proximity to the Project Area and surrounding neighborhoods within a 0.5-mile radius.

Using the distributions shown in **Table 5**, taxi trips and non-resident and non-worker auto trips were first assigned to various portals on the periphery of the Project Area and from there via the most direct route to each Projected Development Sites. Auto trips generated by Project Development Sites 2, 6, 7, 8, 10, and 11 could not accommodate the projected parking demand for residential and staff use. These trips were assigned to two off-street parking facilities within 0.5-mile radius of the Project Area. The first parking facility has a utilization of 80% and the second parking facility has a utilization of 60%. Based on the available capacity for each parking facility, an approximately 60/40 split was implemented between these two parking facilities . Truck trips were first assigned to designated Through and Local truck routes providing access to the Project Area, and then to the most direct paths to and from each site. Truck trips were assigned primarily to the Through Truck Routes along Flushing and Myrtle Avenues.

The site entrances vehicle and pedestrian trips were assigned to/from are listed below:

- Site 1: The general entrance is located on the north curb of Park Avenue between Bedford Avenue and Spencer Street. An additional pedestrian entrance is located on the west curb of Spencer Street between Flushing Avenue and Park Avenue.
- Site 2: The general entrance is located on the east curb of Spencer Street between Flushing Avenue and Park Avenue.
- Site 3: The general entrance is located on the north curb of Park Avenue between Spencer Street and Walworth Street. An additional pedestrian entrance is located on the east curb of Spencer Street between Flushing Avenue and Park Avenue.
- Site 4: The general entrances are located on the west curb of Warsoff Place between Flushing Avenue and Park Avenue and on the north curb of Park Avenue between Walworth Street and Warsoff Place.
- Site 5: The general entrance is located on the south curb of Park Avenue between Walworth Street and Warsoff Place. Additional pedestrian entrances are located on the west curb of Sandford Street between Park Avenue and Myrtle Avenue and on the east curb of Walworth Street between Park Avenue and Myrtle Avenue.
- Site 6: The general entrance is located on the east curb of Walworth Street between Park Avenue and Myrtle Avenue

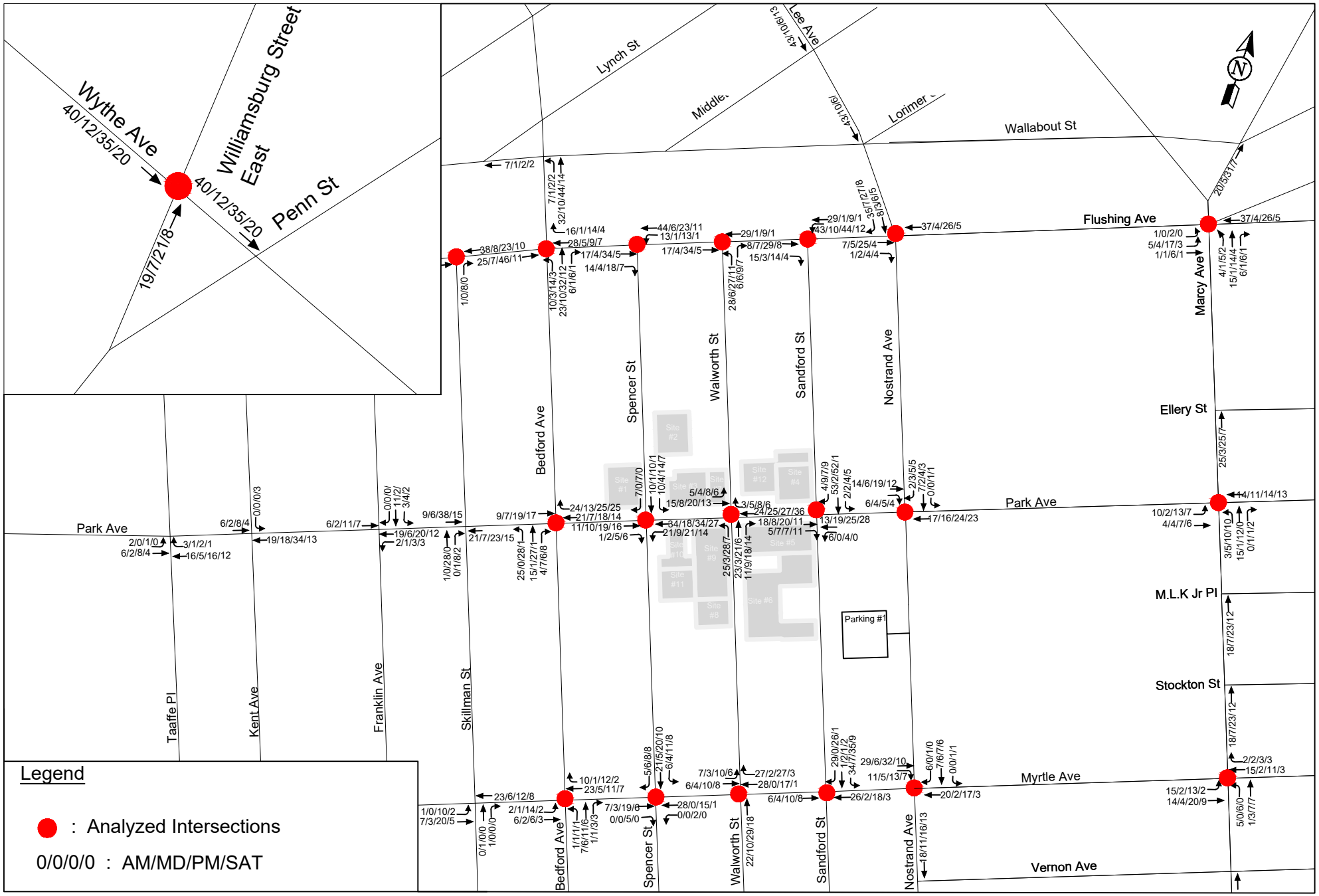
- Site 7: The general entrance is located on the west curb of Walworth Street between Flushing Avenue and Park Avenue. An additional pedestrian entrance is located on the north curb of Park Avenue between Spencer Street and Walworth Street.
- Site 8: The general entrance is located on the west curb of Walworth Street between Park Avenue and Myrtle Avenue.
- Site 9: The general entrances are located on the south curb of Park Avenue between Spencer Street and Walworth Street and on the west curb of Walworth Street between Park Avenue and Myrtle Avenue.
- Site 10: The general entrance is located on the south curb of Park Avenue between Spencer Street and Walworth Street.
- Site 11: The general entrance is located on the east curb of Spencer Street between Park Avenue and Myrtle Avenue.
- Site 12: The general entrance is located on the west curb of Walworth Street between Flushing Avenue and Park Avenue. An additional pedestrian entrance is located on the north curb of Park Avenue between Walworth Street and Sandford Street.

Table 5
Directional Distributions of Auto/Taxi Trips by Land Use

Land Use	Brooklyn				Manhattan	Bronx	Queens	Long Island	Staten Island/N.J	Upstate NY/ CT/PA
	N	S	E	W						
Residential	19.4%	22.7%	6.3%	9.7%	10.9%	0.0%	9.8%	6.7%	9.3%	5.1%
Warehouse	7.5%	41.4%	8.4%	1.3%	0.0%	1.1%	26.0%	4.3%	4.7%	5.4%
School (Staff)	79.0%	3.0%	13.0%	5.0%	---	---	---	---	---	---
Local Retail/School (Students)	39.0%	19.0%	16.0%	26.0%	---	---	---	---	---	---

As discussed above, projected development associated with the Proposed Actions would result in a net incremental increase of 388 vehicle trips during the weekday AM peak hour, 136 during the midday peak hour, 440 during the PM peak hour and 212 during the Saturday peak hour. As these traffic volumes would exceed 50 trips in three peak hours (the *CEQR Technical Manual* Level 1 screening threshold for a detailed analysis), an assignment of net increment traffic volumes was prepared for the AM, midday, PM, and Saturday peak periods to help identify individual intersections that would potentially exceed 50 trips per hour (a Level 2 screening assessment). **Figure 3** shows the assignment of net incremental peak hour vehicle trips from the Proposed Actions' RWCDS at intersections within the traffic study area.

Representative intersections most likely to be used by concentrations of action-generated vehicles traveling to and from the projected development sites were then selected for detailed analysis based on the preliminary assignments. **Figure 3** shows the locations of the 21 intersections (20 signalized and one unsignalized) that were selected for detailed analysis. Of which 21 intersections were analyzed in the AM peak hour, one intersection in the Midday peak hour, 21 intersections in the PM peak hour, and four intersections in the Saturday peak hour. The majority of analyzed intersections are located along east-west corridors providing direct access to projected development sites, including Flushing Avenue (eight intersections), Park Avenue (six intersections), and Myrtle Avenue (six intersections). These intersections are listed below along with the peak hour in which the 50-vehicle threshold is expected to be exceeded.



Park Avenue Brooklyn Rezoning

Figure 3

Incremental Vehicle Trips

Intersections

1. Flushing Avenue and Franklin Avenue (AM/PM)
2. Flushing Avenue and Skillman Avenue (AM/PM)
3. Flushing Avenue and Bedford Avenue (AM/PM)
4. Flushing Avenue and Spencer Street (AM/PM)
5. Flushing Avenue and Walworth Street (AM/PM)
6. Flushing Avenue and Warsoff Place (AM/PM)
7. Flushing Avenue and Nostrand Avenue (AM/PM)
8. Park Avenue and Bedford Avenue (AM/PM/SAT)
9. Park Avenue and Spencer Street (AM/PM/SAT)
10. Park Avenue and Walworth Street (AM/MD/PM/SAT)
11. Park Avenue and Sanford Street (AM/PM/SAT)
12. Park Avenue and Nostrand Avenue (AM/PM)
13. Myrtle Avenue and Bedford Avenue (AM/PM)
14. Myrtle Avenue and Spencer Street (AM/PM)
15. Myrtle Avenue and Walworth Street (AM/PM)
16. Myrtle Avenue and Sanford Street (AM/PM)
17. Myrtle Avenue and Nostrand Avenue (AM/PM)
18. Myrtle Avenue and Marcy Avenue (AM/PM)
19. Flushing Avenue and Marcy Avenue/Union Avenue (AM/PM)
20. Park Avenue and Marcy Avenue (AM/PM)
21. Williamsburg Street East and Wythe Avenue (AM/PM)

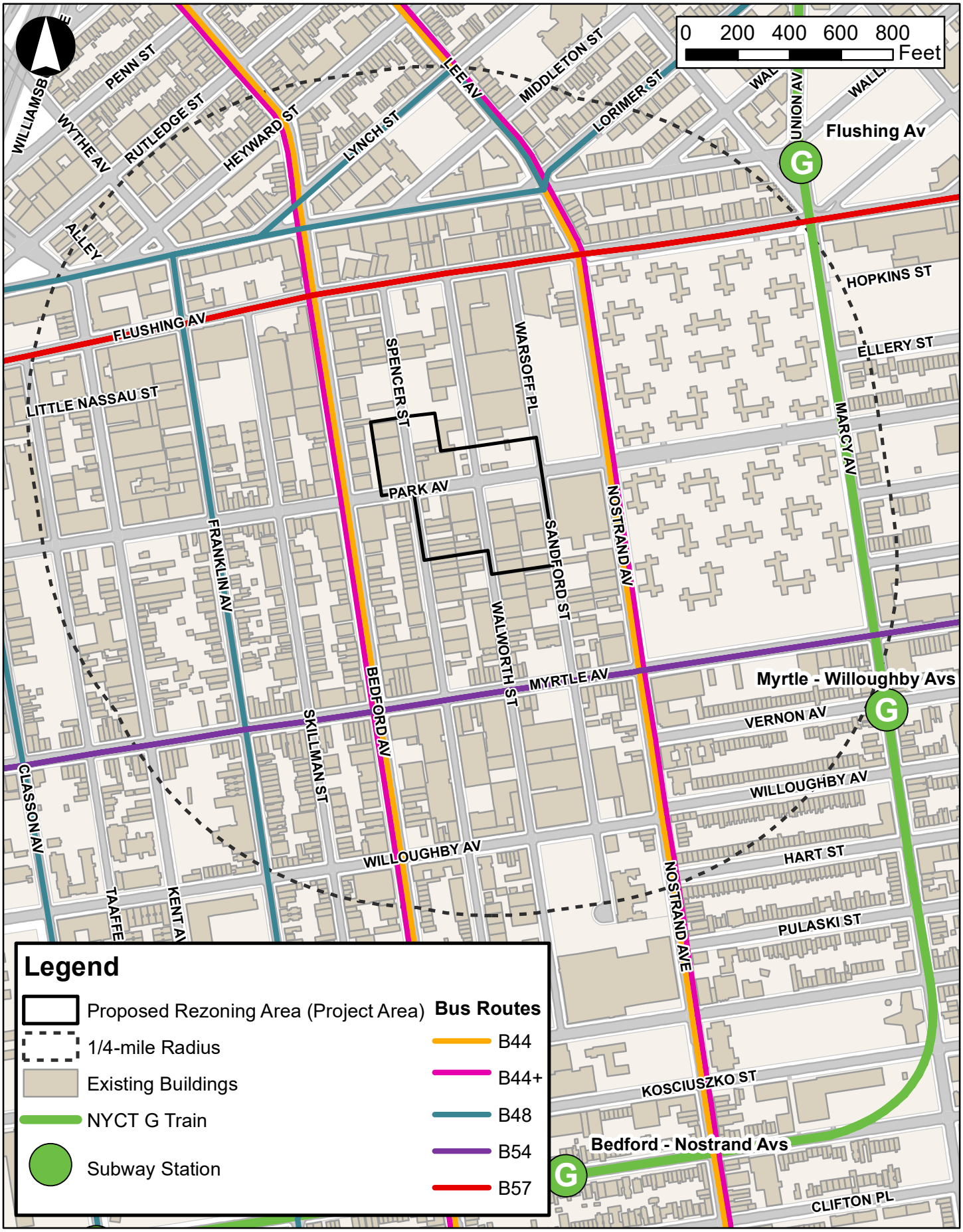
Subway

According to the general thresholds used by the Metropolitan Transportation Authority (MTA) and specified in the *CEQR Technical Manual,* detailed subway transit analyses are generally not required if the Proposed Action(s) is projected to result in fewer than 200 peak hour subway riders. If the Proposed Action(s) would result in an increase of 200 or more passengers at a single subway station or on a single subway line, a detailed subway analysis would be warranted.

Subway Stations

There are a total of three NYCT subway stations or station complexes in proximity to Projected Development Sites that are expected to experience new demand as a result of the Proposed Actions. These stations are shown in **Figure 4** and **Table 6**, along with the subway routes serving each facility. As shown in **Figure 4**, the G train has three stations just outside the ¼-mile radius northeast, southeast, and south of the Project Area. These include the Flushing Avenue, Myrtle – Willoughby Avenue, and Bedford-Nostrand Avenue Stations. The G train connects Long Island City, Queens and Kensington, Brooklyn. The G train provides connections to the E, M, and 7 trains at Court Square on the northernmost point of the line, to the L train at Metropolitan Avenue north of the Project Area, to the A and C trains at Hoyt-Schermerhorn Streets, and finally to the R train at Fourth Avenue. The G train also runs together with the F train between Bergen Street and Church Avenue.

Figure 4
Transit Map



Subway Assignment and Analyzed Stations

As shown in **Table 3**, under the RWCDS, the Proposed Actions would generate a net increment of approximately 722 and 725 subway trips during the weekday AM and PM commuter peak hours, respectively. Trips from each Projected Development Site were assigned to the individual stations serving the Project Area based on proximity and consideration to the existing ridership patterns. **Table 6** shows the estimated net incremental subway trips generated by the Proposed Actions during the weekday AM and PM peak hours at each of the subway stations serving the Project Area. As shown in **Table 6**, the highest number of peak hour subway trips are expected to occur at the Flushing Avenue station which would experience approximately 397 incremental trips (in + out combined) in the AM peak hour and 398 in the PM peak hour. The second highest number of trips would occur at the Myrtle – Willoughby Avenue station which would experience an estimated 218 incremental trips in the AM peak hour and 219 in the PM. The Bedford – Nostrand Avenue station would experience 106 incremental trips in the AM peak hour and 107 in the PM peak hour.

Table 6
Net Incremental Peak Hour Subway Trips by Station

Subway Station	AM Peak Hour Trips			PM Peak Hour Trips		
	Into Project	Out of Project	Total	Into Project	Out of Project	Total
Project Summary						
Peak Hour Project-Generated Trips:	2,077	658	2,735	1,013	2,577	3,590
Peak Hour Project-Generated Subway Trips:	597	125	722	102	623	725
Subway Station Summary						
Flushing Avenue (G)	328	67	395	57	341	399
Myrtle -Willoughby Avenue (G)	180	38	218	31	188	218
Bedford – Nostrand Avenue (G)	89	20	109	14	94	108
Total	**597**	**125**	**722**	**102**	**623**	**725**

The analysis of subway station conditions focuses on two subway stations at which incremental demand from the Proposed Actions is expected to exceed the 200-trip *CEQR Technical Manual* analysis threshold in one or both peak hours. As shown in **Table 6**, these subway stations include:

- Flushing Avenue (G)
- Myrtle – Willoughby Avenue (G)

For each of these facilities, key circulation elements (e.g., street stairs and fare arrays) expected to be used by concentrations of new demand from the Proposed Actions will be analyzed.

Subway Line Haul

As discussed above, the Project Area is served by one NYCT subway route, the G train. As the Proposed Actions are expected to generate 200 or more new subway trips in one direction on this route, an analysis of subway line haul conditions will be included in the EIS. The analysis will use existing maximum load point subway service and ridership data provided by NYCT to assess existing, future No-Action, and future With-Action conditions at the peak load points of the respective subway lines during the weekday AM and PM peak hours.

Bus

According to the general thresholds used by the Metropolitan Transportation Authority (MTA) and specified in the *CEQR Technical Manual,* detailed bus analyses are generally not required if the Proposed Action(s) is projected to result in fewer than 50 peak hour bus riders. If a Proposed Action(s) would result in 50 or more bus passengers being assigned to a single bus line (in one direction), a detailed bus or subway analysis would be warranted.

Bus Routes

As shown in **Figure 4**, a total of approximately five local bus services, all of which are operated by NYCT, are located within approximately ¼-mile of Projected Development Sites. These services and the principal corridors on which they operate in proximity to the Project Area are listed in **Table 7**.

Table 7
Bus Routes Serving the Project Area

Route	Operating Agency	Route Endpoints	Corridors Served in Proximity to the Rezoning Area
B44 Local	NYCT	Williamsburg – Sheepshead Bay	Nostrand/Bedford Avenues
B44 SBS	NYCT	Williamsburg – Sheepshead Bay	Nostrand/Bedford Avenues
B48	NYCT	Greenpoint – Prospect Leffert Gardens	Franklin/Classon Avenues
B54	NYCT	Downtown Brooklyn – Ridgewood, Queens	Myrtle Avenue
B57	NYCT	Red Hook – Maspeth, Queens	Flushing Avenue

Bus Assignment and Analyzed Routes

As shown in **Table 3**, Projected Development Sites are expected to generate a net total of approximately 270 and 280 incremental trips by bus during the weekday AM and PM peak hours, respectively. These local bus trips were assigned to each route based on proximity to individual projected development sites and current ridership patterns. **Table 8** shows the anticipated numbers of new riders expected on each local bus route in the AM and PM peak hours. As shown in **Table 8**, the B44-SBS route in the northbound and southbound directions is expected to experience 50 or more new trips in the AM and PM peak hours, respectively. Therefore, an analysis of bus line haul conditions will be included in the EIS. The analysis will use existing maximum load point bus service and ridership data provided by NYCT to assess existing, future No-Action, and future With-Action conditions at the peak load points of the bus route during the weekday AM and PM peak hours.

Table 8
Net Incremental Bus Trips by Route

Route	Direction	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
B44	NB	36	2	38	4	24	28
	SB	23	3	26	3	36	39
B44 SBS	NB	58	4	**62**	6	39	45
	SB	38	6	44	4	59	**63**
B48	NB	13	1	14	1	3	4
	SB	3	1	4	0	14	14
B54	EB	17	2	19	2	26	28
	WB	25	2	27	3	17	20
B57	EB	10	2	12	2	24	26
	WB	23	1	24	2	11	13
Total		246	24	270	27	253	280

Notes:
Bold - denotes greater than 50 incremental trips per direction.

Pedestrians

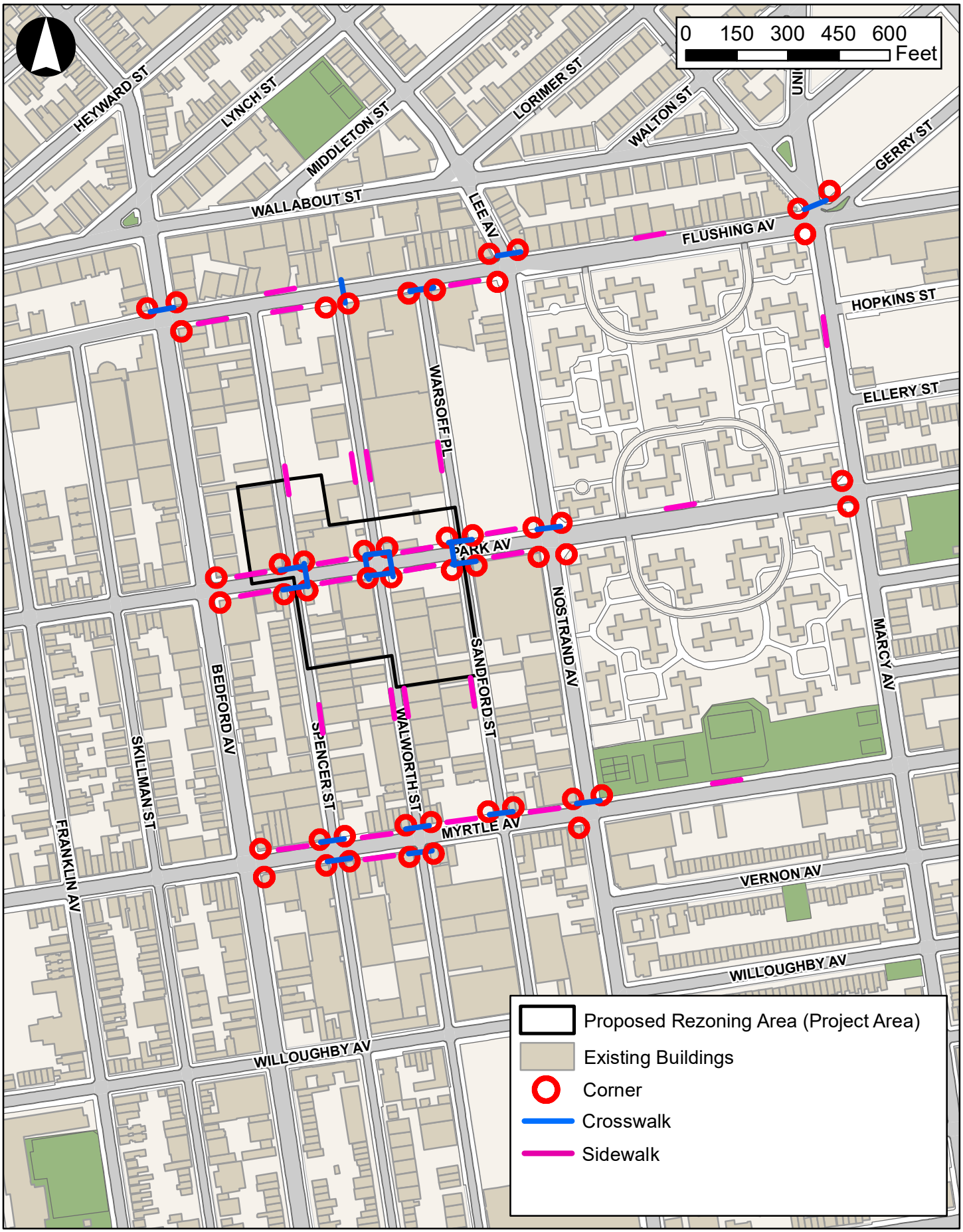
Under *CEQR Technical Manual* guidelines, detailed pedestrian analyses are generally warranted if a proposed action is projected to result in 200 or more new peak hour pedestrians at any sidewalk, corner reservoir area or crosswalk. As shown in **Table 4**, the Proposed Actions are expected to generate approximately 1,643 walk-only trips in the weekday AM peak hour, 936 in the midday peak hour, 2,428 in the PM peak hour, and 1,496 in the Saturday peak hour. Persons en route to and from subway station entrances and bus stops and persons en route to and from nearby parking facilities would add approximately 1,092, 234, 1,162, and 377 additional pedestrian trips to rezoning area sidewalks and crosswalks during these same periods, respectively. In total, the Proposed Actions are expected to generate approximately 2,735 total pedestrian trips in the weekday AM peak hour, 1,170 in the midday peak hour, 3,590 in the PM peak hour, and 1,873 in the Saturday peak hour.

In the weekday AM and PM peak hours, action-generated pedestrian trips would be most concentrated on sidewalks and crosswalks adjacent to Projected Development Sites as well as along corridors connecting these sites to area subway station entrances. In the midday and Saturday peak hours, pedestrian trips would tend to be more dispersed, as people travel throughout the area for lunch, shopping and/or errands. Given the numbers of incremental pedestrian trips that would be generated, a detailed analysis of pedestrian conditions under both scenarios is warranted. Representative pedestrian elements most likely to be used by concentrations of action-generated pedestrian trips traveling to and from the Projected Development Sites are selected for detailed analysis based on an assignment.

Based on the assignment of incremental peak hour pedestrian trips, a total of 99 pedestrian elements (29 sidewalks, 48 corner areas and 22 crosswalks) are expected to experience a net increase of 200 or more trips in one or more peak hours. Given the relatively large numbers of pedestrian trips that would be generated by the Proposed Actions and the assignment, a quantitative pedestrian analysis will be provided in the EIS for these 99 elements. As shown in **Figure 5**, these analysis locations include a total of sidewalks, corner areas and crosswalks where new pedestrian demand would be most concentrated and most likely to result in significant adverse impacts. The specific peak hours for analysis will be

Figure 5

Pedestrian Analysis Locations



determined based on pedestrian counts that will be conducted in proximity to the Project Area as part of the data collection program for the EIS transportation analyses.

Sidewalks

1. North Sidewalk along Flushing Ave between Bedford Ave and Lee Ave
2. South Sidewalk along Flushing Ave between Bedford Ave and Spencer St
3. North Sidewalk along Park Ave between Bedford Ave and Spencer St
4. South Sidewalk along Park Ave between Bedford Ave and Spencer St
5. North Sidewalk along Myrtle Ave between Bedford Ave and Spencer St
6. East Sidewalk along Spencer St between Flushing Ave and Parking Ave
7. South Sidewalk along Flushing Ave between Spencer St and Walworth St
8. North Sidewalk along Park Ave between Spencer St and Walworth St
9. East Sidewalk along Spencer St between Park Ave and Myrtle Ave
10. South Sidewalk along Park Ave between Spencer St and Walworth St
11. North Sidewalk along Myrtle Ave between Spencer St and Walworth St
12. South Sidewalk along Myrtle Ave between Spencer St and Walworth St
13. East Sidewalk along Walworth St between Flushing Ave and Park Ave
14. West Sidewalk along Walworth St between Flushing Ave and Park Ave
15. North Sidewalk along Park Ave between Walworth St and Warsoff Pl
16. East Sidewalk along Walworth St between Park Ave and Myrtle Ave
17. South Sidewalk along Park Ave between Walworth St and Warsoff Pl
18. West Sidewalk along Walworth St between Park Ave and Myrtle Ave
19. North Sidewalk along Myrtle Ave between Walworth St and Sanford St
20. South Sidewalk along Flushing St between Warsoff Pl and Nostrand Ave
21. West Sidewalk along Warsoff Pl between Flushing Ave and Park Ave
22. North Sidewalk along Park Ave between Warsoff Pl and Nostrand Ave
23. South Sidewalk along Park Ave between Warsoff Pl and Nostrand Ave
24. West Sidewalk along Sandford St between Park Ave and Myrtle Ave
25. North Sidewalk along Myrtle Ave between Sandford St and Nostrand Ave
26. North Sidewalk along Flushing Ave between Lee Ave and Marcy Ave
27. North Sidewalk along Park Ave between Nostrand Ave and Marcy Ave
28. North Sidewalk along Myrtle Ave between Nostrand Ave and Marcy Ave
29. West Sidewalk along Marcy Ave between Flushing Ave and Park Ave

Crosswalks

1. North crosswalk of Flushing Avenue and Bedford Avenue
2. East crosswalk of Flushing Avenue and Walworth Street
3. North crosswalk of Park Avenue and Spencer Street
4. South crosswalk of Park Avenue and Spencer Street
5. East crosswalk of Park Avenue and Spencer Street
6. North crosswalk of Park Avenue and Walworth Street
7. South crosswalk of Park Avenue and Walworth Street
8. East crosswalk of Park Avenue and Walworth Street

9. West crosswalk of Park Avenue and Walworth Street
10. North crosswalk of Park Avenue and Warsoff Place/Sandford Street
11. South crosswalk of Park Avenue and Warsoff Place/ Sandford Street
12. West crosswalk of Park Avenue and Warsoff Place/ Sandford Street
13. North crosswalk of Park Avenue and Nostrand Avenue
14. North crosswalk of Myrtle Avenue and Spencer Street
15. South crosswalk of Myrtle Avenue and Spencer Street
16. North crosswalk of Myrtle Avenue and Walworth Street
17. South crosswalk of Myrtle Avenue and Walworth Street
18. North crosswalk of Myrtle Avenue and Sandford Street
19. North crosswalk of Myrtle Avenue and Nostrand Avenue
20. South crosswalk of Warsoff Place and Flushing Avenue
21. North crosswalk of Nostrand Avenue and Flushing Avenue
22. North crosswalk of Marcy Avenue and Flushing Avenue

Corner Areas

1. Northeast corner of Bedford Ave and Flushing Ave
2. Southeast corner of Bedford Ave and Flushing Ave
3. Northwest corner of Bedford Ave and Flushing Ave
4. Northeast corner of Bedford Ave and Park Ave
5. Southeast corner of Bedford Ave and Park Ave
6. Northeast corner of Bedford Ave and Myrtle Ave
7. Southeast corner of Bedford Ave and Myrtle Ave
8. Northeast corner of Spencer St and Park Ave
9. Southeast corner of Spencer St and Park Ave
10. Southwest corner of Spencer St and Park Ave
11. Northwest corner of Spencer St and Park Ave
12. Northeast corner of Spencer St and Myrtle Ave
13. Southeast corner of Spencer St and Myrtle Ave
14. Southwest corner of Spencer St and Myrtle Ave
15. Northwest corner of Spencer St and Myrtle Ave
16. Southeast corner of Walworth St and Flushing Ave
17. Southwest corner of Walworth St and Flushing Ave
18. Northeast corner of Walworth St and Park Ave
19. Southeast corner of Walworth St and Park Ave
20. Southwest corner of Walworth St and Park Ave
21. Northwest corner of Walworth St and Park Ave
22. Northeast corner of Walworth St and Myrtle Ave
23. Southeast corner of Walworth St and Myrtle Ave
24. Southwest corner of Walworth St and Myrtle Ave
25. Northwest corner of Walworth St and Myrtle Ave
26. Southeast corner of Warsoff Pl and Flushing Ave
27. Southwest corner of Warsoff Pl and Flushing Ave
28. Northeast corner of Warsoff Pl and Park Ave

29. Southeast corner of Warsoff Pl and Park Ave
30. Southwest corner of Warsoff Pl and Park Ave
31. Northwest corner of Warsoff Pl and Park Ave
32. Northeast corner of Sandford St and Myrtle Ave
33. Northwest corner of Sandford St and Myrtle Ave
34. Northeast corner of Nostrand Ave and Flushing Ave
35. Southwest corner of Nostrand Ave and Flushing Ave
36. Northwest corner of Nostrand Ave and Flushing Ave
37. Northeast corner of Nostrand Ave and Park Ave
38. Southeast corner of Nostrand Ave and Park Ave
39. Southwest corner of Nostrand Ave and Park Ave
40. Northwest corner of Nostrand Ave and Park Ave
41. Northeast corner of Nostrand Ave and Myrtle Ave
42. Southwest corner of Nostrand Ave and Myrtle Ave
43. Northwest corner of Nostrand Ave and Myrtle Ave
44. Northeast corner of Marcy Ave and Flushing Ave
45. Southwest corner of Marcy Ave and Flushing Ave
46. Northwest corner of Marcy Ave and Flushing Ave
47. Southwest corner of Marcy Ave and Park Ave
48. Northwest corner of Marcy Ave and Park Ave

Parking

Parking demand from commercial and retail uses typically peaks in the weekday midday period and declines during the afternoon and evening. By contrast, residential demand typically peaks during the overnight period.

A parking demand forecast was prepared to determine if the proposed spaces of on-site accessory parking in the Project Area would be sufficient to accommodate all of the projected demand. The forecast of parking demand generated by the residential component of the Proposed Actions' RWCDS is based on 2015-2019 ACS data on average vehicles per household for Brooklyn Census Tracts 191, 235, 241, 255, 531, 537 and 1237 which encompass the Project Area. Parking demands from all other uses will be derived from the forecasts of daily auto trips from these uses.

As shown in **Tables 9** and **10**, it is expected that the parking demand generated by the Proposed Actions would peak at approximately 172 and 161 spaces during the early morning periods before 8 AM during the weekday and 6AM on Saturday, respectively. The Proposed Actions would also generate a parking demand of approximately 143 spaces in the weekday and Saturday overnight periods. As there would be 151 on-site parking spaces on Projected Development Sites and the total increase in parking demand under the Proposed Actions would be greater than the parking spaces provided on-site, excess demand would seek parking availability within a quarter-mile radius of the Project Area. This is addressed in the EIS.

Table 9

With-Action Weekday Parking Accumulation Forecast

Time	Local Retail			Residential			High School Staff			Medical Office			Total Demand		
	In	Out	ACCU.	In	Out	ACCU.	In	Out	ACCU.	In	Out	ACCU.	In	Out	ACCU.
						143									143
12-1 AM	0	0	0	6	0	149	0	0	0	0	0	0	6	0	149
1-2	0	0	0	0	0	149	0	0	0	0	0	0	0	0	149
2-3	0	0	0	0	0	149	0	0	0	0	0	0	0	0	149
3-4	0	0	0	0	0	149	0	0	0	0	0	0	0	0	149
4-5	0	0	0	0	0	149	0	0	0	0	0	0	0	0	149
5-6	0	0	0	0	5	144	0	0	0	0	0	0	0	5	144
6-7	0	0	0	2	11	135	6	0	6	0	0	0	8	11	141
7-8	18	17	1	7	25	117	47	0	53	2	1	1	74	43	**172**
8-9	35	34	2	15	45	87	6	0	59	6	2	5	62	81	153
9-10	60	57	5	10	24	73	0	0	59	9	5	9	79	86	146
10-11	72	63	14	10	16	67	0	0	59	9	8	10	91	87	150
11-12	73	72	15	13	16	64	0	0	59	6	7	9	92	95	147
12-1 PM	88	84	19	18	18	64	0	0	59	6	7	8	112	109	150
1-2	96	96	19	17	18	63	0	0	59	7	6	9	120	120	150
2-3	102	98	23	16	15	64	0	0	59	7	7	9	125	120	155
3-4	106	101	28	20	16	68	0	6	53	5	6	8	131	129	157
4-5	103	108	23	21	16	73	0	47	6	4	7	5	128	178	107
5-6	113	112	24	24	16	81	0	6	0	2	4	3	139	138	108
6-7	131	131	24	32	23	90	0	0	0	1	2	2	164	156	116
7-8	90	102	12	28	17	101	0	0	0	0	1	1	118	120	114
8-9	62	65	9	24	13	112	0	0	0	0	1	0	86	79	121
9-10	38	42	5	22	11	123	0	0	0	0	0	0	60	53	128
10-11	17	18	4	17	6	134	0	0	0	0	0	0	34	24	138
11-12	9	13	0	12	3	143	0	0	0	0	0	0	21	16	143

Notes: Pattern based on data from NYCDOT

Assumes 0.31 auto/DU based on 2015-2019 ACS 5 years detail auto-ownership data for Project Area

Table 10

With-Action Saturday Parking Accumulation Forecast

Time	Local Retail			Residential			High School Staff			Medical Office			Total Demand		
	In	Out	ACCU.	In	Out	ACCU.	In	Out	ACCU.	In	Out	ACCU.	In	Out	ACCU.
						143									143
12-1 AM	0	0	0	11	7	147	0	0	0	0	0	0	11	7	147
1-2	0	0	0	7	3	151	0	0	0	0	0	0	7	3	151
2-3	0	0	0	6	0	157	0	0	0	0	0	0	6	0	157
3-4	0	0	0	3	0	160	0	0	0	0	0	0	3	0	160
4-5	0	0	0	1	0	161	0	0	0	0	0	0	1	0	**161**
5-6	0	0	0	0	0	161	0	0	0	0	0	0	0	0	**161**
6-7	0	0	0	0	3	158	0	0	0	0	0	0	0	3	158
7-8	7	5	2	4	10	152	0	0	0	1	0	1	12	15	155
8-9	25	23	4	7	16	143	0	0	0	4	1	4	36	40	151
9-10	52	42	14	11	23	131	0	0	0	4	3	5	67	68	150
10-11	73	71	16	15	23	123	0	0	0	6	5	6	94	99	145
11-12	90	87	19	17	24	116	0	0	0	4	5	5	111	116	140
12-1 PM	100	100	19	21	26	111	0	0	0	3	4	4	124	130	134
1-2	109	107	21	21	23	109	0	0	0	3	3	4	133	133	134
2-3	126	125	22	23	23	109	0	0	0	3	4	3	152	152	134
3-4	124	124	22	23	23	109	0	0	0	2	2	3	149	149	134
4-5	126	126	22	25	22	112	0	0	0	1	2	2	152	150	136
5-6	155	155	22	33	28	117	0	0	0	1	2	1	189	185	140
6-7	102	107	17	25	21	121	0	0	0	0	1	0	127	129	138
7-8	83	90	10	23	18	126	0	0	0	0	0	0	106	108	136
8-9	64	62	12	22	18	130	0	0	0	0	0	0	86	80	142
9-10	50	55	7	20	15	135	0	0	0	0	0	0	70	70	142
10-11	18	24	1	16	13	138	0	0	0	0	0	0	34	37	139
11-12	15	16	0	15	10	143	0	0	0	0	0	0	30	26	143

Notes: Pattern based on data from NYCDOT

Assumes 0.31 auto/DU based on 2015-2019 ACS 5 years detail auto-ownership data for Project Area

USER STREET SAFETY

Under *CEQR Technical Manual* guidance, an evaluation of vehicular and pedestrian safety is needed for locations within traffic and pedestrian study areas that have been identified as high crash locations These are defined as locations along a Vision Zero priority intersection or locations where five or more pedestrian/bicyclist injury crashes have occurred in any consecutive 12 months of the most recent three-year period for which data are available. In addition, any location along a Vision Zero priority corridor with three or more pedestrian/bicyclist injury crashes in any consecutive 12 months of the most recent three-year period for which data is available should be identified as a high crash location. For these locations, crash trends will be identified to determine whether projected vehicular and pedestrian traffic would further impact safety, or whether existing unsafe conditions could adversely impact the flow of the projected new trips.

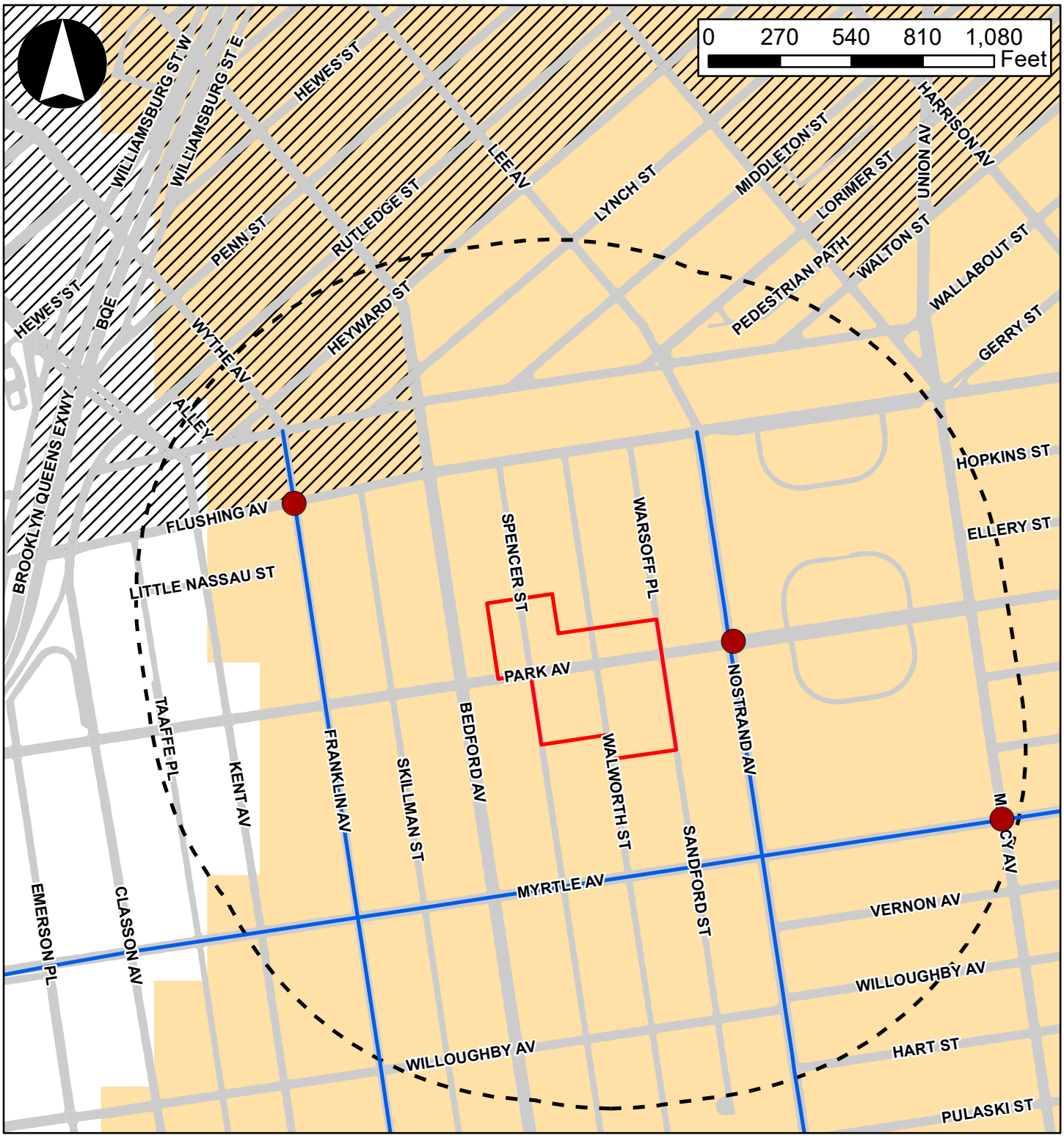
Vision Zero Brooklyn Pedestrian Safety Action Plan

Consistent with the city's Vision Zero initiative, the *Vision Zero Brooklyn Pedestrian Safety Action Plan* was released in 2015 and updated in 2019. The plan identifies a series of engineering/planning, enforcement, and education/awareness campaign strategies to enhance pedestrian safety along the borough's Priority Corridors and Priority Intersections. These strategies include measures such as reducing the speed limit to 25 miles per hour, expanding exclusive pedestrian crossing time, installing additional lighting around key transit stops, expanding the bicycle network, prioritizing targeted enforcement and deploying speed cameras, and targeting intensive street-level outreach. As shown in **Figure 6**, within a ¼-mile of the Project Area, the plan identifies Nostrand Avenue, Franklin Avenue, and Myrtle Avenue as "Priority Corridors." No intersections were identified as Priority Intersections within the study area. However, the Project Area is located within a Priority Area and a small northern portion is identified as a Senior Pedestrian Focus Area (refer to **Figure 6**).

Crash Data

Table 11 shows the crash data summary for the three-year reporting period between January 1, 2019 and December 31, 2019 and January 1, 2023 and December 31, 2024 that were obtained from NYCDOT. This is the most recent three-year period for which data are available. The data obtained quantify the total number of reportable crashes (crashes involving a fatality, injury, or more than $1,000 in property damage), as well as a yearly breakdown of fatalities, injuries, and vehicular crashes involving pedestrians and bicycles at each location. **Table 11** summarizes the crash data for each intersection within the quarter-mile study area during the study period, including a breakdown of pedestrian and bicycle crashes by year.

During the three-year period, a total of 820 reportable and non-reportable crashes, four fatalities, 325 total injuries, and 102 pedestrian/bicyclist injury crashes occurred at intersections within the quarter-mile study area. As shown in **Table 11**, five high crash locations were identified as they are along a Priority Corridor and have experienced a total of three or more pedestrian/bicyclist injury crashes. For selected high crash locations that are also analysis locations, crash trends will be identified to determine whether projected vehicular and pedestrian traffic would further impact safety, or whether existing unsafe conditions could adversely impact the flow of the projected new trips.



Legend

- Proposed Rezoning Area
- 1/4-Mile Radius
- Selected High-Crash Locations
- Vision Zero Priority Corridors
- Vision Zero Priority Area
- Safe Streets for Seniors Priority Area

Table 11
Crash Data Summary 2019, 2023, and 2024

Intersection		Pedestrian Injury Crashes			Bicycle Injury Crashes			Total Pedestrian/ Bicyclist Injury Crashes			Total Crashes (Reportable + Non-Reportable)		
		2019	2023	2024	2019	2023	2024	2019	2023	2024	2019	2023	2024
Franklin Avenue	Willoughby Avenue	0	0	0	0	0	1	0	0	1	2	3	3
	Myrtle Avenue	1	1	0	1	1	1	2	2	1	7	6	5
	Flushing Avenue	3	1	0	0	0	2	**3**	1	2	13	9	7
	Park Avenue	1	0	0	0	1	0	1	1	0	7	7	5
	Wythe Avenue	3	1	1	0	0	0	**3**	1	1	6	3	3
Park Avenue	Taaffe Place	0	0	0	0	0	0	0	0	0	5	2	4
	Kent Avenue	0	0	0	0	1	0	0	1	0	8	8	3
	Skillman Street	0	0	0	0	0	0	0	0	0	1	2	2
	Bedford Avenue	0	2	0	0	1	0	0	3	0	12	17	13
	Spencer Street	1	1	0	0	1	0	1	2	0	6	4	1
	Walworth Street	0	2	0	1	0	0	1	2	0	6	8	3
	Warsoff Place	0	0	0	0	0	0	0	0	0	5	1	1
	Nostrand Avenue	1	0	2	0	0	0	1	0	2	17	9	7
	Marcy Avenue	0	0	1	0	1	0	0	1	1	10	4	5
Kent Avenue	Myrtle Avenue	0	2	0	0	0	0	0	2	0	5	6	2
	Flushing Avenue	0	1	0	0	0	1	0	1	1	18	6	5
	Wallabout Street	0	0	1	1	0	0	1	0	1	14	1	3
	Little Nassau Street	0	0	0	0	0	0	0	0	0	3	1	1
Taaffe Place	Little Nassau Street	0	0	0	0	0	0	0	0	0	3	0	1
Flushing Avenue	Skillman Street	1	1	0	0	0	0	1	1	0	6	2	4
	Bedford Avenue	1	2	1	0	1	0	1	3	1	16	16	10
	Spencer Street	0	0	0	0	0	1	0	0	1	4	0	2
	Walworth Street	0	0	0	0	0	0	0	0	0	7	5	2
	Warsoff Place	0	0	1	0	0	1	0	0	2	3	0	3
	Nostrand Avenue	0	1	0	0	2	1	0	**3**	1	16	12	10
	Union Avenue	0	3	1	0	1	1	0	4	2	4	16	8
	Gerry Street	0	1	0	0	0	0	0	1	0	1	2	1
Wallabout Street	Heyward Street	0	0	0	0	0	0	0	0	0	5	0	1
	Lynch Street	0	0	0	0	0	0	0	0	0	1	0	2
	Bedford Avenue	1	2	1	0	0	0	1	2	1	10	6	5
	Walton Street	0	0	0	0	0	0	0	0	0	0	1	0
	Lee Avenue	0	0	0	0	0	0	0	0	0	7	2	2
Wythe Avenue	Heyward Street	0	0	0	0	0	1	0	0	1	4	0	3
Willoughby Avenue	Skillman Street	0	1	0	0	1	0	0	2	0	2	5	1
	Bedford Avenue	0	0	0	1	2	0	1	2	0	6	5	3
	Spencer Street	0	0	0	0	0	0	0	0	0	6	7	3
	Walworth Street	0	0	0	1	0	1	1	0	1	6	4	6
	Sandford Street	0	0	0	0	0	0	0	0	0	2	2	2
	Nostrand Avenue	0	0	2	1	0	1	1	0	**3**	11	6	6
Myrtle Avenue	Skillman Street	0	0	1	0	0	0	0	0	1	1	4	6
	Bedford Avenue	0	1	0	0	1	0	0	2	0	16	10	9
	Spencer Street	0	0	0	0	0	0	0	0	0	5	6	3
	Walworth Street	0	1	0	0	0	0	0	1	0	8	3	4
	Sandford Street	0	1	0	0	1	0	0	2	0	8	5	1
	Nostrand Avenue	1	2	1	1	0	0	2	2	1	26	15	11
	Marcy Avenue	1	1	1	1	0	2	2	1	**3**	12	9	10
Bedford Avenue	Heyward Street	0	0	0	0	0	0	0	0	0	2	0	2
	Lynch Street	0	0	1	0	0	0	0	0	1	10	1	2
Nostrand Avenue	Hart Street	1	0	0	0	2	0	1	2	0	6	3	2
Marcy Avenue	Stockton Street	0	1	0	0	1	0	0	2	0	5	3	0
	Ellery Street	0	0	2	0	0	0	0	0	2	4	2	3
	Martin Luther King Jr	0	0	0	0	0	0	0	0	0	0	1	1

Note: Shading indicates locations with more than 3 crashes per year