A. INTRODUCTION

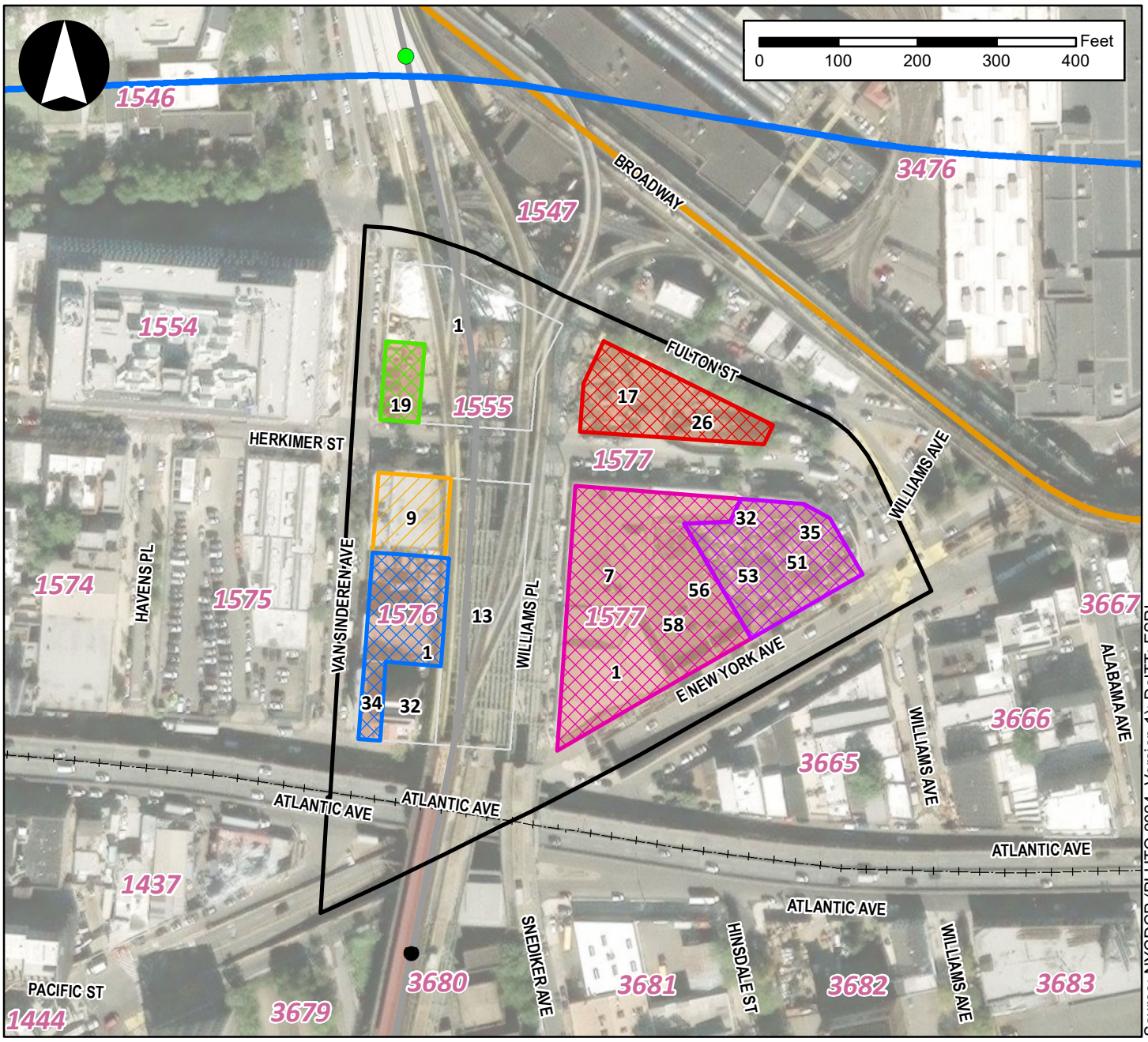
This chapter describes the transportation characteristics and potential impacts associated with the Proposed Actions in accordance with the guidance presented 2021 *City Environmental Quality Review* (CEQR) *Technical Manual*.

The Proposed Actions

Broadway Junction Partners LLC, the Applicant, requests discretionary actions that would facilitate the redevelopment of portions of four blocks in the East New York neighborhood of Brooklyn Community District (CD) 5. The Project Area includes Block 1555, Lots 1 and 19; Block 1576, Lots 1, 9, 13, 32, and 34; and Block 1577, Lots 1, 7, 17, 26, 32, 35, 51, 53, 56, and 58 (refer to **Figure 13-1**). The Applicant is seeking City Planning Commission (CPC) approval of discretionary actions, including: (i) a Zoning Map Amendment to rezone the Project Area from an M1-2 zoning district to C6-4 and M1-6 zoning districts; (ii) special permits within a Large-Scale General Development (LSGD) pursuant to Sections 74-743(a)(1) and (2) of the *Zoning Resolution of the City of New York* (ZR) to distribute floor area across the LSGD and to modify rear yard and height and setback regulations, respectively; (iii) a ZR Section 74-161 special permit to allow Use Group VI retail uses in excess of 20,000 sf of floor area in the proposed M1-6 zoning district; (iv) Zoning Text Amendments to (a) ZR Appendix F to designate a Mandatory Inclusionary Housing ("MIH") Area over the C6-4 zoning district-portion of the Project Area and (b) ZR Section 74-742 with respect to the contiguity of ownership of zoning lots in an LSGD when there is an intervening elevated rail line; and (v) a combination acquisition and site selection of real property by the City to construct a publicly accessible open space at 1519 Herkimer Street (also known as Parcel 1; Block 1555, Lot 19) within the LSGD (collectively, the "Proposed Actions"). DCAS is applicant and NYCEDC is co-applicant only for the combination acquisition and site selection action. Although located in Brooklyn CD 5, the Project Area is proximate to Brooklyn CDs 4 and 16; Brooklyn CD 16 is located across Van Sinderen Avenue from the Project Area, while Brooklyn CD 4 is located approximately 600 feet to the north of the Project Area.

The Proposed Actions would facilitate the redevelopment of the several projected development sites within the Project Area (refer to **Figure 13-1**). The projected development sites are Projected Development Site 1A (Block 1555, Lot 19), Projected Development Site 1B (Block 1576, Lots 1 and 34), Projected Development Site 1C (Block 1577, Lots 17 and 26), Projected Development Site 1D (Block 1577, Lots 32, 35, 51, and 53), and Projected Development Site 1E (Block 1577, Lots 1, 7, 56, and 58). Additionally, Projected Development Site 2 comprises Block 1576, Lot 9. Projected Development Sites 1A through 1E are under the ownership or control of the Applicant and are coterminous with the LSGD. Projected Development Site 2 is owned by Calvary Church and is not under the ownership or control of the Applicant and is not included within the LSGD. Within the Project Area, no redevelopment would occur on Block 1555, Lot 1 and Block 1576, Lots 13 and 32; therefore, these lots are not considered projected development sites.

Approval of the Proposed Actions would facilitate the development of five new buildings and a small retail kiosk on the projected development sites in the Project Area. The new mixed-use development on the projected development sites would contain a combined total of approximately 1,589,202 gross square feet (gsf), including approximately 435,766 gsf of commercial office space, 113,760 gsf of commercial



Source: NYCDCP (PLUTO 2024, Version 1); DoITT; ESRI

Legend

- Project Area
- Projected Development Site 1A
- Projected Development Site 1B
- Projected Development Site 1C
- Projected Development Site 1D
- Projected Development Site 1E
- Projected Development Site 2
- LSGD Development Sites
- Subway Station (Express)
- Subway Station (Local)
- Atlantic Branch Line (LIRR)
- A/C Line
- J/Z Line
- L Line
- 1555 Tax Blocks
- 1 Tax Lots



retail space, 834,763 gsf of residential space (1,112 dwelling units [DUs][1]), 22,985 gsf of community facility (house of worship) space, and 98,483 gsf of light industrial space for Use Groups III-X[2], as well as approximately 174 parking spaces (approximately 83,445 gsf) and 20,080 sf of publicly accessible area ("PAA") space (the "Proposed Development"). Pursuant to the City's MIH program, up to 25-30 percent or approximately 278-334 units would be designated as permanently affordable at an average of 60-80 percent area median income (AMI) depending on the selected Option (the Applicant intends to map both Options 1 and 2). In addition to the approximately 278-334 permanently affordable units pursuant to MIH, the Applicant intends to work with the New York City Department of Housing and Preservation (HPD) to allow the proposed DUs in the Proposed Development to be designated as 100 percent affordable units as well.

The Reasonable Worst Case Development Scenario (RWCDS)

A Reasonable Worst Case Development Scenario (RWCDS) has been established for the Proposed Actions for an analysis year of 2036. In the 2036 future without the Proposed Actions (the "No-Action condition"), the Project Area would remain as under existing conditions. In the 2036 future with the Proposed Actions (the "With-Action condition"), the Proposed Actions would be approved, allowing the Applicant to construct the Proposed Development on the projected development sites in the Project Area. In addition, a second RWCDS (the "Alternate Community Facility Scenario") will be assessed for conservative analysis purposes, where deemed appropriate in the Environmental Impact Statement (EIS) where this development scenario serves as the more conservative RWCDS compared to the Proposed Development. As described below, for this chapter of the EIS, the detailed analyses of traffic, subway, pedestrian conditions focus on the potential effects of the Alternate Community Facility Scenario. The RWCDS under the Proposed Development and the Alternate Community Facility Scenario are outlined below.

Proposed Development

In the 2036 future with the Proposed Actions (the "With-Action condition"), the Proposed Actions would be approved and Projected Development Sites 1A through 1E and Projected Development Site 2 within the Project Area would be redeveloped. **Table 13-1** provides a comparison of the No-Action and With-Action conditions under the Proposed Development for analysis purposes.

As shown in **Table 13-1**, the incremental (net) change that would result from the Proposed Development would be the net addition of approximately 834,763 gsf of residential space (1,112 DUs, of which approximately 278-334 units would be designated as permanently affordable pursuant to MIH), 426,766 gsf of commercial office space, 33,899 gsf of local retail space, 39,931 gsf of destination retail space, 39,931 gsf of supermarket space, 48,061 gsf of light industrial space, 10,081 gsf of community facility (house of worship) space, 143 off-street parking spaces, and 0.46 acres (20,080 sf) of PAA space in the Project Area.

[1] The Proposed Development on Projected Development Sites 1A through 1E and the development on Projected Development Site 2 provide an average dwelling unit size of approximately 750 square feet (sf).

[2] "Light industrial" specifically refers to Use Group III-X uses outlined in the ZR, which consist of custom manufacturing, wholesale, and accessory uses. These uses are permitted in C6-4 commercial districts and would allow, for example, creative maker spaces in the Proposed Development and/or Alternate Community Facility Scenario.

TABLE 13-1
2036 RWCDS No-Action and With-Action Land Uses – Proposed Development

Land Use	No-Action Condition	With-Action Condition	Net Increment
Residential			
Residential	0 gsf (0 DUs)	834,763 gsf (1,112 DUs)	**+ 834,763 gsf** **(+ 1,112 DUs)**
Commercial			
Local Retail	0 gsf	33,899 gsf	+ 33,899 gsf
Destination Retail	0 gsf	39,931 gsf	+ 39,931 gsf
Office	9,000 gsf	435,766 gsf	+ 426,766 gsf
Supermarket	0 gsf	39,931 gsf	+ 39,931 gsf
Total Commercial	***9,000 gsf***	***549,526 gsf***	***+ 540,526 gsf***
Community Facility			
House of Worship	12,904 gsf	22,985 gsf	+ 10,081 gsf
Academic University	0 gsf	0 gsf	+ 0 gsf
Total Community Facility	***12,904 gsf***	***22,985gsf***	***+ 10,081 gsf***
Industrial			
Light Industrial	50,422 gsf	98,483 gsf	+ 48,061 gsf
Open Space (PAA Space)			
Open Space (PAA Space)[1]	0 acres (0 sf)	0.46 acres (20,080 sf)	**+ 0.46 acres** **(+ 20,080 sf)**
Parking			
Parking Spaces	31 spaces	174 spaces	**+ 143 spaces**

Note:
[1] It should be noted that references to With-Action condition open spaces are those that are identified as PAA spaces only; as such, the Proposed Actions would result in the increment of up to approximately 0.46 acres (20,080 sf) of PAA space but would not result in any gain or loss of publicly owned open space.

Alternate Community Facility Scenario

The Alternate Community Facility Scenario would include five new buildings and a small retail kiosk in the Project Area containing a combined total of approximately 1,620,348 gsf, including approximately 688,065 gsf of residential uses (911 DUs), 461,749 gsf of commercial office space, 137,026 gsf of commercial retail space, 114,691 gsf of community facility space (including 22,985 gsf of house of worship space and 91,706 gsf of academic university space), and 111,933 gsf of light industrial space for Use Groups III-X, as well as approximately 200 parking spaces (approximately 106,884 gsf) and 20,080 sf of PAA space. Pursuant to the City's MIH program, up to 25-30 percent or 228-273 units would be designated as permanently affordable at an average of 60-80 percent AMI depending on the selected Option (as mentioned, the Applicant intends to map both Options 1 and 2).

As shown in **Table 13-2**, the incremental change that would result from Proposed Actions under the Alternate Community Facility Scenario would be the net addition of approximately 688,065 gsf of residential space (911 DUs, of which 228-273 units would be designated as permanently affordable pursuant to MIH), 452,749 gsf of commercial office space, 57,165 gsf of local retail space, 39,931 gsf of destination retail space, 39,931 gsf of supermarket space, 61,511 gsf of light industrial space, 101,787 gsf of community facility space (of which, approximately 10,081 gsf would consist of house of worship space, and up to approximately 91,706 gsf would consist of academic university space), 169 off-street parking spaces, and 0.46 acres (20,080 sf) of PAA space in the Project Area.

TABLE 13-2
2036 RWCDS No-Action and With-Action Land Uses – Alternate Community Facility Scenario

Land Use	No-Action Condition	With-Action Condition	Net Increment
Residential			
Residential	0 gsf (0 DUs)	688,065 gsf (911 DUs)	**+ 688,065 gsf** **(+ 911 DUs)**
Commercial			
Local Retail	0 gsf	57,165 gsf	+ 57,165 gsf
Destination Retail	0 gsf	39,931 gsf	+ 39,931 gsf
Office	9,000 gsf	461,749 gsf	+ 452,749 gsf
Supermarket	0 gsf	39,931 gsf	+ 39,931 gsf
Total Commercial	***9,000 gsf***	***598,775 gsf***	***+ 589,775 gsf***
Community Facility			
House of Worship	12,904 gsf	22,985 gsf	+10,081 gsf
Academic University	0 gsf	91,706 gsf	+ 91,706 gsf
Total Community Facility	***12,904 gsf***	***114,691 gsf***	***+ 101,787 gsf***
Industrial			
Light Industrial	50,422 gsf	111,933 gsf	+ 61,511 gsf
Open Space (PAA Space)			
Open Space (PAA Space)[1]	0 acres (0 sf)	0.46acres (20,080 sf)	**+ 0.46 acres** **(+ 20,080 sf)**
Parking			
Parking Spaces	31 spaces	200 spaces	**+ 169 spaces**

Note:
[1] It should be noted that references to With-Action condition open spaces are those that are identified as PAA spaces only; as such, the Proposed Actions would result in the increment of up to approximately 0.46 acres (20,080 sf) of PAA space but would not result in any gain or loss of publicly owned open space.

This chapter describes in detail the existing transportation conditions in proximity to the Project Area. Overall, the Alternate Community Facility Scenario would generate a greater amount of overall travel demand during the weekday AM, midday, PM, and Saturday peak hours than the Proposed Development. Therefore, the detailed analyses of traffic, subway, pedestrian conditions presented herein focus on the potential effects of the Alternate Community Facility Scenario. Future conditions in the 2036 analysis year without the Proposed Actions (i.e., the No-Action condition) are then determined, including additional transportation system demand and any changes expected by the 2036 analysis year. The increase in travel demand resulting from the Proposed Actions under the Alternate Community Facility Scenario is then projected and added to the No-Action condition to develop the 2036 future with the Proposed Actions (i.e., the With-Action condition). Significant adverse impacts from action-generated trips under the Alternate Community Facility Scenario are then identified and described in detail. **Chapter 20, "Mitigation,"** discusses practicable measures to address these impacts.

B. PRINCIPAL CONCLUSIONS

A detailed transportation analysis was conducted and concludes that the Proposed Actions would result, as detailed below, in significant adverse impacts to a) vehicular traffic at 16 intersections, b) two subway stairs at one subway station, and c) pedestrian conditions at four sidewalks, five corners, and three crosswalks. To the extent practicable measures to mitigate these impacts have been identified, they are described in **Chapter 20, "Mitigation."** To the extent there are no practicable measures to fully mitigate these impacts, they would be unmitigated or only partially mitigated, as the case may be. As described in **Chapter 20, "Mitigation,"** mitigation measures will continue to be evaluated between certification of the DEIS and publication of the FEIS.

Traffic

Traffic conditions were evaluated for the weekday 7:15–8:15 a.m., 2:00–3:00 p.m. (midday), 5:15–6:15 p.m., and Saturday 3:45–4:45 p.m. peak hours at 30 intersections in the traffic study area where additional traffic resulting from the Proposed Actions would be most heavily concentrated. As summarized in **Tables 13-3** and **13-4**, the traffic impact analysis indicates, for the Alternate Community Facility Scenario, the potential for significant adverse impacts at 16 intersections (11 signalized and five unsignalized) during one or more analyzed peak hours. Significant adverse impacts were identified to 23 lane groups at 14 intersections during the weekday AM peak hour, 19 lane groups at 13 intersections in the midday peak hour, 27 lane groups at 16 intersections in the PM peak hour, and 20 lane groups at 14 intersections during the Saturday peak hour. **Chapter 20, "Mitigation,"** discusses potential measures to mitigate these significant adverse traffic impacts. As described in **Chapter 20, "Mitigation,"** mitigation measures will continue to be evaluated between certification of the DEIS and publication of the FEIS.

TABLE 13-3
Number of Impacted Intersections and Lane Groups by Peak Hour

	Peak Hour			
	Weekday AM	**Weekday Midday**	**Weekday PM**	**Saturday Midday**
Impacted Lane Groups	23	19	27	20
Impacted Intersections	14	13	16	14

TABLE 13-4
Summary of Significantly Impacted Intersections

	Signalized Intersections	With-Action Signalized Impact Locations (Lane groups)[1] AM	MD	PM	SAT	No. of Impacted Peak Hours
1	Broadway (E-W) & Eastern Pkwy (N-S) & Hull St (NE)	1	2	2	2	4
5	Fulton St (E-W) & Eastern Pkwy (N-S)	1	2	2	2	4
7	Fulton St (E-W) & Van Sinderen Av (N-S)	3	2	3	1	4
9	Herkimer St (E) & Eastern Pkwy (N-S)	1	1	1	1	4
16	Atlantic Av (E-W) & Eastern Pkwy (N-S)	3	1	2	2	4
18	Atlantic Av WB Service Rd (W) & East New York Av SB Service Rd (SW) & William Pl (N)	1	1	1	1	4
19	East New York Av (E-W) & Herkimer St (S) & Fulton St (SW) & Williams Ave (S)	1	1	1	1	4
20	East New York Av (E-W) & Jamaica Av (E-W) & Alabama Av (N) & Broadway (N)	3	1	2	1	4
21	Jamaica Av (E-W) & Georgia Av (N) & Bus Depot Entrance (S)	0	0	0	0	0
23	Jamaica Av (E-W) & Jackie Robinson Pkwy/ Pennsylvania Av (N-S) & Bushwick Av (SE-NW)	3	2	3	3	4
26	Pennsylvania Av (E-W) & Fulton St (N-S)	0	0	0	0	0
28	Atlantic Av (E-W) & Georgia Av (N)	1	1	1	1	4
29	Atlantic Av (E-W) & Pennsylvania Av (N-S)	2	2	2	2	4
	Unsignalized Intersections	**With-Action Signalized Impact Locations (Lane groups)[1]** AM	MD	PM	SAT	**No. of Impact Peak Hours**
2	Broadway (E-W) &Stewart St (N-S)	0	0	0	0	0
3	Broadway (E-W) & Conway St (N-S)	1	2	2	1	4
4	Broadway (E-W) & Van Sinderen Av (S)	0	0	0	0	0
6	Fulton St (E-W) & Sackman St (S)	0	0	0	0	0
8	Fulton St (E-W) & William Pl (N)	1	0	1	1	3
10	Herkimer St (E) & Sherlock Pl (N-S)	0	0	0	0	0
11	Herkimer St (E) & Sackman St (N-S)	0	0	0	0	0
12	Herkimer St (E) & Jardine Pl (N-S)	0	0	0	0	0
13	Herkimer St (E) & Havens Pl (S)	0	0	0	0	0
14	Herkimer St (E) & Van Sinderen Av (N-S)	0	0	0	0	0
15	Herkimer St (E) & William Pl (N)	0	0	2	0	1
17	Atlantic Av WB Service Rd (W) & Van Sinderen Av (N-S)	0	0	0	0	0
22	Truxton St (W) & Van Sinderen Av (N-S)	0	0	1	0	1
24	Fulton St (W) & Georgia Av (N)	1	1	1	1	4
25	Fulton St (W) & Sheffield Av (S) & Mary Warren Pl (S)	0	0	0	0	0
27	Atlantic Av WB Service Rd (W) & Alabama Av (N)	0	0	0	0	0
30	Broadway (E-W) & Somers St (S)	0	0	0	0	0
	Total Number of Impacted Lane groups	**23**	**19**	**27**	**20**	
	Total Number of Impacted Intersections	**14**	**13**	**16**	**14**	

Note:

[1] Number of lane groups that are impacted during the AM, MD, PM, and SAT peak hours.

Transit

Subway

SUBWAY STATIONS

The Proposed Actions would generate a net increment of approximately 1,046 and 1,235 new subway trips during the weekday AM and PM commuter peak hours, respectively. The analysis of subway station conditions focuses on the Metropolitan Transportation Authority (MTA) New York City Transit (NYCT) Broadway Junction (A/C/J/L/Z) subway complex in proximity to the Project Area where incremental demand from the Proposed Actions would exceed the 200-trip *CEQR Technical Manual* analysis threshold in both peak hours. Based on the results of the analysis, the Proposed Actions would significantly adversely impact two platform stairs at the Broadway Junction (A/C/J/L/Z) station complex – stairs P3/P4 in the AM peak hour and the new platform stairs to the southbound A/C platform in the PM peak hour. **Chapter 20, "Mitigation,"** discusses potential measures to mitigate the significant adverse subway stair impacts. As described in **Chapter 20, "Mitigation,"** while these measures do not currently appear practicable, mitigation measures will continue to be evaluated between certification of the DEIS and publication of the FEIS.

SUBWAY LINE HAUL

The Project Area is directly served by five NYCT subway routes, including the A, C, J, L, and Z. All five routes cross the East River, and the peak direction of travel is typically Manhattan-bound in the AM peak period and Brooklyn/Queens-bound in the PM peak period. In the With-Action condition, southbound A trains are expected to operate with available capacity in the peak direction in the PM peak hour. Therefore, as southbound A trains are projected to operate with available capacity in the peak direction in the PM peak hour, no significant adverse impacts to subway line haul conditions would occur because of the Proposed Actions in the PM peak hour.

Bus

The Proposed Actions are expected to generate a net total of approximately 213 and 286 incremental bus trips during the weekday AM and PM peak hours, respectively, on the six NYCT Bus Company local bus routes serving the Project Area — the B12, B20, B25, B83, Q24, and Q56. However, the number of incremental trips in one direction is not expected to reach the 50-trip 2021 *CEQR Technical Manual* analysis threshold for a detailed bus analysis on any of the six NYCT Bus Company local bus routes. Therefore, a detailed analysis of local bus conditions under the Proposed Actions is not warranted and not included in the EIS.

Citywide Ferry Service (CWFS)

As there are no ferry landings proximate to the Project Area, the Proposed Actions are not expected to generate appreciable demand on the CWFS. Therefore, a detailed analysis of CWFS conditions under the Proposed Actions is not warranted and not included in the EIS.

Pedestrians

The Proposed Actions, under the Alternate Community Facility Scenario, would generate a net increment of approximately 993 walk-only trips in the weekday AM peak hour, 2,616 in the weekday midday, 2,261 in the weekday PM peak hour and 2,856 in the Saturday peak hour. Persons en route to and from subway station entrances, bus stops, and off-site parking would add approximately 2,049, 794, 2,251, and 1,232

additional pedestrian trips to Project Area sidewalks and crosswalks during these same periods, respectively. Peak hour pedestrian conditions were evaluated at 54 pedestrian elements where new trips generated by projected developments are expected to be most concentrated. These elements—22 sidewalks, 20 corner areas, and 12 crosswalks—are primarily located in the immediate vicinity of the Project Area and along corridors connecting the Project Area to nearby subway station entrances. As shown in **Table 13-5**, based on 2021 *CEQR Technical Manual* criteria, four sidewalks, five corners, and three crosswalks would be significantly adversely impacted by the Proposed Actions in one or more of the analyzed peak hours. To the extent practicable measures to mitigate these impacts have been identified, they are described in **Chapter 20, "Mitigation."** As described in **Chapter 20, "Mitigation,"** mitigation measures will continue to be evaluated between certification of the DEIS and publication of the FEIS. To the extent there are no practicable measures to fully mitigate these impacts, they would be unmitigated or only partially mitigated, as the case may be.

TABLE 13-5
Summary of Significant Pedestrian Impacts

Corridor/Intersection	Impacted Element	Peak Hour			
		AM	Midday	PM	SAT
Van Sinderen Ave btw Broadway and Fulton St	East Sidewalk	X	X	X	X
Herkimer St btw Williams Pl and E New York Ave	South Sidewalk	X		X	X
Atlantic Ave btw Alabama Ave and Georgia Ave	North Sidewalk		X	X	X
Atlantic Ave btw Williams Ave and Alabama Ave	North Sidewalk	X	X	X	X
Van Sinderen Ave & Fulton St	East Crosswalk			X	X
Williams Ave & Herkimer St & E New York Ave	North Crosswalk		X		
Georgia Ave & Atlantic Ave	West Crosswalk				X
Williams Ave & Herkimer St & E New York Ave	Northeast Corner	X	X	X	
Williams Ave & Herkimer St & E New York Ave	Northwest Corner	X	X	X	X
Broadway & Alabama Ave & Jamaica Ave & E New York Ave	Northwest Corner		X	X	X
Georgia Ave & Atlantic Ave	Southwest Corner				X
Georgia Ave & Atlantic Ave	Northwest Corner				X

Vehicular and Pedestrian Safety

Under the *Vision Zero Brooklyn Pedestrian Safety Action Plan*, Fulton Street, Broadway, East New York Avenue, Atlantic Avenue, Eastern Parkway, Bushwick Avenue, and Pennsylvania Avenue are identified as "Priority Corridors." The plan also identifies Eastern Parkway at Atlantic Avenue, Pennsylvania Avenue at Fulton Street, Rockaway Avenue at Atlantic Avenue, Rockaway Avenue at Eastern Parkway, and Pennsylvania Avenue at Belmont Avenue as "Priority Intersections." The Project Area is also located within a "Priority Area" and "Bike Priority Area" and is adjacent to a Senior Pedestrian Focus Area (SPFA).

Crash data for intersections in the traffic and pedestrian study areas were obtained from the New York City Department of Transportation (DOT) for the three-year non-Covid 19 period between January 1, 2018 and December 31, 2019 and January 1, 2023 and December 31, 2023. During this period, a total of 2,184 reportable and non-reportable crashes, two fatalities, 861 total injuries, and 107 pedestrian/bicyclist injury crashes occurred at intersections within the quarter-mile study area.

Under 2021 *CEQR Technical Manual* guidance, high crash locations are defined as those 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. **Table 13-6** provides the four intersections identified as high crash locations that were selected for a qualitative assessment for street user safety. All four intersections were part of New York City's 25-mph signal retiming initiative, where signal progression was changed to match the 25-mph speed limit. In addition, a Lead Pedestrian Interval (LPI) phase has also been implemented at the intersection of Eastern Parkway at Atlantic Avenue.

TABLE 13-6
High Crash Locations

Intersection	Total Pedestrian/Bicycle Injury Crashes			Total Crashes (Reportable + Non-Reportable)		
	2018	2019	2023	2018	2019	2023
Eastern Parkway at Fulton Street	1	4	4	12	17	11
Atlantic Avenue at Pennsylvania Avenue	2	1	3	99	91	40
Eastern Parkway at Atlantic Avenue	1	2	0	85	83	19
Pennsylvania Avenue at Fulton Street	2	2	2	25	32	17

Parking

Parking demand from the proposed office, retail, and community facility uses typically peaks in the midday period and declines during the late afternoon and evening. By contrast, parking demand from the proposed residential use peaks overnight. Therefore, some of the parking spaces used by residents would be available to accommodate commercial and community facility demand during daytime hours.

Parking demand generated by the Proposed Actions under the Proposed Development would peak at approximately 1,171 spaces during the 2:00 to 3:00 p.m. period on weekdays, and at approximately 494 spaces during the 11:00 a.m. to 12:00 p.m. period on Saturdays. Parking demand generated by the Proposed Actions under the Alternate Community Facility Scenario would peak at approximately 1,242 spaces during the 2:00 to 3:00 p.m. period on weekdays, and at approximately 457 spaces during the 11:00 a.m. to 12:00 p.m. period on Saturdays.

As shown in **Table 13-1**, under the RWCDS for the Proposed Development, up to a total of approximately 174 parking spaces would be provided within the Project Area. As shown in **Table 13-2**, under the RWCDS for the Alternate Community Facility Scenario, up to a total of approximately 200 parking spaces would be provided within the Project Area. Therefore, the total increase in parking demand for the Proposed Actions under the Proposed Development would result in parking shortfalls of approximately 997 spaces during the 2:00 to 3:00 p.m. period on weekdays, and approximately 320 spaces during the 11:00 a.m. to 12:00 p.m. period on Saturdays. The total increase in parking demand for the Proposed Actions under the Alternate Community Facility Scenario would result in parking shortfalls of approximately 1,042 spaces during the 2:00 to 3:00 p.m. period on weekdays, and approximately 257 spaces during the 11:00 a.m. to 12:00 p.m. period on Saturdays. This excess demand would need to be accommodated in nearby off-street public parking facilities, or by on-street parking. Consequently, the Proposed Actions may potentially contribute to, or result in, off-street and on-street parking shortfalls in the 2036 With-Action condition. Based on 2021 *CEQR Technical Manual* guidance, any projected shortfall in parking capacity is unlikely to be considered significant due to the magnitude of available alternative modes of transportation. Although

the Project Area is well served by alternate modes of transportation and a parking shortfall is unlikely to be considered significant, the projected weekday and Saturday demands associated with the Proposed Actions' RWCDS would not be fully accommodated in the Project Area and a detailed analysis of parking conditions within a quarter-mile radius and a half-mile radius of the Project Area will be provided between certification of the DEIS and FEIS publication.

C. PRELIMINARY SCREENING

The 2021 *CEQR Technical Manual* describes a two-level screening procedure for the preparation of a "preliminary analysis" to determine whether quantified operational analyses of transportation conditions are warranted. As discussed in the following sections, the preliminary analysis begins with a trip generation (Level 1) analysis to estimate the numbers of person and vehicle trips attributable to the Proposed Actions. According to the 2021 *CEQR Technical Manual*, if a proposed action is expected to result in fewer than 50 peak hour vehicle 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 (Level 2) are to be performed to estimate the incremental trips that could be incurred at specific transportation elements and to identify potential locations for further analyses. If the trip assignments show 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, 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, pedestrians, parking, and vehicular and pedestrian safety.

D. LEVEL 1 SCREENING ASSESSMENT

A Level 1 trip generation screening assessment was conducted to estimate the numbers of person and vehicle trips by mode expected to be generated by the Proposed Actions during the weekday AM, midday, PM, and Saturday peak hours for the RWCDS (under both the Proposed Development and the Alternate Community Facility Scenario). These estimates were then compared to the 2021 *CEQR Technical Manual* analysis thresholds to determine if a Level 2 screening and/or quantified operational analyses may be warranted. The travel demand assumptions used for the assessment are described in the following sections along with a detailed forecast of the travel demand that would be generated by the RWCDS (under both the Proposed Development and the Alternate Community Facility Scenario).

Background

As shown in **Table 13-1**, under the RWCDS for the Proposed Development, it is estimated that there would be a net increase of approximately 834,763 gsf of residential space (1,112 DUs, of which approximately 278-334 units would be designated as permanently affordable pursuant to MIH), 426,766 gsf of commercial office space, 113,760 gsf of retail space, 48,061 gsf of light industrial space, 10,081 gsf of community facility (house of worship) space, 143 off-street parking spaces, and 20,080 sf of PAA space in the Project Area.

As shown in **Table 13-2**, under the RWCDS for the Alternate Community Facility Scenario, it is estimated that there would be a net increase of approximately 688,065 gsf of residential space (911 DUs, of which 228-273 units would be designated as permanently affordable pursuant to MIH), 452,749 gsf of commercial office space, 137,026 gsf of retail space, 61,511 gsf of light industrial space, 101,787 gsf of

community facility space (of which, approximately 10,081 gsf would consist of house of worship space, and up to approximately 91,706 gsf would consist of academic university space), 169 off-street parking spaces, and 20,080 sf of PAA space in the Project Area.

Transportation Planning Factors

The transportation planning factors used to forecast travel demand for the RWCDS land uses are summarized in **Table 13-7**. 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 2021 *CEQR Technical Manual*; 2015–2019 American Community Survey (ACS) journey-to-work data for Brooklyn census tracts in proximity to the Project Area (tracts 365.01, 365.02, 367, 369, 405, 908, 1142.01, 1144, and 1198); 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 Department of Transportation (DOT); and factors developed for recent environmental reviews.

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). Additional details on the transportation planning factors used for the travel demand forecast are presented in the *Transportation Planning Factors and Travel Demand Forecast Technical Memorandum* provided in **Appendix E**.

It should be noted that, consistent with 2021 *CEQR Technical Manual* guidance, the travel demand forecast reflects the fact that some local retail trip generation can be considered "linked trips" (i.e., internal trips between uses on a site that do not use the public street or sidewalk), "pass-by trips" (i.e., existing trips already present on the adjacent network that enter a site as an intermediate stop), or "diverted trips" (i.e., trips already on the network that alter their route to access a site). Under 2021 *CEQR Technical Manual* guidance, up to a 50 percent credit can be taken for linked, pass-by and/or diverted trips.

As shown in **Tables 13-1** and **13-2**, under the Proposed Actions, a substantial amount of residential, non-retail commercial, community facility, and light industrial uses would be developed on the projected development sites within the Project Area. These proposed uses are expected to generate substantially more trips than would the proposed local retail uses, and it is anticipated that many of these trips would involve a stop at one or more local retail establishments within the Project Area. Furthermore, many of the proposed retail and non-retail uses would be accessed from the publicly accessible open spaces included as part of the Proposed Development and Alternate Community Facility Scenario, such as Projected Development Sites 1C and 1D. As these publicly accessible open spaces would provide an internal circulation function, it is expected that many of these trips would be considered linked trips as they would not occur on public streets or sidewalks and would therefore not be included in the total number of pedestrian trips generated by the Proposed Actions' RWCDS. The local retail trips from projected development sites in the Project Area that would not be considered linked trips would be diverted to/from Projected Development Site 1E within the Project Area and would therefore be included in the total number of pedestrian trips generated by the Proposed Actions' RWCDS. Consequently, the travel demand forecast for the local retail use reflects a 50 percent credit consistent with 2021 *CEQR Technical Manual* guidance.

Travel Demand Forecast

The net incremental change in person and vehicle trips expected to result from the Proposed Actions by the 2036 analysis year was derived based on the net change in land uses shown in **Tables 13-1** and **13-2** and the transportation planning factors shown in **Table 13-7**. **Table 13-8** 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 2036 with implementation of the Proposed Actions and resultant Proposed Development. **Table 13-9** 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 2036 with implementation of the Proposed Actions and resultant Alternate Community Facility Scenario.

As shown in **Table 13-8**, under the RWCDS for the Proposed Development, the Proposed Actions would generate a net increase of approximately 2,748 person trips in the weekday AM peak hour, 3,174 in the weekday midday, 4,034 in the weekday PM, and 3,827 in the Saturday peak hour. Peak hour vehicle trips (including auto, truck, and taxi trips balanced to reflect that some taxis arrive or depart empty) would increase by a net total of approximately 918, 481, 1,042, and 688 (in and out combined) in the weekday AM, midday, PM, and Saturday peak hours, respectively. Peak hour subway trips would increase by a net total of approximately 833, 483, 828, and 722 during these periods, respectively; peak hour rail trips would increase by a net total of approximately 23, 6, 20, and 11 during these periods, respectively; and bus trips would increase by approximately 201, 187, 258, and 218, respectively. In addition, the Proposed Actions under the RWCDS for the Proposed Development would generate a total of 2,537, 2,868, 3,606, and 3,365 pedestrian trips (including walk-only, subway, rail, and bus trips, and trips to/from on-street parking[3]) in the weekday AM, midday, PM, and Saturday midday peak hours, respectively. Of the incremental pedestrian trips, approximately 692, 1,905, 1,664, and 1,864 trips are walk-only trips during the weekday AM, midday, PM, and Saturday peak hours, respectively.

As shown in **Table 13-9**, under the RWCDS for the Alternate Community Facility Scenario, the Proposed Actions would generate a net increase of approximately 3,342 person trips in the weekday AM peak hour, 3,911 in the weekday midday, 5,174 in the weekday PM, and 4,819 in the Saturday peak hour. Peak hour vehicle trips (including auto, truck, and taxi trips balanced to reflect that some taxis arrive or depart empty) would increase by a net total of approximately 986, 519, 1,144, and 728 (in and out combined) in the weekday AM, midday, PM, and Saturday peak hours, respectively. Peak hour subway trips would increase by a net total of approximately 1,046, 465, 1,235, and 665 during these periods, respectively; peak hour rail trips would increase by a net total of approximately 21, 6, 19, and 9 during these periods, respectively; and bus trips would increase by approximately 213, 197, 286, and 232, respectively. In addition, the Proposed Actions under the RWCDS for the Alternate Community Facility Scenario would generate a total of 3,042, 3,520, 4,512, and 4,088 pedestrian trips (including walk-only, subway, rail, and bus trips, and trips to/from on-street parking[4]) in the weekday AM, midday, PM, and Saturday midday

[3] The on-site accessory parking (174 spaces) is assumed to be utilized by tenants of all uses on Projected Development Site 1D, and the supermarket use on Projected Development Site 1E under the RWCDS for the Proposed Development. As such, pedestrian trips to/from the on-site parking for all other proposed uses have been include in the total pedestrian volumes.

[4] The on-site accessory parking (200 spaces) is assumed to be utilized by tenants of the light industrial and local retail uses on Projected Development Site 1B, all uses on Projected Development Site 1D, and the supermarket and destination retail uses on Projected Development Site 1E under the RWCDS for the Alternate Community Facility

peak hours, respectively. Of the incremental pedestrian trips, approximately 993, 2,616, 2,261, and 2,856 trips are walk-only trips during the weekday AM, midday, PM, and Saturday peak hours, respectively.

Table 13-10 summarizes the number of additional trips that would be generated by the Proposed Actions under the RWCDS for the Proposed Development during the weekday AM, midday, PM, and Saturday peak hours by various modes of travel. **Table 13-11** summarizes the number of additional trips that would be generated by the Proposed Actions under the RWCDS for the Alternate Community Facility Scenario during the weekday AM, midday, PM, and Saturday peak hours by various modes of travel. Since these numbers of peak hour trips would exceed the 2021 *CEQR Technical Manual* analysis thresholds for vehicular traffic, transit and pedestrians, a Level 2 screening assessment was undertaken to identify specific locations where additional detailed analyses would be warranted.

As shown in **Tables 13-10** and **13-11**, the Alternate Community Facility Scenario would generate a greater amount of overall travel demand during the weekday AM, midday, PM, and Saturday peak hours than the Proposed Development. However, as shown in **Tables 13-10** and **13-1**, the Proposed Development would generate a greater amount of rail trips during the weekday AM, weekday PM, and Saturday peak hours than the Alternate Community Facility Scenario, while both the Proposed Development and Alternate Community Facility Scenario would generate an equal amount of rail trips during the weekday midday peak hour. In addition, the Proposed Development would generate a greater amount of subway trips during the weekday midday and Saturday peak hours than the Alternate Community Facility Scenario. Therefore, the rail screening analysis focuses on the Proposed Development during the commuter peak periods, while the bus, subway, pedestrian, and traffic screening analyses focus on the Alternate Community Facility Scenario.

Scenario. As such, pedestrian trips to/from the on-site parking for all other proposed uses have been include in the total pedestrian volumes.

TABLE 13-7
Transportation Planning Factors

Land Use:	Residential	Local Retail	Office	Light Industrial	House of Worship
Trip Generation					
	(1)	(1)	(1)	(8)	(8)
Weekday	8.18	329	18.0	14.7	19.2
Saturday	9.08	358	3.9	2.2	21.8
	per DU	per 1,000 gsf	per 1,000 gsf	per 1,000 gsf	per 1,000 gsf
Temporal Distribution					
	(1)	(1)	(1)	(8)	(8)
AM	9.3%	4.8%	12.4%	13.2%	7.9%
MD	5.6%	8.0%	11.0%	11.0%	4.0%
PM	8.5%	10.9%	10.5%	14.2%	7.2%
Saturday	8.4%	11.7%	14.1%	10.7%	15.8%
Modal Splits					
	(2)	(7)	(4)(8)	(4)(8)	(8)
	All Periods	All Periods	AM/PM/SAT MD	AM/PM/SAT MD	All Periods
Auto	20.9%	11.0%	56.9% 2.0%	56.9% 2.0%	5.0%
Taxi	0.5%	0.0%	0.6% 3.0%	0.6% 3.0%	1.0%
Subway	64.3%	3.0%	23.3% 6.0%	23.3% 6.0%	2.9%
Railroad	1.1%	0.0%	1.2% 0.0%	1.2% 0.0%	0.1%
Bus	7.2%	2.0%	9.2% 6.0%	9.2% 6.0%	6.0%
Bike	0.7%	0.0%	0.4% 0.0%	0.4% 0.0%	0.0%
Walk/Other	5.3%	84.0%	8.4% 83.0%	8.4% 83.0%	85.0%
	100.0%	100.0%	100.0% 100.0%	100.0% 100.0%	100.0%
In/Out Splits	(7)	(7)	(7)	(8)	(8)
	In Out	In Out	In Out	In Out	In Out
AM	22% 78%	52% 48%	86% 14%	88% 12%	54% 46%
MD	50% 50%	50% 50%	52% 48%	50% 50%	50% 50%
PM	62% 38%	50% 50%	16% 84%	12% 88%	52% 48%
Saturday	55% 45%	50% 50%	48% 52%	47% 53%	71% 29%
Vehicle Occupancy	(2)(8)	(7)	(4)(8)	(4)(8)	(8)
	All Periods	All Periods	All Periods	All Periods	All Periods
Auto	1.10	1.20	1.06	1.06	1.65
Taxi	1.30	1.20	1.20	1.20	1.40
Truck Trip Generation:	(1)	(1)	(1)	(8)	(8)
Weekday	0.06	0.35	0.32	0.67	0.29
Saturday	0.02	0.04	0.01	0.67	0.29
	per DU	per 1,000 sf	per 1,000 sf	per 1,000 sf	per 1,000 sf
Truck Temporal Distribution:	(1)	(1)	(1)	(8)	(8)
AM	12.0%	8.0%	10.0%	14.0%	9.6%
MD	9.0%	11.0%	11.0%	9.0%	11.0%
PM	2.0%	2.0%	2.0%	1.0%	1.0%
Saturday	9.0%	11.0%	11.0%	0.0%	0.0%
Truck In/Out Splits:					
	In Out	In Out	In Out	In Out	In Out
All Periods	50.0% 50.0%	50.0% 50.0%	50.0% 50.0%	50.0% 50.0%	50.0% 50.0%

Notes:

(1) Based on data from the 2021 CEQR Technical Manual.
(2) Based on 2015-2019 ACS Journey-to-Work census data for Brooklyn census tracts 365.01, 365.02, 367, 369, 405, 908, 1142.01, 1144 and 1198.
(3) Based on data from *Domino Sugar Rezoning FEIS TM003* (2013).
(4) Based on 2012-2016 AAsHTO CTPP Reverse Journey-to-Work census data for Brooklyn census tracts 365.01, 365.02, 367, 369, 405, 908, 1142.01, 1144 and 1198.
(5) Based on data from the *Proposed Manhattanville in West Harlem Rezoning and Academic Mixed-Use Development FEIS* (2007).
(6) Based on data from the *Gowanus Neighborhood Rezoning FEIS* (2021).
(7) Based on data provided by NYCDOT.
(8) Based on data from the East New York Rezoning Proposal FEIS (2016).
(9) Weekday daily trip estimate based on following equation: 141.77 + 66.626 x gross SF (in thousands).
(10) The Columbia Manhattanville On-line Travel Survey was also utilized and adjusted for area characteristics to have a lower walk only
(11) Based on data from the *Kingsboro Psychiatric Center Mixed-Use Project DEIS* (2023).

TABLE 13-7 (Cont.)
Transportation Planning Factors

Land Use:	Community Facility (Academic University)		Open Space		Supermarket		Destination Retail	
Trip Generation								
	(1)		(1)		(1)		(1)	
Weekday	26.60		44.0		256		78.2	
Saturday	13.50		62.0		300		92.5	
	per 1,000 gsf		per acre		per 1,000 gsf		per 1,000 gsf	
Temporal Distribution								
	(1) (5)		(1)		(1)		(1)	
AM	16.0%		3.0%		4.0%		3.0%	
MD	9.0%		14.0%		7.0%		9.0%	
PM	26.0%		14.0%		10.6%		9.0%	
Saturday	16.0%		16.0%		9.5%		11.0%	
Modal Splits								
	(5)(10)		(11)		(7)		(6)	
	AM/PM	MD/SAT	All Periods		Weekday	SAT	Weekday	SAT
Auto	6.0%	5.0%	0.0%		25.0%	25.0%	59.0%	59.0%
Taxi	2.5%	2.0%	0.0%		5.0%	5.0%	3.0%	5.0%
Subway	73.0%	13.0%	0.0%		5.0%	2.0%	18.0%	18.0%
Railroad	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%
Bus	3.5%	5.0%	0.0%		6.0%	6.0%	15.0%	13.0%
Bike	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%
Walk/Other	15.0%	75.0%	100.0%		59.0%	62.0%	5.0%	5.0%
	100.0%	100.0%	100.0%		100.0%	100.0%	100.0%	100.0%
In/Out Splits	(7)		(7)		(7)		(7)	
	In	Out	In	Out	In	Out	In	Out
AM	94%	6%	59%	41%	51%	49%	63%	37%
MD	46%	54%	55%	45%	51%	49%	53%	47%
PM	44%	56%	55%	45%	50%	50%	49%	51%
Saturday	57%	43%	55%	45%	49%	51%	52%	48%
Vehicle Occupancy	(5)		(3)		(6)		(6)	
	All Periods		All Periods		Weekday	SAT	Weekday	SAT
Auto	1.20		2.00		1.58	1.90	2.00	2.70
Taxi	1.30		2.00		1.58	1.90	2.00	2.80
Truck Trip Generation:	(5)		(6)		(6)		(6)	
Weekday	0.03		0.01		0.35		0.35	
Saturday	0.03		0.01		0.02		0.02	
	per 1,000 sf		per acre		per 1,000 sf		per 1,000 sf	
Truck Temporal Distribution:	(5)		(6)		(6)		(6)	
AM	9.7%		6.0%		8.0%		7.7%	
MD	9.1%		6.0%		11.0%		11.0%	
PM	5.1%		1.0%		2.0%		1.0%	
Saturday	0.0%		6.0%		11.0%		11.0%	
Truck In/Out Splits:								
	In	Out	In	Out	In	Out	In	Out
All Periods	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%

Notes:

(1) Based on data from the 2021 CEQR Technical Manual.
(2) Based on 2015-2019 ACS Journey-to-Work census data for Brooklyn census tracts 365.01, 365.02, 367, 369, 405, 908, 1142.01, 1144 and 1198.
(3) Based on data from Domino Sugar Rezoning FEIS TM003 (2013).
(4) Based on 2012-2016 AAsHTO CTPP Reverse Journey-to-Work census data for Brooklyn census tracts 365.01, 365.02, 367, 369, 405, 908, 1142.01, 1144 and 1198.
(5) Based on data from the Proposed Manhattanville in West Harlem Rezoning and Academic Mixed-Use Development FEIS (2007).
(6) Based on data from the Gowanus Neighborhood Plan FEIS (2021).
(7) Based on data provided by DOT.
(8) Based on data from the East New York Neighborhood Plan FEIS (2016).
(9) Weekday daily trip estimate based on following equation: 141.77 + 66.626 x gross SF (in thousands).
(10) The Columbia Manhattanville On-line Travel Survey was also utilized and adjusted for area characteristics to have a lower walk only share, higher subway share in comparison. Shuttle mode is added to subway. Saturday modal split assumed to be the same as the weekday midday modal split.
(11) Based on data from the Kingsboro Psychiatric Center Mixed-Use Project DEIS (2023).

TABLE 13-8
Travel Demand Forecast – Proposed Development

Land Use:	Residential		Local Retail						Office		Light Industrial		House of Worship		Open Space		Supermarket		Destination Retail		Total	
Size/Units:	1,112 DU		33,899 gsf						426,766 gsf		48,061 gsf		10,081 gsf		0.46 acres		39,931 gsf		39,931 gsf			
Peak Hour Trips:			Unlinked		Diverted		Total															
AM	846		268		62		330		953		93		15		8		409		94		2,748	
MD	509		443		286		729		845		78		8		8		716		281		3,174	
PM	774		606		360		966		807		100		14		8		1,084		281		4,034	
Saturday	848		708		438		1,146		235		11		35		8		1,138		406		3,827	
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	38	138	15	14	0	0	15	14	466	76	45	7	0	0	0	0	52	50	35	21	651	306
Taxi	0	3	0	0	0	0	0	0	5	1	1	0	0	0	0	0	10	10	2	1	18	15
Subway	120	426	4	3	0	0	4	3	191	31	19	3	0	0	0	0	10	10	10	6	354	479
Railroad	2	8	0	0	0	0	0	0	10	2	1	0	0	0	0	0	0	0	0	0	13	10
Bus	14	48	2	2	0	0	2	2	75	12	7	1	0	0	0	0	13	13	9	5	120	81
Bike	0	5	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	3	6
Walk/Other	9	35	117	111	32	30	149	141	69	11	8	1	8	7	4	4	123	118	3	2	373	319
Total	**183**	**663**	**138**	**130**	**32**	**30**	**170**	**160**	**819**	**134**	**81**	**12**	**8**	**7**	**4**	**4**	**208**	**201**	**59**	**35**	**1,532**	**1,216**
MD	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	53	53	24	24	0	0	24	24	9	8	1	1	0	0	0	0	91	88	88	78	266	252
Taxi	0	0	0	0	0	0	0	0	13	12	1	1	0	0	0	0	18	18	4	4	36	35
Subway	164	164	6	6	0	0	6	6	26	24	3	3	0	0	0	0	18	18	27	24	244	239
Railroad	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3
Bus	18	18	5	5	0	0	5	5	26	24	3	3	0	0	0	0	22	21	22	20	96	91
Bike	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
Walk/Other	15	14	186	187	143	143	329	330	365	338	31	31	4	4	4	4	215	207	7	7	970	935
Total	**255**	**254**	**221**	**222**	**143**	**143**	**364**	**365**	**439**	**406**	**39**	**39**	**4**	**4**	**4**	**4**	**364**	**352**	**148**	**133**	**1,617**	**1,557**
PM	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	101	62	33	33	0	0	33	33	73	386	7	50	0	0	0	0	136	136	81	85	431	752
Taxi	3	1	0	0	0	0	0	0	1	4	0	1	0	0	0	0	27	27	4	4	35	37
Subway	307	189	9	9	0	0	9	9	30	158	3	20	0	0	0	0	26	26	25	26	400	428
Railroad	6	3	0	0	0	0	0	0	2	8	0	1	0	0	0	0	0	0	0	0	8	12
Bus	35	20	6	6	0	0	6	6	12	62	0	9	0	0	0	0	33	33	21	21	107	151
Bike	3	2	0	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	4	5
Walk/Other	26	16	256	254	180	180	436	434	11	56	1	8	7	7	4	4	320	320	7	7	812	852
Total	**481**	**293**	**304**	**302**	**180**	**180**	**484**	**482**	**130**	**677**	**11**	**89**	**7**	**7**	**4**	**4**	**542**	**542**	**138**	**143**	**1,797**	**2,237**
Saturday	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	98	80	39	39	0	0	39	39	64	70	3	2	1	1	0	0	139	145	125	115	469	452
Taxi	3	2	0	0	0	0	0	0	1	1	0	0	0	0	0	0	28	29	11	10	43	42
Subway	299	245	11	11	0	0	11	11	27	29	2	2	1	0	0	0	11	12	37	35	388	334
Railroad	6	3	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	7	4
Bus	34	26	7	7	0	0	7	7	10	12	0	0	1	1	0	0	33	35	27	25	112	106
Bike	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3
Walk/Other	26	20	297	297	219	219	516	516	9	10	1	1	21	9	4	4	346	360	11	10	934	930
Total	**469**	**379**	**354**	**354**	**219**	**219**	**573**	**573**	**112**	**123**	**6**	**5**	**24**	**11**	**4**	**4**	**557**	**581**	**211**	**195**	**1,956**	**1,871**
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	35	126	13	12	0	0	13	12	440	72	43	7	0	0	0	0	33	32	18	11	582	260
Taxi Balanced	3	3	0	0	0	0	0	0	5	5	1	1	0	0	0	0	12	12	2	2	23	23
Truck	3	3	0	0	0	0	0	0	7	7	3	3	0	0	0	0	1	1	1	1	15	15
Total	**41**	**132**	**13**	**12**	**0**	**0**	**13**	**12**	**452**	**84**	**47**	**11**	**0**	**0**	**0**	**0**	**46**	**45**	**21**	**14**	**620**	**298**
MD	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	48	48	21	21	0	0	21	21	8	8	1	1	0	0	0	0	58	56	44	39	180	173
Taxi Balanced	0	0	0	0	0	0	0	0	21	21	2	2	0	0	0	0	22	22	4	4	49	49
Truck	3	3	0	0	0	0	0	0	8	8	2	2	0	0	0	0	1	1	1	1	15	15
Total	**51**	**51**	**21**	**21**	**0**	**0**	**21**	**21**	**37**	**37**	**5**	**5**	**0**	**0**	**0**	**0**	**81**	**79**	**49**	**44**	**244**	**237**
PM	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	92	56	28	28	0	0	28	28	69	364	6	47	0	0	0	0	86	86	41	43	322	624
Taxi Balanced	4	4	0	0	0	0	0	0	4	4	1	1	0	0	0	0	34	34	4	4	47	47
Truck	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1
Total	**96**	**60**	**28**	**28**	**0**	**0**	**28**	**28**	**74**	**369**	**7**	**48**	**0**	**0**	**0**	**0**	**120**	**120**	**45**	**47**	**370**	**672**
Saturday	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	89	72	33	33	0	0	33	33	60	66	3	2	1	1	0	0	73	76	46	43	305	293
Taxi Balanced	5	5	0	0	0	0	0	0	2	2	0	0	0	0	0	0	30	30	8	8	45	45
Truck	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	**94**	**77**	**33**	**33**	**0**	**0**	**33**	**33**	**62**	**68**	**3**	**2**	**1**	**1**	**0**	**0**	**103**	**106**	**54**	**51**	**350**	**338**

Note: A 50% linked/diverted-trip credit was applied to the Local Retail use.

TABLE 13-9
Travel Demand Forecast – Alternate Community Facility Scenario

Land Use:	Residential		Local Retail						Office		Light Industrial	
Size/Units:	911 DU		57,165 gsf						452,749 gsf		61,511 gsf	
Peak Hour Trips:			Unlinked		Diverted		Total					
AM	694		450		152		602		1,011		119	
MD	417		751		514		1,265		896		100	
PM	635		1,022		512		1,534		856		128	
Saturday	695		1,196		880		2,076		249		14	
Person Trips :												
AM	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	31	113	25	24	0	0	25	24	494	81	60	9
Taxi	0	3	0	0	0	0	0	0	5	1	1	0
Subway	99	350	7	6	0	0	7	6	202	33	25	3
Railroad	1	6	0	0	0	0	0	0	11	2	1	0
Bus	12	38	4	4	0	0	4	4	80	13	8	1
Bike	0	4	0	0	0	0	0	0	3	1	0	0
Walk/Other	8	29	196	184	79	73	275	257	73	12	10	1
Total	**151**	**543**	**232**	**218**	**79**	**73**	**311**	**291**	**868**	**143**	**105**	**14**
MD	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	44	44	42	42	0	0	42	42	10	8	1	1
Taxi	0	0	0	0	0	0	0	0	14	13	1	1
Subway	134	135	11	11	0	0	11	11	28	25	3	3
Railroad	3	3	0	0	0	0	0	0	0	0	0	0
Bus	14	14	7	7	0	0	7	7	28	25	3	3
Bike	1	1	0	0	0	0	0	0	0	0	0	0
Walk/Other	13	11	316	315	257	257	573	572	387	358	42	42
Total	**209**	**208**	**376**	**375**	**257**	**257**	**633**	**632**	**467**	**429**	**50**	**50**
PM	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	83	51	55	55	0	0	55	55	77	409	9	64
Taxi	2	0	0	0	0	0	0	0	1	4	0	1
Subway	254	155	15	15	0	0	15	15	31	169	4	26
Railroad	5	3	0	0	0	0	0	0	2	8	0	1
Bus	28	17	10	10	0	0	10	10	13	66	1	11
Bike	3	1	0	0	0	0	0	0	1	3	0	0
Walk/Other	20	13	432	430	256	256	688	686	12	60	1	10
Total	**395**	**240**	**512**	**510**	**256**	**256**	**768**	**766**	**137**	**719**	**15**	**113**
Saturday	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	80	66	66	66	0	0	66	66	68	74	4	4
Taxi	2	1	0	0	0	0	0	0	1	1	0	0
Subway	245	200	17	17	0	0	17	17	29	31	2	2
Railroad	4	3	0	0	0	0	0	0	1	1	0	0
Bus	28	22	13	13	0	0	13	13	11	13	0	0
Bike	3	3	0	0	0	0	0	0	0	0	0	0
Walk/Other	21	17	503	501	440	440	943	941	9	10	1	1
Total	**383**	**312**	**599**	**597**	**440**	**440**	**1,039**	**1,037**	**119**	**130**	**7**	**7**
Vehicle Trips :												
AM	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	28	103	21	20	0	0	21	20	466	77	57	9
Taxi Balanced	3	3	0	0	0	0	0	0	5	5	1	1
Truck	3	3	0	0	0	0	0	0	7	7	3	3
Total	**34**	**109**	**21**	**20**	**0**	**0**	**21**	**20**	**478**	**89**	**61**	**13**
MD	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	40	40	36	36	0	0	36	36	9	8	1	1
Taxi Balanced	0	0	0	0	0	0	0	0	23	23	2	2
Truck	3	3	1	1	0	0	1	1	8	8	2	2
Total	**43**	**43**	**37**	**37**	**0**	**0**	**37**	**37**	**40**	**39**	**5**	**5**
PM	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	75	46	46	46	0	0	46	46	73	386	8	60
Taxi Balanced	2	2	0	0	0	0	0	0	4	4	1	1
Truck	0	0	0	0	0	0	0	0	1	1	0	0
Total	**77**	**48**	**46**	**46**	**0**	**0**	**46**	**46**	**78**	**391**	**9**	**61**
Saturday	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	72	60	56	56	0	0	56	56	64	70	4	4
Taxi Balanced	3	3	0	0	0	0	0	0	2	2	0	0
Truck	0	0	0	0	0	0	0	0	0	0	0	0
Total	**75**	**63**	**56**	**56**	**0**	**0**	**56**	**56**	**66**	**72**	**4**	**4**

Note: A 50% linked/diverted-trip credit was applied to the Local Retail use.

TABLE 13-9 (Cont.)
Travel Demand Forecast – Alternate Community Facility Scenario

Land Use:	House of Worship		Community Facility (Higher Education)		Open Space		Supermarket		Destination Retail		Total	
Size/Units:	10,081 gsf		91,706 gsf		0.46 acres		39,931 gsf		39,931 gsf			
Peak Hour Trips:												
AM	15		390		8		409		94		3,342	
MD	8		220		8		716		281		3,911	
PM	14		634		8		1,084		281		5,174	
Saturday	35		198		8		1,138		406		4,819	
Person Trips :												
AM	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	0	0	22	1	0	0	52	50	35	21	719	299
Taxi	0	0	9	1	0	0	10	10	2	1	27	16
Subway	0	0	268	17	0	0	10	10	10	6	621	425
Railroad	0	0	0	0	0	0	0	0	0	0	13	8
Bus	0	0	13	1	0	0	13	12	9	5	139	74
Bike	0	0	0	0	0	0	0	0	0	0	3	5
Walk/Other	8	7	54	4	4	4	123	119	3	2	558	435
Total	**8**	**7**	**366**	**24**	**4**	**4**	**208**	**201**	**59**	**35**	**2,080**	**1,262**
MD	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	0	0	5	6	0	0	91	88	88	78	281	267
Taxi	0	0	2	2	0	0	18	18	4	4	39	38
Subway	0	0	13	15	0	0	18	18	27	24	234	231
Railroad	0	0	0	0	0	0	0	0	0	0	3	3
Bus	0	0	5	6	0	0	22	21	22	20	101	96
Bike	0	0	0	0	0	0	0	0	0	0	1	1
Walk/Other	4	4	76	90	4	4	215	207	7	7	1,321	1,295
Total	**4**	**4**	**101**	**119**	**4**	**4**	**364**	**352**	**148**	**133**	**1,980**	**1,931**
PM	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	0	0	17	21	0	0	136	136	81	85	458	821
Taxi	0	0	7	9	0	0	27	27	4	4	41	45
Subway	0	0	204	259	0	0	26	26	25	26	559	676
Railroad	0	0	0	0	0	0	0	0	0	0	7	12
Bus	0	0	10	12	0	0	33	33	21	21	116	170
Bike	0	0	0	0	0	0	0	0	0	0	4	4
Walk/Other	7	7	42	53	4	4	320	320	7	7	1,101	1,160
Total	**7**	**7**	**280**	**354**	**4**	**4**	**542**	**542**	**138**	**143**	**2,286**	**2,888**
Saturday	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	1	1	6	4	0	0	139	145	125	115	489	475
Taxi	0	0	2	2	0	0	28	29	11	10	44	43
Subway	1	0	15	11	0	0	11	12	37	35	357	308
Railroad	0	0	0	0	0	0	0	0	0	0	5	4
Bus	1	1	6	4	0	0	33	35	27	25	119	113
Bike	0	0	0	0	0	0	0	0	0	0	3	3
Walk/Other	21	9	84	64	4	4	346	360	11	10	1,440	1,416
Total	**24**	**11**	**113**	**85**	**4**	**4**	**557**	**581**	**211**	**195**	**2,457**	**2,362**
Vehicle Trips :												
AM	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	0	0	18	1	0	0	33	32	18	11	641	253
Taxi Balanced	0	0	8	8	0	0	12	12	2	2	31	31
Truck	0	0	0	0	0	0	1	1	1	1	15	15
Total	**0**	**0**	**26**	**9**	**0**	**0**	**46**	**45**	**21**	**14**	**687**	**299**
MD	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	0	0	4	5	0	0	58	56	44	39	192	185
Taxi Balanced	0	0	4	4	0	0	22	22	4	4	55	55
Truck	0	0	0	0	0	0	1	1	1	1	16	16
Total	**0**	**0**	**8**	**9**	**0**	**0**	**81**	**79**	**49**	**44**	**263**	**256**
PM	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	0	0	14	18	0	0	86	86	41	43	343	685
Taxi Balanced	0	0	12	12	0	0	34	34	4	4	57	57
Truck	0	0	0	0	0	0	0	0	0	0	1	1
Total	**0**	**0**	**26**	**30**	**0**	**0**	**120**	**120**	**45**	**47**	**401**	**743**
Saturday	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Auto	1	1	5	3	0	0	73	76	46	43	321	313
Taxi Balanced	0	0	4	4	0	0	30	30	8	8	47	47
Truck	0	0	0	0	0	0	0	0	0	0	0	0
Total	**1**	**1**	**9**	**7**	**0**	**0**	**103**	**106**	**54**	**51**	**368**	**360**

Note: A 50% linked/diverted-trip credit was applied to the Local Retail use.

TABLE 13-10
Summary of Net Incremental Peak Hour Trips Generated Under the Proposed Development RWCDS

Peak Hour	Vehicle Trips			Pedestrian Trips																	
				Auto[1]			Subway			Rail			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	In	Out	Total
AM	620	298	918	585	203	788	354	479	833	13	10	23	120	81	201	373	319	692	1,445	1,092	2,537
MD	244	237	481	149	138	287	244	239	483	3	3	6	96	91	187	970	935	1,905	1,462	1,406	2,868
PM	370	672	1,042	249	587	836	400	428	828	8	12	20	107	151	258	812	852	1,664	1,576	2,030	3,606
Saturday	350	338	688	283	267	550	388	334	722	7	4	11	112	106	218	934	930	1,864	1,724	1,641	3,365

Notes:
[1]Auto trips en route to nearby on-street parking. Assumes all uses except for the uses on Projected Development Site 1D and the supermarket use on Projected Development Site 1E park off-site in the vicinity of the Projected Development Site.
[2]Includes walk-only trips and pedestrians en route to/from nearby subway stations, rail stations, and bus stops.

TABLE 13-11
Summary of Net Incremental Peak Hour Trips Generated Under the Alternate Community Facility Scenario RWCDS

Peak Hour	Vehicle Trips			Pedestrian Trips																	
				Auto[1]			Subway			Rail			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	In	Out	Total
AM	687	299	986	588	181	769	621	425	1,046	13	8	21	139	74	213	558	435	993	1,919	1,123	3,042
MD	263	256	519	64	62	126	234	231	465	3	3	6	101	96	197	1,321	1,295	2,616	1,723	1,687	3,410
PM	401	743	1,144	174	537	711	559	676	1,235	7	12	19	116	170	286	1,101	1,160	2,261	1,957	2,555	4,512
Saturday	368	360	728	165	161	326	357	308	665	5	4	9	119	113	232	1,440	1,416	2,856	2,086	2,002	4,088

Notes:
[1]Auto trips en route to nearby on-street parking. Assumes all uses except for the uses on Projected Development Site 1D and the supermarket use on Projected Development Site 1E park off-site in the vicinity of the Projected Development Site.
[2]Includes walk-only trips and pedestrians en route to/from nearby subway stations, rail stations, and bus stops.

E. LEVEL 2 SCREENING ASSESSMENT

A Level 2 screening assessment involves the assignment of action-generated trips to the study area street network, pedestrian elements, and transit facilities, and the identification of specific locations where the incremental increase in demand may potentially exceed 2021 *CEQR Technical Manual* analysis thresholds and therefore require a quantitative analysis.

Vehicular Traffic

As shown in **Table 13-11**, the Alternate Community Facility Scenario is expected to result in an incremental increase of approximately 986, 519, 1,144, and 728 vehicle trips in the weekday AM, midday, PM, and Saturday peak hours, respectively. These traffic volumes would exceed the 2021 *CEQR Technical Manual* threshold of 50 peak hour vehicle trips for Level 1 screening and, therefore, a Level 2 screening was performed to help identify intersections for detailed analysis.

The 2021 *CEQR Technical Manual* Level 2 screening threshold for detailed analysis is also 50 vehicles, but this threshold applies to individual intersections during the peak hours (rather than total trips generated). Peak hour project increment traffic volumes were first assigned to the Project Area street network to identify the intersections that would potentially exceed the 50-trip threshold during one or more periods. The assignments of auto and taxi trips to the street network in proximity to the Project Area were based on the anticipated origins and destinations of vehicle trips associated with the different land uses projected under the RWCDS for the Alternate Community Facility Scenario. The origins/destinations for residential uses were based on 2012–2016 ACS journey-to-work data, while those for the office, light

industrial, and community facility (academic university) trips used for the assignments were based on 2012-2016 AASHTO CTPP reverse journey-to-work data for Brooklyn census tracts 365.01, 365.02, 367, 369, 405, 908, 1142.01, 1144, and 1198. The origins/destinations for the local retail and community facility (house of worship) uses that are mostly local in nature were based on population density in neighborhoods within a half-mile radius of the Project Area. The origins/destinations for the supermarket use were based on population density in neighborhoods within a one-mile radius of the Project Area. The origins/destinations for the destination retail use were based on population density in neighborhoods within a two-mile radius of the Project Area. (Additional data on the distributions of auto and taxi trips by land use are presented in the *Transportation Planning Factors and Travel Demand Forecast Technical Memorandum* included in **Appendix E**.) Based on the O-D data, auto and taxi trips were first assigned to various portals on the periphery of East New York, and from there via the most direct route to the Project Area. As the RWCDS for the Alternate Community Facility Scenario includes a limited amount on-site parking, auto trips were assigned directly to the proposed parking garage entrances on Van Sinderen Avenue for Projected Development Site 1B and East New York Avenue for Projected Development Sites 1D and 1E. Similarly, vehicle trips for Projected Development Sites 1A, 1C, and 2 were conservatively assigned to their respective frontages. Although some drivers may park at on-street parking spaces, assigning all trips to the Project Area can be considered a conservative approach with respect to the traffic impact analysis as it concentrates project traffic at analyzed intersections in proximity to the Project Area rather than dispersing traffic to outlying parking facilities.

Taxi trips were generally assigned to the projected development site frontages. Trucks were assigned to DOT-designated truck routes—i.e., Atlantic Avenue (a Through Truck Route) and Pennsylvania Avenue (a Local Truck Route) — and then to the most direct paths to and from the Project Area's loading docks on East New York Avenue for Projected Development Sites 1D and 1E. Similarly, truck trips for Projected Development Sites 1A, 1B, 1C, and 2 were assigned to their respective frontages.

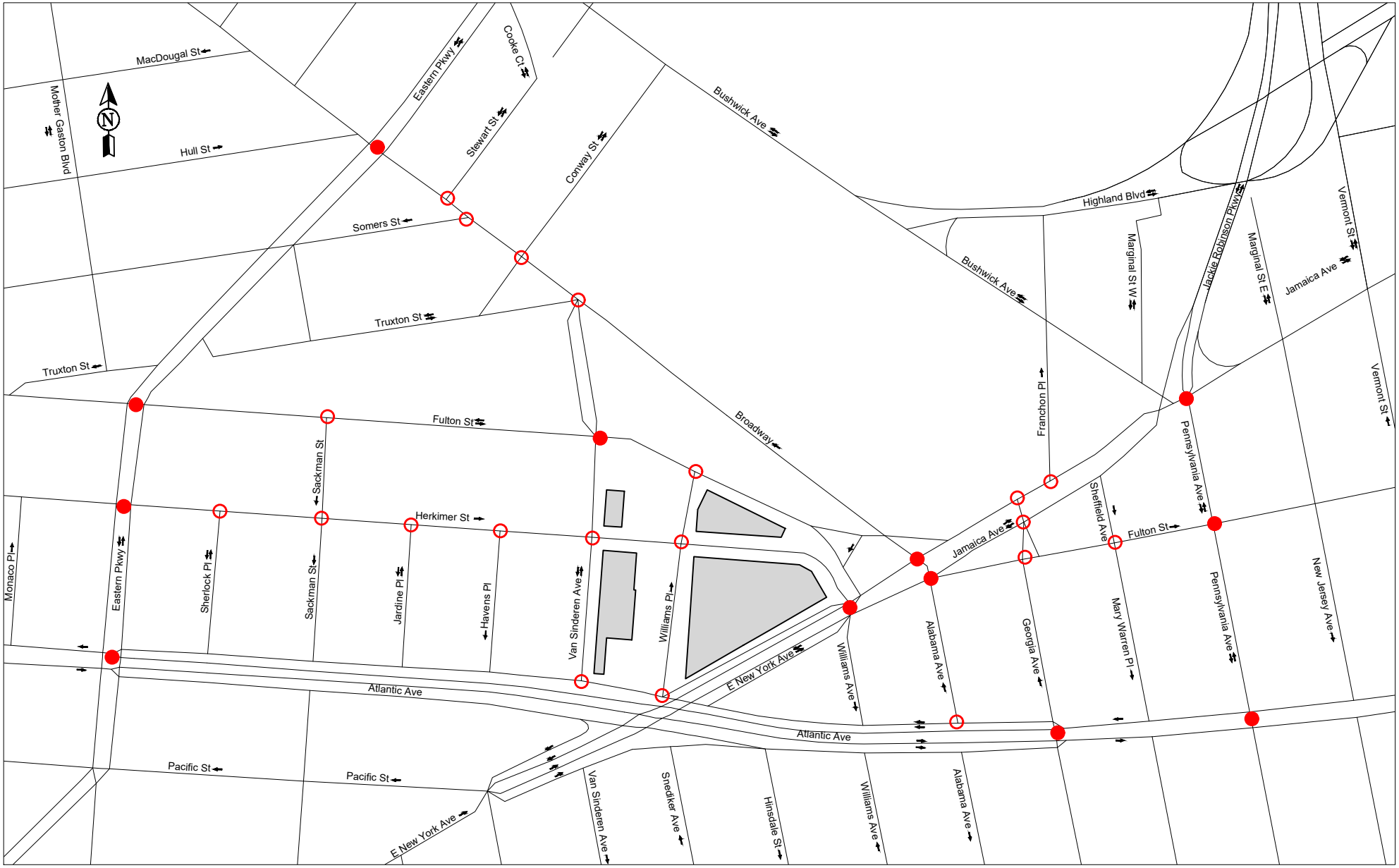
Representative intersections most likely to be used by concentrations of action-generated vehicles traveling to and from the Project Area's projected development sites were then selected for detailed analysis. Existing bottleneck locations and prevailing travel patterns in the study area were also taken into consideration. **Figure 13-2** shows the locations of the 30 intersections (13 signalized and 17 unsignalized) selected for detailed analysis pending further consultation with DCP and DOT. Most of the analyzed intersections are located along corridors providing direct access to the Project Area, including Fulton Street (nine intersections), Herkimer Street (eight intersections), Atlantic Avenue (six intersections), Broadway (six intersections), Jamaica Avenue (six intersections), Eastern Parkway (four intersections), Van Sinderen Avenue (four intersections), Williams Place (three intersections), and East New York Avenue (two intersections).

Transit

According to the general thresholds used by the MTA and specified in the 2021 *CEQR Technical Manual*, detailed transit analyses are generally not required if a proposed action is projected to result in fewer than 200 peak hour rail or bus transit riders. If a proposed action would result in 50 or more bus passengers being assigned to a single bus line (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 or subway analysis would be warranted.

Figure 13-2

Traffic Analysis Locations



LEGEND

Development Site

Analysis Location (Signalized)

Analysis Location (Unsignalized)

Subway

SUBWAY STATIONS

As shown in **Table 13-11**, the Alternate Community Facility Scenario is expected to result in an incremental increase of approximately 1,046 and 1,235 incremental subway trips in the weekday AM and PM peak hours, respectively. As shown in **Figure 13-3**, three NYCT subway stations located within a quarter-mile of the Project Area are expected to be used by action-generated demand. Most subway trips are expected to use the Broadway Junction station complex, which is located to the northwest of the Project Area and is served by the A (8th Avenue express), C (8th Avenue local), J (Nassau Street), L (14th Street-Canarsie local), and Z (Nassau Street) trains. In addition, it is anticipated that some incremental subway trips would also likely occur at the Alabama Avenue (J/Z) station located to the east of the Project Area and the Atlantic Avenue (L) station located directly south of the Project Area. It should be noted that the J and Z routes implement a skip-stop service, where the J route operates at all times, while the Z route operates during weekday rush hours in the peak direction.

Incremental subway trips generated by the Proposed Actions were assigned to the three stations serving the Project Area based on census origin/destination data and each station's proximity to the projected development sites within the Project Area. The numbers of peak hour trips assigned to each station are shown in **Table 13-12**. As shown in **Table 13-12**, the highest number of peak hour subway trips is expected to occur at the Broadway Junction station complex which would experience an incremental increase of approximately 902 and 1,059 subway trips (in and out combined) during the weekday AM and PM peak hours, respectively. The Alabama Avenue and Atlantic Avenue stations would experience significantly fewer incremental increases of subway trips, with approximately 107 and 139 incremental subway trips anticipated at the Alabama Avenue station during the weekday AM and PM peak hours, respectively, and approximately 37 incremental subway trips anticipated at the Atlantic Avenue station in both the weekday AM and PM peak hours.

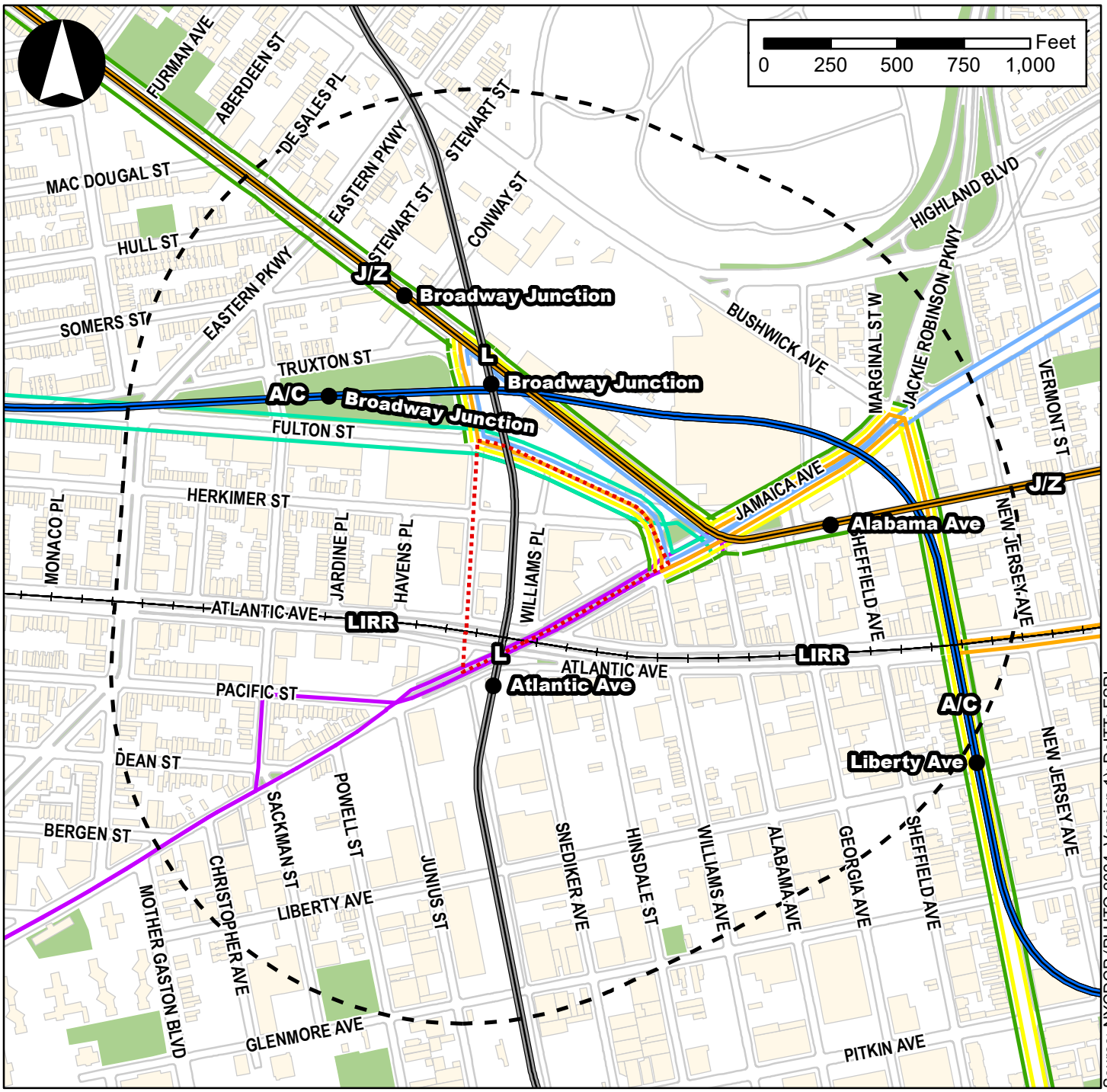
TABLE 13-12
Net Incremental Peak Hour Subway Trips by Station – Alternate Community Facility Scenario

	AM Peak Hour			PM Peak Hour		
Station	**In**	**Out**	**Total**	**In**	**Out**	**Total**
Broadway Junction (A, C, J, L, Z)	516	386	902	488	571	1,059
Alabama Avenue (J, Z)	80	27	107	59	80	139
Atlantic Avenue (L)	25	12	37	12	25	37
Total	621	425	1,046	559	676	1,235

As shown in **Table 13-12**, based on these assignments, it is estimated that new subway demand from the Alternate Community Facility Scenario would exceed the 200-trip 2021 *CEQR Technical Manual* analysis threshold in the AM and PM periods at the Broadway Junction (A/C/J/L/Z) station complex, and therefore this station was selected for detailed analysis. Key circulation elements (e.g., stairs and fare arrays) expected to be used by concentrations of new demand from the Alternate Community Facility Scenario will be analyzed.

SUBWAY LINE HAUL

As discussed above, the Project Area is currently served by a total of five NYCT subway routes, including the A, C, J, L, and Z. **Table 13-13** shows the assignment of net incremental subway trips generated by the Alternate Community Facility Scenario to the five subway routes by direction during the weekday AM and PM peak hours. As shown in **Table 13-13**, the Alternative Community Facility Scenario is expected to generate more than 200 incremental trips along the A line during AM and PM peak hours in both



Source: NYCDCP (PLUTO 2024, Version 1); DoITT; ESRI

Legend

- Project Area
- Quarter-Mile Radius
- Subway Station (Local)
- Subway Station (Express)
- Atlantic Branch Line (LIRR)
- A/C Line
- L Line
- J/Z Line
- B12
- B20
- B25
- B83
- Q24
- Q56

directions. All other peak direction trips are expected to experience fewer than 200 incremental trips on any one route during the AM and PM peak hours. As incremental peak hour demand from the Alternate Community Facility Scenario is expected to generate 200 or more new peak hour subway trips along the A line during the PM peak hour, the analysis threshold for subway line haul analysis on this line is exceeded and therefore, an analysis of subway line haul conditions will be included in the EIS for this line. The analysis will use subway service and ridership data provided by NYCT to assess existing, future No-Action, and future With-Action conditions at the maximum load points during the weekday PM peak hour.

TABLE 13-13
Net Incremental Peak Hour Subway Trips by Route and Direction – Alternate Community Facility Scenario

Line	Direction	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
A	Manhattan-Bound	27	149	176	23	200	223
	Queens-Bound	173	18	191	182	29	211
C	Manhattan-Bound	2	93	95	1	119	120
	Brooklyn-Bound	103	0	103	107	3	110
J/Z	Manhattan-Bound	58	33	91	38	57	95
	Queens-Bound	52	24	76	49	57	106
L	Manhattan-Bound	54	81	135	40	156	196
	Brooklyn-Bound	152	27	179	119	55	174
Total		**621**	**425**	**1,046**	**559**	**676**	**1,235**

Bus

As shown in **Figure 13-3**, six NYCT Bus Company local bus services operate within approximately quarter-mile of the Project Area—the B12, B20, B25, B83, Q24, and Q56. These services and the principal corridors on which they operate in proximity to the Project Area are listed in **Table 13-14**.

TABLE 13-14
Bus Routes Serving the Project Area

Route	Operating Agency	Route Endpoints	Corridors Served in Proximity to the Project Area
B12	NYCT Bus	Lefferts Gardens – East New York	East New York Avenue
B20	NYCT Bus	Ridgewood – Spring Creek	Fulton Street / Broadway / Jamaica Avenue/ Pennsylvania Avenue
B25	NYCT Bus	DUMBO – Broadway Junction	Fulton Street
B83	NYCT Bus	Spring Creek – Broadway Junction	Fulton Street / Broadway / Jamaica Avenue/ Pennsylvania Avenue
Q24	NYCT Bus	Broadway Junction – Jamaica, Queens	Fulton Street / Broadway / Jamaica Avenue/ Pennsylvania Avenue
Q56	NYCT Bus	Broadway Junction – Jamaica, Queens	Fulton Street / Broadway / Jamaica Avenue/ Pennsylvania Avenue

As shown in **Table 13-11**, the Alternate Community Facility Scenario would generate an incremental increase of approximately 213 and 286 bus trips during the weekday AM and PM peak hours, respectively.

These bus trips were assigned to each route based on proximity to the projected development sites and current ridership patterns. **Table 13-15** provides the bus route assignment of action-generated bus person trips for the weekday AM and PM peak hours. As shown in **Table 13-15**, all six routes are expected to experience fewer than 50 new trips per direction in each peak hour. Therefore, based on 2021 *CEQR Technical Manual* guidance, significant adverse impacts to local bus service are not anticipated, and a detailed analysis of local bus conditions is not warranted in the EIS.

TABLE 13-15
Net Incremental Bus Route Assignments – Alternate Community Facility Scenario

Route	Direction	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
B12	EB	36	0	36	29	0	29
	WB	0	19	19	0	43	43
B20	NB	11	4	15	9	9	18
	SB	7	6	13	6	13	19
B25	EB	23	0	23	19	0	19
	WB	0	12	12	0	28	28
B83	NB	20	0	20	17	0	17
	SB	0	11	11	0	25	25
Q24	EB	4	9	13	4	21	25
	WB	17	2	19	14	5	19
Q56	EB	0	11	11	0	26	26
	WB	13	0	13	19	0	19
Total		**139**	**74**	**213**	**116**	**170**	**286**

Citywide Ferry Service (CWFS)

Based on 2021 *CEQR Technical Manual* guidance, a quantified analysis of conditions on CWFS routes and landings is typically required if a proposed action would generate 25 or more peak hour ferry trips in a single direction on a single route or 50 or more at a ferry landing. As there are no ferry landings proximate to the Project Area, the Proposed Actions are not expected to generate appreciable numbers of new trips on the CWFS. Therefore, a detailed analysis of CWFS conditions under the Proposed Actions is not warranted and not included in the EIS.

Pedestrians

Based on 2021 *CEQR Technical Manual* guidance, 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 area, or crosswalk. As shown in **Table 13-11**, the Alternate Community Facility Scenario would generate an incremental increase of approximately 993, 2,616, 2,261, and 2,856 walk-only trips (in and out combined) during the weekday AM, midday, PM and Saturday peak periods, respectively. In addition to the walk-only trips, transit trips (subway, bus, and rail trips) and off-site auto trips also include walk portions of the trip. Therefore, the Alternate Community Facility Scenario would generate a total of approximately 2,537, 2,868, 3,606, and 3,365 pedestrian trips in the weekday AM, weekday midday, weekday PM, and Saturday peak periods, respectively. During the weekday AM and PM peak hours, new pedestrian trips would be most concentrated on sidewalks and crosswalks adjacent to the Project Area and along corridors connecting the Project Area to nearby transit stations and bus stops. In the midday

and Saturday periods, pedestrian trips would tend to be more dispersed, as people travel throughout the area for dining, shopping, and/or running errands.

Based on a preliminary assignment of incremental peak hour pedestrian trips, a total of 54 elements (22 sidewalks, 12 crosswalks, and 20 corner areas) that would exceed the 200-trip 2021 *CEQR Technical Manual* analysis threshold in one or more peak hours were selected for detailed analyses (refer to **Figure 13-4**). These pedestrian elements are primarily located in the immediate proximity of the Project Area, along Atlantic Avenue, East New York Avenue, and Jamaica Avenue.

Parking

Parking demand from the proposed retail, office, light industrial, and community facility uses typically peaks in the midday period and declines during the afternoon and evening, while parking demand from residential uses peaks in the overnight period. Therefore, some of the spaces used by residents would be available to accommodate commercial and community facility demand during daytime hours.

As shown in **Table 13-1**, under the RWCDS for the Proposed Development, up to a total of approximately 174 parking spaces would be provided within the Project Area. As shown in **Table 13-2**, under the RWCDS for the Alternate Community Facility Scenario, up to a total of approximately 200 parking spaces would be provided within the Project Area. Parking demand forecasts are provided to document the ability of the on-site parking under each With-Action condition RWCDS to accommodate all of the projected parking demand and assess the potential for a significant parking shortfall.

F. TRANSPORTATION ANALYSES METHODOLOGIES

Traffic

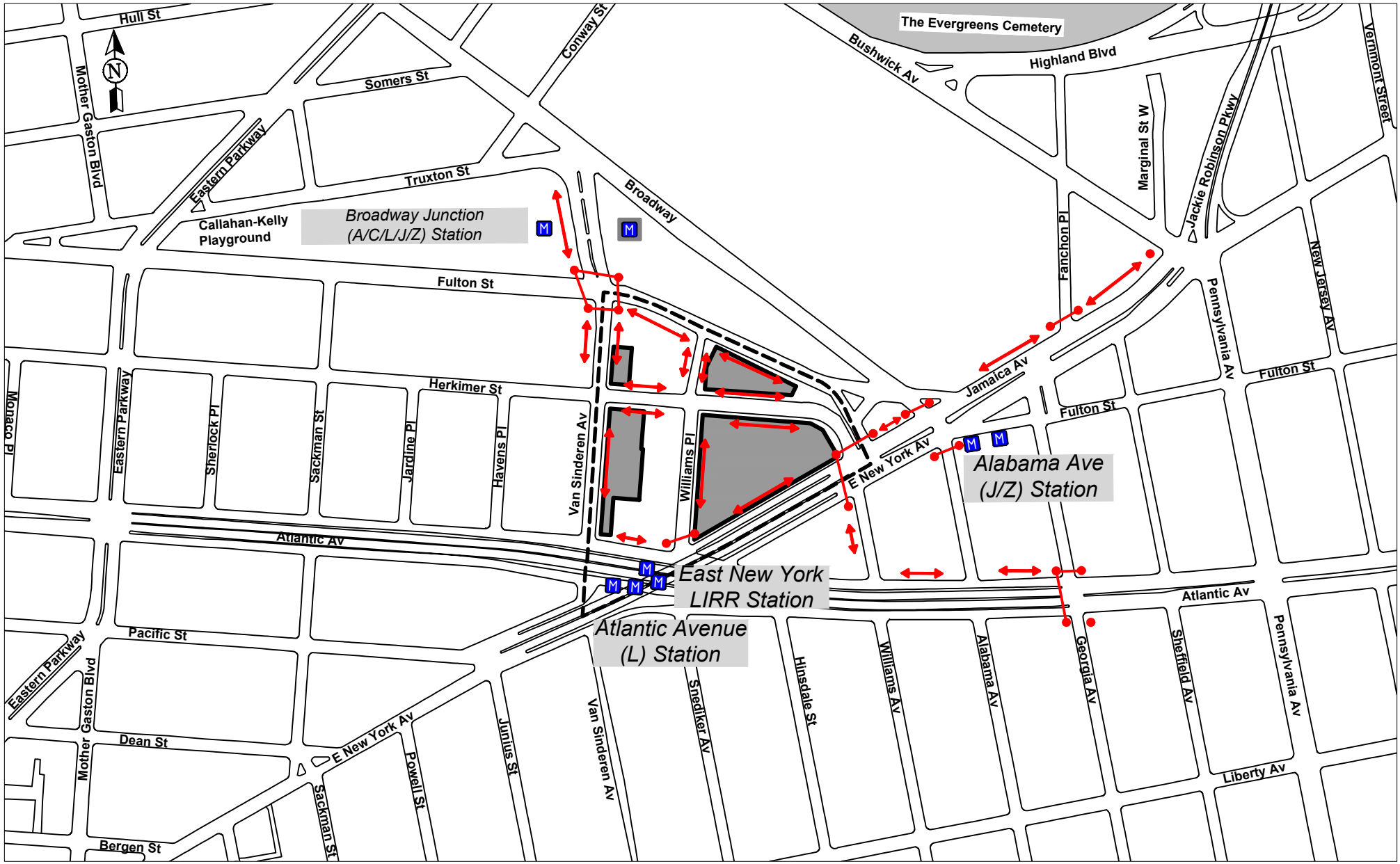
Analysis Methodology

The traffic analysis examines conditions in the weekday AM, midday, PM, and Saturday peak hours when the increased travel demand attributable to the Proposed Actions is expected to be the greatest. The peak hours selected for analysis are the weekday 7:15–8:15 a.m., 2:00–3:00 p.m. (midday), 5:15–6:15 p.m., and Saturday 3:45–4:45 p.m. period. These peak hours were selected based on existing traffic volumes in the study area as reflected in automatic traffic recorder (ATR) count data.

The capacity analyses at intersections are based on the methodology presented in the 2000 *Highway Capacity Manual* (HCM) and were conducted using the Synchro Version 11 software. Traffic data required for these analyses include the hourly volumes on each approach, turning movements, the percentage of trucks and buses, and pedestrian volumes at crosswalks. Field inventories are also necessary to document the physical layout and street widths, lane markings, curbside parking regulations, and other relevant characteristics needed for the analysis.

The HCM methodology produces a volume-to-capacity (v/c) ratio for each signalized intersection approach. The v/c ratio represents the ratio of traffic volume on an approach to the approach's carrying capacity. A v/c ratio of less than 0.90 is generally considered indicative of non-congested conditions in dense urban areas; when higher than this value, the ratio reflects increasing congestion. At a v/c ratio between 0.95 and 1.0, near-capacity conditions are reached, and delays can become substantial. Ratios of greater than 1.0 indicate saturated conditions with queuing. The HCM methodology also expresses the

Analyzed Pedestrian Elements



LEGEND

- Development Site
- Project Area
- Subway Station Entrance
- Proposed Subway Station Entrance
- Analyzed Corner
- Analyzed Sidewalk
- Analyzed Crosswalk

quality of traffic flow in terms of level of service (LOS), which is based on the amount of delay that a driver typically experiences at an intersection. Levels of service range from A, representing minimal delay (10 seconds or less per vehicle), to F, which represents long delays (greater than 80 seconds per vehicle).

For unsignalized intersections, the HCM methodology generally assumes that traffic on major streets is not affected by traffic flows on minor streets. Left turns from a major street are assumed to be affected by the opposing, or oncoming, traffic flow on that major street. Traffic on minor streets is affected by all conflicting movements. Similar to signalized intersections, the HCM methodology expresses the quality of traffic flow at unsignalized intersections in terms of LOS based on the amount of delay that a driver experiences. Level of service definitions used to characterize traffic flows at unsignalized intersections differ somewhat from those used for signalized intersections, primarily because drivers anticipate different levels of performance from the two different kinds of intersections. For unsignalized intersections, LOS ranges from A, representing minimal delay (10 seconds or less per vehicle, as it is for signalized intersections), to F, which represents long delays (greater than 50 seconds per vehicle, compared to greater than 80 seconds per vehicle for signalized intersections).

Table 13-16 shows the LOS/delay relationship for signalized and unsignalized intersections using the HCM methodology. Levels of service A, B, and C generally represent highly favorable to fair levels of traffic flow. At LOS D, the influence of congestion becomes noticeable. LOS E is considered to be the limit of acceptable delay, and LOS F is considered to be unacceptable to most drivers. In these traffic impact analyses, a signalized lane grouping operating at LOS E or F or a v/c ratio of 0.90 or more is identified as congested. For unsignalized intersections, a movement with LOS E or F is also identified as congested.

TABLE 13-16
Intersection Level of Service Criteria

		Average Delay per Vehicle (seconds)	
LOS	**Description**	**Signalized Intersections**	**Unsignalized Intersections**
A	Satisfactory—Little/No Delay	Less than 10.1	Less than 10.1
B	Satisfactory—Minor Delay	10.1 to 20.0	10.1 to 15.0
C	Satisfactory—With Some Delay	20.1 to 35.0	15.1 to 25.0
D	Borderline Congestion	35.1 to 55.0	25.1 to 35.0
E	Marginally Acceptable Congestion	55.1 to 80.0	35.1 to 50.0
F	Unsatisfactory—Highly Congested	Greater than 80.0	Greater than 50.0

Source: 2000 *HCM*

Significant Impact Criteria

The identification of significant adverse traffic impacts at analyzed intersections is based on criteria presented in the 2021 *CEQR Technical Manual*. For signalized intersections, if a lane group in the With-Action condition would be LOS A, B, C, or D (i.e., delay less than or equal to 55.0 seconds/vehicle), the impact is not considered significant. For a lane group that would operate at LOS E under the With-Action condition, an increase in delay of 5.0 or more seconds compared to the No-Action condition is considered a significant impact. For a lane group that would operate at LOS F in the With-Action condition, an increase in projected delay of 4.0 or more seconds compared to the No-Action is considered a significant impact.

The same criteria apply to signalized and unsignalized intersections. However, for traffic on a minor street at an unsignalized intersection to result in a significant impact, a total approach volume of 90 passenger car equivalents (PCEs) must be projected in the future With-Action condition in any peak hour.

Transit

Analysis Methodology

SUBWAY STATIONS

To determine existing conditions at analyzed subway station elements, subway ridership data was provided by NYCT. The methodology for assessing subway station pedestrian circulation elements (stairs, escalators, and passageways), and fare control elements (regular turnstiles, high entry/exit turnstiles [HEETs], and high exit turnstiles [HXTs]) compares existing and projected pedestrian volumes with the element's design capacity to yield a volume-to-capacity (v/c) ratio. All analyses reflect pedestrian flow volumes over a 15-minute interval during each peak hour. Peak volumes for the analyzed subway station during the AM and PM peak periods were determined from the ridership data provided by NYCT; the peak hours selected for analysis are the weekday 7:30–8:30 a.m. and 5:30–6:30 p.m. peak hours. (As noted previously, 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.)

Under 2021 *CEQR Technical Manual* guidelines, the capacity of a stairway or passageway is determined based on four factors: the NYCT guideline capacity, the effective width, and surging and counter-flow factors, if applicable. NYCT guideline capacity is 10 passengers per minute per foot-width (pmf) for stairs and 15 pmf for passageways. The effective width of a stair or passageway is the actual width adjusted to reflect pedestrian avoidance of sidewalls and for center handrails, if present. A surging factor is applied to existing pedestrian volumes to reflect conditions where pedestrian flows tend to be concentrated (or surged) during shorter periods within the 15-minute analysis interval. This factor, which is based on the size of the station and the proximity of the pedestrian element to the station platforms, can reduce the calculated capacity by up to 25 percent. Lastly, a friction (or counter-flow) factor reducing calculated capacity by 10 percent is applied where opposing pedestrian flows use the same stair or passageway. No friction factor is applied if the flow is all or predominantly in one direction.

By contrast with stairways and passageways, under 2021 *CEQR Technical Manual* guidelines the capacity of an escalator or turnstile is determined based on only two factors: the NYCT guideline capacity for a 15-minute interval and a surging factor of up to 25 percent. **Table 13-17** shows the 2021 *CEQR Technical Manual* level of service criteria for all subway station elements. As shown in **Table 13-17**, six levels of service are defined with letters A through F. LOS A is representative of free flow conditions without pedestrian conflicts and LOS F depicts severe congestion and queuing.

TABLE 13-17
Level of Service Criteria for Subway Station Elements

LOS	Description	V/C Ratio
A	Free Flow	0.00 to 0.45
B	Fluid Flow	0.45 to 0.70
C	Fluid, somewhat restricted	0.70 to 1.00
D	Crowded, walking speed restricted	1.00 to 1.33
E	Congested, some shuffling and queuing	1.33 to 1.67
F	Severely congested, queued	> 1.67

Source: 2021 *CEQR Technical Manual*

SUBWAY LINE HAUL

Line haul capacity is based on the guideline capacity per subway car multiplied by the number of subway cars crossing the maximum load point in the peak hour. Maximum guideline capacities established by NYCT for each car class are 110 passengers/car for a 51-foot subway car, 145 passengers/car for a 60-foot car, and 175 passengers/car for a 75-foot car.[5] The v/c ratio is determined by dividing the number of peak-hour passengers traveling through the maximum load point by the line haul capacity. Maximum load point subway service and ridership data were provided by NYCT. The subway line haul analysis focuses on the weekday AM and PM commuter peak hours as it is during these periods that overall demand on the subway system is usually highest.

Significant Impact Criteria

SUBWAY STATIONS

The 2021 *CEQR Technical Manual* identifies a significant impact for stairways and passageways in terms of the minimum width increment threshold (WIT) based on the minimum amount of additional capacity that would be required to restore conditions to either their No-Action v/c ratio or to a v/c ratio of 1.00 (LOS C/D), whichever is greater. Stairways that are substantially degraded in level of service or which experience the formation of extensive queues are classified as significantly impacted. Significant adverse stairway or passageway impacts are typically considered to have occurred once the thresholds shown in **Table 13-18** are reached or exceeded.

TABLE 13-18
Significant Impact Thresholds for Stairways and Passageways

	WIT for Significant Impact (inches)	
With-Action V/C Ratio	**Stairway**	**Passageway**
1.00-1.09	8	13
1.10-1.19	7	11.5
1.20-1.29	6	10
1.30-1.39	5	8.5
1.40-1.49	4	6
1.50-1.59	3	4.5
>1.6	2	3

Source: 2021 *CEQR Technical Manual*

For turnstiles, escalators, and high-wheel exit gates, the 2021 *CEQR Technical Manual* defines a significant impact as an increase from a No-Action v/c ratio of below 1.00 to a v/c ratio of 1.00 or greater. Where a facility is already at a v/c ratio of 1.00 or greater, a 0.01 change in v/c ratio is also considered significant.

SUBWAY LINE HAUL

For subway line haul conditions, 2021 *CEQR Technical Manual* criteria specify that any increases in load levels that remain within practical capacity limits are generally not considered significant. However, significant adverse subway line haul impacts can occur if a proposed action is expected to generate an incremental increase averaging five or more riders per subway car on lines projected to carry loads

[5] For the A train, guideline capacities are based on NYCT rush hour loading guidelines, which vary by car type, line, and location based on frequency and type of service. Per NYCT direction, A train capacity has been adjusted from 175 to 140 to reflect 10 60-foot cars at 140 pass./car capacity.

exceeding guideline capacity. This is based on the general assumption that when subways are at or above practical capacity, the addition of even five or more riders per car is perceptible.

Pedestrians

Analysis Methodology

Data on peak period pedestrian flow volumes were collected along analyzed sidewalks, corner areas, and crosswalks in the vicinity of the Project Area in September 2024. Peak hours were determined by comparing rolling hourly averages, and the highest 15-minute volumes within the selected peak hours were used for analysis. Based on existing peak pedestrian volumes along major corridors in the study area, the peak hours selected for analysis include the weekday 7:30–8:30 a.m., 12:00–1:00 p.m. (midday), and 5:15–6:15 p.m., and Saturday 2:00–3:00 p.m. periods.

Peak 15-minute pedestrian flow conditions during the weekday AM, midday, and PM peak hours are analyzed using *2000 HCM* methodology and procedures outlined in the 2021 *CEQR Technical Manual*. Using this methodology, the congestion level of pedestrian facilities is determined by considering pedestrian volume, measuring the sidewalk or crosswalk width, determining the available pedestrian capacity, and developing a ratio of volume flows to capacity conditions. The resulting ratio is then compared with LOS standards for pedestrian flow, which define a qualitative relationship at a certain pedestrian traffic concentration level. The evaluation of street crosswalks and corners is more complicated as these spaces cannot be treated as corridors due to the time incurred waiting for traffic lights. To effectively evaluate these facilities a "time-space" analysis methodology is employed which takes into consideration the traffic light cycle at intersections. 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 assigned, with LOS A representative of free flow conditions without pedestrian conflicts and LOS F depicting significant capacity limitations and inconvenience. **Table 13-19** defines the LOS criteria for pedestrian crosswalk/corner area and sidewalk conditions, as based on *HCM* methodology.

The analysis of sidewalk conditions includes a "platoon" factor in the calculation of pedestrian flow to more accurately estimate the dynamics of walking. "Platooning" is the tendency of pedestrians to move in bunched groups or "platoons" once they cross a street where cross traffic required them to wait. Platooned flow is more representative of pedestrian activities within New York City.

TABLE 13-19
Pedestrian Crosswalk/Corner Area and Sidewalk Levels of Service Descriptions

LOS	Crosswalk/Corner	Crosswalk/Corner Area Criteria (sf/ped)	Non-Platoon Sidewalk Criteria (sf/ped)	Platoon Sidewalk Criteria (sf/ped)
A	(Unrestricted)	> 60	> 60	> 530
B	(Slightly Restricted)	> 40 to 60	> 40 to 60	> 90 to 530
C	(Restricted but fluid)	> 24 to 40	> 24 to 40	> 40 to 90
D	(Restricted, necessary to continuously alter walking stride and direction)	> 15 to 24	> 15 to 24	> 23 to 40
E	(Severely restricted)	> 8 to 15	> 8 to 15	> 11 to 23
F	(Forward progress only by shuffling; no reverse movement possible)	< 8	< 8	< 11

Source: 2021 *CEQR Technical Manual*
Notes: Based on average conditions for 15 minutes; sf/ped—square feet of area per pedestrian

Significant Impact Criteria

SIDEWALKS

The 2021 *CEQR Technical Manual* impact criteria for a Central Business District (CBD) location are used to identify significant adverse impacts due to the Proposed Actions. These criteria define a significant adverse sidewalk impact to have occurred under platoon conditions if the average pedestrian space under the No-Action condition is greater than 34.7 square feet/pedestrian (sf/ped), and the average pedestrian space under the With-Action condition is 31.4 sf/ped or less (worse than mid-LOS D). If the average pedestrian space under the With-Action condition is greater than or equal to 31.5 sf/ped (mid-LOS D or better), the impact should not be considered significant. If the No-Action pedestrian space is between 6.4 and 34.6 sf/ped, a reduction in pedestrian space under the With-Action condition should be considered significant based on **Table 13-20**, which shows a sliding scale that identifies what decrease in pedestrian space is considered a significant impact for a given pedestrian space value in the No-Action condition. If the reduction in pedestrian space is less than the value in **Table 13-20**, the impact is not considered significant. If the average pedestrian space under the No-Action condition is 6.3 sf/ped or less, then a reduction in pedestrian space greater than or equal to 0.3 sf/ped, under the With-Action condition, should be considered significant.

TABLE 13-20
Significant Impact Criteria for Sidewalks in a CBD Location

No-Action Pedestrian Flow (sf/ped)			With-Action Condition Pedestrian Flow Increment to be Considered a Significant Impact (sf/ped)
≥ 34.7			With-Action Condition ≤ 31.4
34.0	to	34.6	Reduction ≥ 3.3
33.0	to	33.9	Reduction ≥ 3.2
32.1	to	32.9	Reduction ≥ 3.1
31.1	to	32.0	Reduction ≥ 3.0
30.2	to	31.0	Reduction ≥ 2.9
29.2	to	30.1	Reduction ≥ 2.8
28.3	to	29.1	Reduction ≥ 2.7
27.3	to	28.2	Reduction ≥ 2.6
26.4	to	27.2	Reduction ≥ 2.5
25.4	to	26.3	Reduction ≥ 2.4
24.5	to	25.3	Reduction ≥ 2.3
23.5	to	24.4	Reduction ≥ 2.2
22.6	to	23.4	Reduction ≥ 2.1
21.6	to	22.5	Reduction ≥ 2.0
20.7	to	21.5	Reduction ≥ 1.9
19.7	to	20.6	Reduction ≥ 1.8
18.8	to	19.6	Reduction ≥ 1.7
17.8	to	18.7	Reduction ≥ 1.6
16.9	to	17.7	Reduction ≥ 1.5
15.9	to	16.8	Reduction ≥ 1.4
15.0	to	15.8	Reduction ≥ 1.3
14.0	to	14.9	Reduction ≥ 1.2
13.1	to	13.9	Reduction ≥ 1.1
12.1	to	13.0	Reduction ≥ 1.0
11.2	to	12.0	Reduction ≥ 0.9
10.2	to	11.1	Reduction ≥ 0.8
9.3	to	10.1	Reduction ≥ 0.7
8.3	to	9.2	Reduction ≥ 0.6
7.4	to	8.2	Reduction ≥ 0.5
6.4	to	7.3	Reduction ≥ 0.4
≤6.3			Reduction ≥ 0.3

Source: 2021 *CEQR Technical Manual*

CORNER AREAS AND CROSSWALKS

For CBD areas, 2021 *CEQR Technical Manual* criteria define a significant adverse corner area or crosswalk impact to have occurred if the average pedestrian space under the No-Action condition is greater than or equal to 21.5 sf/ped and, under the With-Action condition, the average pedestrian space decreases to 19.4 sf/ped or less (worse than mid-LOS D). If the pedestrian space under the With-Action condition is greater than or equal to 19.5 sf/ped (mid-LOS D or better), the impact should not be considered significant. If the average pedestrian space under the No-Action condition is between 5.1 and 21.4 sf/ped, a decrease in pedestrian space under the With-Action condition should be considered significant based on **Table 13-21** which shows a sliding scale that identifies what decrease in pedestrian space is considered a significant impact for a given amount of pedestrian space in the No-Action condition. If the decrease in pedestrian space is less than the value in **Table 13-21**, the impact is not considered significant. If the

average pedestrian space under the No-Action condition is less than 5.0 sf/ped or less, then a decrease in pedestrian space greater than or equal to 0.2 sf/ped should be considered significant.

TABLE 13-21
Significant Impact Criteria for Corners and Crosswalks in a CBD Location

No-Action Pedestrian Space (sf/ped)			With-Action condition Pedestrian Space Reduction to be Considered a Significant Impact (sf/ped)
≥ 21.5			With-Action Condition ≤ 19.4
21.3	to	21.4	Reduction ≥ 2.1
20.4	to	21.2	Reduction ≥ 2.0
19.5	to	20.3	Reduction ≥ 1.9
18.6	to	19.4	Reduction ≥ 1.8
17.7	to	18.5	Reduction ≥ 1.7
16.8	to	17.6	Reduction ≥ 1.6
15.9	to	16.7	Reduction ≥ 1.5
15.0	to	15.8	Reduction ≥ 1.4
14.1	to	14.9	Reduction ≥ 1.3
13.2	to	14.0	Reduction ≥ 1.2
12.3	to	13.1	Reduction ≥ 1.1
11.4	to	12.2	Reduction ≥ 1.0
10.5	to	11.3	Reduction ≥ 0.9
9.6	to	10.4	Reduction ≥ 0.8
8.7	to	9.5	Reduction ≥ 0.7
7.8	to	8.6	Reduction ≥ 0.6
6.9	to	7.7	Reduction ≥ 0.5
6.0	to	6.8	Reduction ≥ 0.4
5.1	to	5.9	Reduction ≥ 0.3
≤ 5.0			Reduction ≥ 0.2

Source: 2021 *CEQR Technical Manual*

Vehicular and Pedestrian Safety Evaluation

Under 2021 *CEQR Technical Manual* guidance, an evaluation of street user safety should be performed for actions that would geometrically or operationally redesign or reconfigure one or more study corridors and/or intersections as part of the proposed action; are located near sensitive land uses, such as hospitals, schools, parks, nursing homes, or senior housing; or analysis locations which are identified as high crash locations, or are part of Vision Zero corridors/intersections, within Senior Pedestrian Focus Areas (SPFAs) or on Truck Priority Safety Corridors that could be affected by increased traffic, pedestrian, and bicyclist volumes generated by the proposed action. High crash locations are defined as 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. For these locations, crash trends would 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. The determination of potential significant safety impacts depends on the type of area where the project site is located, traffic and pedestrian volumes, crash types and severity, and other contributing factors. Where appropriate, measures to improve traffic and pedestrian safety should be identified and coordinated with DOT.

Parking

Analysis Methodology

Parking demand forecasts for the Proposed Development and the Alternate Community Facility Scenario are provided to document the projected demand at on-site parking and to determine whether any demand would need to be accommodated on-street or at nearby off-street public parking facilities.

Significant Impact Criteria

Should a proposed action generate the need for more parking than it provides, a shortfall of spaces may be considered significant. The availability of off-street and on-street parking spaces within a convenient walking distance (about ¼-mile)—as well as the availability of alternative modes of transportation—is considered in making this determination.

Under 2021 *CEQR Technical Manual* guidance, different criteria for determining significance are applied based on whether or not a proposed action is located in residential or commercial areas designated as Parking Zones 1 and 2 as shown in Map 16-2 ("CEQR Parking Zones, May 2010") in the 2021 *CEQR Technical Manual*. As the Project Area is located outside of Parking Zones 1 and 2, the inability of the Proposed Actions or the surrounding area to accommodate future parking demands would be considered a parking shortfall. However, additional factors should be considered to determine whether a parking shortfall is significant, including: the availability and extent of transit in the area; the proximity of the project to such transit; any features of the project that are considered trip reduction or travel demand management (TDM) measures as set forth in Chapter 16, Subsection 515 of the 2021 *CEQR Technical Manual*; and travel modes of customers of area commercial businesses; and patterns of automobile usage by area residents.

G. TRAFFIC

Existing Conditions

Study Area Street Network

As shown in **Figure 13-1**, the street network in proximity to the Project Area is comprised of an irregular grid pattern of arterial, collector, and local streets. Most intersections in the study area are unsignalized.

The Project Area is generally bound by Fulton Street to the north, Van Sinderen Avenue to the west, Atlantic Avenue to the south, and East New York Avenue to the east. The Project Area is bifurcated in the east-west direction by Herkimer Street and in the north-south direction by Williams Place. Near the Project Area, **Fulton Street** is a two-way, east-west arterial that operates with one moving lane in each direction and parking along both curbs. Near the Project Area, Fulton Street is traversed by MTA Bus B20, B25, B83, Q24, and Q56 local buses. Near the Project Area, **Van Sinderen Avenue** is a discontinuous street bifurcated by Atlantic Avenue; to the north of Atlantic Avenue, Van Sinderen Avenue operates as a two-way, north-south street with parking along both curbs, and operates as a one-way southbound local street with parking along both curbs to the south of Atlantic Avenue. Between Broadway and Herkimer Street, Van Sinderen Avenue is a DOT-designated Local Truck Route. Near the Project Area, **Herkimer Street** is a one-way, eastbound local street that operates with one moving lane and parking along both curbs. Between Van Sinderen Avenue and East New York Avenue, Herkimer Street operates as a collector and is a DOT-designated Local Truck Route. **Williams Place** is a one-way, northbound local street that operates

with one moving lane and parking along both curbs. Williams Place spans two city blocks between Fulton Street to the north and Atlantic Avenue to the south.

Atlantic Avenue is a two-way, east-west arterial connecting Brooklyn's waterfront with Jamaica, Queens. Near the Project Area, Atlantic Avenue is a DOT-designated Through Truck Route with six total moving lanes separated into four central elevated express lanes flanked by two at-grade local lanes. The elevated portion of Atlantic Avenue is located above the Long Island Rail Road (LIRR) and contains two east and westbound moving lanes separated by Jersey barriers. The two at-grade local lanes flank the elevated portion on each side, with one eastbound moving lane on the south and one westbound moving lane on the north; the local at-grade lanes contain parking along both curbs.

East New York Avenue is a two-way, northeast-southwest arterial that provides access to Jamacia Avenue and the Jackie Robinson Parkway. Near the Project Area, between Junius Street and Williams Avenue, East New York Avenue contains six total moving lanes separated into four central below-grade express lanes flanked by two at-grade local lanes. The below-grade portion of East New York Avenue is located below Atlantic Avenue and the LIRR and contains two east and westbound moving lanes separated by a median. The two at-grade local lanes flank the below-grade portion on each side, with one eastbound moving lane on the south and one westbound moving lane on the north; the local at-grade lanes contain parking along both curbs and connect to Atlantic Avenue's local at-grade lanes. Near the Project Area, East New York Avenue is traversed by MTA Bus B12, B20, B25, B83, Q24, and Q56 local buses and is a DOT-designated Local Truck Route between Alabama and Williams avenues.

Other study area arterials and collectors of note include Broadway, Bushwick Avenue, Eastern Parkway, Glenmore Avenue, Highland Boulevard, Jamaica Avenue, Liberty Avenue, Pacific Street, Pennsylvania Avenue. **Eastern Parkway** and **Jamaica Avenue** are both arterials that typically operate with four moving lanes (two in each direction) separated by a median. Jamaica Avenue is a DOT-designated Local Truck Route and both roadways feature curbside parking. **Glenmore Avenue** is a one-way eastbound arterial with parking along both curbs. **Liberty Avenue** is a two-way, east-west arterial that operates with one moving lane in each direction and parking along both curbs. Liberty Avenue features a shared bicycle lane (i.e., Class III) in each direction. **Pennsylvania Avenue** is a two-way, north-south arterial and DOT-designated Local Truck Route that operates with two moving lanes in each direction and parking along both curbs. Pennsylvania Avenue is traversed by MTA Bus B20 and B83 local buses. **Pacific Street** is a one-way westbound collector with parking along both curbs; the street connects East New York Avenue and Eastern Parkway. **Broadway** is a north-south arterial and DOT-designated Local Truck Route that operates with one to two moving lanes and parking along both curbs. South of Truxton Street, Broadway operates as a one-way northbound arterial with one moving lane, while north of Truxton Street, Broadway operates as a two-way, north-south arterial with one moving lane in each direction. **Bushwick Avenue** is a north-south arterial that operates with two moving lanes in each direction and no curbside parking. **Highland Boulevard** is an east-west arterial that generally operates with two or four moving lanes (one or two in each direction) and parking along both curbs.

Jackie Robinson Parkway (NY 908B) is a regional artery providing access to the Project Area. Jackie Robinson Parkway is a limited-access roadway that extends approximately five miles from Jamaica and Pennsylvania avenues to the Kew Gardens interchange in Kew Gardens, Queens, where it meets the Grand Central Parkway and the Van Wyck Expressway (I-678). From the Project Area, access to Jackie Robinson Parkway is facilitated by Fulton and Herkimer streets, as well as East New York and Jamaica avenues.

BUS ROUTES

NYCT bus routes primarily operate along the following study area corridors:

- Broadway (B20, B83, Q24, and Q56)
- Fulton Street (B20, B25, B83, Q24, and Q56)
- East New York Avenue (B12, B20, B25, B83, Q24, and Q56)

TRUCK ROUTES

The City has established Local and Through Truck Routes to manage the flow of trucks and improve the quality of neighborhoods. The City defines a truck as "a vehicle which is designed for transportation of property, which has either of the following characteristics: two axles and six tires or three or more axles." Trucks must generally travel on local Truck Routes to reach the intersection nearest their destinations. In proximity to the Project Area, Local Truck Routes have been designated by DOT along Broadway, East New York Avenue (between Alabama and Williams avenue), Fulton Street, Herkimer Street, Jamaica Avenue, Pennsylvania Avenue, Truxton Street, Van Sinderen Avenue, and Williams Avenue. Through trucks are defined as having neither an origin nor a destination within the Borough of Brooklyn. Atlantic Avenue is a DOT-designated Through Truck Route near the Project Area.

BICYCLE LANES

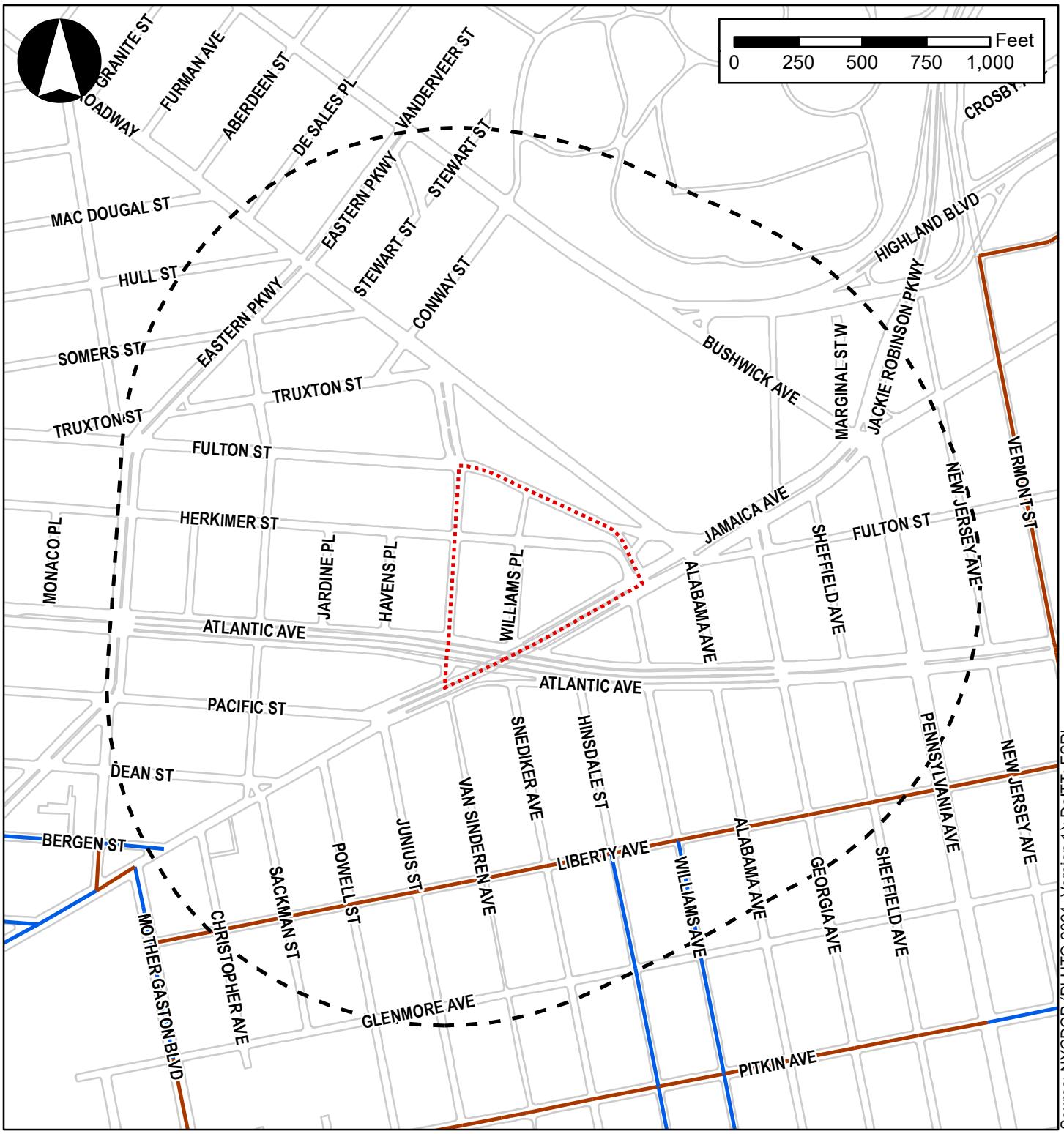
As shown in **Figure 13-5**, bicycle lanes have been installed along several corridors in proximity to the traffic study area. These include conventional bicycle lanes (i.e., Class II) along portions of Hinsdale Street, Williams Avenue, Bergen Street, St Marks Avenue, and East New York Avenue; and shared bicycle lanes (i.e., Class III) along portions of Vermont Street, Liberty Avenue, Mother Gaston Boulevard, East New York Avenue, and Pitkin Avenue.

Traffic Conditions

To establish the existing conditions traffic network, an extensive traffic data collection program—including ATR counts, turning movement counts, and vehicle classification counts—was undertaken in September 2024. Physical inventory data needed for operational analysis—e.g., the number of traffic lanes, lane widths, pavement markings, turn prohibitions, bus stops, and typical parking regulations—were collected in October and November 2024. Signal timing plans for signalized intersections within the study area were obtained from DOT. **Figures 13-6a** through **13-6d** show existing traffic volumes during weekday AM, midday, PM, and Saturday peak hours.

Intersection Capacity Analysis

The v/c ratios, delays, and levels of service for all lane groups at all analyzed intersections in all peak hours under existing conditions are shown in **Table 13-22**. A lane group is considered congested and is included in **Table 13-22** if it operates at LOS E or F and/or with a v/c ratio of 0.90 or above. A v/c ratio of 1.00 or above reflects capacity conditions. As shown in **Table 13-22**, a total of 13 analyzed intersections (11 signalized and two unsignalized) currently have at least one congested lane group in one or more peak hours. Intersections along Eastern Parkway and East New York Avenue/Jamacia Avenue feature the greatest number of congested locations with a total of four intersections, followed by Atlantic Avenue (three intersections each). Five intersections currently have one or more lane groups operating at or over capacity (v/c ratio $\geq$ 1.0) in the weekday AM peak hour, four in the midday, six in the PM, and five in the Saturday peak hour. Overall, the data in **Table 13-22** indicates that congestion at analyzed intersections is most evident during the weekday AM, weekday PM, and the Saturday peak periods, and least evident during the weekday midday period.



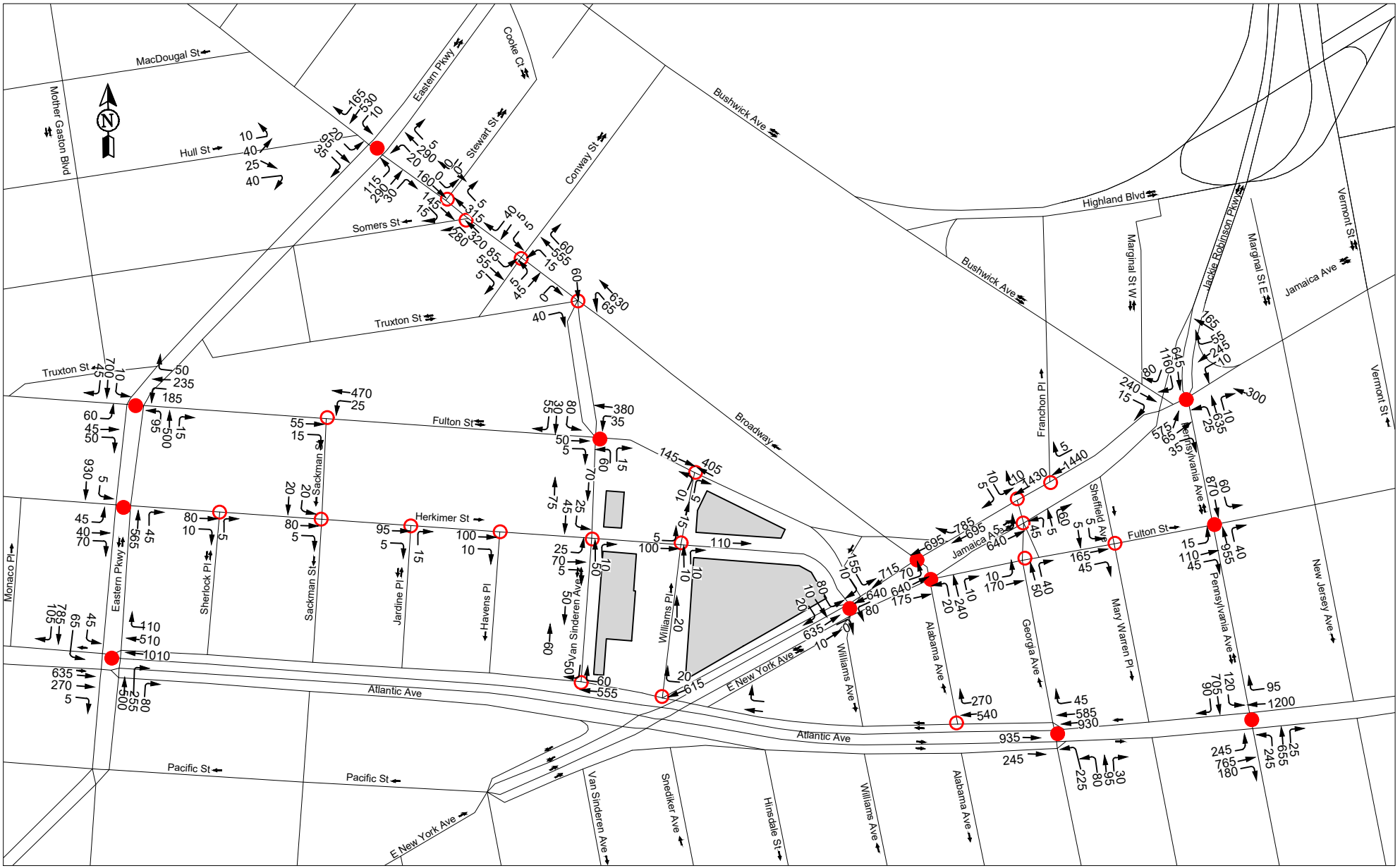
Legend

- Project Area
- Quarter-Mile Radius

Bike Route Class

- I
- II
- III
- L

Existing Weekday AM Peak Hour Traffic Volumes



LEGEND

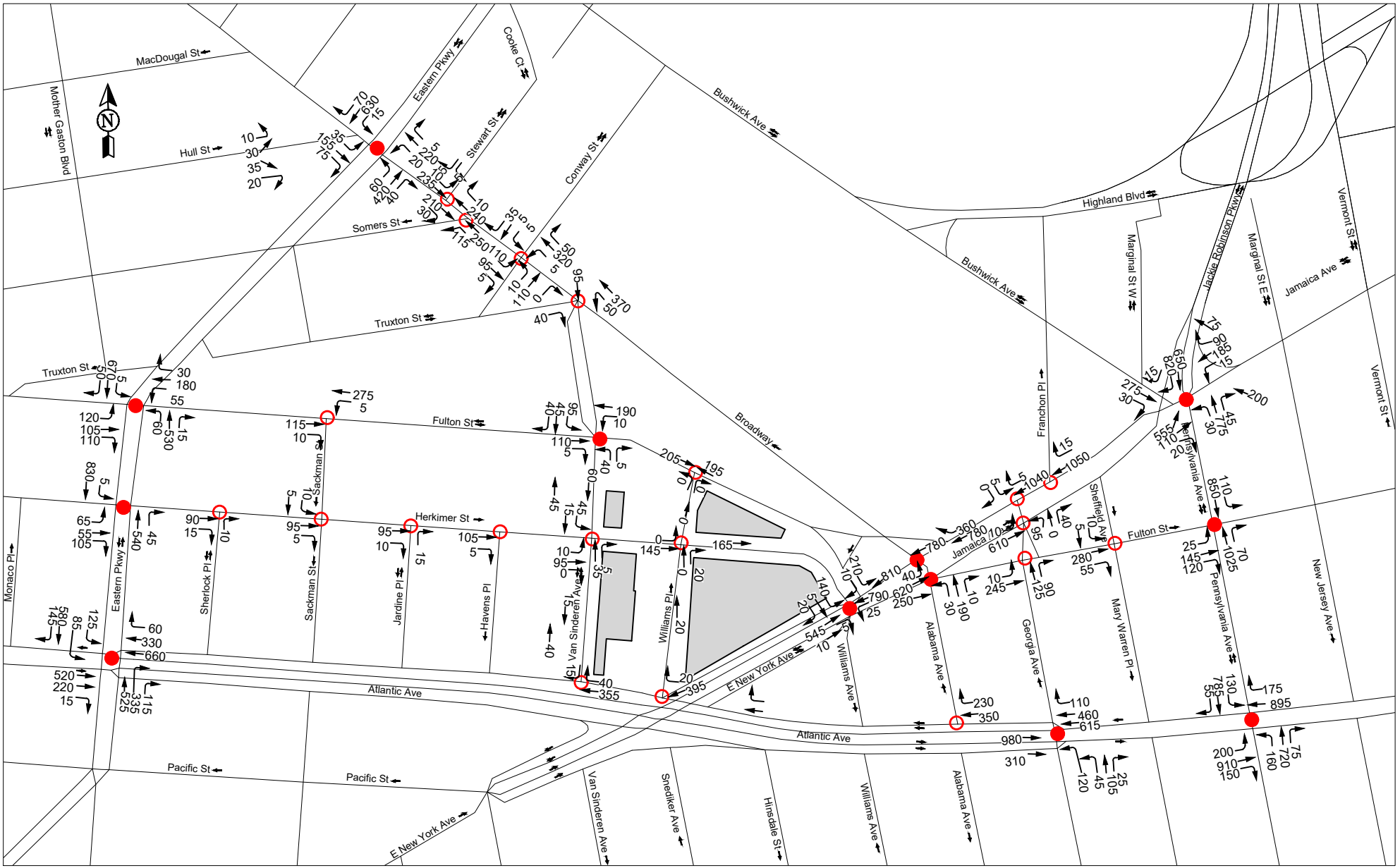
Development Site

Analysis Location (Signalized)

Analysis Location (Unsignalized)

2 = Weekday AM Traffic Volume

Existing Weekday Midday Peak Hour Traffic Volumes



LEGEND

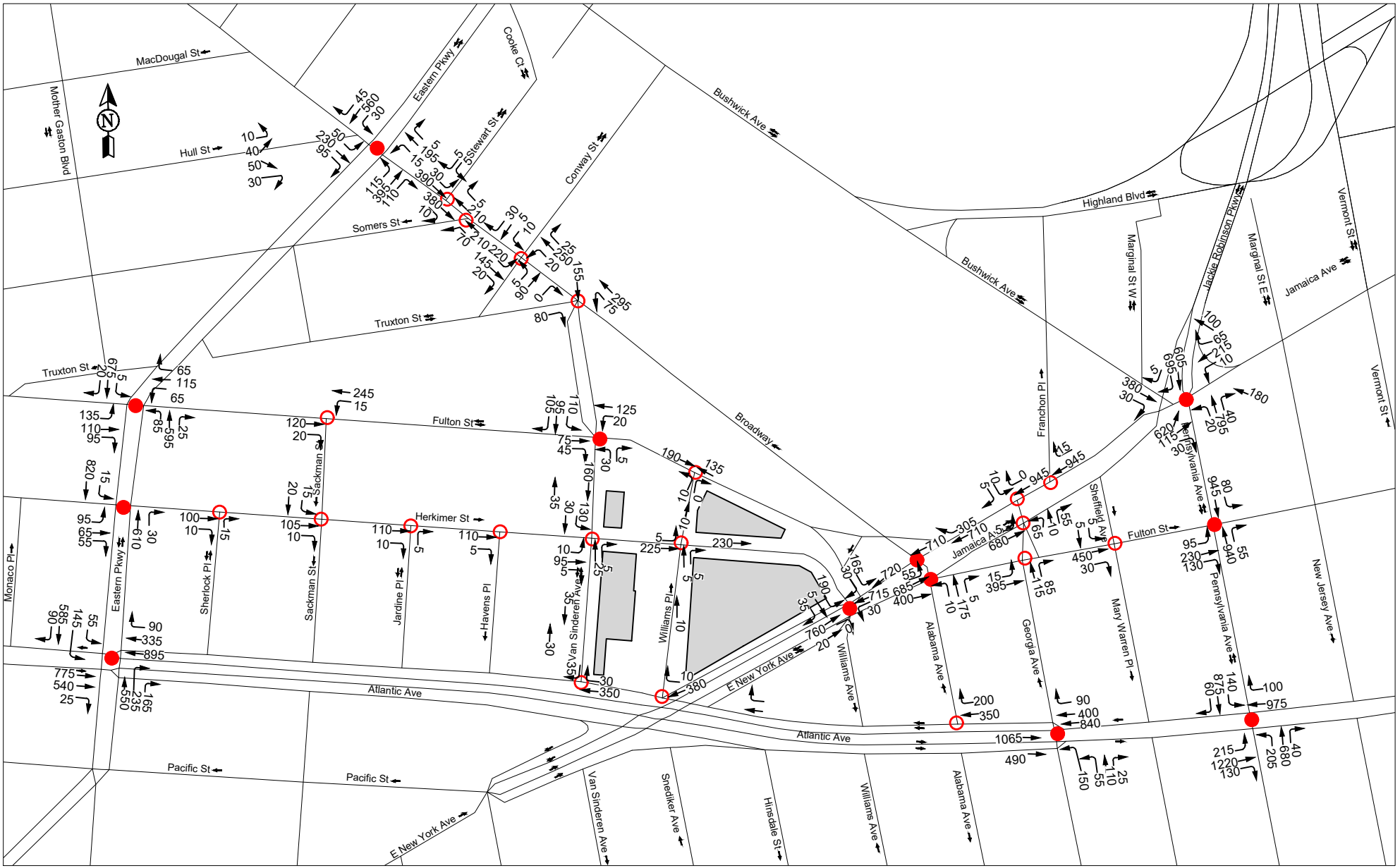
Development Site

Analysis Location (Signalized)

Analysis Location (Unsignalized)

2 = Weekday Midday Traffic Volume

Existing Weekday PM Peak Hour Traffic Volumes



LEGEND

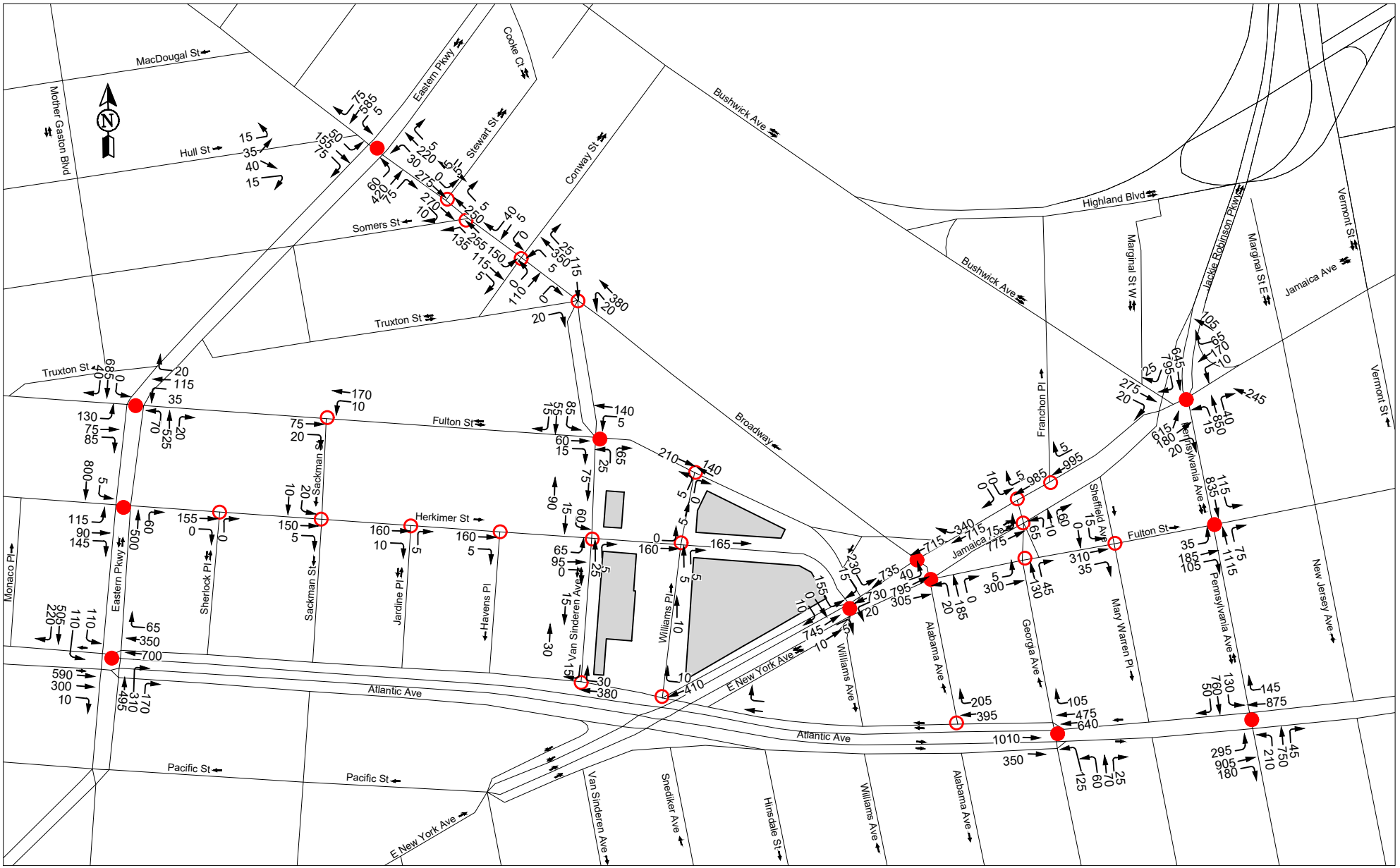
Development Site

Analysis Location (Signalized)

Analysis Location (Unsignalized)

2 = Weekday PM Traffic Volume

Existing Saturday Peak Hour Traffic Volumes



LEGEND

Development Site

Analysis Location (Signalized)

Analysis Location (Unsignalized)

2 = Saturday Traffic Volume

TABLE 13-22
Existing Level of Service at Analyzed Intersections

Signalized Intersections	Approach	Lane Group	Weekday AM V/C Ratio	Weekday AM Delay (sec/veh)	Weekday AM LOS	Weekday Midday V/C Ratio	Weekday Midday Delay (sec/veh)	Weekday Midday LOS	Weekday PM V/C Ratio	Weekday PM Delay (sec/veh)	Weekday PM LOS	Saturday V/C Ratio	Saturday Delay (sec/veh)	Saturday LOS
1: Broadway (E-W) @	EB	LTR	0.59	45.3	D	0.98	76.5	E *	1.05	100.9	F *	1.05	97.4	F *
Eastern Pkwy (N-S) & Hull St (NE)	WB	TR	0.90	65.8	E *	0.66	36.7	D	0.53	41.1	D	0.71	38.8	D
	NB	LTR	0.92	29.0	C *	0.64	22.9	C	0.88	41.0	D	0.64	22.8	C
	SB	LTR	0.63	25.2	C	0.69	23.4	C	0.55	23.5	C	0.58	20.8	C
(Hull St)	NEB	LTR	0.95	113.7	F *	0.71	61.2	E *	0.99	122.6	F *	0.77	66.8	E *
5: Fulton St (E-W) @	EB	LTR	0.59	37.5	D	1.05	89.3	F *	1.05	96.5	F *	0.99	77.0	E *
Eastern Pkwy (N-S)	WB	LTR	1.05	89.6	F *	0.74	44.2	D	0.70	40.9	D	0.44	41.2	D
	NB	LTR	0.68	46.7	D	0.52	16.7	B	0.72	15.0	B	0.53	13.3	B
	SB	LTR	0.52	26.1	C	0.51	20.9	C	0.45	26.0	C	0.42	19.6	B
7: Fulton St (E-W) @	EB	TR	0.13	18.9	B	0.25	11.1	B	0.30	21.3	C	0.17	33.1	C
Van Sinderen Av (N-S)	WB	LT	0.95	59.2	E *	0.51	25.3	C	0.40	23.1	C	0.36	22.1	C
	NB	LTR	0.31	28.3	C	0.17	25.9	C	0.14	25.5	C	0.32	28.2	C
	SB	LTR	0.49	32.6	C	0.49	33.8	C	0.87	56.8	E *	0.34	29.7	C
(Bus Lane)	SEB	LR	0.24	35.2	D	0.20	36.4	D	0.28	36.5	D	0.24	30.7	C
(Bus Lane)	SEB	R	0.11	33.1	C	0.10	34.1	C	0.25	35.9	D	0.09	28.5	C
9: Herkimer St (E) @	EB	LTR	0.53	41.3	D	0.68	34.9	C	0.68	47.1	D	1.00	74.5	E *
Eastern Pkwy (N-S)	NB	TR	0.46	6.7	A	0.54	6.0	A	0.48	6.1	A	0.51	6.5	A
	SB	LT	0.68	16.5	B	0.81	18.1	B	0.60	11.9	B	0.68	12.6	B
16: Atlantic Av (E-W) @	EB	LTR	0.61	32.0	C	0.74	36.6	D	0.87	41.0	D	0.85	41.3	D
Eastern Pkwy (N-S)	WB	T	0.97	51.5	D *	0.91	45.7	D *	0.74	26.3	C	0.95	50.0	D *
	WB	R	0.25	25.6	C	0.21	29.2	C	0.20	19.6	B	0.23	29.4	C
	NB	T	0.59	39.2	D	0.54	27.1	C	0.68	41.4	D	0.49	26.1	C
	NB	R	1.03	96.0	F *	1.04	80.4	F *	1.05	97.4	F *	1.05	82.1	F *
	SB	TR	0.87	24.1	C	0.86	10.6	B	1.05	49.6	D *	0.85	9.5	A
18: Atlantic Av WB Service Rd (W) @	WB	TR	0.62	20.3	C	0.40	16.1	B	0.39	16.0	B	0.61	22.4	C
East New York Av SB Service Rd	SWB	R‡												
(SW) & William Pl (N)														
19: East New York Av (E-W) @	EB	TR	0.30	19.1	B	0.26	18.5	B	0.39	20.3	C	0.40	20.4	C
Herkimer St (S) & Fulton St (SW) &	WB	LTR	0.70	10.0	A	0.67	9.5	A	0.68	10.1	B	0.67	5.6	A
Williams Ave (S)	SB	LTR	0.43	49.1	D	0.58	53.5	D	0.96	93.3	F *	0.73	63.2	E *
	SWB	LR	0.53	46.2	D	0.69	52.0	D	0.67	52.1	D	0.81	61.6	E *
20: East New York Av (E-W) &	EB	LTR	0.76	14.6	B	0.59	10.6	B	0.84	17.5	B	0.87	19.2	B
Jamaica Av (E-W) @	WB	TR	1.05	3.2	A *	0.55	5.2	A	0.51	5.8	A	0.58	4.3	A
Alabama Av (N) & Broadway (N)	NB	L	0.11	58.2	E *	0.15	43.8	D	0.08	41.0	D	0.08	43.3	D
	NB	TR	0.96	104.2	F *	0.73	61.8	E *	0.86	76.4	E *	0.66	57.5	E *
21: Jamaica Av (E-W) @	EB	L	0.03	36.1	D	0.51	86.3	F *	0.30	56.4	E *	0.46	48.3	D
Georgia Av (N) & Bus Depot	EB	T	0.35	5.3	A	0.34	3.8	A	0.41	4.1	A	0.59	13.1	B
Entrance (S)	WB	TR	0.58	2.5	A	0.45	2.0	A	0.42	2.1	A	0.57	3.0	A
	NB	L	0.20	44.0	D	0.41	48.6	D	0.30	47.2	D	0.24	42.2	D
	NB	T	0.03	42.3	D	0.00	0.0	A	0.08	43.9	D	0.07	40.2	D
	NB	R	0.24	44.5	D	0.20	44.4	D	0.26	46.2	D	0.25	42.5	D
	SB	R	0.04	47.6	D									
23: Jamaica Av (E-W) @	EB	L	1.05	97.8	F *	0.97	78.3	E *	1.03	92.7	F *	1.05	96.9	F *
Jackie Robinson	EB	T	0.53	52.3	D	0.56	52.8	D	0.71	61.3	E *	0.91	82.7	F *
Pkwy/Pennsylvania Av (N-S) &	WB	TR	1.05	106.1	F *	1.05	109.1	F *	1.05	106.5	F *	1.05	108.5	F *
Bushwick Av (SE-NW)	WB	R‡												
	NB	L	0.93	46.3	D *	0.65	19.7	B	0.52	17.9	B	0.78	56.6	E *
	NB	TR	0.57	1.9	A	0.51	3.7	A	0.52	5.0	A	0.73	26.0	C
	SB	T	0.85	55.1	E *	0.93	63.2	E *	0.93	64.1	E *	0.88	57.5	E *
	SB	R	1.02	62.3	E *	0.77	31.4	C	0.65	27.2	C	0.75	30.4	C
	SE	R	0.91	75.3	E *	1.05	109.0	F *	1.05	103.2	F *	1.05	106.7	F *
26: Pennsylvania Av (E-W) @	EB	L	0.04	30.9	C	0.06	20.9	C	0.20	17.2	B	0.11	27.0	C
Fulton St (N-S)	EB	TR	0.18	32.1	C	0.39	24.4	C	0.36	18.0	B	0.50	32.0	C
	NB	TR	0.83	25.8	C	0.82	22.6	C	0.79	24.4	C	0.76	13.4	B
	SB	L	0.29	17.0	B	0.41	15.9	B	0.32	9.1	A	0.43	25.9	C
	SB	T	0.52	6.2	A	0.47	1.0	A	0.56	1.7	A	0.42	8.4	A
28: Atlantic Av (E-W) @	EB	T	0.46	20.4	C	0.53	17.9	B	0.60	13.2	B	0.54	18.0	B
Georgia Av (N)	WB	TR	0.65	20.2	C	0.51	17.6	B	0.51	17.6	B	0.50	17.4	B
	NB	LTR	0.93	66.8	E *	0.69	46.4	D	0.68	44.7	D	0.66	44.6	D
29: Atlantic Av (E-W) @	EB	L	1.05	126.0	F *	1.04	118.6	F *	1.05	119.7	F *	1.05	105.1	F *
Pennsylvania Av (N-S)	EB	LTR	0.83	32.5	C	0.76	31.5	C	0.89	39.6	D	1.04	62.4	E *
	WB	TR	0.86	42.0	D	0.80	40.2	D	0.82	44.4	D	0.84	36.3	D
	NB	L	1.04	98.0	F *	1.01	95.1	F *	1.05	101.9	F *	1.05	92.5	F *
	NB	TR	0.74	42.3	D	0.78	39.1	D	0.63	33.7	C	0.80	33.6	C
	SB	L	0.67	63.6	E *	0.77	56.8	E *	0.63	34.8	C	0.76	48.9	D
	SB	TR	0.94	78.4	E *	0.78	27.3	C	0.89	35.7	D	0.86	29.1	C

TABLE 13-22 (Cont.)
Existing Level of Service at Analyzed Intersections

			Weekday AM			Weekday Midday			Weekday PM			Saturday		
Unsignalized Intersections	Approach	Lane Group	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS	V/C Ratio	Delay (sec/veh)	LOS
2: Broadway (E-W) @	EB	LT	0.00	0.0	A	0.01	0.4	A	0.03	0.8	A	0.00	0.0	A
Stewart St (N-S)	WB	TR	0.22	0.0	A	0.17	0.0	A	0.15	0.0	A	0.17	0.0	A
	SB	LR	0.00	0.0	A	0.02	11.4	B	0.03	13.5	B	0.02	11.9	B
3: Broadway (E-W) @	EB	LTR	0.12	6.2	A	0.12	5.1	A	0.22	6.0	A	0.17	5.8	A
Conway St (N-S)	WB	LTR	0.02	0.4	A	0.00	0.2	A	0.02	0.8	A	0.00	0.2	A
	NB	LTR	0.45	50.3	F	0.62	46.7	E	1.05	194.4	F *	0.86	96.5	F *
	SB	LTR	0.20	19.9	C	0.15	16.6	C	1.02	281.3	F *	0.12	14.2	B
4: Broadway (E-W) @	EB	R	0.04	0.0	A	0.07	0.0	A	0.11	0.0	A	0.08	0.0	A
Van Sinderen Av (S)	WB	LT	0.05	1.3	A	0.50	1.5	A	0.07	2.3	A	0.02	0.7	A
6: Fulton St (E-W) @	EB	TR	0.05	0.0	A	0.09	0.0	A	0.09	0.0	A	0.06	0.0	A
Sackman St (S)	WB	LT	0.02	0.6	A	0.00	0.2	A	0.01	0.6	A	0.01	0.5	A
8: Fulton St (E-W) @ William Pl (N)	NB	LR	0.04	12.9	B	0.00	0.0	A	0.02	11.5	B	0.01	11.2	B
10: Herkimer St (E) @	EB	TR	0.07	0.0	A	0.07	0.0	A	0.07	0.0	A	0.11	0.0	A
Sherlock Pl (N-S)	NB	LT	0.01	9.1	A	0.01	9.3	A	0.02	9.4	A	0.00	0.0	A
11: Herkimer St (E) @	EB	TR	0.06	0.0	A	0.07	0.0	A	0.08	0.0	A	0.11	0.0	A
Sackman St (N-S)	SB	LT	0.08	11.6	B	0.03	11.9	B	0.07	11.5	B	0.07	12.3	B
12: Herkimer St (E) @	EB	TR	0.07	0.0	A	0.08	0.0	A	0.08	0.0	A	0.12	0.0	A
Jardine Pl (N-S)	NB	LR	0.02	9.4	A	0.02	9.2	A	0.01	8.9	A	0.01	9.6	A
13: Herkimer St (E) @ Havens Pl (S)	EB	TR	0.08	0.0	A	0.07	0.0	A	0.07	0.0	A	0.12	0.0	A
14: Herkimer St (E) @	EB	LTR		8.1	A		8.0	A		8.2	A		8.8	A
Van Sinderen Av (N-S)	NB	TR		7.7	A		7.6	A		7.6	A		7.6	A
(All-way Stop)	SB	LT		8.0	A		8.0	A		8.8	A		8.2	A
15: Herkimer St (E) @	EB	TR	0.00	0.4	A	0.00	0.0	A	0.00	0.2	A	0.00	0.0	A
William Pl (N)	NB	LT	0.03	9.7	A	0.03	9.5	A	0.02	10.4	B	0.02	10.0	A
17: Atlantic Av WB Service Rd (W) @	EB	TR	0.39	0.0	A	0.26	0.0	A	0.27	0.0	A	0.27	0.0	A
Van Sinderen Av (N-S)	SB	R	0.13	13.5	B	0.03	10.8	B	0.07	11.1	B	0.03	10.7	B
22: Truxton St (W) @	EB	R	0.08	11.0	B	0.07	10.9	B	0.22	15.4	C	0.04	10.9	B
Van Sinderen Av (N-S)	SB	T	0.06	7.4	A	0.08	7.5	A	0.13	7.5	A	0.07	7.4	A
24: Fulton St (W) @	EB	LT	0.01	0.5	A	0.01	0.4	A	0.01	0.4	A	0.00	0.2	A
Georgia Av (N)	NB	TR	0.62	36.8	E	0.75	40.7	E	0.98	96.1	F *	0.53	23.7	C
25: Fulton St (W) @	EB	TR	0.15	0.0	A	0.22	0.0	A	0.33	0.0	A	0.24	0.0	A
Sheffield Av (S) & Mary Warren Pl	SB	LT	0.02	12.1	B	0.04	12.6	B	0.03	15.6	C	0.04	12.3	B
27: Atlantic Av WB Service Rd (W) @ Alabama Av (N)	WB	TR	0.51	0.0	A	0.38	0.0	A	0.38	0.0	A	0.41	0.0	A
30: Broadway (E-W) @	EB	TR	0.11	0.0	A	0.17	0.0	A	0.28	0.0	A	0.20	0.0	A
Somers St (S)	WB	LT	0.26	5.8	A	0.12	3.7	A	0.09	3.1	A	0.15	4.2	A

Notes:
EB - eastbound, WB - westbound, NB - northbound, SB - southbound
L - left, T - through, R - right, DefL - Analysis considers a defacto left-turn lane on this approach
V/C ratio - volume-to-capacity ratio
Sec/veh - seconds per vehicle
LOS - level of service
* - Denotes a congested movement (LOS E or F, or v/c ratio greater than or equal to 0.9)
‡ - Denotes the lane group was closed due to construction in the existing conditions.
Analysis is based on the 2000 Highway Capacity Manual methodology (Synchro 12)

The Future Without the Proposed Actions (No-Action Condition)

Congestion Pricing

New York City's CBD Tolling Program, also known as "Congestion Pricing," is an electronic toll system that charges vehicles that enter Manhattan's CBD1 and taxis/for hire vehicles that enter, leave or travel within the CBD. The program is intended to reduce congestion in the CBD and provide a new local, recurring funding source for MTA capital projects. The program went into effect on January 5, 2025. Initial data collected by MTA/NYCT and New York City Department of Transportation (NYSDOT) indicate a decrease in congestion in the CBD; however, the longer-term effects cannot yet be determined. Thus, while the transportation data presented in the DEIS were collected prior to implementation of the Congestion Pricing program, this data was not adjusted to account for the implementation of the program, nor have any improvements to the transit system been considered.

Future No-Action Traffic Growth

In the 2036 future without the Proposed Actions (the No-Action condition), the Proposed Actions would not be approved, and the projected development sites in the Project Area would remain as under existing conditions. No new development would occur on the projected development sites in the Project Area in the No-Action condition. However, between 2024 and 2036, it is expected that transportation demands in the vicinity of the Project Area will increase due to long-term background growth.

To forecast future traffic conditions in the No-Action condition, development on sites within a half-mile radius of the Project Area shown in **Figure 13-7** and summarized in **Table 13-23** were considered. The future No-Action traffic volumes also reflect annual background growth rates of 0.5 percent per year for the 2024 through 2029 period and 0.25 percent for the 2029 through 2036 period. These background growth rates, recommended in the 2021 *CEQR Technical Manual* for projects in Brooklyn outside of Downtown Brooklyn, are applied to account for smaller projects and as-of-right developments not reflected in **Table 13-23**, and general increases in travel demand not attributable to specific development projects. **Figures 13-8a** through **13-8d** show total No-Action traffic volumes during the weekday AM, midday, PM, and Saturday peak hours. It should also be noted that the analysis reflects that the construction in the existing condition is assumed to be completed by 2036.

TABLE 13-23
No-Action Condition Development Projects Within Half-Mile Radius of Project Area

Map Number[1]	Address	Residential (gsf)	Total DUs	Affordable DUs	Commercial (gsf)	Hotel (keyed rooms)	Community Facility (gsf)	Shelter Beds	Parking Spaces
1	156 Somers Street	7,570	10	0	0	0	0	0	0
2	158 Somers Street	7,307	10	0	0	0	0	0	0
3	39 Truxton Street	46,920	93	0	0	0	0	0	0
4	2246 Fulton Street	83,450	123	31	526	0	0	0	46
5	2440 Fulton Street	0	0	0	333,424	0	0	0	323
6	2384 Atlantic Avenue	0	0	0	0	105	0	0	6
7	2396 Atlantic Avenue	0	0	0	0	75	0	0	9
8	2435 Pacific Street	185,522	236	236	6,963	0	0	0	0
9	51 Sheffield Avenue	0	0	0	0	69	0	0	0
10	55 Sheffield Avenue	0	0	0	0	69	0	0	0
11	120 Liberty Avenue	10,277	13	0	0	0	0	0	0
12	114 Snediker Avenue	0	0	0	0	0	0	200	11
13	1882 Broadway	45,684	66	0	8,164	0	4,518	0	33
14	25 Truxton Street	-	8	-	-	-	-	-	-
15	91 De Sales Place	6,600	10	0	0	0	0	0	0
16	2667 Fulton Street	76,554	110	28	915	0	0	0	45
17	2715 Fulton Street	41,457	60	15	2,698	0	0	0	0
18	2718 Fulton Street	0	0	0	0	102	0	0	0
19	2767 Atlantic Avenue	27,325	41	13	758	0	0	0	0
20	2777 Atlantic Avenue	35,771	63	19	758	0	0	0	0
21	2700 Atlantic Avenue	155,966	227	57	1,970	0	0	0	92
22	221 Vermont Street	10,486	11	11	0	0	0	0	0

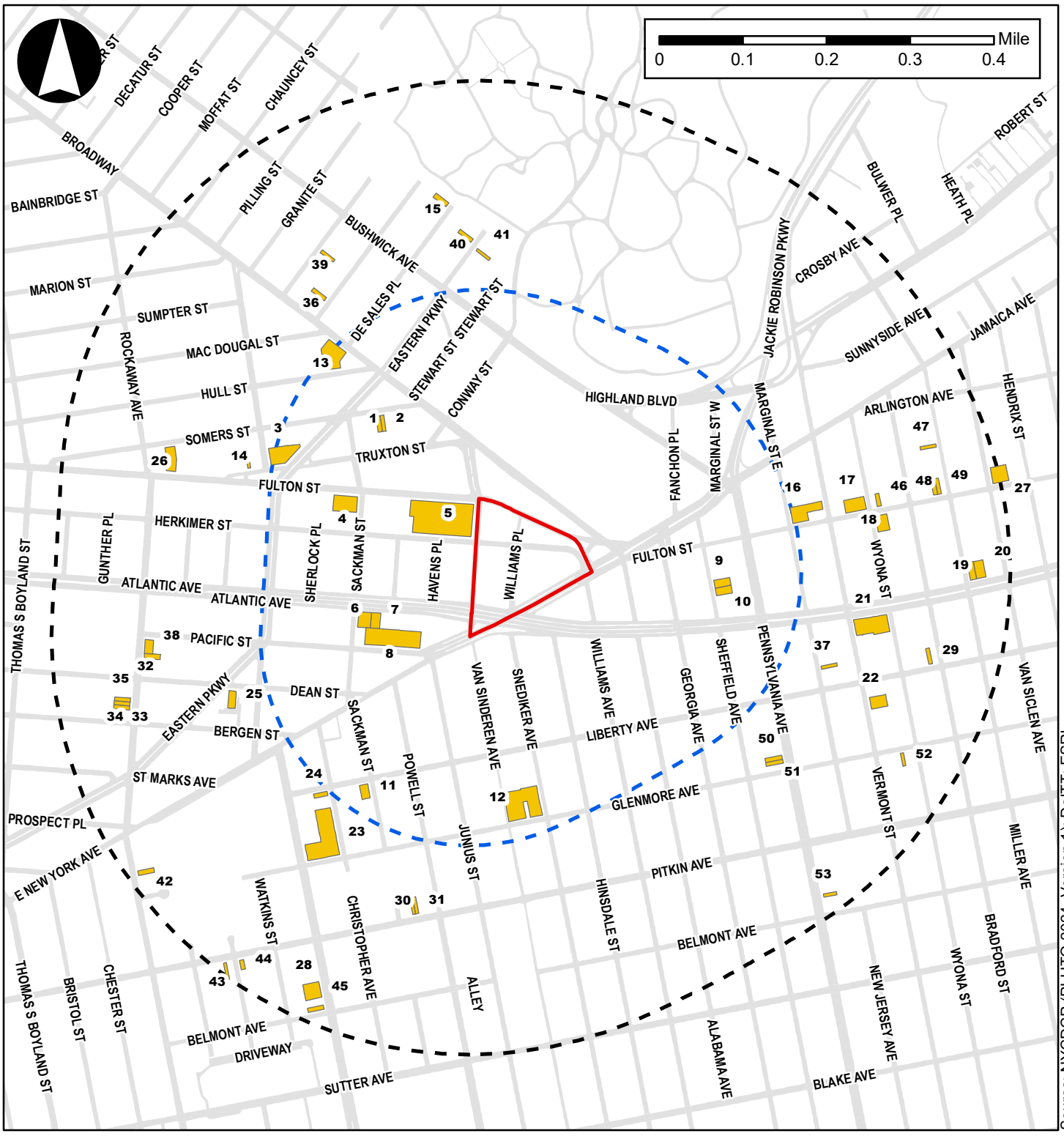
23	97 Glenmore Avenue	185,010	233	233	9,224	0	9,377	0	58
24	38 Christopher Avenue	3,596	3	0	0	0	0	0	0
25	2380 Dean Street	14,152	21	21	0	0	0	0	11
26	48 Somers Street	23,904	29	0	5,460	0	8,704	0	14
27	2795 Fulton Street	34,277	51	13	1,627	0	0	0	19
28	402 Mother Gaston Boulevard	42,183	62	0	15,409	0	17,107	0	80
29	453 Liberty Avenue	6,350	10	0	602	0	0	0	0
30	1845 Pitkin Avenue	5,368	8	0	0	0	0	0	0
31	1847 Pitkin Avenue	5,398	8	0	0	0	0	0	0
32	219 Rockaway Avenue	7,119	10	0	0	0	1,430	0	0
33	260 Rockaway Avenue	5,264	8	0	0	0	0	0	0
34	262 Rockaway Avenue	5,416	8	0	0	0	0	0	0
35	258 Rockaway Avenue	5,418	9	0	0	0	0	0	0
36	11 Aberdeen Street	5,951	9	0	0	0	0	0	0
37	197 New Jersey Avenue	5,386	9	0	0	0	0	0	0
38	216 Rockaway Avenue	-	2	0	0	0	0	0	0
39	34 Furman Avenue	3,884	1	0	0	0	0	0	0
40	103 Vanderveer Street	5,471	8	0	0	0	0	0	0
41	100 Vanderveer Street	-	1	0	0	0	0	0	0
42	353 Rockaway Avenue	-	7	0	0	0	0	0	0
43	1736 Pitkin Avenue	-	3	0	0	0	0	0	0
44	1742 Pitkin Avenue	-	2	0	0	0	0	0	0
45	412 Mother Gaston Boulevard	8,112	10	0	0	0	0	0	0
46	2719 Fulton Street	-	10	0	0	0	0	0	0
47	108 Miller Avenue	-	2	0	0	0	0	0	0
48	2757 Fulton Street	-	8	0	0	0	0	0	0
49	2759 Fulton Street	6,475	8	0	563	0	0	0	0
50	180 Pennsylvania Avenue	-	8	0	0	0	0	0	0
51	182 Pennsylvania Avenue	-	50	13	0	0	0	0	0
52	452 Glenmore Avenue	-	1	0	0	0	0	0	0
53	271 Pennsylvania Avenue	-	8	0	0	0	4,263	0	0

Notes:
[1] Keyed to **Figure 13-7**.
[2] These numbers represent the most recent filing with DOB from June 2024.
[3] A shaded row denotes a development project included in the analysis.
Sources: DOB Building Information System (BIS); Articles from *CityRealty*, *Curbed NY*, *The Real Deal*, and *YIMBY*.

Intersection Capacity Analysis

The v/c ratios, delays, and levels of service for those individual lane groups experiencing congestion in one or more peak hours under the No-Action condition are shown in **Table 13-24**. As shown in **Table 13-24**, a total of 15 intersections (12 signalized and three unsignalized) would have at least one congested lane

group in one or more peak hours in the No-Action condition, compared to a total of 13 analyzed intersections (11 signalized and two unsignalized) under existing conditions. Eastern Parkway and East New York Avenue/Jamaica Avenue would continue to have the most congested intersections with four intersections (the same as under existing conditions) as well as Atlantic Avenue with four intersections each (compared to three under existing conditions). A total of eight intersections would have one or more lane groups operating at or over capacity (v/c > 1.0) in the weekday AM peak hour, seven in the midday, 10 in the PM, and seven in the Saturday peak hour. This compares to five, four, six, and five intersections operating at or over capacity during these same periods, respectively, under existing conditions.

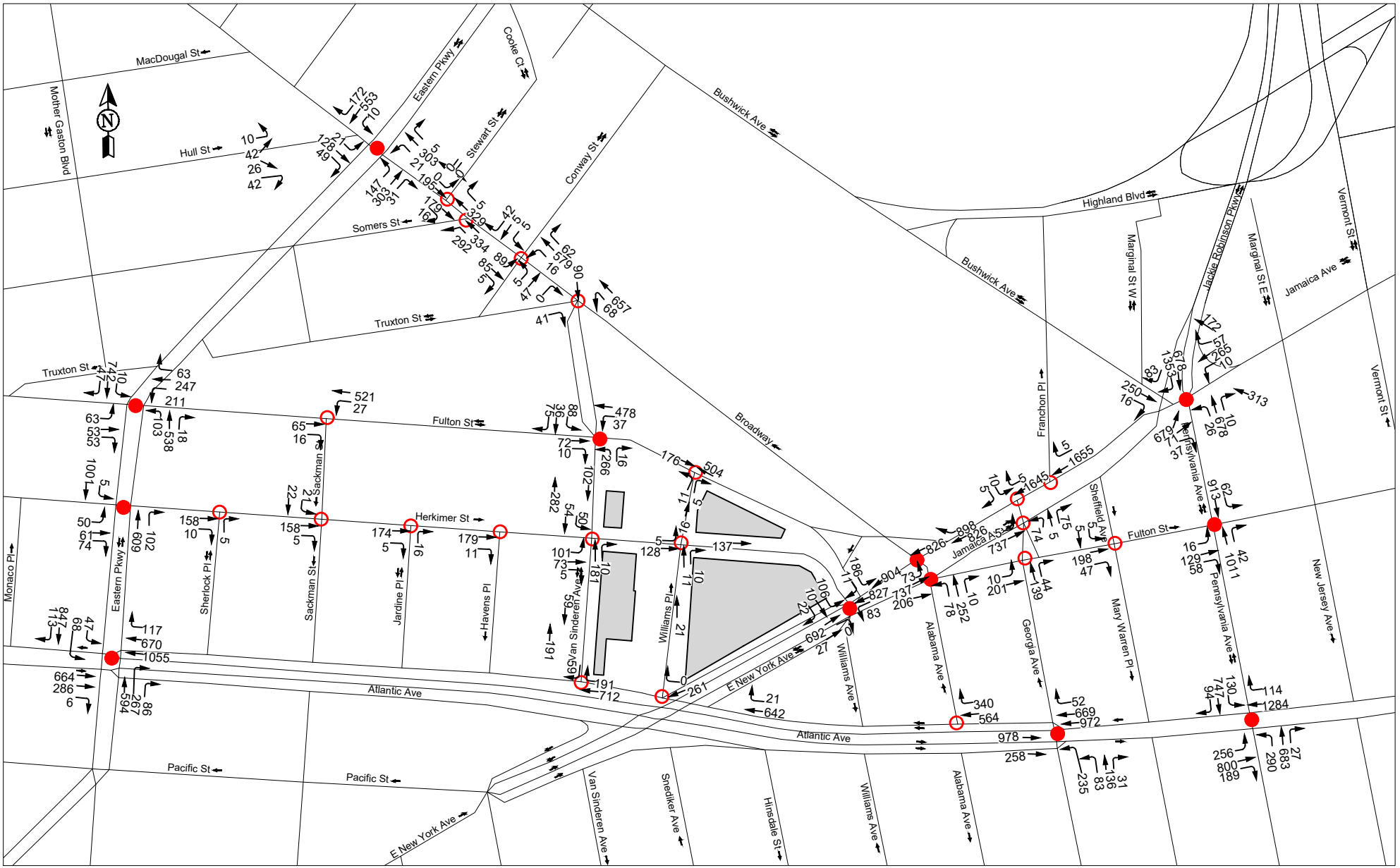


Source: NYCDCP (PLUTO 2024, Version 1); DoITT; ESRI

Legend

- Project Area
- Half-Mile Radius
- Quarter-Mile Radius
- 1 No-Action Developments (refer to Table 13-24)

No-Action Weekday AM Peak Hour Traffic Volumes



LEGEND

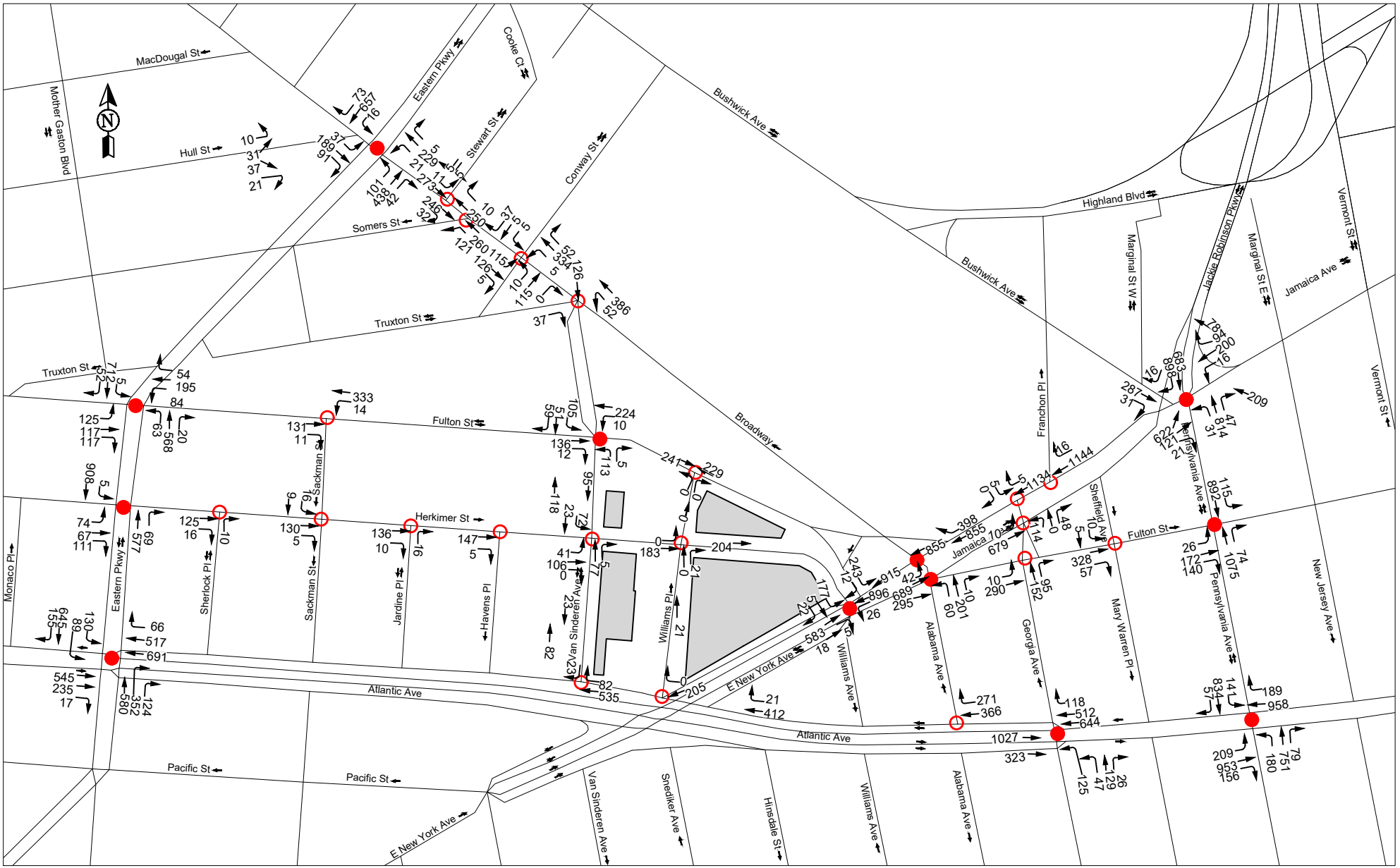
Development Site

Analysis Location (Signalized)

Analysis Location (Unsignalized)

2 = Weekday AM Traffic Volume

No-Action Weekday Midday Peak Hour Traffic Volumes



LEGEND

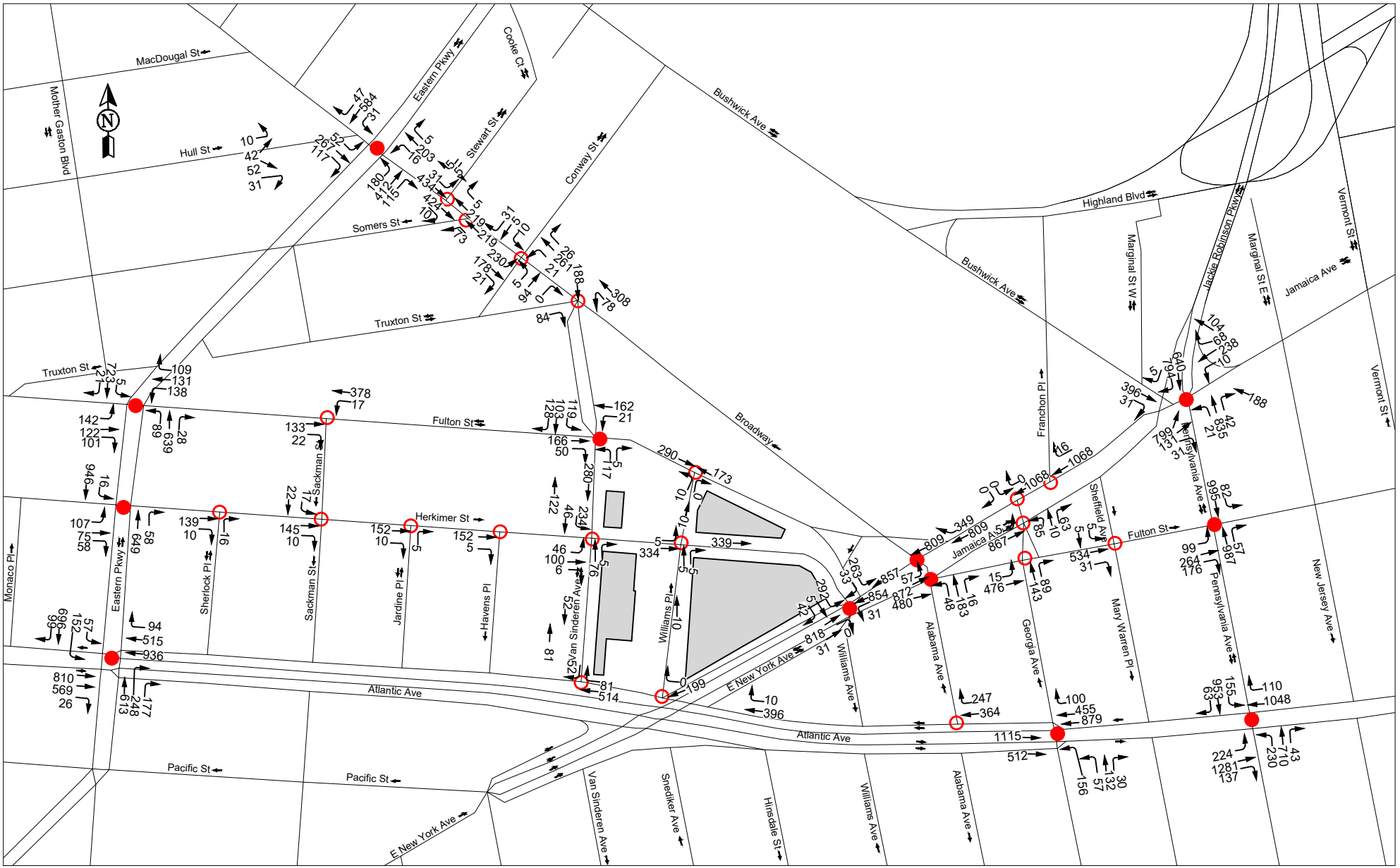
Development Site

Analysis Location (Signalized)

Analysis Location (Unsignalized)

2 = Weekday Midday Traffic Volume

No-Action Weekday PM Peak Hour Traffic Volumes



LEGEND

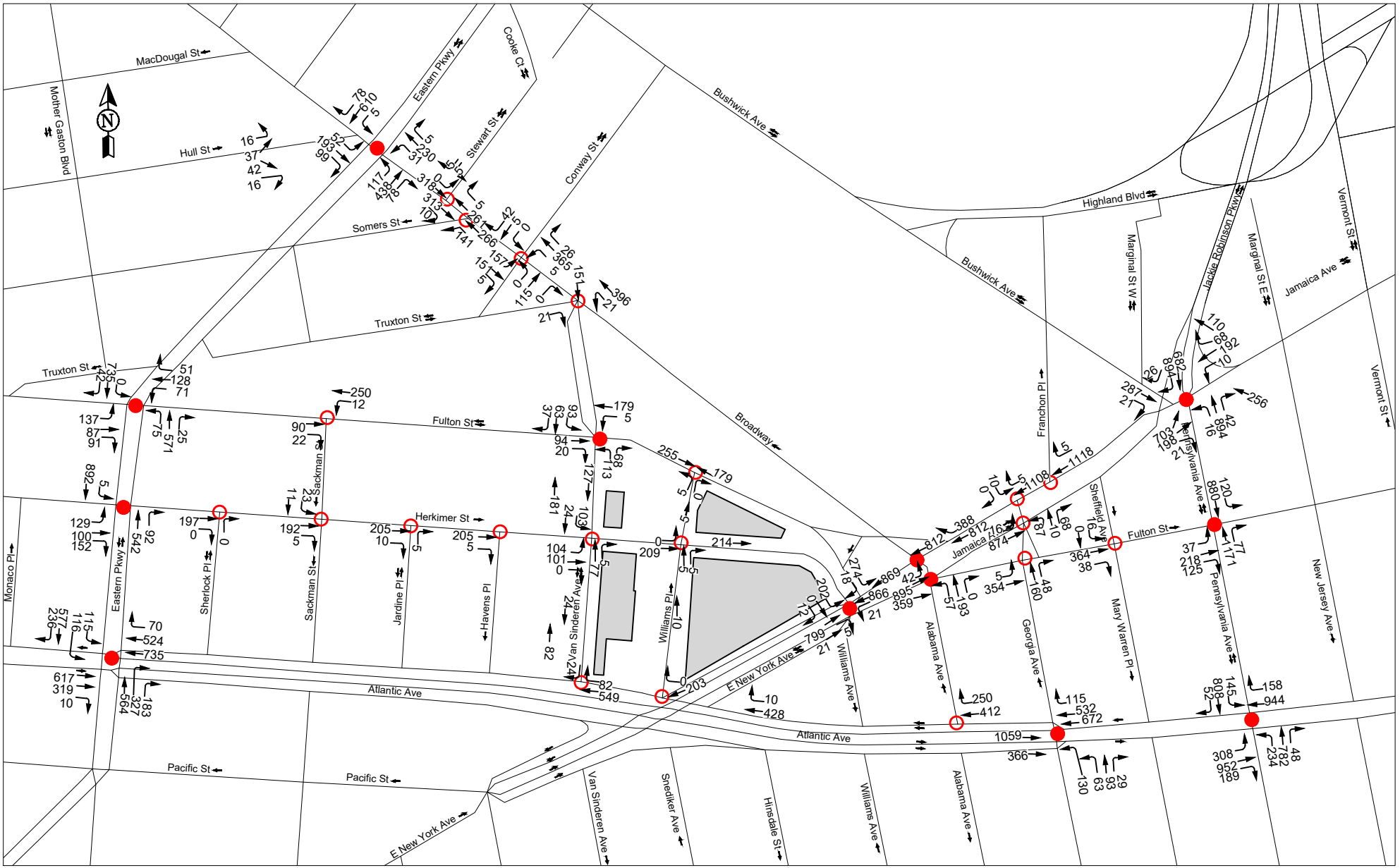
Development Site

Analysis Location (Signalized)

Analysis Location (Unsignalized)

2 = Weekday PM Traffic Volume

No-Action Saturday Peak Hour Traffic Volumes



LEGEND

Development Site

Analysis Location (Signalized)

Analysis Location (Unsignalized)

2 = Saturday Traffic Volume

TABLE 13-24
No-Action Condition Level of Service at Analyzed Intersections

Signalized Intersections	Approach	Lane Group	Existing Weekday AM V/C Ratio	Existing Weekday AM Delay (sec/veh)	Existing Weekday AM LOS		No-Action Weekday AM V/C Ratio	No-Action Weekday AM Delay (sec/veh)	No-Action Weekday AM LOS		Existing Weekday Midday V/C Ratio	Existing Weekday Midday Delay (sec/veh)	Existing Weekday Midday LOS		No-Action Weekday Midday V/C Ratio	No-Action Weekday Midday Delay (sec/veh)	No-Action Weekday Midday LOS		Existing Weekday PM V/C Ratio	Existing Weekday PM Delay (sec/veh)	Existing Weekday PM LOS		No-Action Weekday PM V/C Ratio	No-Action Weekday PM Delay (sec/veh)	No-Action Weekday PM LOS		Existing Saturday V/C Ratio	Existing Saturday Delay (sec/veh)	Existing Saturday LOS		No-Action Saturday V/C Ratio	No-Action Saturday Delay (sec/veh)	No-Action Saturday LOS	
1: Broadway (E-W) @	EB	LTR	0.59	45.3	D		0.80	59.8	E	*	0.98	76.5	E	*	1.22	155.6	F	*	1.05	100.9	F	*	1.27	183.9	F	*	1.05	97.4	F	*	1.35	211.7	F	*
Eastern Pkwy (N-S) & Hull St (NE)	WB	TR	0.90	65.8	E	*	0.94	73.1	E	*	0.66	36.7	D		0.71	39.0	D		0.53	41.1	D		0.57	42.7	D		0.71	38.8	D		0.77	43.5	D	
	NB	LTR	0.92	29.0	C	*	1.24	34.3	C	*	0.64	22.9	C		0.95	37.5	D	*	0.88	41.0	D		1.21	87.4	F	*	0.64	22.8	C		0.92	41.9	D	*
	SB	LTR	0.63	25.2	C		0.65	25.9	C		0.69	23.4	C		0.72	24.4	C		0.55	23.5	C		0.58	24.2	C		0.58	20.8	C		0.61	21.3	C	
(Hull St)	NEB	LTR	0.95	113.7	F	*	0.99	123.2	F	*	0.71	61.2	E	*	0.74	64.1	E	*	0.99	122.6	F	*	1.03	132.6	F	*	0.77	66.8	E	*	0.82	72.8	E	*
5: Fulton St (E-W) @	EB	LTR	0.59	37.5	D		0.64	40.3	D		1.05	89.3	F	*	1.28	175.0	F	*	1.05	96.5	F	*	1.21	153.9	F	*	0.99	77.0	E	*	1.17	134.8	F	*
Eastern Pkwy (N-S)	WB	LTR	1.05	89.6	F	*	1.20	144.0	F	*	0.74	44.2	D		1.11	118.0	F	*	0.70	40.9	D		1.27	178.4	F	*	0.44	41.2	D		0.74	39.2	D	
	NB	LTR	0.68	46.7	D		0.76	48.8	D		0.52	16.7	B		0.57	18.8	B		0.72	15.0	B		0.79	17.6	B		0.53	13.3	B		0.60	20.4	C	
	SB	LTR	0.52	26.1	C		0.55	26.7	C		0.51	20.9	C		0.54	21.4	C		0.45	26.0	C		0.48	26.6	C		0.42	19.6	B		0.45	20.0	C	
7: Fulton St (E-W) @	EB	TR	0.13	18.9	B		0.20	19.8	B		0.25	11.1	B		0.34	12.5	B		0.30	21.3	C		0.54	26.0	C		0.17	33.1	C		0.26	31.5	C	
Van Sinderen Av (N-S)	WB	LT	0.95	59.2	E	*	1.18	130.5	F	*	0.51	25.3	C		0.60	28.0	C		0.40	23.1	C		0.51	25.6	C		0.36	22.1	C		0.45	24.0	C	
	NB	LTR	0.31	28.3	C		1.40	234.0	F	*	0.17	25.9	C		0.60	38.7	D		0.14	25.5	C		0.75	52.1	D		0.32	28.2	C		0.82	53.4	D	
	SB	LTR	0.49	32.6	C		0.66	40.0	D		0.49	33.8	C		0.86	59.6	E	*	0.87	56.8	E	*	1.11	120.1	F	*	0.34	29.7	C		0.54	34.5	C	
(Bus Lane)	SEB	LR	0.24	35.2	D		0.25	36.5	D		0.20	36.4	D		0.21	37.5	D		0.28	36.5	D		0.29	36.4	D		0.24	30.7	C		0.26	28.5	C	
(Bus Lane)	SEB	R	0.11	33.1	C		0.11	33.1	C		0.10	34.1	C		0.10	35.6	D		0.25	35.9	D		0.26	36.0	D		0.09	28.5	C		0.09	26.4	C	
9: Herkimer St (E) @	EB	LTR	0.53	41.3	D		0.63	45.1	D		0.68	34.9	C		0.85	49.7	D		0.68	47.1	D		0.77	52.2	D		1.00	74.5	E	*	1.09	100.4	F	*
Eastern Pkwy (N-S)	NB	TR	0.46	6.7	A		0.55	8.3	A		0.54	6.0	A		0.60	6.6	A		0.48	6.1	A		0.54	6.6	A		0.51	6.5	A		0.60	35.0	C	
	SB	LT	0.68	16.5	B		0.74	18.3	B		0.81	18.1	B		0.88	22.1	C		0.60	11.9	B		0.70	13.6	B		0.68	12.6	B		0.76	46.7	D	
16: Atlantic Av (E-W) @	EB	LTR	0.61	32.0	C		0.64	32.7	C		0.74	36.6	D		0.78	38.1	D		0.87	41.0	D		0.91	44.5	D	*	0.85	41.3	D		0.90	44.7	D	*
Eastern Pkwy (N-S)	WB	T	0.97	51.5	D	*	1.10	90.1	F	*	0.91	45.7	D	*	1.11	95.7	F	*	0.74	26.3	C		0.88	32.6	C		0.95	50.0	D	*	1.13	105.6	F	*
	WB	R	0.25	25.6	C		0.26	25.3	C		0.21	29.2	C		0.26	30.0	C		0.20	19.6	B		0.21	20.3	C		0.23	29.4	C		0.27	30.2	C	
	NB	T	0.59	39.2	D		0.71	42.3	D		0.54	27.1	C		0.60	28.1	C		0.68	41.4	D		0.76	44.2	D		0.49	26.1	C		0.55	27.2	C	
	NB	R	1.03	96.0	F	*	1.26	180.2	F	*	1.04	80.4	F	*	1.45	246.0	F	*	1.05	97.4	F	*	1.22	162.9	F	*	1.05	82.1	F	*	1.23	149.4	F	*
	SB	TR	0.87	24.1	C		0.97	33.5	C	*	0.86	10.6	B		0.98	12.9	B	*	1.05	49.6	D	*	1.24	49.5	D	*	0.85	9.5	A		0.99	31.6	C	*
18: Atlantic Av WB Service Rd (W) @	WB	TR	0.62	20.3	C		0.65	21.1	C		0.40	16.1	B		0.43	16.6	B		0.39	16.0	B		0.41	16.2	B		0.61	22.4	C		0.64	23.1	C	
East New York Av SB Service Rd (SW) &	SWB	R‡					0.80	69.1	E	*					0.64	27.3	C						0.61	28.7	C						0.60	36.5	D	
William Pl (N)																																		
19: East New York Av (E-W) @	EB	TR	0.30	19.1	B		0.34	19.5	B		0.26	18.5	B		0.28	18.8	B		0.39	20.3	C		0.43	20.8	C		0.40	20.4	C		0.43	20.8	C	
Herkimer St (S) & Fulton St (SW) &	WB	LTR	0.70	10.0	A		0.59	10.8	B		0.67	9.5	A		0.53	8.1	A		0.68	10.1	B		0.56	8.3	A		0.67	5.6	A		0.55	5.0	A	
Williams Ave (S)	SB	LTR	0.43	49.1	D		0.54	52.4	D		0.58	53.5	D		0.71	59.9	E	*	0.96	93.3	F	*	1.41	254.9	F	*	0.73	63.2	E	*	0.95	92.8	F	*
	SWB	LR	0.53	46.2	D		0.63	49.9	D		0.69	52.0	D		0.79	59.0	E	*	0.67	52.1	D		1.02	98.2	F	*	0.81	61.6	E	*	0.96	85.1	F	*
20: East New York Av (E-W) & Jamaica Av	EB	LTR	0.76	14.6	B		1.08	28.0	C	*	0.59	10.6	B		0.74	14.2	B		0.84	17.5	B		1.07	61.4	E	*	0.87	19.2	B		1.05	52.7	D	*
(E-W) @	WB	TR	1.05	3.2	A	*	1.25	6.8	A	*	0.55	5.2	A		0.74	10.7	B		0.51	5.8	A		0.60	7.4	A		0.58	4.3	A		0.69	6.0	A	
Alabama Av (N) & Broadway (N)	NB	L	0.11	58.2	E	*	0.43	62.6	E	*	0.15	43.8	D		0.38	48.0	D		0.08	41.0	D		0.38	46.5	D		0.08	43.3	D		0.23	45.1	D	
	NB	TR	0.96	104.2	F	*	1.00	110.9	F	*	0.73	61.8	E	*	0.76	61.2	E	*	0.86	76.4	E	*	0.90	79.5	E	*	0.66	57.5	E	*	0.69	58.5	E	*
21: Jamaica Av (E-W) @	EB	L	0.03	36.1	D		0.03	66.5	E	*	0.51	86.3	F	*	0.51	79.8	E	*	0.30	56.4	E	*	0.30	46.9	D		0.46	48.3	D		0.56	38.3	D	
Georgia Av (N) & Bus Depot Entrance (S)	EB	T	0.35	5.3	A		0.40	6.6	A		0.34	3.8	A		0.38	3.7	A		0.41	4.1	A		0.53	5.0	A		0.59	13.1	B		0.67	15.7	B	
	WB	TR	0.58	2.5	A		0.67	2.7	A		0.45	2.0	A		0.50	2.1	A		0.42	2.1	A		0.47	2.2	A		0.57	3.0	A		0.64	3.3	A	
	NB	L	0.20	44.0	D		0.33	44.8	D		0.41	48.6	D		0.50	50.8	D		0.30	47.2	D		0.40	48.7	D		0.24	42.2	D		0.31	43.3	D	
	NB	T	0.03	42.3	D		0.03	41.0	D		0.00	0.0	A		0.00	0.0	A		0.08	43.9	D		0.08	42.7	D		0.07	40.2	D		0.07	39.9	D	
	NB	R	0.24	44.5	D		0.30	44.0	D		0.20	44.4	D		0.24	44.9	D		0.26	46.2	D		0.30	46.4	D		0.25	42.5	D		0.27	42.6	D	
	SB	R	0.04	47.6	D		0.04	47.6	D						0.00	0.0	A						0.00	0.0	A						0.00	0.0	A	
23: Jamaica Av (E-W) @	EB	L	1.05	97.8	F	*	1.24	169.4	F	*	0.97	78.3	E	*	1.09	111.6	F	*	1.03	92.7	F	*	1.33	207.5	F	*	1.05	96.9	F	*	1.20	152.5	F	*
Jackie Robinson Pkwy/Pennsylvania Av	EB	T	0.53	52.3	D		0.57	54.2	D		0.56	52.8	D		0.72	66.5	E	*	0.71	61.3	E	*	0.79	67.6	E	*	0.91	82.7	F	*	0.99	100.1	F	*
(N-S) & Bushwick Av (SE-NW)	WB	TR	1.05	106.1	F	*	0.94	77.5	E	*	1.05	109.1	F	*	0.56	48.5	D		1.05	106.5	F	*	0.89	70.6	E	*	1.05	108.5	F	*	0.86	69.5	E	*
	WB	R‡					0.24	45.8	D						0.58	59.6	E	*					0.32	47.5	D						0.33	47.8	D	
	NB	L	0.93	46.3	D	*	0.97	51.1	D	*	0.65	19.7	B		0.68	20.5	C		0.52	17.9	B		0.55	18.1	B		0.78	56.6	E	*	0.82	59.8	E	*
	NB	TR	0.57	1.9	A		0.61	2.0	A		0.51	3.7	A		0.70	5.1	A		0.52	5.0	A		0.55	5.1	A		0.73	26.0	C		0.77	27.5	C	
	SB	T	0.85	55.1	E	*	0.89	59.2	E	*	0.93	63.2	E	*	0.97	71.4	E	*	0.93	64.1	E	*	0.98	74.3	E	*	0.88	57.5	E	*	0.93	63.7	E	*
	SB	R	1.02	62.3	E	*	1.18	120.9	F	*	0.77	31.4	C		0.85	35.4	D		0.65	27.2	C		0.75	30.3	C		0.75	30.4	C		0.84	35.2	D	
	SE	R	0.91	75.3	E	*	0.94	82.3	F	*	1.05	109.0	F	*	1.10	123.1	F	*	1.05	103.2	F	*	1.09	116.7	F	*	1.05	106.7	F	*	1.09	121.3	F	*
26: Pennsylvania Av (E-W) @	EB	L	0.04	30.9	C		0.04	30.8	C		0.06	20.9	C		0.07	21.5	C		0.20	17.2	B		0.20	19.5	B		0.11	27.0	C		0.12	27.1	C	
Fulton St (N-S)	EB	TR	0.18	32.1	C		0.22	32.9	C		0.39	24.4	C		0.48	26.0	C		0.36	18.0	B		0.44	21.2	C		0.50	32.0	C		0.60	34.1	C	
	NB	TR	0.83	25.8	C		0.88	28.0	C		0.82	22.6	C		0.86	24.0	C		0.79	24.4	C		0.83	26.1	C		0.76	13.4	B		0.80	13.6	B	
	SB	L	0.29	17.0	B		0.32	19.5	B		0.41	15.9	B		0.45	18.7	B		0.32	9.1	A		0.34	11.0	B		0.43	25.9	C		0.47	30.0	C	
	SB	T	0.52	6.2	A		0.55	6.4	A		0.47	1.0	A		0.49	1.5	A		0.56	1.7	A		0.59	1.5	A		0.42	8.4	A		0.44	8.6	A	
28: Atlantic Av (E-W) @	EB	T	0.46	20.4	C		0.48	21.2	C		0.53	17.9	B		0.55	18.3	B		0.60	13.2	B		0.63	13.0	B		0.54	18.0	B		0.57	18.5	B	
Georgia Av (N)	WB	TR	0.65	20.2	C		0.71	21.5	C		0.51	17.6	B		0.56	18.5	B		0.51	17.6	B		0.55	18.2	B		0.50	17.4	B		0.54	18.0	B	
	NB	LTR	0.93	66.8	E	*	1.09	108.1	F	*	0.69	46.4	D		0.91	69.1	E	*	0.68	44.7	D		0.78	50.1	D		0.66	44.6	D		0.78	51.2	D	
29: Atlantic Av (E-W) @	EB	L	1.05	126.0	F	*	1.10	141.8	F	*	1.04	118.6	F	*	1.18	166.0	F	*	1.05	119.7	F	*	1.17	162.2	F	*	1.05	105.1	F	*	1.06	109.6	F	*
Pennsylvania Av (N-S)	EB	LTR	0.83	32.5	C		0.87	35.3	D		0.76	31.5	C		0.82	34.0	C		0.89	39.6	D		0.96	48.4	D	*	1.04	62.4	E	*	1.02	54.5	D	*
	WB	TR	0.86	42.0	D		0.93	48.6	D	*	0.80	40.2	D		0.87	44.4	D		0.82	44.4	D		0.88	48.4	D		0.84	36.3	D		0.90	41.1	D	*
	NB	L	1.04	98.0	F	*	1.30	194.0	F	*	1.01	95.1	F	*	1.21	164.2	F	*	1.05	101.9	F	*	1.23	169.4	F	*	1.05	92.5	F	*	1.19	140.9	F	*
	NB	TR	0.74	42.3	D		0.78	43.7	D		0.78	39.1	D		0.82	41.2	D		0.63	33.7	C		0.66	34.5	C		0.80	33.6	C		0.84	35.6	D	
	SB	L	0.67	63.6	E	*	0.75	70.9	E	*	0.77	56.8	E	*	0.88	78.6	E	*	0.63	34.8	C		0.73	42.9	D		0.76	48.9	D		0.89	69.4	E	*
	SB	TR	0.94	78.4	E	*	0.99	88.3	F	*	0.78	27.3	C		0.83	29.3	C		0.89	35.7	D		0.96	45.5	D	*	0.86	29.1	C		0.91	33.1	C	*

TABLE 13-24 (Cont.)
No-Action Condition Level of Service at Analyzed Intersections

Unsignalized Intersections	Approach	Lane Group	Existing Weekday AM V/C Ratio	Existing Weekday AM Delay (sec/veh)	Existing Weekday AM LOS	No-Action Weekday AM V/C Ratio	No-Action Weekday AM Delay (sec/veh)	No-Action Weekday AM LOS	Existing Weekday Midday V/C Ratio	Existing Weekday Midday Delay (sec/veh)	Existing Weekday Midday LOS	No-Action Weekday Midday V/C Ratio	No-Action Weekday Midday Delay (sec/veh)	No-Action Weekday Midday LOS	Existing Weekday PM V/C Ratio	Existing Weekday PM Delay (sec/veh)	Existing Weekday PM LOS	No-Action Weekday PM V/C Ratio	No-Action Weekday PM Delay (sec/veh)	No-Action Weekday PM LOS	Existing Saturday V/C Ratio	Existing Saturday Delay (sec/veh)	Existing Saturday LOS	No-Action Saturday V/C Ratio	No-Action Saturday Delay (sec/veh)	No-Action Saturday LOS
2: Broadway (E-W) @	EB	LT	0.00	0.00	A	0.00	0.00	A	0.01	0.4	A	0.01	0.5	A	0.03	0.8	A	0.03	0.9	A	0.00	0.0	A	0.00	0.0	A
Stewart St (N-S)	WB	TR	0.22	0.0	A	0.23	0.0	A	0.17	0.0	A	0.17	0.0	A	0.15	0.0	A	0.16	0.0	A	0.17	0.0	A	0.18	0.0	A
	SB	LR	0.00	0.0	A	0.00	0.0	A	0.02	11.4	B	0.02	12.2	B	0.03	13.5	B	0.03	15.0	B	0.02	11.9	B	0.03	13.0	B
3: Broadway (E-W) @	EB	LTR	0.12	6.2	A	0.13	5.7	A	0.12	5.1	A	0.13	4.9	A	0.22	6.0	A	0.25	6.2	A	0.17	5.8	A	0.19	5.8	A
Conway St (N-S)	WB	LTR	0.02	0.4	A	0.02	0.6	A	0.00	0.2	A	0.01	0.2	A	0.02	0.8	A	0.03	1.1	A	0.00	0.2	A	0.01	0.2	A
	NB	LTR	0.45	50.3	F *	0.68	101.6	F *	0.62	46.7	E *	1.07	167.1	F *	1.05	194.4	F *	1.92	603.6	F *	0.86	96.5	F *	1.58	386.6	F *
	SB	LTR	0.20	19.9	C	0.27	25.6	D	0.15	16.6	C	0.35	38.6	E *	1.02	281.3	F *	N/A	>9999	F *	0.12	14.2	B	0.17	17.4	C
4: Broadway (E-W) @	EB	R	0.04	0.0	A	0.07	0.0	A	0.07	0.0	A	0.09	0.0	A	0.11	0.0	A	0.14	0.0	A	0.08	0.0	A	0.11	0.0	A
Van Sinderen Av (S)	WB	LT	0.05	1.3	A	0.06	1.4	A	0.50	1.5	A	0.05	1.5	A	0.07	2.3	A	0.08	2.4	A	0.02	0.7	A	0.03	0.7	A
6: Fulton St (E-W) @	EB	TR	0.05	0.0	A	0.06	0.0	A	0.09	0.0	A	0.10	0.0	A	0.09	0.0	A	0.10	0.0	A	0.06	0.0	A	0.07	0.0	A
Sackman St (S)	WB	LT	0.02	0.6	A	0.02	0.7	A	0.00	0.2	A	0.01	0.5	A	0.01	0.6	A	0.02	0.5	A	0.01	0.5	A	0.01	0.5	A
8: Fulton St (E-W) @	NB	LR	0.04	12.9	B	0.05	14.8	B	0.00	0.0	A	0.00	0.0	A	0.02	11.5	B	0.03	13.2	B	0.01	11.2	B	0.01	12.1	B
William Pl (N)																										
10: Herkimer St (E) @	EB	TR	0.07	0.0	A	0.12	0.0	A	0.07	0.0	A	0.10	0.0	A	0.07	0.0	A	0.10	0.0	A	0.11	0.0	A	0.14	0.0	A
Sherlock Pl (N-S)	NB	LT	0.01	9.1	A	0.01	9.7	A	0.01	9.3	A	0.02	11.7	B	0.02	9.4	A	0.03	9.8	A	0.00	0.0	A	0.00	0.0	A
11: Herkimer St (E) @	EB	TR	0.06	0.0	A	0.12	0.0	A	0.07	0.0	A	0.10	0.0	A	0.08	0.0	A	0.11	0.0	A	0.11	0.0	A	0.14	0.0	A
Sackman St (N-S)	SB	LT	0.08	11.6	B	0.11	13.1	B	0.03	11.9	B	0.17	28.0	D	0.07	11.5	B	0.09	12.4	B	0.07	12.3	B	0.09	13.5	B
12: Herkimer St (E) @	EB	TR	0.07	0.0	A	0.12	0.0	A	0.08	0.0	A	0.11	0.0	A	0.08	0.0	A	0.11	0.0	A	0.12	0.0	A	0.16	0.0	A
Jardine Pl (N-S)	NB	LR	0.02	9.4	A	0.03	10.0	B	0.02	9.2	A	0.03	11.2	B	0.01	8.9	A	0.01	9.2	A	0.01	9.6	A	0.01	9.9	A
13: Herkimer St (E) @	EB	TR	0.08	0.0	A	0.13	0.0	A	0.07	0.0	A	0.10	0.0	A	0.07	0.0	A	0.10	0.0	A	0.12	0.0	A	0.15	0.0	A
Havens Pl (S)																										
14: Herkimer St (E) @	EB	LTR		8.1	A		10.1	B		8.0	A		8.8	A		8.2	A		9.6	A		8.8	A		10.0	A
Van Sinderen Av (N-S)	NB	TR		7.7	A		9.7	A		7.6	A		8.2	A		7.6	A		8.6	A		7.6	A		8.4	A
(All-way Stop)	SB	LT		8.0	A		9.2	A		8.0	A		8.6	A		8.8	A		11.3	B		8.2	A		9.2	A
15: Herkimer St (E) @	EB	TR	0.00	0.4	A	0.00	0.3	A	0.00	0.0	A	0.00	0.0	A	0.00	0.2	A	0.00	0.1	A	0.00	0.0	A	0.00	0.0	A
William Pl (N)	NB	LT	0.03	9.7	A	0.04	10.4	B	0.03	9.5	A	0.92	347.1	F *	0.02	10.4	B	0.02	12.3	B	0.02	10.0	A	0.02	11.0	B
17: Atlantic Av WB Service Rd (W) @	EB	TR	0.39	0.0	A	0.58	0.0	A	0.26	0.0	A	0.41	0.0	A	0.27	0.0	A	0.42	0.0	A	0.27	0.0	A	0.42	0.0	A
Van Sinderen Av (N-S)	SB	R	0.13	13.5	B	0.23	19.9	C	0.03	10.8	B	0.11	20.2	C	0.07	11.1	B	0.14	14.5	B	0.03	10.7	B	0.07	13.5	B
22: Truxton St (W) @	EB	R	0.08	11.0	B	0.11	13.5	B	0.07	10.9	B	0.11	14.8	B	0.22	15.4	C	0.38	26.1	D	0.04	10.9	B	0.07	15.2	C
Van Sinderen Av (N-S)	SB	T	0.06	7.4	A	0.09	7.6	A	0.08	7.5	A	0.11	7.6	A	0.13	7.5	A	0.16	7.7	A	0.07	7.4	A	0.10	7.6	A
24: Fulton St (W) @	EB	LT	0.01	0.5	A	0.01	0.4	A	0.01	0.4	A	0.01	0.3	A	0.01	0.4	A	0.01	0.4	A	0.00	0.2	A	0.00	0.1	A
Georgia Av (N)	NB	TR	0.62	36.8	E *	0.99	100.8	F *	0.75	40.7	E *	1.60	339.0	F *	0.98	96.1	F *	1.45	275.3	F *	0.53	23.7	C	0.75	41.2	E *
25: Fulton St (W) @	EB	TR	0.15	0.0	A	0.18	0.0	A	0.22	0.0	A	0.25	0.0	A	0.33	0.0	A	0.38	0.0	A	0.24	0.0	A	0.29	0.0	A
Sheffield Av (S) & Mary Warren Pl (S)	SB	LT	0.02	12.1	B	0.03	12.8	B	0.04	12.6	B	0.04	14.0	B	0.03	15.6	C	0.04	17.6	C	0.04	12.3	B	0.04	13.2	B
27: Atlantic Av WB Service Rd (W) @	WB	TR	0.51	0.0	A	0.57	0.0	A	0.38	0.0	A	0.42	0.0	A	0.38	0.0	A	0.42	0.0	A	0.41	0.0	A	0.45	0.0	A
Alabama Av (N)																										
30: Broadway (E-W) @	EB	TR	0.11	0.0	A	0.14	0.0	A	0.17	0.0	A	0.19	0.0	A	0.28	0.0	A	0.31	0.0	A	0.20	0.0	A	0.23	0.0	A
Somers St (S)	WB	LT	0.26	5.8	A	0.31	6.6	A	0.12	3.7	A	0.15	4.2	A	0.09	3.1	A	0.11	3.6	A	0.15	4.2	A	0.18	4.9	A

Notes:
EB - eastbound, WB - westbound, NB - northbound, SB - southbound
L - left, T - through, R - right, DefL - Analysis considers a defacto left-turn lane on this approach
V/C ratio - volume-to-capacity ratio
Sec/veh - seconds per vehicle
LOS - level of service
* - Denotes a congested movement (LOS E or F, or v/c ratio greater than or equal to 0.9)
‡ - Denotes the lane group was closed due to construction in the existing conditions.
Analysis is based on the 2000 Highway Capacity Manual methodology (Synchro 12)

The Future With the Proposed Actions (With-Action Condition)

Future With-Action Traffic Growth

In the 2036 future with the Proposed Actions (the With-Action condition), the Proposed Actions would be approved, and the projected development sites in the Project Area would be redeveloped. As shown in **Table 13-11**, the Alternate Community Facility Scenario, which is the more conservative RWCDS with respect to vehicle trip generation, is expected to result in an incremental increase of approximately 986, 519, 1,144, and 728 additional vehicle trips (auto, taxi, and truck) during the weekday AM, midday, PM, and Saturday peak hours, respectively.

The assignments of auto and taxi trips to the street network in proximity to the Project Area were based on the anticipated origins and destinations of vehicle trips associated with the different land uses projected under the RWCDS for the Alternate Community Facility Scenario. The origins/destinations for residential uses were based on 2012–2016 ACS journey-to-work data, while those for the office, light industrial, and community facility (academic university) trips used for the assignments were based on 2012-2016 AASHTO CTPP reverse journey-to-work data for Brooklyn census tracts 365.01, 365.02, 367, 369, 405, 908, 1142.01, 1144, and 1198. The origins/destinations for the local retail and community facility (house of worship) uses that are mostly local in nature were based on population density in neighborhoods within a half-mile radius of the Project Area. The origins/destinations for the supermarket use were based on population density in neighborhoods within a one-mile radius of the Project Area. The origins/destinations for the destination retail use were based on population density in neighborhoods within a two-mile radius of the Project Area. (Additional data on the distributions of auto and taxi trips by land use are presented in the *Transportation Planning Factors and Travel Demand Forecast Technical Memorandum* included in **Appendix E**.)

Based on the O-D data, auto and taxi trips were first assigned to various portals on the periphery of East New York, and from there via the most direct route to the Project Area. As the RWCDS for the Alternate Community Facility Scenario includes a limited amount on-site parking, auto trips were assigned directly to the proposed parking garage entrances on Van Sinderen Avenue for Projected Development Site 1B and East New York Avenue for Projected Development Sites 1D and 1E. Similarly, vehicle trips for Projected Development Sites 1A, 1C, and 2 were conservatively assigned to their respective frontages. Although some drivers may park at on-street parking spaces, assigning all trips to the Project Area can be considered a conservative approach with respect to the traffic impact analysis as it concentrates project traffic at analyzed intersections in proximity to the Project Area rather than dispersing traffic to outlying parking facilities.

Taxi trips were generally assigned to the projected development site frontages. Trucks were assigned to DOT-designated truck routes—i.e., Atlantic Avenue (a Through Truck Route) and Pennsylvania Avenue (a Local Truck Route) — and then to the most direct paths to and from the Project Area's loading docks on East New York Avenue for Projected Development Sites 1D and 1E. Similarly, truck trips for Projected Development Sites 1A, 1B, 1C, and 2 were assigned to their respective frontages.

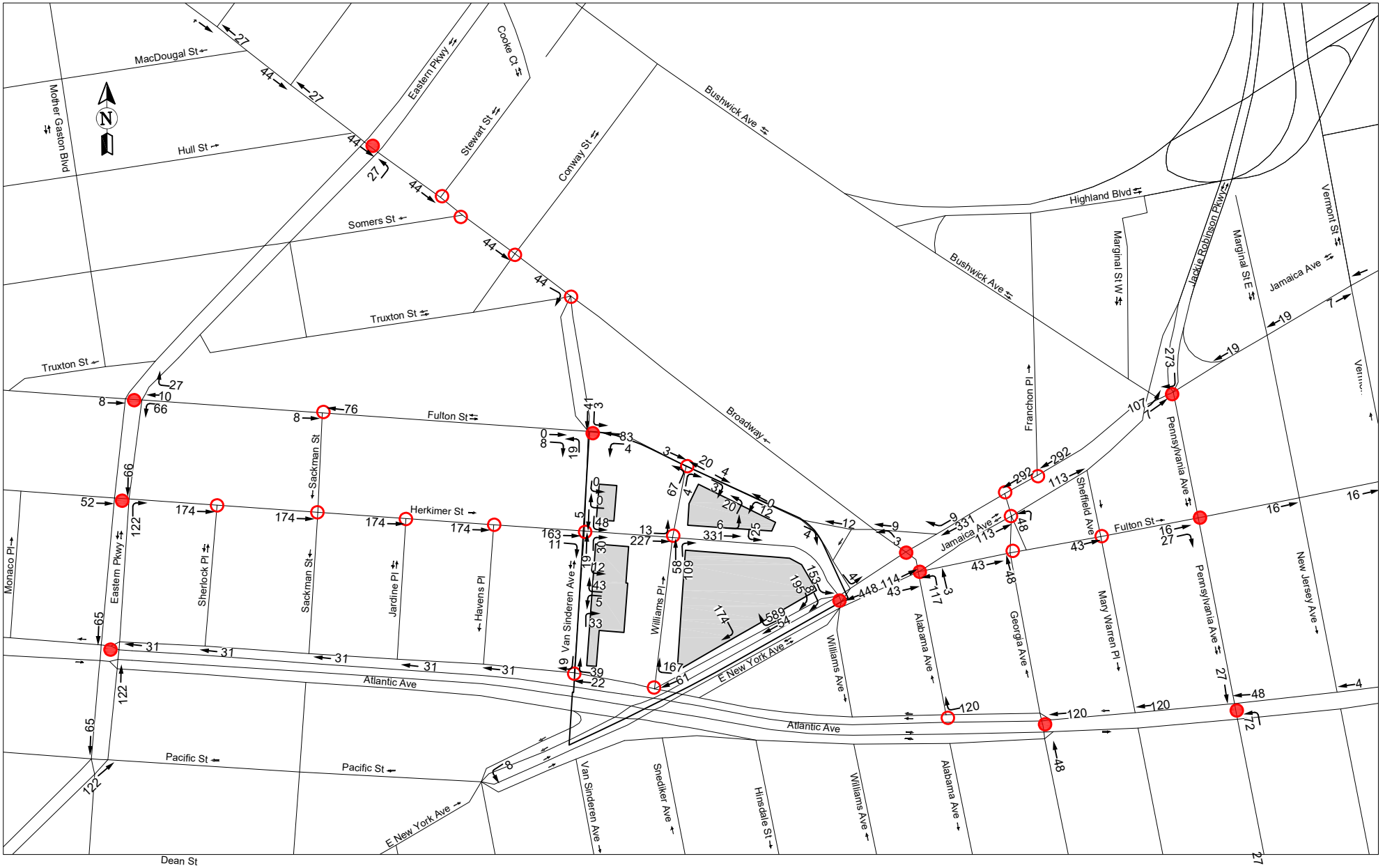
Figures 13-9a through **13-9d** show the assignment of incremental vehicle trips (auto, taxi, and truck) generated during the weekday AM, midday, PM, and Saturday peak hours under the Proposed Actions. **Figures 13-10a** through **13-10d** show the total weekday AM, midday, PM, and Saturday traffic volumes in the 2036 With-Action condition. The volumes shown are the combination of the net incremental traffic generated by the Proposed Actions and the No-Action volumes.

Intersection Capacity Analysis

The v/c ratios, delays, and levels of service for those individual lane groups experiencing congestion in one or more peak hours under the With-Action condition are shown in **Table 13-25**. Lane groups with significant adverse impacts are denoted with an asterisk (*). As shown in **Table 13-25**, a total of 17 intersections (12 signalized and five unsignalized) would have at least one congested lane group in one or more peak hours in the With-Action condition, compared to 15 intersections (13 signalized and two unsignalized) in the No-Action condition.

The traffic impact analysis indicates the potential for significant adverse impacts at 16 intersections (11 signalized and five unsignalized) during one or more analyzed peak hours. (As noted above, most of these intersections would already be congested in the No-Action condition.) Significant adverse impacts were identified to 23 lane groups at 14 intersections during the weekday AM peak hour, 19 lane groups at 13 intersections in the weekday midday peak hour, 27 lane groups at 16 intersections in the weekday PM peak hour, and 20 lane groups at 14 intersections during the Saturday peak hour. To the extent practicable measures to mitigate the significant adverse traffic impacts identified in **Table 13-25** have been identified, they are described in **Chapter 20, "Mitigation."** As described in **Chapter 20, "Mitigation,"** mitigation measures will continue to be evaluated between certification of the DEIS and publication of the FEIS. To the extent there are no practicable measures to fully mitigate these impacts, they would be unmitigated or only partially mitigated, as the case may be.

Weekday AM Incremental Project Vehicle Trip Assignments



LEGEND

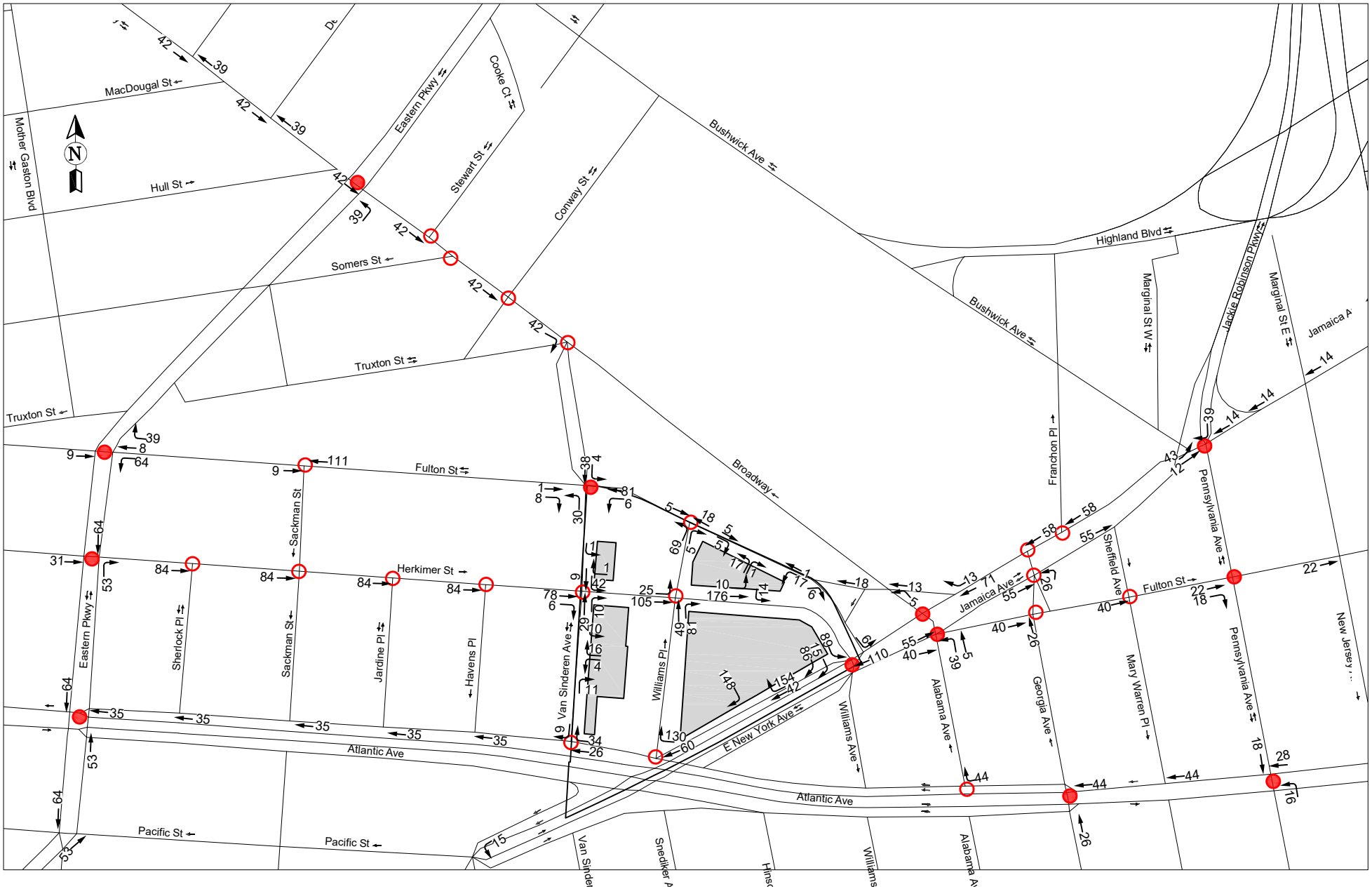
Development Site

Analysis Location (Signalized)

Analysis Location (Unsignalized)

2 = Weekday AM Incremental Project Traffic Volume

Weekday MD Incremental Project Vehicle Trip Assignments



LEGEND

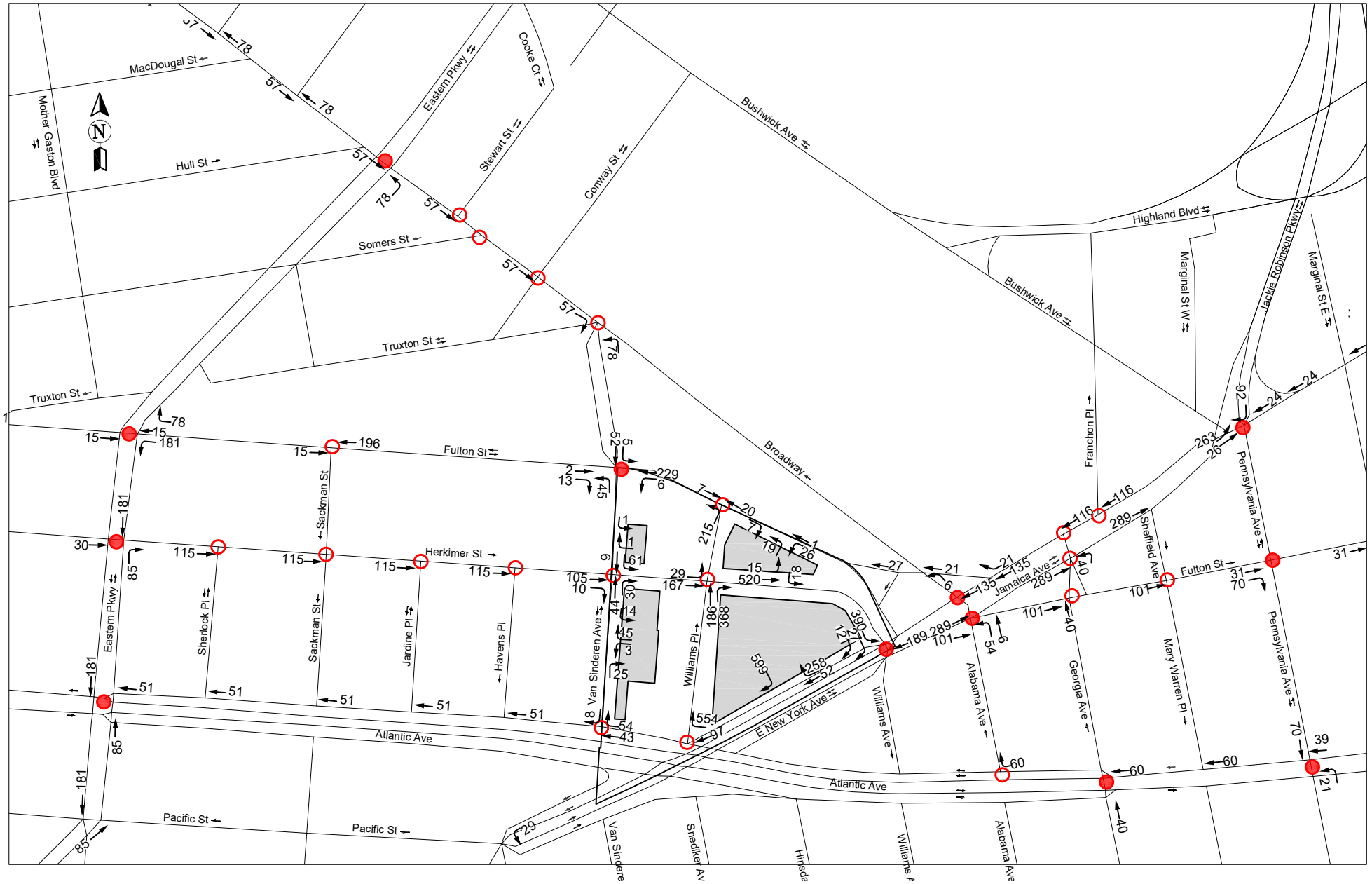
Development Site

Analysis Location (Signalized)

Analysis Location (Unsignalized)

2 = Weekday MD Incremental Project Traffic Volume

Weekday PM Incremental Project Vehicle Trip Assignments



LEGEND

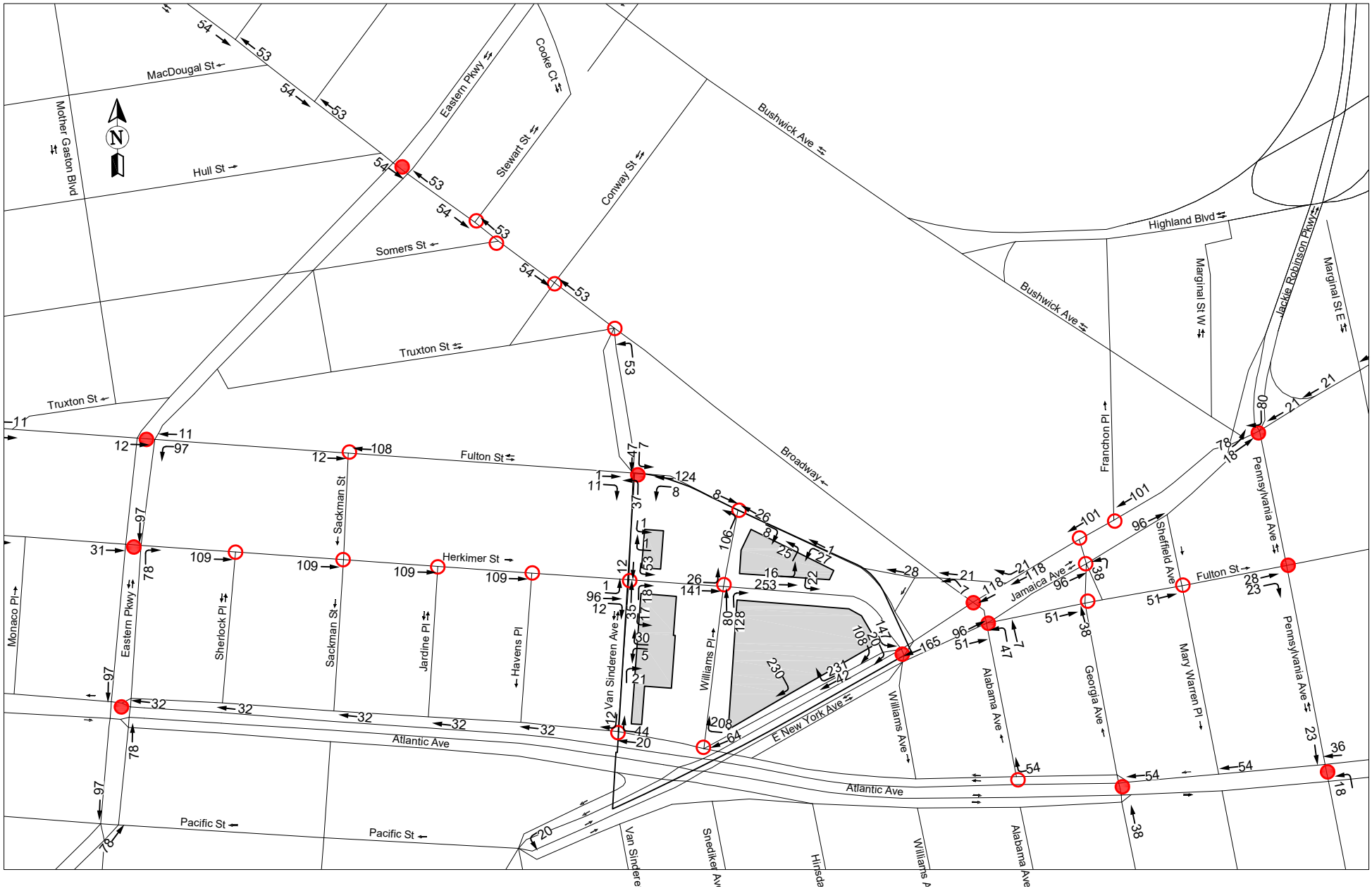
Development Site

Analysis Location (Signalized)

Analysis Location (Unsignalized)

2 = Weekday PM Incremental Project Traffic Volume

Saturday Incremental Project Vehicle Trip Assignments



LEGEND

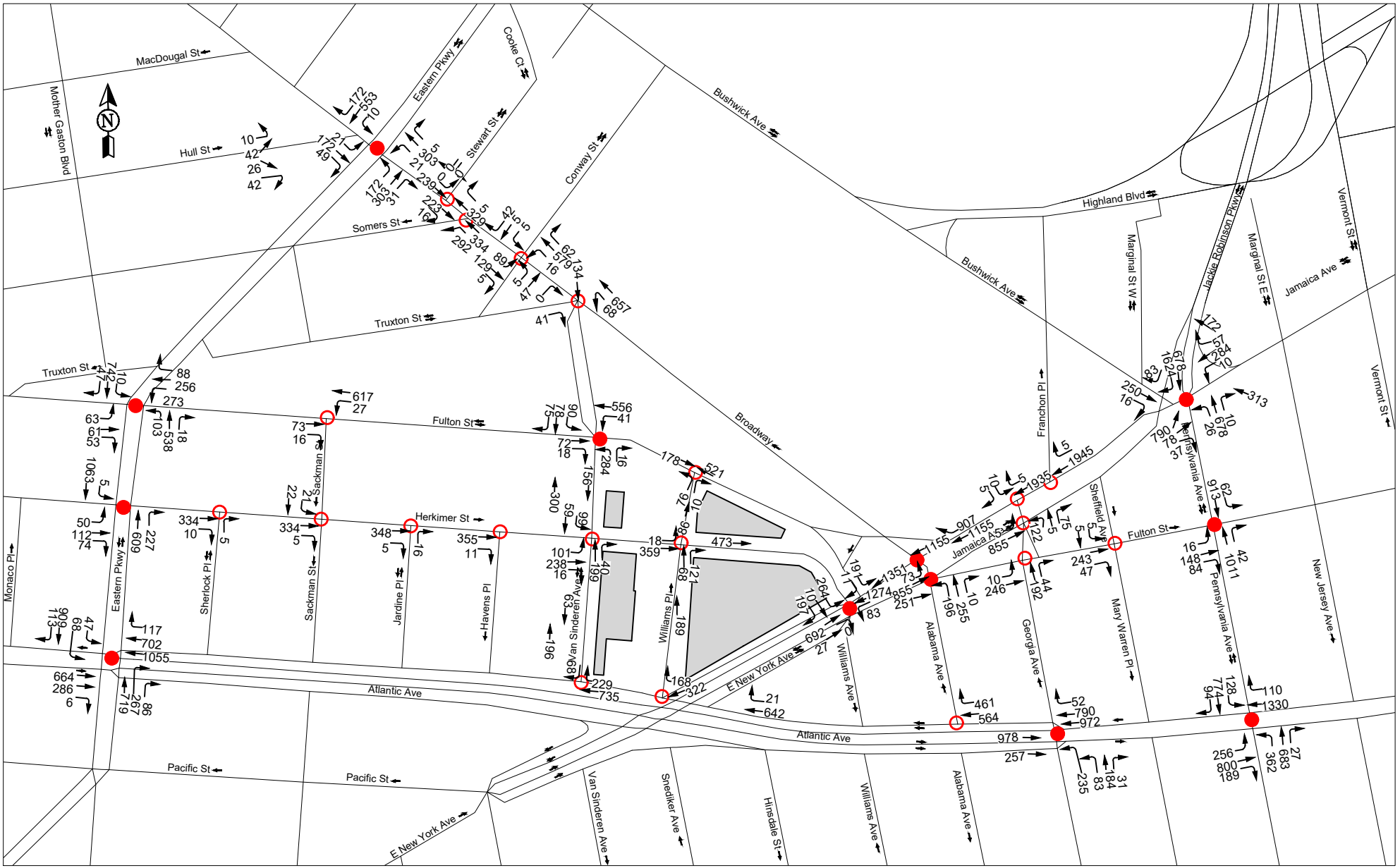
Development Site

Analysis Location (Signalized)

Analysis Location (Unsignalized)

2 = Saturday Incremental Project Traffic Volume

With-Action Weekday AM Peak Hour Traffic Volumes



LEGEND

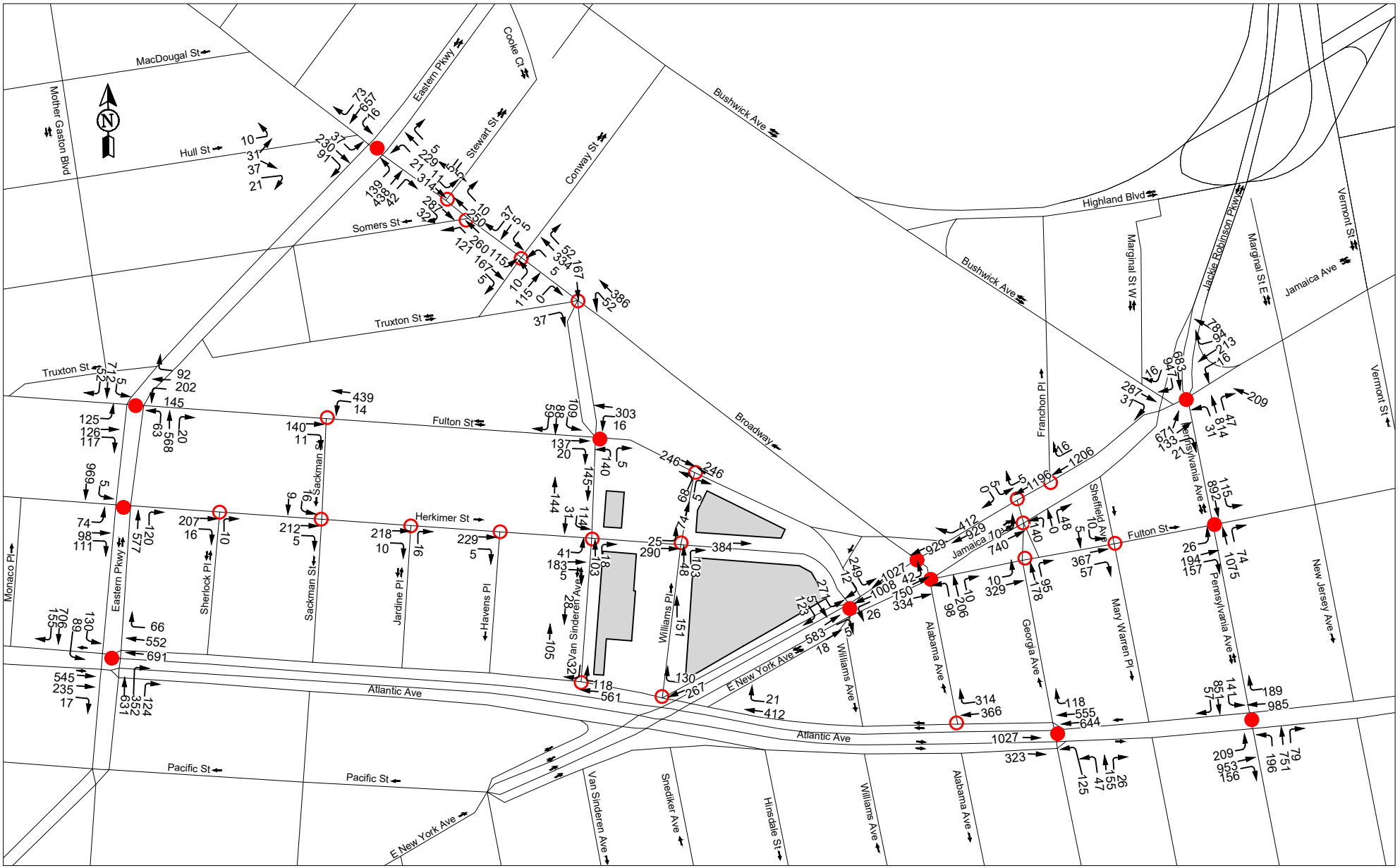
Development Site

Analysis Location (Signalized)

Analysis Location (Unsignalized)

2 = Weekday AM Traffic Volume

With-Action Weekday Midday Peak Hour Traffic Volumes



LEGEND

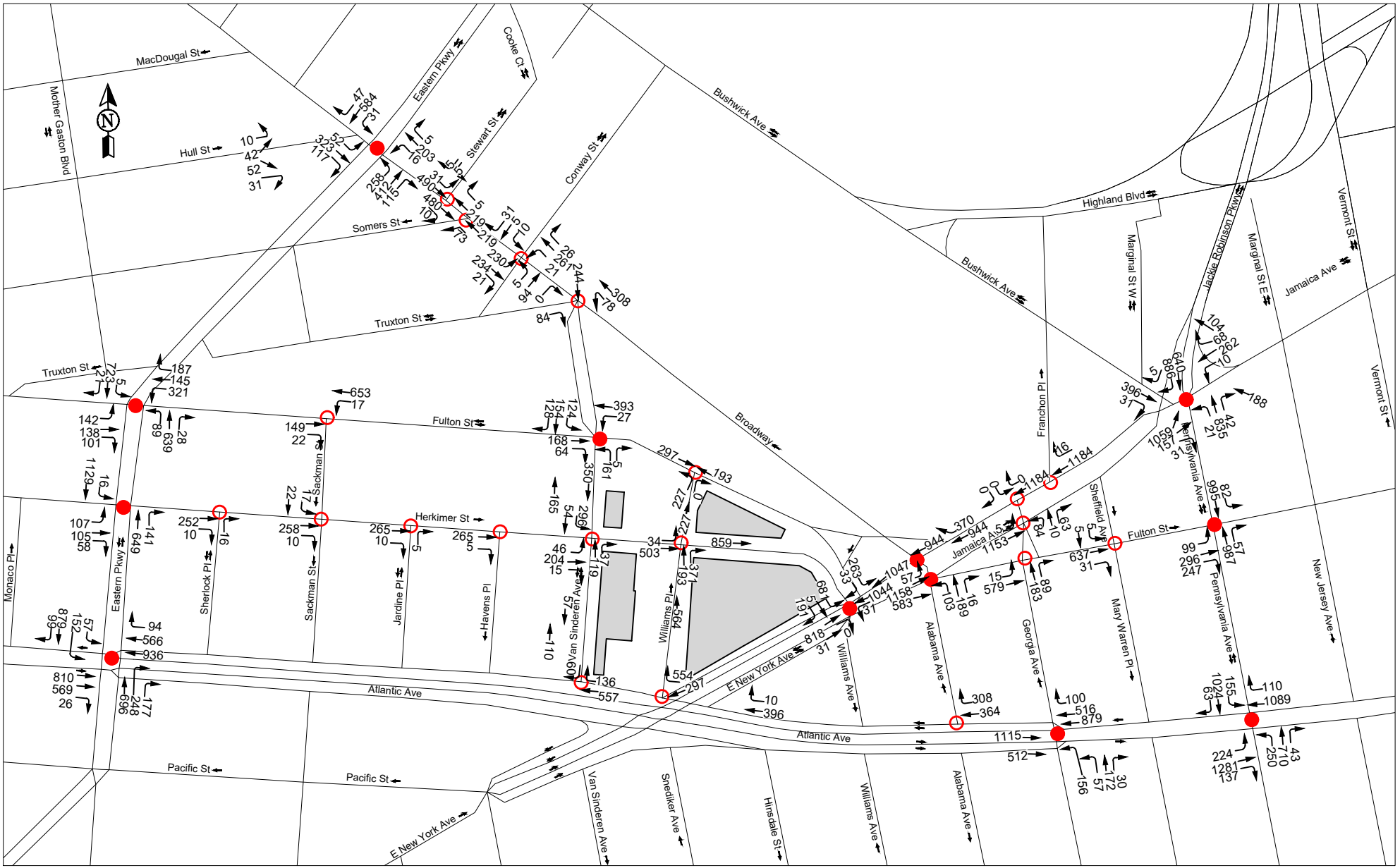
Development Site

Analysis Location (Signalized)

Analysis Location (Unsignalized)

2 = Weekday Midday Traffic Volume

With-Action Weekday PM Peak Hour Traffic Volumes



LEGEND

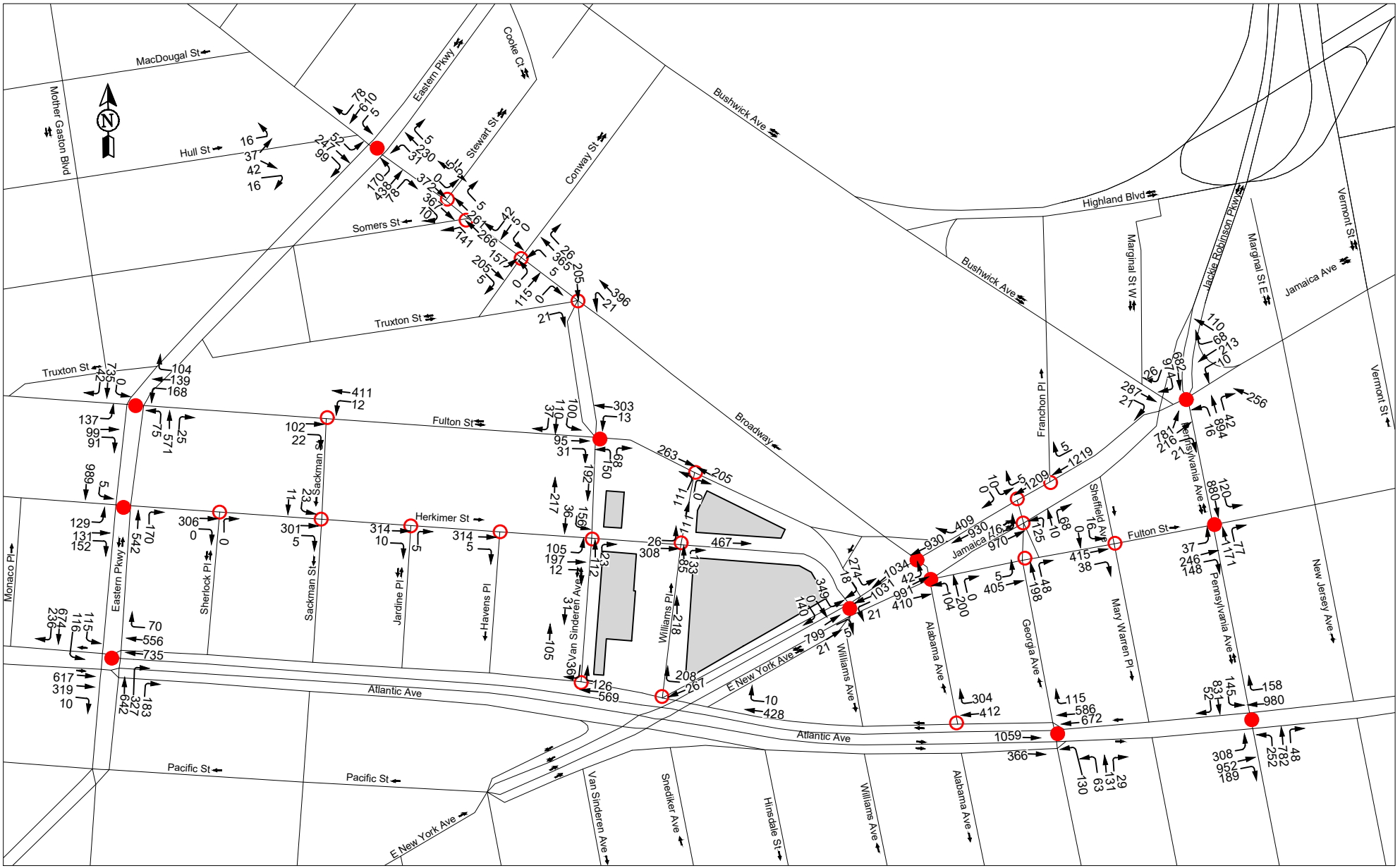
Development Site

Analysis Location (Signalized)

Analysis Location (Unsignalized)

2 = Weekday PM Traffic Volume

With-Action Saturday Peak Hour Traffic Volumes



LEGEND

Development Site

Analysis Location (Signalized)

Analysis Location (Unsignalized)

2 = Saturday Traffic Volume

TABLE 13-25
With-Action Condition Level of Service at Analyzed Intersections

Signalized Intersections	Approach	Lane Group	No-Action Weekday AM V/C Ratio	No-Action Weekday AM Delay (sec/veh)	No-Action Weekday AM LOS	With-Action Weekday AM V/C Ratio	With-Action Weekday AM Delay (sec/veh)	With-Action Weekday AM LOS		No-Action Weekday Midday V/C Ratio	No-Action Weekday Midday Delay (sec/veh)	No-Action Weekday Midday LOS	With-Action Weekday Midday V/C Ratio	With-Action Weekday Midday Delay (sec/veh)	With-Action Weekday Midday LOS		No-Action Weekday PM V/C Ratio	No-Action Weekday PM Delay (sec/veh)	No-Action Weekday PM LOS	With-Action Weekday PM V/C Ratio	With-Action Weekday PM Delay (sec/veh)	With-Action Weekday PM LOS		No-Action Saturday V/C Ratio	No-Action Saturday Delay (sec/veh)	No-Action Saturday LOS	With-Action Saturday V/C Ratio	With-Action Saturday Delay (sec/veh)	With-Action Saturday LOS	
1: Broadway (E-W) @	EB	LTR	0.80	59.8	E	0.93	79.3	E	*	1.22	155.6	F	1.35	209.7	F	*	1.27	183.9	F	1.40	236.4	F	*	1.35	211.7	F	1.51	277.7	F	*
Eastern Pkwy (N-S) & Hull St (NE)	WB	TR	0.94	73.1	E	0.95	74.1	E		0.71	39.0	D	0.73	40.3	D		0.57	42.7	D	0.59	43.6	D		0.77	43.5	D	0.81	47.4	D	
	NB	LTR	1.24	34.3	C	1.45	38.8	D		0.95	37.5	D	1.30	59.0	E	*	1.21	87.4	F	1.74	157.7	F	*	0.92	41.9	D	1.22	74.9	E	*
	SB	LTR	0.65	25.9	C	0.65	25.9	C		0.72	24.4	C	0.73	24.4	C		0.58	24.2	C	0.60	24.8	C		0.61	21.3	C	0.61	21.3	C	
(Hull St)	NEB	LTR	0.99	123.2	F	0.99	123.2	F		0.74	64.1	E	0.74	64.1	E		1.03	132.6	F	1.03	132.6	F		0.82	72.8	E	0.82	72.8	E	
5: Fulton St (E-W) @	EB	LTR	0.64	40.3	D	0.68	42.6	D		1.28	175.0	F	1.35	205.4	F	*	1.21	153.9	F	1.27	181.1	F	*	1.17	134.8	F	1.34	206.3	F	*
Eastern Pkwy (N-S)	WB	LTR	1.20	144.0	F	1.55	293.3	F	*	1.11	118.0	F	1.72	374.9	F	*	1.27	178.4	F	2.68	801.9	F	*	0.74	39.2	D	1.51	274.0	F	*
	NB	LTR	0.76	48.8	D	0.76	40.7	D		0.57	18.8	B	0.57	17.9	B		0.79	17.6	B	0.79	14.3	B		0.60	20.4	C	0.60	16.2	B	
	SB	LTR	0.55	26.7	C	0.55	26.7	C		0.54	21.4	C	0.54	21.4	C		0.48	26.6	C	0.48	26.6	C		0.45	20.0	C	0.45	20.0	C	
7: Fulton St (E-W) @	EB	TR	0.20	19.8	B	0.25	20.6	C		0.34	12.5	B	0.37	12.3	B		0.54	26.0	C	0.66	31.2	C		0.26	31.5	C	0.33	32.9	C	
Van Sinderen Av (N-S)	WB	LT	1.18	130.5	F	1.41	225.2	F	*	0.60	28.0	C	0.82	40.1	D		0.51	25.6	C	1.17	125.8	F	*	0.45	24.0	C	0.79	37.6	D	
	NB	LTR	1.40	234.0	F	1.74	385.1	F	*	0.60	38.7	D	0.82	57.9	E	*	0.75	52.1	D	1.20	168.0	F	*	0.82	53.4	D	1.36	222.5	F	*
	SB	LTR	0.66	40.0	D	0.88	61.7	E	*	0.86	59.6	E	0.94	68.2	E	*	1.11	120.1	F	1.52	285.3	F	*	0.54	34.5	C	0.78	37.5	D	
(Bus Lane)	SEB	LR	0.25	36.5	D	0.25	36.5	D		0.21	37.5	D	0.21	37.9	D		0.29	36.4	D	0.29	36.4	D		0.26	28.5	C	0.26	26.0	C	
(Bus Lane)	SEB	R	0.11	33.1	C	0.11	33.1	C		0.10	35.6	D	0.10	36.0	D		0.26	36.0	D	0.26	36.0	D		0.09	26.4	C	0.09	24.7	C	
9: Herkimer St (E) @	EB	LTR	0.63	45.1	D	0.83	60.4	E	*	0.85	49.7	D	0.93	61.1	E	*	0.77	52.2	D	0.96	80.9	F	*	1.09	100.4	F	1.31	189.0	F	*
Eastern Pkwy (N-S)	NB	TR	0.55	8.3	A	0.69	15.4	B		0.60	6.6	A	0.66	8.0	A		0.54	6.6	A	0.62	7.8	A		0.60	35.0	C	0.70	10.0	A	
	SB	LT	0.74	18.3	B	0.78	20.9	C		0.88	22.1	C	0.94	27.7	C		0.70	13.6	B	0.83	16.4	B		0.76	46.7	D	0.84	21.8	C	
16: Atlantic Av (E-W) @	EB	LTR	0.64	32.7	C	0.64	32.7	C		0.78	38.1	D	0.78	38.1	D		0.91	44.5	D	0.91	44.5	D		0.90	44.7	D	0.90	44.7	D	
Eastern Pkwy (N-S)	WB	T	1.10	90.1	F	1.12	97.4	F	*	1.11	95.7	F	1.14	108.0	F	*	0.88	32.6	C	0.91	34.7	C		1.13	105.6	F	1.16	117.4	F	*
	WB	R	0.26	25.3	C	0.27	24.6	C		0.26	30.0	C	0.25	30.0	C		0.21	20.3	C	0.22	20.4	C		0.27	30.2	C	0.27	30.4	C	
	NB	T	0.71	42.3	D	0.86	49.9	D		0.60	28.1	C	0.65	29.3	C		0.76	44.2	D	0.86	50.2	D		0.55	27.2	C	0.63	28.7	C	
	NB	R	1.26	180.2	F	1.37	228.7	F	*	1.45	246.0	F	1.45	244.4	F		1.22	162.9	F	1.36	221.3	F	*	1.23	149.4	F	1.39	219.4	F	*
	SB	TR	0.97	33.5	C	1.06	58.7	E	*	0.98	12.9	B	1.05	14.7	B		1.24	49.5	D	1.45	59.0	E	*	0.99	31.6	C	1.10	15.5	B	
18: Atlantic Av WB Service Rd (W) @	WB	TR	0.65	21.1	C	0.65	21.2	C		0.43	16.6	B	0.43	16.6	B		0.41	16.2	B	0.41	16.3	B		0.64	23.1	C	0.64	23.2	C	
East New York Av SB Service Rd (SW) & William Pl (N)	SWB	R	0.80	69.1	E	1.50	292.8	F	*	0.64	27.3	C	1.25	160.2	F	*	0.61	28.7	C	2.62	776.1	F	*	0.60	36.5	D	1.39	226.0	F	*
19: East New York Av (E-W) @	EB	TR	0.34	19.5	B	0.34	19.5	B		0.28	18.8	B	0.28	18.8	B		0.43	20.8	C	0.43	20.8	C		0.43	20.8	C	0.43	20.8	C	
Herkimer St (S) & Fulton St (SW) &	WB	LTR	0.59	10.8	B	0.85	19.6	B		0.53	8.1	A	0.59	9.5	A		0.56	8.3	A	0.68	10.2	B		0.55	5.0	A	0.65	8.2	A	
Williams Ave (S)	SB	LTR	0.54	52.4	D	1.17	153.7	F	*	0.71	59.9	E	1.09	125.4	F	*	1.41	254.9	F	3.13	1019.9	F	*	0.95	92.8	F	1.70	380.2	F	*
	SWB	LR	0.63	49.9	D	0.65	50.6	D		0.79	59.0	E	0.81	60.8	E		1.02	98.2	F	1.02	98.2	F		0.96	85.1	F	0.96	85.1	F	
20: East New York Av (E-W) &	EB	LTR	1.08	28.0	C	1.55	121.9	F	*	0.74	14.2	B	0.84	21.9	C		1.07	61.4	E	1.56	280.3	F	*	1.05	52.7	D	1.31	166.1	F	*
Jamaica Av (E-W) @	WB	TR	1.25	6.8	A	1.55	77.3	E	*	0.74	10.7	B	0.79	12.4	B		0.60	7.4	A	0.79	12.3	B		0.69	6.0	A	0.89	14.7	B	
Alabama Av (N) & Broadway (N)	NB	L	0.43	62.6	E	1.43	280.1	F	*	0.38	48.0	D	0.69	62.9	E	*	0.38	46.5	D	1.08	143.9	F	*	0.23	45.1	D	0.55	54.7	D	
	NB	TR	1.00	110.9	F	1.01	108.3	F		0.76	61.2	E	0.79	62.5	E		0.90	79.5	E	0.92	81.0	F		0.69	58.5	E	0.72	60.1	E	
21: Jamaica Av (E-W) @	EB	L	0.03	66.5	E	0.03	37.2	D		0.51	79.8	E	0.51	70.9	E		0.30	46.9	D	0.30	46.8	D		0.56	38.3	D	0.63	41.8	D	
Georgia Av (N) & Bus Depot Entrance	EB	T	0.40	6.6	A	0.47	7.8	A		0.38	3.7	A	0.42	4.3	A		0.53	5.0	A	0.70	6.6	A		0.67	15.7	B	0.74	18.4	B	
(S)	WB	TR	0.67	2.7	A	0.78	3.2	A		0.50	2.1	A	0.52	2.2	A		0.47	2.2	A	0.52	2.3	A		0.64	3.3	A	0.70	3.5	A	
	NB	L	0.33	44.8	D	0.55	52.2	D		0.50	50.8	D	0.61	54.9	D		0.40	48.7	D	0.59	54.8	D		0.31	43.3	D	0.46	47.2	D	
	NB	T	0.03	41.0	D	0.03	41.4	D		0.00	0.0	A	0.00	0.0	A		0.08	42.7	D	0.08	42.8	D		0.07	39.9	D	0.07	39.9	D	
	NB	R	0.30	44.0	D	0.30	45.1	D		0.24	44.9	D	0.24	44.8	D		0.30	46.4	D	0.30	46.1	D		0.27	42.6	D	0.28	42.9	D	
	SB	R	0.04	47.6	D	0.04	47.6	D		0.00	0.0	A	0.00	0.0	A		0.00	0.0	A	0.00	0.0	A		0.00	0.0	A	0.00	0.0	A	
23: Jamaica Av (E-W) @	EB	L	1.24	169.4	F	1.44	256.2	F	*	1.09	111.6	F	1.18	143.9	F	*	1.33	207.5	F	1.62	333.4	F	*	1.20	152.5	F	1.28	185.6	F	*
Jackie Robinson Pkwy/Pennsylvania	EB	T	0.57	54.2	D	0.62	56.8	E		0.72	66.5	E	0.78	71.5	E	*	0.79	67.6	E	0.92	86.2	F	*	0.99	100.1	F	1.08	126.5	F	*
Av (N-S) & Bushwick Av (SE-NW)	WB	TR	0.94	77.5	E	0.97	84.1	F	*	0.56	48.5	D	0.64	52.8	D		0.89	70.6	E	0.95	80.5	F	*	0.86	69.5	E	0.99	94.2	F	*
	WB	R	0.24	45.8	D	0.30	48.0	D		0.58	59.6	E	0.57	58.8	E		0.32	47.5	D	0.42	52.1	D		0.33	47.8	D	0.45	53.0	D	
	NB	L	0.97	51.1	D	0.97	51.2	D		0.68	20.5	C	0.68	20.4	C		0.55	18.1	B	0.55	18.1	B		0.82	59.8	E	0.82	59.8	E	
	NB	TR	0.61	2.0	A	0.61	2.0	A		0.70	5.1	A	0.70	5.1	A		0.55	5.1	A	0.55	5.1	A		0.77	27.5	C	0.77	27.5	C	
	SB	T	0.89	59.2	E	0.89	59.2	E		0.97	71.4	E	0.97	71.4	E		0.98	74.3	E	0.98	74.3	E		0.93	63.7	E	0.93	63.7	E	
	SB	R	1.18	120.9	F	1.40	216.1	F	*	0.85	35.4	D	0.89	39.1	D		0.75	30.3	C	0.83	34.5	C		0.84	35.2	D	0.92	41.8	D	
	SE	R	0.94	82.3	F	0.94	82.3	F		1.10	123.1	F	1.10	123.1	F		1.09	116.7	F	1.09	116.7	F		1.09	121.3	F	1.09	121.3	F	
26: Pennsylvania Av (E-W) @	EB	L	0.04	30.8	C	0.04	31.7	C		0.07	21.5	C	0.08	23.9	C		0.20	19.5	B	0.23	19.8	B		0.12	27.1	C	0.15	27.6	C	
Fulton St (N-S)	EB	TR	0.22	32.9	C	0.28	34.6	C		0.48	26.0	C	0.54	28.5	C		0.44	21.2	C	0.57	23.0	C		0.60	34.1	C	0.72	38.1	D	
	NB	TR	0.88	28.0	C	0.88	27.9	C		0.86	24.0	C	0.86	23.8	C		0.83	26.1	C	0.83	26.0	C		0.80	13.6	B	0.80	13.5	B	
	SB	L	0.32	19.5	B	0.32	19.5	B		0.45	18.7	B	0.45	18.0	B		0.34	11.0	B	0.34	11.0	B		0.47	30.0	C	0.47	30.0	C	
	SB	T	0.55	6.4	A	0.55	6.4	A		0.49	1.5	A	0.49	1.4	A		0.59	1.5	A	0.59	1.5	A		0.44	8.6	A	0.44	8.6	A	
28: Atlantic Av (E-W) @	EB	T	0.48	21.2	C	0.48	21.1	C		0.55	18.3	B	0.55	18.3	B		0.63	13.0	B	0.63	12.7	B		0.57	18.5	B	0.57	18.5	B	
Georgia Av (N)	WB	TR	0.71	21.5	C	0.77	23.1	C		0.56	18.5	B	0.58	18.9	B		0.55	18.2	B	0.59	18.9	B		0.54	18.0	B	0.58	18.7	B	
	NB	LTR	1.09	108.1	F	1.38	228.5	F	*	0.91	69.1	E	0.98	82.0	F	*	0.78	50.1	D	0.99	81.3	F	*	0.78	51.2	D	1.01	90.8	F	*
29: Atlantic Av (E-W) @	EB	L	1.10	141.8	F	1.10	96.8	F		1.18	166.0	F	1.20	177.1	F	*	1.17	162.2	F	1.17	162.8	F		1.06	109.6	F	1.06	110.0	F	
Pennsylvania Av (N-S)	EB	LTR	0.87	35.3	D	0.87	35.7	D		0.82	34.0	C	0.82	34.4	C		0.96	48.4	D	0.98	51.8	D		1.02	54.5	D	1.03	59.7	E	*
	WB	TR	0.93	48.6	D	0.97	54.6	D		0.87	44.4	D	0.89	46.0	D		0.88	48.4	D	0.93	52.7	D		0.90	41.1	D	0.95	47.2	D	
	NB	L	1.30	194.0	F	1.85	430.4	F	*	1.21	164.2	F	1.35	218.9	F	*	1.23	169.4	F	1.34	213.3	F	*	1.19	140.9	F	1.29	179.3	F	*
	NB	TR	0.78	43.7	D	0.78	43.8	D		0.82	41.2	D	0.82	41.2	D		0.66	34.5	C	0.66	34.6	C		0.84	35.6	D	0.84	35.8	D	
	SB	L	0.75	70.9	E	0.75	69.7	E		0.88	78.6	E	0.88	77.3	E		0.73	42.9	D	0.73	40.5	D		0.89	69.4	E	0.89	67.8	E	
	SB	TR	0.99	88.3	F	1.02	96.0	F	*	0.83	29.3	C	0.84	30.3	C		0.96	45.5	D	1.03	63.1	E	*	0.91	33.1	C	0.93	36.0	D	

TABLE 13-25 (Cont.)
With-Action Condition Level of Service at Analyzed Intersections

Unsignalized Intersections	Approach	Lane Group	No-Action Weekday AM V/C Ratio	No-Action Weekday AM Delay (sec/veh)	No-Action Weekday AM LOS	With-Action Weekday AM V/C Ratio	With-Action Weekday AM Delay (sec/veh)	With-Action Weekday AM LOS	No-Action Weekday Midday V/C Ratio	No-Action Weekday Midday Delay (sec/veh)	No-Action Weekday Midday LOS	With-Action Weekday Midday V/C Ratio	With-Action Weekday Midday Delay (sec/veh)	With-Action Weekday Midday LOS	No-Action Weekday PM V/C Ratio	No-Action Weekday PM Delay (sec/veh)	No-Action Weekday PM LOS	With-Action Weekday PM V/C Ratio	With-Action Weekday PM Delay (sec/veh)	With-Action Weekday PM LOS	No-Action Saturday V/C Ratio	No-Action Saturday Delay (sec/veh)	No-Action Saturday LOS	With-Action Saturday V/C Ratio	With-Action Saturday Delay (sec/veh)	With-Action Saturday LOS
2: Broadway (E-W) @	EB	LT	0.00	0.00	A	0.00	0.00	A	0.01	0.5	A	0.01	0.4	A	0.03	0.9	A	0.03	0.9	A	0.00	0.0	A	0.00	0.0	A
Stewart St (N-S)	WB	TR	0.23	0.0	A	0.23	0.0	A	0.17	0.0	A	0.17	0.0	A	0.16	0.0	A	0.16	0.0	A	0.18	0.0	A	0.18	0.0	A
	SB	LR	0.00	0.0	A	0.00	0.0	A	0.02	12.2	B	0.02	12.5	B	0.03	15.0	B	0.04	16.3	C	0.03	13.0	B	0.03	13.4	B
3: Broadway (E-W) @	EB	LTR	0.13	5.7	A	0.13	4.9	A	0.13	4.9	A	0.13	4.4	A	0.25	6.2	A	0.25	5.9	A	0.19	5.8	A	0.19	5.3	A
Conway St (N-S)	WB	LTR	0.02	0.6	A	0.02	0.6	A	0.01	0.2	A	0.01	0.2	A	0.03	1.1	A	0.04	1.3	A	0.01	0.2	A	0.01	0.2	A
	NB	LTR	0.68	101.6	F	0.79	137.5	F *	1.07	167.1	F	1.15	201.1	F *	1.92	603.6	F	3.25	>9999	F *	1.58	386.6	F	2.21	691.6	F *
	SB	LTR	0.27	25.6	D	0.30	29.4	D	0.35	38.6	E	N/A	>9999	F *	N/A	>9999	F	N/A	>9999	F *	0.17	17.4	C	0.19	19.7	C
4: Broadway (E-W) @	EB	R	0.07	0.0	A	0.10	0.0	A	0.09	0.0	A	0.12	0.0	A	0.14	0.0	A	0.18	0.0	A	0.11	0.0	A	0.15	0.0	A
Van Sinderen Av (S)	WB	LT	0.06	1.4	A	0.06	1.5	A	0.05	1.5	A	0.05	1.6	A	0.08	2.4	A	0.09	2.6	A	0.03	0.7	A	0.03	0.8	A
6: Fulton St (E-W) @	EB	TR	0.06	0.0	A	0.06	0.0	A	0.10	0.0	A	0.11	0.0	A	0.10	0.0	A	0.11	0.0	A	0.07	0.0	A	0.08	0.0	A
Sackman St (S)	WB	LT	0.02	0.7	A	0.03	0.7	A	0.01	0.5	A	0.02	0.5	A	0.02	0.5	A	0.02	0.5	A	0.01	0.5	A	0.01	0.4	A
8: Fulton St (E-W) @	NB	LR	0.05	14.8	B	0.73	77.5	F *	0.00	0.0	A	0.40	30.5	D	0.03	13.2	B	2.74	874.3	F *	0.01	12.1	B	0.75	65.9	F *
William Pl (N)																										
10: Herkimer St (E) @	EB	TR	0.12	0.0	A	0.25	0.0	A	0.10	0.0	A	0.16	0.0	A	0.10	0.0	A	0.18	0.0	A	0.14	0.0	A	0.22	0.0	A
Sherlock Pl (N-S)	NB	LT	0.01	9.7	A	0.01	13.0	B	0.02	11.7	B	0.03	12.7	B	0.03	9.8	A	0.04	13.4	B	0.00	0.0	A	0.00	0.0	A
11: Herkimer St (E) @	EB	TR	0.12	0.0	A	0.25	0.0	A	0.10	0.0	A	0.16	0.0	A	0.11	0.0	A	0.18	0.0	A	0.14	0.0	A	0.22	0.0	A
Sackman St (N-S)	SB	LT	0.11	13.1	B	0.25	26.6	D	0.17	28.0	D	0.20	33.6	D	0.09	12.4	B	0.24	28.4	D	0.09	13.5	B	0.24	30.9	D
12: Herkimer St (E) @	EB	TR	0.12	0.0	A	0.25	0.0	A	0.11	0.0	A	0.17	0.0	A	0.11	0.0	A	0.18	0.0	A	0.16	0.0	A	0.24	0.0	A
Jardine Pl (N-S)	NB	LR	0.03	10.0	B	0.05	13.6	B	0.03	11.2	B	0.04	12.2	B	0.01	9.2	A	0.01	12.2	B	0.01	9.9	A	0.01	13.4	B
13: Herkimer St (E) @	EB	TR	0.13	0.0	A	0.25	0.0	A	0.10	0.0	A	0.16	0.0	A	0.10	0.0	A	0.17	0.0	A	0.15	0.0	A	0.23	0.0	A
Havens Pl (S)																										
14: Herkimer St (E) @	EB	LTR		10.1	B		18.3	C		8.8	A		10.6	B		9.6	A		13.1	B		10.0	A		14.1	B
Van Sinderen Av (N-S)	NB	TR		9.7	A		13.1	B		8.2	A		9.2	A		8.6	A		10.5	B		8.4	A		9.9	A
(All-way Stop)	SB	LT		9.2	A		11.9	B		8.6	A		9.9	A		11.3	B		16.4	C		9.2	A		11.4	B
15: Herkimer St (E) @	EB	TR	0.00	0.3	A		14.1	B	0.00	0.0	A		11.3	B	0.00	0.1	A		68.0	F *	0.00	0.0	A		14.4	B
William Pl (N)	NB	LT	0.04	10.4	B		9.8	A	0.92	347.1	F		8.7	A	0.02	12.3	B		72.2	F *	0.02	11.0	B		10.2	B
			(Two-way Stop-Controlled)				*(All-way)*		*(Two-way Stop-Controlled)*				*(All-way)*		*(Two-way Stop-Controlled)*				*(All-way)*		*(Two-way Stop-Controlled)*				*(All-way)*	
17: Atlantic Av WB Service Rd (W) @	EB	TR	0.58	0.0	A	0.62	0.0	A	0.41	0.0	A	0.46	0.0	A	0.42	0.0	A	0.49	0.0	A	0.42	0.0	A	0.46	0.0	A
Van Sinderen Av (N-S)	SB	R	0.23	19.9	C	0.40	33.4	D	0.11	20.2	C	0.16	21.6	C	0.14	14.5	B	0.30	26.0	D	0.07	13.5	B	0.17	21.6	C
22: Truxton St (W) @	EB	R	0.11	13.5	B	0.13	15.7	C	0.11	14.8	B	0.13	16.2	C	0.38	26.1	D	0.53	42.1	E *	0.07	15.2	C	0.09	19.0	C
Van Sinderen Av (N-S)	SB	T	0.09	7.6	A	0.12	7.7	A	0.11	7.6	A	0.14	6.7	A	0.16	7.7	A	0.20	7.9	A	0.10	7.6	A	0.14	7.7	A
24: Fulton St (W) @	EB	LT	0.01	0.4	A	0.01	0.4	A	0.01	0.3	A	0.01	0.3	A	0.01	0.4	A	0.01	0.4	A	0.00	0.1	A	0.00	0.1	A
Georgia Av (N)	NB	TR	0.99	100.8	F	2.05	549.1	F *	1.60	339.0	F	2.16	588.9	F *	1.45	275.3	F	3.77	>9999	F *	0.75	41.2	E	1.60	336.2	F *
25: Fulton St (W) @	EB	TR	0.18	0.0	A	0.21	0.0	A	0.25	0.0	A	0.28	0.0	A	0.38	0.0	A	0.45	0.0	A	0.29	0.0	A	0.32	0.0	A
Sheffield Av (S) & Mary Warren Pl (S)	SB	LT	0.03	12.8	B	0.03	15.3	C	0.04	14.0	B	0.06	16.7	C	0.04	17.6	C	0.06	25.7	D	0.04	13.2	B	0.06	16.3	C
27: Atlantic Av WB Service Rd (W) @	WB	TR	0.57	0.0	A	0.65	0.0	A	0.42	0.0	A	0.44	0.0	A	0.42	0.0	A	0.46	0.0	A	0.45	0.0	A	0.48	0.0	A
Alabama Av (N)																										
30: Broadway (E-W) @	EB	TR	0.14	0.0	A	0.17	0.0	A	0.19	0.0	A	0.22	0.0	A	0.31	0.0	A	0.35	0.0	A	0.23	0.0	A	0.27	0.0	A
Somers St (S)	WB	LT	0.31	6.6	A	0.33	7.1	A	0.15	4.2	A	0.15	4.4	A	0.11	3.6	A	0.14	4.4	A	0.18	4.9	A	0.21	5.6	A

Notes:
EB - eastbound, WB - westbound, NB - northbound, SB - southbound
L - left, T - through, R - right, DefL - Analysis considers a defacto left-turn lane on this approach
V/C ratio - volume-to-capacity ratio
Sec/veh - seconds per vehicle
LOS - level of service
* - Denotes a congested movement (LOS E or F, or v/c ratio greater than or equal to 0.9)
# denotes no significant adverse impact under CEQR Technical Manual criteria as minor street volume would total less than 90 PCEs in the With Action condition.
Analysis is based on the 2000 Highway Capacity Manual methodology (Synchro 12)

H. TRANSIT

Existing Conditions

Subway Service

SUBWAY STATIONS

As discussed above in Section E, "Level 2 Screening Assessment," project-generated subway trips at the Broadway Junction (A/C/J/L/Z) station complex are expected to exceed the 200-trip 2021 *CEQR Technical Manual* analysis threshold in the weekday AM and PM peak hours. The Broadway Junction Subway Station complex is composed of three interconnected stations: the two elevated stations on the Jamaica (J/Z) and Canarsie (L) lines, as well as the underground station on the Fulton Street (A/C) line.

Broadway Junction Subway Station Complex

The Broadway Junction Subway Station complex provides access to Manhattan- and Euclid Avenue/Ozone Park/Rockaway Beach-bound service along the A/C subway lines; Manhattan- and Jamaica Center-bound service along the J/Z subway lines; and Manhattan- and Canarsie/Rockaway Parkway-bound service along the L subway line. The Broadway Junction Subway Station complex is composed of three stations: the two elevated stations on the Jamaica (J/Z) and Canarsie (L) lines, as well as the Fulton Street (A/C) line underground station located beneath Callahan-Kelly Playground.

The Fulton Street (A/C) line is accessible from the ground-level station house fronting the west side of Van Sinderen Avenue between Fulton and Truxton streets; the station house located on Van Sinderen Avenue is the only entrance/exit to the entire complex. It features four tracks and two island platforms; the northbound (Manhattan-bound) platform features express and local service accessed by stair P3/P4, while the southbound (Brooklyn/Queens-bound) platform features express and local service accessed by stairs P1/P2. Refer to **Figure 13-11a** for a layout of the Fulton Street (A/C) line platforms of the Broadway Junction Subway Station complex.

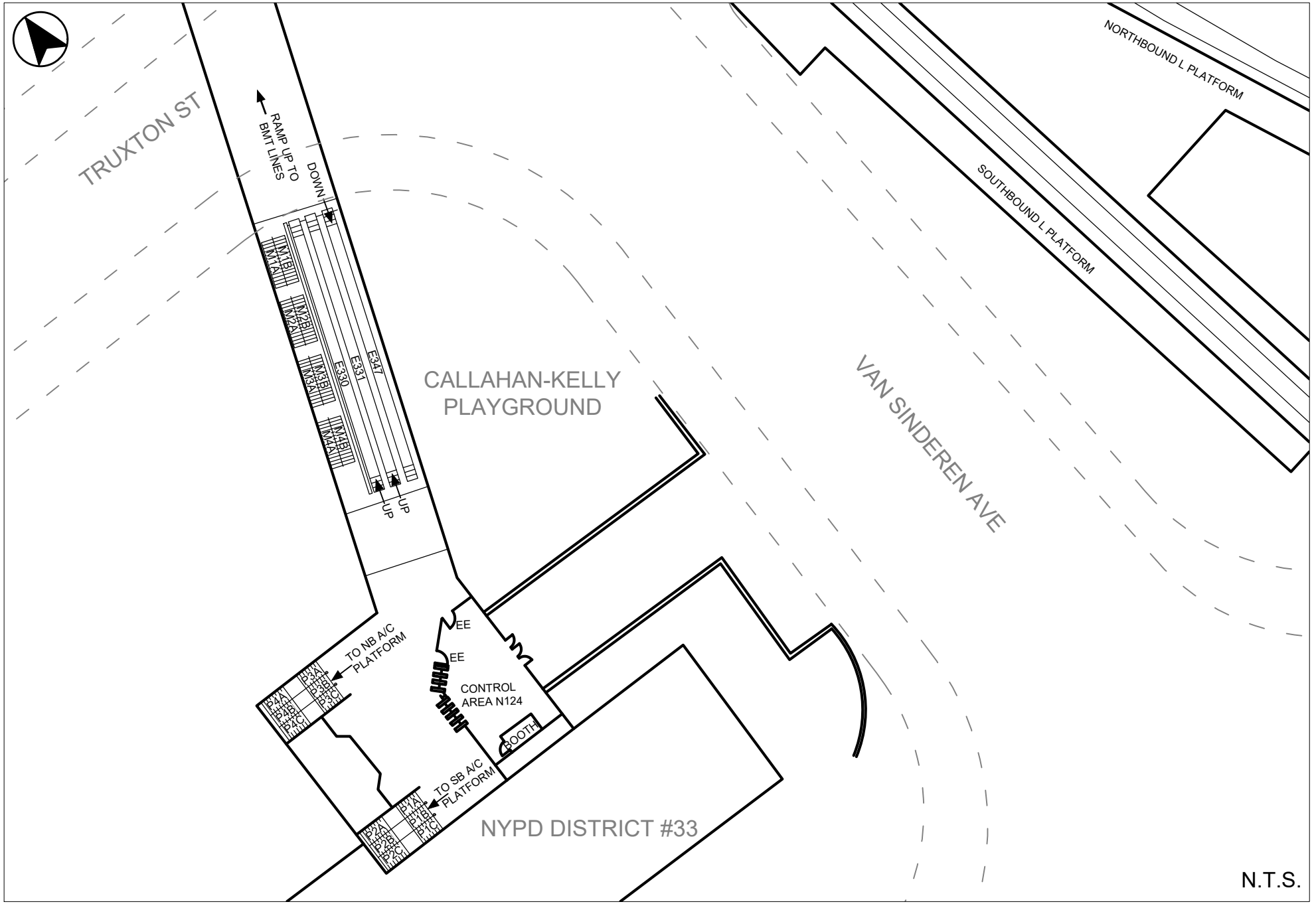
From the ground-level station house on Van Sinderen Avenue, both the Jamaica (J/Z) and Canarsie (L) lines are reachable via three escalators (E330 and E331 [ascending] and E347 [descending]) and stairs M1-M4 that connect to the upper mezzanine. Refer to **Figure 13-11b** for a layout of the Jamaica (J/Z) and Canarsie (L) lines platforms of the Broadway Junction Subway Station complex.

From the mezzanine, the Jamaica (J/Z) line station features three tracks and two island platforms; the northbound (Manhattan-bound) platform features (alternating) express and local service accessed by stairs U2/U4, U6, and U8, while the southbound (Queens-bound) platform features (alternating) express and local service accessed by stairs U1/U3, U5, and U7. It should be noted that the J and Z routes implement a skip-stop service, where the J route operates at all times, while the Z route operates during weekday rush hours in the peak direction on the local tracks.

From the mezzanine, the Canarsie (L) line features two tracks and two side platforms; the northbound (Manhattan-bound) platform features local service accessed via ramp from the mezzanine, while the southbound (Brooklyn-bound) platform features local service accessed by an overpass accessed by stairs U9/U10, U11/U13, and U12/U14.

Figure 13-11a

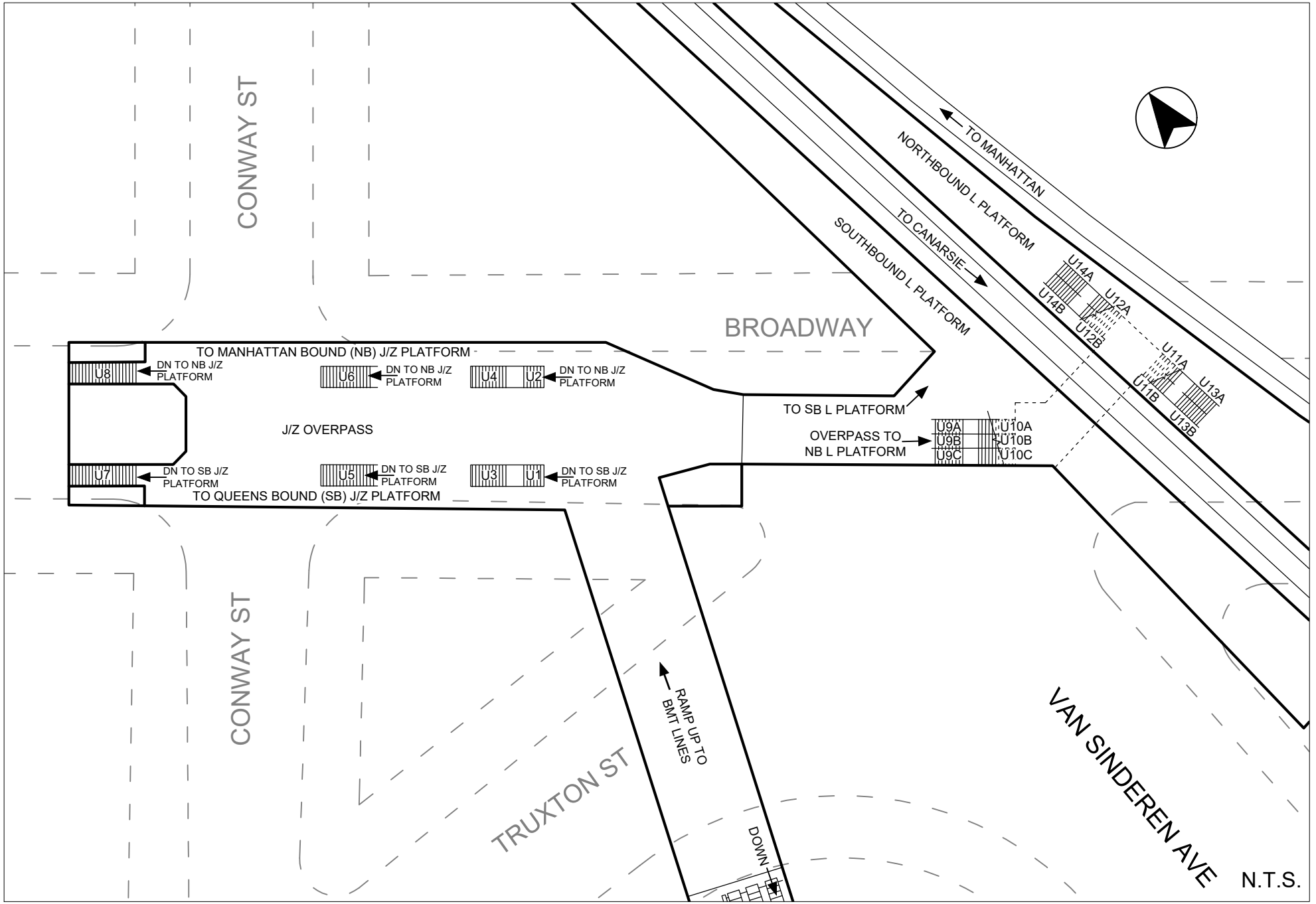
Broadway Junction (A/C/J/L/Z) Subway Station - IND Line



Legend Stairs Fare Array

Figure 13-11b

Broadway Junction (A/C/J/L/Z) Subway Station - BMT Lines



Legend Stairs Fare Array

As shown in **Table 13-26**, all analyzed stairs at the Broadway Junction Subway Station complex operate at an acceptable LOS C or better in both the AM and PM peak hours except for three stairs that operate at LOS D or worse during the AM and PM peak hours. During the AM peak hour, stairs P3/P4 and U2/U4 operate at LOS D under existing conditions. During the PM peak hour, stair P1/P2 operate at LOS E under existing conditions.

As shown in **Table 13-27**, all analyzed fare arrays at the Broadway Junction Subway Station complex operate at an acceptable LOS A in both the AM and PM peak hours under existing conditions.

As shown in **Table 13-28**, all analyzed escalators at the Broadway Junction Subway Station complex operate at an acceptable LOS C in both the AM and PM peak hours except for escalator E347 (descending), which operates at LOS D during the AM peak hour.

TABLE 13-26
Existing Conditions Subway Station Stair Analysis

Peak Hour	Station	Stair	Total Width (ft.)	Effective Width (ft.)	Peak Hour Volumes		Surging Factor		Friction Factor	V/C Ratio	LOS
					Up	Down	Up	Down			
AM	Broadway Junction (A/C/J/L/Z)	P1/P2	12.67	11.17	1,329	552	0.75	0.90	0.90	0.49	B
		P3/P4	12.58	11.08	1,303	3,670	0.75	0.90	0.90	1.21	D
		M1-M4	7.67	6.42	46	2,362	0.80	0.80	1.00	0.98	C
		U1/U3	5.42	4.42	102	718	0.75	8.00	0.90	0.12	A
		U2/U4	5.42	4.42	266	1,475	0.75	0.80	0.90	1.15	D
		U5	5.42	4.42	170	299	0.75	0.80	0.90	0.32	A
		U6	5.42	4.42	443	615	0.75	0.80	0.90	0.71	C
		U7	5.42	4.42	407	180	0.75	0.80	0.90	0.40	A
		U8	5.42	4.42	1,062	369	0.75	0.80	0.90	0.98	C
PM	Broadway Junction (A/C/J/L/Z)	P1/P2	12.67	11.17	4,214	1,004	0.75	0.90	0.90	1.40	E
		P3/P4	12.58	11.08	667	1,385	0.75	0.90	0.90	0.51	B
		M1-M4	7.67	6.42	352	961	0.80	0.80	0.90	0.59	B
		U1/U3	5.42	4.42	166	1,278	0.75	8.00	0.90	0.20	A
		U2/U4	5.42	4.42	173	370	0.75	0.80	0.90	0.36	A
		U5	5.42	4.42	276	533	0.75	0.80	0.90	0.54	B
		U6	5.42	4.42	289	154	0.75	0.80	0.90	0.30	A
		U7	5.42	4.42	663	320	0.75	0.80	0.90	0.67	B
		U8	5.42	4.42	694	92	0.75	0.80	0.90	0.55	B

TABLE 13-27
Existing Conditions Subway Station Fare Array Analysis

Peak Hour	Station	Control Area	Control Elements			Peak Hour Volumes		Surging Factor		Friction Factor	V/C Ratio	LOS
			Turnstile	HEET	HXT	System Entries	System Exits	System Entries	System Exits			
AM	Broadway Junction (A/C/J/L/Z)	N124	7	0	0	1,152	591	1.00	0.75	0.90	0.20	A
PM	Broadway Junction (A/C/J/L/Z)	N124	7	0	0	727	1,020	1.00	0.75	0.90	0.19	A

TABLE 13-28
Existing Conditions Escalator Analysis

Peak Period	Station	Escalator	Tread Width	Feet per Minute	Guideline Capacity	Peak Hour Volumes	Surging Factor	V/C Ratio	LOS
AM	Broadway Junction (A/C/J/L/Z)	E330 (Up)	32"	90	750	1,404	0.80	0.73	C
		E331 (Up)	32"	90	750	1,403	0.80	0.73	C
		E347 (Down)	32"	90	750	2,167	0.80	1.13	D
PM	Broadway Junction (A/C/J/L/Z)	E330 (Up)	32"	90	750	1,657	0.80	0.86	C
		E331 (Up)	32"	90	750	1,657	0.80	0.86	C
		E347(Down)	32"	90	750	1,615	0.80	0.84	C

SUBWAY LINE HAUL

Line haul is the volume of transit riders passing a defined point on a given transit route. For subway routes in New York City to and from Brooklyn, line haul is typically measured either at East River bridge and tunnel crossings, or at the actual maximum load point on each subway route (the point where the trains carry the greatest number of passengers during the peak hour).

As discussed previously, five NYCT subway routes operate in proximity to the Project Area, including the A, C, J, L, and Z. All five routes cross the East River, and the peak direction of travel is typically Manhattan-bound in the AM peak period and Brooklyn/Queens-bound in the PM peak period. The analysis of existing subway line haul conditions for the A subway route during the PM peak hour is based on maximum load point capacity and ridership data for 2019 provided by NYCT.

Table 13-29 shows existing line haul conditions in the peak direction at the maximum load point for the A subway route during the PM peak hour. As shown in **Table 13-29**, southbound A trains are currently operating with available capacity in the peak direction in the PM peak hour with a v/c ratio of 0.7.

TABLE 13-29
Existing Conditions Subway Line Haul Analysis

Peak Period	Route	Direction	Maximum Load Point (leaving station)	Average Trains Per Hour [1]	Cars Per Hour per Train[1]	Average Passengers Per Hour [1]	Average Passengers Per Car	Guideline Passengers Per Car [2,4]	V/C Ratio [3]
PM	A	SB	Jay St - MetroTech	15.0	10	14,750	98	140	0.70

Notes:
[1] Based on 2019 ridership data and train throughput data from NYCT. Data was provided by NYCT in 2024.
[2] Guideline capacities are based on NYCT rush hour loading guidelines, which vary by car type, line, and location based on frequency and type of service. Per NYCT direction, A train capacity has been adjusted from 175 to 140 to reflect 10 60-foot cars at 140 pass./car capacity.
[3] Volume to guideline capacity ratio.
[4] Guideline capacities are based on combined corridor headways for lines on shared segments (e.g. the 2/3).

The Future Without the Proposed Actions (No-Action Condition)

Between 2024 and 2036, it is expected that subway demand in the vicinity of the Project Area will increase due to long-term background growth. To forecast future subway volumes in the No-Action condition, development on sites within a half-mile radius of the Project Area shown in **Figure 13-7** and summarized in **Table 13-23** were considered. The future No-Action subway station volumes also reflect annual background growth rates of 0.5 percent per year for the 2024 through 2029 period and 0.25 percent for

the 2029 through 2036 period. These background growth rates, recommended in the 2021 *CEQR Technical Manual* for projects in Brooklyn outside of Downtown Brooklyn, are applied to account for smaller projects and as-of-right developments not reflected in **Table 13-23**, and general increases in travel demand not attributable to specific development projects.

Subway Service

SUBWAY STATIONS

Under the No-Action condition, demand at the analyzed Broadway Junction Subway Station complex is expected to increase due to new development and/or background growth.

Broadway Junction Subway Station Complex

It should also be noted that transit improvements are planned at the Broadway Junction Subway Station complex (see **Figures 13-12a** and **13-12b**). The improvements would include the following:

- Elevator access to each platform within the entire complex;
- Expansion of the existing control house;
- An additional platform stair per A/C platform – to be located near the existing stairs and future platform elevators towards the east (train south) ends of each platform;[6]
- A new street-level entry on the east side of Van Sinderen Avenue connecting to the L via new platform stairs;
- A new paid-zone transfer bridge spanning Van Sinderen Avenue to connect the A/C lines to the L line;
- Widening of two of the three station escalators in the existing transfer core;
- Slight rearrangement of the J/Z platform stairs to accommodate the new elevators; and
- The enlargement/relocation/expansion of back of house rooms at the station complex.

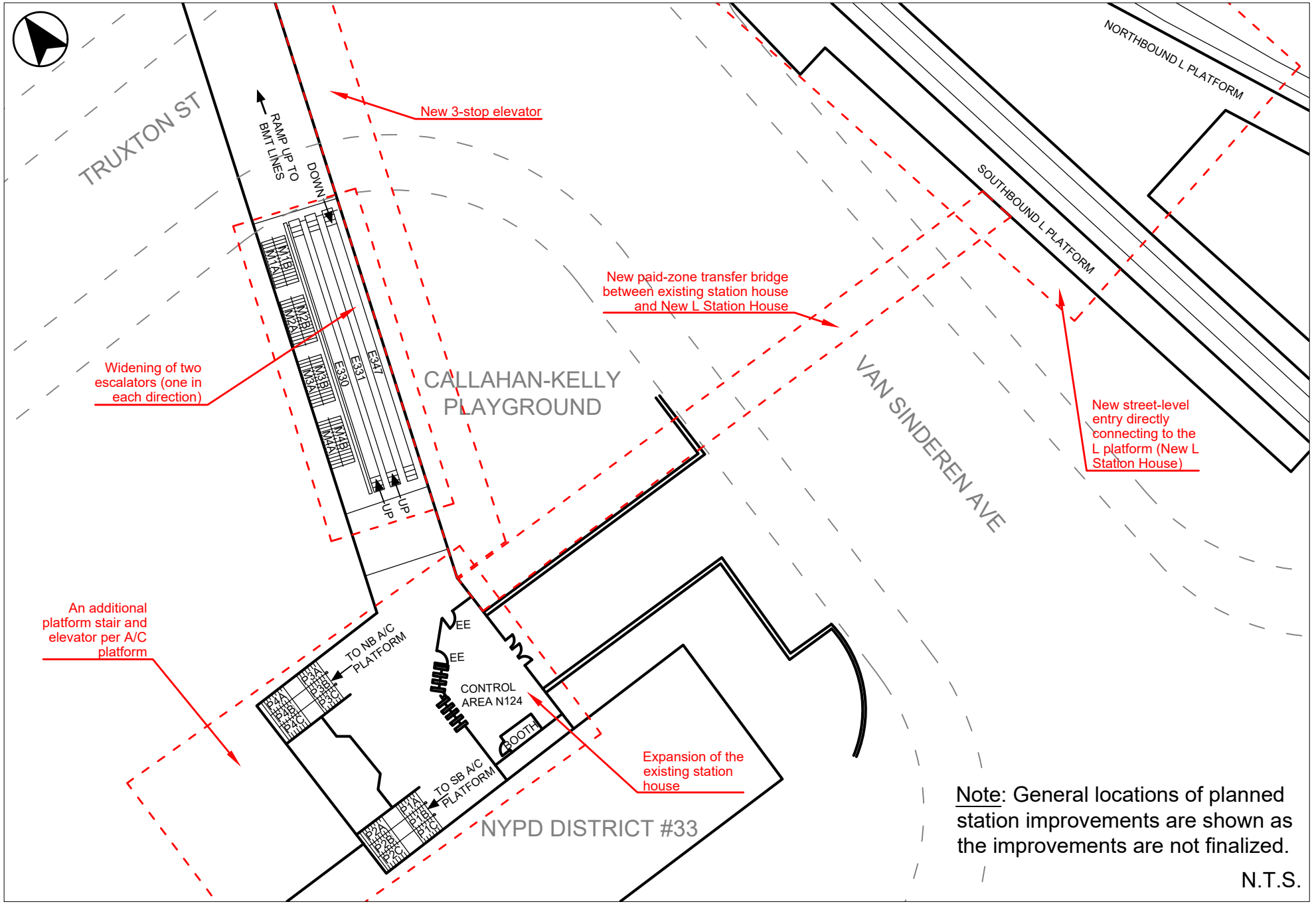
These planned transit improvements would be implemented by the 2036 analysis year. Therefore, these improvements would affect circulation at the analyzed subway station by introducing a new entrance to the Broadway Junction Subway Station complex. Future 2036 volumes with the planned transit improvements were provided by NYCT; the future 2036 volumes conservatively include estimated volumes associated with population growth facilitated by the 2016 East New York Community Plan.

As shown in **Table 13-30**, in the No-Action condition, all analyzed stairs at the Broadway Junction Subway Station complex would operate at an acceptable LOS C or better in both the AM and PM peak hours with the exception of four stairs, of which three and one are expected to operate with LOS D or worse during the AM and PM peak hours, respectively. During the AM peak hour, stairs P3/P4 and U8 are expected to operate at LOS D and stairs U2/U4 are expected to operate at LOS E under the No-Action condition. During the PM peak hour, the new platform stairs to the southbound A/C platform are expected to operate at LOS F under the No-Action condition.

[6] It should be noted that based on guidance from NYCT, 75 percent and two percent of subway riders using the A/C trains were assumed to utilize the additional A/C platform stairs for exiting the station and entering the station, respectively.

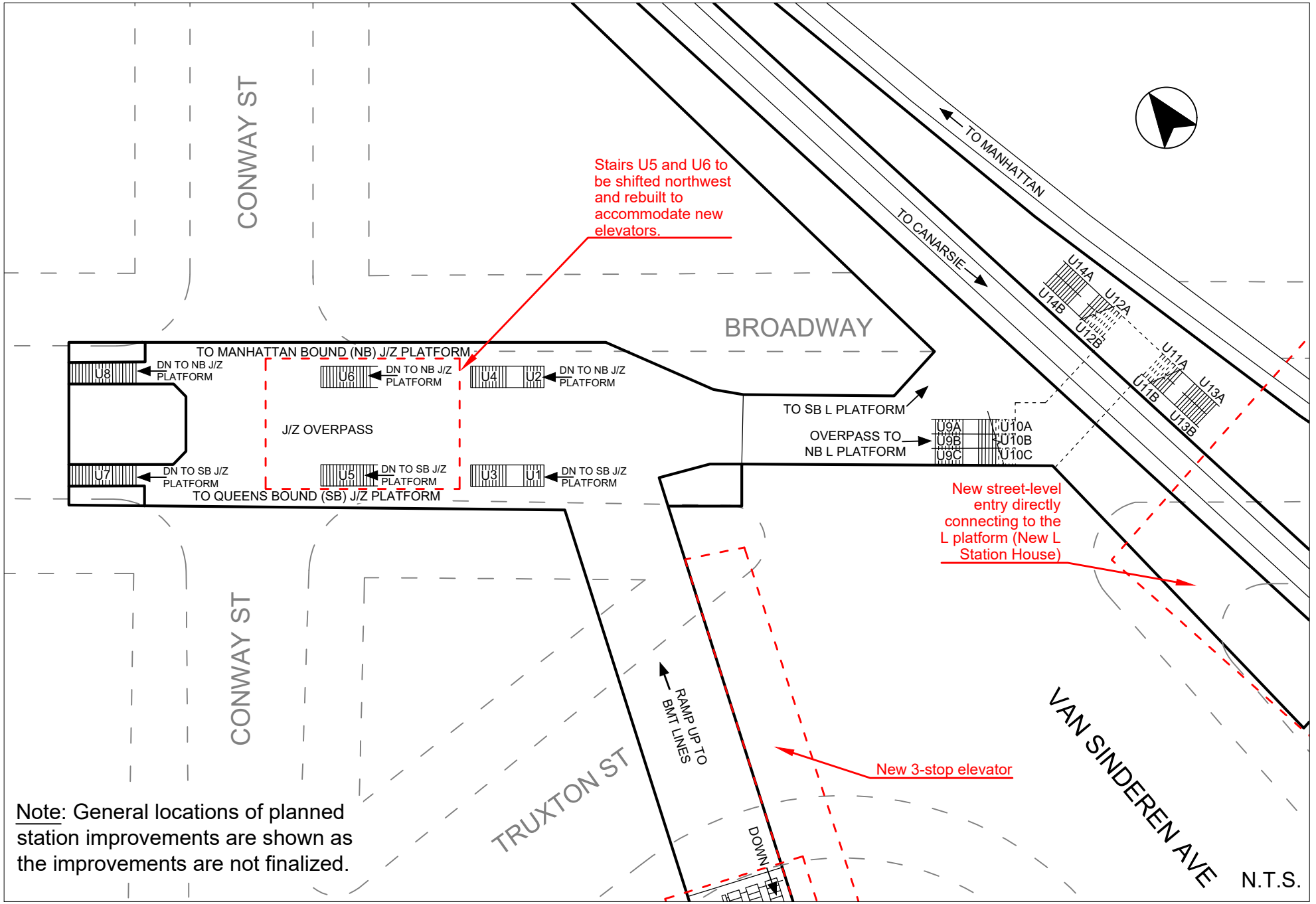
Figure 13-12a

Broadway Junction (A/C/J/L/Z) Subway Station Planned Improvements - IND Line



Legend Stairs Fare Array Planned Station Improvements

Broadway Junction (A/C/J/L/Z) Subway Station Planned Improvements - BMT Lines



Note: General locations of planned station improvements are shown as the improvements are not finalized.

Legend Stairs Fare Array Planned Station Improvements

As shown in **Table 13-31**, all analyzed fare arrays at the Broadway Junction Subway Station complex would continue to operate at an acceptable LOS A in both the AM and PM peak hours under the No-Action condition.

As shown in **Table 13-32**, in the No-Action condition, all analyzed escalators at the Broadway Junction Subway Station complex would operate at an acceptable LOS C in both the AM and PM peak hours.

TABLE 13-30
No-Action Condition Subway Station Stair Analysis

Peak Hour	Station	Stair	Total Width (ft.)	Effective Width (ft.)	Peak Hour Volumes		Surging Factor		Friction Factor	V/C Ratio	LOS
					Up	Down	Up	Down			
AM	Broadway Junction (A/C/J/L/Z)	P1/P2	12.67	11.17	401	659	0.75	0.90	0.90	0.26	A
		P3/P4	12.58	11.08	401	4,283	0.75	0.90	0.90	1.10	D
		M1-M4	7.50	6.25	43	1,793	0.80	0.80	1.00	0.76	C
		U1/U3	5.42	4.42	127	919	0.75	8.00	0.90	0.15	A
		U2/U4	5.42	4.42	342	1,680	0.75	0.80	0.90	1.34	E
		U5	5.42	4.42	212	383	0.75	0.80	0.90	0.40	A
		U6	5.42	4.42	571	701	0.75	0.80	0.90	0.86	C
		U7	5.42	4.42	508	229	0.75	0.80	0.90	0.51	B
		U8	5.42	4.42	1,369	419	0.75	0.80	0.90	1.23	D
		New Platform Stair to NB A/C	7.00	6.00	1,201	88	0.75	0.90	0.90	0.66	B
		New Platform Stair to SB A/C	7.00	6.00	1,204	13	0.75	0.90	1.00	0.56	B
		New Stair from street level of new station house to Level 2	5.00	4.00	98	66	1.00	0.80	0.90	0.11	A
		New Platform Stair from Level 2 to NB L	6.00	5.00	64	44	0.90	0.75	0.90	0.06	A
		New Platform Stair from Level 2 to SB L	9.00	7.75	34	19	0.90	0.75	0.90	0.02	A
PM	Broadway Junction (A/C/J/L/Z)	P1/P2	12.67	11.17	1,246	1,209	0.75	0.90	0.90	0.62	B
		P3/P4	12.58	11.08	198	1,653	0.75	0.90	0.90	0.44	A
		M1-M4	7.50	6.25	353	750	0.80	0.80	0.90	0.51	B
		U1/U3	5.42	4.42	191	1,573	0.75	8.00	0.90	0.24	A
		U2/U4	5.42	4.42	216	457	0.75	0.80	0.90	0.45	A
		U5	5.42	4.42	318	657	0.75	0.80	0.90	0.65	B
		U6	5.42	4.42	360	184	0.75	0.80	0.90	0.37	A
		U7	5.42	4.42	762	394	0.75	0.80	0.90	0.79	C
		U8	5.42	4.42	866	114	0.75	0.80	0.90	0.68	B
		New Platform Stair to NB A/C	7.00	6.00	594	34	0.75	0.90	0.90	0.32	A
		New Platform Stair to SB A/C	7.00	6.00	3,740	25	0.75	0.90	1.00	1.74	F
		New Stair from street level of new station house to Level 2	5.00	4.00	45	90	1.00	0.80	0.90	0.09	A
		New Platform Stair from Level 2 to NB L	6.00	5.00	15	27	0.90	0.75	0.90	0.02	A
		New Platform Stair from Level 2 to SB L	9.00	7.75	29	53	0.90	0.75	0.90	0.03	A

Notes:
Based on information provided by NYCT, the new A/C platform stairs would be 7 feet wide, stairs M1-M4 would 7.5 feet wide, the new platform stair from Level 2 to the northbound L platform would be 6 feet wide, and the new platform stair from Level 2 to the southbound L platform would be 9 feet wide.
Assumes the new platform stair from Level 2 to the northbound L platform would not have an intermediate railing.
Assumes the new platform stair from Level 2 to the southbound L platform would have an intermediate railing.

TABLE 13-31
No-Action Condition Subway Station Fare Array Analysis

Peak Hour	Station	Control Area	Control Elements			Peak Hour Volumes		Surging Factor		Friction Factor	V/C Ratio	LOS
			Turnstile	HEET	HXT	System Entries	System Exits	System Entries	System Exits			
AM	Broadway Junction (A/C/J/L/Z)	New L Station House Entrance	3	0	0	98	66	1.00	0.75	0.90	0.04	A
		N124	7	0	0	1,389	801	1.00	0.75	0.90	0.25	A
PM	Broadway Junction (A/C/J/L/Z)	New L Station House Entrance	3	0	0	45	90	1.00	0.75	0.90	0.03	A
		N124	7	0	0	1,008	1,242	1.00	0.75	0.90	0.25	A

TABLE 13-32
No-Action Condition Escalator Analysis

Peak Period	Station	Escalator	Tread Width	Feet per Minute	Guideline Capacity	Peak Hour Volumes	Surging Factor	V/C Ratio	LOS
AM	Broadway Junction (A/C/J/L/Z)	E330 (Up)	32"	90	750	1,373	0.80	0.72	C
		E331 (Up)	40"	90	945	1,372	0.80	0.57	B
		E347 (Down)	40"	90	945	1,764	0.80	0.73	C
PM	Broadway Junction (A/C/J/L/Z)	E330 (Up)	32"	90	750	1,720	0.80	0.90	C
		E331 (Up)	40"	90	945	1,719	0.80	0.71	C
		E347(Down)	40"	90	945	1,335	0.80	0.55	B

SUBWAY LINE HAUL

Table 13-33 shows anticipated 2036 No-Action line haul conditions at the maximum load point on the A subway route operating in proximity to the Project Area that would generate 200 or more new subway trips in one direction per route. The data in **Table 13-33** reflect both background growth for the 2024 through 2036 period and the addition of demand from new development within the Project Area and its proximity.

As shown in **Table 13-33**, in the No-Action condition, southbound A trains are expected to operate with available capacity in the peak direction in the PM peak hour with a v/c ratio of 0.75. This compares to a v/c ratio of 0.7 in the PM peak hour under existing conditions.

TABLE 13-33
No-Action Condition Subway Line Haul Analysis

Peak Period	Route	Direction	Maximum Load Point (leaving station)	Average Trains Per Hour [(1)]	Cars Per Hour per Train[(1)]	Average Passengers Per Hour [(1)]	Average Passengers Per Car	Guideline Passengers Per Car [(2,4)]	V/C Ratio [(3)]
PM	A	SB	Jay St - MetroTech	15.0	10	15,720	105	140	0.75

Notes:
[1] Based on 2019 ridership data and train throughput data from NYCT. Data was provided by NYCT in 2024. Passenger volumes were grown by 0.5 percent/year to account for growth in demand during the 2019 to 2024 period and 0.25 percent/year until the 2036 analysis year.
[2] Guideline capacities are based on NYCT rush hour loading guidelines, which vary by car type, line, and location based on frequency and type of service. Per NYCT direction, A train capacity has been adjusted from 175 to 140 to reflect 10 60-foot cars at 140 pass./car capacity.
[3] Volume to guideline capacity ratio.
[4] Guideline capacities are based on combined corridor headways for lines on shared segments (e.g. the 2/3).

The Future With the Proposed Actions (With-Action Condition)

Subway Service

SUBWAY STATIONS

As shown in **Table 13-11**, the Alternate Community Facility Scenario, which is the more conservative RWCDS with respect to subway trip generation, is expected to generate a net total of approximately 1,046 and 1,235 new subway trips in the weekday AM and PM peak hours, respectively. These incremental subway trips were assigned to the Broadway Junction Subway Station complex. AM and PM peak hour conditions at the Broadway Junction Subway Station complex in the With-Action condition are shown in Tables 13-34 through 13-36 and discussed below.

Broadway Junction Subway Station Complex

In the With-Action condition, as shown in **Table 13-34**, all analyzed stairs at the Broadway Junction Subway Station complex are expected to operate at an acceptable LOS C or better in both the AM and PM peak hours with the exception of four stairs, of which three and one are expected to operate at LOS D or worse during the AM and PM peak hours, respectively. During the AM peak hour, stairs P3/P4 and U8 are expected to operate at LOS D and stairs U2/U4 are expected to operate at LOS E under the With-Action condition (same as under the No-Action condition). During the PM peak hour, the new platform stairs to the southbound A/C platform are expected to operate at LOS F under the No-Action condition (same as under the No-Action condition). However, all stairs would not be considered significantly adversely impacted by the Proposed Actions based on the *CEQR Technical Manual* impact criteria previously described in Section F, "Transportation Analyses Methodologies" with the exception of platform stairs P3/P4 in the AM peak hour and the new platform stairs to the southbound A/C platform in the PM peak hour. Therefore, two platform stairs would be considered significantly adversely impacted as a result of the Proposed Actions. Potential mitigation for the significant adverse impact to these stairs are discussed in **Chapter 20, "Mitigation."** As described in **Chapter 20, "Mitigation,"** while these measures do not currently appear practicable, mitigation measures will continue to be evaluated between certification of the DEIS and publication of the FEIS.

TABLE 13-34
With-Action Condition Subway Station Stair Analysis

Peak Hour	Station	Stair	Total Width (ft.)	Effective Width (ft.)	Project Increment Up	Project Increment Down	Peak Hour Volumes Up	Peak Hour Volumes Down	Surging Factor Up	Surging Factor Down	Friction Factor	V/C Ratio	LOS	WIT	Impact Threshold
AM	Broadway Junction (A/C/J/L/Z)	P1/P2	12.67	11.17	69	18	470	677	0.75	0.90	0.90	0.29	A	- - -	- - -
		P3/P4	12.58	11.08	7	237	408	4,520	0.75	0.90	0.90	1.16	D *	7.09	7.00
		M1-M4	7.50	6.25	0	15	43	1,808	0.80	0.80	1.00	0.77	C	- - -	- - -
		U1/U3	5.42	4.42	4	4	131	923	0.75	8.00	0.90	0.15	A	- - -	- - -
		U2/U4	5.42	4.42	0	14	342	1,694	0.75	0.80	0.90	1.35	E	0.34	5.00
		U5	5.42	4.42	7	2	219	385	0.75	0.80	0.90	0.40	A	- - -	- - -
		U6	5.42	4.42	1	6	572	707	0.75	0.80	0.90	0.86	C	- - -	- - -
		U7	5.42	4.42	16	0	524	229	0.75	0.80	0.90	0.52	B	- - -	- - -
		U8	5.42	4.42	2	4	1,371	423	0.75	0.80	0.90	1.23	D	0.09	6.00
		New Platform Stair to NB A/C	7.00	6.00	22	5	1,223	93	0.75	0.90	0.90	0.67	B	- - -	- - -
		New Platform Stair to SB A/C	7.00	6.00	207	0	1,411	13	0.75	0.90	1.00	0.66	B	- - -	- - -
		New Stair from street level of new station house to Level 2	5.00	4.00	96	181	194	247	1.00	0.80	0.90	0.29	A	- - -	- - -
		New Platform Stair from Level 2 to NB L	6.00	5.00	15	152	79	196	0.90	0.75	0.90	0.16	A	- - -	- - -
		New Platform Stair from Level 2 to SB L	9.00	7.75	81	29	115	48	0.90	0.75	0.90	0.06	A	- - -	- - -
PM	Broadway Junction (A/C/J/L/Z)	P1/P2	12.67	11.17	72	31	1,318	1,240	0.75	0.90	0.90	0.65	B	- - -	- - -
		P3/P4	12.58	11.08	6	313	204	1,966	0.75	0.90	0.90	0.51	B	- - -	- - -
		M1-M4	7.50	6.25	3	10	356	760	0.80	0.80	0.90	0.52	B	- - -	- - -
		U1/U3	5.42	4.42	3	2	194	1,575	0.75	8.00	0.90	0.24	A	- - -	- - -
		U2/U4	5.42	4.42	1	18	217	475	0.75	0.80	0.90	0.46	B	- - -	- - -
		U5	5.42	4.42	6	1	324	658	0.75	0.80	0.90	0.66	B	- - -	- - -
		U6	5.42	4.42	1	8	361	192	0.75	0.80	0.90	0.38	A	- - -	- - -
		U7	5.42	4.42	14	1	776	395	0.75	0.80	0.90	0.80	C	- - -	- - -
		U8	5.42	4.42	3	4	869	118	0.75	0.80	0.90	0.69	B	- - -	- - -
		New Platform Stair to NB A/C	7.00	6.00	18	6	612	40	0.75	0.90	0.90	0.33	A	- - -	- - -
		New Platform Stair to SB A/C	7.00	6.00	217	1	3,957	26	0.75	0.90	1.00	1.84	F *	4.16	2.00
		New Stair from street level of new station house to Level 2	5.00	4.00	186	147	231	237	1.00	0.80	0.90	0.30	A	- - -	- - -
		New Platform Stair from Level 2 to NB L	6.00	5.00	30	119	45	146	0.90	0.75	0.90	0.11	A	- - -	- - -
		New Platform Stair from Level 2 to SB L	9.00	7.75	156	28	185	81	0.90	0.75	0.90	0.09	A	- - -	- - -

Notes:
WIT denotes the Width Increment Threshold.
* denotes a significant adverse impact per 2021 *CEQR Technical Manual* criteria.

As shown in **Table 13-35**, all analyzed fare arrays at the Broadway Junction Subway Station complex are expected to operate at LOS A in both the AM and PM peak hours under the With-Action condition. Therefore, no significant adverse fare array impacts are anticipated to occur at the Broadway Junction Subway Station complex as a result of the Proposed Actions.

As shown in **Table 13-36**, all analyzed escalators at the Broadway Junction Subway Station complex are expected to operate at an acceptable LOS C or better in both the AM and PM peak hours under the With-Action condition. Therefore, no significant adverse escalator impacts are anticipated to occur at the Broadway Junction Subway Station complex as a result of the Proposed Actions.

TABLE 13-35
With-Action Condition Subway Station Fare Array Analysis

Peak Hour	Station	Control Area	Control Elements Turnstile	Control Elements HEET	Control Elements HXT	Project Increment System Entries	Project Increment System Exits	Peak Hour Volumes System Entries	Peak Hour Volumes System Exits	Surging Factor System Entries	Surging Factor System Exits	Friction Factor	V/C Ratio	LOS
AM	Broadway Junction (A/C/J/L/Z)	New L Station House Entrance	3	0	0	96	181	194	247	1.00	0.75	0.90	0.11	A
		N124	7	0	0	290	335	1,679	1,136	1.00	0.75	0.90	0.31	A
PM	Broadway Junction (A/C/J/L/Z)	New L Station House Entrance	3	0	0	186	147	231	237	1.00	0.75	0.90	0.12	A
		N124	7	0	0	385	341	1,393	1,583	1.00	0.75	0.90	0.33	A

Note:
* denotes a significant adverse impact per 2021 *CEQR Technical Manual* criteria.

TABLE 13-36
With-Action Condition Escalator Analysis

Peak Period	Station	Escalator	Tread Width	Feet per Minute	Guideline Capacity	Project Increment	Peak Hour Volumes	Surging Factor	V/C Ratio	LOS
AM	Broadway Junction (A/C/J/L/Z)	E330 (Up)	32"	90	750	15	1,388	0.80	0.72	C
		E331 (Up)	40"	90	945	15	1,387	0.80	0.57	B
		E347 (Down)	40"	90	945	15	1,779	0.80	0.74	C
PM	Broadway Junction (A/C/J/L/Z)	E330 (Up)	32"	90	750	16	1,736	0.80	0.91	C
		E331 (Up)	40"	90	945	15	1,734	0.80	0.72	C
		E347(Down)	40"	90	945	18	1,353	0.80	0.56	B

Note:
* denotes a significant adverse impact per 2021 *CEQR Technical Manual* criteria.

SUBWAY LINE HAUL

Table 13-37 shows line haul conditions on the A subway route serving the Project Area in the With-Action condition. As shown in **Table 13-37**, southbound A trains are expected to operate with available capacity in the peak direction in the PM peak hour with a v/c ratio of 0.76. This compares to a v/c ratio of 0.75 in the PM peak hour under the No-Action condition. Therefore, as southbound A trains are projected to operate with available capacity in the peak direction in the PM peak hour, no significant adverse impacts to subway line haul conditions would occur because of the Proposed Actions in the PM peak hour.

TABLE 13-37
With-Action Condition Subway Line Haul Analysis

Peak Period	Route	Direction	Maximum Load Point (leaving station)	Average Trains Per Hour [1]	Average Cars Per Hour per Train [1]	Project Increment	Average Passengers Per Hour [1]	Average Passengers Per Car	Guideline Passengers Per Car [2,4]	V/C Ratio [3]	Average Additional Passengers Per Car Per Hour
PM	A	SB	Jay St - MetroTech	15.0	10	182	15,902	106	140	0.76	1.21

Notes:
[1] Based on 2019 ridership data and train throughput data from NYCT. Data was provided by NYCT in 2024. Passenger volumes were grown by 0.5 percent/year to account for growth in demand during the 2019 to 2024 period and 0.25 percent/year until the 2036 analysis year.
[2] Guideline capacities are based on NYCT rush hour loading guidelines, which vary by car type, line, and location based on frequency and type of service. Per NYCT direction, A train capacity has been adjusted from 175 to 140 to reflect 10 60-foot cars at 140 pass./car capacity.
[3] Volume to guideline capacity ratio.
[4] Guideline capacities are based on combined corridor headways for lines on shared segments (e.g. the 2/3).

I. PEDESTRIANS

Existing Conditions

Much of the area surrounding the Project Area is characterized by relatively light to moderate pedestrian flows during peak periods except for retail corridors such as Fulton Street and corridors providing access to area subway stations and bus routes. As discussed previously in Section E, "Level 2 Screening Assessment," the analysis of pedestrian conditions focuses on representative pedestrian elements where new trips generated by a proposed action are expected to be most concentrated. These elements—sidewalks, corner areas, and crosswalks—are primarily located in the vicinity of the Project Area and along corridors connecting the Project Area to surrounding transit services. As shown in **Figure 13-4**, they include a total of 54 elements (22 sidewalks, 12 crosswalks, and 20 corner areas) primarily located along the Atlantic Avenue, East New York Avenue, and Jamaica Avenue corridors.

Sidewalks

Data from pedestrian counts conducted in September 2024 indicate that the highest pedestrian flows at analyzed sidewalks within the study area are generally found along commercial corridors and corridors providing access to subway station entrances, including Fulton Street and Van Sinderen Avenue. The effective width (i.e., accounting for shy distance from fixed objects) of the analyzed sidewalks ranged from 0.5 to 11.5 feet in width. It should be noted that some analyzed sidewalks feature an effective width of "N/A" as they were impassable under existing conditions due to obstructions such as overgrown vegetation or utilized infrequently under the analyzed peak hours. Features typically present along study area sidewalks that can reduce the effective width available for pedestrian flow include street furniture such as sign posts, traffic signal and lamp posts, fire hydrants and tree pits, as well as larger installations such as subway support columns (for elevated subway structures).

Table 13-38 shows the existing peak hour pedestrian volumes, average pedestrian space in square feet per pedestrian (sf/ped), and platoon-adjusted levels of service at analyzed sidewalks. As shown in **Table 13-38**, all analyzed sidewalks currently operate at an acceptable LOS C or better in all peak hours. For those sidewalks that were obstructed, unpaved, or did not feature existing pedestrian volumes, no LOS could be calculated.

Crosswalks

The analyzed crosswalks were located at signalized intersections with pedestrian signals. Most crosswalks in the study area feature high visibility striping and analyzed crosswalks generally range from 11 to 15.5 feet in effective width. **Table 13-39** shows the peak hour volumes, average pedestrian space (in sf/ped), and levels of service at analyzed crosswalks. As shown in **Table 13-39**, all analyzed crosswalks currently operate at an acceptable LOS A in all peak hours.

Corner Areas

Table 13-40 shows the peak hour volumes, average pedestrian space (in sf/ped) and levels of service at analyzed corner areas. As shown in **Table 13-40**, all analyzed corner areas currently operate at an acceptable LOS A in all peak hours.

TABLE 13-38
Existing Sidewalk Conditions

No.	Location	Effective Width (ft)	Peak Hour Volumes				Average Pedestrian Space (ft^2/ped)				Platoon-Adjusted Level of Service			
			AM	MD	PM	SAT	AM	MD	PM	SAT	AM	MD	PM	SAT
S1	East sidewalk along Van Sinderen Ave btw Broadway and Fulton St	0.5	13	15	8	1	328.8	284.9	326.5	1,980.0	B	B	B	A
S2	East sidewalk along Van Sinderen Ave btw Fulton St and Herkimer St	4.0	11	11	13	14	3,168.0	3,168.0	2,631.9	2,262.8	A	A	A	A
S3	West sidewalk along Van Sinderen Ave btw Fulton St and Herkimer St	1.5	317	114	254	115	54.5	174.8	75.1	160.8	C	B	C	B
S4	West sidewalk along Van Sinderen Ave btw Truxton St and Fulton St	6.5	759	390	663	319	113.5	234.7	137.8	258.0	B	B	B	B
S5	East sidewalk along Van Sinderen Ave btw Herkimer St and Atlantic	3.0	27	14	9	3	1,073.5	1,697.1	3,960.0	6,019.2	A	A	A	A
S6	North sidewalk along Atlantic Ave btw Van Sinderen Ave and Williams	11.5	31	31	31	42	3,231.9	2,820.5	3,819.5	2,298.7	A	A	A	A
S7	East sidewalk along Williams Place btw Fulton St and Herkimer	N/A	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S8	South sidewalk along Fulton St btw Williams Place and E New York Ave	3.0	8	15	10	9	2,376.0	2,376.0	2,376.0	3,960.0	A	A	A	A
S9	West sidewalk along Williams Place btw Fulton St and Herkimer	4.5	6	2	0	0	8,910.0	17,820.0	N/A	N/A	A	A	N/A	N/A
S10	South sidewalk along Fulton St btw Van Sinderen and Williams Pl	4.0	19	43	11	12	1,767.4	1,060.9	2,649.6	2,270.4	A	A	A	A
S11	North sidewalk along Herkimer St btw Williams Ave and E New York	N/A	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S12	East sidewalk along Williams Place btw Herikimer St and Atlantic	7.5	0	5	3	3	N/A	7,365.6	9,900.0	29,700.0	N/A	A	A	A
S13	South sidewalk along Herikimer St btw Williams Place and E New York	0.5	8	28	8	8	326.5	141.0	494.9	494.9	B	B	B	B
S14	South sidewalk along Herkimer St btw Van Sinderen and Williams Pl	10.0	13	33	9	11	5,604.9	2,496.0	13,200.0	9,936.0	A	A	A	A
S15	North sidewalk along Herkimer St btw Van Sinderen and Williams Pl	4.5	1	3	0	0	17,820.0	9,028.8	N/A	N/A	A	A	N/A	N/A
S16	North sidewalk along East New York Ave btw Fulton St and	5.0	40	21	26	16	1,524.6	2,828.6	1,797.2	3,960.0	A	A	A	A
S17	West sidewalk along Williams Ave btw E New York Ave and Atlantic	9.0	2	0	3	2	17,820.0	N/A	18,057.6	17,820.0	A	N/A	A	A
S18	North sidewalk along East New York Ave btw Williams Pl and Herkimer St	3.0	50	20	27	8	703.2	1,188.0	1,196.8	2,376.0	A	A	A	A
S19	North sidewalk along Jamaica Ave btw Fanchon Pl and Bushwick Ave	8.0	102	89	95	36	1,093.2	882.7	1,133.8	2,886.4	A	A	A	A
S20	North sidewalk along Jamaica Ave btw Fanchon Pl and Broadway	8.5	98	129	91	60	838.0	887.1	1,080.0	1,974.7	A	A	A	A
S21	North sidewalk along Atlantic Ave btw Alabama Ave and Georgia Ave	3.0	25	32	35	16	1,268.8	891.0	590.6	1,492.4	A	A	A	A
S22	North sidewalk along Atlantic Ave btw Williams Ave and Alabama Ave	2.5	14	12	15	12	1,060.7	1,485.0	1,247.4	1,485.0	A	A	A	A

Note:
N/A is noted for sidewalks that are utilized infrequently (i.e., zero pedestrian volumes) or are heavily overgrown with vegetation.

TABLE 13-39
Existing Crosswalk Conditions

Intersection	Crosswalk		Peak Hour Volumes				Average Pedestrian Space (ft^2/ped)				Level of Service			
			AM	MD	PM	SAT	AM	MD	PM	SAT	AM	MD	PM	SAT
Van Sinderen Ave & Fulton St	X1	North	47	42	35	18	600.2	809.4	756.6	924.2	A	A	A	A
Van Sinderen Ave & Fulton St	X2	East	19	33	10	9	1,001.5	569.1	1,117.6	1,567.4	A	A	A	A
Van Sinderen Ave & Fulton St	X3	South	9	16	14	9	2,245.8	1,621.6	1,557.8	1,896.9	A	A	A	A
Van Sinderen Ave & Fulton St	X4	West	336	149	273	126	140.3	400.3	199.7	420.0	A	A	A	A
Williams Pl & Atlantic Ave	X5	North	35	26	40	11	496.5	499.9	545.6	1,297.9	A	A	A	A
Williams Ave/Herkimer St & E New York Ave	X6	North	43	14	19	8	683.8	1,466.9	1,175.1	2,929.8	A	A	A	A
Williams Ave/Herkimer St & E New York Ave	X7	West	2	20	18	9	8,068.1	1,016.1	1,149.2	2,023.7	A	A	A	A
Broadway/Alabama Ave & Jamaica Ave/E New York Ave	X8	North	58	29	40	12	209.7	851.3	565.5	1,015.9	A	A	A	A
Broadway/Alabama Ave & Jamaica Ave/E New York Ave	X9	South	140	202	145	102	236.0	216.8	280.1	363.0	A	A	A	A
Fanchon Pl & Jamaica Ave	X10	North	76	62	78	25	1,088.7	982.8	1,086.0	3,069.6	A	A	A	A
Georgia Ave & Atlantic Ave	X11	North	30	26	26	15	717.5	1,419.6	1,559.8	1,005.8	A	A	A	A
Georgia Ave & Atlantic Ave	X12	West	60	58	58	12	311.7	367.6	297.2	841.9	A	A	A	A

TABLE 13-40
Existing Corner Conditions

Intersection	Corner		Average Pedestrian Space (ft^2/ped)				Level of Service			
			AM	MD	PM	SAT	AM	MD	PM	SAT
Van Sinderen Ave & Fulton St	C01	NE	1,942.7	2,129.5	2,649.0	3,295.2	A	A	A	A
Van Sinderen Ave & Fulton St	C02	SE	2,111.0	1,492.4	1,999.8	2,385.5	A	A	A	A
Van Sinderen Ave & Fulton St	C03	SW	156.8	384.0	214.9	439.6	A	A	A	A
Van Sinderen Ave & Fulton St	C04	NW	399.9	922.7	556.9	1,067.9	A	A	A	A
Williams Pl & Atlantic Ave	C05	NE	1,635.2	1,702.8	1,365.8	2,394.0	A	A	A	A
Williams Pl & Atlantic Ave	C06	NW	4,162.8	5,737.6	6,920.3	9,447.0	A	A	A	A
Williams Ave & Herkimer St & E New York Ave	C07	NE	619.0	779.5	735.9	1,873.6	A	A	A	A
Williams Ave & Herkimer St & E New York Ave	C08	SW	2,004.5	1,039.1	872.4	1,578.2	A	A	A	A
Williams Ave & Herkimer St & E New York Ave	C09	NW	726.9	784.4	747.8	1,574.1	A	A	A	A
Broadway & Alabama Ave &	C10	NE	800.7	1,202.1	1,164.6	1,550.0	A	A	A	A
Broadway & Alabama Ave &	C11	SE	126.9	140.5	174.3	204.2	A	A	A	A
Broadway & Alabama Ave & Jamaica Ave & E New York Ave	C12	SW	244.2	239.5	273.1	414.3	A	A	A	A
Broadway & Alabama Ave & Jamaica Ave & E New York Ave	C13	NW	267.0	379.3	337.1	587.0	A	A	A	A
Fanchon Pl & Jamaica Ave	C14	NE	600.3	420.0	634.7	1,479.4	A	A	A	A
Fanchon Pl & Jamaica Ave	C15	NW	407.5	493.2	592.6	1,297.2	A	A	A	A
Bushwick Ave & Jamaica Ave	C16	NW	1,381.0	1,152.5	1,146.1	2,060.4	A	A	A	A
Georgia Ave & Atlantic Ave	C17	NE	1,050.8	1,283.2	1,385.6	2,013.2	A	A	A	A
Georgia Ave & Atlantic Ave	C18	SE	838.6	963.4	995.1	3,008.0	A	A	A	A
Georgia Ave & Atlantic Ave	C19	SW	389.9	438.0	365.7	967.5	A	A	A	A
Georgia Ave & Atlantic Ave	C20	NW	495.3	556.6	527.2	873.4	A	A	A	A

The Future Without the Proposed Actions (No-Action Condition)

Between 2024 and 2036, pedestrian volumes along analyzed sidewalks, crosswalks, and corner areas are expected to increase due to long-term background growth. To forecast future pedestrian volumes in the No-Action condition, development on sites within a half-mile radius of the Project Area shown in **Figure 13-7** and summarized in **Table 13-23** were considered. It should also be noted that the analysis reflects that the construction in the existing condition is assumed to be completed by 2036. Conditions on analyzed sidewalks, crosswalks, and corner areas in the No-Action condition are discussed below.

Sidewalks

Table 13-41 shows the No-Action peak hour pedestrian volumes, average pedestrian space, and platoon-adjusted levels of service at analyzed sidewalks. As shown in **Table 13-41**, all analyzed sidewalks are projected to operate at an acceptable LOS C or better in all peak hours except for one sidewalk. The south sidewalk along Herkimer Street between Williams Place and East New York Avenue is expected to operate at a LOS E in the weekday midday peak hour (compared to LOS B under existing conditions).

Crosswalks

Table 13-42 shows the peak hour volumes, average pedestrian space, and levels of service at analyzed crosswalks in the No-Action condition. As shown in **Table 13-42**, all analyzed crosswalks are expected to continue to operate at an acceptable LOS A in all peak hours in the No-Action condition.

Corner Areas

Table 13-43 shows the peak hour volumes, average pedestrian space, and levels of service at analyzed corner areas in the No-Action condition. As shown in **Table 13-43**, all analyzed corner areas are expected to continue to operate at an acceptable LOS A in all peak hours.

TABLE 13-41
No-Action Sidewalk Conditions

No.	Location	Effective Width (ft)	Peak Hour Volumes				Average Pedestrian Space (ft^2/ped)				Platoon-Adjusted Level of Service			
			AM	MD	PM	SAT	AM	MD	PM	SAT	AM	MD	PM	SAT
S1	East sidewalk along Van Sinderen Ave btw Broadway and Fulton St	0.5	26	35	36	33	164.2	121.7	71.9	59.1	B	B	C	C
S2	East sidewalk along Van Sinderen Ave btw Fulton St and Herkimer St	4.0	24	31	41	46	1,452.0	1,124.1	834.4	688.6	A	A	A	A
S3	West sidewalk along Van Sinderen Ave btw Fulton St and Herkimer St	7.5	492	504	489	316	178.4	197.7	196.5	293.1	B	B	B	B
S4	West sidewalk along Van Sinderen Ave btw Truxton St and Fulton St	6.5	1,084	655	1,055	670	79.1	139.5	86.2	122.5	C	B	C	B
S5	East sidewalk along Van Sinderen Ave btw Herkimer St and Atlantic Ave	3.0	51	113	48	45	568.3	210.0	742.4	401.1	A	B	A	B
S6	North sidewalk along Atlantic Ave btw Van Sinderen Ave and Williams Pl	11.5	61	201	75	84	1,642.4	434.9	1,578.7	1,149.3	A	B	A	A
S7	East sidewalk along Williams Place btw Fulton St and Herkimer St	N/A	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S8	South sidewalk along Fulton St btw Williams Place and E New York Ave	3.0	8	16	10	9	2,376.0	2,227.5	2,376.0	3,960.0	A	A	A	A
S9	West sidewalk along Williams Place btw Fulton St and Herkimer St	4.5	6	2	0	0	8,910.0	17,820.0	N/A	N/A	A	A	N/A	N/A
S10	South sidewalk along Fulton St btw Van Sinderen and Williams Pl	4.0	19	44	11	12	1,767.4	1,036.7	2,649.6	2,270.4	A	A	A	A
S11	North sidewalk along Herkimer St btw Williams Ave and E New York Ave	N/A	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S12	East sidewalk along Williams Place btw Herikimer St and Atlantic Ave	7.5	0	5	3	3	N/A	7,365.6	9,900.0	29,700.0	N/A	A	A	A
S13	South sidewalk along Herikimer St btw Williams Place and E New York Ave	0.5	44	164	59	53	58.5	21.9	66.3	74.0	C	E	C	C
S14	South sidewalk along Herkimer St btw Van Sinderen and Williams Pl	10.0	49	169	60	56	1,487.0	487.3	1,980.0	1,951.7	A	B	A	A
S15	North sidewalk along Herkimer St btw Van Sinderen and Williams Pl	4.5	1	3	0	0	17,820.0	9,028.8	N/A	N/A	A	A	N/A	N/A
S16	North sidewalk along East New York Ave btw Fulton St and Alabama Ave	5.0	76	143	77	61	802.4	415.3	606.8	1,038.6	A	B	A	A
S17	West sidewalk along Williams Ave btw E New York Ave and Atlantic Ave	9.0	6	7	13	14	5,940.0	16,292.6	4,167.1	2,545.7	A	A	A	A
S18	North sidewalk along East New York Ave btw Williams Pl and Herkimer St	3.0	52	21	28	8	676.2	1,131.4	1,154.0	2,376.0	A	A	A	A
S19	North sidewalk along Jamaica Ave btw Fanchon Pl and Bushwick Ave	8.0	116	170	110	48	961.3	462.0	979.1	2,164.8	A	B	A	A
S20	North sidewalk along Jamaica Ave btw Fanchon Pl and Broadway	8.5	112	212	106	73	733.2	539.7	927.2	1,623.0	A	A	A	A
S21	North sidewalk along Atlantic Ave btw Alabama Ave and Georgia Ave	3.0	80	228	111	92	396.4	124.8	186.1	259.4	B	B	B	B
S22	North sidewalk along Atlantic Ave btw Williams Ave and Alabama Ave	2.5	52	195	77	74	285.5	91.0	242.9	240.7	B	B	B	B

Note:
N/A is noted for sidewalks that are utilized infrequently (i.e., zero pedestrian volumes) or are heavily overgrown with vegetation.

TABLE 13-42
No-Action Crosswalk Conditions

Intersection	Crosswalk		Peak Hour Volumes				Average Pedestrian Space (ft^2/ped)				Level of Service			
			AM	MD	PM	SAT	AM	MD	PM	SAT	AM	MD	PM	SAT
Van Sinderen Ave & Fulton St	X1	North	49	44	37	18	577.1	771.7	712.9	924.2	A	A	A	A
Van Sinderen Ave & Fulton St	X2	East	32	54	38	41	586.4	347.4	292.0	265.0	A	A	A	A
Van Sinderen Ave & Fulton St	X3	South	9	16	14	9	2,233.7	1,611.6	1,549.2	1,890.2	A	A	A	A
Van Sinderen Ave & Fulton St	X4	West	586	424	622	428	70.5	132.1	78.8	116.1	A	A	A	A
Williams Pl & Atlantic Ave	X5	North	65	196	84	51	266.5	61.0	258.5	283.9	A	A	A	A
Williams Ave/Herkimer St & E New York Ave	X6	North	80	136	69	52	337.9	146.2	351.0	447.2	A	A	A	A
Williams Ave/Herkimer St & E New York Ave	X7	West	8	39	30	21	2,479.3	519.3	696.8	858.3	A	A	A	A
Broadway/Alabama Ave & Jamaica Ave/E New York Ave	X8	North	71	108	53	22	90.6	177.3	338.5	382.9	A	A	A	A
Broadway/Alabama Ave & Jamaica Ave/E New York Ave	X9	South	172	268	191	144	163.3	138.8	180.5	215.6	A	A	A	A
Fanchon Pl & Jamaica Ave	X10	North	89	141	92	36	926.0	431.2	921.0	2,132.0	A	A	A	A
Georgia Ave & Atlantic Ave	X11	North	45	91	41	26	468.2	400.6	973.2	573.7	A	A	A	A
Georgia Ave & Atlantic Ave	X12	West	132	208	149	105	136.6	101.3	118.1	84.6	A	A	A	A

TABLE 13-43
No-Action Corner Conditions

Intersection	Corner		Average Pedestrian Space (ft^2/ped)				Level of Service			
			AM	MD	PM	SAT	AM	MD	PM	SAT
Van Sinderen Ave & Fulton St	C01	NE	1,617.5	1,630.6	1,456.6	1,489.1	A	A	A	A
Van Sinderen Ave & Fulton St	C02	SE	1,589.7	1,094.4	958.2	912.0	A	A	A	A
Van Sinderen Ave & Fulton St	C03	SW	256.9	414.4	263.9	388.3	A	A	A	A
Van Sinderen Ave & Fulton St	C04	NW	267.3	481.2	310.7	454.4	A	A	A	A
Williams Pl & Atlantic Ave	C05	NE	1,065.7	314.9	893.5	989.4	A	A	A	A
Williams Pl & Atlantic Ave	C06	NW	2,848.7	968.0	3,686.6	3,227.6	A	A	A	A
Williams Ave & Herkimer St & E New York Ave	C07	NE	350.2	153.2	329.5	488.6	A	A	A	A
Williams Ave & Herkimer St & E New York Ave	C08	SW	1,522.6	621.3	700.0	1,045.6	A	A	A	A
Williams Ave & Herkimer St & E New York Ave	C09	NW	354.5	134.5	294.3	377.1	A	A	A	A
Broadway & Alabama Ave & Jamaica Ave & E New York Ave	C10	NE	707.8	582.5	967.6	1,160.0	A	A	A	A
Broadway & Alabama Ave & Jamaica Ave & E New York Ave	C11	SE	108.8	113.3	143.4	162.0	A	A	A	A
Broadway & Alabama Ave & Jamaica Ave & E New York Ave	C12	SW	180.1	154.2	189.4	258.0	A	A	A	A
Broadway & Alabama Ave & Jamaica Ave & E New York Ave	C13	NW	186.0	121.5	196.4	268.8	A	A	A	A
Fanchon Pl & Jamaica Ave	C14	NE	533.0	243.0	558.8	1,160.8	A	A	A	A
Fanchon Pl & Jamaica Ave	C15	NW	369.5	266.4	520.0	1,042.9	A	A	A	A
Bushwick Ave & Jamaica Ave	C16	NW	1,179.1	556.0	959.9	1,688.6	A	A	A	A
Georgia Ave & Atlantic Ave	C17	NE	789.0	513.6	1,032.9	1,223.4	A	A	A	A
Georgia Ave & Atlantic Ave	C18	SE	568.8	471.5	620.8	1,007.3	A	A	A	A
Georgia Ave & Atlantic Ave	C19	SW	185.7	143.8	159.3	134.4	A	A	A	A
Georgia Ave & Atlantic Ave	C20	NW	253.1	156.5	236.1	155.0	A	A	A	A

The Future With the Proposed Actions (With-Action Condition)

Incremental pedestrian demand generated by the Proposed Actions by 2036 would include trips made solely by walking, as well as pedestrian trips en route to and from subway station entrances and bus stops. Pedestrian trips generated by the Proposed Actions are expected to be most concentrated in proximity to the Project Area and along corridors connecting the Project Area to surrounding transit services. To better accommodate the increased pedestrian demand, sidewalk widths adjacent to Projected Development Sites 1C, 1D, and 1E would be widened as part of the Proposed Actions. At Projected Development Site 1C, the new building would be setback from Fulton Street (ranging from 2'-5" to 5'-11" on one portion, and 10'-11" to 12'-2" on another portion) and Williams Place (ranging from five feet to 11'-2") to facilitate wider sidewalks. At Projected Development Site 1D, the new building would be setback from Herkimer Street by five feet and from East New York Avenue by six feet to facilitate wider sidewalks. At Projected Development Site 1E, the new building would be setback from Williams Place by five feet and from East New York Avenue by six feet to facilitate wider sidewalks.

In addition, under existing conditions, sidewalks adjacent to Projected Development Site 1C – specifically the northern sidewalk of Herkimer Street (S11) and the east sidewalk of Williams Place (S7) – do not feature complete, paved sidewalks with clear walking paths. Therefore, in the With-Action condition, these two sidewalks would be improved through the construction of sidewalks that are at least 10 feet width.

As shown in **Table 13-11**, the Alternate Community Facility Scenario is expected to generate a net total of approximately 993 walk-only trips in the weekday AM peak hour, 2,616 in the midday peak hour, 2,261 in the PM peak hour and 2,856 in the Saturday peak hour. Persons en route to and from subway station entrances, bus stops, and off-site parking would add approximately 1,845, 963, 1,942, and 1,502 additional pedestrian trips to Project Area sidewalks and crosswalks during these same periods, respectively. These pedestrian volumes were added to the projected No-Action volumes to generate the With-Action pedestrian volumes for analysis.

Anticipated conditions and significant adverse impacts at analyzed sidewalks, crosswalks, and corner areas in the With-Action condition are shown in **Tables 13-44** through **13-46**. As discussed below, four sidewalks out of the 22 analyzed, three crosswalks out of the 12 analyzed, and five corner areas out of the 20 analyzed would be impacted in one or more peak hours. To the extent practicable measures to mitigate these impacts have been identified, they are described in **Chapter 20, "Mitigation."** As described in **Chapter 20, "Mitigation,"** mitigation measures will continue to be evaluated between certification of the DEIS and publication of the FEIS. To the extent there are no practicable measures to fully mitigate these impacts, they would be unmitigated or only partially mitigated, as the case may be.

Sidewalks

Table 13-44 shows the incremental change in peak hour pedestrian volumes attributable to the Proposed Actions and the total With-Action pedestrian volumes, average pedestrian space, and platoon-adjusted levels of service at analyzed sidewalks. In addition, **Table 13-44** identifies the sidewalks that are expected to be significantly adversely impacted in one or more peak hours based on the 2021 *CEQR Technical Manual* criteria shown in **Table 13-20**. As shown in **Table 13-44**, there would be significant adverse impacts at four of the 22 analyzed sidewalks in one or more peak hours. These would include:

- The east sidewalk along Van Sinderen Avenue between Broadway and Fulton Street in the weekday AM, weekday midday, weekday PM, and Saturday peak hours;

- The south sidewalk along Herkimer Street between Williams Place and East New York Avenue in the weekday AM, weekday PM, and Saturday peak hours;
- The north sidewalk along Atlantic Avenue between Alabama Avenue and Georgia Avenue in the weekday midday, weekday PM, and Saturday peak hours; and
- The north sidewalk along Atlantic Avenue between Williams Avenue and Alabama Avenue in the weekday AM, weekday midday, weekday PM, and Saturday peak hours.

Crosswalks

Table 13-45 shows the incremental change in peak hour pedestrian volumes attributable to the Proposed Actions and the total With-Action pedestrian volumes, average pedestrian space, and levels of service at analyzed crosswalks. As shown in **Table 13-45**, based on the 2021 *CEQR Technical Manual* criteria shown in **Table 13-21**, there would be significant adverse impacts at three of the 12 analyzed crosswalks in one or more peak hours as result of the Proposed Actions. These would include:

- The east crosswalk of the intersection of Van Sinderen Avenue and Fulton Street in the weekday PM and Saturday peak hours; and
- The north crosswalk of the intersection of Williams Avenue/Herkimer Street and East New York Avenue in the weekday midday peak hour; and
- The west crosswalk of the intersection of Georgia Avenue and Atlantic Avenue in the Saturday peak hour.

Corner Areas

Table 13-45 shows the total With-Action pedestrian volumes, average pedestrian space, and levels of service at analyzed corner areas. As shown in **Table 13-45**, based on the 2021 *CEQR Technical Manual* criteria shown in **Table 13-21**, there would be significant adverse impacts at five of the 20 analyzed corners in one or more peak hours as result of the Proposed Actions. These would include:

- The northeast corner on Williams Avenue/Herkimer Street and East New York Avenue in the weekday AM, weekday midday, and weekday PM peak hours;
- The northwest corner on Williams Avenue/Herkimer Street and East New York Avenue in the weekday AM, weekday midday, weekday PM, and Saturday peak hours;
- The northwest corner on Broadway/Alabama Avenue and Jamaica Avenue/East New York Avenue in the weekday midday, weekday PM, and Saturday peak hours;
- The southwest corner on Georgia Avenue at Atlantic Avenue in the Saturday peak hour; and
- The northwest corner on Georgia Avenue at Atlantic Avenue in the Saturday peak hour.

TABLE 13-44
With-Action Sidewalk Conditions

No.	Location	Effective Width (ft)	Project Increment				Peak Hour Volumes				Average Pedestrian Space (ft^2/ped)				Platoon-Adjusted Level of Service			
			AM	MD	PM	SAT	AM	MD	PM	SAT	AM	MD	PM	SAT	AM	MD	PM	SAT
S1	East sidewalk along Van Sinderen Ave btw Broadway and Fulton St	0.5	243	101	284	143	269	136	320	176	9.4	22.3	1.1	4.8	F *	E *	F *	F *
S2	East sidewalk along Van Sinderen Ave btw Fulton St and Herkimer St	4.0	533	324	625	427	557	355	666	473	46.3	73.2	37.7	49.6	C	C	D	C
S3	West sidewalk along Van Sinderen Ave btw Fulton St and Herkimer St	7.5	249	192	314	220	741	696	803	536	88.6	107.3	89.5	129.4	C	B	C	B
S4	West sidewalk along Van Sinderen Ave btw Truxton St and Fulton St	6.5	702	372	848	521	1,786	1,027	1,903	1,191	35.5	66.5	35.3	51.3	D	C	D	C
S5	East sidewalk along Van Sinderen Ave btw Herkimer St and Atlantic Ave	9.5	207	162	225	228	258	275	273	273	266.7	205.1	310.0	156.9	B	B	B	B
S6	North sidewalk along Atlantic Ave btw Van Sinderen Ave and Williams	11.5	202	231	293	267	263	432	368	351	285.6	151.6	241.2	206.1	B	B	B	B
S7	East sidewalk along Williams Place btw Fulton St and Herkimer St	11.3	266	290	488	389	266	290	488	389	403.7	370.2	219.9	276.0	B	B	B	B
S8	South sidewalk along Fulton St btw Williams Place and E New York Ave	12.1	104	216	292	341	112	232	302	350	513.3	464.6	237.9	307.9	B	B	B	B
S9	West sidewalk along Williams Place btw Fulton St and Herkimer St	4.5	195	128	256	157	201	130	256	157	199.3	205.5	166.9	272.3	B	B	B	B
S10	South sidewalk along Fulton St btw Van Sinderen and Williams Pl	4.0	444	334	638	420	463	378	649	432	53.8	90.2	32.8	46.7	C	B	D	C
S11	North sidewalk along Herkimer St btw Williams Ave and E New York Ave	7.0	434	555	769	887	434	555	769	887	153.1	119.6	86.2	74.6	B	B	C	C
S12	East sidewalk along Williams Place btw Herikimer St and Atlantic	12.0	780	931	888	689	780	936	891	692	146.0	46.6	39.2	154.3	B	C	D	B
S13	South sidewalk along Herikimer St btw Williams Place and E New York Ave	7.0	823	924	1,564	1,372	867	1,088	1,623	1,425	30.7	37.4	24.4	28.1	D *	D	D *	D *
S14	South sidewalk along Herkimer St btw Van Sinderen and Williams Pl	10.0	569	530	764	571	618	699	824	627	88.1	88.0	107.8	130.5	C	C	B	B
S15	North sidewalk along Herkimer St btw Van Sinderen and Williams Pl	4.5	374	307	505	400	375	310	505	400	34.8	65.1	84.3	106.6	D	C	C	B
S16	North sidewalk along East New York Ave btw Fulton St and Alabama Ave	5.0	702	800	966	782	778	943	1,043	843	58.3	46.6	32.7	55.8	C	C	D	C
S17	West sidewalk along Williams Ave btw E New York Ave and Atlantic Ave	9.0	295	434	521	563	301	441	534	577	88.5	193.8	75.7	45.7	C	B	C	C
S18	North sidewalk along East New York Ave btw Williams Pl and Herkimer St	7.1	544	648	564	464	596	669	592	472	104.4	62.6	96.6	71.1	B	C	B	C
S19	North sidewalk along Jamaica Ave btw Fanchon Pl and Bushwick Ave	8.0	225	312	343	322	341	482	453	370	245.1	122.0	178.2	210.5	B	B	B	B
S20	North sidewalk along Jamaica Ave btw Fanchon Pl and Broadway	8.5	275	381	420	393	387	593	526	466	159.0	144.5	139.9	190.5	B	B	B	B
S21	North sidewalk along Atlantic Ave btw Alabama Ave and Georgia Ave	3.0	614	850	934	870	694	1,078	1,045	962	45.0	25.3	18.2	23.6	C	D *	E *	D *
S22	North sidewalk along Atlantic Ave btw Williams Ave and Alabama Ave	2.5	425	608	684	680	477	803	761	754	30.1	20.8	23.3	22.3	D *	E *	D *	E *

Note:
* denotes a significant adverse impact per 2021 *CEQR Technical Manual* criteria.

TABLE 13-45
With-Action Crosswalk Conditions

Intersection	Crosswalk		Project Increment				Peak Hour Volumes				Average Pedestrian Space (ft^2/ped)				Level of Service			
			AM	MD	PM	SAT	AM	MD	PM	SAT	AM	MD	PM	SAT	AM	MD	PM	SAT
Van Sinderen Ave & Fulton St	X1	North	430	289	551	373	479	333	588	391	51.1	97.1	40.7	39.2	B	A	B	C
Van Sinderen Ave & Fulton St	X2	East	673	389	834	516	705	443	872	557	23.9	40.6	10.3	15.4	D	B	E *	D *
Van Sinderen Ave & Fulton St	X3	South	306	268	429	334	315	284	443	343	60.4	85.7	44.2	44.3	A	A	B	B
Van Sinderen Ave & Fulton St	X4	West	430	290	552	373	1,016	714	1,174	801	38.8	75.7	38.9	59.3	C	A	C	B
Williams Pl & Atlantic Ave	X5	North	205	233	294	267	270	429	378	318	60.2	25.6	53.0	42.5	A	C	B	B
Williams Ave/Herkimer St & E New York Ave	X6	North	702	800	966	782	782	936	1,035	834	28.0	18.3	20.5	24.5	C	D *	D	C
Williams Ave/Herkimer St & E New York Ave	X7	West	384	533	652	665	392	572	682	686	50.8	32.8	28.8	23.4	B	C	C	D
Broadway/Alabama Ave & Jamaica Ave/E New York Ave	X8	North	510	585	703	585	581	693	756	607	37.6	39.8	36.0	23.9	C	C	C	D
Broadway/Alabama Ave & Jamaica Ave/E New York Ave	X9	South	202	209	295	217	374	477	486	361	106.9	112.5	100.2	125.7	A	A	A	A
Fanchon Pl & Jamaica Ave	X10	North	225	312	343	322	314	453	435	358	262.9	135.1	195.6	215.3	A	A	A	A
Georgia Ave & Atlantic Ave	X11	North	238	330	365	343	283	421	406	369	71.2	81.8	90.8	36.6	A	A	A	C
Georgia Ave & Atlantic Ave	X12	West	376	520	570	527	508	728	719	632	33.0	27.4	23.4	12.6	C	C	D	E *

Note:
* denotes a significant adverse impact per 2021 *CEQR Technical Manual* criteria.

TABLE 13-46
With-Action Corner Conditions

Intersection	Corner		Average Pedestrian Space (ft^2/ped)				Level of Service			
			AM	MD	PM	SAT	AM	MD	PM	SAT
Van Sinderen Ave & Fulton St	C01	NE	110.7	202.4	62.1	75.2	A	A	A	A
Van Sinderen Ave & Fulton St	C02	SE	62.2	102.0	26.3	43.6	A	A	C	B
Van Sinderen Ave & Fulton St	C03	SW	87.6	135.8	78.4	99.3	A	A	A	A
Van Sinderen Ave & Fulton St	C04	NW	130.9	245.9	124.7	156.3	A	A	A	A
Williams Pl & Atlantic Ave	C05	NE	129.4	38.2	51.5	111.0	A	C	B	A
Williams Pl & Atlantic Ave	C06	NW	873.3	428.7	854.0	579.6	A	A	A	A
Williams Ave & Herkimer St & E New York Ave	C07	NE	18.7	12.0	14.8	20.0	D *	E *	E *	D
Williams Ave & Herkimer St & E New York Ave	C08	SW	73.2	42.3	32.3	27.5	A	B	C	C
Williams Ave & Herkimer St & E New York Ave	C09	NW	16.4	2.2	2.9	3.3	D *	F *	F *	F *
Broadway & Alabama Ave & Jamaica Ave & E New York Ave	C10	NE	139.9	101.9	95.1	86.4	A	A	A	A
Broadway & Alabama Ave & Jamaica Ave & E New York Ave	C11	SE	42.9	55.3	51.3	61.6	B	B	B	A
Broadway & Alabama Ave & Jamaica Ave & E New York Ave	C12	SW	55.7	57.5	57.9	79.1	B	B	B	A
Broadway & Alabama Ave & Jamaica Ave & E New York Ave	C13	NW	28.7	16.4	10.5	13.5	C	D *	E *	E *
Fanchon Pl & Jamaica Ave	C14	NE	183.8	92.9	142.0	158.9	A	A	A	A
Fanchon Pl & Jamaica Ave	C15	NW	158.7	95.4	137.9	154.8	A	A	A	A
Bushwick Ave & Jamaica Ave	C16	NW	272.5	174.5	198.8	189.0	A	A	A	A
Georgia Ave & Atlantic Ave	C17	NE	163.2	118.9	142.1	82.9	A	A	A	A
Georgia Ave & Atlantic Ave	C18	SE	206.3	157.2	172.9	152.9	A	A	A	A
Georgia Ave & Atlantic Ave	C19	SW	39.9	33.1	25.2	13.8	C	C	C	E *
Georgia Ave & Atlantic Ave	C20	NW	47.2	28.6	25.3	6.9	B	C	C	F *

Note:
* denotes a significant adverse impact per 2021 *CEQR Technical Manual* criteria.

J. VEHICULAR AND PEDESTRIAN SAFETY EVALUATION

Recent DOT Initiatives

Vision Zero Brooklyn Pedestrian Safety Action Plan

The City's Vision Zero initiative seeks to eliminate all deaths from traffic crashes regardless of whether on foot, bicycle, or inside a motor vehicle. To drive these fatalities down, DOT and the New York City Police Department (NYPD) developed a set of five plans, each of which analyzes the unique conditions of one New York City borough and recommends actions to address the borough's specific challenges to pedestrian safety. These plans pinpoint the conditions and characteristics of pedestrian fatalities and severe injuries; they also identify priority corridors, intersections, and areas that disproportionately account for pedestrian fatalities and severe injuries, prioritizing them for safety interventions. The plans outline a series of recommended actions comprised of engineering, enforcement, and education measures that intend to alter the physical and behavioral conditions on City streets that lead to pedestrian fatality and injury.

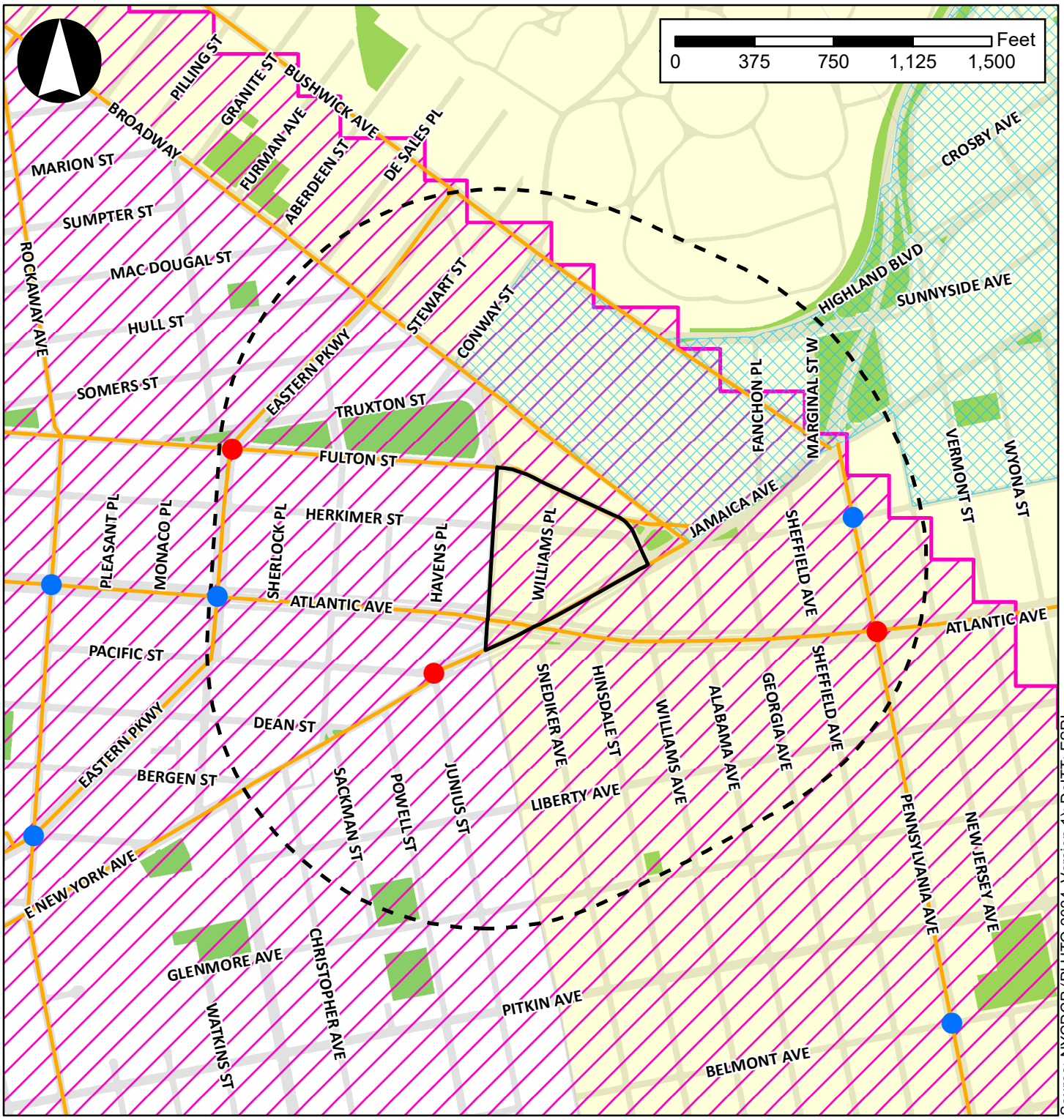
The *Vision Zero Brooklyn Pedestrian Safety Action Plan* was initially released on February 19, 2015, and last updated in 2023. In proximity to the Project Area, the plan identifies Fulton Street, Broadway, East New York Avenue, Atlantic Avenue, Eastern Parkway, Bushwick Avenue, and Pennsylvania Avenue as "Priority Corridors" (refer to **Figure 13-13**). The plan also identifies Eastern Parkway at Atlantic Avenue and Pennsylvania Avenue at Fulton Street as "Priority Intersections." The Project Area is also located within a "Priority Area" and "Bike Priority Area" and is adjacent to a Senior Pedestrian Focus Area (SPFA). Actions recommended in the *Vision Zero Brooklyn Pedestrian Safety Action Plan* to enhance pedestrian safety in Brooklyn are summarized below.

ENGINEERING AND PLANNING

- Implement at least 50 Vision Zero safety engineering improvements at Priority Corridors, Intersections, and Areas Citywide, informed by community input.
- Expand exclusive pedestrian crossing time, install expanded speed limit signage, and modify signal timing to reduce off-speak speeding on Priority Corridors and Intersections where feasible.
- Expand community outreach and engagement with regard to Priority Corridors, Intersections, and Areas.
- Expand the off-hour delivery program to reduce truck conflicts with pedestrians.
- Coordinate with MTA to ensure bus operations contribute to a safe pedestrian environment.
- Expand a bicycle network in Brooklyn that improves safety for all road users.
- Proactively design for pedestrian safety in high-growth areas in Brooklyn.

ENFORCEMENT

- Deploy speed cameras at Priority Corridors, Intersections, and Areas.
- Focus enforcement and deploy dedicated resources to Brooklyn NYPD precincts that overlap substantially with Priority Areas.
- Prioritize targeted enforcement at all Priority Corridors, Intersections, and Areas annually.
- Focus failure-to-yield enforcement on nighttime hour (9:00 p.m. to midnight).



Source: NYCDCP (PLUTO 2024, Version 1); DoITT; ESRI

Legend

- Project Area
- Quarter-Mile Radius
- Vision Zero Priority Corridor
- Vision Zero Priority Area
- Senior Pedestrian Focus Area
- Bike Priority Area
- Vision Zero Priority Intersections
- High Crash Locations

- Initiate a series of target truck enforcement blitzes to reduce failure to yield and keep trucks on truck routes.

EDUCATION AND AWARENESS CAMPAIGNS

- Target child and senior safety education at Priority Corridors and Priority Areas.
- Target intensive street-level outreach at Priority Corridors, Intersections, and Areas.

High Crash Locations

Crash data for analyzed intersections in the traffic and pedestrian study areas were obtained from DOT for the most recent three-year, non-Covid-19 period between January 1, 2018 and December 31, 2019 and January 1, 2023 and December 31, 2023. The data quantify the total number of reportable crashes (involving a fatality, injury, or more than $1,000 in property damage) and non-reportable crashes as well as the total number of crashes involving injuries to pedestrians or bicyclists. During the three-year period, a total of 2,184 reportable and non-reportable crashes, two fatalities, 861 total injuries, and 107 pedestrian/bicyclist injury crashes occurred at intersections within the quarter-mile study area.

According to the 2021 *CEQR Technical Manual*, a high crash location is defined as those along a Vision Zero Priority Intersection 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. As shown in **Table 13-47**, four intersections (all traffic and/or pedestrian analysis locations) have been selected for the safety assessment, of which two intersections are located along a Vision Zero Priority Corridor that were found to have experienced a total of three or more pedestrian/bicyclist injury crashes in any more year. The two intersections are Eastern Parkway at Fulton Street and Atlantic Avenue at Pennsylvania Avenue. The remaining two intersections selected for the safety assessment are Priority Intersections – Eastern Parkway at Atlantic Avenue and Pennsylvania Avenue at Fulton Street.

PENNSYLVANIA AVENUE AT FULTON STREET

This Priority Intersection is located along a Priority Corridor – Pennsylvania Avenue. At this intersection, a total of one pedestrian injury crash occurred in 2018, two pedestrian injury crashes occurred in 2019, and two pedestrian injury crashes occurred in 2023. There was a total of one bicycle injury crash between 2018-2019 and 2023, which occurred in 2018. The intersection is signalized and includes pedestrian signals with countdown clocks and striped crosswalks at each approach. The one 2018 pedestrian injury crash occurred during daylight with clear weather conditions and a dry road surface; the pedestrian injury crash was not located at the intersection with the pedestrian crossing without a signal or crosswalk. Of the two 2019 pedestrian injury crashes, both occurred during daylight, one under clear weather conditions and the second occurred under cloudy weather conditions. The road surface was dry during both pedestrian injury crashes; both of the pedestrian injury crashes were located at the intersection with one of the pedestrian's crossing with a signal and the second pedestrian crossing against the signal. Of the two 2023 pedestrian injury crashes, one occurred at dusk under clear weather conditions and the second occurred during daylight under clear weather conditions. The road surface was dry during both pedestrian injury crashes; one of the pedestrian injury crashes was not located at the intersection with the pedestrian crossing with no signal or crosswalk, while the second pedestrian injury crash was located at the intersection with the pedestrian crossing with a signal. The one 2018 bicycle injury crash occurred during the night with the road lighted with clear weather conditions and a dry road surface.

EASTERN PARKWAY AT ATLANTIC AVENUE

This Priority Intersection is located along two Priority Corridors – Atlantic Avenue and Eastern Parkway. At this intersection, no pedestrian injury crashes occurred in 2018, one pedestrian injury crash occurred in 2019, and no pedestrian injury crashes occurred in 2023. No bicycle injury crashes occurred between 2018-2019 and 2023. The intersection is signalized and includes pedestrian signals with countdown clocks and striped crosswalks at each approach, as well as LPI for pedestrians crossing Atlantic Avenue. In addition, the bidirectional vehicular traffic lanes of each roadway are separated by medians on all approaches. On the north, west, and south approaches, there are pedestrian islands; there is also a pedestrian island on the east approach separating the express and local westbound lanes of Atlantic Avenue. Both the 2017 and 2019 pedestrian injury crashes occurred during daylight with clear weather conditions and a dry road surface; both pedestrian injury crashes were located at the intersection with the pedestrian crossing with a signal.

EASTERN PARKWAY AT FULTON STREET

This intersection is located along two Priority Corridors – Eastern Parkway and Fulton Street. At this intersection, a total of one pedestrian injury crash occurred in 2018, four pedestrian injury crashes occurred in 2019, and three pedestrian injury crashes occurred in 2023. There was a total of one bicycle injury crash between 2018-2019 and 2023, which occurred in 2023. The intersection is signalized and includes pedestrian signals with countdown clocks and striped crosswalks at each approach. In addition, the bidirectional vehicular traffic lanes of Eastern Parkway are separated by medians; there is a pedestrian island on the south approach. The one 2018 pedestrian injury crash occurred during daylight with cloudy weather conditions and a dry road surface; the pedestrian injury crash was located at the intersection with the pedestrian crossing without a signal or crosswalk. Of the four 2019 pedestrian injury crashes, three occurred during the night with the road lighted. Of these three pedestrian injury crashes occurring during the night, two occurred under rainy weather conditions with a wet road surface and the third occurred under clear weather conditions with a dry road surface. The fourth pedestrian injury crash occurred during daylight under clear weather conditions with a dry road surface. Three of the four pedestrian injury crashes were located at the intersection with two of the pedestrian's crossing with a signal and the third pedestrian crossing in an unknown fashion. The one remaining pedestrian injury crash did not occur at the intersection with another pedestrian action occurring in the roadway. Of the three 2023 pedestrian injury crashes, one occurred during the night with the road lighted under rainy weather conditions with a wet road surface, one occurred during daylight under cloudy weather conditions with a wet road surface, and one occurred during daylight under clear weather conditions with a dry road surface. One of the three pedestrian injury crashes lacks complete crash data, while the remaining two pedestrian injury crashes were located at the intersection with the pedestrians' crossing with a signal. The one 2023 bicycle injury crash occurred during daylight under clear weather conditions and a dry road surface.

ATLANTIC AVENUE AT PENNSYLVANIA AVENUE

This intersection is located along two Priority Corridors – Atlantic Avenue and Pennsylvania Avenue. At this intersection, a total of one pedestrian injury crash occurred in 2018, one pedestrian injury crash occurred in 2019, and one pedestrian injury crash occurred in 2023. There was a total of three bicycle injury crashes between 2017-2019 and 2023, one occurred in 2018 and two occurred in 2023. The intersection is signalized and includes pedestrian signals with countdown clocks and striped crosswalks at each approach. In addition, the bidirectional vehicular traffic lanes of Atlantic Avenue are separated by medians; there is a pedestrian island on the east approach. Both the 2018 and 2019 pedestrian injury crashes occurred during daylight with clear weather conditions and a dry road surface; these two pedestrian injury crashes were located at the intersection with the pedestrian's crossing with a signal. The

2023 pedestrian injury crash occurred during the night with the road lighted under rainy weather conditions with a wet road surface; the pedestrian injury crash was located at the intersection with the pedestrian crossing with a signal. The one 2018 bicycle injury crash occurred during daylight with clear weather conditions and a dry road surface. One of the two 2023 bicycle injury crashes occurred during daylight with clear weather conditions and a dry road surface, while the second bicycle injury crash occurred during the night with the road lighted under cloudy weather conditions with a dry road surface.

TABLE 13-47
Crash Data Summary – 2018, 2019, 2023

Intersection		Pedestrian Injury Crashes			Bicycle Injury Crashes			Total Pedestrian/Bicyclist Injury Crashes			Total Crashes (Reportable + Non-Reportable)		
		2018	2019	2023	2018	2019	2023	2018	2019	2023	2018	2019	2023
Fulton Street	Eastern Parkway	1	4	3	0	0	1	1	**4**	**4**	12	17	11
	Pennsylvania Avenue	1	2	2	1	0	0	2	2	2	25	32	17
Eastern Parkway	Atlantic Avenue	1	2	0	0	0	0	1	2	0	85	83	19
Atlantic Avenue	Pennsylvania Avenue	1	1	1	1	0	2	2	1	**3**	99	91	40

Note: A shaded row denotes a high-crash location based on 2021 *CEQR Technical Manual* criteria.
Source: NYCDOT/NYPD

K. PARKING

Parking demand forecasts were prepared to determine if the on-site parking provided under the Proposed Actions' RWCDS, for both the Proposed Development and the Alternate Community Facility Scenario, would be sufficient to accommodate all of the projected demand for both a typical weekday and a typical Saturday. **Tables 13-48** and **13-49** show forecasts of the total parking demand for the Proposed Development on a weekday and Saturday, respectively, while **Tables 13-50** and **13-51** show the weekday and Saturday forecasts for the Alternate Community Facility Scenario. The hourly parking patterns used to estimate parking demand were primarily based on data from DOT and from previously approved environmental reviews. As the Proposed Actions' residential component is expected to be comprised of rental units, 2015–2019 ACS auto ownership data for rental households in Brooklyn census tracts 365.01, 365.02, 367, 369, 405, 908, 1142.01, 1144, and 1198 were used to estimate residential overnight parking demand. Accordingly, an auto ownership rate of 0.32 autos per household was utilized for the residential component.

As shown in **Tables 13-48** through **13-51**, parking demand from the proposed office, retail, and community facility uses typically peaks in the midday period and declines during the late afternoon and evening. By contrast, parking demand from the proposed residential use peaks overnight. Therefore, some of the parking spaces used by residents would be available to accommodate commercial and community facility demand during daytime hours.

As shown in **Tables 13-48** and **13-49**, parking demand generated by the Proposed Actions under the Proposed Development would peak at approximately 1,171 spaces during the 2:00 to 3:00 p.m. period on weekdays, and at approximately 494 spaces during the 11:00 a.m. to 12:00 p.m. period on Saturdays. As shown in **Tables 13-50** and **13-51**, parking demand generated by the Proposed Actions under the Alternate Community Facility Scenario would peak at approximately 1,242 spaces during the 2:00 to 3:00 p.m. period on weekdays, and at approximately 457 spaces during the 11:00 a.m. to 12:00 p.m. period on Saturdays.

As shown in **Table 13-1**, under the RWCDS for the Proposed Development, up to a total of approximately 174 parking spaces would be provided within the Project Area. As shown in **Table 13-2**, under the RWCDS for the Alternate Community Facility Scenario, up to a total of approximately 200 parking spaces would be provided within the Project Area. Approximately 31 parking spaces would exist under the No-Action condition. Therefore, the total increase in parking demand for the Proposed Actions under the Proposed Development would result in parking shortfalls of approximately 997 spaces during the 2:00 to 3:00 p.m. period on weekdays, and approximately 320 spaces during the 11:00 a.m. to 12:00 p.m. period on Saturdays. The total increase in parking demand for the Proposed Actions under the Alternate Community Facility Scenario would result in parking shortfalls of approximately 1,042 spaces during the 2:00 to 3:00 p.m. period on weekdays, and approximately 257 spaces during the 11:00 a.m. to 12:00 p.m. period on Saturdays.

As the Project Area is located outside of CEQR Parking Zones 1 and 2 (within which a parking shortfall from a proposed action would not be considered significant), the inability of the Proposed Actions and the surrounding area to accommodate future parking demands under either RWCDS could potentially be considered significant. Much of the shortfall is highest during the midday peak hours when parking demand for commercial, retail, and community facility uses that would be developed under the Proposed Actions would typically peak. However, it is important to consider that some of the parking spaces used by residents would be available to accommodate commercial and community facility demand during daytime hours.

In addition, under 2021 *CEQR Technical Manual* guidance, one of the factors to be considered in determining the significance of a parking shortfall is the availability of alternative modes of transportation. The Project Area is well served by alternate modes of transportation within a quarter-mile of the Project Area, including three subway stations – Broadway Junction station (located approximately 400 feet or an approximate two-minute walk from the western boundary of the Project Area), Alabama Avenue station (located approximately 400 feet or an approximate two-minute walk from the eastern boundary of the Project Area), and Atlantic Avenue station (located approximately 300 feet or an approximate two-minute walk from the southern boundary of Project Area). The Broadway Junction station is a major subway transfer point for five subway lines, including the A and C lines, which serve the 8th Avenue express and local lines, respectively, the J and Z lines, which serve the Nassau Street local and express lines, respectively, and the L line, which serve the 14th Street-Canarsie local line. The Alabama Avenue station provides service to the J and Z lines, while the Atlantic Avenue station provides service to the L line. In addition, the Project Area is located adjacent to a major bus hub located at the intersection of East New York Avenue, Broadway, and Fulton Street. Six NYCT Bus Company local bus services operate within a quarter-mile of the Project Area, four of which operate solely in Brooklyn – the B12, which runs between Lefferts Gardens and East New York, the B20, which runs between Ridgewood and Spring Creek, the B25, which runs between DUMBO and Broadway Junction, and the B83, which runs in Brooklyn between Spring Creek and Broadway Junction, and two of which operate between Broadway Junction, Brooklyn and Jamaica, Queens – the Q24 and Q56. Lastly, the East New York LIRR station on the LIRR's Atlantic Branch is located approximately 300 feet or an approximate two-minute walk from the southern boundary of Project Area and is generally served by the West Hempstead Branch and the City Terminal Zone Atlantic Branches of the LIRR.

Within a quarter-mile radius of the Project Area, there is a shared bicycle lane along Liberty Avenue, which provides connections to East New York Avenue and Georgia Avenue. In addition, there are conventional bicycle lanes along Pacific Street, Bergen Street, Saint Marks Avenue, and Thomas S Boyland Street as well as shared bicycle lanes along East New York Avenue, Vermont Avenue, Miller Avenue, and Pitkin Avenue within a half-mile radius of the Project Area. Moreover, there are numerous Citi Bike dock stations located

to the east of East New York Avenue, with three dock stations installed in close vicinity to the Project Area. These locations are along the following corridors: Van Sinderen Avenue near Truxton Street (adjacent to the Broadway Junction station), Van Sinderen Avenue near Atlantic Avenue (across from the southeastern corner of the Project Area), and Fulton Street near Williams Avenue (across from the northeastern corner of the Project Area).

Furthermore, the area surrounding the Project Area will be undergoing ongoing changes as part of the Broadway Junction Improvement project to improve pedestrian safety, enhance connections to transit, and revitalize the area surrounding the station. These improvements would include installing new elevators and escalators at the Broadway Junction station to make the station fully ADA accessible and improving the streetscape and pedestrian and bicyclist safety improvements on Van Sinderen Avenue between Atlantic Avenue and Fulton Street (on the east side of the Project Area). Groundbreaking for the Broadway Junction Improvement project is anticipated in 2027 and work is anticipated to be completed by 2030. Therefore, the Project Area is well served by alternate modes of transportation and the parking shortfalls under both the Proposed Development and the Alternate Community Facility Scenario are unlikely to be considered significant. Although the Project Area is well served by alternate modes of transportation and a parking shortfall is unlikely to be considered significant, the projected weekday and Saturday demands associated with the Proposed Actions' RWCDS would not be fully accommodated in the Project Area and a detailed analysis of parking conditions within a quarter-mile radius and a half-mile radius of the Project Area will be provided between certification of the DEIS and FEIS publication.

TABLE 13-48
Total Weekday Hourly Parking Accumulation for the Project Area – Proposed Development

	Residential 1,112 DUs 1,730 Total auto trips/day			Local Retail 33,899 gsf 666 Total auto trips/day			Office 435,766 gsf 2,884 Total auto trips/day			Light Industrial 98,483 gsf 486 Total auto trips/day			House of Worship 22,985 gsf 14 Total auto trips/day			Supermarket 39,931 gsf 1,618 Total auto trips/day			Destination Retail 39,931 gsf 922 Total auto trips/day			Total		
	In	Out	Accum.	In	Out	Accum.	In	Out	Accum.	In	Out	Accum.	In	Out	Accum.	In	Out	Accum.	In	Out	Accum.	In	Out	Accum.
12-1 AM	16	6	366	0	0	0	3	9	5	0	0	0	0	0	0	0	2	0	0	0	0	19	17	371
1-2	6	3	369	0	0	0	2	7	0	0	0	0	0	0	0	0	0	0	0	0	0	8	10	369
2-3	3	0	372	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	5	2	372
3-4	3	3	372	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5	372
4-5	3	3	372	0	0	0	6	2	4	0	0	0	0	0	0	0	0	0	0	0	0	9	5	376
5-6	3	12	363	0	0	0	9	3	10	0	0	0	0	0	0	0	0	0	0	0	0	12	15	373
6-7	9	29	343	0	0	0	32	6	36	0	0	0	0	0	0	5	2	3	2	0	2	48	37	384
7-8	20	74	289	6	6	0	106	13	129	7	1	6	1	0	1	18	14	7	5	3	4	163	111	436
8-9	35	126	198	10	10	0	260	23	366	90	12	84	1	1	1	30	25	12	17	10	11	443	207	672
9-10	29	69	158	15	13	2	449	74	741	72	13	143	1	1	1	35	33	14	28	6	33	629	209	1,092
10-11	23	40	141	18	18	2	109	57	793	11	10	144	0	0	1	44	42	16	33	17	49	238	184	1,146
11-12	33	37	137	19	20	1	40	42	791	5	13	136	0	0	1	50	47	19	36	28	57	183	187	1,142
12-1 PM	48	48	137	23	23	1	5	8	788	2	2	136	1	0	2	53	51	21	43	37	63	175	169	1,148
1-2	43	38	142	26	26	1	8	8	788	2	2	136	0	0	2	58	55	24	44	39	68	181	168	1,161
2-3	43	42	143	29	27	3	56	53	791	20	8	148	0	0	2	56	59	21	36	41	63	240	230	**1,171**
3-4	52	43	152	29	28	4	90	101	780	8	8	148	0	0	2	59	59	21	35	41	57	273	280	1,164
4-5	55	46	161	29	29	4	81	164	697	8	54	102	1	1	2	70	67	24	37	42	52	281	403	1,042
5-6	68	43	186	31	31	4	70	372	395	13	97	18	1	0	3	67	70	21	41	42	51	291	655	678
6-7	92	56	222	36	36	4	33	242	186	4	20	2	1	1	3	86	86	21	36	35	52	288	476	490
7-8	74	50	246	27	29	2	32	129	89	1	3	0	0	1	2	67	70	18	34	32	54	235	314	411
8-9	68	37	277	19	19	2	17	54	52	0	0	0	0	1	1	54	59	13	22	35	41	180	205	386
9-10	58	28	307	11	13	0	14	37	29	0	0	0	0	1	0	36	43	6	8	35	14	127	157	356
10-11	46	18	335	3	3	0	10	23	16	0	0	0	0	0	0	15	17	4	3	12	5	77	73	360
11-12	35	14	356	2	2	0	6	11	11	0	0	0	0	0	0	6	8	2	1	6	0	50	41	369

Notes:
35% diverted-trip credit applied to Local Retail use.
Anticipates 100 percent rental units (0.32 autos/DU based on 2015-2019 ACS auto ownership data for rental households in Brooklyn census tracts 365.01, 365.02, 367, 369, 405, 908, 1142.01, 1144, and 1198).
190 denotes the total peak peaking accumulation.

TABLE 13-49
Total Saturday Hourly Parking Accumulation for the Project Area – Proposed Development

	Residential 1,112 DUs 1,922 Total auto trips/day			Local Retail 33,899 gsf 726 Total auto trips/day			Office 435,766 gsf 914 Total auto trips/day			Light Industrial 98,483 gsf 116 Total auto trips/day			House of Worship 22,985 gsf 16 Total auto trips/day			Supermarket 39,931 gsf 1,576 Total auto trips/day			Destination Retail 39,931 gsf 808 Total auto trips/day			Total		
	In	Out	Accum.	In	Out	Accum.	In	Out	Accum.	In	Out	Accum.	In	Out	Accum.	In	Out	Accum.	In	Out	Accum.	In	Out	Accum.
12-1 AM	30	20	366	0	0	0	4	16	11	0	0	0	0	0	0	0	1	14	0	2	0	34	39	391
1-2	20	11	375	0	0	0	2	11	2	0	0	0	0	0	0	0	0	14	0	0	0	22	22	391
2-3	17	5	387	0	0	0	1	3	0	0	0	0	0	0	0	0	0	14	0	0	0	18	8	401
3-4	11	6	392	0	0	0	2	2	0	0	0	0	0	0	0	0	0	14	0	0	0	13	8	406
4-5	8	3	397	0	0	0	6	2	4	0	0	0	0	0	0	0	0	14	0	0	0	14	5	415
5-6	3	6	394	0	0	0	7	3	8	0	0	0	0	0	0	0	0	14	0	0	0	10	9	416
6-7	6	9	391	0	0	0	22	9	21	0	0	0	0	0	0	4	1	17	0	0	0	32	19	429
7-8	12	26	377	2	2	0	26	15	32	1	0	1	1	0	1	15	11	21	1	0	1	58	54	433
8-9	20	46	351	7	7	0	44	16	60	13	1	13	0	0	1	30	25	26	13	0	14	127	95	465
9-10	30	62	319	15	12	3	39	19	80	12	1	24	2	1	2	38	35	29	21	8	27	157	138	484
10-11	38	64	293	19	20	2	36	28	88	5	2	27	1	1	2	47	45	31	34	17	44	180	177	487
11-12	50	68	275	26	24	4	37	29	96	4	6	25	1	3	0	55	53	33	44	27	61	217	210	**494**
12-1 PM	60	74	261	28	28	4	62	67	91	5	11	19	1	1	0	64	64	33	48	36	73	268	281	481
1-2	59	63	257	29	29	4	35	43	83	6	7	18	0	1	-1	62	64	31	46	43	76	237	250	468
2-3	63	60	260	33	33	4	34	44	73	6	3	21	0	0	-1	58	58	31	51	48	79	245	246	467
3-4	63	63	260	34	34	4	25	36	62	3	2	22	0	0	-1	58	60	29	46	52	73	229	247	449
4-5	68	56	272	35	35	4	17	27	52	2	7	17	1	0	0	73	76	26	38	54	57	234	255	428
5-6	89	72	289	42	42	4	12	27	37	1	15	3	1	0	1	61	60	27	21	51	27	227	267	388
6-7	63	52	300	30	30	4	9	15	31	0	3	0	0	1	0	61	62	26	12	34	5	175	197	366
7-8	59	49	310	23	25	2	11	14	28	0	0	0	0	0	0	58	61	23	8	8	5	159	157	368
8-9	59	46	323	17	17	2	7	9	26	0	0	0	0	0	0	48	50	21	6	5	6	137	127	378
9-10	52	35	340	14	14	2	7	6	27	0	0	0	0	0	0	34	37	18	12	3	15	119	95	402
10-11	44	35	349	5	6	1	7	7	27	0	0	0	0	0	0	15	17	16	3	8	10	74	73	403
11-12	37	30	356	4	5	0	5	9	23	0	0	0	0	0	0	7	8	15	0	8	2	53	60	396

Notes:
35% diverted-trip credit applied to Local Retail use.
Anticipates 100 percent rental units (0.32 autos/DU based on 2015-2019 ACS auto ownership data for rental households in Brooklyn census tracts 365.01, 365.02, 367, 369, 405, 908, 1142.01, 1144, and 1198).
190 denotes the total peak peaking accumulation.

TABLE 13-50

Total Weekday Hourly Parking Accumulation for the Project Area – Alternate Community Facility Scenario

	Residential			Local Retail			Office			Light Industrial			House of Worship			Community Facility (Academic University)			Supermarket			Destination Retail			Total		
	911 DUs			57,165 gsf			461,749 gsf			111,933 gsf			22,985 gsf			91,706 gsf			39,931 gsf			39,931 gsf					
	1,418 Total auto trips/day			1,124 Total auto trips/day			3,054 Total auto trips/day			554 Total auto trips/day			14 Total auto trips/day			122 Total auto trips/day			1,618 Total auto trips/day			922 Total auto trips/day					
	In	Out	Accum.	In	Out	Accum.	In	Out	Accum.	In	Out	Accum.	In	Out	Accum.	In	Out	Accum.	In	Out	Accum.	In	Out	Accum.	In	Out	Accum.
12-1 AM	13	5	300	0	1	1	3	10	6	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	16	18	307
1-2	5	2	303	0	0	1	2	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	10	304
2-3	3	0	306	0	0	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	2	307
3-4	3	2	307	0	0	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	4	308
4-5	3	3	307	0	0	1	6	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	5	312
5-6	3	10	300	0	0	1	10	3	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	13	312
6-7	8	26	282	2	0	3	34	6	39	0	0	0	0	0	0	0	0	0	5	2	3	2	0	2	51	34	329
7-8	17	61	238	9	8	4	111	14	136	8	1	7	1	0	1	8	2	6	18	14	7	5	3	4	177	103	403
8-9	29	104	163	17	15	6	276	24	388	102	14	95	1	1	1	7	2	11	30	25	12	17	10	11	479	195	687
9-10	23	57	129	28	25	9	476	78	786	83	15	163	1	1	1	5	4	12	35	33	14	28	6	33	679	219	1,147
10-11	21	30	120	33	31	11	117	60	843	13	11	165	0	0	1	5	6	11	44	42	16	33	17	49	266	197	1,216
11-12	26	29	117	33	33	11	43	43	843	6	15	156	0	0	1	5	7	9	50	47	19	37	28	58	200	202	1,214
12-1 PM	39	39	117	41	39	13	6	8	841	2	3	155	1	0	2	5	5	9	53	51	21	43	38	63	190	183	1,221
1-2	34	30	121	45	45	13	9	9	841	3	3	155	0	0	2	5	6	8	58	55	24	44	39	68	198	187	1,232
2-3	34	35	120	48	45	16	60	55	846	22	9	168	0	0	2	4	6	6	56	59	21	36	41	63	260	250	**1,242**
3-4	43	35	128	50	47	19	95	107	834	9	9	168	0	0	2	3	5	4	59	59	21	35	41	57	294	303	1,233
4-5	45	37	136	48	50	17	85	174	745	9	60	117	1	1	2	4	5	3	70	67	24	38	42	53	300	436	1,097
5-6	55	35	156	52	52	17	75	394	426	15	110	22	1	0	3	5	6	2	67	70	21	41	42	52	311	709	699
6-7	75	46	185	62	62	17	34	255	205	4	24	2	1	1	3	2	2	2	86	86	21	36	36	52	300	512	487
7-8	61	41	205	44	49	12	32	136	101	1	3	0	0	1	2	2	2	2	67	70	18	34	32	54	241	334	394
8-9	55	33	227	27	29	10	17	58	60	0	0	0	0	1	1	1	2	1	54	59	13	23	35	42	177	217	354
9-10	48	25	250	14	20	4	15	40	35	0	0	0	0	1	0	0	1	0	36	43	6	7	35	14	120	165	309
10-11	38	14	274	5	7	2	11	26	20	0	0	0	0	0	0	0	0	0	15	17	4	2	11	5	71	75	305
11-12	28	10	292	4	4	2	6	13	13	0	0	0	0	0	0	0	0	0	6	8	2	0	5	0	44	40	309

Notes:

50% linked/diverted-trip credit applied to Local Retail use.

Anticipates 100 percent rental units (0.32 autos/DU based on 2015-2019 ACS auto ownership data for rental households in Brooklyn census tracts 365.01, 365.02, 367, 369, 405, 908, 1142.01, 1144, and 1198).

190 denotes the total peak peaking accumulation.

TABLE 13-51

Total Saturday Hourly Parking Accumulation for the Project Area – Alternate Community Facility Scenario

	Residential 911 DUs 1,576 otal auto trips/day			Local Retail 57,165 gsf 1,220 Total auto trips/day			Office 461,749 gsf 968 Total auto trips/day			Light Industrial 111,933 gsf 132 Total auto trips/day			House of Worship 22,985 gsf 16 Total auto trips/day			Community Facility (Academic University) 91,706 gsf 62 Total auto trips/day			Supermarket 39,931 gsf 1,576 Total auto trips/day			Destination Retail 39,931 gsf 808 Total auto trips/day			Total		
	In	Out	Accum	In	Out	Accum.	In	Out	Accum.	In	Out	Accum.	In	Out	Accum.	In	Out	Accum.	In	Out	Accum.	In	Out	Accum.	In	Out	Accum.
12-1 AM	25	17	300	0	2	0	4	17	12	0	0	0	0	0	0	0	0	5	0	1	0	0	2	0	29	39	317
1-2	17	9	308	0	0	0	2	12	2	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	19	21	315
2-3	14	4	318	0	0	0	1	3	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	15	7	323
3-4	9	5	322	0	0	0	2	2	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	11	7	327
4-5	6	3	325	0	0	0	7	2	5	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	13	5	335
5-6	3	5	323	0	0	0	8	3	10	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	11	8	338
6-7	5	8	320	0	0	0	24	10	24	0	0	0	0	0	0	0	0	5	4	1	3	0	0	0	33	19	352
7-8	9	20	309	3	2	1	27	16	35	1	0	1	1	0	1	1	0	6	15	11	7	1	0	1	58	49	361
8-9	17	35	291	13	10	4	46	17	64	13	1	13	0	0	1	2	1	7	30	25	12	13	0	14	134	89	406
9-10	25	52	264	23	19	8	40	19	85	14	1	26	2	1	2	3	2	8	38	35	15	21	8	27	166	137	435
10-11	30	52	242	33	32	9	38	29	94	6	2	30	1	1	2	4	3	9	47	45	17	34	17	44	193	181	447
11-12	41	56	227	42	41	10	39	30	103	5	7	28	1	3	0	3	3	9	55	53	19	44	27	61	230	220	**457**
12-1 PM	49	61	215	47	47	10	66	71	98	6	12	22	1	1	0	6	4	11	64	64	19	48	36	73	287	296	448
1-2	49	52	212	50	50	10	37	46	89	7	8	21	0	1	-1	3	3	11	62	64	17	46	43	76	254	267	435
2-3	52	49	215	58	57	11	36	47	78	7	4	24	0	0	-1	3	4	10	58	58	17	51	48	79	265	267	433
3-4	52	52	215	57	57	11	26	38	66	3	3	24	0	0	-1	2	2	10	58	60	15	46	52	73	244	264	413
4-5	57	46	226	58	58	11	18	28	56	2	9	17	1	0	0	2	3	9	73	76	12	38	54	57	249	274	388
5-6	73	60	239	71	71	11	13	28	41	1	16	2	1	0	1	1	2	8	61	61	12	21	51	27	242	289	341
6-7	52	42	249	48	51	8	10	16	35	1	3	0	0	1	0	1	2	7	61	62	11	12	34	5	185	211	315
7-8	48	41	256	39	42	5	13	15	33	0	0	0	0	0	0	0	2	5	58	61	8	8	8	5	166	169	312
8-9	48	38	266	30	30	5	8	9	32	0	0	0	0	0	0	0	0	5	48	50	6	6	5	6	140	132	320
9-10	42	30	278	22	25	2	7	8	31	0	0	0	0	0	0	0	0	5	34	37	3	12	3	15	117	103	334
10-11	36	28	286	9	10	1	8	8	31	0	0	0	0	0	0	0	0	5	15	17	1	3	8	10	71	71	334
11-12	29	23	292	7	6	2	4	10	25	0	0	0	0	0	0	0	0	5	7	7	1	0	8	2	47	54	327

Notes:

50% linked/diverted-trip credit applied to Local Retail use.

Anticipates 100 percent rental units (0.32 autos/DU based on 2015-2019 ACS auto ownership data for rental households in Brooklyn census tracts 365.01, 365.02, 367, 369, 405, 908, 1142.01, 1144, and 1198).

190 denotes the total peak peaking accumulation.