

Stevenson Commons EIS

Chapter 11: Transportation

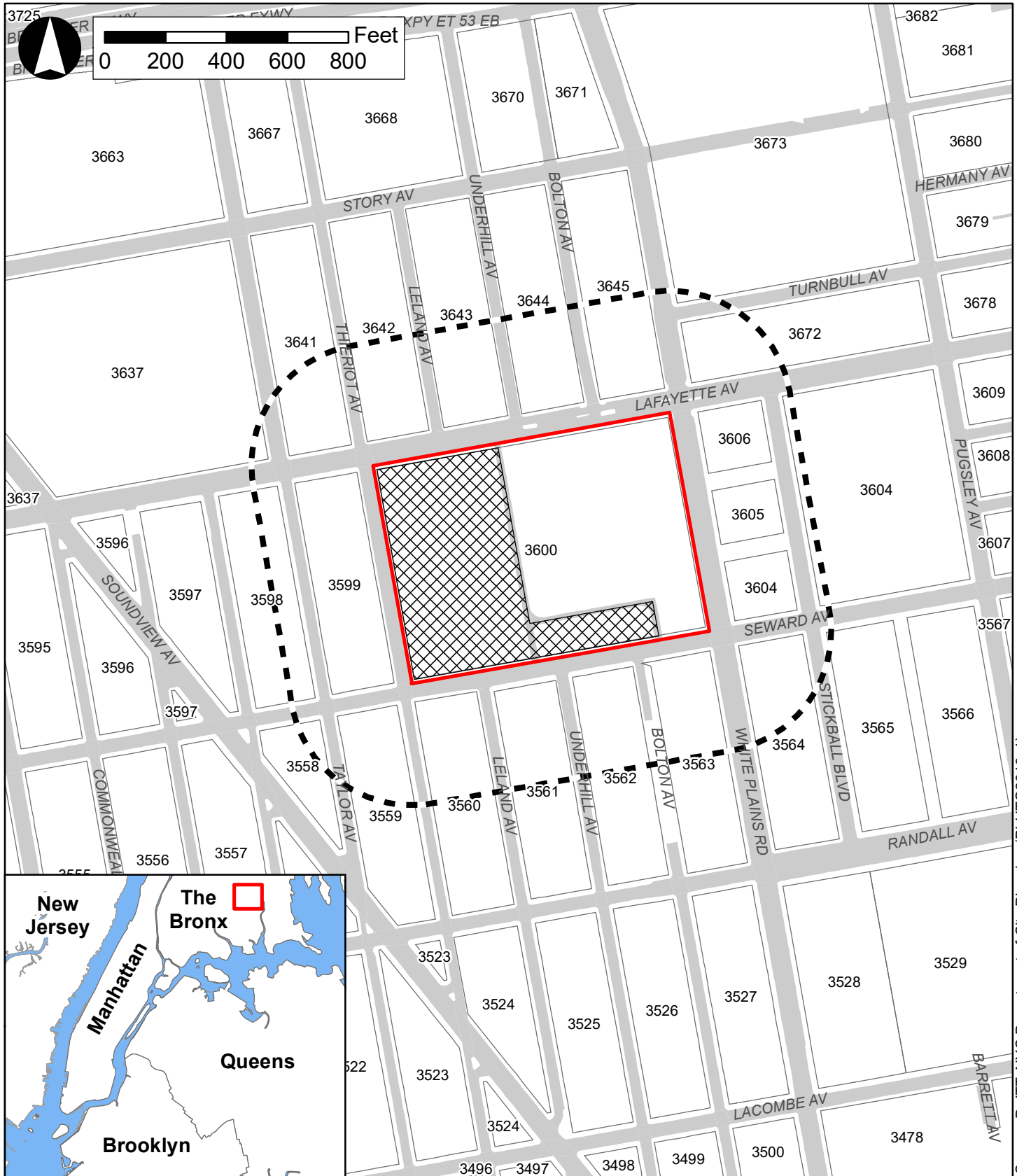
A. INTRODUCTION

This chapter describes the transportation characteristics and potential impacts associated with the Proposed Actions, which involve modifications to the approved Stevenson Commons large-scale residential development (LSRD), and the previously approved Stevenson Commons City-aided limited-profit housing project, on Block 3600, Lots 4, 10, 15, 20, 25, 30, 40, and 50 in the Soundview neighborhood of Bronx Community District 9. As shown in Figure 11-1, the Stevenson Commons site (the “Project Area”) at 1850 Lafayette Avenue (~~Block 3600, Lot 4~~) encompasses the 679,000-square-foot (sf) superblock bounded by Lafayette Avenue, White Plains Road, Seward Avenue, and Thieriot Avenue. The eastern portion of the site is currently developed with a mix of residential, retail, community facility, and/or accessory parking uses.

The Proposed Actions would facilitate new construction on the Stevenson Commons site that, compared to the future without the Proposed Actions, would result in an incremental (net) increase of approximately 735 affordable dwelling units (DUs), including 621 income-restricted housing units and 114 affordable units-independent residences for seniors (AIRS), 33,995 gross square feet (gsf) of community facility uses and, approximately 1.94 acres of publicly accessible open space, and a net decrease of 104 accessory parking spaces (the “Proposed Project”). New development would be spread across six new buildings on the Stevenson Commons site. Construction of the Proposed Project is expected to begin in the second quarter of 2021 with all components complete and operational by early-2028.

In order to assess the potential effects of the Proposed Actions, a reasonable worst case development scenario (RWCDS) for both “future without the Proposed Actions” (No-Action) and “future with the Proposed Actions” (With-Action) conditions is analyzed for an analysis year, or Build year, of 2028 (see Table 11-1). As per the RWCDS, the No-Action scenariocondition assumes that no new as-of-right development could occur on the Stevenson Commons site without modification of the existing LSRD. As such, the Project Area would continue to be occupied by nine buildings with a total of 948 DUs, 10,648 gsf of local retail uses, and 36,214 gsf of community facility uses (health center) on the eastern portion of the block. The western portion of the block would continue to be occupied by 570 surface accessory parking spaces and tennis and handball courts.

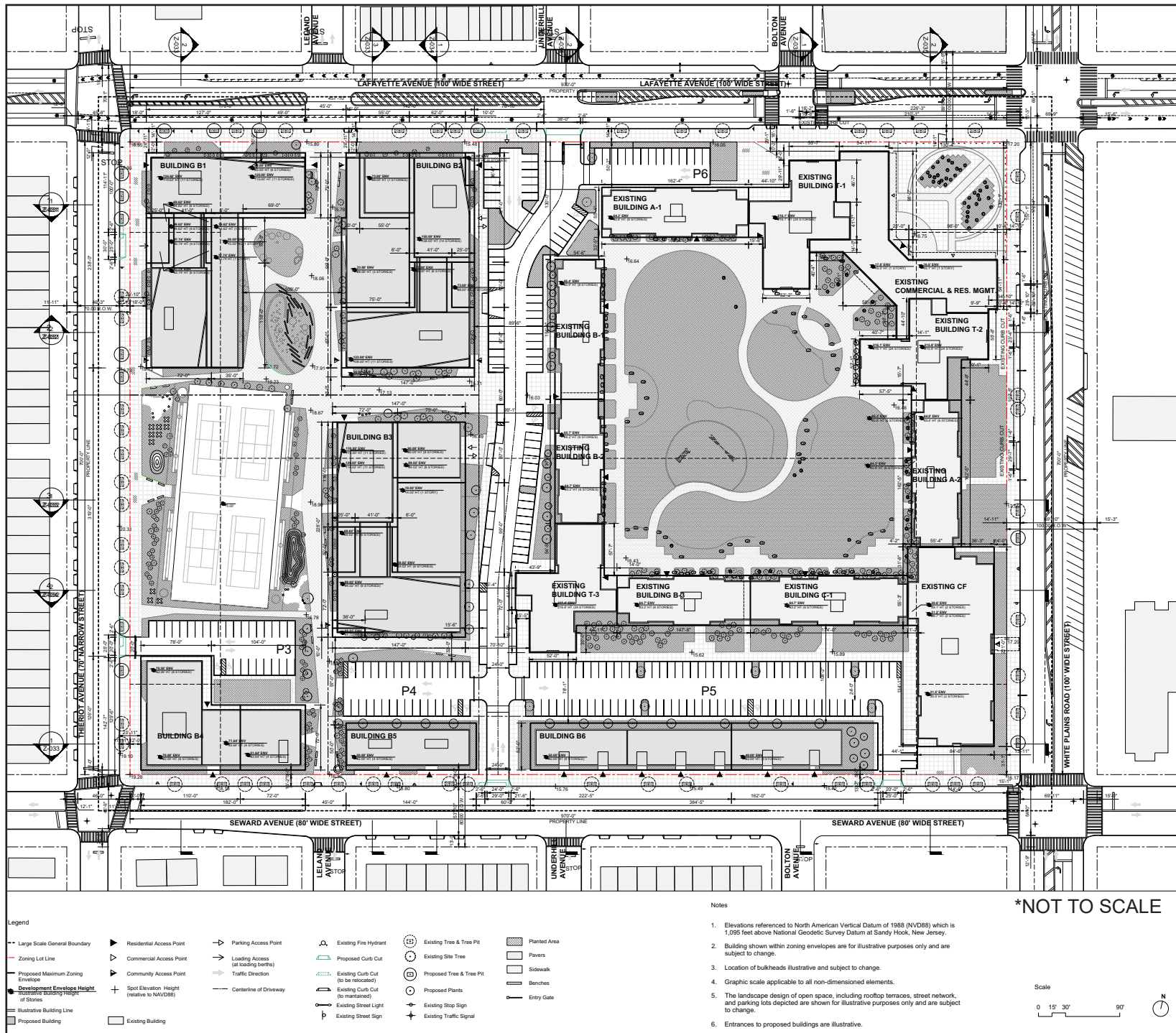
By 2028 under the With-Action scenariocondition, the Stevenson Commons site would include six new predominantly residential buildings on Block 3600 (~~to~~ Buildings B1 through B6 in Figure 11-2, which comprise the “Development Site”). As shown in Table 11-1, development of these buildings would result in a net increase of approximately 735 DUs, 19,879 gsf of daycare center space, and 14,116 gsf of recreation center space on the Stevenson Commons site. There would also be a total of approximately 466 on-site accessory parking spaces in surface lots and two garages, a net decrease of approximately 104 spaces from the No-Action condition. In addition, as noted above, the Proposed Project would include approximately 1.94 acres of publicly accessible open space. As this open space would primarily consist of new grassy areas along with outdoor spaces associated with the proposed recreation center and daycare uses (i.e., tennis courts and a playground), they are not expected to generate new travel demand independent of other proposed With-Action uses and are therefore not reflected in Table 11-1.



Source: DoITT, NYC Department of City Planning (PLUTO2019v1)

Legend

-  Project Area
-  400-Foot Radius
-  Development Site
-  Tax Blocks



Stevenson Commons

This Figure has been updated for the FEIS

Figure 11-2
Site Plan

**TABLE 11-1
2028 RWCDs No-Action and With-Action Land Uses**

Land Use	No-Action Condition	With-Action Condition	Net Increment
Commercial			
Local Retail	10,648 gsf	10,648 gsf	0 gsf
Residential			
Affordable Senior Housing	---	114 DUs	+114 DUs
Affordable Housing	948 DUs	1,569 DUs	+621 DUs
Total Residential	948 DUs	1,683 DUs	+735 DUs
Community Facility			
Health Center	36,214 gsf	36,214 gsf	0 gsf
Daycare Center	---	19,879 gsf	+19,879 gsf
Recreation Center	---	14,116 gsf	+14,116 gsf
Total Community Facility	36,214 gsf	70,209 gsf	+33,995 gsf
Parking			
Accessory Parking Spaces	570	466	-104
Notes:			
Approximately 1.94 acres of new grassy areas and outdoor spaces associated with the proposed recreation center and daycare uses are not shown as they are not expected to generate new travel demand independent of other proposed With-Action uses.			

This chapter describes in detail the existing transportation conditions in proximity to the Project Area. Future conditions in the year 2028 without the Proposed Actions (the No-Action condition) are then determined, including additional transportation-system demand and any changes expected by 2028. The increase in travel demand resulting from the Proposed Actions is then projected and added to the No-Action condition to develop the 2028 future with the Proposed Actions (the With-Action condition). Significant adverse impacts from action-generated trips are then identified and described in detail. Chapter 18, “Mitigation” discusses practicable measures to address these impacts.

B. PRINCIPAL CONCLUSIONS

Traffic

Traffic conditions were evaluated for the weekday AM (7:45-8:45 AM), midday (12:30-1:30 PM) and PM (4:30-5:30 PM) peak hours, and Saturday (2:00-3:00 PM) peak hours at 13 intersections (nine signalized and four unsignalized) in the traffic study area where additional traffic resulting from the Proposed Actions would exceed the 50-trips/hour 2020 City Environmental Quality Review (CEQR) Technical Manual analysis threshold. As summarized in Table 11-2 and Table 11-3, the traffic impact analysis indicates the potential for significant adverse impacts at 14 lane groups at seven intersections in the weekday AM peak hour, three lane groups at two intersections in the midday, seven lane groups at four intersections in the PM, and five lane groups at three intersections in the Saturday peak hour. Chapter 18, “Mitigation,” discusses potential measures to mitigate these significant adverse traffic impacts.

TABLE 11-2
Number of Impacted Intersections and Lane Groups by Peak Hour

	Peak Hour			
	Weekday AM	Weekday Midday	Weekday PM	Saturday
Impacted Lane Groups	<u>1411</u>	<u>32</u>	7	<u>56</u>
Impacted Intersections	7	2	4	3

Note: This table has been updated for the FEIS.

TABLE 11-3
Summary of Significantly Impacted Intersections

Intersection		Peak Hour			
Location	Control	Weekday AM	Weekday Midday	Weekday PM	Saturday
Bruckner Boulevard EB (EB) & White Plains Road (NB/SB)	Signalized	X	---	X	X
Bruckner Boulevard WB (WB) & White Plains Road (NB/SB)	Signalized	X	X	X	X
Bruckner Plaza (WB) & White Plains Road (NB/SB)	Signalized	X	---	---	---
Lafayette Avenue (EB/WB) & White Plains Road (NB/SB)	Signalized	X	---	X	---
Story Avenue (EB/WB) & White Plains Road (NB/SB)	Signalized	X	X	X	X
Turnbull Avenue (EB/WB) & White Plains Road (NB/SB)	Signalized	X	---	---	---
Lafayette Avenue (EB/WB) & Thieriot Avenue (NB/SB)	Unsignalized	X			
Total		7	2	4	3

Transit

Subway

SUBWAY STATIONS

The Proposed Actions would generate a net increment of approximately 298 and 317 new subway trips during the weekday AM and PM commuter peak hours. The analysis of subway station conditions focuses on New York City Transit's (NYCT's) Parkchester (6) station on the Pelham Line as incremental demand from the Proposed Actions would exceed the 200-trips/hour *CEQR Technical Manual* analysis threshold at this station in the weekday AM and PM peak hours. In the future with the Proposed Actions, those stairs and fare arrays, escalator, turnstiles, and station doors that would be used by project-generated demand are expected to operate at an acceptable level of service (LOS) AC or B better in both the AM and PM peak hours and would therefore not be significantly adversely impacted by the Proposed Actions based on *CEQR Technical Manual* criteria.

SUBWAY LINE HAUL

The vicinity of the Project Area is served by one NYCT subway route – the No. 6 train. The peak direction of travel along the No. 6 route is typically Manhattan-bound (southbound) in the AM and Bronx-bound (northbound) in the PM. The Proposed Actions would generate a net increment of approximately 184

Manhattan-bound trips along the No.6 subway route during the weekday AM peak hour, and approximately 170 Bronx-bound trips during the weekday PM peak hour. As the Proposed Actions would not generate the *CEQR Technical Manual* threshold of 200 or more new peak hour subway trips in any one direction of the analyzed No. 6 train, an analysis of subway line haul conditions is not warranted as impacts are not expected.

Bus

Four ~~New York City Transit~~ NYCT local bus routes—the Bx5, Bx27, Bx36, and Bx39—operate within ~~¼-a~~ quarter-mile of the Project Area. It is estimated that the Proposed Actions would generate a net total of approximately 486 and 516 incremental bus trips on these routes during the weekday AM and PM peak hours, respectively. These would include trips that would use the bus to access the subway, as well as trips made solely by bus. Incremental demand is expected to meet or exceed the 50-trip per direction *CEQR Technical Manual* analysis threshold in the AM and/or PM peak hour at the maximum load points along two routes—the Bx36 and Bx39. Based on projected levels of bus service in the No-Action condition, the Proposed Actions would result in a capacity shortfall of 89 spaces on the northbound Bx39 service and 1 space on the southbound Bx39 service in the AM peak hour. Therefore, northbound and southbound Bx39 service would be significantly adversely impacted in the AM peak hour based on *CEQR Technical Manual* criteria. As discussed in Chapter 18, “Mitigation,” the significant impact to Bx39 service could be mitigated by increasing the number of northbound buses from 15 to 17 and the number of southbound buses from 11 to 12 in the AM peak hour. The general policy of the MTA is to provide additional bus service where demand warrants, taking into account financial and operational constraints.

Pedestrians

The Proposed Actions’ RWCDs is expected to generate approximately 104 incremental walk-only trips in the weekday AM peak hour, 60 in the weekday midday peak hour, 117 in the weekday PM peak hour, and 71 in the Saturday peak hour. Persons walking to and from subway station entrances and bus stops would add approximately 486, 159, 516, and 294 incremental pedestrian trips to sidewalks and crosswalks in the vicinity of the Project Area during the weekday AM, midday and PM peak hours, and Saturday peak hour, respectively. Pedestrian conditions were evaluated during the weekday AM (8:30-9:30 AM), midday (12:15-1:15 PM), PM (4:30-5:30 PM), and Saturday (12:45-1:45 PM) peak hours at a total of six pedestrian elements (two sidewalks, one crosswalks, and three corner areas) where new trips generated by the Proposed Actions are expected to exceed the 200-trip/hour *CEQR Technical Manual* analysis threshold. These elements are located along White Plains Road and Lafayette Avenue in the immediate proximity of the Project Area. In the Future with the Proposed Actions, all analyzed pedestrian elements would continue to operate at an acceptable LOS C or better during each analyzed peak hours, and there would be no significant adverse pedestrian impacts based on *CEQR Technical Manual* impact criteria.

Vehicular and Pedestrian Safety

The *Vision Zero Bronx Pedestrian Safety Action Plan*, released in 2015 and updated in 2019, identified White Plains Road, to the east of the Project Area, and Soundview Avenue, to the west of the Project Area, as Priority Corridors. There were no Priority Intersections or Priority Areas identified within the traffic or pedestrian study areas, and no analyzed intersections are located within a designated Senior Pedestrian Focus Area.

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 reporting period between January 1, 2015,

and December 31, 2017 (the most recent period for which data were available for all locations). The data quantify the total number of crashes as well as the total number of crashes involving injuries to pedestrians or bicyclists. During the three-year reporting period, a total of 146 crashes and 36 pedestrian/bicyclist-related injury crashes occurred at analyzed study area intersections. None of these crashes involved fatalities.

According to the ~~2020~~ *CEQR Technical Manual*, a high crash location is one where there were 48 or more reportable and non-reportable crashes or five or more pedestrian/bicyclist-related crashes in any consecutive 12 months within the most recent three-year period for which data are available. Based on these criteria, no intersections were found to have experienced 48 or more crashes in any one year. However, as shown in Table 11-4, the intersection of White Plains Road and Story Avenue experienced five pedestrian or bicycle injury crashes in 2016 and 2017, and the intersection of White Plains Road and Bruckner Boulevard Westbound experienced five pedestrian or bicycle injury crashes on 2017. Additional measures that could be employed to increase pedestrian/bicyclist safety could include installation of additional high visibility crosswalks, where not already present, and improved street lighting.

TABLE 11-4
High Crash Locations

Intersection	Total Pedestrian/Bicycle Injury Crashes			Total Crashes (Reportable + Non-Reportable)		
	2015	2016	2017	2015	2016	2017
White Plains Road/Story Avenue	2	5	5	6	11	11
White Plains Road/Bruckner Boulevard WB	1	0	5	18	14	31

Parking

The parking analysis documents changes in parking supply and utilization within the Project Area. Under the Proposed Actions, no existing on-street or off-street public parking would be displaced. The Proposed Project would provide a total of 466 accessory parking spaces within the Project Area, resulting in a net decrease of 104 accessory parking spaces as compared to the No-Action conditions. The Proposed Actions would generate a peak overnight parking accumulation of approximately 463 spaces during the weekday overnight period, which would be fully accommodated on-site. This includes the parking demand generated by the existing uses at the Development Site. Therefore, the Proposed Actions are not expected to result in significant adverse parking impacts during the weekday overnight peak period for residential parking demand.

C. PRELIMINARY ANALYSIS METHODOLOGY

The ~~City Environmental Quality Review (CEQR)~~ *Technical Manual* describes a two-level screening procedure for the preparation of a “preliminary analysis” to determine if quantified operational analyses of transportation conditions are warranted. As discussed in the following sections, the preliminary analysis begins with a trip generation (Level 1) analysis to estimate the numbers of person and vehicle trips attributable to the proposed action. According to the *CEQR Technical Manual*, if the 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 (a Level 2 analysis) are to be performed to estimate the incremental trips that would be incurred at specific transportation elements and to identify potential locations for further

analyses. If the trip assignments show that the 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, vehicular and pedestrian safety, and parking.

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 and PM peak hours, and Saturday peak hour, for the RWCDs. These estimates were then compared to the *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 summary of the travel demand that would be generated by the RWCDs. A detailed travel demand forecast is then provided for the RWCDs.

Background

As shown in Table 11-1, compared to the No-Action condition, the Proposed Actions would result in a net incremental increase of 735 DUs (including 114 affordable senior AIRS units) and 33,995 gsf of community facility space. A total of 466 accessory parking spaces would be provided (a net decrease of 104 spaces) as well as approximately 1.94 acres of publicly accessible open space.

Transportation Planning Factors

The trip generation rates, temporal and directional distributions, modal splits, vehicle occupancies, and truck trip factors used to forecast travel demand for residential, daycare, and recreation center land uses are summarized in Table 11-5. They were based on factors cited in the ~~2020 City Environmental Quality Review (CEQR)~~ *CEQR Technical Manual*, American Community Survey (ACS) Means of Transportation to Work data, 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).

Travel Demand Forecast

The net incremental change in person and vehicle trips expected to result from the Proposed Actions by the 2028 analysis year was derived based on the net change in land uses shown in Table 11-1 and the transportation planning factors shown in Table 11-5. Tables 11-6 and 11-7 show estimates of the net incremental change in peak hour person trips and vehicle trips (versus the No-Action condition) that would occur in 2028 with implementation of the Proposed Actions. These data are further summarized in Table 11-8. As shown in Table 11-6, under the RWCDs, the Proposed Actions would generate a net increase of approximately 994 person trips (in + out combined) in the weekday AM peak hour, 352 in the weekday midday, 1,062 in the weekday PM, and 604 in the Saturday peak hour. As shown in Table 11-8, peak hour vehicle trips (including auto, taxi, and truck trips) would increase by a net total of approximately 353, 130, 377, and 229 (in + out combined) in the weekday AM, midday, and PM peak hours, and Saturday peak hour, respectively. Peak hour subway trips would increase by a net total of approximately 298, 99,

317, and 183 trips during the weekday AM, midday, and PM peak hours, and Saturday peak hour, respectively. Bus trips would increase by 486, 159, 516, and 294 (in + out combined, including trips to and from the Parkchester subway station) in the weekday AM, midday, and PM peak hours, and Saturday peak hour, respectively. Lastly, pedestrian trips would increase by 590, 219, 633, and 365, during the weekday AM, midday, and PM peak hours, and Saturday peak hour, respectively. These totals include walk-only trips and pedestrians en route to and from nearby subway stations and bus stops.

**TABLE 11-5
Transportation Planning Factors**

Land Use:	<u>Residential - Family</u>	<u>Residential - Senior</u>	<u>Community Facility - Daycare (Students)</u>	<u>Community Facility - Daycare (Parents)</u>	<u>Community Facility - Daycare (Staff)</u>	<u>Community Facility - Recreation Center</u>
Size/Units:	621 DU	114 DU	19,879 gsf	19,879 gsf	19,879 gsf	14,116 gsf
Trip Generation:	(1)	(1)	(6)	(6)	(6)	(5)
Weekday	8.075	8.075	22.0	44.0	6.0	44.7
Saturday	9.6	9.6	0.0	0.0	0.0	26.6
	per DU	per DU	per 1,000 gsf	per 1,000 gsf	per 1,000 gsf	per 1,000 gsf
Temporal Distribution:	(1)	(1)	(6)	(6)	(6)	(5)
AM (8-9 AM)	10.0%	10.0%	25.0%	25.0%	25.0%	5.8%
MD (1-2 PM)	5.0%	5.0%	0.0%	0.0%	2.5%	7.4%
PM (5-6 PM)	11.0%	11.0%	25.0%	25.0%	25.0%	7.6%
SatMD (1-2 PM)	8.0%	8.0%	0.0%	0.0%	0.0%	10.0%
Modal Splits:	(2)	(2)	(2)	(2)	(7)	(5)
All Periods	All Periods	All Periods	All Periods	All Periods	All Periods	All Periods
Auto	40.7%	40.7%	40.7%	40.7%	50.5%	4.0%
Taxi	0.7%	0.7%	0.7%	0.7%	0.0%	9.0%
Bus-to-Subway	31.3%	31.3%	31.3%	31.3%	14.5%	12.0%
Bus Only	19.3%	19.3%	19.3%	19.3%	22.3%	5.0%
Walk/Other	8.0%	8.0%	8.0%	8.0%	12.7%	70.0%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
In/Out Splits:	(3)	(3)	(6)	(6)	(6)	(5)
In	In	In	In	In	In	In
Out	Out	Out	Out	Out	Out	Out
AM	16.0%	84.0%	36.0%	64.0%	100%	0%
MD	50.0%	50.0%	50.0%	50.0%	0%	0%
PM	67.0%	33.0%	60.0%	40.0%	0%	100%
Sat MD	53.0%	47.0%	53.0%	47.0%	0%	0%
Vehicle Occupancy:	(2,3)	(2,3)	(6)	(6)	(6)	(5)
All Periods	All Periods	All Periods	All Periods	All Periods	All Periods	All Periods
Auto	1.06	1.06	1.00	1.00	1.00	1.40
Taxi	1.40	1.40	1.00	1.00	1.00	1.40
Truck Trip Generation:	(1)	(1)	(4)	(4)	(4)	(5)
Weekday	0.06	0.06	0.07	0.07	0.07	0.04
Saturday	0.02	0.02	0.00	0.00	0.00	0.01
	per DU	per DU	per 1,000 sf	per 1,000 sf	per 1,000 sf	per 1,000 sf
AM	(1)	(1)	(4)	(4)	(4)	(5)
MD	12.0%	12.0%	9.6%	9.6%	9.6%	7.7%
PM	9.0%	9.0%	11.0%	11.0%	11.0%	11.0%
Sat MD	2.0%	2.0%	1.0%	1.0%	1.0%	2.0%
	9.0%	9.0%	0.0%	0.0%	0.0%	11.0%
AM/MD/PM	In	In	In	In	In	In
	Out	Out	Out	Out	Out	Out
	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%

Notes :

- (1) Based on 2014 City Environmental Quality Review (CEQR) Technical Manual.
- (2) Based on 2014-2018 American Community Survey (ACS) Means of Transportation to Work Table for Bronx Census Tracts 16, 20, 38, 42, 74, and 98.
- (3) 1965 Lafayette Avenue EAS, 2017.
- (4) La Central FEIS, 2016.
- (5) West Harlem Rezoning FEIS, 2012.
- (6) Based on data provided by NYCDOT.
- (7) Based on 2012-2016 AASHTO CTPP Reverse Journey to Work data for Bronx Census Tracts 16, 20, 38, 42, 74, and 98.

**TABLE 11-6
RWCDs Travel Demand Forecast – Incremental Person Trips**

Land Use:	Residential - Family		Residential - Senior		Community Facility - Daycare (Students)		Community Facility - Daycare (Parents)		Community Facility - Daycare (Staff)		Community Facility - Recreation Center		Total			
	621	DU	114	DU	19,879	gsf	19,879	gsf	19,879	gsf	14,116	gsf				
Peak Hour Person Trips:																
AM (8-9 AM)	502		94		110		220		30		38		994			
MD (1-2 PM)	252		48		0		0		4		48		352			
PM (5-6 PM)	552		102		110		220		30		48		1,062			
Sat MD (1-2 PM)	478		88		0		0		0		38		604			
Person Trips:																
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	Total	
AM	Auto	33	172	14	23	45	0	45	45	15	0	1	1	153	241	394
	Taxi	1	3	0	0	1	0	1	1	0	0	2	1	5	5	10
	Bus-to-Subway	25	132	11	19	34	0	34	34	4	0	3	2	111	187	298
	Bus Only	16	81	7	12	21	0	21	21	7	0	1	1	73	115	188
	Walk/Other	<u>6</u>	<u>33</u>	<u>3</u>	<u>5</u>	<u>9</u>	<u>0</u>	<u>9</u>	<u>9</u>	<u>4</u>	<u>0</u>	<u>17</u>	<u>9</u>	<u>48</u>	<u>56</u>	<u>104</u>
	Total	81	421	35	59	110	0	110	110	30	0	24	14	390	604	994
MD	Auto	51	51	10	10	0	0	0	0	1	1	1	1	63	63	126
	Taxi	1	1	0	0	0	0	0	0	0	0	3	2	4	3	7
	Bus-to-Subway	39	39	7	7	0	0	0	0	1	1	3	2	50	49	99
	Bus Only	24	24	5	5	0	0	0	0	0	0	1	1	30	30	60
	Walk/Other	<u>11</u>	<u>11</u>	<u>2</u>	<u>2</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>20</u>	<u>14</u>	<u>33</u>	<u>27</u>	<u>60</u>
	Total	126	126	24	24	0	0	0	0	2	2	28	20	180	172	352
PM	Auto	150	74	25	17	0	45	45	45	0	15	1	1	221	197	418
	Taxi	3	1	0	0	0	1	1	1	0	0	1	3	5	6	11
	Bus-to-Subway	116	57	19	13	0	34	34	34	0	4	2	4	171	146	317
	Bus Only	71	35	12	8	0	21	21	21	0	7	1	2	105	94	199
	Walk/Other	<u>30</u>	<u>15</u>	<u>5</u>	<u>3</u>	<u>0</u>	<u>9</u>	<u>9</u>	<u>9</u>	<u>0</u>	<u>4</u>	<u>11</u>	<u>22</u>	<u>55</u>	<u>62</u>	<u>117</u>
	Total	370	182	61	41	0	110	110	110	0	30	16	32	557	505	1,062
Sat MD	Auto	103	91	19	17	0	0	0	0	0	0	1	1	123	109	232
	Taxi	2	2	0	0	0	0	0	0	0	0	2	1	4	3	7
	Bus-to-Subway	80	70	15	13	0	0	0	0	0	0	3	2	98	85	183
	Bus Only	49	43	9	8	0	0	0	0	0	0	1	1	59	52	111
	Walk/Other	<u>20</u>	<u>18</u>	<u>4</u>	<u>3</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>15</u>	<u>11</u>	<u>39</u>	<u>32</u>	<u>71</u>
	Total	254	224	47	41	0	0	0	0	0	0	22	16	323	281	604

TABLE 11-7
RWCDS Travel Demand Forecast – Incremental Vehicle Trips

Land Use:		Residential - Family		Residential - Senior		Community Facility - Daycare (Students)		Community Facility - Daycare (Parents)		Community Facility - Daycare (Staff)		Community Facility - Recreation Center		Total		
Vehicle Trips :																
		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	Total
AM	Auto (Total)	31	162	13	22	0	0	45	45	15	0	1	1	105	230	335
	Taxi	1	2	0	0	0	0	1	1	0	0	1	1	3	4	7
	Taxi Balanced	3	3	0	0	0	0	2	2	0	0	2	2	7	7	14
	Truck	2	2	0	0	0	0	0	0	0	0	0	0	2	2	4
	Total	36	167	13	22	0	0	47	47	15	0	3	3	114	239	353
MD	Auto (Total)	47	47	9	9	0	0	0	0	1	1	1	1	58	58	116
	Taxi	1	1	0	0	0	0	0	0	0	0	2	1	3	2	5
	Taxi Balanced	2	2	0	0	0	0	0	0	0	0	3	3	5	5	10
	Truck	2	2	0	0	0	0	0	0	0	0	0	0	2	2	4
	Total	51	51	9	9	0	0	0	0	1	1	4	4	65	65	130
PM	Auto (Total)	142	70	24	16	0	0	45	45	0	15	1	1	212	147	359
	Taxi	2	1	0	0	0	0	1	1	0	0	1	2	4	4	8
	Taxi Balanced	3	3	0	0	0	0	2	2	0	0	3	3	8	8	16
	Truck	1	1	0	0	0	0	0	0	0	0	0	0	1	1	2
	Total	146	74	24	16	0	0	47	47	0	15	4	4	221	156	377
Sat MD	Auto (Total)	97	86	18	16	0	0	0	0	0	0	1	1	116	103	219
	Taxi	1	1	0	0	0	0	0	0	0	0	1	1	2	2	4
	Taxi Balanced	2	2	0	0	0	0	0	0	0	0	2	2	4	4	8
	Truck	1	1	0	0	0	0	0	0	0	0	0	0	1	1	2
	Total	100	89	18	16	0	0	0	0	0	0	3	3	121	108	229

TABLE 11-8
Travel Demand Forecast Summary

Peak Hour	Incremental Vehicle Trips			Incremental Pedestrian Trips (Walk + Bus + Subway)			Incremental Subway Trips			Incremental Bus Trips (Bus + Subway)		
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total
AM	114	239	353	232	358	590	111	187	298	184	302	486
MD	65	65	130	113	106	219	50	49	99	80	79	159
PM	221	156	377	331	302	633	171	146	317	276	240	516
Sat MD	121	108	229	196	169	365	98	85	183	157	137	294

TRAFFIC

Based on *CEQR Technical Manual* guidelines, a quantified traffic analysis is typically required if a proposed action would result in 50 or more vehicle trip ends in a peak hour at one or more intersections. As shown in Table 11-8, under the RWCDs, the net number of incremental vehicle trips—353, 130, 377, and 229 in the weekday AM, midday, and PM peak hours, and Saturday peak hour, respectively—would exceed the 50-trip threshold in each peak hour, and a Level 2 screening analysis is therefore warranted for these periods to determine which intersections would require quantified analysis.

TRANSIT

According to the general thresholds used by the Metropolitan Transportation Authority and specified in the *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 and/or subway analysis would be warranted. Transit analyses typically focus on the weekday AM and PM commuter peak hours as it is during these periods that overall demand on the subway and bus systems is usually highest.

As shown in Table 11-8, the Proposed Actions are expected to generate approximately 298 and 317 new subway trips in the weekday AM and PM peak hours. As these numbers of trips would exceed the 200-trip *CEQR Technical Manual* analysis threshold, a Level 2 screening analysis is warranted to determine which subway stations and routes would require quantified analysis. As also shown in Table 11-8, the Proposed Actions are expected to generate 486 and 516 new trips by bus in the weekday AM and PM peak hours, respectively (including trips to and from the Parkchester subway station). As these numbers of trips would exceed the 50-trip *CEQR Technical Manual* analysis threshold, a Level 2 screening analysis is warranted to determine which bus routes would require quantified analysis.

PEDESTRIANS

According to *CEQR Technical Manual* guidelines, a quantified analysis of pedestrian conditions is typically required if a proposed action would result in 200 or more peak hour pedestrian trips at any pedestrian element (sidewalk, corner area, or crosswalk). As shown in Table 11-8, the Proposed Actions' RWCDs would generate an incremental demand of approximately 590, 219, 633, and 365 total pedestrian trips (including walk-only trips and pedestrians en route to and from nearby subway stations, and bus and ferry stops) in the weekday AM, midday, and PM peak hours, and Saturday peak hour, respectively. As the numbers of trips in all of these periods would exceed the 200-trip threshold, a Level 2 screening analysis is warranted to determine which if any pedestrian elements would require quantified analysis.

E. LEVEL 2 SCREENING ASSESSMENT

A Level 2 screening assessment involves the assignment of project-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 *CEQR Technical Manual* analysis thresholds and therefore require a quantitative analysis.

Vehicular Traffic

As shown in Table 11-8 and discussed above, the Proposed Actions are expected to result in new incremental increases of approximately 353, 130, 377, and 229 vehicle trips in the weekday AM, midday, and PM peak hours, and Saturday peak hour, respectively. These traffic volumes would exceed the *CEQR Technical Manual* threshold of 50 vehicles during each peak hour for Level 1 screening and, therefore, a Level 2 screening was performed to help identify intersections for detailed analysis.

The *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 origins/destinations of the residential trips used for the assignments are based upon 2014 – 2018 ACS journey-to-work data for Bronx Census Tracts 16, 20, 38, 42, 74, and 98 and the portal assignments used for the *1965 Lafayette Avenue EAS*, while the origins/destinations for the daycare parents and students and recreation facility trips that are mostly local in nature were based on population density in neighborhoods within a one-mile radius of the Project Area. In addition, the origins/destinations of the daycare staff trips used for the assignments are based on reverse-journey-to-work data for the aforementioned Bronx Census Tracts. (Additional data on the distributions of auto and taxi trips by land use are presented in the TPF/TDF Technical Memorandum included in Appendix D. For conservative analysis purposes, all auto trips were assigned to an entrance/exit located on the Development Site. As part of the Proposed Project, the Lafayette Avenue entrance to the Development Site would be realigned with Underhill Avenue (see Figure 11-2). Specifically, auto trips generated by the residential (family + senior), daycare, and recreation center uses were assigned to/from the proposed entrances/exits on Lafayette Avenue, Thieriot Avenue, Seward Avenue, and White Plains Road (refer to see Figure 11-2). Taxi trips were assigned to frontages along White Plains Road and Lafayette Avenue. Trucks were assigned to DOT-designated truck routes—i.e., White Plains Road and Bruckner Boulevard—and then to the most direct paths to and from the Development Site.

The assignment of net incremental peak hour vehicle trips at intersections in proximity to the Development Site are shown in Figure 11-3. As shown in Figure 11-3, a total of 13 intersections (nine signalized and four unsignalized) were selected for detailed analysis as they would exceed the 50-trip threshold in one or more peak hours.

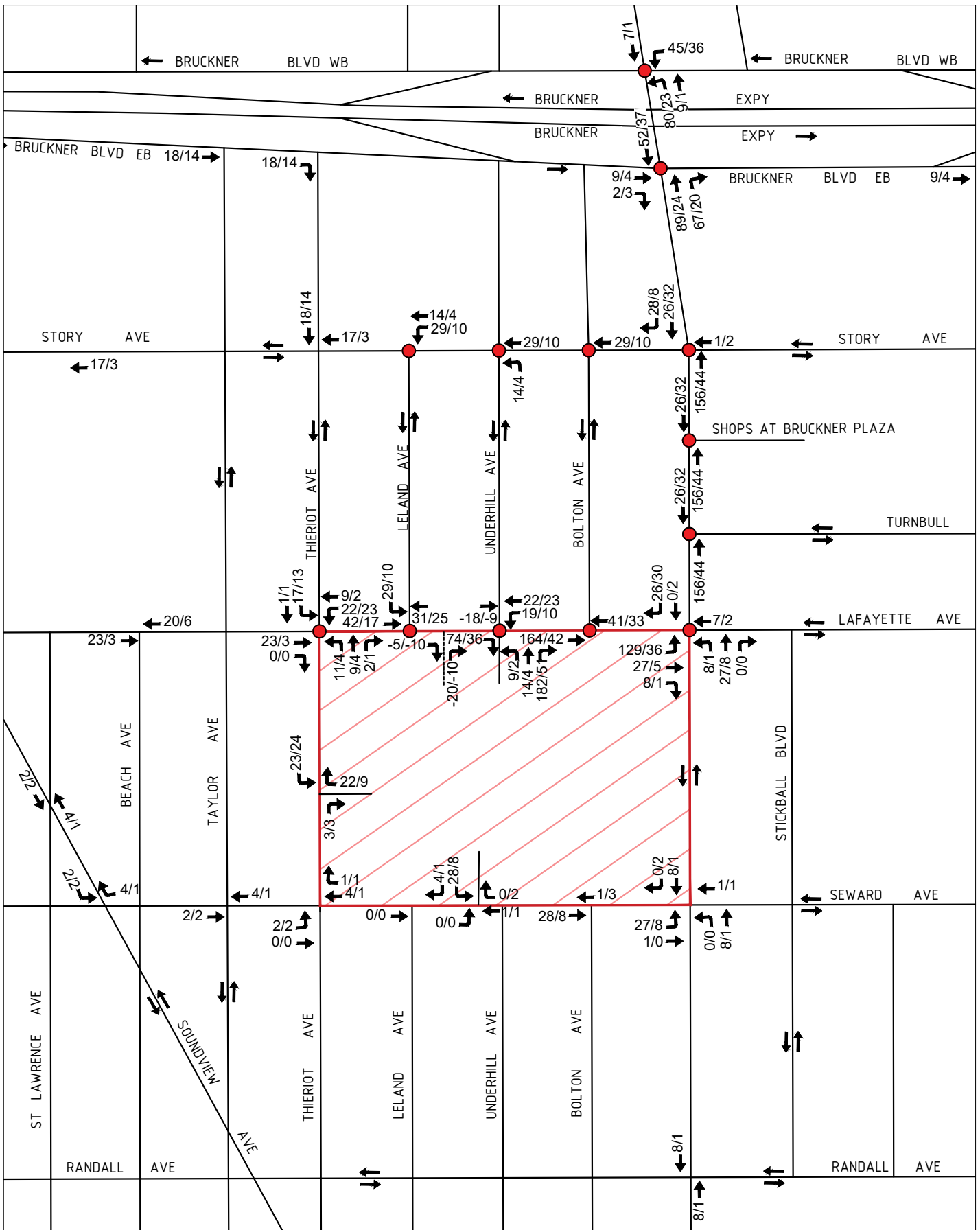
Transit

Subway

Subway Stations

As shown in Table 11-8, the Proposed Actions are expected to generate a net total of approximately 298 and 317 incremental subway trips in the weekday AM and PM peak hours, respectively. All trips were assigned to the Parkchester subway station, as it is the only station serving the Project Area. The Parkchester station, served by the No. 6 train operating on the Lexington Avenue Local Line, is located an approximately 0.9-mile walk to/from the northeast corner of the Project Area at the Hugh J. Grant traffic circle (see Figure 11-4). As incremental peak hour demand from the Proposed Actions would exceed the 200-trip *CEQR Technical Manual* analysis threshold at this station during the AM and PM peak hours, it has been selected for detailed analysis during the weekday AM and PM peak hours. Key circulation

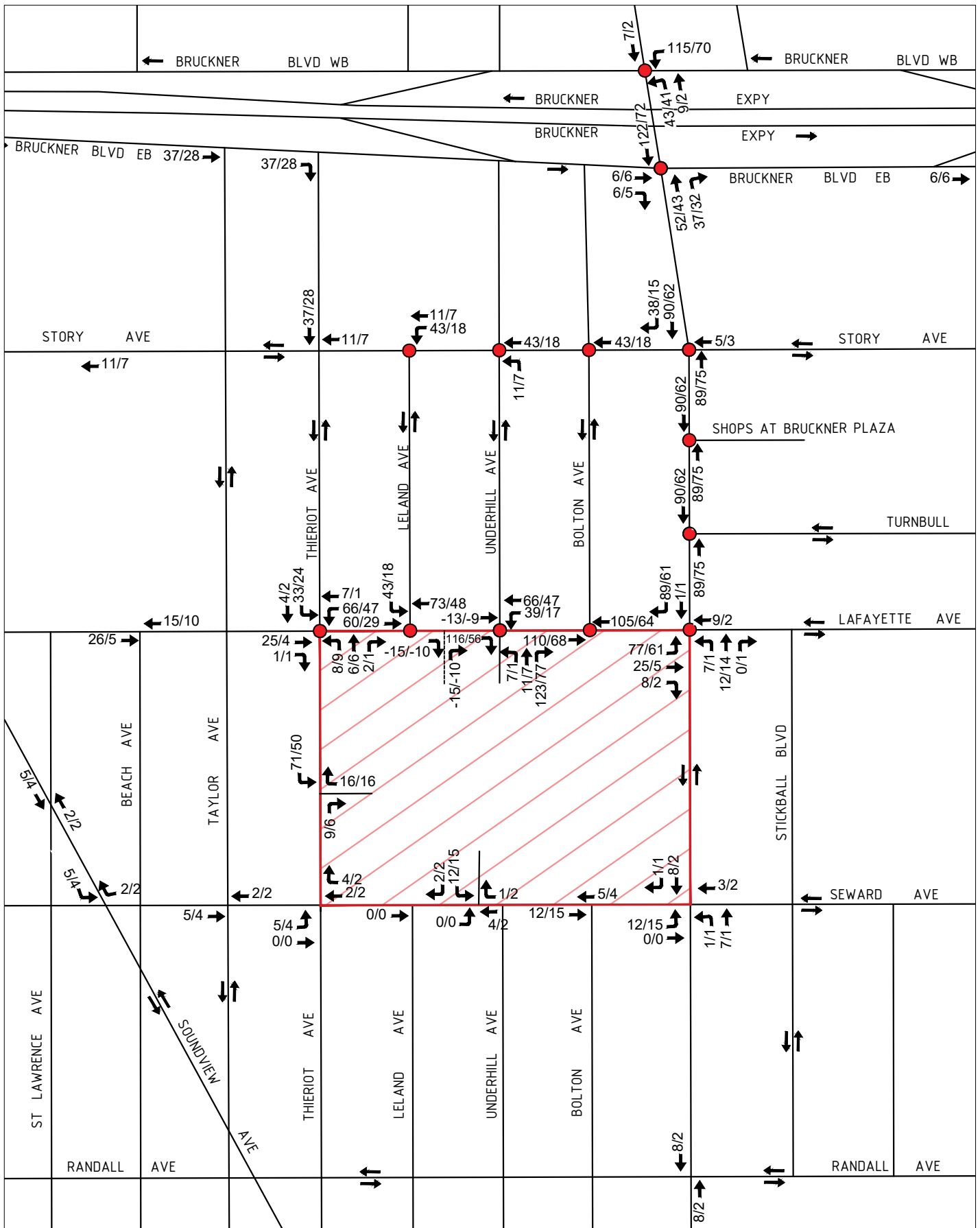
Incremental Vehicle Volumes - AM & MD



14/4 - Weekday AM/MD Vehicular Volumes
This Figure has been updated for the FEIS

Project Area Analysis Intersection

Incremental Vehicle Volumes - PM & SAT

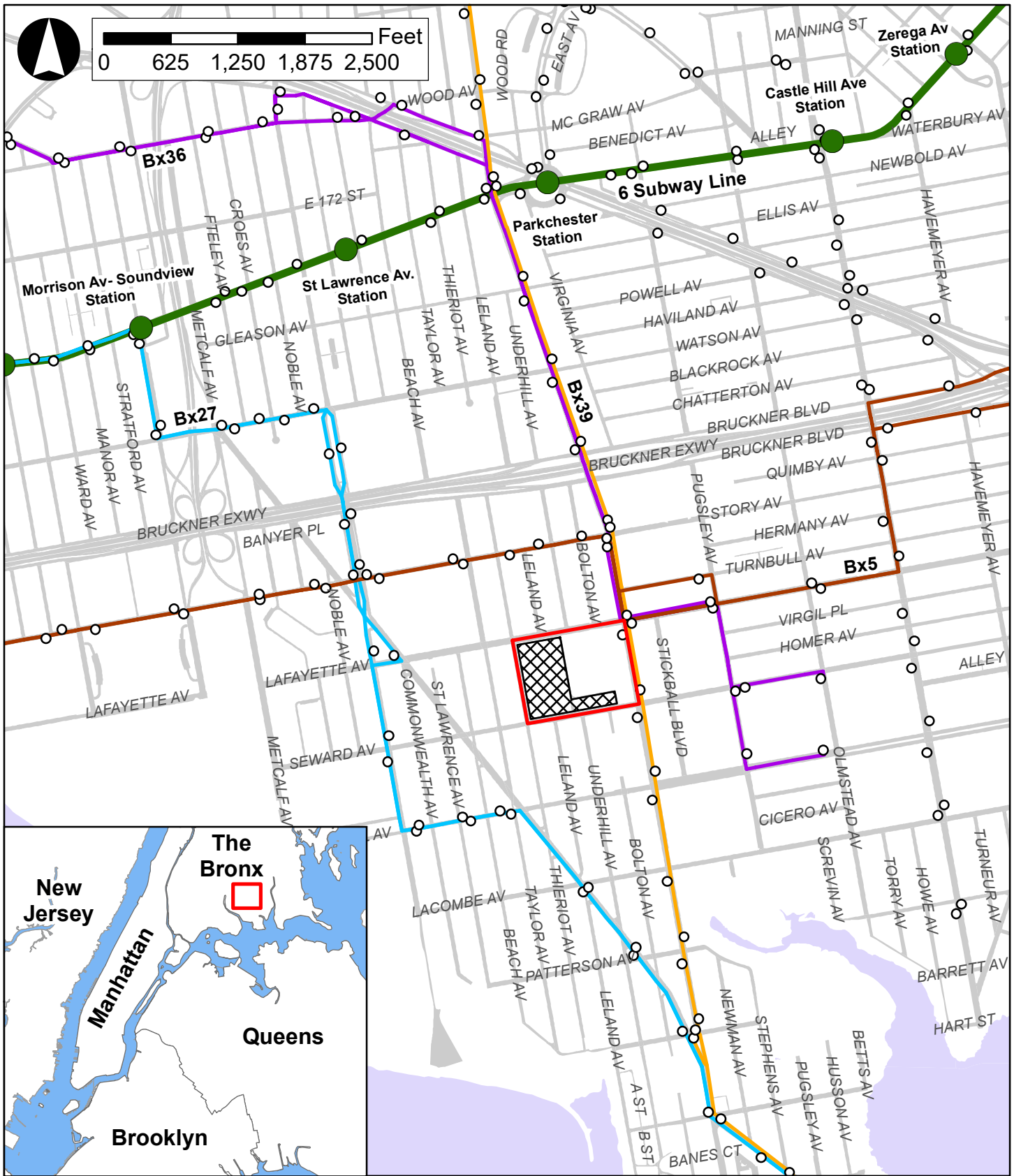


14/4 - Weekday PM/SAT Vehicular Volumes

Project Area

Analysis Intersection

This Figure has been updated for the FEIS



Legend

Project Area

Stevenson Commons Site

Subway Station

Bus Stops

Bus Routes

6 Subway Line

Bx27

Bx36

Bx39

Bx5

elements (e.g., stairs and fare arrays) expected to be used by concentrations of new demand from the Proposed Actions are analyzed.

SUBWAY LINE HAUL

As discussed above, the vicinity of the Project Area is served by one NYCT subway route – the No. 6 train. The peak direction of travel along the No. 6 route is typically Manhattan-bound (southbound) in the AM and Bronx-bound (northbound) in the PM. Table 11-9 provides the assignment of project-generated subway trips for the weekday AM and PM peak hours, by direction. As shown below in Table 11-9, the Proposed Actions would generate approximately 184 Manhattan-bound trips along the No.6 subway route during the weekday AM peak hour, and approximately 170 Bronx-bound trips during the weekday PM peak hour. As the Proposed Actions would not generate the *CEQR Technical Manual* threshold of 200 or more new peak hour subway trips in any one direction of the analyzed No. 6 train, an analysis of subway line haul conditions is not warranted as impacts are not expected.

**TABLE 11-9
Subway Assignments by Direction - No. 6 Train**

Direction	AM			PM		
	In	Out	Total	In	Out	Total
Manhattan-Bound	3	181	184	5	142	147
Bronx-Bound	108	6	114	166	4	170
Total	111	187	298	171	146	317

Bus

As shown in Table 11-8 and discussed above, the approximate hourly public bus trips generated by the Proposed Actions would be 486 and 516 trips in the weekday AM and PM peak hours, respectively. This includes trips that would use the bus to access the subway, as well as bus-only trips. As shown in Figure 11-4, a total of four local bus routes – the Bx5, Bx27, Bx36, and Bx39 routes – operated by NYCT provide service within ~~one~~ a quarter-mile of the Project Area. Bus trips were assigned to bus stops based on the anticipated ridership of each bus route. Table 11-10 provides the bus route assignment of project-generated bus person-trips for the weekday AM and PM peak hours. As shown in Table 11-10, based on the bus route distribution outlined above, the Bx36 bus would experience an increase of 177 northbound and 105 southbound trips in the weekday AM peak hour and 140 northbound and 161 southbound trips in the weekday PM peak hour. The Bx39 bus would experience an increase of 107 northbound and 44 southbound trips in the weekday AM peak hour and 96 northbound trips and 66 southbound trips in the weekday PM peak hour. Therefore, detailed bus analyses of the Bx36 and Bx39 routes are warranted for both peak hours.

TABLE 11-10
Bus Route Assignments

Route	Inbound				Outbound			
	AM	MD	PM	SAT	AM	MD	PM	SAT
	184	80	276	157	302	79	240	137
Bx5 EB (btwn White Plains & Pugsly)	7	3	9	5	10	3	8	5
Bx5 WB (btwn Lafayette & Turnbull)	7	3	9	5	10	3	8	5
Bx27 NB (btwn Lafayette & Seward)	7	3	9	5	10	3	8	5
Bx27 SB (btwn Seward & Randall)	1	0	1	1	1	0	1	1
Bx36 NB (to subway) (btwn Lafayette & Turnbull)	0	0	0	0	177	45	140	78
Bx36 SB (from subway) (btwn White Plains & Pugsly)	105	45	161	92	0	0	0	0
Bx39 NB (to subway) (btwn Lafayette & Turnbull)	16	7	24	13	91	24	72	41
Bx39 SB (from subway) (btwn Lafayette & Seward)	41	19	63	36	3	1	3	2
Total	184	80	276	157	302	79	240	137

Pedestrians

Under *CEQR Technical Manual* criteria, detailed pedestrian analyses are generally warranted if a proposed action is projected to result in 200 or more peak hour pedestrians at any sidewalk, corner area or crosswalk.

As shown in Table 11-8, the Proposed Actions' RWCDs is expected to generate approximately 104 incremental walk-only trips in the weekday AM peak hour, 60 in the weekday midday peak hour, 117 in the weekday PM peak hour, and 71 in the Saturday peak hour. Persons walking to and from subway station entrances and bus stops would add approximately 486, 159, 516, and 294 incremental pedestrian trips to sidewalks and crosswalks in the vicinity of the Project Area during the weekday AM, midday, and PM peak hours, and Saturday peak hour, respectively. Bus only, bus-to-subway, and walk-only trips would each have a different assignment pattern. Subway and bus trips would be assigned as described above. Walk-only trips were assigned evenly through the local street network, with residential and community facility "walk-only" trips originating/ending at their respective entrance/exit locations based on the proposed site plan (refer to Figure 11-2). In the weekday AM and PM peak hours, new pedestrian trips would be most concentrated on sidewalks and crosswalks adjacent to the Development Site and along corridors connecting the site to nearby 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.

Given the numbers of incremental pedestrian trips that would be generated, a detailed analysis of pedestrian conditions under the Proposed Actions is warranted. Based on pedestrian count data collected in proximity to the Development Site, the weekday AM (8:30-9:30 AM), midday (12:15-1:15 PM), PM (4:30-5:30 PM), and Saturday (12:45-1:45 PM) peak hours have been selected for analysis. A preliminary assignment of weekday AM, midday and PM peak hours, and Saturday peak hour pedestrian trips is shown in Figure 11-5. As shown in Figure 11-5, a total of six pedestrian elements (two sidewalks, three corner areas, and one crosswalk) will exceed the 200-trip *CEQR Technical Manual* analysis threshold in one or more peak hours, thereby warranting detailed analyses in all four peak hours. These pedestrian elements, discussed below, are primarily located along White Plains Road and Lafayette Avenue.

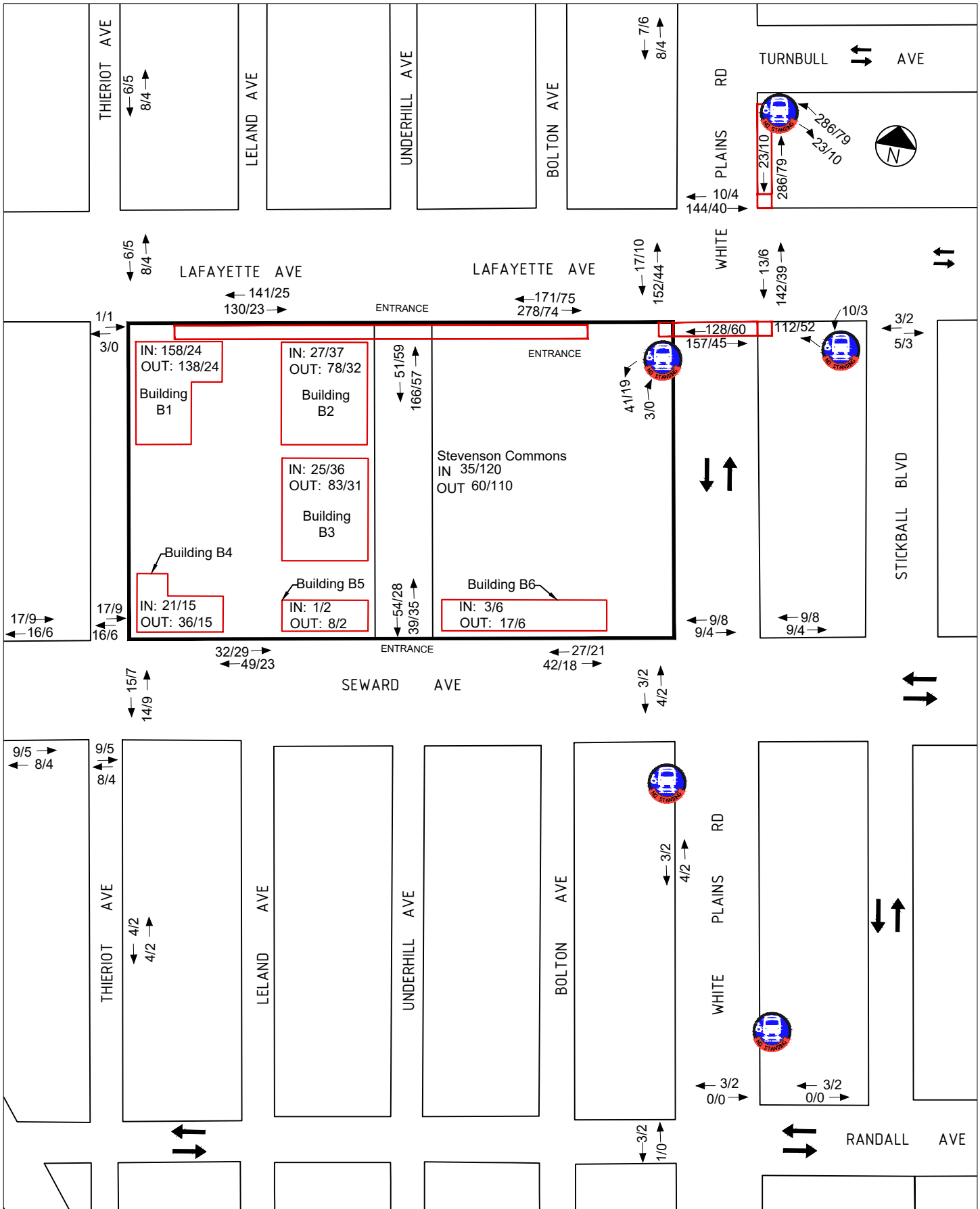
Parking

As the Proposed Project is predominantly residential, it is anticipated that parking demand would peak in the overnight period. The Proposed Project would provide a total of 466 accessory parking spaces within the Project Area, resulting in a net decrease of 104 accessory parking spaces as compared to the No-Action conditions. The Proposed Actions would generate a peak overnight parking accumulation of



MTA Bus Stop Analysis Location

Incremental Pedestrian Volumes - AM & MD

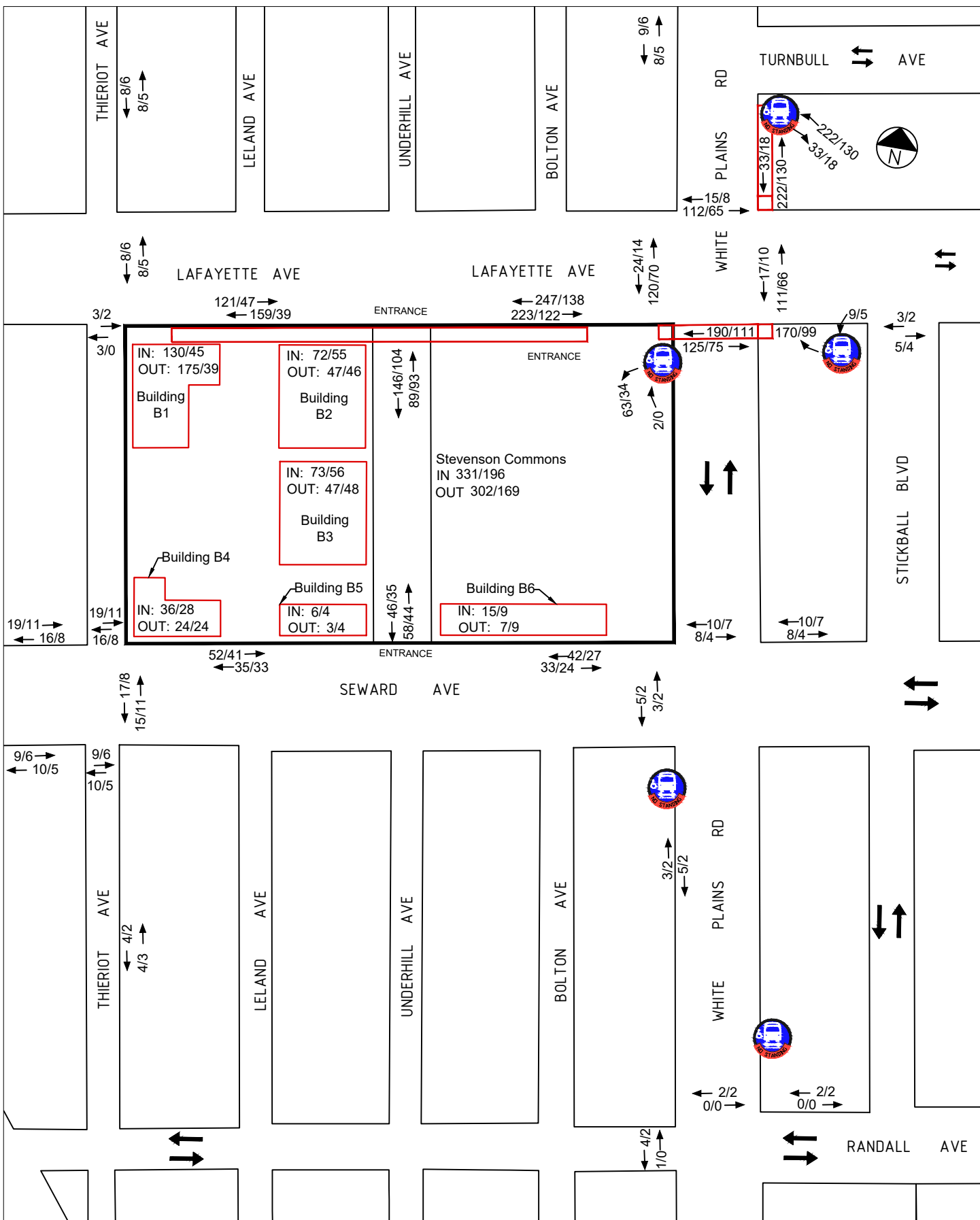


14/4 - Weekday AM/MD Pedestrian Volumes

Incremental Pedestrian Volumes - PM & SAT



MTA Bus Stop Analysis Location



14/4 - Weekday PM/SAT Pedestrian Volumes

approximately 463 spaces during the weekday overnight period, which would be fully accommodated on-site. However, as existing parking within the Project Area would be displaced under the Proposed Actions, a detailed analysis of parking conditions within the Project Area is included in this EIS. Existing parking inventories are provided to document the existing supply and demand within the Project Area during the weekday overnight period (when the residential parking demand peaks). Changes in the parking supply and utilization under both No-Action and With-Action conditions are also forecasted.

F. TRANSPORTATION ANALYSES METHODOLOGIES

Traffic

Analysis Methodology

The traffic analysis examines conditions in the weekday AM, midday, and PM peak hours, and Saturday peak hour at 13 intersections (nine signalized and four unsignalized). Based on data collected in June 2019, the weekday peak hours selected for analysis are 7:45-8:45 AM, 12:30-1:30 PM, and 4:30-5:30 PM, and the Saturday peak hour is 2:00-3:00 PM.

The capacity analyses at intersections were based on the methodology presented in the Highway Capacity Manual (HCM) and utilize HCS+ Version 5.5 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 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 (ten 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 (ten ~~ten~~ 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 11-11 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 reflects heavy 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 11-11
Intersection Level of Service Criteria

LOS	Average Delay per Vehicle (seconds)	
	Signalized Intersections	Unsignalized Intersections
A	Less than 10.1	Less than 10.1
B	10.1 to 20.0	10.1 to 15.0
C	20.1 to 35.0	15.1 to 25.0
D	35.1 to 55.0	25.1 to 35.0
E	55.1 to 80.0	35.1 to 50.0
F	Greater than 80.0	Greater than 50.0

Source: 2000 Highway Capacity Manual

Significant Impact Criteria

The identification of significant adverse traffic impacts at analyzed intersections is based on criteria presented in the *CEQR Technical Manual*. If a lane group in the With-Action condition would be LOS A, B, or C, or marginally acceptable LOS D (i.e., delay less than or equal to 45.0 seconds/vehicle for signalized intersections and 30.0 seconds/vehicle for unsignalized intersections), the impact is not considered significant. If the lane-group LOS would deteriorate from LOS A, B, or C in the No-Action condition to worse than mid-LOS D or to LOS E or F in the With-Action condition, a significant traffic impact is identified. For a lane group that would operate at LOS D in the No-Action condition, an increase in delay of 5.0 or more seconds in the With-Action condition is considered a significant impact if the With-Action delay would exceed mid-LOS D. For a lane group that would operate at LOS E in the No-Action condition, a projected With-Action increase in delay of 4.0 or more seconds is considered a significant impact. For a lane group that would operate at LOS F in the No-Action condition, a projected With-Action increase in delay of 3.0 or more seconds 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, 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 collected at the Parkchester (No. 6) subway station in June 2019. The methodology for assessing subway station pedestrian circulation elements (stairs, escalators, and passageways) and fare control elements

(low 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 v/c ratio. All analyses reflect pedestrian flow volumes over a 15-minute interval during each peak hour. Based on existing pedestrian volumes at the Parkchester (No. 6) station, the peak hours selected for the analysis of subway station conditions are 7:45-8:45 AM and 5:30-6:30 PM. (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 *CEQR Technical Manual* guidance, 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 ~~ten~~10 passengers per foot-width per minute (pfm) for stairs and 15 pfm 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 ten 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 *CEQR Technical Manual* guidance 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 11-12 shows the *CEQR Technical Manual* LOS criteria for all subway station elements. As shown in Table 11-12, 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 11-12
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: 2020 *CEQR Technical Manual*

BUS

The operating conditions for bus service are measured in terms of the number of passengers carried per bus at the maximum load point for each route. This is determined by dividing the peak hour passenger count by the number of buses during that hour. The bus load levels are compared with the NYCT loading guidelines of 54 passengers for a 40-foot standard bus and 85 passengers for a 60-foot articulated bus. The bus analyses focus on the weekday AM and PM commuter peak hours as it is during these periods that overall demand on the bus system is usually highest.

Significant Impact Criteria

SUBWAY STATIONS

The *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 LOS or that 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 11-13 are reached or exceeded.

TABLE 11-13
Significant Impact Thresholds for Stairways and Passageways

With-Action V/C Ratio	WIT for Significant Impact (inches)	
	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: 2020 *CEQR Technical Manual*

For turnstiles, escalators, and high-wheel exit gates, the *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.

BUS

According to the *CEQR Technical Manual* and NYCT guidelines, additional bus service along a route is recommended when load levels exceed maximum capacity at the route's maximum load point. A significant impact is considered at the route's maximum load point where an increase in bus load levels would exceed the maximum capacity. NYCT's general policy is to provide additional bus service where demand warrants increased service, taking into account fiscal and operational constraints.

Pedestrians

Analysis Methodology

Data on peak period pedestrian flow volumes were collected along analyzed sidewalks, corner areas, and crosswalks in the vicinity of the Development Site in June 2019. 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 8:30-9:30 AM, 12:15-1:15 PM, and 4:30-5:30 PM peak hours, and the Saturday peak hour is 12:45-1:45 PM.

Peak 15-minute pedestrian flow conditions during the weekday AM, midday and PM peak hours, and Saturday peak hour are analyzed using the *Highway Capacity Manual 2010* methodology and procedures outlined in the *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 11-14 defines the LOS criteria for pedestrian crosswalk/corner area and sidewalk conditions, as based on the *Highway Capacity Manual* 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. Platooning generally results in an LOS one level poorer than that determined for average flow rates.

Significant Impact Criteria

SIDEWALKS

The *CEQR Technical Manual* impact criteria for a non-central business district (non-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 44.3 square feet/pedestrian (sf/ped), and the average pedestrian space under the With-Action condition is 40.0 sf/ped or less (LOS D or worse). If the average pedestrian space under the With-Action condition is greater than 40.0 sf/ped (LOS C or better), the impact should not be considered significant. If the No-Action condition pedestrian space is between 6.4 and 44.3 sf/ped, a reduction in pedestrian space under the With-Action condition should be considered significant based on Table 11-15, 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 11-15, the impact is not considered significant. If the average pedestrian space under the No-Action condition is less than 6.4 sf/ped, 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 11-14
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

Notes:
Based on average conditions for 15 minutes
sf/ped – square feet of area per pedestrian
Source: 2020 CEQR Technical Manual

CORNER AREAS AND CROSSWALKS

For non-CBD areas, *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 26.6 sf/ped and, under the With-Action condition, the average pedestrian space decreases to 24 sf/ped or less (LOS D or worse). If the pedestrian space under the With-Action condition is greater than 24 sf/ped (LOS C or better), the impact should not be considered significant. If the average pedestrian space under the No-Action condition is between 5.1 and 26.6 sf/ped, a decrease in pedestrian space under the With-Action condition should be considered significant based on Table 11-16 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 11-16, the impact is not considered significant. If the average pedestrian space under the No-Action condition is less than 5.1 sf/ped, then a decrease in pedestrian space greater than or equal to 0.2 sf/ped should be considered significant.

TABLE 11-15
Significant Impact Criteria for Sidewalks
with Platooned Flow in a Non-CBD Location

No-Action Condition Pedestrian Flow (sf/ped)	With-Action Condition Pedestrian Flow Increment to be Considered a Significant Impact (sf/ped)
>44.3	With-Action Condition < 40.0
43.5 to 44.3	Reduction ≥ 4.3
42.5 to 43.4	Reduction ≥ 4.2
41.6 to 42.4	Reduction ≥ 4.1
40.6 to 41.5	Reduction ≥ 4.0
39.7 to 40.5	Reduction ≥ 3.9
38.7 to 39.6	Reduction ≥ 3.8
37.8 to 38.6	Reduction ≥ 3.7
36.8 to 37.7	Reduction ≥ 3.6
35.9 to 36.7	Reduction ≥ 3.5
34.9 to 35.8	Reduction ≥ 3.4
34.0 to 34.8	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
<6.4	Reduction ≥ 0.3

Source: 2020 CEQR Technical Manual

TABLE 11-16
Significant Impact Criteria for Corners and Crosswalks
in a Non-CBD Location

No-Action Condition Pedestrian Space (sf/ped)	With-Action Condition Pedestrian Space Reduction to be Considered a Significant Impact (sf/ped)
> 26.6	With-Action Condition < 24.0
25.8 to 26.6	Reduction \geq 2.6
24.9 to 25.7	Reduction \geq 2.5
24.0 to 24.8	Reduction \geq 2.4
23.1 to 23.9	Reduction \geq 2.3
22.2 to 23.0	Reduction \geq 2.2
21.3 to 22.1	Reduction \geq 2.1
20.4 to 21.2	Reduction \geq 2.0
19.5 to 20.3	Reduction \geq 1.9
18.6 to 19.4	Reduction \geq 1.8
17.7 to 18.5	Reduction \geq 1.7
16.8 to 17.6	Reduction \geq 1.6
15.9 to 16.7	Reduction \geq 1.5
15.0 to 15.8	Reduction \geq 1.4
14.1 to 14.9	Reduction \geq 1.3
13.2 to 14.0	Reduction \geq 1.2
12.3 to 13.1	Reduction \geq 1.1
11.4 to 12.2	Reduction \geq 1.0
10.5 to 11.3	Reduction \geq 0.9
9.6 to 10.4	Reduction \geq 0.8
8.7 to 9.5	Reduction \geq 0.7
7.8 to 8.6	Reduction \geq 0.6
6.9 to 7.7	Reduction \geq 0.5
6.0 to 6.8	Reduction \geq 0.4
5.1 to 5.9	Reduction \geq 0.3
< 5.1	Reduction \geq 0.2
<i>Source: 2020 CEQR Technical Manual</i>	

Vehicular and Pedestrian Safety Evaluation

Under *CEQR Technical Manual* guidance, an evaluation of vehicular and pedestrian safety is needed for locations within the traffic and pedestrian study areas that have been identified as high crash locations. These are defined as locations with 48 or more total reportable and non-reportable crashes or 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 NYC DOT/DOIT.

Parking

Analysis Methodology

The parking analysis identifies the supply of parking within the Project Area and determines the extent to which the supply is utilized in existing conditions and in the future without and with a proposed action. The analysis considers anticipated changes in the Project Area's parking supply and demand, and compares project-generated parking demand with future parking availability to determine if a parking shortfall is likely to result. The displacement of existing parking capacity attributable to the proposed action or project is also considered.

A parking demand forecast for the Proposed Actions' RWCDs is provided to document the projected demand at the proposed 466 on-site accessory parking spaces. As the Proposed Actions are predominantly residential, the parking analysis focuses on the weekday overnight period.

Significant Shortfall 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 a ¼-quarter-mile), as well as the availability of alternative modes of transportation, are considered in making this determination.

G. TRAFFIC

Existing Conditions

Study Area Street Network

As shown in Figure 11-3, the Project Area comprises the ~~679,000-square-foot (-sf)~~ superblock bounded by Lafayette Avenue to the north, White Plains Road to the east, Seward Avenue to the south, and Thieriot Avenue to the west. The Stevenson Commons site has approximately 970 feet of street frontage on Lafayette and Seward Avenues (to the north and south, respectively) and approximately 700 feet of street frontage on White Plains Road and Thieriot Avenue (to the east and west, respectively).

White Plains Road is a major two- to four-lane north-south corridor running from Bronx River Avenue in the Shorehaven area along the East River to the border with Westchester County at East 243rd Street, where it continues as West 1st Street in the city of Mount Vernon. It is a designated local truck route north of the Bruckner Expressway. The Bx39 bus route runs along its entire length north of Soundview Avenue, and the Bx36 runs along White Plains Road north of Lafayette Avenue. The Bx5 bus travels along White Plains Road in the vicinity of the Project Area between Story and Lafayette Avenues. Parking is permitted, with some restrictions, on both sides of White Plains Road adjacent to the Project Area. White Plains Road provides the most direct vehicular connection between the Project Area and the Bruckner Expressway.

Lafayette Avenue is an east-west corridor that runs in four sections. In the Soundview area of the Bronx, it runs from Soundview Park in the west to Zerega Avenue in the east with two lanes and a hatched median. In the vicinity of the Project Area, the Bx5 bus runs along Lafayette Avenue, intersecting with White Plains Road. There is a Class II bicycle lane on Lafayette Avenue between Metcalf and Zerega Avenues, and parking is permitted on both sides of the street adjacent to the Stevenson Commons site.

To the west of the Stevenson Commons site, **Thieriot Avenue** runs in the north-south direction between Bruckner Boulevard and O'Brien Avenue. Parking is permitted on both sides of the street in the vicinity of the Project Area.

Bordering the south of the Stevenson Commons site, **Seward Avenue** is an approximately 40-foot-wide arterial running in the east-west direction between Metcalf and Zerega Avenues. Parking is permitted on both sides of the street in the vicinity of the Project Area.

Additional predominant arterials in the vicinity of the Project Area include The **Bruckner Expressway**, a six- to eight-lane east-west limited access highway that carries Interstate 278 between the Triborough Bridge (with connections to Queens, Brooklyn, and Staten Island) and the Bruckner Interchange with the Cross Bronx Expressway and the Hutchison River Parkway; the **Bronx River Parkway**, a four- to six-lane north-south limited access parkway that runs from Story Avenue in the Bronx to NY State Route 22 in Westchester County; and **Story Avenue**, a two-lane east-west corridor that provides the most direct vehicular connection between the Project Area and the Bronx River Parkway.

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 the vicinity of the Development Site, local truck routes have been designated along Bruckner Boulevard and Soundview Avenue. Through trucks are defined as having neither an origin nor a destination within the Bronx. The nearest designated through truck route in proximity to the Development Site is the Bruckner Expressway (I-278).

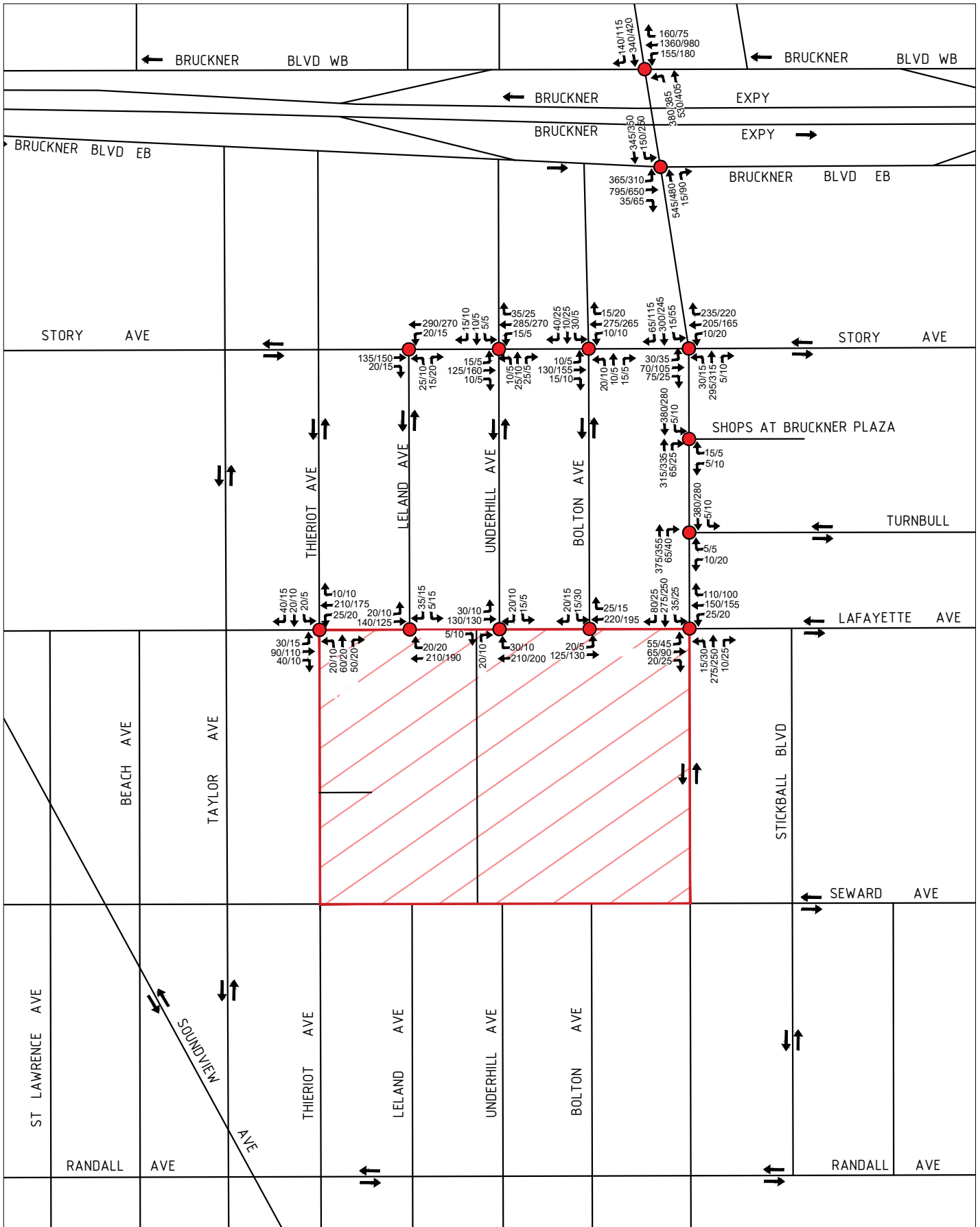
Traffic Conditions

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 June 2019. 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 also collected in June 2019. Signal timing plans for signalized intersections within the study area were obtained from NYCDOT. Figure 11-6 shows existing traffic volumes during the weekday AM, midday, and PM peak hours, and Saturday peak hour.

Intersection Capacity Analysis

Existing v/c ratios, delays, and LOS for individual lane groups at analyzed intersections are shown in Table 11-17. A lane group is considered congested in Table 11-17 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 11-17, of the 13 analyzed intersections, three signalized intersections currently have at least one congested lane group in one or more peak hours. All three analyzed congested intersections are located along the White Plains Road corridor. One intersection contains one or more lane groups operating at or over capacity (v/c ratio ≥ 1.0) in the weekday AM peak hour, two in the midday, two in the PM, and ~~two~~ one in the Saturday peak hour.

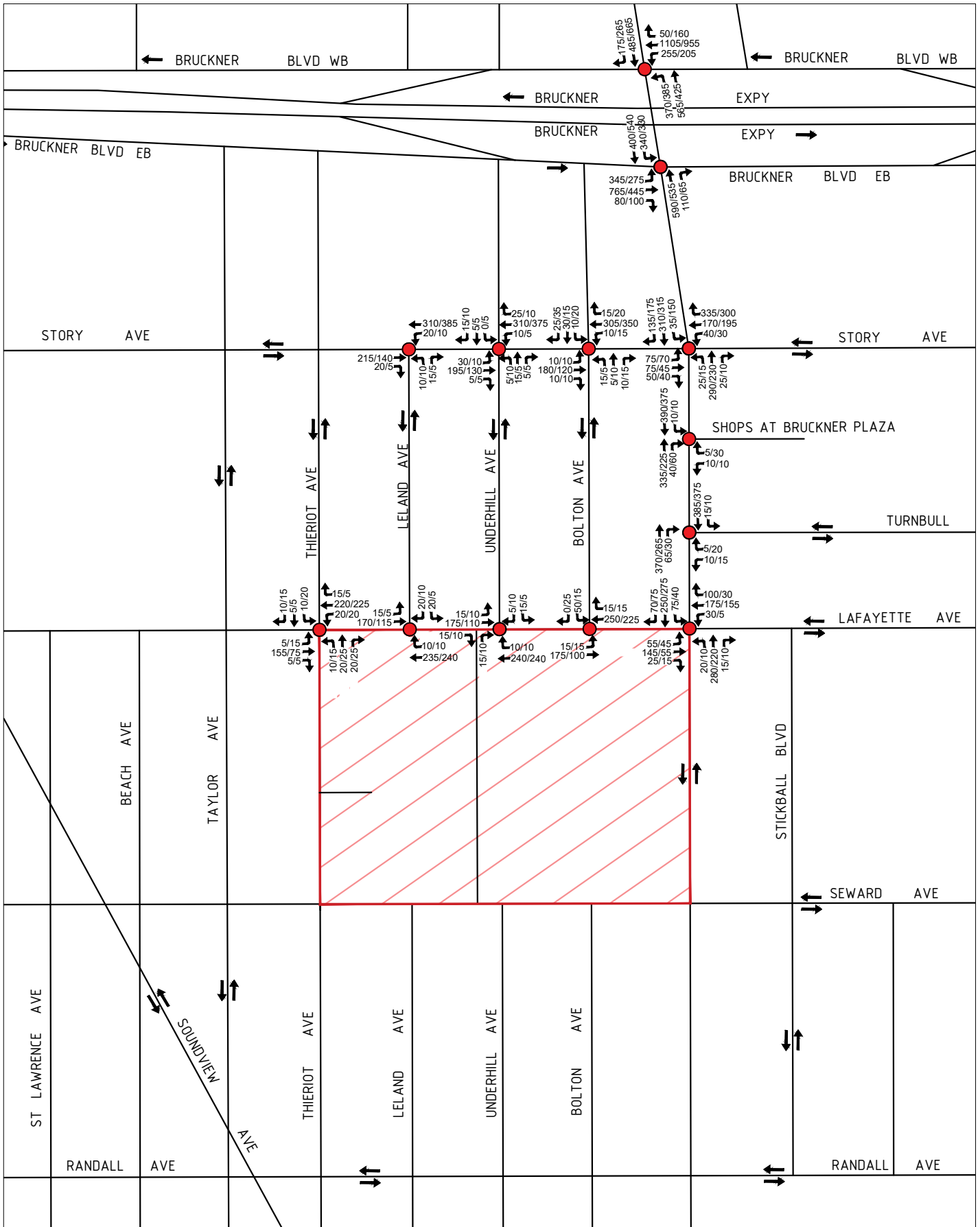
Existing Vehicle Volumes - AM & MD



14/4 - Weekday AM/MD Vehicular Volumes
This Figure has been updated for the FEIS

Project Area ● Analysis Intersection ● Analysis Intersection with 170+ vehicles

Existing Vehicle Volumes - PM & SAT



14/4 - Weekday PM/SAT Vehicular Volumes Project Area ● Analysis Intersection ● Analysis Intersection with 170+ vehicles
 This Figure has been updated for the FEIS

**TABLE 11-17
Existing Conditions Intersection Level of Service Analysis**

Signalized Intersections	Existing AM Peak Hour					Existing Midday Peak Hour					Existing PM Peak Hour					Existing SAT Peak Hour				
	Approach	Group	V/C Ratio	Delay (sec/veh)	LOS	Approach	Group	V/C Ratio	Delay (sec/veh)	LOS	Approach	Group	V/C Ratio	Delay (sec/veh)	LOS	Approach	Group	V/C Ratio	Delay (sec/veh)	LOS
Bruckner Blvd EB & White Plains Rd	EB	L	0.66	33.2	C	EB	L	0.66	37.8	D	EB	L	0.69	36.8	D	EB	L	0.52	31.1	C
	EB	LTR	0.88	41.7	D	EB	LTR	0.84	42.8	D	EB	LTR	1.00	64.7	E *	EB	LTR	0.51	29.3	C
	NB	TR	0.94	65.7	E *	NB	TR	0.74	39.2	D	NB	TR	0.99	72.9	E *	NB	TR	0.72	40.0	D
	SB	L	0.38	40.1	D	SB	L	0.58	41.7	D	SB	L	0.59	40.9	D	SB	L	0.66	49.1	D
	SB	LT	0.47	26.3	C	SB	LT	0.56	24.3	C	SB	LT	0.61	28.1	C	SB	LT	0.75	31.8	C
Bruckner Blvd WB & White Plains Rd	WB	LT	1.05	69.1	E *	WB	LT	1.05	77.4	E *	WB	LT	0.99	55.8	E *	WB	LT	0.98	56.5	E *
	WB	R	0.40	24.4	C	WB	R	0.22	27.4	C	WB	R	0.11	21.7	C	WB	R	0.39	28.4	C
	NB	L	0.81	56.9	E *	NB	L	0.68	42.0	D	NB	L	0.71	48.6	D	NB	L	0.71	46.7	D
	NB	LT	0.79	38.9	D	NB	LT	0.68	27.7	C	NB	LT	0.72	32.5	C	NB	T	0.68	30.8	C
	SB	TR	0.56	41.7	D	SB	TR	0.49	31.6	C	SB	TR	0.60	39.6	D	SB	TR	0.39	35.4	D
Bruckner Plaza & White Plains Rd	WB	LR	0.04	16.6	B	WB	LR	0.03	16.5	B	WB	LR	0.03	16.5	B	WB	LR	0.09	17.1	B
	NB	TR	0.74	26.5	C	NB	TR	0.63	21.9	C	NB	TR	0.66	22.5	C	NB	TR	0.52	18.8	B
	SB	L	0.02	12.0	B	SB	L	0.04	12.2	B	SB	L	0.04	12.2	B	SB	L	0.04	12.2	B
	SB	T	0.73	25.8	C	SB	T	0.52	18.8	B	SB	T	0.65	22.2	C	SB	T	0.63	21.3	C
Lafayette Ave & Bolton Ave	EB	L	0.11	15.5	B	EB	L	0.02	14.1	B	EB	L	0.06	14.6	B	EB	L	0.06	14.6	B
	EB	T	0.21	16.2	B	EB	T	0.24	16.5	B	EB	T	0.31	17.4	B	EB	T	0.18	15.7	B
	WB	TR	0.46	20.0	B	WB	TR	0.38	18.6	B	WB	TR	0.45	19.7	B	WB	TR	0.39	18.4	B
	SB	LR	0.09	14.9	B	SB	LR	0.10	15.0	B	SB	LR	0.10	14.9	B	SB	LR	0.09	14.9	B
Story Ave & Bolton Ave	EB	LTR	0.33	17.8	B	EB	LTR	0.30	17.2	B	EB	LTR	0.36	18.2	B	EB	LTR	0.25	16.6	B
	WB	LTR	0.55	22.2	C	WB	LTR	0.50	20.6	C	WB	LTR	0.61	23.2	C	WB	LTR	0.63	23.9	C
	NB	LTR	0.14	15.5	B	NB	LTR	0.05	14.4	B	NB	LTR	0.07	14.6	B	NB	LTR	0.07	14.6	B
	SB	LTR	0.22	16.6	B	SB	LTR	0.13	15.2	B	SB	LTR	0.15	15.4	B	SB	LTR	0.17	15.7	B
Story Ave & Underhill Ave	EB	LTR	0.33	17.8	B	EB	LTR	0.33	17.7	B	EB	LTR	0.43	19.3	B	EB	LTR	0.27	16.8	B
	WB	LTR	0.70	26.9	C	WB	LTR	0.52	21.2	C	WB	LTR	0.59	22.7	C	WB	LTR	0.64	24.2	C
	NB	LTR	0.15	15.5	B	NB	LTR	0.05	14.3	B	NB	LTR	0.06	14.4	B	NB	LTR	0.05	14.4	B
	SB	LTR	0.08	14.7	B	SB	LTR	0.05	14.4	B	SB	LTR	0.05	14.3	B	SB	LTR	0.04	14.3	B
White Plains Rd & Lafayette Ave	EB	L	0.28	24.6	C	EB	L	0.26	24.3	C	EB	L	0.30	25.2	C	EB	L	0.21	22.7	C
	EB	TR	0.24	22.5	C	EB	TR	0.33	24.0	C	EB	TR	0.44	25.9	C	EB	TR	0.19	21.7	C
	WB	L	0.11	21.1	C	WB	L	0.09	20.7	C	WB	L	0.15	21.7	C	WB	L	0.02	19.6	B
	WB	TR	0.76	38.5	D	WB	TR	0.77	40.3	D	WB	TR	0.66	32.1	C	WB	TR	0.44	25.5	C
	NB	L	0.05	9.9	A	NB	L	0.10	10.5	B	NB	L	0.08	10.2	B	NB	L	0.04	9.7	A
	NB	TR	0.39	13.3	B	NB	TR	0.39	13.3	B	NB	TR	0.39	13.2	B	NB	TR	0.31	12.1	B
	SB	L	0.14	11.2	B	SB	L	0.08	10.3	B	SB	L	0.29	13.2	B	SB	L	0.13	10.8	B
	SB	TR	0.64	19.1	B	SB	TR	0.47	14.8	B	SB	TR	0.52	15.9	B	SB	TR	0.55	16.5	B
White Plains Rd & Story Ave	EB	LTR	0.73	44.2	D	EB	LTR	0.85	62.0	E *	EB	LTR	1.05	103.4	F *	EB	LTR	1.05	113.3	F *
	WB	LT	0.61	34.8	C	WB	LT	0.59	36.7	D	WB	LT	0.56	33.3	C	WB	LT	0.67	39.9	D
	WB	R	0.84	52.8	D	WB	R	1.05	103.1	F *	WB	R	1.05	95.4	F *	WB	R	1.05	98.4	F *
	NB	L	0.19	16.6	B	NB	L	0.10	16.8	B	NB	L	0.15	15.8	B	NB	L	0.13	17.8	B
	NB	TR	0.64	24.6	C	NB	TR	0.82	37.4	D	NB	TR	0.64	24.6	C	NB	TR	0.50	22.5	C
	SB	L	0.05	14.0	B	SB	L	0.25	19.1	B	SB	L	0.14	15.2	B	SB	L	0.64	31.0	C
White Plains Rd & Turnbull Ave	WB	LR	0.04	19.9	B	WB	LR	0.06	20.0	C	WB	LR	0.04	19.8	B	WB	LR	0.09	20.4	C
	NB	TR	0.76	23.6	C	NB	TR	0.65	18.9	B	NB	TR	0.69	19.7	B	NB	TR	0.38	13.1	B
	SB	L	0.03	9.7	A	SB	L	0.05	9.9	A	SB	L	0.08	10.5	B	SB	L	0.03	9.6	A
	SB	T	0.65	19.3	B	SB	T	0.43	14.1	B	SB	T	0.61	17.9	B	SB	T	0.56	16.5	B
Lafayette Ave & Leland Ave Unsignalized	EB	LT	0.02	8.4	A	EB	LT	0.01	8.0	A	EB	LT	0.02	8.3	A	EB	LT	0.00	8.1	A
	SB	LR	0.08	11.8	B	SB	LR	0.06	11.0	B	SB	LR	0.09	12.1	B	SB	LR	0.03	11.0	B
Lafayette Ave & Underhill Ave Unsignalized	EB	LT	0.03	8.2	A	EB	LT	0.01	7.9	A	EB	LT	0.02	8.1	A	EB	LT	0.01	8.0	A
	SB	LR	0.07	11.6	B	SB	LR	0.03	10.4	B	SB	LR	0.05	12.4	B	SB	LR	0.03	10.8	B
Story Ave & Leland Ave Unsignalized	WB	LT	0.02	8.4	A	WB	LT	0.01	7.9	A	WB	LT	0.02	8.3	A	WB	LT	0.01	8.0	A
	NB	LR	0.11	14.6	B	NB	LR	0.06	11.4	B	NB	LR	0.06	13.2	B	NB	LR	0.04	13.2	B
Lafayette Ave & Thieriot Ave Unsignalized	EB	LTR	0.03	8.5	A	EB	LTR	0.01	7.9	A	EB	LTR	0.00	7.9	A	EB	LTR	0.02	8.4	A
	WB	L	0.02	7.8	A	WB	L	0.02	7.9	A	WB	L	0.02	8.0	A	WB	L	0.02	7.6	A
	NB	LTR	0.41	20.5	C	NB	LTR	0.12	13.2	B	NB	LTR	0.13	13.9	B	NB	LTR	0.17	14.1	B
	SB	LTR	0.28	20.5	C	SB	LTR	0.07	12.5	B	SB	LTR	0.07	14.0	B	SB	LTR	0.13	16.4	C

Notes: This table has been updated for the FEIS.

EB-Eastbound, WB-Westbound, NB-Northbound, SB-Southbound, L-Left, T-Through, R-Right, DefL-Defacto Left

* - Denotes a congested movement

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

Future No-Action Traffic Growth

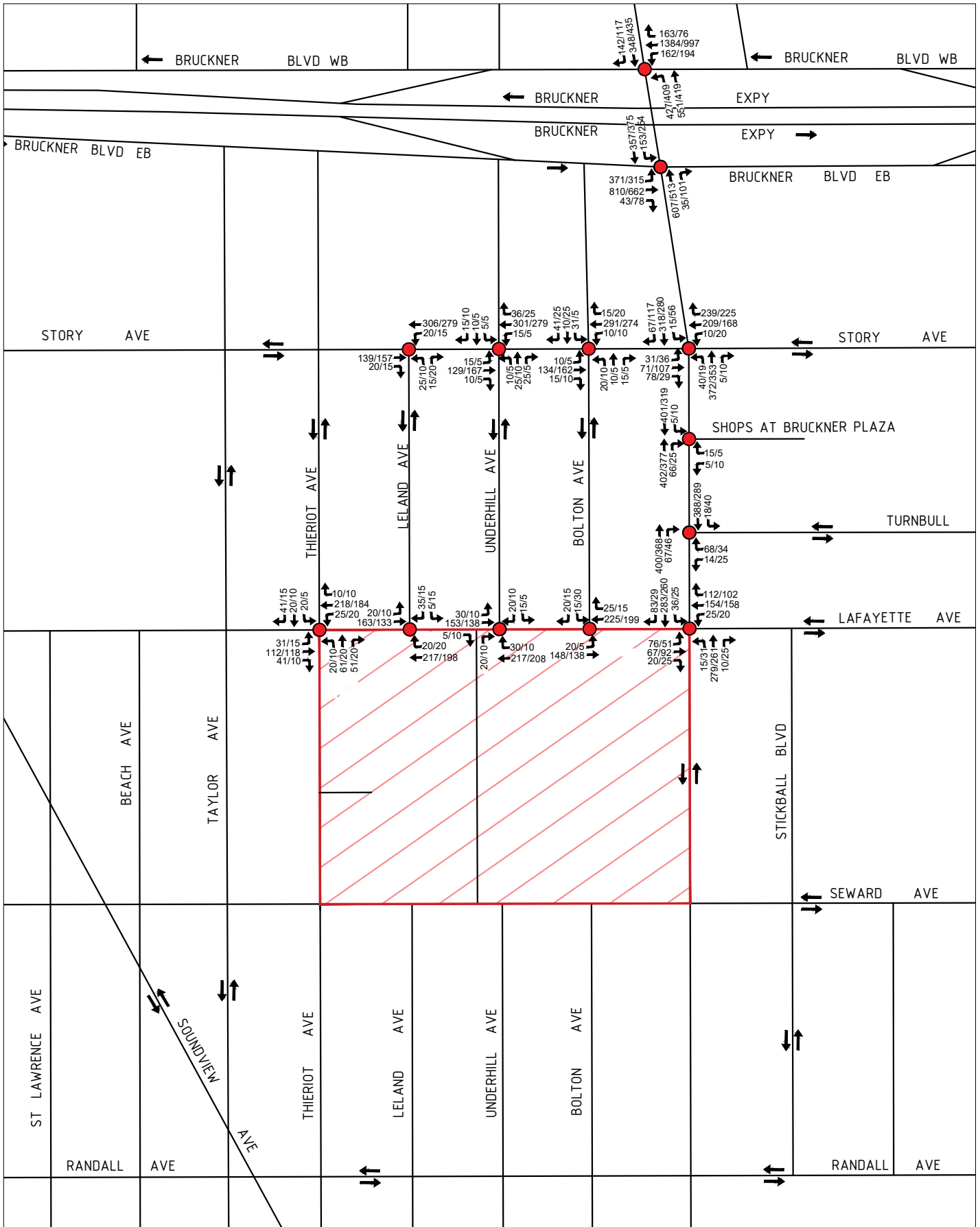
Between 2019 and 2028, it is expected that transportation demands in the vicinity of the Development Site will increase due to long-term background growth and other planned developments unrelated to the Proposed Actions. As shown in Table 11-1, it is assumed that under the No-Action condition RWCDs, no new as-of-right development could occur on the Stevenson Commons site without modification of the existing LSRD. As such, the Project Area would continue to be occupied by nine buildings with a total of 948 DUs, 10,648 gsf of local retail uses, and 36,214 gsf of community facility uses (health center) on the eastern portion of the block. The western portion of the block (the Development Site) would continue to be occupied by 570 surface accessory parking spaces and tennis and handball courts.

In order to forecast future traffic conditions without the Proposed Actions (the No-Action condition), the developments within ~~¼-quarter~~ mile of the Development Site listed in Table 2-2 in Chapter 2, “Land Use, Zoning, and Public Policy,” were considered. The future No-Action traffic analyses incorporated the previously approved traffic improvement measures associated with the *1965 Lafayette Avenue EAS (2017)*. The future No-Action traffic volumes also reflect annual background growth rates of 0.25 percent per year for the 2019 through 2024 period and 0.125 percent per year for 2024 to 2028. These background growth rates, recommended in the *2020-CEQR Technical Manual* for projects in the Bronx, are applied to account for smaller projects and as-of-right developments not reflected in Table 2-2, and general increases in travel demand not attributable to specific development projects. Where new developments were found to generate relatively little new traffic through analyzed intersections, demand from these sites was also assumed to be reflected as part of general background growth. Figure 11-7 shows total No-Action condition traffic volumes during the weekday AM, midday, and PM peak hours, and Saturday peak hour.

Intersection Capacity Analysis

The peak hour v/c ratios, delays and LOS for lane groups at analyzed intersections under the No-Action conditions are shown in Table 11-18. As shown in Table 11-18, a total of four analyzed signalized intersections would have at least one congested lane group in one or more peak hours in the No-Action condition, compared to three signalized intersections under existing conditions. All four congested intersections would be located along the White Plains Road corridor (versus three under existing conditions). Two intersections would have one or more lane groups operating at or over capacity ($v/c \geq 1.0$) in the weekday AM peak hour (versus one under existing conditions), two in the midday (same as under existing conditions), three in the PM (versus two under existing conditions), and two in the Saturday peak hour (~~same as~~ versus one under existing conditions).

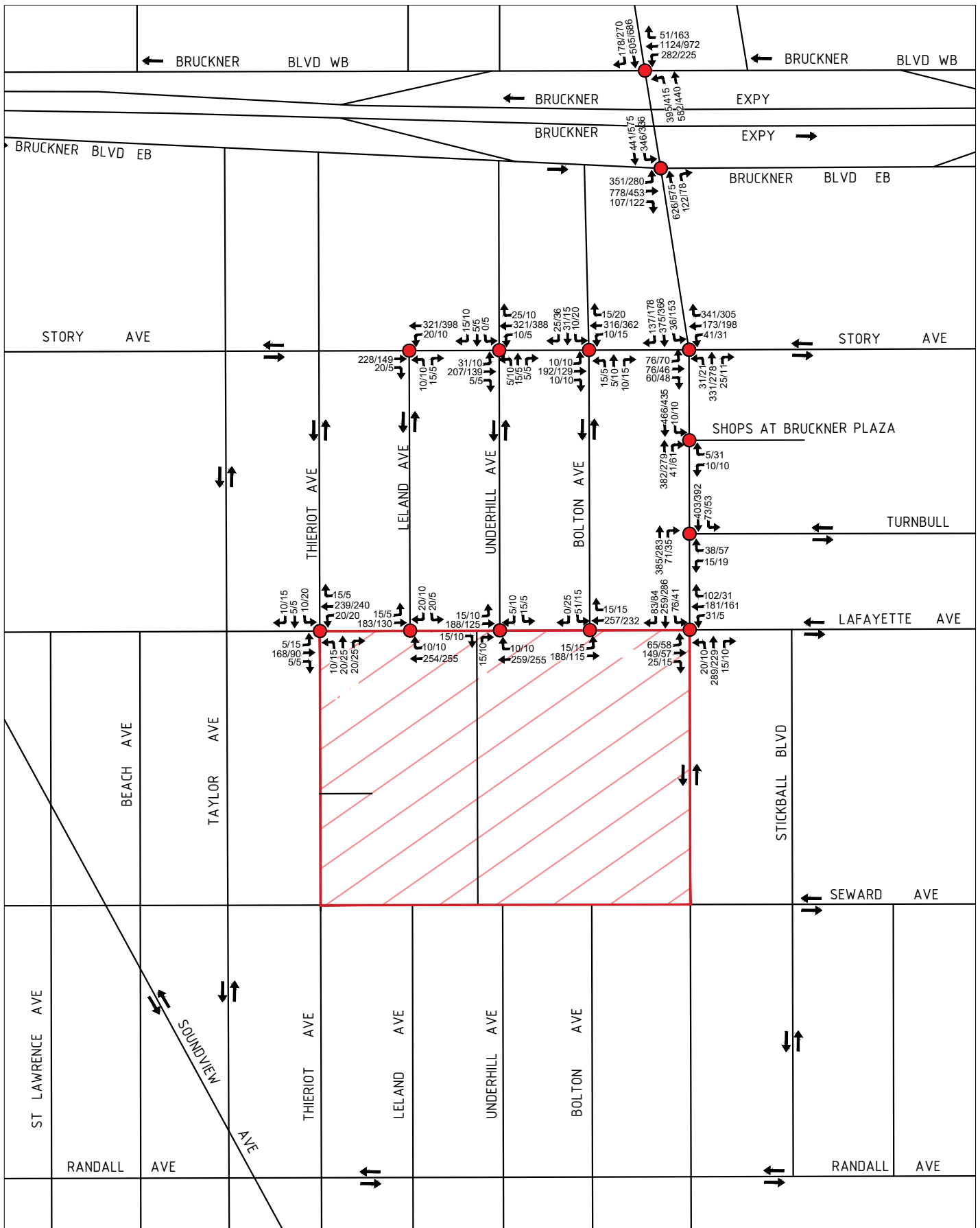
No-Action Vehicle Volumes - AM & MD



14/4 - Weekday AM/MD Vehicular Volumes
This Figure has been updated for the FEIS

Project Area Analysis Intersection Analysis Intersection with 170+ vehicles

No-Action Vehicle Volumes - PM & SAT



14/4 - Weekday PM/SAT Vehicular Volumes Project Area Analysis Intersection Analysis Intersection with 170+ vehicles
 This Figure has been updated for the FEIS

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

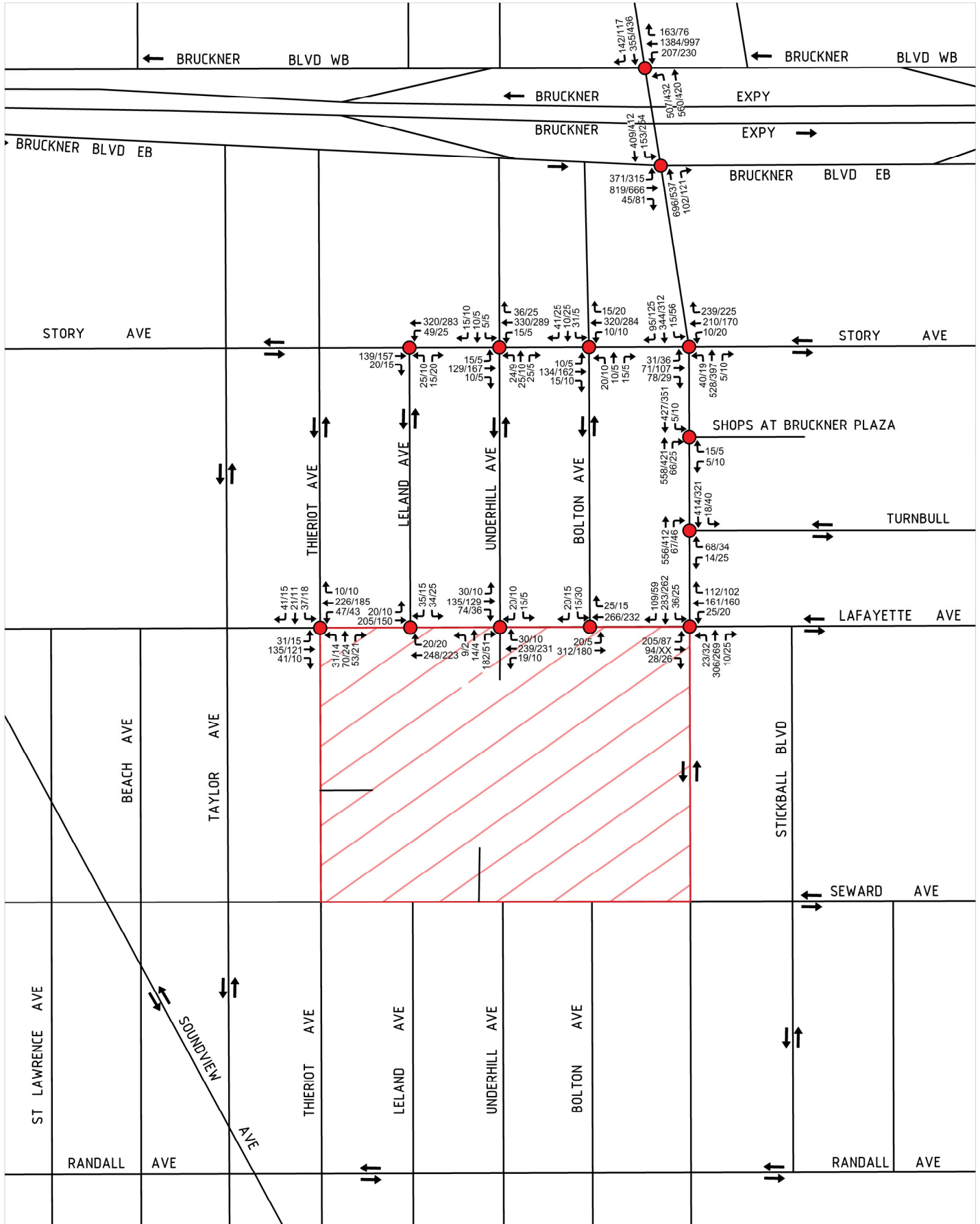
Future With-Action Traffic Growth

As shown in Table 11-8, based on projected development associated with the Proposed Actions, there would be a net total of approximately 353, 130, 377, and 229 vehicle trips (auto, taxi, and truck) in the weekday AM, midday, and PM peak hours, and Saturday peak hour, respectively. Figure 11-3 shows the assignment of incremental vehicle trips (auto, taxi, and truck) generated during the each analyzed peak hour under the Proposed Actions. As previously noted, the Lafayette Avenue entrance to the Development Site would be realigned with Underhill Avenue as part of the Proposed Project (see Figure 11-2). Figure 11-8 shows the total traffic volumes at the 13 analyzed intersections for the 2028 future with the Proposed Actions. The volumes shown are the combination of the net incremental traffic generated by the Proposed Actions and the No-Action condition volumes.

Intersection Capacity Analysis

The peak hour v/c ratios, delays, and LOS for lane groups at analyzed intersections under the With-Action conditions are shown in Table 11-19. Lane groups with significant adverse impacts are identified. As shown in Table 11-19, a total of seven analyzed signalized intersections would have at least one congested lane group in one or more peak hour in the With-Action condition, as compared to four intersections under the No-Action condition. Significant adverse impacts were identified to ~~14~~11 lane groups at seven intersections in the weekday AM peak hour, ~~three~~two lane groups at two intersections in the midday, seven lane groups at four intersections in the PM, and ~~five~~six lane groups at three intersections in the Saturday peak hour. Potential measures to mitigate the significant adverse traffic impacts identified in Table 11-19 are discussed in Chapter 18, "Mitigation."

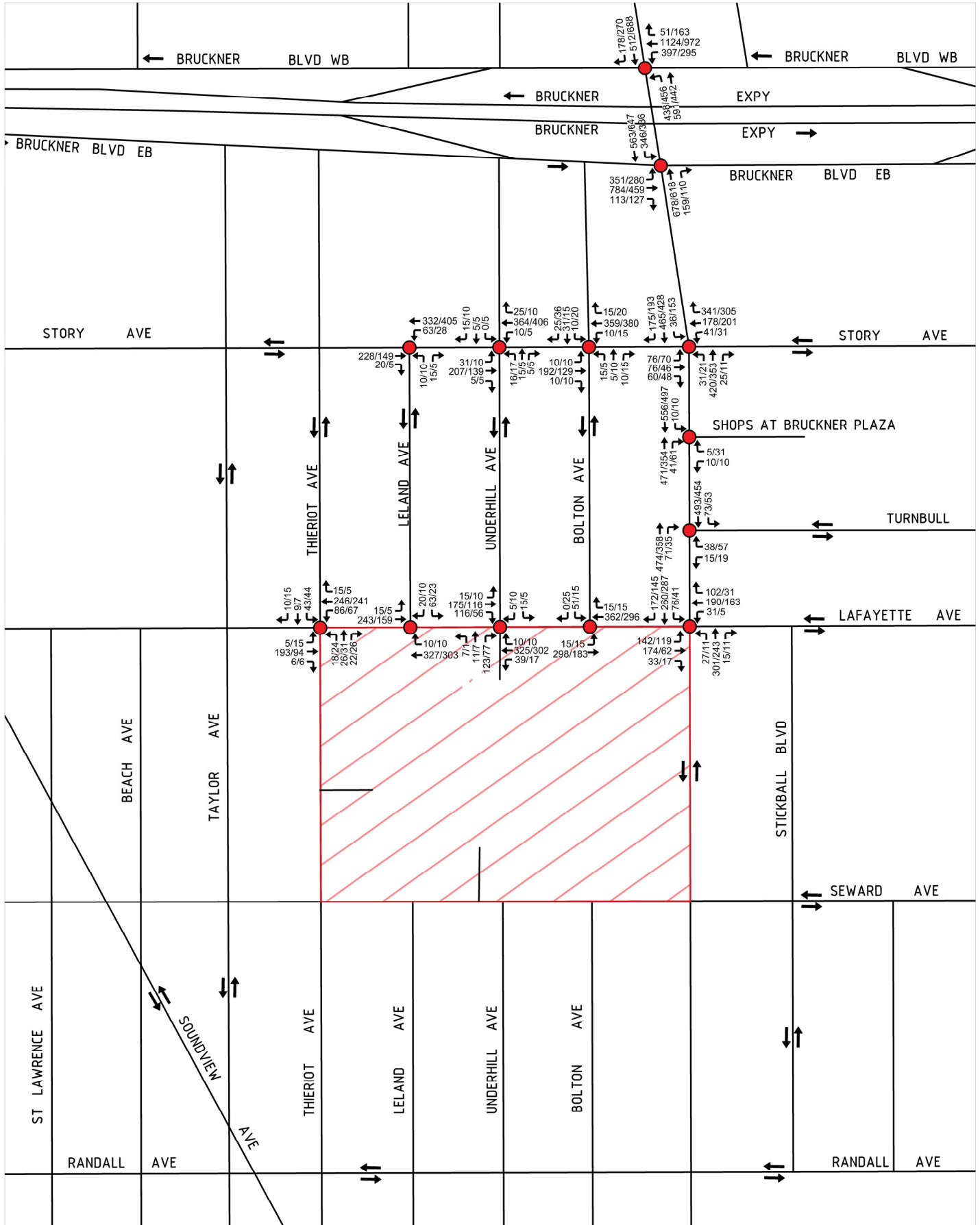
With-Action Vehicle Volumes - AM & MD



14/4 - Weekday AM/MD Vehicular Volumes Project Area ● Analysis Intersection

This Figure has been updated for the FEIS

With-Action Vehicle Volumes - PM & SAT



14/4 - Weekday PM/SAT Vehicular Volumes Project Area Analysis Intersection

This Figure has been updated for the FEIS

H. TRANSIT

Existing Conditions

Subway Stations

As discussed above in Section E, “Level 2 Screening Assessment,” the Proposed Actions are expected to exceed the 200-trip *CEQR Technical Manual* threshold for a subway station analysis in both the weekday AM and PM peak hours at the Parkchester station served by No. 6 train operating on the Lexington Avenue Local Line (see Figure 11-4). The Parkchester station is located beneath the Hugh J. Grant traffic circle and Westchester Avenue. The an elevated station consists of a mezzanine level below which are with two island platforms, above a mezzanine level. As shown in Figure 11-9a, four street stairs provide access to the ground floor mezzanine level, and four mezzanine stairs provide access to the second floor mezzanine. At at the street level, the five fare arraysturnstiles on the west side of the station, adjacent to the staff booth (R417), provide access to street stairs S1A/S1B, and mezzanine stairs M1 and M3. On the east side of the station, five fare arraysturnstiles provide access to street stairs S2A/S2B and mezzanine stairs M2 and M4. In addition, an escalator (E111) provides access from the west control area to the southbound (Manhattan-bound) platform.

As shown in Figure 11-9b, Stairs M1, M2, M3, and M4 provide access to the second floor mezzanine. On the north side of the second floor mezzanine, platform stairs P3A/P3B and P7A/P7B provide access to the Manhattan-bound platform and platform stairs P4A/P4B and P8A/P8B provide access to the Pelham Bay Park-bound platform. On the south side of the second floor mezzanine, platform stairs P1A/P1B and P5A/P5B provide access to the Manhattan-bound platform and platform stairs P2A/P2B and P6A/P6B provide access to the Pelham Bay Park-bound platform. As shown in Tables 11-20, 11-21, 11-22, and 11-2123, all stairs and, escalator, fare arrays, and station doors, respectively, currently operate at an uncongested-LOS AC or B better in both the AM and PM peak hours.

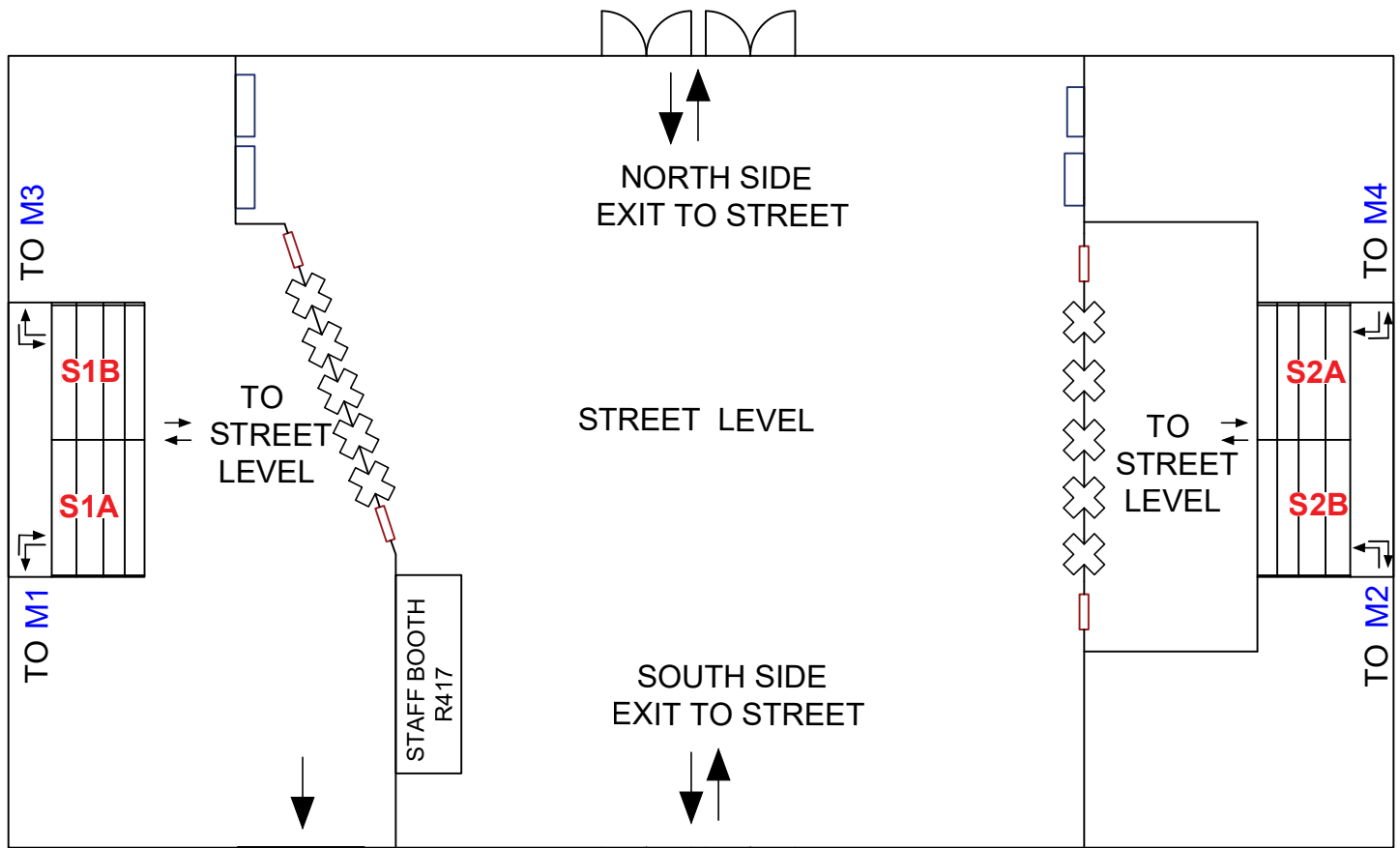
TABLE 11-20
Existing Conditions Subway Station Stair Analysis

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	Parkchester (6)	S1A/B	12.33	11.08	160	124	1.00	0.80	0.90	0.07	A
		S2A/B	12.75	11.50	381	893	1.00	0.80	0.90	0.30	A
		M1	6.67	5.42	80	62	1.00	0.80	0.90	0.07	A
		M3	6.42	5.17	80	62	1.00	0.80	0.90	0.07	A
		M2	6.58	5.33	191	447	1.00	0.80	0.90	0.33	A
		M4	6.67	5.42	190	446	1.00	0.80	0.90	0.32	A
		P3/P7	7.91	6.66	83	29	1.00	0.75	0.90	0.04	A
		P1/P5	7.91	6.66	310	57	1.00	0.75	0.90	0.13	A
		P4/P8	7.91	6.66	28	328	1.00	0.75	0.90	0.16	A
P2/P6	7.91	6.66	121	603	1.00	0.75	0.90	0.32	A		
PM	Parkchester (6)	S1A/B	12.33	11.08	88	1,131	1.00	0.80	0.90	0.31	A
		S2A/B	12.75	11.50	179	2,851	1.00	0.80	0.90	0.75	C
		M1	6.67	5.42	44	566	1.00	0.80	0.90	0.32	A
		M3	6.42	5.17	44	565	1.00	0.80	0.90	0.34	A
		M2	6.58	5.33	90	1,426	1.00	0.80	0.90	0.81	C
		M4	6.67	5.42	89	1,425	1.00	0.80	0.90	0.80	C
		P3/P7	7.91	6.66	106	271	1.00	0.75	0.90	0.16	A
		P1/P5	7.91	6.66	106	300	1.00	0.75	0.90	0.18	A
		P4/P8	7.91	6.66	15	1,595	1.00	0.75	1.00	0.67	B
P2/P6	7.91	6.66	39	1,817	1.00	0.75	1.00	0.77	C		

Notes:

This table has been updated for the FEIS.

Methodology based on *CEQR Technical Manual* guidance.

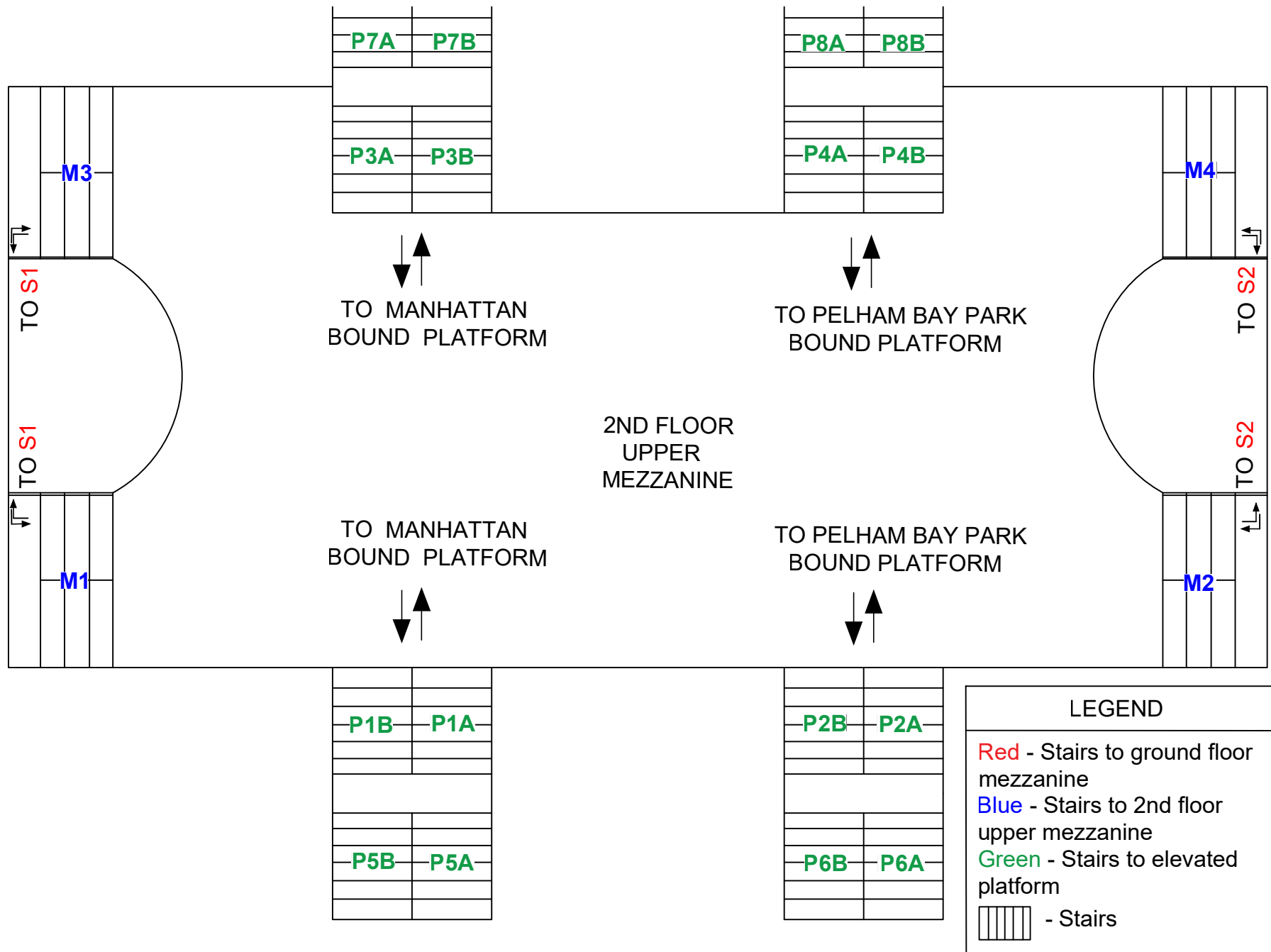


LEGEND	
Red - Stairs to ground floor mezzanine	⊗ - Turnstile
Blue - Stairs to 2nd floor upper mezzanine	▤ - Stairs
	▭ - Emergency exit door
	▭ - Ticket machine

Stevenson Commons

This Figure has been updated for the FEIS

**Figure 11-9a
Parkchester Subway Station Elements**




LEGEND	
Red	- Stairs to ground floor mezzanine
Blue	- Stairs to 2nd floor upper mezzanine
Green	- Stairs to elevated platform
	- Stairs

TABLE 11-21**Existing Conditions Subway Station Escalator Analysis**

Peak Period	Escalator	Tread Width	Feet per Minute	Guideline Capacity	Peak Hour Volumes	Surging Factor	V/C Ratio	LOS
AM	E111 (Up)	40"	90	945	2,581	1.00	0.85	C
PM	E111 (Up)	40"	90	945	426	1.00	0.14	A

Notes:

This table has been added for the FEIS.

Methodology based on CEQR Technical Manual guidance.

TABLE 11-221**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	Parkchester (6)	East	5	0	0	381	893	1.00	0.9	0.90	0.17	A
		West	5	0	0	2,741	124	1.00	0.9	1.00	0.42	A
PM	Parkchester (6)	East	5	0	0	179	2,851	1.00	0.9	0.90	0.37	A
		West	5	0	0	514	1,131	1.00	0.9	0.90	0.22	A

Notes:

This table has been updated for the FEIS.

Methodology based on CEQR Technical Manual guidance.

TABLE 11-23**Existing Conditions Subway Station Door Analysis**

Peak Hour	Station	Entrance	Doors	Peak Hour Volumes		Surging Factor		Friction Factor	V/C Ratio	LOS
				System Entries	System Exits	System Entries	System Exits			
AM	Parkchester (6)	North Side	4	1,594	497	1.00	0.9	0.90	0.31	A
		South Side	4	1,528	520	1.00	0.9	0.90	0.31	A
PM	Parkchester (6)	North Side	4	413	2,262	1.00	0.9	0.90	0.42	A
		South Side	4	280	1,720	1.00	0.9	0.90	0.32	A

Notes:

This table has been added for the FEIS.

Assumes a door capacity of 40 ppm

Source: Dr. John Fruin, Ph.D., *Pedestrian Planning and Design*, 1971.

Bus Service

As discussed above, the Project Area is served by a total of four local bus routes operated by NYCT. These include the Bx5, Bx27, Bx36, and Bx39. A brief overview of these local bus services is provided below.

Bx5

NYCT's Bx5 route provides daily service between Pelham Bay Park and Hunts Point in the Bronx, generally from 5:00 AM to 1:30 AM. In proximity to the project area, Bx5 buses operate primarily along Lafayette Avenue.

Bx27

NYCT's Bx27 route provides 24-hour daily service between Clason Point and Soundview or Hunts Point in the Bronx. In proximity to the project area, Bx27 buses operate primarily along Rosedale Avenue.

Bx36

NYCT's Bx36 route provides 24-hour daily service between Soundview, Bronx and Washington Heights, Manhattan. In proximity to the project area, Bx36 buses operate primarily along Pugsley Avenue.

Bx39

NYCT's Bx39 route provides 24-hour daily service between Wakefield and Clason Point in the Bronx. In proximity to the project area, Bx39 buses operate primarily along White Plains Road.

As shown in Table 11-10, of the four bus routes operating in proximity to the Project Area, the Bx36 and Bx39 bus routes are expected to experience 50 or more new trips in one direction in both peak hours and are therefore analyzed in this EIS. Table 11-~~2224~~ shows the existing number of buses and ridership at the maximum load point in each direction for the Bx36 and Bx39 local bus routes in the AM and PM peak hours. As shown in Table 11-~~2224~~, the Bx36 and Bx39 local bus routes currently operate with available capacity at their maximum load points in the southbound direction during the AM peak hour and in both directions during the PM peak hour. During the AM peak hour, the Bx36 and Bx39 bus routes operate over capacity in the northbound direction with a deficit of 37 and 199 passengers, respectively.

TABLE 11-~~242~~
Existing Local Bus Analysis

Peak Hour	Route	Direction	Maximum Load Point	Peak Hour Buses ¹	Peak Hour Passengers ¹	Average Passengers per Bus	Available Capacity ²
AM	Bx36	NB	Valentine Ave & Tremont Ave	13	739	57	-37
		SB	E. Tremont Ave & Morris Ave	9	367	41	119
	Bx39	NB	White Plains Rd & Gleason Ave	10	739	74	-199
		SB	White Plains Rd & Morris Park Ave	11	580	53	14
PM	Bx36	NB	E. Tremont Ave & Morris Ave	10	409	41	131
		SB	E. Tremont Ave & Grand Concourse	14	400	29	356
	Bx39	NB	White Plains Rd & E. 215 St	12	395	33	253
		SB	White Plains Rd & Wood Ave	9	461	51	25

Notes:

¹ Based on most currently available data from NYCT/MTA Bus.

² Available capacity based on MTA loading guidelines of 54 passengers per standard bus.

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

Between 2019 and 2028, it is expected that subway demand in the vicinity of the Development Site will increase due to long-term background growth as well as planned development. In order to forecast future subway conditions without the Proposed Actions (the No-Action condition), the developments within ~~¼~~ a quarter-mile of the Development Site listed in Table 2-2 in Chapter 2, “Land Use, Zoning, and Public Policy,” were considered. The future No-Action traffic volumes also reflect annual background growth rates of 0.25 percent per year for the 2019 through 2024 period and 0.125 percent per year for 2024 to 2028. These background growth rates, recommended in the ~~2020~~ CEQR Technical Manual for projects in the Bronx, are applied to account for smaller projects and as-of-right developments not reflected in Table 2-2, and general increases in travel demand not attributable to specific development projects.

Subway Stations

Under the ~~No-Action conditions~~ condition, demand at the Parkchester (No. 6) subway station is expected to increase as a result of new development and background growth. As shown in Tables ~~11-23~~ 11-25, ~~11-26~~, 11-27 and ~~11-24~~ 28, it is expected that in the future No-Action condition, all analyzed street stairs ~~and~~ escalator, fare arrays, and station doors, respectively, will continue to operate at an ~~uncongested~~ LOS AC or Better in both the AM and PM peak hours.

TABLE 11-25
No-Action Stair Analysis at Analyzed Subway Stations

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	Parkchester (6)	S1A/B	12.33	11.08	173	127	1.00	0.80	0.90	0.07	A
		S2A/B	12.75	11.50	390	927	1.00	0.80	0.90	0.31	A
		M1	6.67	5.42	86	64	1.00	0.80	0.90	0.07	A
		M3	6.42	5.17	86	63	1.00	0.80	0.90	0.07	A
		M2	6.58	5.33	195	464	1.00	0.80	0.90	0.34	A
		M4	6.67	5.42	194	463	1.00	0.80	0.90	0.33	A
		P3/P7	7.91	6.66	89	30	1.00	0.75	0.90	0.04	A
		P1/P5	7.91	6.66	320	59	1.00	0.75	0.90	0.14	A
		P4/P8	7.91	6.66	29	343	1.00	0.75	0.90	0.17	A
		P2/P6	7.91	6.66	124	623	1.00	0.75	0.90	0.33	A
PM	Parkchester (6)	S1A/B	12.33	11.08	103	1,153	1.00	0.80	0.90	0.32	A
		S2A/B	12.75	11.50	183	2,971	1.00	0.80	0.90	0.78	C
		M1	6.67	5.42	52	577	1.00	0.80	0.90	0.33	A
		M3	6.42	5.17	52	576	1.00	0.80	0.90	0.35	A
		M2	6.58	5.33	92	1,486	1.00	0.80	0.90	0.85	C
		M4	6.67	5.42	92	1,485	1.00	0.80	0.90	0.83	C
		P3/P7	7.91	6.66	115	277	1.00	0.75	0.90	0.17	A
		P1/P5	7.91	6.66	115	306	1.00	0.75	0.90	0.18	A
		P4/P8	7.91	6.66	16	1,658	1.00	0.75	1.00	0.70	B
		P2/P6	7.91	6.66	40	1,884	1.00	0.75	1.00	0.80	C

Notes:

This table has been updated for the FEIS.

Methodology based on *CEQR Technical Manual guidance*.

TABLE 11-26
No-Action Escalator Analysis at Analyzed Subway Stations

Peak Period	Escalator	Tread Width	Feet per Minute	Guideline Capacity	Peak Hour Volumes	Surging Factor	V/C Ratio	LOS
AM	E111 (Up)	40"	90	945	2,691	1.00	0.89	C
PM	E111 (Up)	40"	90	945	461	1.00	0.15	A

Notes:

This table has been added to the FEIS.

Methodology based on *CEQR Technical Manual guidance*.

TABLE 11-274
No-Action Fare Array Analysis at Analyzed Subway Stations

Peak Hour	Station	Fare Array	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	Parkchester (6)	East	5	0	0	390	927	1.00	0.9	0.90	0.18	A
		West	5	0	0	2,863	127	1.00	0.9	1.00	0.44	A
PM	Parkchester (6)	East	5	0	0	183	2,971	1.00	0.9	0.90	0.39	A
		West	5	0	0	563	1,153	1.00	0.9	0.90	0.23	A

Notes:

This table has been updated for the FEIS.

Methodology based on *CEQR Technical Manual guidance*.

TABLE 11-28
No-Action Station Door Analysis at Analyzed Subway Stations

Peak Hour	Station	Entrance	Doors	Peak Hour Volumes		Surging Factor		Friction Factor	V/C Ratio	LOS
				System Entries	System Exits	System Entries	System Exits			
AM	Parkchester (6)	North Side	4	1,632	543	1.00	0.9	0.90	0.32	A
		South Side	4	1,564	568	1.00	0.9	0.90	0.32	A
PM	Parkchester (6)	North Side	4	463	2,325	1.00	0.9	0.90	0.44	A
		South Side	4	314	1,768	1.00	0.9	0.90	0.33	A

Notes:

This table has been added for the FEIS.

Assumes a door capacity of 40 ppm

Source: Dr. John Fruin, Ph.D., *Pedestrian Planning and Design*, 1971.

Bus Service

Demand on the local bus services operating in the vicinity of the Development Site is expected to increase during the 2019 through 2028 period as a result of background growth as well as demand from new development. As shown in Table 11-2529, existing levels of bus service will not be sufficient to provide adequate supply to meet the projected demand in the 2028 No-Action condition on the northbound Bx36 and Bx39 routes in the AM peak hour. Based on a loading guideline of 54 passengers per standard bus, during the AM peak hour, two additional standard buses would be required along the northbound Bx36 bus route per hour and five additional standard buses would be required along the northbound Bx39 bus route per hour to accommodate projected No-Action demand. Southbound Bx36 and Bx39 bus routes are expected to continue to operate with available capacity in the AM peak hour in the No-Action condition. Similarly, during the PM peak hour, the Bx36 and Bx39 are expected to operate with available capacity in both directions in the No-Action condition.

As a general policy, the MTA (NYCT and MTA Bus) provides additional bus service where demand warrants, taking into account financial and operational constraints. Based on ongoing passenger monitoring programs, comprehensive service plans would be generated to respond to specific, known needs with capital and/or operational improvements where fiscally and operationally practicable. The MTA's capital program is developed on a five-year cycle; through this program, expansion of bus services would be provided as needs are determined. It is therefore anticipated that in the No-Action condition, MTA Bus would increase service frequency on the Bx36 and Bx39 northbound routes to address its capacity shortfall on this route in the northbound direction in the AM peak hour.

TABLE 11-259
No-Action Local Bus Analysis

Peak Hour ¹	Route	Direction	Maximum Load Point	Peak Hour Passengers ¹	No-Action Conditions with Current Service Levels			No-Action Conditions with Potential Service Adjustments		
					Peak Hour Buses ¹	Average Passengers per Bus	Available Capacity ²	Peak Hour Buses ¹	Average Passengers per Bus	Available Capacity ²
AM	Bx36	NB	Valentine Ave & Tremont Ave	774	13	60	-72	15	52	36
		SB	E. Tremont Ave & Morris Ave	373	9	41	113	9	41	113
	Bx39	NB	White Plains Rd & Gleason Ave	803	10	80	-263	15	54	7
		SB	White Plains Rd & Morris Park Ave	591	11	54	3	11	54	3
PM	Bx36	NB	E. Tremont Ave & Morris Ave	443	10	44	97	10	44	97
		SB	E. Tremont Ave & Grand Concourse	409	14	29	347	14	29	347
	Bx39	NB	White Plains Rd & E. 215 St	416	12	35	232	12	35	232
		SB	White Plains Rd & Wood Ave	471	9	52	15	10	47	69

Notes:

¹ Based on most currently available data from NYCT/MTA Bus.

² Available capacity based on MTA loading guidelines of 54 passengers per standard bus.

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

Subway Stations

As shown in Table 11-8, the Proposed Actions are expected to generate a net increment of 226 and 251 new subway trips in the weekday AM and PM peak hours, respectively, at the Parkchester (No. 6) station. Based on the location of the Parkchester station relative to the Project Area and nearby bus stops, it is anticipated that new project-generated subway trips would utilize the entrances on both the east and west side of the station. Tables 11-26 and 30, 11-27, 31, 11-32, and 11-33 show conditions at analyzed stairs and escalator, fare arrays, and station doors at this subway station in the future with the Proposed Actions, respectively. As shown in Tables 11-26 and 30 - 11-27, 33, under the With-Action condition all analyzed stairs and fare array elements at the Parkchester (No. 6) station would operate at an uncongested acceptable LOS AC or Better in both the AM and PM peak hours. The Proposed Actions would therefore not result in significant adverse subway station impacts based on CEQR Technical Manual impact criteria.

TABLE 11-2630
With-Action Stair Analysis at Analyzed Subway Stations

Peak Hour	Station	Stair	Total Width (ft.)	Effective Width (ft.)	Project Increment		Peak Hour Volumes		Surging Factor		Friction Factor	V/C Ratio	LOS
					Up	Down	Up	Down	Up	Down			
AM	Parkchester (6)	S1A/B	12.33	11.08	24	3	197	130	1.00	0.80	0.90	0.08	A
		S2A/B	12.75	11.50	6	108	396	1,035	1.00	0.80	0.90	0.34	A
		M1	6.67	5.42	12	2	98	66	1.00	0.80	0.90	0.08	A
		M3	6.42	5.17	12	1	98	64	1.00	0.80	0.90	0.08	A
		M2	6.58	5.33	3	54	198	518	1.00	0.80	0.90	0.37	A
		M4	6.67	5.42	3	54	197	517	1.00	0.80	0.90	0.36	A
		P3/P7	7.91	6.66	12	1	101	31	1.00	0.75	0.90	0.05	A
		P1/P5	7.91	6.66	12	2	332	61	1.00	0.75	0.90	0.14	A
		P4/P8	7.91	6.66	3	54	32	397	1.00	0.75	0.90	0.20	A
P2/P6	7.91	6.66	3	54	127	677	1.00	0.75	0.90	0.36	A		
PM	Parkchester (6)	S1A/B	12.33	11.08	47	5	150	1,158	1.00	0.80	0.90	0.33	A
		S2A/B	12.75	11.50	4	166	187	3,137	1.00	0.80	0.90	0.83	C
		M1	6.67	5.42	24	3	76	580	1.00	0.80	0.90	0.34	A
		M3	6.42	5.17	23	2	75	578	1.00	0.80	0.90	0.36	A
		M2	6.58	5.33	2	83	94	1,569	1.00	0.80	0.90	0.89	C
		M4	6.67	5.42	2	83	94	1,568	1.00	0.80	0.90	0.88	C
		P3/P7	7.91	6.66	23	2	138	279	1.00	0.75	0.90	0.18	A
		P1/P5	7.91	6.66	24	3	139	309	1.00	0.75	0.90	0.19	A
		P4/P8	7.91	6.66	2	83	18	1,741	1.00	0.75	1.00	0.73	C
P2/P6	7.91	6.66	2	83	42	1,967	1.00	0.75	1.00	0.83	C		

Notes:

This table has been updated for the FEIS.

Methodology based on CEQR Technical Manual guidance.

TABLE 11-31
With-Action Escalator Analysis at Analyzed Subway Stations

Peak Period	Escalator	Tread Width	Feet per Minute	Guideline Capacity	Project Increment	Peak Hour Volumes	Surging Factor	V/C Ratio	LOS
AM	E111 (Up)	40"	90	945	157	2,848	1.00	0.94	C
PM	E111 (Up)	40"	90	945	95	556	1.00	0.18	A

Note:

This table has been added to the FEIS.

Methodology based on CEQR Technical Manual guidance.

TABLE 11-2732**With-Action Fare Array Analysis at Analyzed Subway Stations**

Peak Hour	Station	Fare Array	Control Elements			Project Increment		Peak Hour Volumes		Surging Factor		Friction Factor	V/C Ratio	LOS
			Turnstile	HEET	HXT	System Entries	System Exits	System Entries	System Exits	System Entries	System Exits			
AM	Parkchester (6)	East	5	0	0	6	108	396	1,035	1.00	0.9	0.90	0.19	A
		West	5	0	0	181	3	3,044	130	1.00	0.9	1.00	0.47	B
PM	Parkchester (6)	East	5	0	0	4	166	187	3,137	1.00	0.9	0.90	0.41	A
		West	5	0	0	142	5	705	1,158	1.00	0.9	0.90	0.25	A

Notes:

This table has been updated for the FEIS.

Methodology based on *CEQR Technical Manual guidance*.

TABLE 11-33**With-Action Station Door Analysis at Analyzed Subway Stations**

Peak Hour	Station	Entrance	Doors	Project Increment		Peak Hour Volumes		Surging Factor		Friction Factor	V/C Ratio	LOS
				System Entries	System Exits	System Entries	System Exits	System Entries	System Exits			
AM	Parkchester (6)	North Side	4	57	92	1,689	635	1.00	0.9	0.90	0.35	A
		South Side	4	54	95	1,618	663	1.00	0.9	0.90	0.34	A
PM	Parkchester (6)	North Side	4	102	83	565	2,408	1.00	0.9	0.90	0.47	B
		South Side	4	69	63	383	1,831	1.00	0.9	0.90	0.35	A

Notes:

This table has been added to the FEIS.

Assumes a door capacity of 40 ppm

Source: Dr. John Fruin, Ph.D., *Pedestrian Planning and Design*, 1971.

Bus Service

As shown in Table 11-8, the Proposed Project is expected to generate a net increment of approximately 486 and 516 new trips on the local bus services operating in proximity to the Development Site during the weekday AM and PM peak hours, respectively. As shown in Table 11-2834, demand on the Bx36 route is expected to increase by approximately 11 northbound trips and 7 southbound trips at the maximum load points in the AM peak hour and by 9 northbound and 10 southbound trips in the PM. In addition, demand on the Bx39 route is expected to increase by approximately 96 northbound trips and 4 southbound trips at the maximum load points in the AM peak hour and by 9 northbound and 5 southbound trips in the PM.

As shown in Table 11-2834, based on projected levels of bus service in the No-Action condition, the Proposed Actions would result in a capacity shortfall of 89 spaces on the northbound Bx39 service and 1 space on the southbound Bx39 service in the AM peak hour. Therefore, northbound and southbound Bx39 service would be significantly adversely impacted in the AM peak hour based on *CEQR Technical Manual* criteria. As discussed in Chapter 18, "Mitigation," the significant impact to Bx39 service could be mitigated by increasing the number of northbound buses from 15 to 17 and the number of southbound buses from 11 to 12 in the AM peak hour.

TABLE 11-2834
With-Action Local Bus Analysis

Peak Hour	Route	Direction	Maximum Load Point	Peak Hour Buses ¹	No-Action Available Capacity ²	Project Increment	Available Capacity w/Proposed Actions ²
AM	Bx36	NB	Valentine Ave & Tremont Ave	15	36	11	25
		SB	E. Tremont Ave & Morris Ave	9	113	7	106
	Bx39	NB	White Plains Rd & Gleason Ave	15	7	96	-89
		SB	White Plains Rd & Morris Park Ave	11	3	4	-1
PM	Bx36	NB	E. Tremont Ave & Morris Ave	10	97	9	88
		SB	E. Tremont Ave & Grand Concourse	14	347	10	337
	Bx39	NB	White Plains Rd & E. 215 St	12	232	9	223
		SB	White Plains Rd & Wood Ave	10	69	5	64
Notes: ¹ Assumes service levels adjusted to address capacity shortfalls in the No-Action condition. ² Available capacity based on MTA loading guidelines of 54 passengers per standard bus. * Denotes a significant adverse impact.							

I. PEDESTRIANS

Existing Conditions

As discussed previously in Section E, “Level 2 Screening Assessment,” the analysis of pedestrian conditions focuses on a total of six pedestrian elements where new trips generated by the Proposed Project are expected to exceed the 200-trip *CEQR Technical Manual* analysis threshold in one or more peak hours. As shown in Figure 11-5, these elements—two sidewalks, one crosswalk, and three corner areas—are located in the immediate proximity of the Development Site and along the White Plains Road and Lafayette Avenue corridor which connect the Development Site to nearby bus routes.

Sidewalks

The east sidewalk along White Plains Road between Lafayette Avenue and Turnbull Avenue and the south sidewalk along Lafayette Avenue between Thieriot Avenue and White Plains Road were analyzed during the weekday AM, midday, and PM peak hours, and experience moderate pedestrian volumes during each analyzed peak hour (up to approximately 222 person/hour). As shown below in Table 11-2935, the analyzed sidewalks have effective widths of approximately nine to 10 feet. Features typically present along study area sidewalks that can reduce the effective width available for pedestrian flow include street furniture such as fire hydrants, curbside signage, and traffic signal and lamp posts.

Table 11-~~2935~~ shows the existing peak hour pedestrian volumes, average pedestrian space (in sf/ped), and platoon-adjusted LOS at the analyzed sidewalks. As shown in Table 11-~~2935~~, the analyzed sidewalks currently operate at an uncongested LOS A or B in all weekday peak hours.

TABLE 11-~~2935~~
Existing Sidewalk Conditions

Location	Sidewalk	Total Width	Effective Width	Peak Hour Volume				Average Pedestrian Space (ft ² /ped)				Platoon-Adjusted Level of Service			
				AM	MD	PM	SAT	AM	MD	PM	SAT	AM	MD	PM	SAT
White Plains Rd btwn Lafayette Ave and Turnbull Ave	East	14.7	10.0	57	222	52	-	2,334.3	363.7	2,315.1	-	A	B	A	-
Lafayette Ave btwn White Plains Rd and Thieriot Ave	South	14.3	9.1	76	73	75	85	1,498.3	1,283.4	1,057.0	1,204.0	A	A	A	A

Crosswalks

Study area intersections are a mix of signalized and stop controlled, and the signalized intersections generally include pedestrian signals. High visibility crosswalk striping is present at several intersections along White Plains Road. Table 11-~~3036~~ shows the peak hour volumes, average pedestrian space (in sf/ped), and LOS at the analyzed crosswalk during the weekday AM, midday, and PM peak hour. As shown in Table 11-~~3036~~, the analyzed crosswalk currently operates at an uncongested LOS A or B in all weekday peak hours.

TABLE 11-~~3036~~
Existing Crosswalk Conditions

Location	Crosswalk	Peak Hour Volume			Average Pedestrian Space (ft ² /ped)			Level of Service		
		AM	MD	PM	AM	MD	PM	AM	MD	PM
White Plans Rd and Lafayette Avenue	South	182	240	166	106.1	53.7	131.9	A	B	A

Corner Areas

Table 11-~~3137~~ shows the peak hour volumes, average pedestrian space (in sf/ped) and levels of service at analyzed corner areas. As shown in Table 11-~~3137~~, all three of the analyzed corner areas currently operate at an uncongested LOS A in all analyzed peak hours. It should be noted that the southwest corner at White Plains Road and Lafayette Avenue is the only corner that exceeds the 200-trip *CEQR Technical Manual* analysis threshold during the Saturday peak hour. As such, the Saturday analysis only includes this corner, which currently operates at LOS A during the Saturday peak hour.

TABLE 11-~~371~~
Existing Corner Conditions

Location	Corner	Peak Hour Volume				Average Pedestrian Space (ft ² /ped)				Level of Service			
		AM	MD	PM	SAT	AM	MD	PM	SAT	AM	MD	PM	SAT
White Plans Rd and Lafayette Avenue	NE	28	40	14	-	644.5	210.6	599.2	-	A	A	A	-
	SE	4	20	7	-	655.3	272.2	776.2	-	A	A	A	-
	SW	0	0	5	1	676.9	257.0	419.4	421.8	A	A	A	A

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

Pedestrian volumes along analyzed sidewalks, crosswalks, and corner areas are expected to increase through 2028 as a result of background growth as well as demand from No-Action development projects (see Table 2-2 in Chapter 2, “Land Use, Zoning, and Public Policy”). No changes to the study area pedestrian network are anticipated to occur during this period.

Sidewalks

Table 11-~~3138~~ shows the No-Action condition peak hour pedestrian volumes, average pedestrian space, and platoon-adjusted LOS at the analyzed sidewalks. As shown in Table 11-~~3238~~, the analyzed sidewalks are expected to operate at an uncongested LOS A or B in all weekday peak hours in the future without the Proposed Actions.

TABLE 11-~~382~~
No-Action Sidewalk Conditions

Location	Sidewalk	Total Width	Effective Width	Peak Hour Volume				Average Pedestrian Space (ft ² /ped)				Platoon-Adjusted Level of Service			
				AM	MD	PM	SAT	AM	MD	PM	SAT	AM	MD	PM	SAT
White Plains Rd btwn Lafayette Ave and Turnbull Ave	East	14.7	10.0	235	533	264	-	566.1	151.2	455.9	-	A	B	B	-
Lafayette Ave btwn White Plains Rd and Thieriot Ave	South	14.3	9.1	106	116	121	118	1,074.2	807.6	655.1	867.2	A	A	A	A

Crosswalks

Table 11-~~3339~~ shows the peak hour volumes, average pedestrian space, and LOS at the analyzed crosswalk in the No-Action condition. As shown in Table 11-~~3339~~, the analyzed crosswalk is expected to operate at an uncongested LOS A or B in all weekday peak hours in the future without the Proposed Actions.

TABLE 11-~~393~~
No-Action Crosswalk Conditions

Location	Crosswalk	Average Pedestrian Space								
		Peak Hour Volume			(ft ² /ped)			Level of Service		
		AM	MD	PM	AM	MD	PM	AM	MD	PM
White Plans Rd and Lafayette Avenue	South	204	290	220	94.4	44.3	98.4	A	B	A

Corner Areas

Table 11-~~3440~~ shows the peak hour volumes, average pedestrian space, and LOS at analyzed corner areas in the No-Action condition. As shown in Table 11-~~3440~~, all analyzed corner areas are expected to continue to operate at an uncongested LOS A in all analyzed peak hours in the future without the Proposed Actions.

TABLE 11-3440
No-Action Corner Conditions

Location	Corner	Peak Hour Volume				Average Pedestrian Space (ft ² /ped)				Level of Service			
		AM	MD	PM	SAT	AM	MD	PM	SAT	AM	MD	PM	SAT
White Plains Rd and Lafayette Avenue	NE	149	116	91	-	291.2	109.2	225.1	-	A	A	A	-
	SE	4	20	7	-	501.7	179.5	390.3	-	A	A	A	-
	SW	0	0	5	1	549.9	211.8	328.2	349.1	A	A	A	A

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

The Proposed Actions would generate new pedestrian demand on analyzed sidewalks, crosswalks, and corner areas by 2028. This new demand 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 Development Site and along corridors connecting the site to area transit services.

As shown in Table 11-8, the Proposed Actions are expected to generate a net total of approximately 104 walk-only trips in the weekday AM peak hour, 60 in the weekday midday peak hour, 117 in the weekday PM peak hour, and 71 in the Saturday peak hour. Persons en route to and from subway station entrances and bus stops would add approximately 486, 159, 516, and 294 incremental pedestrian trips to sidewalks and crosswalks in the vicinity of the Project Area during the weekday AM, midday, and PM peak hours, and Saturday peak hour, respectively. These pedestrian volumes were added to the projected No-Action condition volumes to generate the With-Action condition pedestrian volumes for analysis.

Anticipated conditions at analyzed sidewalks, crosswalks, and corner areas in the future with the Proposed Actions are shown in Tables 11-~~3541~~ through 11-~~3743~~. As discussed below, all analyzed pedestrian elements would continue to operate at acceptable levels of service in all analyzed peak hours in the With-Action condition, and no significant adverse impacts are expected to result from the Proposed Actions.

Sidewalks

Table 11-~~3541~~ shows the incremental change in peak hour pedestrian volumes attributable to the Proposed Actions and the total With-Action condition pedestrian volumes, average pedestrian space, and platoon-adjusted LOS at the analyzed sidewalks. As shown in Table 11-~~3541~~, in the With-Action condition, the analyzed sidewalks would continue to operate at an uncongested LOS B in all weekday peak hours. Therefore, the Proposed Actions would not result in any significant adverse sidewalk impacts based on the *CEQR Technical Manual* impact criteria discussed above in Section F, “Transportation Analyses Methodologies.”

TABLE 11-~~3541~~
With-Action Sidewalk Conditions

Location	Sidewalk	Total Width	Effective Width	Project Increment				Peak Hour Volume				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
White Plains Rd btwn Lafayette Ave and Turnbull Ave	East	14.7	10.0	307	88	255	-	542	621	519	-	245.3	129.7	231.7	-	B	B	B	-
Lafayette Ave btwn White Plains Rd and Thieriot Ave	South	14.3	9.1	449	149	470	260	555	265	591	378	204.9	353.4	133.7	270.5	B	B	B	B

Crosswalks

Table 11-~~3642~~ shows the incremental change in peak hour pedestrian volumes attributable to the Proposed Actions and the total With-Action condition pedestrian volumes, average pedestrian space, and LOS at the analyzed crosswalk. As shown in Table 11-~~3642~~, in the With-Action condition the analyzed crosswalk would operate at an acceptable LOS C or better in all weekday peak hours. Therefore, the Proposed Actions would not result in any significant adverse crosswalk impacts based on the *CEQR Technical Manual* impact criteria discussed above in Section F, "Transportation Analyses Methodologies."

TABLE 11-~~3642~~
With-Action Crosswalk Conditions

Location	Crosswalk	Project Increment			Average Pedestrian Space								
					Peak Hour Volume			(ft ² /ped)			Level of Service		
		AM	MD	PM	AM	MD	PM	AM	MD	PM	AM	MD	PM
White Plans Rd and Lafayette Avenue	South	285	105	315	489	395	535	37.7	32.9	38.9	C	C	B

Corner Areas

Table 11-~~3743~~ shows the total With-Action condition pedestrian volumes, average pedestrian space, and LOS at analyzed corner areas. As shown in Table 11-~~3743~~, in the With-Action condition all analyzed corner areas would continue to operate at an uncongested LOS A in all analyzed peak hours. Therefore, the Proposed Actions would not result in any significant adverse corner area impacts based on the *CEQR Technical Manual* impact criteria discussed above in Section F, "Transportation Analyses Methodologies."

TABLE 11-~~3743~~
With-Action Corner Conditions

Location	Corner	Project Increment				Peak Hour Volume				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
White Plans Rd and Lafayette Avenue	NE	0	0	0	-	149	116	91	-	158.9	95.2	146.0	-	A	A	A	-
	SE	0	0	0	-	4	20	7	-	208.3	143.0	192.8	-	A	A	A	-
	SW	0	0	0	0	0	0	5	1	204.2	165.7	170.9	226.2	A	A	A	A

J. VEHICULAR AND PEDESTRIAN SAFETY EVALUATION

Recent ~~NY~~CDOT Initiatives

Vision Zero Bronx 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. In an effort to drive these fatalities down, ~~NY~~CDOT 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 Bronx Pedestrian Safety Action Plan* was released in 2015 and updated in 2019. White Plains Road, located to the east of the Project Area, and Soundview Avenue, located to the west of the Project Area, were identified as Priority Corridors. No Priority Intersections or Priority Areas were identified in proximity to the Project Area. The *Vision Zero Bronx Pedestrian Safety Action Plan* recommendations to enhance pedestrian safety in the Bronx 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-peak speeding on Priority Corridors and Intersections where feasible
- Expand community outreach and engagement with regard to Priority Corridors, Intersections, and Areas
- Install additional lighting under elevated trains and around other key transit stops
- Coordinate with MTA to ensure bus operations contribute to a safe pedestrian environment
- Expand a bicycle network in the Bronx that improves safety for all road users
- Proactively design for pedestrian safety in high-growth areas in the Bronx

ENFORCEMENT

- Deploy speed camera at Priority Corridors, Intersections, and Areas
- Focus enforcement and deploy dedicated resources to the Bronx NYPD precincts that overlap substantially with Priority Areas
- Prioritize targeted enforcement at all Priority Corridors, Intersections, and Areas annually

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

Study Area High Crash Locations

Crash data for intersections in the traffic and pedestrian study areas were obtained from NYCDOT for the three-year period between January 1, 2015 and December 31, 2017 (the most recent three-year period for which data are available). The data quantify the total number of crashes as well as the total number of crashes involving injuries to pedestrians or bicyclists. During the three-year reporting period, a total of 146 crashes and 36 pedestrian/bicyclist-related injury crashes occurred at analyzed study area intersections. None of these crashes involved fatalities. Table 11-3844 provides a summary of crashes by intersection during the 2015 to 2017 period, as well as a breakdown of pedestrian and bicycle crashes by year and location.

According to the ~~2020~~ *CEQR Technical Manual*, a high crash location is one where there were 48 or more reportable and non-reportable crashes or five or more pedestrian/bicyclist-related crashes in any

consecutive 12 months within the most recent three-year period for which data are available. As shown in Table 11-3844, based on these criteria, no intersections were found to have experienced 48 or more crashes in any one year. However, the intersection of White Plains Road and Story Avenue experienced five pedestrian or bicycle injury crashes in 2016 and 2017, and the intersection of White Plains Road and Bruckner Boulevard Westbound experienced five pedestrian or bicycle injury crashes on 2017. These and is therefore considered a high crash intersections are presented below intersection.

White Plains Road and Story Avenue

This intersection is located just under $\frac{1}{4}$ mile from the Project Area, and would likely experience a minimal increase in pedestrian trips as a result of the Proposed Project. The majority of the project generated pedestrian trips at these crosswalks would be walk-only trips. This intersection was included in the detailed traffic analyses. A total of two pedestrian injury crashes occurred in 2015, 3 pedestrian injury and two bicycle injury crashes in 2016, and five pedestrian injury crashes in 2017. This intersection is signalized and includes pedestrian signals and a leading pedestrian interval, as well as striped lanes and crosswalks at each approach. A potential measure to enhance pedestrian safety at this intersection would be to restripe the existing crosswalk markings as needed.

White Plains Road and Bruckner Boulevard Westbound

As it is located over $\frac{1}{4}$ a quarter-mile from the Project Area, this intersection would likely experience a minimal increase in pedestrian trips as a result of the Proposed Project. The project generated pedestrian trips at these crosswalks would also likely be walk-only trips. This intersection was also included in the detailed traffic analyses. A total of three pedestrian and two bicycle injury crashes occurred at this intersection in 2017, compared to 1 one pedestrian injury crash in 2015 and no pedestrian or bicycle injury crashes in 2016. This intersection is signalized and includes pedestrian signals and with countdown clocks. A number of measures to enhance pedestrian/bicycle safety have already been implemented at this intersection including a leading pedestrian interval, as well as (LPI) that allows pedestrians to begin crossing Bruckner Boulevard before vehicles turning from White Plains Road are permitted to go, and striped lanes and north, west, and east striped crosswalks. A potential measure to enhance pedestrian safety at this intersection would be the installation of a high visibility southern crosswalk and restriping the existing crosswalk markings as needed.

Modifying the signal timing plan to provide a LPI for pedestrians crossing White Plains Road may warrant consideration as a potential safety improvement measure at this intersection based on the fact that two of the three pedestrian crashes in 2017 occurred when pedestrians were crossing with the signal. In addition, improvements to street lighting may warrant consideration as a potential safety improvement based on the fact that 12 of the 26 motor vehicle crashes in 2017 occurred on cloudy, rainy, or snow days.

Lastly, no intersections within the traffic and pedestrian study areas are located within a designated Senior Pedestrian Focus Area (SPFA), which were identified by NYCDOTDOT based on the density of senior pedestrian (age 65+) crashes resulting in fatalities or severe injuries in a five-year period, as well as variables such as senior trip generators, concentrations of senior centers, and senior housing locations.

TABLE 11-~~3844~~
Summary of Motor Vehicle Crash Data 2015-2017

Intersection		Pedestrian Injury Crashes			Bicycle Injury Crashes			Total Pedestrian/ Bicyclist Injury Crashes			Total Crashes (Reportable + Non-Reportable)		
Roadway 1	Roadway 2	2015	2016	2017	2015	2016	2017	2015	2016	2017	2015	2016	2017
White Plains Rd	Lafayette Ave	0	1	4	0	0	0	0	1	4	3	3	5
	Seward Ave	0	0	1	1	0	0	1	0	1	3	2	5
	Story Ave	2	2	3	0	2	0	2	4	3	6	11	11
	Turnbull Ave	1	0	0	0	0	0	1	0	0	1	0	0
	Bruckner Blvd WB	1	0	3	0	0	2	1	0	5	18	14	31
	Bruckner Blvd EB	0	0	0	0	0	0	0	0	0	5	5	0
Story Ave	Leland Ave	0	2	1	0	0	0	0	2	1	1	1	1
	Underhill Ave	0	0	0	0	0	0	0	0	0	0	3	1
	Bolton Ave	1	1	1	0	0	0	1	1	1	3	4	3
Lafayette Ave	Thieriot Ave	0	0	0	1	0	0	1	0	0	1	0	1
	Leland Ave	0	0	0	0	0	0	0	0	0	0	0	0
	Underhill Ave	0	0	0	0	0	0	0	0	0	0	0	0
	Bolton Ave	0	3	0	0	0	0	0	3	0	0	4	0

Note: This table has been updated for the FEIS.

K. PARKING

Existing Conditions

Under existing conditions, there are 570 at-grade accessory parking spaces provided within the Project Area. It should be noted however that only 462 of the 570 spaces are currently functional, as a portion of the parking square footage is used for onsite maintenance and storage. As the existing development is predominately residential, overnight parking surveys were conducted within the Project Area in August 2020. Per the surveys conducted, the existing 948 affordable rental family units generate an overnight parking demand of 178 occupied spaces. As such, the weekday parking accumulation for the existing 948 DUs, 10,648 gsf of local retail uses, and 36,214 gsf of community facility uses (health center) is shown below in Table 11-~~3945~~. As shown in Table 11-~~3945~~, the existing weekday parking accumulation peaks during the overnight period with 178 occupied spaces, and drops to 11 occupied spaces during the midday period. As there are 462 currently functional spaces within the Project Area, the existing parking is approximately 39 percent utilized during the overnight period with 284 spaces available.

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

The No-Action scenario condition assumes that no new as-of-right development could occur on the Stevenson Commons site without modification of the existing LSRD special permit. As such, the Project Area would continue to be occupied by 948 DUs, 10,648 gsf of local retail uses, and 36,214 gsf of community facility uses (health center). Therefore, approximately 39 percent of spaces within the Project Area would remain utilized during the overnight period, leaving a residual supply of approximately 284 available parking spaces.

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

Under the Proposed Actions, no existing on-street or off-street public parking would be displaced. The Proposed Project would provide a total of 466 accessory parking spaces within the Project Area, resulting in a net decrease of 104 accessory parking spaces as compared to the No-Action conditions condition. Table 11-~~4046~~ shows a forecast of the total hourly parking demand that would be generated within the Project Area on a weekday under the Proposed Actions.

TABLE 11-3945
Existing Project Area Parking Accumulation

Time	Existing Uses									Existing Accumulation
	Residential - Family Rental			Local Retail			Existing Health Center			
	948	DUs	Accum. ⁽¹⁾	10,648	gsf	Accum.	36,214	gsf	Accum.	
12-1 AM	3	3	178	0	0	0	0	0	0	178
1-2	3	3	178	0	0	0	0	0	0	178
2-3	3	3	178	0	0	0	0	0	0	178
3-4	3	3	178	0	0	0	0	0	0	178
4-5	3	3	178	0	0	0	0	0	0	178
5-6	7	20	165	0	0	0	0	0	0	165
6-7	17	38	144	0	0	0	0	0	0	144
7-8	35	40	139	0	0	0	1	0	1	140
8-9	41	163	17	1	1	0	2	1	2	19
9-10	40	43	14	1	1	0	2	3	1	15
10-11	45	51	8	1	1	0	2	2	1	9
11-12	42	45	5	2	2	0	2	2	1	6
12-1 PM	49	45	9	5	5	0	2	2	1	10
1-2	49	49	9	5	5	0	2	1	2	11
2-3	52	49	12	2	2	0	2	2	2	14
3-4	74	65	21	3	2	1	2	2	2	24
4-5	106	83	44	3	3	1	2	3	1	46
5-6	143	80	107	3	3	1	1	2	0	108
6-7	98	70	135	1	2	0	2	2	0	135
7-8	88	58	165	1	1	0	1	1	0	165
8-9	51	41	175	0	0	0	1	1	0	175
9-10	18	18	175	0	0	0	0	0	0	175
10-11	13	13	175	0	0	0	0	0	0	175
11-12	12	9	178	0	0	0	0	0	0	178
Total	995	995		28	28		24	24		

Notes:

- (1) Existing overnight parking is based on August 2020 surveys conducted within the Project Area.

The parking forecast was derived from the forecast of daily auto trips from the proposed uses within the Project Area. As shown in Table 11-4046, the weekday parking accumulation under the Proposed Actions would peak with approximately 463 occupied spaces during the overnight period, which would be fully accommodated within the Project Area. During the weekday midday, the parking demand within the Project Area would drop to 77 vehicles. As the parking demand generated by the Proposed Actions would be fully accommodated within the Project Area, the Proposed Actions are not expected to result in significant adverse parking impacts based on *CEQR Technical Manual* criteria.

TABLE 11-460
Total Weekday Hourly Parking Accumulation Under the Proposed Actions' RWCDs

Time	Existing Uses									Proposed Uses											Total Accumulation	Total Spaces Available					
	Residential - Family Rental			Local Retail			Existing Health Center			Existing Accumulation	Residential - Family Rental			Residential - Family Owner			Residential - Senior Rental			Daycare (Staff)			Recreation Center				
	948	DUs	Accum. ⁽¹⁾	10,648	gsf	Accum.	36,214	gsf	Accum.		563	DUs	Accum. ⁽²⁾	58	DUs	Accum. ⁽³⁾	114	DUs	Accum. ⁽⁴⁾	19,879			gsf	Accum.	14,116	gsf	Accum.
12-1 AM	3	3	178	0	0	0	0	0	0	178	3	3	190	0	0	78	1	1	17	0	0	0	0	0	0	463	3
1-2	3	3	178	0	0	0	0	0	0	178	3	3	190	0	0	78	1	1	17	0	0	0	0	0	0	463	3
2-3	3	3	178	0	0	0	0	0	0	178	3	3	190	0	0	78	1	1	17	0	0	0	0	0	0	463	3
3-4	3	3	178	0	0	0	0	0	0	178	3	3	190	0	0	78	1	1	17	0	0	0	0	0	0	463	3
4-5	3	3	178	0	0	0	0	0	0	178	3	3	190	0	0	78	1	1	17	0	0	0	0	0	0	463	3
5-6	7	20	165	0	0	0	0	0	0	165	9	13	186	1	2	77	1	2	16	0	0	0	0	0	0	444	22
6-7	17	38	144	0	0	0	0	0	0	144	20	38	168	2	5	74	2	7	11	1	1	0	0	0	0	397	69
7-8	35	40	139	0	0	0	1	0	1	140	24	39	153	2	5	71	6	7	10	5	5	0	0	0	0	374	92
8-9	41	163	17	1	1	0	2	1	2	19	29	153	29	4	19	56	14	23	1	15	0	15	1	1	0	120	346
9-10	40	43	14	1	1	0	2	3	1	15	33	42	20	3	5	54	10	8	3	3	2	16	1	1	0	108	358
10-11	45	51	8	1	1	0	2	2	1	9	33	44	9	3	5	52	9	10	2	1	1	16	1	1	0	88	378
11-12	42	45	5	2	2	0	2	2	1	6	37	46	0	3	5	50	7	8	1	1	1	16	1	1	0	73	393
12-1 PM	49	45	9	5	5	0	2	2	1	10	45	45	0	5	5	50	9	10	0	1	1	16	1	1	0	76	390
1-2	49	49	9	5	5	0	2	1	2	11	45	45	0	6	6	50	10	10	0	1	1	16	1	1	0	77	389
2-3	52	49	12	2	2	0	2	2	2	14	47	44	3	5	5	50	10	10	0	1	1	16	1	1	0	83	383
3-4	74	65	21	3	2	1	2	2	2	24	60	40	23	7	4	53	10	9	1	2	3	15	1	1	0	116	350
4-5	106	83	44	3	3	1	2	3	1	46	104	65	62	12	7	58	16	15	2	3	4	14	1	1	0	182	284
5-6	143	80	107	3	3	1	1	2	0	108	134	65	131	16	9	65	25	17	10	1	15	0	1	1	0	314	152
6-7	98	70	135	1	2	0	2	2	0	135	84	55	160	10	5	70	13	10	13	1	1	0	0	0	0	378	88
7-8	88	58	165	1	1	0	1	1	0	165	64	44	180	8	3	75	10	7	16	0	0	0	0	0	0	436	30
8-9	51	41	175	0	0	0	1	1	0	175	36	28	188	5	2	78	6	5	17	0	0	0	0	0	0	458	8
9-10	18	18	175	0	0	0	0	0	0	175	16	16	188	2	2	78	3	3	17	0	0	0	0	0	0	458	8
10-11	13	13	175	0	0	0	0	0	0	175	12	12	188	1	1	78	2	2	17	0	0	0	0	0	0	458	8
11-12	12	9	178	0	0	0	0	0	0	178	10	8	190	1	1	78	1	1	17	0	0	0	0	0	0	463	3
Total	995	995		28	28		24	24			857	857		96	96		169	169		36	36		10	10			

Notes:

- (1) Existing overnight parking is based on August 2020 surveys conducted within the Project Area.
- (2) Assumes 0.338 autos / DU for affordable family rental units based on ~~BX~~Bronx Census Tracts 16, 20, 38, 42, 74, and 98.
- (3) Assumes 1.35 autos / DU for family owner units based on ~~BX~~Bronx Census Tracts 16, 20, 38, 42, 74, and 98.
- (4) Assumes 0.150 autos / DU for senior rental units based on ~~BX~~Bronx Census Tracts 16, 20, 38, 42, 74, and 98.